

Testing the Anti-Drug Message in 12 American Cities
National Youth Anti-Drug Media Campaign
Phase I (Report No. 2)

March 1999



Barry R. McCaffrey
Director

Executive Office of the President
Office of National Drug Control Policy

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EXECUTIVE SUMMARY

INTRODUCTION

This report presents findings from the evaluation of Phase I of the National Youth Anti-Drug Media Campaign (the Media Campaign) sponsored by the Office of National Drug Control Policy (ONDCP). The Media Campaign is the largest and most comprehensive anti-drug media campaign ever undertaken by the Federal Government. It is further distinguished from earlier efforts because it features paid advertising.

The Media Campaign is being implemented in three phases, each of which will be evaluated. The purpose of this report is to measure the effectiveness of the Phase I paid campaign, which includes 62 different interventions through television, radio, newspapers, and outdoor billboards. The particular focus of this report is the effect of the paid television advertising on awareness of anti-drug messages among youth, teens, parents, and other adult influencers.

The overall communication objective for Phase I was to reach 90 percent of the primary target audience once per day for the first two months of the campaign, and then for the balance of Phase I the goal was a 90 percent reach with a frequency range of 4 to 7 each week. Parents and other adult influencers were to be the focus of 40 percent of the messages and youth aged 9 to 18 were the emphasis of 60 percent of the intervention, prioritized as follows: young teens aged 11–13, teens aged 14–18, and youth aged 9–10.

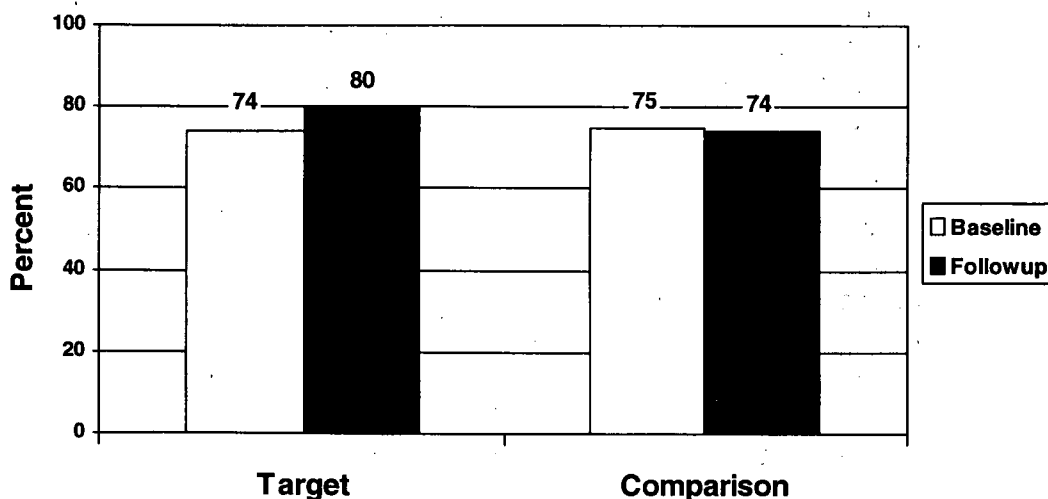
The major findings of the evaluation are as follows:

- The findings from school- and telephone-based surveys, focus groups, and interviews with key informants in the target sites and comparison sites indicate that the paid placement of anti-drug advertisements resulted in greater increases in awareness of anti-drug ads in target sites than in the comparison sites.
- Survey findings regarding awareness of a sampling of paid anti-drug ads show that when all target sites collectively are compared to all comparison sites collectively, the target sites consistently experienced greater increases in levels of awareness from baseline to followup, as follows:
 - For all four paid ads on the *youth* survey, the overall percentage difference between target and comparison sites from baseline to followup was statistically significant, and substantially so, with net differences that ranged from 11 to 26 percent.
 - Four of the six paid ads on the *teen* survey showed statistically significant differences in the net percentage change. The overall percentage difference between target and comparison sites from baseline to followup ranged from 12 to 27 percent for three of the

ads; the overall percentage difference for the fourth ad was a modest 6 percent, which may not be considered significant in a practical sense.

- Four of the five paid ads on the *parent* survey showed overall percentage differences between target and comparison sites that were statistically significant. Only one of the ads, however, showed a net percentage change that might be considered significant in a practical sense (10 percent); the net percentage change for the others was relatively small, at 4 and 5 percent.
- Again looking at target and comparison sites in the aggregate, media monitoring and survey data, supported by media buying plan data, show that the number of times an ad was shown and the time it was shown are correlated to audience level of awareness of the ad (i.e., the greater the number of times shown and the more often it was shown during the prime viewing hours of its intended audience, the greater the level of awareness).
- Site-specific data clearly show that when an ad was purchased in some sites but not in others, the level of awareness of the ad was consistently greater in the sites where the ad was purchased as opposed to being broadcast as a PSA.
- Survey data also show that paid advertising was an effective way to reach youth, teens, and parents. For youth, Exhibit 1 illustrates the increase in the

Exhibit 1
Increases, Due to Watching TV Ads, in Youth Awareness of the Dangers of Drugs



Agreed that "TV ads or commercials make you more aware of how dangerous drugs are."*

*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

percentage of youth in target sites who agreed that television ads made them more aware of how dangerous drugs are. For teens, Exhibit 2 presents the increase in the percentage who agreed they learned “a lot” about the risks of drugs from TV commercials and Exhibit 3 shows the increase in the percentage of teens who reported seeing or hearing ads about the risks of drugs every day or almost every day. For parents, Exhibit 4 illustrates the increase in the percentage who strongly agreed that the anti-drug commercials made them more aware of the risks of using drugs, those who strongly agreed that the anti-drug commercials gave them new information or told them things they didn’t know about drugs, and those who strongly agreed that the anti-drug commercials made them more aware that America’s drug problem is something all families should be concerned about.

- From baseline to followup, parents in target sites showed increases in perceptions of the risk of their children *regularly using* marijuana, cocaine/crack, heroin, inhalants, and methamphetamines as well as *trying* inhalants, methamphetamines, heroin and cocaine/crack. In comparison sites, the percentages of parents who perceived these drugs to be of risk to their children decreased or remained the same. Although the differences were not great, the net difference between target and comparison sites was statistically significant. The changes are illustrated graphically in Exhibit 5.

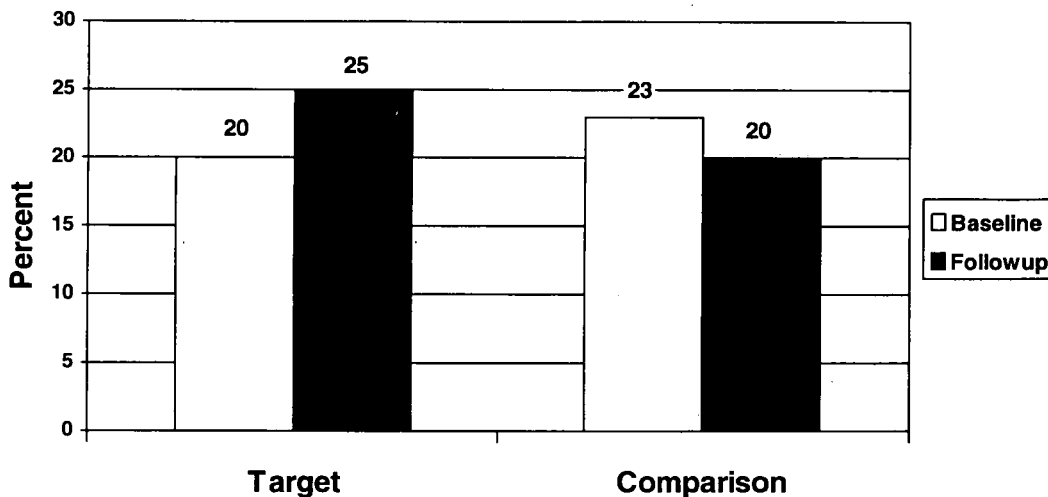
The Media Campaign Design

After more than a decade of steady decline in the reported use of drugs by teenagers, from 1992 to 1996 national survey data (*Monitoring the Future*) showed an increase in drug use by 8th, 10th, and 12th graders and a corresponding steady decrease in their disapproval of drug use and perception of the risk of drug use. The 1996 *Monitoring the Future* study found that more than half of all high school students use illicit drugs by the time they graduate, and more than 20 percent of youth surveyed reported using marijuana in the past month.

In 1997, the number one goal of *The National Drug Control Strategy* became to “Educate and enable America’s youth to reject illegal drugs as well as alcohol and tobacco.” The second objective in support of that goal is “Pursue a vigorous advertising and public communications program dealing with the dangers of drug, alcohol, and tobacco use by youth.” The President’s drug control budget for FY 1998 included proposed funding for the Media Campaign, which received bipartisan support in Congress for “a national media campaign to reduce and prevent drug use among young Americans.”

Planning for the Media Campaign began in early 1997. ONDCP initiated a collaboration with the Partnership for a Drug-Free America (PDFA), who would provide the creative advertising for the Media Campaign through their existing pro bono relationship with leading American advertising companies.

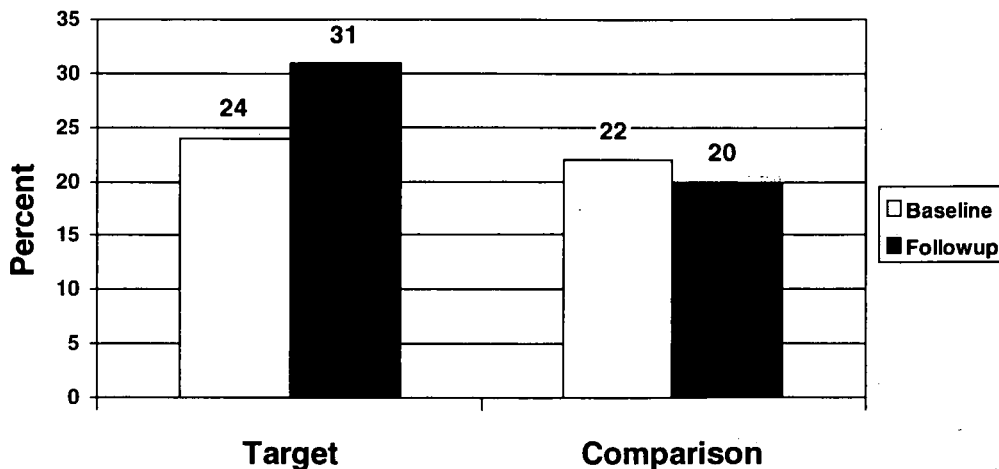
Exhibit 2 Increases in Teens Reporting TV Commercials as a Source of Information About the Risks of Drugs



Agreed they learned “a lot” about the risks of drugs from TV commercials.*

*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

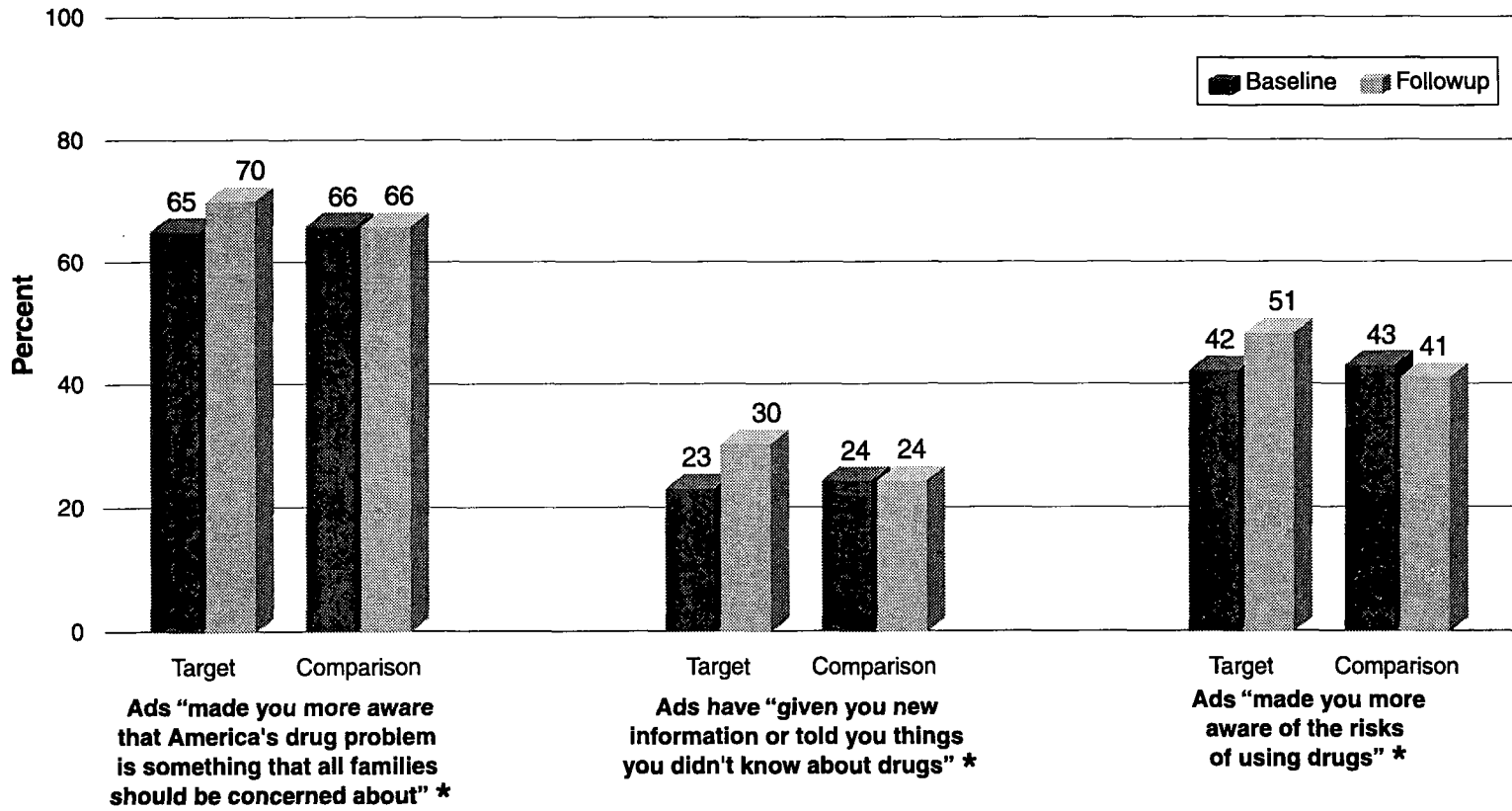
Exhibit 3 Increases in Teens’ Reported Level of Exposure to Anti-Drug Ads



Percentage reporting the “frequency of seeing or hearing commercials or ads telling them about drugs every day or almost every day significantly increased.”*

*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

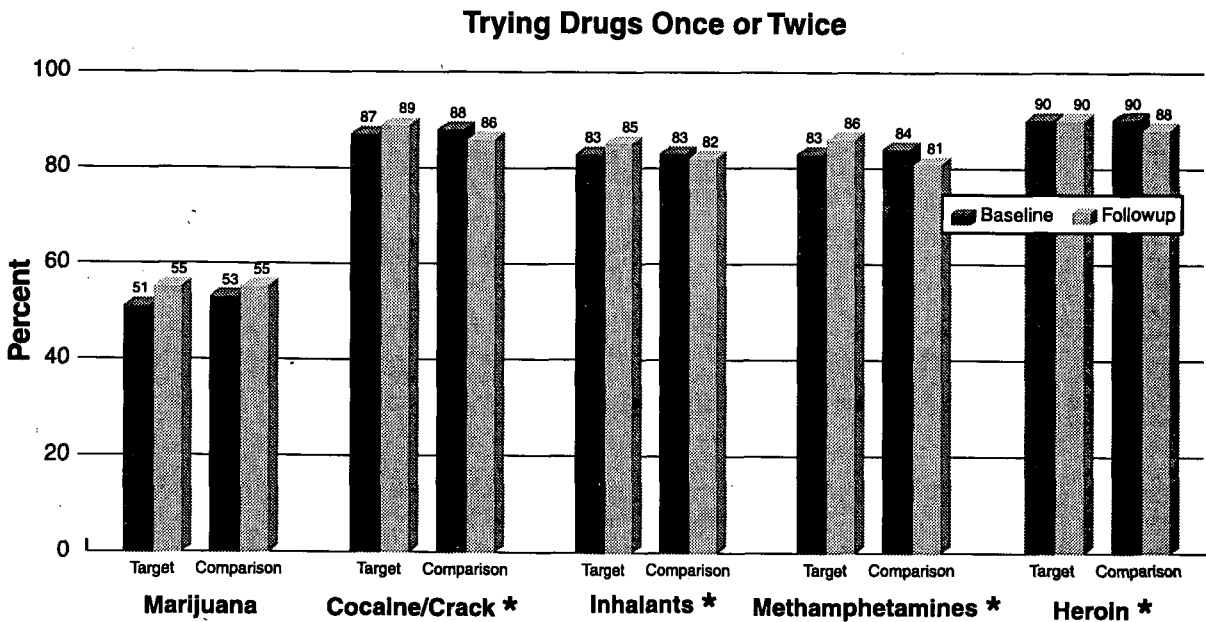
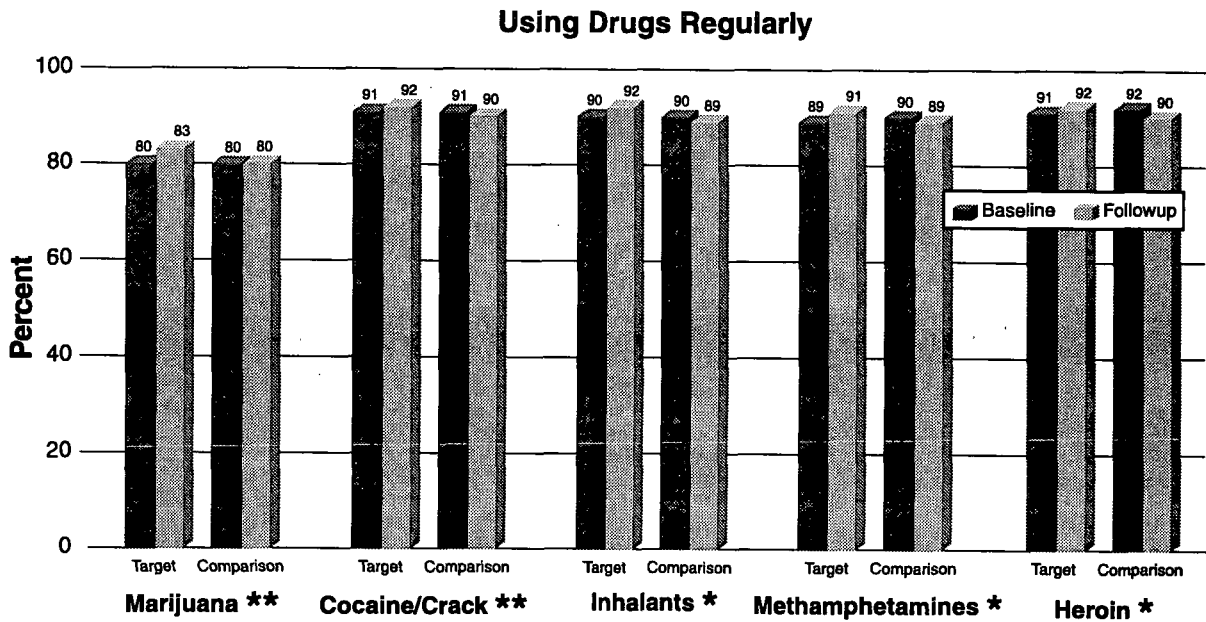
Exhibit 4
Effectiveness of Ads: Percentage of Parents Saying They "Agree a Lot" With the Statement...



Note: Percentages are weighted.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

**Exhibit 5
Parents' Awareness of the Risk of Drugs:
Percentage Saying There Is "Great Risk" in...**



Note: Percentages are weighted. Parent Question #

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

**Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 90% confidence level.

The Media Campaign has three goals:

- Educate and enable America's youth to reject illegal drugs;
- Prevent youth from initiating use of drugs, especially marijuana and inhalants; and
- Convince occasional users of these and other drugs to stop using drugs.

Through realistic portrayals, the Media Campaign is designed to show the harmful effects of drugs and the benefits of a drug-free lifestyle, "denormalize" drug use by reminding people that most youth do not use drugs, and empower parents with information and strategies to prevent their children from using drugs. The Media Campaign is designed to reach five target groups: youth, ages 9-10 (13% of the Media Campaign effort); youth, ages 11-13 (25%); youth, ages 14-18 years (12%); parents (40%); and other influential adults (10%).

The Media Campaign is being implemented in three phases:

- *Phase I* was a 26-week pilot test that ran from January through June 1998 in 12 metropolitan areas across the country. Because the timeframe for launching the first phase did not allow the development of new advertisements, television, radio, outdoor and newspaper advertisements that had already been produced by PDFA were used and were placed in paid spots, with a pro bono match requirement. Television advertising included both broadcast and local cable stations as well as in-school Channel One. Television and radio were the primary vehicles for reaching youth and teens, and television, radio, and newspapers were used to reach adults.
- *Phase II* was the initial nationwide advertising, or "validation" phase. It began in July 1998 and ran through December 1998. Expanded to a national audience, Phase II included paid television, radio, newspaper, print, Internet, and outdoor advertising; television advertising included both broadcast and selected cable networks.
- *Phase III* will mark full implementation of the Media Campaign. It will start in 1999 and run for four years. Phase III will disseminate new advertisements developed specifically for the Media Campaign and that meet campaign strategy objectives. A key feature of the Phase III effort is to build partnerships with community-based and national anti-drug groups, local and State governments, industry, private businesses, and professional sports teams. For the most part, those partners will play various non-advertising roles.

Strategy for Evaluation of the Media Campaign

The effectiveness of each phase of the Media Campaign will be measured by an impact evaluation. The evaluations are being conducted within the broader context of the *Performance Measures of Effectiveness: A System for Assessing the Performance of the National Drug Control Strategy*, published in 1998 by

ONDCP. Under the Performance Measures of Effectiveness system two “Impact Targets” have been established for reaching the goal of educating and enabling America’s youth to reject illegal drugs, alcohol, and tobacco:

- *Use of illegal drugs, alcohol, and tobacco by youth:* By 2002, reduce the prevalence of past-month use of illegal drugs and alcohol among youth by 20 percent as measured against the 1996 base year. By 2007, reduce this prevalence by 50 percent as compared to the base year. Reduce tobacco use by youth by 25 percent by 2002 and 55 percent by 2007.
- *Initial age of drug use in youth:* By 2002, increase the average age for first-time drug use by 12 months from the average age of first-time use in 1996. By 2007, increase the average age of first-time drug use by 36 months from the 1996 base year.

In addition, two “Performance Targets” have been established specifically to measure the effectiveness of the Media Campaign:

- *Youth risk perceptions:* By 2002, increase to 80 the percent of youth who perceive that regular use of illegal drugs, alcohol, and tobacco is harmful, and maintain this rate through 2007.
- *Youth disapproval:* By 2002, increase to 95 the percent of youth who disapprove of illegal drug, alcohol, and tobacco use and maintain this rate through 2007.

Consistent with the Media Campaign focus on drugs, the impact evaluations will focus on use of illegal drugs, initial age of drug use, and youth risk perceptions and disapproval of drugs.

At the start of the Média Campaign, ONDCP expected to detect measurable changes in ad awareness within a few months of the start of the 6-month Phase I Pilot Test. Other measurable changes were expected to take much longer. For example, change in perceptions and attitudes about drugs were not expected to occur for another 1 to 2 years, and changes in drug use itself, not for another 2 to 3 years.

Because of the short time periods (approximately 6 months each) of Phases I and II, the evaluations of those phases focus on change in awareness of the Media Campaign. Expected changes in perceptions and attitudes about drug use, and expected changes in behavior, are to be measured in the Phase III evaluation.

Implementation of Phase I

ONDCP began implementation of the Media Campaign in January 1998. The key features of Phase I were as follows:

- The Campaign was conducted in 12 metropolitan areas: Atlanta, Baltimore, Boise, Denver, Hartford, Houston, Milwaukee, Portland (Oregon), San Diego, Sioux City, Tucson, and Washington, D.C.;
- Sites were selected on the basis of geographic representation within the United States, population size, demographic representation, and the types of drugs prevalent in each community;
- The Campaign used advertisements that had already been produced by PFDA, but instead of presenting them as public service announcements, the Campaign purchased time slots for television and radio ads to ensure that the ads reached their target audiences; television advertising included both broadcast and major cable networks;
- Selected to be appropriate for child, teen, or adult audiences, the paid advertisements were scheduled to be broadcast during peak viewing/air time for each of the target audiences (i.e. youth, teens, and adults); the objective was to reach 90 percent of each target audience with an average of four exposures per week;
- Advertisements emphasized prevention of entry-level drug use (marijuana and inhalants) in all target sites and focused on local epidemics of heroin, cocaine, and methamphetamine use, where appropriate;
- In sites with substantial Hispanic populations (Denver, Hartford, Houston, San Diego, Tucson, and Washington, D.C.), some advertisements were broadcast in Spanish as well as in English;
- Stations were required to provide pro bono, one-to-one matching time for other approved public service announcements or in-kind programming;
- Advertisements with a pro bono match requirement were also purchased in newspapers; and
- Two outdoor billboard advertisements were also purchased in each target site.

The Media Campaign was kicked off in each target site by the Director or another senior representative of ONDCP, typically with the area congressional representative and local community leaders, and ran from January through June.

The paid advertisements for each target site during Phase I are presented in a matrix format in Appendix A. Of 62 paid advertisements, 30 were shown on television (6 for elementary school children, 15 for teens, and 8 for parents), 17 were broadcast on radio, 13 were printed in newspapers, and 2 were displayed as outdoor billboards. As shown in the matrix, the mix of specific paid ads varied by site; i.e., not all ads were purchased in all sites.

Evaluation of Phase I

To measure the impact of Phase I of the Media Campaign, the 12 target sites were matched with 12 comparison sites: Memphis, Richmond, Eugene, Albuquerque, Harrisburg, Dallas, Nashville, Spokane, Phoenix, Duluth, Austin, and Birmingham. Identical data collection was conducted in all 24 sites to allow comparative analysis. (Exceptions are noted in Chapter 2.)

The evaluation included three components:

- A quantitative component, consisting of in-school surveys of 4th through 6th and 7th through 12th graders, and a telephone survey of parents with children 18 or younger (surveys were provided in Spanish when appropriate);
- A qualitative component, in which site visits were made to conduct focus groups with members of the target audiences (elementary, middle, and high school youth, parents) and to conduct interviews with key informants in communities (e.g., prevention and treatment specialists, community coalition members, law enforcement representatives, members of the clergy); and
- Media monitoring, in which the level of anti-drug advertising on television was measured.

Surveys, focus groups, and interviews were conducted in both center-city and non-center-city locales in each of the 24 sites. Surveys were conducted in all 24 metropolitan areas at baseline (prior to and at the beginning of the Media Campaign, from November 1997 through February 1998) and at followup (near the end of Phase I in May and June 1998). Respondents were asked about their awareness of anti-drug ads in the media and about their perceptions, attitudes, and behaviors with regard to drug use. Site visits were conducted at three points in time: baseline (November 1997–January 1998); intermediate (approximately 12 weeks after the baseline visit to each respective site); and follow up (May–June 1998). Media monitoring was conducted continuously from October 1997 through June 1998 (i.e., prior to and throughout the Phase I Media Campaign).

ONDCP did not purchase advertising in the comparison sites; any exposure to anti-drug advertising in the comparison sites was expected to come only from public service announcements. The evaluation of Phase I of the Media Campaign was designed to determine if there were changes in awareness of the anti-drug ads (and, to the extent possible, changes in attitudes toward drugs) resulting from exposure to paid anti-drug messages, compared with changes resulting from exposure to free public service messages on local radio and TV stations.

In both target and comparison sites, however, youth and parents may have been exposed to other advertisements and other information campaigns that were conducted in their communities. The evaluation makes every effort to distinguish between effects resulting from the Media Campaign and those resulting from other public information and education campaigns in the communities studied.

For this Phase I Final Report, the focus is on change in awareness as measured by student and parent survey data, using site visit and media monitoring data to help explain and interpret analysis of the quantitative survey data.

METHODOLOGICAL SCOPE AND LIMITATIONS

The following methodological considerations have a direct bearing on the findings of this evaluation:

- *Selection of comparison sites*—Each target site was paired with a comparison site that had similar population characteristics, to the extent possible, and was located in a relatively similar geographic region. Sometimes a “perfect” match between a target site and its comparison was difficult, and a city defined as a large MSA (i.e., population over 500,000) was paired with a site that was a medium MSA (i.e., population between 200,000 and 500,000). This was done only when there were other characteristics (e.g., geographic location, proportion of ethnic groups) that made the two MSAs well suited as paired sites.
- *Some sites not used as comparisons for the two student samples*—The original site selections were maintained for the parent sample, and parent data were collected in all 24 sites. These original sites also were maintained for the qualitative data collected through site visits. However, for the student samples, in-school survey data were not collected in Albuquerque, Spokane, center city Richmond, and Harrisburg (all comparison sites) because school districts declined to participate in the study. In-school survey data also were not collected in center-city Tucson (a target site) for the same reason. In the aggregate data analysis, student survey data for the 12 target sites were compared with student survey data for the remaining 8 original comparison sites. For site-level data analysis, substitutions were made using student survey data and relevant media monitoring data from four other, comparable comparison sites (Austin, Eugene, Memphis, and Nashville, respectively).
- *Survey implementation*—Baseline data collection began in December 1997 and continued through February 1998. As a phased-in intervention, the Phase I Media Campaign was introduced in the target sites over the second, third, and fourth weeks of January 1998. All baseline parent surveys were completed prior to the beginning of the Phase I Media Campaign. In two-thirds of the target sites, the majority of baseline school surveys were completed before the Phase I Media Campaign began in those sites. In the remaining four target sites, a number of baseline school surveys were still being conducted after Phase I had been launched because of obstacles encountered in gaining clearance into the schools.
- *Student samples*—In-school student samples were drawn from the universe of all public schools in the designated test and comparison market areas. The students interviewed at followup were *not* the same as the ones interviewed for baseline data. Different classrooms were used at followup in order to avoid

inclusion of respondents who had been predisposed to questions during baseline and, thus, could have been influenced if asked to provide followup responses. The sample consisted of all students in the selected classes who were present on the scheduled date of the interview. The final sample size for students was 18,300 at baseline, and 17,015 at followup.

- *Parent sample*—Student and parent samples were independent samples; that is, parents were not selected to be related to the youth and teen sample subjects. The parent sample was a completely random sample, obtained by using a random digit dialing technique (RDD). The resulting sample was demographically similar to the metro area being sampled. At least 175 parents were interviewed in each of the 24 sites at baseline and again at followup, using questions similar to those posed to youth. The pre-test and post-test samples were independent (i.e., the same individuals were not re-interviewed). Overall, data were collected at baseline on 2,200 parents from target sites and 2,114 parents from comparison sites and, at followup, on 2,105 parents from target sites and 2,106 parents from comparison sites.
- *Survey instruments*—The student and parent questionnaires were developed from existing survey instruments used in studies to assess responses to various campaigns of the Partnership for a Drug Free America (PDFA) and from the Monitoring the Future Survey and the National Household Survey on Drug Abuse. Because the paid advertisements used in the Phase I ONDCP Campaign were developed by PDFA, these surveys were appropriate data collection tools but were modified significantly in order to adequately measure the goals of the Phase I Campaign. (See Appendix B for copies of the in-school and parent survey instruments and the guide that shows the different studies from which the survey questions were drawn.)
- *Focus groups*—Focus groups were not intended to be a nationally representative sample of youth, teens, and parents, but were selected as groups that reflected their communities. Eight focus groups were conducted at each site during the baseline, intermediate, and followup site. Groups comprised elementary grade youth (4th, 5th, and 6th graders), youth and teens in middle school (grades 7, 8, and 9), 10th–12th grade teens, and parents. Focus groups were held in the center city area as well as in a non-center city area. In order to avoid having any youth, teens, or parents who were already predisposed to questions about drugs and the media, none of the participants in the baseline focus groups were recruited for participation in focus groups conducted during intermediate or follow-up site visits. However, the researchers maintained continuity in terms of the particular area of the site included for the focus groups. For example, if a particular suburb was selected for all of the youth, teen, and parent nonurban focus groups at baseline, that same suburb was used again for the intermediate site visits. Across all site visits, focus group data reflect discussions with approximately 576 different focus groups, comprising more than 4,600 youth, teen, and parent participants.
- *Key informant interviews*—The purpose of the key informant interviews was to provide important information on levels of community awareness of the

problems and dangers of drugs; attitudes towards drug use; and information on drug-related events and prevention activities in the community; and on already existing levels of community anti-drug commercials in the media. This information was collected at the baseline, intermediate, and followup site visits, and was used to account for and gauge campaign-related and non-related changes, so that the true effectiveness of the campaign could be accurately measured. Over the course of all site visits, approximately 1,800 interviews were conducted with key community informants.

- *Media monitoring*—During Phase I of the Media Campaign, paid and unpaid anti-drug television advertisements that appeared in target and comparison sites were tracked during the 3 months (October–December 1997) preceding the Media Campaign (the baseline period) and, for purposes of analysis, during 5 months (January–May 1998) of the Phase I intervention period. Radio, billboard, and newspaper advertising of Media Campaign ads were not monitored. Data were collected across several variables: the number of ads that aired, the parts of the day when the ads were shown, the types of drugs that the ads targeted, and the sponsors of the ads. Anti-drug ads that aired on affiliates of the three major national television networks (ABC, CBS, and NBC), national cable WBN (Time-Warner cable), FOX, TBS, UPN, IND, and Univision and Telemundo (Spanish-language cable) were tracked in the target and comparison sites. The television monitoring service was unable to collect data on ads airing on several local cable stations, including MTV and Nickelodeon, or on in-school Channel One.
- *Not all sites could be monitored*—Media monitoring is possible only in the 75 largest television markets nationally. Of the 24 evaluation sites, 19 are included in the top 75 television markets. The following five communities were not electronically monitored: Boise, Sioux City, Tucson, Eugene, and Duluth.
- *Statistically significant findings*—The survey results presented in this report highlight statistically significant findings (a complete compilation of all survey data appears in the tables contained in the separately bound appendix volume that accompanies this report). Although we present all statistically significant results, the fact that estimates of change are found to be significantly different does not necessarily imply that the difference is large or meaningful in a practical sense. However, statistical significance is important in itself because it means that one can conclude, with a small risk of error, that the new estimates would not be different from the old estimates if the survey were replicated with different samples drawn from the same population, using the same sampling procedures. That is, the differences cannot be attributed solely to sampling error.

EVALUATION RESULTS REGARDING AWARENESS OF SPECIFIC ADS

For each of the three samples included in the evaluation (youth, teens, parents), survey respondents were asked about their awareness of only a sampling of all paid television advertisements that were part of the Media Campaign. Youth were surveyed about four paid television ads: *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. Teens were surveyed about six ads: *911*, *Alex Straight A's*, *Free Ride*, *Frying Pan*, *Layla*, and *Rite of Passage*. The teen survey in Portland included *911*, *Alex Straight A's*, and *Frying Pan*, but three music-oriented ads that were specially purchased in Portland (*Everclear*, *Lauryn Hill*, and *Sublime*) were substituted for the others. Parents responded to questions regarding *Burbs*, *Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose*. The main findings of this study pertain to awareness of these Media Campaign paid ads. The ads in the survey questionnaires were not necessarily those that aired with the greatest frequency or reach, as measured by media monitoring and indicated by GRP data.

Youth

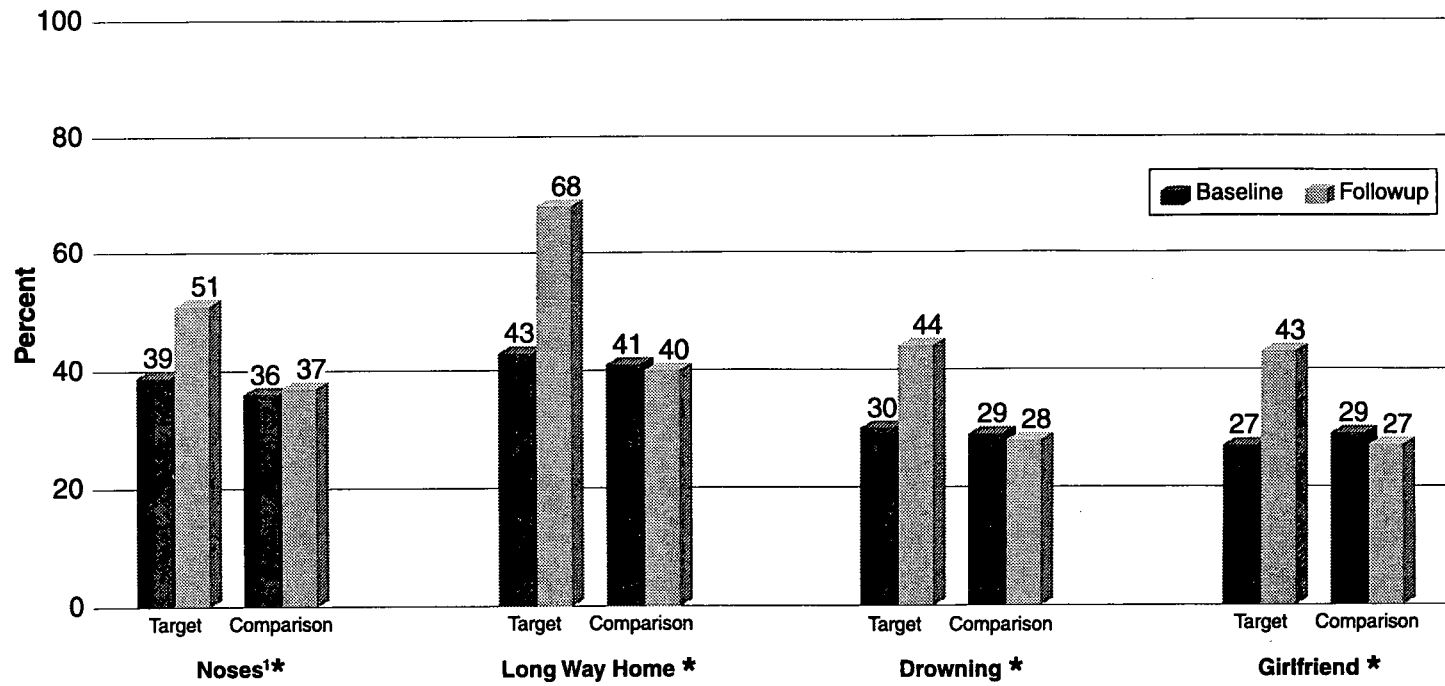
During the Phase I Media Campaign, the percentage of youth who answered “yes” when asked if they had seen anti-drug ads on TV increased substantially between baseline and followup in target sites, but remained virtually unchanged in the comparison sites. For all four paid ads included on the youth survey—*Long Way Home*, *Girlfriend*, *Noses*, and *Drowning*—these increases were statistically significant. Differences between target and comparison sites are presented in Exhibit 6.

Long Way Home was shown as a paid ad in all 12 target sites.

- In the aggregate, 68 percent of youth in target sites recalled seeing this ad at followup, compared with 43 percent at baseline. Recognition in the aggregate comparison sites decreased slightly, from 41 to 40 percent, for a net difference of 26 percent. The increase from baseline to followup in the target sites was 58 percent.
- In the individual target sites, level of awareness at followup ranged from a high of 78 percent in Atlanta, where *Long Way Home* was shown an average of 22.4 times per month, to a low of 59 percent in Milwaukee, where the ad was shown an average of 12.2 times per month. (Estimates of purchased delivery of ads indicate *Long Way Home* was shown as a paid ad 40 times in Atlanta and 31 times in Milwaukee). Percent change in awareness ranged from a 7 percent increase in Houston (from 72 to 77%) to a 127 percent increase in Tucson (30 to 68%).

Girlfriend was shown as a paid ad in seven sites.

Exhibit 6 Ad Awareness: Percentage of Youth Who Saw Specific Ads “Often”



Note: Percentages are weighted. Youth Question 7.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

¹This Specific ad had the highest average GRPs across sites.

- In the aggregate (i.e., all sites), 43 percent of youth in target sites recalled seeing this ad at followup, compared with 28 percent at baseline, a 54 percent increase. In comparison sites, youth who reported seeing the ad decreased from 29 to 27 percent, resulting in a net difference of 18 percent between target and comparison sites.
- In the seven sites where *Girlfriend* was shown as a paid ad, awareness at followup ranged from 65 percent in Atlanta to 42 percent in Hartford. In Atlanta, *Girlfriend* was shown an average of 17 times per month, 62 percent of the time during prime viewing hours for youth.
- In the five sites where *Girlfriend* was not shown as a paid ad, recall at followup ranged from a high of 34 percent in Denver to 23 percent in Boise. The difference at followup between Denver and Hartford is noteworthy because recall at baseline in both sites was 22 percent. Media monitoring data indicate the ad was not shown in Denver during Phase I, but was broadcast an average of 8.2 times per month in Hartford.

Noses, an anti-inhalant ad, was shown as a paid spot in eight sites, including four with both English and Spanish versions.

- In the aggregate, 51 percent of youth in target sites recalled seeing this ad at followup, compared with 39 percent at baseline, a 31 percent increase. In all comparison sites, the percentage of youth who reported seeing the ad increased only slightly, from 36 to 37. The net difference between target and comparison sites was 11 percent.
- In the eight sites where *Noses* was broadcast as a paid ad, awareness at followup was substantially greater, ranging from a low of 55 percent in Houston to a high of 72 percent in Sioux City, where the percent increase from baseline to followup was also highest at 89 percent. Media monitoring data are not available for Sioux City; the next highest level of awareness at followup was 71 percent in Baltimore, where *Noses* was broadcast an average of 26.8 times per month. (Estimates of purchased delivery indicate *Noses* aired as a paid ad more frequently in Baltimore, with 80 paid spots, than in any other target site). The next highest percent increase from baseline to followup was 87 percent in Hartford, where media monitoring indicates the ad was broadcast an average of 27.2 times per month.
- In the four sites where *Noses* was not broadcast as a paid ad, recall at followup was highest in Denver, at 42 percent; media monitoring data reveal that *Noses* was shown an average of seven times per month in Denver as a PSA. Recall was lowest in Tucson, where the percentage decreased 22 percent from baseline to followup, from 32 to 25 percent.

Drowning, also an anti-inhalant ad, was shown as a paid spot in eight sites, including three with both English and Spanish versions.

- In all sites taken together, 44 percent of youth in target sites recalled seeing this ad at followup, compared with 30 percent at baseline, a percent increase of 47. In comparison sites, 28 percent of youth reported seeing the ad at baseline, with a slight increase to 29 percent at followup. The net difference between target and comparison sites was 16 percent.
- In the eight sites where *Drowning* was broadcast as a paid ad, recall at followup ranged from 31 percent in Portland to 67 percent in Hartford and 68 percent in Sioux City. That is an increase of 135 percent in Hartford and 183 percent in Sioux City. The dramatic increase in Hartford corresponds to an average there of 51.4 broadcasts of *Drowning* per month during Phase I.
- Among youth in the target sites where the ad was not purchased, recall ranged from a high of 35 percent in San Diego to a low of 17 percent in Boise and Tucson.

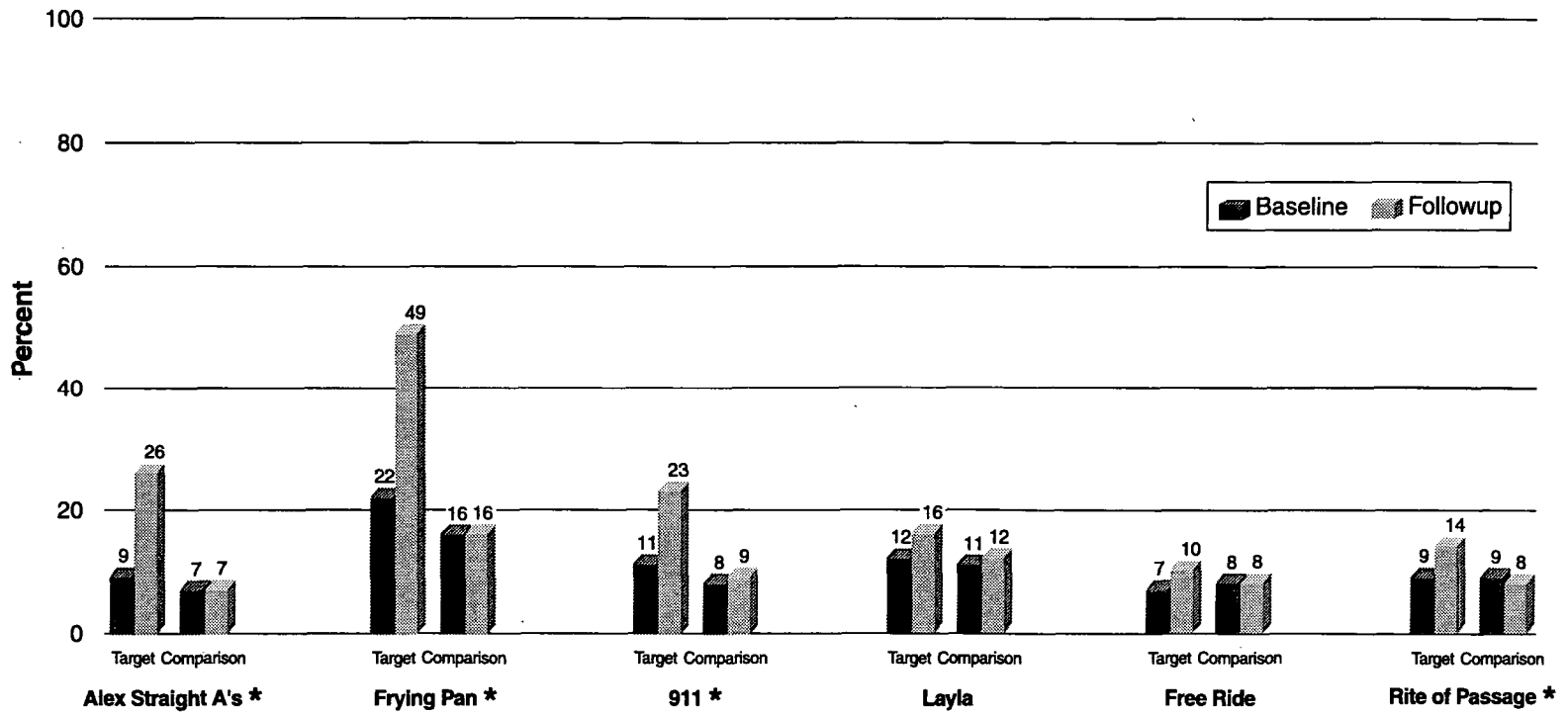
Teens

On their survey, teens were asked if they had seen six specific anti-drug advertisements in the past few months. Possible responses were “often,” “a few times,” and “not at all.” In the analysis of teen survey data, tests of statistical significance were done on “often” responses, which produces a conservative measurement of teens’ awareness of the ads. Furthermore, 4 of the 6 ads were not purchased in all 12 target sites. As with the Youth Survey, ads included in the teen survey instrument were not necessarily those placed to achieve greatest reach and frequency, and reach and frequency varied by ad and by site. Nevertheless, aggregate change in awareness among teens in the target sites from baseline to followup was statistically significant for four of the ads when compared to teen responses in the comparison sites: *Frying Pan*, *Alex Straight A’s*, *911*, and *Rite of Passage*. Exhibit 7 illustrates the differences in the percentage of teens who reported seeing the ads “often.”

Frying Pan was shown as a paid ad in all 12 sites during Phase I of the Media Campaign, after not having been broadcast during the baseline period.

- In the aggregate, 49 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 22 percent at baseline, a percent change of 123 percent. In comparison sites 16 percent of teens reported this level of recall at both baseline and followup, resulting in a significant difference of 27 percent between target and comparison sites.
- The difference between target and comparison sites was statistically significant for 10 of the 12 individual target sites. “Often” responses ranged from 68 percent in Baltimore (up from 22 percent, a change of 209 percent) to a low of 34 percent in Portland. In Baltimore, *Frying Pan* was broadcast an average of 30.8 times per month, or once per day. The greatest percent increase was found in Denver, at 327 percent (from 11 to 47 %), followed closely by Hartford at 313 percent (from 16 to 66 %).

Exhibit 7 Ad Awareness: Percentage of Teens Who Saw Ads "Often"



Note: Percentages are weighted. Teen Question 9.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

- On average, *Frying Pan* achieved the highest number of gross rating points (a proxy of reach and frequency) of any of the paid ads included in the survey instrument.

Alex Straight A's was also shown as a paid ad in all 12 sites, after not having been broadcast during the baseline period.

- In the aggregate, 26 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 9 percent at baseline, a percent change of 189 percent. In comparison sites the percentage of teens who recalled the ad at this level was unchanged from baseline to followup, at 7 percent, resulting in a significant difference of 16 percent between target and comparison sites.
- In the individual sites, “often” responses at followup were as high as 38 percent in Sioux City (up from 4 percent, or an increase of 850 percent) and as low as 13 percent in Milwaukee. Nine of the 12 target sites had percent increases from baseline to followup greater than 100 percent. Media monitoring data indicate Hartford broadcast the ad most frequently, at 23.8 times per month, and four sites broadcast the ad during prime viewing hours for teens more than 70 percent of the time.

911, an anti-methamphetamine ad, was shown as a paid ad in six sites.

- The level of recognition of this ad in the six sites where it was shown was powerful enough to make it statistically significant at the aggregate level. In the aggregate, 23 percent of teens in target recalled seeing this ad “often” at followup, compared with 11 percent at baseline, a 109 percent change. In comparison sites this level of recognition increased only from 8 to 9 percent, resulting in the significant difference (12 percent) between target and comparison sites.
- In the six sites where *911* was shown as a paid ad, “often” responses at followup ranged from a low of 27 percent in Milwaukee to a high of 62 percent in Sioux City. The percent increase in Sioux City was lowest of the six sites, at 72 percent (up from 36%); increases in the other sites ranged from 145 percent in Milwaukee to 1,045 percent in Tucson (from 4 to 45%). Media monitoring data are available for only three of the six sites, where the average number of broadcasts of the ad were 8.2, 10.2, and 10.8.
- The contrast with the six sites where the ad aired only as a PSA is dramatic, with “often” responses at followup ranging from 9 percent to a low of 3 percent.

Rite of Passage was shown as a paid ad in five sites, in both English and Spanish.

- In the aggregate, 14 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 9 percent at baseline, a percent increase of 56. In comparison sites, this level of recall decreased slightly, from 9 to 8 percent, resulting in a significant difference between target and comparison

sites. The modest difference of 6 percent may not be significant in a practical sense.

- In the five sites where *Rite of Passage* was shown as a paid ad, “often” responses at followup ranged from 15 percent in Tucson to 29 percent in Denver. The percent increase was lowest in Tucson, at 67 percent (up from 9%), and highest in Denver, at 314 percent (up from 7%). Media monitoring data indicate the ad was shown most frequently in Houston, at an average of 15.6 times per month. It was shown only 6.2 times per month in Denver, but almost always (96.8%) during prime viewing hours for teens.
- In the remaining seven sites, where the ad was not shown, “often” responses at followup ranged from 6 to 12 percent.

Layla was scheduled to air as a paid ad in ten target sites, but GRP data from the post-buy data indicate the ad did not air in two of those sites, Portland and Milwaukee. Hence, *Layla* aired as a paid ad in eight sites.

- In the aggregate, 16 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 12 percent at baseline, a percent increase of 33. In comparison sites, the change in the level of “often” responses was from 11 to 12 percent. The difference between target and comparison sites was not statistically significant.
- In the eight sites where *Layla* was broadcast as a paid ad, “often” responses at followup ranged from 9 percent in Boise to 24 percent in the District of Columbia (where, according to post-buy data, it aired as a paid ad 63 times for a total of 330.89 GRPs). Percent increases ranged from 0 in Houston (17% at baseline and followup) to 175 percent in Denver (from 8 to 22 %). Only two of the target sites—Denver and Sioux City—showed a significant difference from their comparison sites in the change in the level of “often” responses.

Free Ride was shown as a paid ad in four sites.

- In the aggregate, 10 percent of teens in target sites recalled seeing *Free Ride* “often” at followup, compared with 7 percent at baseline, a percent change of 43 percent. In comparison sites, no change occurred between baseline and followup, with “often” responses remaining constant at 8 percent. The difference between target and comparison sites was not statistically significant.
- In three of the four sites where *Free Ride* was broadcast as a paid ad, “often” responses at followup were appreciably higher, at 18, 19, and 20 percent. The 20 percent response (a 100% increase) came in Atlanta, where the ad was shown most frequently, at a rate of 13.6 times per month. Conversely, at the fourth site, where “often” responses were lowest (10% at followup), the ad was shown an average of only 3.4 times per month. The explanation for the increase in Atlanta is reinforced by media buy data, which indicate that

Atlanta had the second highest GRPs (238) among sites where the ad aired and that it was broadcast as a paid ad 40 times.

Parents

As with teens, parents were offered three responses to whether they had seen five paid advertisements targeted at them: “often,” “a few times,” and “not at all.” As with teens, the conservative approach of computing statistical significance of “often” responses was taken to measure parent awareness of the ads. Although two of the five parent advertisements were not shown as paid ads in all sites, four ads elicited statistically significant change: *Girl Interview*, *O’Connor*, *Burbs*, and *Under Your Nose*. Media buying plan data indicate that in the target sites overall, parents were exposed to anti-drug ads targeting youth and teens more frequently than to ads targeting parents, which may help explain the awareness findings. Exhibit 8 illustrates the differences between target and comparison sites.

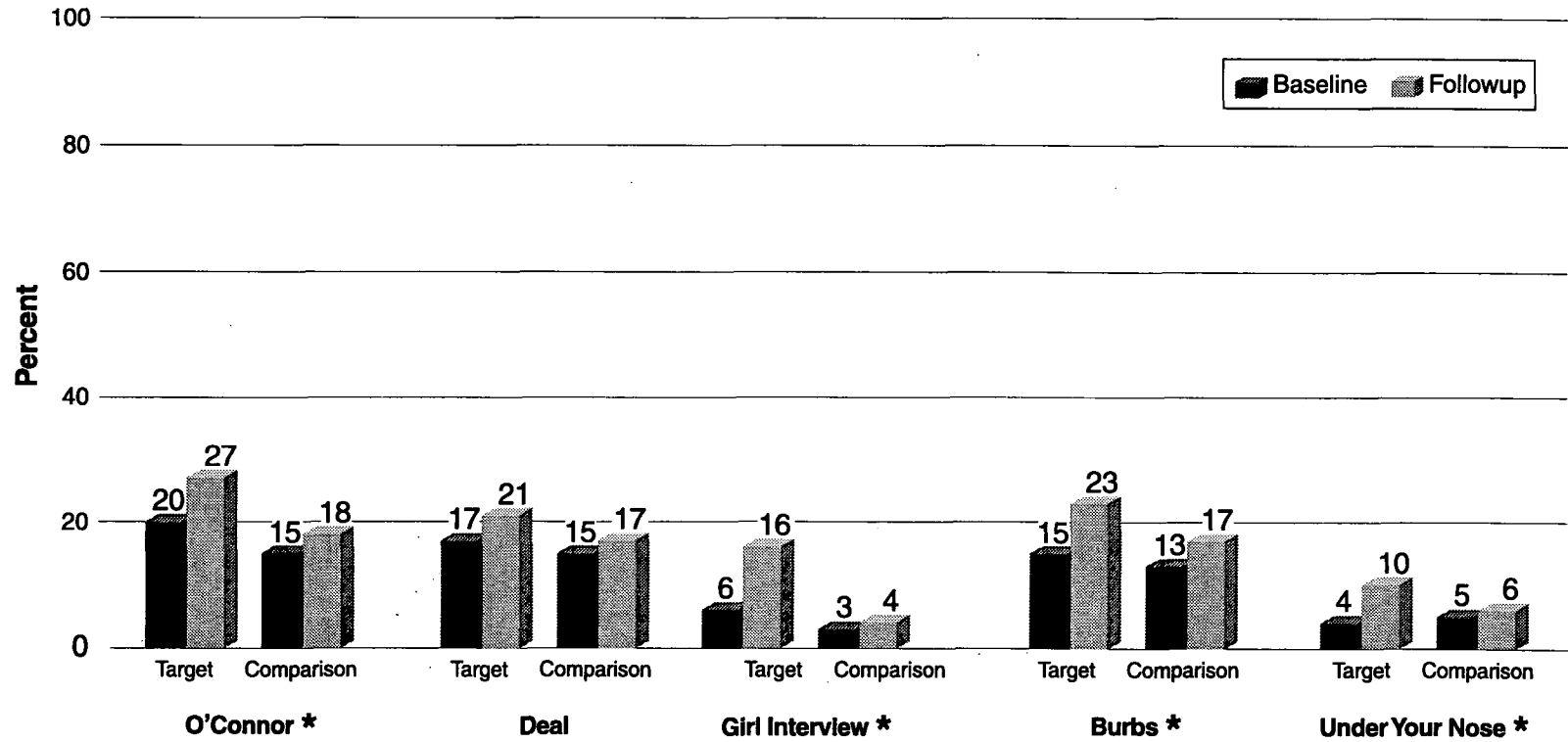
Girl Interview was shown as a paid ad in all 12 target sites.

- In the aggregate, 16 percent of parents in target sites recalled seeing this ad “often” at followup, compared with 5 percent at baseline, an increase of 11 percentage points and a 220 percent change. In comparison sites only 4 percent of parents reported seeing the ad at followup, up from 3 percent, yielding a statistically significant difference (10 percent) between target and comparison sites.
- In the individual sites, “often” responses at followup ranged from 7 percent in Houston (up from 3 percent) to 39 percent in Sioux City (up from 22 percent). Sioux City was the only target site where “often” responses at baseline were higher than 10 percent. Concomitantly, 10 of 12 target sites showed percent increases from baseline to followup over 100 percent, with the highest change coming in Boise, at 1100 percent.

O’Connor was also shown as a paid ad in all 12 target sites.

- In the aggregate, 27 percent of parents in target sites recalled seeing this ad “often” at followup, compared with 20 percent at baseline, a percent increase of 35 percent. In comparison sites, the increase from baseline to followup was smaller, from 15 to 18 percent, resulting in a statistically significant difference between target and comparison sites. The net difference of 4 percent may not be considered significant in a practical sense.
- In the individual target sites, “often” responses at followup ranged from 17 to 52 percent. The 52 percent response came in Boise, where media monitoring was not available. The next highest level of “often” responses came in Hartford, which also broadcast the ad most frequently (an average of 32.6 times per month). The low, 17 percent response came in San Diego, where the ad was broadcast least frequently, an average of 7.8 times per month. The greatest percent change from baseline to followup came in Portland, where “often” responses increased from 10 to 20 percent (a 100%

Exhibit 8 Ad Awareness: Percentage of Parents Who Saw Specific Ads "Often"



Note: Percentages are weighted. Parent Question 12.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

increase). *O'Connor* was broadcast an average of 14.4 times per month in Portland as both a paid ad and a PSA.

Burbs was scheduled to be shown as a paid ad in 4 sites

- In the aggregate, *Burbs* was shown more often during prime viewing hours for parents, in both target and comparison sites, than any of the other ads included in the survey instrument: an average of 61 times per month in target sites and 33.8 times per month in comparison sites.
- In the aggregate, 23 percent of parents in target sites recalled seeing *Burbs* “often” at followup, compared with 15 percent at baseline, a 53 percent change. In comparison sites 17 percent of parents recalled seeing the ad “often” at followup, compared with 13 percent at baseline. The difference between target and comparison sites was statistically significant, but at 4 percent may not be considered significant in a practical sense.
- In individual sites, “often” responses at followup ranged from 15 percent in the District of Columbia (where it was not scheduled as a paid ad) to 39 percent in Sioux City. Again, the largest percent change occurred in Portland (100 percent, from 13 to 26%) where it was shown an average of 27 times per month. The average number of broadcasts per month for *Burbs* ranged from 13.8 in Milwaukee to 36.8 in Hartford (where it was not scheduled as a paid ad).

Under Your Nose, an anti-inhalant ad, was shown as a paid spot in eight sites.

- In the aggregate, 10 percent of parents in target sites had seen this ad “often” at followup, compared with 4 percent at baseline, an increase of 150 percent. In comparison sites 5 percent of parents reported seeing this ad at baseline, but that increased to only 6 percent at followup, resulting in a statistically significant difference between target and comparison sites. Again, the small net difference of 5 percent may not be considered significant in a practical sense.
- In the eight sites where *Under Your Nose* was shown as a paid ad, “often” responses at followup ranged from 9 percent in Hartford to 13 percent in San Diego, Milwaukee, and Atlanta. The highest percent change occurred in Hartford (350 percent, up from 2 %) where estimates of purchased delivery indicate the ad aired 22 times as a paid ad, the second highest frequency among the target sites. In Atlanta, which showed a 225 percent change from baseline to followup (up from 4%), the ad was broadcast an average of 20.4 times per month as both a paid ad and a PSA.

Deal was shown as a paid ad in six sites.

- Parental awareness of this ad in the aggregate increased within sites, but the change was not significant between target and comparison sites. In target sites, 21 percent of parents recalled seeing this ad “often” at followup, up

from 17 percent at baseline. In comparison sites, 17 percent of parents reported this level of recall at followup, compared with 15 percent at baseline.

- In the six sites where *Deal* was shown as a paid ad, “often” responses at followup ranged from 22 percent in Baltimore, Hartford, and Milwaukee to as high as 36 percent in Atlanta. The ad was shown an average of 33.4 times per month, or more than once per day, in Atlanta. Greatest percent increases occurred in the District of Columbia (221%), where the ad was shown an average of 28.6 times per month, and in Houston (200%), where it was shown an average of 23.8 times per month. Estimates of purchased delivery indicate the ad was scheduled to air most frequently in these two sites, and media buy data indicate *Deal* had its highest reach and frequency in the District of Columbia (26 times for a total of 104.34 GRPs) and the second highest number of paid spots (10) in Houston.
- “Often” responses decreased from baseline to followup in three of the six sites where *Deal* was not shown as a paid ad.

LESSONS LEARNED

Based on the analyses of the multiple data sets of the evaluation of Phase I of the Media Campaign, certain themes and issues repeatedly emerged. Some of the lessons learned support definitive conclusions about the effectiveness of the Phase I Campaign. Others support the formulation of recommendations that may inform subsequent activities and efforts to be undertaken by the national campaign.

Lessons Relating to the Effectiveness of the Phase I Campaign

Lesson 1: Phase I Resulted in Increased Awareness of Anti-Drug Advertisements

The major objective of the Phase I Campaign, tested in 12 communities, was to increase awareness of anti-drug ads paid for by the Campaign. Comparisons of baseline and follow-up surveys, focus group results, and media monitoring results clearly indicate that both young people and parents saw or heard more anti-drug ads in target communities. Concentrated broadcasting of anti-drug use advertisements in prime time slots produced a greater awareness of those anti-drug ads. As expected, ad awareness measures for youth, teens and parents showed substantial increases from baseline to follow-up and substantial differences between target and comparison sites. Given this information, the following conclusions can be drawn about the impact of the Phase I Campaign on its audiences:

- Repeated broadcasts of individual advertisements on drug use dangers raised viewer awareness of anti-drug ads regardless of the viewer’s age;

- The use of paid television as a source of anti-drug information for youth and teens was effective in reaching these target groups;
- Media monitoring data indicate that awareness of ads is greater when targeted ads are broadcast frequently and in dayparts viewed by each target audience;
- The content of drug-specific ads was appropriately matched with the audiences targeted (e.g., inhalants with youth); and
- The campaign advertisements were shown with sufficient repeated broadcasts to significantly increase viewer awareness in the target communities.

Four recommendations are pertinent here:

- Survey questions should be expanded to include other media used (e.g., print ads, radio ads): survey and focus group responses indicate that non-TV ads are especially effective in reaching particular groups and ages. For example, teens surveyed in several cities said that they learn more about drug risks from radio than from other media, and teens in focus groups said they listen to radio more than they watch TV.
- Other-than-English language ads should continue to be developed in sites with appreciable ethnic populations; focus group transcripts document ethnic language groups' preferences for certain media, as well as their distinctive critiques of Campaign ads.
- Media monitoring data should be collected for any subsequent Media Campaign efforts because these data provide critical information to help explain why awareness is higher for certain ads; in addition, daypart information is important for understanding awareness of campaign ads when they appear in both paid spots and as PSAs.
- Data on the estimated purchased delivery of the paid ads is valuable in establishing correlations between increased awareness and the frequency and reach of the targeted ads.

Lesson 2: Perceptions of the Effectiveness of Phase I Ads Varied By Age of the Viewer

Survey results revealed that parents and youth tended to perceive ads as being effective, while teens found the ads to be less so. Focus group sessions with teens revealed that they are influenced by their own feelings of invincibility as well as the impact of peer pressure.

These findings support the following recommendations:

- The Phase I approach to developing targeted ads for each audience should be continued, and reach and frequency to adult audiences should be enhanced;

- Efforts should be made to further study what aspects of ads targeting teens can be fine-tuned or revised to raise teens' perceptions of effectiveness. Teens' own recommendations include to develop ads with more realistic presentations of drug dangers; involve teens themselves in designing and producing ads; have persons well-known to teens (but not celebrities) as actors in the ads; and make the ads' settings as local and recognizable as possible; and
- Purchasing ability should allow for more targeted buying at the national level, allowing more precise selection of appropriate times for reaching the target audiences.

Lesson 3: Youth and Parents Did Learn Some New Facts About the Risks of Using Drugs

Analyses linking survey and media findings strongly suggest that increases in the monthly total number of ads and airing during prime viewing slots led to greater awareness of drug problems across age groups. Findings also indicate that increased frequency of drug-specific ads led to greater recognition of the risks and dangers associated with that drug. For example, increases in the frequency of inhalant ads paralleled the significantly increased percentage of target site youth who viewed inhalants as life threatening as compared to comparison site youth.

Additionally, survey findings revealed a significant increase in the percentage of target site youth who reported learning about the negative aspects of drugs from TV ads, and the percentage of target site teens who learned this information from the radio, contrasted with the comparison site youth and teens.

Likewise, parents in target sites gained new knowledge about the risks of using drugs, compared with parents in the comparison sites. After the Campaign had been in place for several months, parents in target sites reported a much higher level of awareness of how important it is to talk with their youngsters about the dangers of drug use. In addition, the consensus of parents in 9 of the 12 target sites was that the ads shown had provided a positive contribution to a wider, more comprehensive effort to address youth and adult drug use. Survey results for parents confirm that by the end of Phase I, target site parents increased their perceptions of the risks posed by the use of cocaine, inhalants, heroin, and methamphetamines.

Lesson 4: The Media Campaign Changed Some Attitudes Towards Drug Use

Phase I resulted in some change in attitudes that were not expected so early. While survey results confirm that most attitudes, across all age groups of youth, did not change during the period of the Phase I Media Campaign, there were a few findings suggesting that even this short Campaign effort has made some inroads to changing youth and parents' attitudes toward drug use.

The percentage of target site youth who believed that the use of inhalants was risky increased during the Campaign compared with comparison youth. By the end of the Campaign the percentage of youth who thought that “things you sniff or huff to get high can kill you”, was significantly higher than before the Campaign, compared with those youth in communities where the Campaign was not in place.

The Campaign has also achieved some modest success in changing parents’ attitudes about drug use. For example, before the Campaign fewer parents thought that “America’s drug problem is something that all families should be concerned about.” After the Campaign, the percentage of parents holding this view increased significantly. Likewise, the percentage of parents who were “aware of the risks of using drugs” increased significantly by the end of the Phase I Campaign.

Lesson 5: The Media Campaign Did Have an Impact on Target Communities

While community-level efforts were not a stated goal of Phase I, in fact the Media Campaign did encourage local communities to mobilize their own anti-drug initiatives and education campaigns. Site visit data collected toward the end of the Campaign suggest that many such events have occurred in the 12 target communities since the Campaign began last year.

Eleven of the 12 target communities reported anti-drug activities that built on the Campaign’s momentum and were directly attributable to it. These activities included, for example, an increase in local hotline calls for substance abuse information or referral; outreach/education activities carried out by the organizations coordinating the Media Campaign; involvement of staff and students in local schools; pro-bono support from the media; presentations about the Media Campaign at conferences or seminars; and provision of matching funds for the Campaign by the business community.

Based on these findings, we recommend that target communities should continue to be encouraged to use the Media Campaign as an opportunity to increase their involvement in many types of anti-drug initiatives.

We also recommend that an in-depth analysis of Phase I site-level survey data be undertaken, to identify how youth’s, teens’, and parents’ responses may be influenced by local contextual factors in the community in addition to the Media Campaign intervention. This analysis will help to identify the types of community conditions where anti-drug media messages have a stronger impact.

Lessons That Will Inform the National Media Campaign

Lesson 6: Inconsistent Teen Views About Marijuana Affect Their Perceptions of Anti-Marijuana Ads

Survey results indicated that teens’ awareness of the risk of marijuana either within or between the target and comparison sites remained unchanged

throughout the Media Campaign. Survey results also underscored the degree to which teens seem confused about the dangers of marijuana use. Results showed that many teens perceived health risks as being less important than social/behavioral risks. A relatively small proportion of teens thought that there was “great risk” in trying marijuana; however, many more thought there was “great risk” in using it regularly. Two-thirds also thought that marijuana users were at “great risk” for “getting hooked” or “going on to harder drugs.” Approximately three quarters thought that marijuana users were at “great risk” for upsetting their parents.

Focus group discussions indicated that the majority of teens view the use of marijuana as acceptable and as one of their drugs of choice. Teenagers, especially those in high school, said that they like marijuana because it is cheap, transportable, easy to cover up, and relaxing. Most teens disagreed with the statement, “I don’t want to hang around anyone who uses marijuana.”

Based on this information, the following recommendations are offered:

- Future campaign ads targeting marijuana use should be clear and precise in describing the effects of regular marijuana use on teens; and
- Media campaign ads targeting marijuana use by teens should also incorporate the following in their content: (1) the transition from casual marijuana use to chronic use; (2) the differences between popular misconceptions and facts on the physical, personal and psychological effects of marijuana use; and 3) the strong impact of peer influence on marijuana use.
- Further analysis of survey data should be undertaken on the relationship between teens’ use of marijuana and their awareness of its risks. Site-level analyses would allow examination of the relationship between drug use and awareness of risk in the context of local factors (e.g., a highly publicized drug-related event).

Lesson 7: Parents Are One of the Key Information Sources on Drug Use Dangers

Survey results indicated that parents are one of the most important sources of information about drugs among youth. Yet, survey data show serious discrepancies in parents’ claims about their drug-related communication with their children. Despite the fact that most parents agreed that *my child knows exactly how I feel about him/her using drugs*, at target sites far fewer at baseline and at follow-up said that they had spoken with their children about drugs four or more times in the past year.

Parents in focus group discussions at all target and comparison sites stressed the importance of talking to their children about the risks and dangers of drug use and communicating values about avoiding drugs. These parents reported that they used the Media Campaign ads as starting points or icebreakers for initiating conversations about drugs with their children. However, many parents described

the reasons they did not talk to their children about drugs or had difficulties doing so effectively. These included the parents' own past or present drug use, lack of information about drugs, the youth drug culture, how and when to present information to their children, denial that the problem could affect their children, and acceptance of youth drug use.

Our observations indicate that parents strongly desire to engage their children in discussions of drug use and its consequences, but do not know how to approach the subject or how to proceed effectively even when the subject is raised by their children.

In light of these findings, the following recommendations are offered:

- Parents urgently need to know more about drugs, their risks, what they look like, and how young people gain access to them;
- Ads on parent-child communication should point out the possible discrepancies between young people's knowledge and experience with drugs and parents' perceptions about how much their children know; and
- Ads on improving parent-child communication should move beyond stressing the general importance of parent-child communication and present specific methods to parents that can be expected to be effective in communicating dangers of drug use to their children.

Lesson 8: Anti-Drug Media Ads Can Be Improved

There was considerable agreement among focus group participants across center city and non-center city neighborhoods and community representatives from all sites about how to improve ads. They agreed that ads need to be realistic, present the facts, and use local contact numbers for referrals. Other suggestions include the following:

- Ads should demonstrate the physical effects of drug use, including negative changes in physical appearance;
- Ads should show recognizable local (or at least regional) settings;
- Celebrities used in the ads should be local personalities;
- There should be more first-person testimonials, especially by youth peers.

Lesson 9: Surveying Students in School Settings Is Problematic

The research design for gathering survey data from youth and teens involved sampling public schools and administering the survey to respondents during the school day. However, many barriers were encountered in this effort. The in-school surveys could not take place if the school or school district refused entry. Some districts were participating in other national surveys, experienced difficulty obtaining signed parent consent forms, or did not gain approval from their

Institutional Review Board in time for the survey. Also, in a number of sites, unrelated legal issues resulted in last minute refusals to participate.

The results of research done on the ONDCP Campaign were not adversely affected by the problems reported above because adequate data redundancy was available: appropriate substitute sites were selected when school access was denied, and survey findings were cross-checked against data from focus groups, key informant interviews, and media monitoring to ensure reliability and validity of findings. Nevertheless, it is recommended that future on-site research should not rely on in-school surveys.

Summary

Youth and teen survey responses clearly indicate that television, and especially television anti-drug ads, became a common source of information about the risks of drugs in the 12 target communities during the Phase I Media Campaign. Parents, likewise, were very aware of the ads aired during the Campaign. Youth and parents in these communities reported that they learned new information about the risks of using drugs. Further, many local community efforts were undertaken over the course of the campaign to build on the Phase I Campaign efforts.

1. BACKGROUND AND INTRODUCTION

This report presents findings from the evaluation of Phase I of the National Youth Anti-Drug Media Campaign (the Media Campaign) sponsored by the Office of National Drug Control Policy (ONDCP). The Media Campaign is the largest and most comprehensive anti-drug media campaign ever undertaken by the Federal Government. It is further distinguished from earlier efforts because it features paid advertising.

The Media Campaign is being implemented in three phases, each of which will be evaluated. The purpose of this Phase I report is to measure the effectiveness of the paid campaign, which includes 62 different interventions through television, radio, newspapers, and outdoor billboards. Radio was used especially to reach teens, and six paid newspaper advertisements were used in each site (and included local resource telephone numbers) to reach parents. This report focuses on the effectiveness of the paid television advertisements, which was the primary vehicle to reach all audiences. A complete listing of all paid advertisements used in Phase I is provided in Appendix A.

To establish a context for the findings that follow in subsequent chapters, this chapter provides an overview of the design of the Media Campaign's three phases and describes the strategy for its evaluation. Following this is a description of the implementation and evaluation of Phase I. This chapter then concludes with a summary of the report's organization.

1.1 THE MEDIA CAMPAIGN DESIGN

After more than a decade of steady decline in the reported use of drugs by teenagers, 8th graders responding to the *Monitoring the Future Survey* in 1992 reported a slight increase in their use of illicit drugs. Over the next 4 years, as that cohort aged to become 12th graders, drug use by 8th, 10th, and 12th graders increased steadily. The 1996 *Monitoring the Future* study found that more than half of all high school students used illicit drugs by the time they graduated, and more than 20 percent of youth surveyed reported using marijuana in the past month. Over that same 4-year period, 1992–1996, disapproval of drug use and perception of the risk of drug use decreased steadily among the youth surveyed. Similar trends in use and attitude were found during the same period by the *National Household Survey on Drug Abuse*. The 1996 *Monitoring the Future* study also reported that approximately one-quarter of 10th graders and one-third of 12th graders had five or more drinks on at least one occasion in the 2 weeks before taking the survey, and that more than one-third of high school seniors smoked cigarettes.

In 1997 the number one goal of *The National Drug Control Strategy* was to “Educate and enable America’s youth to reject illegal drugs as well as alcohol and tobacco.” Ten objectives are listed under that goal, including educating parents and other adults who influence youth, promoting zero-tolerance policies for youth regarding the use of drugs, providing prevention programs in schools, and

assisting the development of community coalitions and programs to prevent drug abuse.

The second objective in support of the goal is “Pursue a vigorous advertising and public communications program dealing with the dangers of drug, alcohol, and tobacco use by youth.” The President’s drug control budget for FY 1998 included proposed funding for the Media Campaign, which received bipartisan support in Congress. Under the Executive Office Appropriations Act, 1998, the House and Senate approved funding (Conference Report on H.R.2378) for “a national media campaign to reduce and prevent drug use among young Americans.”

Planning for the Media Campaign began in early 1997. ONDCP initiated a collaboration with the Partnership for a Drug-Free America (PDFA), who would provide the creative advertising for the Media Campaign through their existing pro bono relationship with leading American advertising companies. Working together, ONDCP and PDFA solicited input from experts in advertising and marketing, national and local media, substance abuse prevention, communications research, law enforcement, and community anti-drug coalitions. From September 1997 through February 1998, a team led by Porter Novelli, a strategic communications firm, worked with ONDCP and PDFA to develop the *Communication Strategy Statement* for the Media Campaign. (The communication strategy was not finalized prior to the implementation of Phase I in January 1998.) The development team engaged in a consultation process that involved nearly 200 organizations and individuals. The team also convened three panels—one to assist in design of the campaign; one to coordinate partnerships with community coalitions, service organizations and others involved in drug abuse prevention efforts; and one to generate corporate sponsorship. The Communication Strategy describes the problem of substance abuse among youth in America, presents the scientific basis for the strategy, and addresses target audiences, communication objectives, and message execution.

The Media Campaign has three goals:

- Educate and enable America’s youth to reject illegal drugs;
- Prevent youth from initiating use of drugs, especially marijuana and inhalants; and
- Convince occasional users of these and other drugs to stop using drugs.

Through realistic portrayals, the Media Campaign is designed to show the harmful effects of drugs and the benefits of a drug-free lifestyle, “denormalize” drug use by reminding people that most youth do not use drugs, and empower parents with information and strategies to prevent their children from using drugs. The Media Campaign is designed to reach five target groups: youth ages 9–10 (13% of the Media Campaign effort), ages 11–13 (25%), ages 14–18 (12%); and parents (40%) and other influential adults (10%).

The Media Campaign is being implemented in three Phases. Phase I was a 26-week pilot test that ran from January through June 1998 in 12 metropolitan areas across the country. Phase I was the conceptual development, or “learning lab” phase. Because the timeframe for launching the first phase did not allow the development of new advertisements, television and radio advertisements that had already been produced by PDFA were used and were placed in paid spots, with a 100 percent pro bono match requirement.

Phase II is the initial nationwide advertising, or “validation” phase. It began in July 1998 and will continue into early 1999. Expanded to a national audience, Phase II includes paid television, radio, newspaper, print, Internet, and outdoor advertising; television advertising includes both broadcast and selected cable networks.

Phase III will be the full implementation of the Media Campaign. It will begin early in 1999 and run for 4 years. Phase III will disseminate new advertisements developed specifically for the Media Campaign, based on the Communication Strategy. A key feature of the Phase III effort is to build partnerships with community-based and national anti-drug groups, local and State governments, industry, private businesses, and professional sports teams. For the most part, those partners will play various non-advertising roles.

1.2 STRATEGY FOR EVALUATION OF THE MEDIA CAMPAIGN

The authorizing legislation for the Media Campaign states that “the Director shall report to Congress within two years on the effectiveness of the national media campaign” The effectiveness of each phase of the Media Campaign will be measured by an impact evaluation. These evaluations are being conducted within the broader context of the *Performance Measures of Effectiveness: A System for Assessing the Performance of the National Drug Control Strategy*, published in 1998 by ONDCP.

The Performance Measures of Effectiveness (PME) system is built on two fundamental assumptions. The first is that achieving the goals and objectives of the *National Drug Control Strategy* will truly be a national effort, in that not only the Federal Government, but also State and local governments, the private sector, and individuals will be involved. The second is that the national pursuit of Strategy goals and objectives will yield measurable effects. For the five goals of the Strategy, 12 “Impact Targets” that define desired outcomes or end states have been established. For the 32 objectives of the 1998 Strategy, 82 “Performance Targets,” which are generally expressed as “outputs” or “outcomes,” were established to measure progress.

The Media Campaign is, of course, being implemented to support the first goal of the National Drug Control Strategy, to “educate and enable America’s youth to reject illegal drugs as well as the use of alcohol and tobacco.” Two Impact Targets have been set for this goal:

- *Use of illegal drugs, alcohol, and tobacco by youth:* By 2002, reduce the prevalence of past-month use of illegal drugs and alcohol among youth by 20 percent as measured against the 1996 base year. By 2007, reduce this prevalence by 50 percent as compared to the base year. Reduce tobacco use by youth by 25 percent by 2002 and 55 percent by 2007.
- *Initial age of drug use in youth:* By 2002, increase the average age for first-time drug use by 12 months from the average age of first-time use in 1996. By 2007, increase the average age of first-time drug use by 36 months from the 1996 base year.

The years 2002 and 2007 are 5-year and 10-year milestones, respectively.

Under the PME system, two Performance Targets have been established specifically to measure the effectiveness of the Media Campaign:

- *Youth risk perceptions:* By 2002, increase to 80 percent the number of youth who perceive that regular use of illegal drugs, alcohol, and tobacco is harmful, and maintain this rate through 2007.
- *Youth disapproval:* By 2002, increase to 95 percent the number of youth who disapprove of illegal drug, alcohol, and tobacco use and maintain this rate through 2007.

The impact evaluations will focus on use of illegal drugs, the initial age of drug use, and youth risk perceptions and disapproval of drugs. The impact evaluations are only one of many components that will be used to measure progress toward attaining the PME Impact and Performance Targets. For example, the *Monitoring the Future* study and the *National Household Survey on Drug Abuse* will continue to be used to measure drug use and attitudes. The National Institute on Alcohol Abuse and Alcoholism (NIAAA), the Center for Substance Abuse Prevention (CSAP), the National Highway Traffic Safety Administration (NHTSA), and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) are conducting studies on various dimensions of underage drinking. The Food and Drug Administration (FDA), the Centers for Disease Control and Prevention (CDC), and CSAP are all involved in efforts to prevent tobacco use among youth.

With the impact evaluations, ONDCP expects to be able to detect changes in awareness of anti-drug messages presented through the media within a few months of the start of the Media Campaign, changes in perceptions and attitudes about drug use within 1 to 2 years, and changes in behavior within 2 to 3 years.

Because of the short time periods (approximately 6 months each) of Phases I and II, the evaluations of those phases focus on change in awareness of paid anti-drug ads that are part of the Media Campaign. Expected changes in perceptions and attitudes about drug use, and expected changes in behavior, are to be measured in the Phase III evaluation. Phase III of the Media Campaign is planned to run for 4 years, from 1999 through 2002. The impact evaluation of Phase III will be

conducted under the auspices of the National Institute on Drug Abuse (NIDA), acting as ONDCP's agent.

1.3 IMPLEMENTATION AND EVALUATION OF PHASE I

ONDCP began implementation of the Media Campaign in January 1998. The key features of Phase I were as follows:

- The Campaign was conducted in 12 metropolitan areas: Atlanta, Baltimore, Boise, Denver, Hartford, Houston, Milwaukee, Portland (Oregon), San Diego, Sioux City, Tucson, and Washington, D.C.;
- Sites were selected on the basis of geographic representation within the United States, population size, demographic representation, and the types of drugs prevalent in each community;
- The Media Campaign used advertisements that had already been produced by PFDA, but purchased television and radio time slots to ensure the ads would reach their target audiences, rather than presenting them as PSAs (public service announcements); the television advertising included both broadcast and major cable networks;
- Selected to be appropriate for child, teen, or adult audiences, the paid advertisements were scheduled to be broadcast during peak viewing/air time for each of the target audiences; the objective was to reach 90 percent of each target audience with an average of four exposures per week;
- Advertisements emphasized prevention of entry-level drug use (marijuana and inhalants) in all target sites and focused on local epidemics of heroin, cocaine, and methamphetamine use, where appropriate;
- In sites with substantial Hispanic populations (Denver, Hartford, Houston, San Diego, Tucson, and Washington, D.C.), advertisements were broadcast in Spanish as well as in English;
- Stations were required to provide pro bono, one-to-one matching time for other approved public service announcements or in-kind programming;
- Advertisements with a pro bono match requirement also were purchased in newspapers; and
- Two outdoor billboard advertisements also were purchased in each target site.

The Media Campaign was kicked off in each target site by the Director or another senior representative of ONDCP, typically with each area's congressional representative and local community leaders, and ran from January through June. The paid advertisements for each target site during Phase I are presented in a matrix format in Appendix A. Of 62 paid advertisements, 30 were shown on

television (6 for elementary school children, 15 for teens, and 8 for parents), 17 were broadcast on radio, 13 were printed in newspapers, and 2 were displayed on outdoor billboards.

To measure the impact of Phase I of the Media Campaign, the 12 target sites were matched with 12 comparison sites: Memphis, Richmond, Eugene, Albuquerque, Harrisburg, Dallas, Nashville, Spokane, Phoenix, Duluth, Austin, and Birmingham. Identical data collection was conducted in all 24 sites to allow comparative analysis. (Exceptions are noted in Chapter 2.)

The evaluation included three components:

- A quantitative component, consisting of in-school surveys of 4th through 6th graders and 7th through 12th graders, and a telephone survey of parents with children 18 or younger;
- A qualitative component, in which site visits were made to conduct focus groups with members of the target audiences (elementary, middle, and high school youth; and parents) and to conduct interviews with key informants in communities (e.g., prevention and treatment specialists, community coalition members, law enforcement representatives, members of the clergy); and
- Media monitoring, in which the level of television anti-drug advertising was measured.

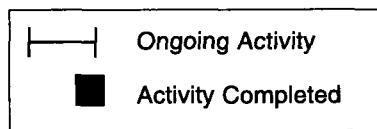
Surveys, focus groups, and interviews were conducted in both center-city and non-center-city locales in each of the 24 sites.

ONDCP did not purchase advertising in the comparison sites; any exposure to anti-drug advertising in the comparison sites was expected to come only from public service announcements. The evaluation of Phase I of the Media Campaign was designed to determine if there were changes in awareness of the anti-drug ads (and, to the extent possible, changes in attitudes toward drugs) resulting from exposure to paid anti-drug messages, compared with changes in awareness resulting from exposure to free public service messages on local television stations.

In both target and comparison sites, however, youth and parents may have been exposed to other advertisements and other information campaigns that were conducted in their communities. Site visits were made to target and comparison sites to determine what other exposure there may have been, and what other factors in the community may have influenced awareness and attitudes regarding drugs. The site visits revealed, for example, that San Diego, a target site, and Memphis, a comparison site, each had anti-drug media campaigns in place prior to implementation of the Media Campaign, and those efforts continued during the Phase I time period. Furthermore, during Phase I the Media Campaign provided the impetus for other, community-based activities in some target sites. The evaluation makes every effort to distinguish between effects resulting from the

Exhibit 1-1 An Overview of Timing of Data Collection

	Months											Type of data collected
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul		
Monitoring of television ads	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----											Quantitative
In-school surveys and parent interviews (baseline)		----- ----- ----- ----- ----- ----- ----- ----- ----- -----										Quantitative
Baseline site visits			----- ----- ----- ----- ----- ----- ----- ----- ----- -----									Qualitative
Intermediate site visits						----- ----- ----- ----- ----- ----- ----- ----- ----- -----						Qualitative
In-school surveys and parent interviews (followup)									----- ----- ----- ----- ----- ----- ----- ----- ----- -----			Quantitative
Followup site visit									----- ----- ----- ----- ----- ----- ----- ----- ----- -----		Qualitative	



Media Campaign and those resulting from other public information and education campaigns in the communities studied.

Exhibit 1-1 provides an overview of the timing of data collection for the Phase I evaluation. Surveys were conducted in all 24 metropolitan areas at baseline (prior to and at the beginning of the Media Campaign from November 1997 through February 1998) and at followup (near the end of Phase I in May and June 1998). Respondents were asked about their awareness of anti-drug ads in the media and about their perceptions, attitudes, and behaviors with regard to drug use. Site visits were conducted at three points in time: baseline (November 1997–January 1998); intermediate (approximately 12 weeks after the baseline visit to each respective site); and followup (May–June 1998). Media monitoring was conducted continuously from October 1997 through June 1998 (i.e., prior to and throughout the Phase I Media Campaign).

In Phase I, television advertisements comprised the majority of the intervention because this medium provides greatest access to the target audiences. For this reason, and because ads scheduled for dissemination through other media were finalized after the Media Campaign had begun, the measures of ad awareness concentrated on television ads only, and specifically on a subset of television ads included in the survey instruments.

For the Phase I Final Report, the focus is on changes in awareness as measured by student and parent survey data, using site visit and media monitoring data to help explain and interpret analysis of the quantitative survey data. For a thorough presentation of qualitative data that describe the context for measurement in the target and comparison communities, readers of this report are referred to *Testing the Anti-Drug Message in 12 American Cities: National Youth Anti-Drug Media*

Campaign, Phase I (Report No. 1) (September 1998). That report, based on baseline and intermediate data collection, assesses the early impact of the Media Campaign.

Although the evaluation of Phase I focuses on changes in awareness, the data collected on attitudes and behavior provide context for the awareness data and will provide insight on these factors in subsequent phases of the Media Campaign. The Phase I Media Campaign evaluation is the first step in an ongoing evaluation research effort that will be conducted during all three planned phases of the Media Campaign.

1.4 ORGANIZATION OF THE REPORT

Evaluation findings for Phase I of the Media Campaign are presented in the five chapters that follow.

Chapter 2 explains the methodologies used for the selection of sites, administration of in-school and telephone surveys, conducting of site visits, and media monitoring. Also discussed is the analytic approach used for integrating findings from the different data sources.

Chapter 3 presents aggregate survey results for youth (4th to 6th graders), teens (7th and 8th graders, 9th and 10th graders, and 11th and 12th graders), and parents. Charts and figures are included in Chapter 3 to illustrate results across the major topic areas of the study; tables in Appendix E provide a more complete breakout of variables.

Chapter 4 provides an interpretation and discussion of aggregate survey results, in which media monitoring and site visit data are used, where possible, to explain patterns of findings that were observed in the survey data.

Chapter 5 presents within-market results in the form of case studies of each of the 12 target sites. Statistically significant differences in the market-level survey findings, focused on intended outcomes, are discussed in the context of findings from site visits and media monitoring in those markets.

The report concludes with Chapter 6, which presents lessons learned from Phase I and recommendations that may be applied to the full implementation of the Media Campaign in Phase III.

Supporting data are provided in five appendixes, as follows:

- Appendix A, *Television Media Monitoring Data*, presents data gleaned from the monitoring of television advertisements that were broadcast in the cities included in the study and includes a listing of all paid advertisements for each target site;
- Appendix B, *Youth, Teen, and Parent Surveys*, includes the surveys that were administered at the beginning and end of Phase I of the Media Campaign;

- Appendix C, Weighting Procedures, explains how survey data were weighted for purposes of statistical analysis;
- Appendix D, Analytic Approach and Statistical Testing, explains how survey data were analyzed and tested for statistically significant differences; and
- Appendix E, Aggregate-Level Data, presents survey data for all of the target sites grouped together and all of the comparison sites grouped together.
- Appendix F, Site Level Data, presents survey data for each target site and its respective comparison site in the same table.

2. METHODOLOGY

Phase I of the National Youth Anti-Drug Media Campaign (hereafter referred to as the Media Campaign) evaluation was designed as a 6-month “learning lab” or “pilot,” to test the hypothesis that the planned intervention—exposure to paid, well-placed anti-drug messages on television, radio, and in newspapers, as compared to mostly unpaid, public service media messages—could meet the overall goals of the Media Campaign. Therefore, the specific intent of Phase I was to measure target group awareness of different types of paid anti-drug media messages (ad awareness), and any changes in awareness attributable to the Media Campaign.

The Phase I evaluation focused on awareness of television ads, even though the Media Campaign evolved to include radio, newspaper, and billboard advertisements. The primary vehicle for disseminating anti-drug messages was television as this medium provided the capability to reach the largest percentage of the target audiences. Radio, newspaper, and billboard ads had not yet been developed when the survey instruments were being completed. Furthermore, a system for direct monitoring of television ads was already in place before the Media Campaign was launched. For these reasons, the surveys included awareness questions only about ads seen on television. The survey instruments included questions on a few specific ads targeting each of the primary audiences (e.g., adults, teens, and youth) that were selected based on the initial plan that these ads would receive heavy emphasis in the buying plan.

At the start of the Media Campaign, ONDCP expected to detect measurable changes in ad awareness within a few months of the start of the 6-month Phase I Pilot Test. However, measurable changes in other domains were expected to take much longer. For example, change in perceptions and attitudes about drugs, if any, were not expected to occur for another 1 to 2 years, and changes in drug use itself, if any, not for another 2 to 3 years. In Phase I, therefore, the goal was to evaluate ad awareness.

Data were collected on a number of domains in addition to awareness of the paid ads in order to assess completely and thoroughly the context within which the Media Campaign was implemented. These domains include the following:

- Awareness of paid ads (the focus of the Phase I evaluation);
- Perceptions of effectiveness of the ads;
- Awareness of risk of drugs;
- Attitudes toward drugs;
- Sources of information about drugs; and

- Use of drugs among youth and teens.

The reasons for collecting this additional data were:

- To be able to measure short-term changes in domains other than ad awareness, in the unlikely event that they should occur. (In fact many such short-term changes did occur, and they are reported in Chapter 3).
- To establish a baseline against which to measure any future change in perceptions, attitudes, or drug use attributable to the Media Campaign¹;
- To provide information for improving the focus, type, and presentation of future Campaign messages.

The Phase I evaluation relies on a case-control, pretest and posttest study design (Cook and Campbell, 1979). Its overall purpose is to identify and measure awareness of anti-drug advertisements among target groups and to assess the impact of these ads on awareness of the dangers of drugs, and on attitudes toward drugs, while taking into account local contextual events and the potential effects of any independent, simultaneous, community educational or informational activities that could influence change in the target group.

Three types of data were collected for the Phase I evaluation: quantitative survey data, qualitative site visit data, and media monitoring data.

This chapter describes the specific procedures used to collect these types of data, including the data collection forms and content of information gathered, and provides a description of how the information was used to address the research questions posed by the evaluation of the Phase I Media Campaign.

2.1 SELECTION OF PHASE I EVALUATION SITES

Twenty-four metropolitan areas throughout the United States served as the Phase I evaluation sites. Twelve of these were the designated target sites, where the Phase I paid anti-drug messages would be disseminated. Another 12 market areas were designated as comparison sites, where the Media Campaign ads would not be aired as paid advertisements. (Pre-existing anti-drug and social issue public service announcements (PSAs) would continue to appear without manipulation.) The 12 target sites selected for the Phase I Media Campaign were chosen on the basis of the following criteria: (1) geographic dispersion to ensure that market area sites were representative of different regions of the country; (2) variation in the size of the population (i.e., to ensure that small, medium, and large media markets were included), race

¹ Originally, the evaluation designers had hoped to continue monitoring the subsample of Phase I sites throughout the 5-year Campaign. In this case, the Phase I data would have served as baseline data. However, in part due to lessons learned in Phase I, the Phase III evaluation designers awarded, under full and open competition by NIDA, a contract to collect data through a household survey methodology rather than through a school-based survey in Phase III. Results obtained from these two different methods would not be scientifically comparable.

and ethnicity of the population, percentage of the population between the ages of 5 and 17, crimes per 100,000 population, percentage of children under 18 living below the poverty level, and unemployment rate; (3) inclusion of some metropolitan statistical areas (MSAs) that reported a serious emerging drug problem (e.g., methamphetamines); (4) inclusion of MSAs that had data available on drug use and attitudes and were part of a High Intensity Drug Trafficking Area (HIDTA), an Arrestee Drug Abuse Monitoring program (ADAM), or a Community Epidemiologic Work Group (CEWG) site, because these sites were presumed to have secondary data sources that would provide additional information on the drug problem in the community; and (5) inclusion of sites that experienced relatively low prior Partnership for a Drug-Free America (PDFA) PSA activity, because PDFA PSAs already were running in most sites but were aired more frequently in certain areas.

The same criteria were used to select the 12 comparison sites for the Phase I evaluation as were used to select the target sites. Each target site was paired with a comparison site that had similar population characteristics, to the extent possible, and was located in a relatively similar geographic region. Sometimes a “perfect” match between a target site and its comparison was difficult, and a city defined as a large MSA (i.e., a population over 500,000) was paired with a site that was a medium MSA (i.e., a population between 200,000 and 500,000). This was done only when there were other characteristics (e.g., geographic location, proportion of ethnic groups) that made the two MSAs well suited as paired sites.

It was not always possible to achieve an optimal match with the comparison sites. Richmond was one of the few candidates available that matched Baltimore on most of the criteria listed above. In this case, finding a comparison site with similar characteristics, and still having it located in the proximate geographic region, was the deciding factor in selecting Richmond as the comparison site for Baltimore. Unfortunately, an insufficient number of center-city student surveys were obtained in Richmond, so Richmond was later dropped altogether as a comparison site for Baltimore for the student survey analysis. (Richmond was retained for the parent component of the study.)

Only one site in Texas, Houston, was selected as a target site. Dallas was selected as the comparison site for Houston because the two MSAs have similar demographic and socioeconomic indicators. For the same reason, Austin was selected as the comparison for Tucson, another target site. It was very difficult to find an MSA with characteristics similar to those of Atlanta, a target site, and have it be located in the Southeast. Memphis was judged to be sufficiently close to Atlanta on the criteria listed above and, therefore, was selected as a comparison to Atlanta.

Large MSAs such as New York, Los Angeles, San Francisco, Chicago, and Miami were not selected as target sites, primarily for programmatic reasons. Since Phase I was a pilot or test phase for the Media Campaign, ONDCP, like any advertising client, wanted to avoid testing its message in the largest

markets, which would draw national attention to the test phase. Additionally, the cost of buying advertising time is significantly higher in the largest markets, especially New York and Los Angeles, the top two media markets and centers of the national media industry.

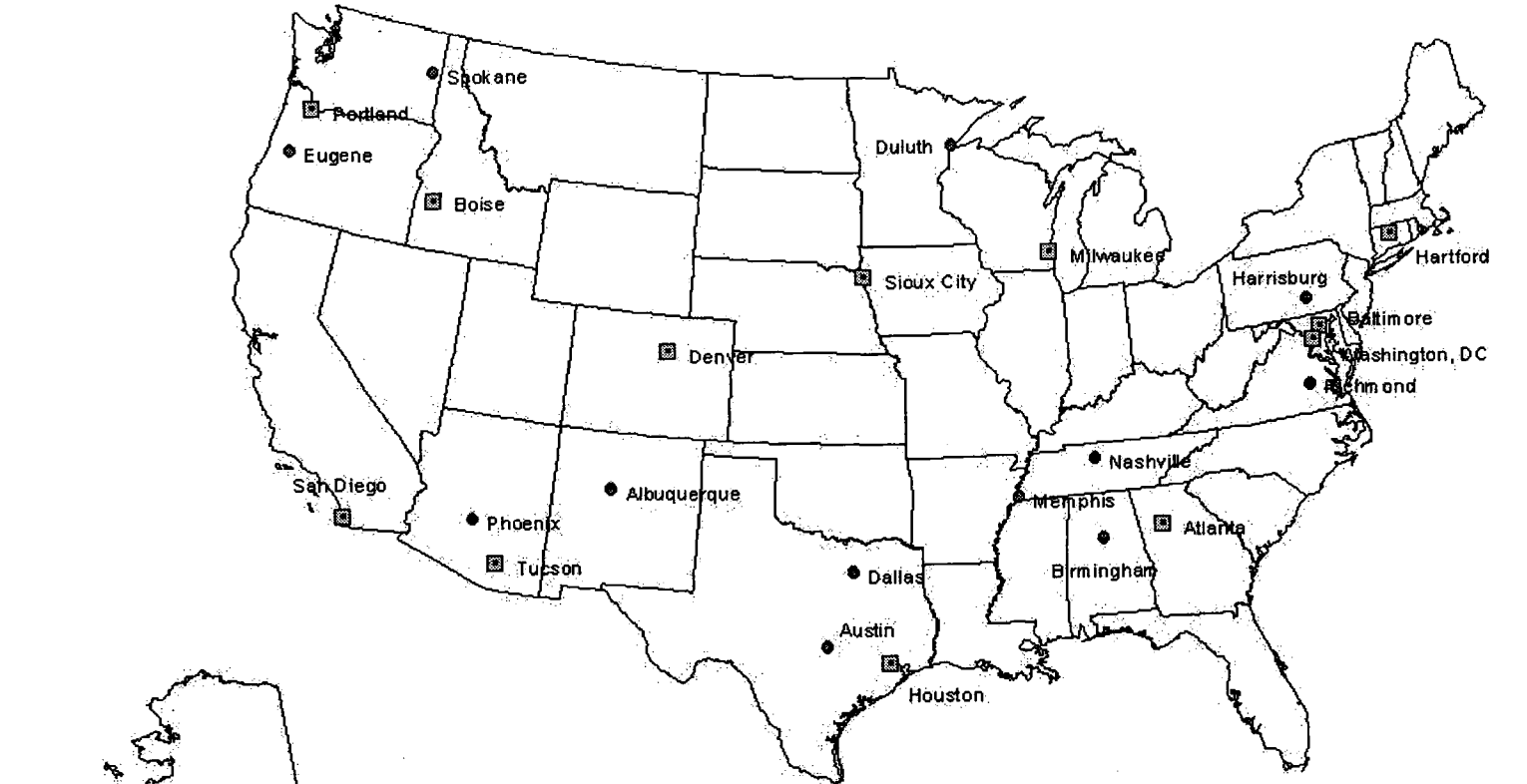
From the evaluation perspective, there were also good reasons to avoid these “mega-MSAs.” Among these were (1) the difficulty of obtaining appropriate comparison sites (a particular problem for Miami, a unique city that has the largest concentration of Cuban Americans in the country); (2) some of the largest cities had already been saturated with PDFA’s prior PSA campaigns and had been heavily exposed to some of the ads used in Phase I. For example, Miami has the most active community coalition in the country and the highest exposure to PDFA’s advertisements over the past 3 years. Inclusion of such cities would confound any attempt to measure changes in target group awareness of the ads from the baseline to followup; (3) the sheer size of these communities would have significantly increased costs because the selection of larger samples within each of the MSAs would have been necessary in order to provide an adequate assessment of the impact of the Media Campaign on the MSA; and (4) these mega-MSAs would not have been representative of the vast majority of the MSAs in the country.

Exhibit 2-1 presents a map depicting the Media Campaign target sites with their corresponding comparison sites. Exhibit 2-2 lists all of the target sites with their paired comparison sites and presents the MSA size and demographic characteristics. More specific demographic information pertaining to each target site is presented in the site-specific results (case studies) in Chapter 5.

There were three independent samples: the parent sample, the in-school sample of youth, and the in-school sample of teens. The youth and teen samples were school-based and therefore required the cooperation of schools and school districts. However, cooperation of all school districts was not always obtained. This led to some sites not being used as comparisons for the two student samples. The original site selections were maintained for the parent sample, and parent data were collected in all 24 sites. These original sites also were maintained for the qualitative data collected through site visits. However, for the student samples, in-school survey data were not collected in Albuquerque, Spokane, center city Richmond, and Harrisburg because school districts declined to participate in the study. In-school survey data also were not collected in center city Tucson for the same reason.

The in-school surveys could not take place if the school or school district refused entry. Some school districts already were participating in one of a number of other Federal, State, local, or private-sector school-based surveys. Some school districts required affirmative consent from parents, which created a further obstacle. At one site, the school district did not gain approval from their Institutional Review Board in time for the survey so that the site had to be dropped. In a number of sites, unrelated legal issues at certain schools resulted in last minute refusals to participate.

Exhibit 2-1 Media Campaign Phase I Target and Comparison Sites



Media Campaign Sites		TARGET SITES	COMPARISON SITES
●	Comparison	Atlanta	Memphis
◻	Target	Baltimore	Richmond
		Boise	Eugene
		Denver	Albuquerque
		Hartford	Harrisburg
		Houston	Dallas
		Milwaukee	Nashville
		Portland, OR	Spokane
		San Diego	Phoenix
		Sioux City	Duluth
		Tucson	Austin
		Washington, D.C.	Birmingham

Exhibit 2-2

Demographic Characteristics of Phase I Target and Comparison Sites

Demographic Characteristics	Comparison Sites	
	Atlanta	Memphis
Population	2,833,511	981,747
White (%)	71	58
African American (%)	25	40.6
Hispanic (%)	1.0	0.7
Crime rate per 100,000 per year	807	1,253
Children under 18 below poverty level (%)	13.9	26.6
Unemployment rate (%)	5.1	7.2
Population ages 5-17 (%)	18	19.7
		Richmond
Population	2,383,172	865,640
White (%)	71	69
African American (%)	25	29
Hispanic (%)	1.0	1.0
Crime rate per 100,000 per year	1,335	603
Children under 18 below poverty level (%)	34	14
Unemployment rate (%)	4.8	4.1
Population ages 5-17 (%)	16	17.1
		Eugene
Population	205,775	282,912
White (%)	96	95
African American (%)	0.5	0.7
Hispanic (%)	2	2.4
Crime rate per 100,000 per year	366	404
Children under 18 below poverty level (%)	10.9	16.1
Unemployment rate (%)	4	7.1
Population ages 5-17 (%)	20	13.7
		Albuquerque
Population	1,622,980	589,131
White (%)	86	63
African American (%)	6	2
Hispanic (%)	13	30
Crime rate per 100,000 per year	513	879
Children under 18 below poverty level (%)	13.4	19.9
Unemployment rate (%)	4.8	6.5
Population ages 5-17 (%)	18	30
		Harrisburg
Population	1,123,678	587,986
White (%)	86.3	91
African American (%)	8.4	6.6
Hispanic (%)	6.6	1.5
Crime rate per 100,000 per year	482	299
Children under 18 below poverty level (%)	11.4	10.9
Unemployment rate (%)	4.8	3.8
Population ages 5-17 (%)	15.7	15.5

Demographic Characteristics	Target Sites		Comparison Sites	
	Houston		Dallas	
Population	3,322,025		2,676,248	
<i>White (%)</i>	66		73	
<i>African American (%)</i>	18.4		16	
<i>Hispanic (%)</i>	21		14	
Crime rate per 100,000 per year	856		819	
Children under 18 below poverty level (%)	20.2		16.5	
Unemployment rate (%)	6.7		5.8	
Population ages 5–17 (%)	20.9		18.8	
	Milwaukee		Nashville	
Population	1,432,149		865,640	
<i>White (%)</i>	83		83	
<i>African American (%)</i>	14		15	
<i>Hispanic (%)</i>	3		0.7	
Crime rate per 100,000 per year	533		1,088	
Children under 18 below poverty level (%)	19.4		15	
Unemployment rate (%)	5.4		4.8	
Population ages 5–17 (%)	18.6		17.9	
	Portland, OR		Spokane	
Population	1,477,895		361,364	
<i>White (%)</i>	91		95	
<i>African American (%)</i>	2		1.4	
<i>Hispanic (%)</i>	3		1.6	
Crime rate per 100,000 per year	726		510	
Children under 18 below poverty level (%)	12.4		16.8	
Unemployment rate (%)	5.1		7.2	
Population ages 5–17 (%)	18.3		19	
	San Diego		Phoenix	
Population	2,498,016		2,122,101	
<i>White (%)</i>	75		85	
<i>African American (%)</i>	6		3.5	
<i>Hispanic (%)</i>	19		16	
Crime rate per 100,000 per year	794		756	
Children under 18 below poverty level (%)	16.2		17.3	
Unemployment rate (%)	6.1		6	
Population ages 5–17 (%)	16		18.1	
	Sioux City		Duluth	
Population	115,018		239,971	
<i>White (%)</i>	93		97	
<i>African American (%)</i>	1		0.5	
<i>Hispanic (%)</i>	3		0.4	
Crime rate per 100,000 per year	1,271		252	
Children under 18 below poverty level (%)	17.8		17.3	
Unemployment rate (%)	4.9		8.5	
Population ages 5–17 (%)	19		18.4	

Demographic Characteristics	Target Sites	Comparison Sites
	Tucson	Austin
Population	666,880	781,572
White (%)	78	77
African American (%)	3	9
Hispanic (%)	24	20
Crime rate per 100,000 per year	877	580
Children under 18 below poverty level (%)	23.4	17.4
Unemployment rate (%)	7.5	5.8
Population ages 5–17 (%)	16	17.5
	Washington, DC	Birmingham
Population	3,923,574	907,810
White (%)	65	72
African American (%)	26	27
Hispanic (%)	5	4
Crime rate per 100,000 per year	716	1,071
Children under 18 below poverty level (%)	7.9	20.4
Unemployment rate (%)	3.7	6.1
Population ages 5–17 (%)	16	18.4

NOTE: Data for each site refer to the metropolitan statistical area (MSA).

Exhibit 2-3 presents those sites where replacements were necessary for the student samples and the reasons for selecting the comparison site to serve as a replacement. The decision was made to use four of the existing comparison sites as substitutions for dropped comparison sites because the data collection process was already underway and it would have been too late to obtain clearance for conducting surveys in those sites. In the aggregate data analysis, student survey data for the 12 target sites were compared with student survey data for the 8 original comparison sites. The comparison site substitutions were made only when comparing target site student survey data with comparison site student survey data at the site level.

2.2 SURVEY METHODOLOGY

This section includes a summary of the study population selection process, a description of the survey instruments, and methodologies for measuring pretest and posttest change.

Quantitative data were collected through in-school surveys of youth (grades 4–6) and teens (grades 7–12), and telephone interviews with parents. Parent interview surveys were conducted in all 12 target sites and 12 comparison sites. Student surveys were collected in all 12 target sites and in 8 of the 12 comparison sites. The reasons for this are discussed below. The survey was conducted at two points in time—at baseline (prior to the introduction of the Media Campaign intervention) and at followup (approximately 5 months after introduction of the Media Campaign intervention)—to measure awareness, attitudes, perceptions, and behaviors among youth, teens, and parents before and after Phase I.

Exhibit 2-3 Replacement Comparison Sites

Target site	Original Comparison Site	Replacement Comparison Site	Reason for Selection
Baltimore, MD	Richmond, VA	Memphis, TN	Memphis is a large MSA and its population is 54% African American, similar to Baltimore's population, which is 60% African American.
Denver, CO	Albuquerque, NM	Austin, TX	Austin is a medium size MSA, is geographically located in the southwest, and has the same proportion of Hispanics (23%) as Denver.
Portland, OR	Spokane, WA	Eugene, OR	Eugene was selected due to geographic congruency with Portland, and because its size and demographic breakdown closely matched Spokane, the original comparison site.
Hartford, CT	Harrisburg, PA	Nashville, TN	Nashville was the best replacement because it was located in the southeast, and its size was a reasonable match to Hartford.

2.2.1 Selection of the In-School Survey Population

In-school student samples were drawn from the universe of all public schools in the designated test and comparison market areas. Private schools were not sampled because of the relatively high cost of accessing private vs. public schools. Furthermore, because private schools make up a relatively small proportion of all schools, it would be cost prohibitive to sample enough schools to yield a large enough sample size of private school students to compare to the public school students. Limiting the sample to public schools means that the results are generalizable only to public school students. School lists were obtained from the Market Data Retrieval's *CIC School Directory*. The sample was drawn in two segments: the first segment was the center city of each market (by center city, we mean the city whose name designates the market area), and the second

being all other territory covered by the market area. A total of 16 schools were drawn from each of the 24 sites (8 schools for the elementary school sample and 8 schools for the secondary school sample). Within schools, three classes were selected, one from each of three different grades, wherever possible. Students completed a self-administered questionnaire in which they responded to a range of questions addressing their awareness, beliefs, attitudes, and behaviors with regard to drugs, as well as their awareness of anti-drug advertisements. Questions were organized under the domains presented in the bulleted list at the front of this chapter. Survey instruments were available in Spanish for those students requiring them. The original targeted number of student surveys at baseline was 24,000 across all target and comparison sites (approximately 1,000 in each of 24 sites) with a range of plus or minus 1,000. This was based on an expectation of 60 completed surveys from each school and a total of 16 schools per market. However, because some sites refused to participate, the number of completed surveys was fewer than this early goal. The students interviewed at followup were *not* the same as the ones interviewed for baseline data. Different classrooms were used at followup in order to avoid inclusion of respondents who had been exposed to questions during baseline and, thus, could have been influenced if asked to provide followup responses. The final sample size for students was 18,300 at baseline, and 17,015 at followup.

Baseline survey data collection began in November 1997 and continued through February 1998. As a phased-in intervention, the Phase I Media Campaign was introduced in the target sites during the second, third, and fourth weeks of January 1998. In two-thirds of the target sites, the majority of baseline school surveys were completed before the Phase I Media Campaign began in those sites. In the remaining four target sites, a number of baseline school surveys were still being conducted after Phase I had been launched because obstacles were encountered in gaining admittance into the school to conduct surveys in the classrooms. (The implications of conducting late baseline surveys are discussed in Chapters 4 and 5.) All baseline parent surveys were completed prior to the beginning of the Phase I Media Campaign.

Followup data were collected in May and June 1998. Schools and classrooms within schools were randomly selected, and school administrators were not involved in any way in the selection of the samples or administration of the surveys. The sample design is similar to those utilized by the *Monitoring the Future* study and other nationally representative school-based surveys in that they are school-based and use a multi-stage random sampling procedure with three stages of selection. Stage 1 is the selection of particular geographic areas. Stage 2 is the selection of one or more schools in each area, and Stage 3 is the selection of classrooms. The resulting samples are representative of the market areas from which they were drawn.

Exhibit 2-4 presents school response rates for each of the target and comparison sites, and Exhibit 2-5 presents overall school response rates. School response rates in center city areas were somewhat higher (60% at baseline and 57% at followup) than school response rates in non-center city locations (43% at baseline

Exhibit 2-4 School Response Rates for Target and Comparison Sites¹

Target Site	Response Rate (%)		Comparison Site	Response (%)	
	Baseline	Followup		Baseline	Followup
Atlanta	56	50	Memphis	63	63
Baltimore	56	56	Richmond*	25	31
Boise	63	56	Eugene	69	56
Denver	56	56	Albuquerque*	6	0
Hartford	69	63	Harrisburg*	6	6
Houston	38	31	Dallas	50	50
Milwaukee	44	44	Nashville	50	44
Portland, OR	56	56	Spokane*	19	13
San Diego	44	44	Phoenix	25	25
Sioux City	94	88	Duluth	81	75
Tucson	44	44	Austin	94	94
Washington, DC	69	69	Birmingham	56	50

¹ School response rate was calculated by taking the total number of schools from the original sample that participated in the study, divided by the total number of schools originally drawn. Sixteen schools were drawn for each market/site.

* Indicates market was cancelled. School response rates are lower in these markets because recruitment efforts were stopped once cooperation from the center city school district was denied.

Exhibit 2-5 Overall School Response Rates

	Target Sites	Comparison Sites
Number of schools originally drawn for survey	192 ¹	192
Number of schools originally drawn that participated in survey	110	78
Number of schools participating in survey that were replacements	55	42
Response rate	57% ²	41% ³

¹ The number was derived by multiplying the number of target sites (12) by 16 schools per market.

² Response rate was calculated by dividing the number of original schools that participated by the number of schools originally drawn.

³ Response rate for comparison sites would be higher (61%) if the number of schools originally drawn is treated as 128 (derived from removing the 4 comparison markets that were dropped and multiplying (8) comparison sites by 16 schools per market.)

and 40% at followup). Overall school response rates were 57% at baseline and 55% at followup for target sites at the aggregate level, and 41% at baseline and 42% at followup for comparison sites. For an example of high and low-level response rates, Sioux City had a school response rate of 94% at baseline and 88% at followup. Houston's school response rate was 38% at baseline and 31% at followup. Houston ended up with just as many schools and classrooms participating in the study as Sioux City; the difference was that more replacement schools needed to be contacted in Houston whereas researchers in Sioux City were able to work with more of the original schools drawn there. Marketing and opinion research considers any response rate higher than 50% to be a very good response (CMOR, 1996).

Exhibit 2-6 presents the student response rates, which were calculated by dividing the number of students participating in the study by the total number of students

enrolled in classrooms randomly selected to be in the study. We were not able to distinguish between those enrolled students who participated and those who did not because student, classroom, teacher and school anonymity is guaranteed as part of the design of the study. The total number of students present in a given classroom at the time that questionnaires were administered was not recorded, but on-site interviewers indicated that typically 100% of the students present in any given classroom did participate in the study. The student response rates displayed in Exhibit 2-6 include response rates at each site as well as student response rates aggregated across all sites (aggregated response rates represent a sum of the number of completed interviews across all sites, divided by the number of eligible students in the sample—those enrolled in selected classes—also summed across all sites. An adjusted overall student response rate is possible by multiplying the school response rate (presented in Exhibit 2-5) by the student response rate (in

**Exhibit 2-6
Student Response Rates**

	Baseline (%)	Followup (%)
Aggregate Student Response Rates*		
TOTAL	83	82
Youths (Grades 4-6)	82	82
Teens (Grades 7-12)	83	82
Target Sites	82	82
Comparison Sites	84	83
Central City	83	82
Non-Central City	82	82
Site-Level Student Response Rates*		
Atlanta	84	85
Baltimore	86	83
Boise	82	78
DC	77	77
Denver	77	82
Hartford	81	86
Houston	85	80
Milwaukee	85	79
Portland	80	81
San Diego	82	83
Sioux City	86	88
Tucson	77	80
Austin	83	80
Birmingham	80	77
Dallas	82	82
Duluth	86	89
Eugene	83	82
Memphis	82	88
Nashville	92	83
Phoenix	82	82

*FORMULA: Number of students participating in the study divided by the total number of students enrolled in the classrooms randomly selected to be in the study

	Baseline (%)	Followup (%)
Site-Level Student Response Rates, by Central City and Non-Central City Within Target Sites		
Atlanta		
<i>Central City</i>	79	85
<i>Non-Central City</i>	89	85
Baltimore		
<i>Central City</i>	86	88
<i>Non-Central City</i>	86	77
Boise		
<i>Central City</i>	85	77
<i>Non-Central City</i>	78	78
Washington, DC		
<i>Central City</i>	80	72
<i>Non-Central City</i>	74	83
Denver		
<i>Central City</i>	74	77
<i>Non-Central City</i>	81	87
Hartford		
<i>Central City</i>	81	86
<i>Non-Central City</i>	81	85
Houston		
<i>Central City</i>	87	84
<i>Non-Central City</i>	84	75
Milwaukee		
<i>Central City</i>	82	77
<i>Non-Central City</i>	91	81
Portland		
<i>Central City</i>	83	76
<i>Non-Central City</i>	78	85
San Diego		
<i>Central City</i>	82	83
<i>Non-Central City</i>	84	83
Sioux City		
<i>Central City</i>	84	80
<i>Non-Central City</i>	88	93
Tucson		
<i>Central City</i>	NA	NA
<i>Non-Central City</i>	77	80

Exhibit 2-6). The overall adjusted student response, based on the original sample, was 47% at baseline, and 34% at followup.

In Exhibit 2-7, the number of student respondents who completed the in-school surveys in target and comparison sites is presented. This is followed by Exhibit 2-8, which displays the number of schools in which data were collected. There was no minimum threshold established for counting a classroom or school as complete. At the outset of the study, however, it was anticipated that approximately 60 student interviews per school would be completed, on average. The resulting outcome showed an average slightly better than 60 interviews (that is, more schools contributed more than 60 completed interviews than contributed less than 60). Minimum thresholds for the class-level or the school-level were not established as school sizes and class sizes vary depending on state or local community norms.

Exhibit 2-7

Number of Student Respondents in Target and Comparison Sites

Target Site	No. of Respondents (% of Goal)		Comparison Site	No. of Respondents (% of Goal)	
	Baseline	Followup		Baseline	Followup
Atlanta	Youth 392 (81.6) Teens 416 (86.6)	519 (108.1) 386 (80.4)	Memphis	Youth 482 (100.0) Teens 555 (115.6)	564 (117.5) 437 (91.0)
Baltimore	Youth 425 (88.5) Teens 472 (98.3)	295 (61.6) ¹ 405 (84.4)	Memphis ²	See number of respondents listed above.	
Boise	Youth 555 (115.6) Teens 508 (105.8)	509 (106.0) 495 (103.1)	Eugene	Youth 426 (88.7) Teens 541 (112.7)	380 (79.2) 479 (99.8)
Denver	Youth 426 (88.7) Teens 573 (119.4)	414 (86.2) 564 (117.5)	Austin ³	Youth 393 (81.8) Teens 531 (110.6)	369 (76.8) 474 (98.7)
Hartford	Youth 420 (87.5) Teens 301 (62.7)	442 (92.1) 311 (64.8)	Nashville ⁴	See number of respondents listed below.	
Houston	Youth 405 (84.4) Teens 442 (92.1)	419 (87.3) 382 (79.6)	Dallas	Youth 425 (88.5) Teens 447 (93.1)	471 (98.1) 381 (97.4)
Milwaukee	Youth 393 (81.8) Teens 432 (90.0)	350 (72.9) 331 (69.0)	Nashville	Youth 546 (113.8) Teens 487 (101.5)	452 (94.2) 452 (94.2)
Portland, OR	Youth 537 (111.9) Teens 607 (126.5)	495 (103.1) 473 (98.5)	Eugene ⁵	See number of respondents listed above.	
San Diego	Youth 404 (84.2) Teens 549 (114.4)	419 (87.3) 515 (107.3)	Phoenix	Youth 331 (69.0) Teens 457 (95.2)	395 (82.3) 389 (81.0)
Sioux City	Youth 448 (93.3) Teens 522 (108.8)	446 (93.0) 444 (92.5)	Duluth	Youth 564 (117.5) Teens 561 (116.9)	522 (108.8) 480 (100.0)
Tucson ⁶	Youth 191 (40.0) Teens 335 (70.0)	191 (40.0) 301 (62.7)	Austin	See number of respondents listed above.	
Washington, DC	Youth 462 (96.3) Teens 439 (91.5)	490 (102.1) 389 (79.2)	Birmingham	Youth 426 (88.7) Teens 474 (98.7)	411 (85.6) 374 (77.9)
Total	10,654 9,985		Total	7,646 7,030	

Note: The goal for each sample was 480 respondents per site, per wave.

¹This relatively low rate was due to on-site problems in a number of schools on the day of the survey.

²Replaces comparison site of Richmond.

³Replaces comparison site of Albuquerque.

⁴Replaces comparison site of Harrisburg.

⁵Replaces comparison site of Spokane.

⁶Non-center city data only. No center city data were collected due to on-site problems.

Exhibit 2-8 Number of Schools Surveyed in Target and Comparison Sites

Target Site	No. of Schools (% of Goal)		Comparison Site	No. of Schools (% of Goal)	
	<i>Baseline</i>	<i>Followup</i>		<i>Baseline</i>	<i>Followup</i>
Atlanta	14 (87.5)	15 (94.0)	Memphis	16 (100.0)	16 (100.0)
Baltimore	13 (81.2)	13 (81.2)	Memphis	See number of schools listed above	
Boise	16 (100.0)	16 (100.0)	Eugene	13 (81.2)	13 (81.2)
Denver	16 (100.0)	16 (100.0)	Austin	16 (100.0)	16 (100.0)
Hartford	13 (81.2)	13 (81.2)	Nashville	15 (94.0)	15 (94.0)
Houston	13 (81.2)	14 (87.5)	Dallas	15 (94.0)	15 (94.0)
Milwaukee	12 (75.0)	12 (75.0)	Nashville	See number of schools listed above	
Portland, OR	16 (100.0)	16 (100.0)	Eugene	See number of schools listed above	
San Diego	13 (81.2)	13 (81.2)	Phoenix	13 (81.2)	13 (81.2)
Sioux City	16 (100.0)	15 (94.0)	Duluth	16 (100.0)	15 (94.0)
Tucson ¹	8 (50.0)	8 (50.0)	Austin	See number of schools listed above	
Washington, DC	15 (94.0)	15 (94.0)	Birmingham	16 (100.0)	16 (100.0)
Total	165	166	Total	120	119

Note: Targeted goal was 16 schools per site except for Tucson, whose target was 8 schools.

¹ Center city data were not collected in Tucson but data from non-center city schools were collected.

The implications of not getting into schools in some comparison sites meant that there was not a unique comparison site for every target site. As discussed earlier, for the analysis of student survey data, some comparison sites were used more than once to serve as replacements. Further, the implications of not obtaining data from all schools within each market was not an issue for the aggregate analyses but prevented some comparisons at the market level. Sample sizes were not large enough to look at center city and non-center city differences at the market level. (For example, in Tucson, we were unable to obtain access to the Tucson city schools; therefore, the analysis could not examine results for center city students but was able to compare non-center city students in Tucson with the non-center city students in Austin).

Power analyses were conducted to determine an appropriate sample size. These analyses were performed to ensure that the study would be able to address the research questions adequately. They provided a means of determining the minimum sample size necessary to detect statistically significant differences between groups. The power analyses indicated that the expected student sample sizes would be large enough to detect small to moderate expected changes (changes ranging from 2 to 10 percentage points) over time in awareness and/or attitudes. The differences in drug use between target and comparison sites could not be detected using this power analysis and the resulting sample sizes. However, change in drug use was not an area of focus for the Phase I study.

Collecting data from the elementary and secondary school student samples consisted of self-administered questionnaires completed in the schools with oversight by a research staff member. School staff were not involved in administering the survey. Questionnaires preserved individuals' anonymity and did not contain students' names or any form of individual identification. The surveys were identified by the school and class in which they were conducted solely for purposes of weighting and identifying analytical groups (e.g., center city vs. non-center city schools). Within each of the 12 target sites, 8 schools were randomly selected for the elementary school student sample and 8 schools for the secondary school student sample, at both pretest and posttest, resulting in an estimated sample of 12,000 target group students at baseline and 12,000 target group students at followup. Likewise, within each of the 12 comparison market areas, 8 schools were randomly selected for the elementary school student sample and 8 schools for the secondary school student sample, at both pretest and posttest, resulting in an estimated sample goal of 12,000 comparison group students at baseline and another 12,000 comparison group students at followup.

For the secondary school student sample, the sampling methodology was as follows:

- Within each market area, a random sample of public schools was drawn. The sample was drawn in two segments, the first segment being the center city of each market and the second being all other territory covered by the market area. An approximately equal number of schools were drawn from each of these segments.
- The schools were drawn from lists obtained from Market Data Retrieval's *CIC School Directory*, using the most recent directories available. Probability of selection for each individual school was proportional to the number of students enrolled in the school multiplied by the estimated proportion of students enrolled in the designated grades (i.e., grades 7 through 12).
- Each school so selected was recruited for participation in the study. Once a school was recruited, three classes were selected for participation at pretest and three classes at posttest, for a total of six classes. The classes were selected with the intention of minimizing the likelihood that the same students would be participating in both the baseline and followup surveys to avoid conditioning bias. The three classes at pretest and three classes at posttest consisted of one from each of three different grades in the school whenever feasible (i.e., when the school had three or more of the designated grades). When a selected school had fewer than three of the designated grades (e.g., a middle school with grades 7 and 8 only), the classes were randomly selected from the available grades to ensure that at least one class from each grade was represented (e.g., the designated classes included either two 7th grade classes and one 8th grade class or two 8th grade classes and one 7th grade class.)
- The grades from which classes were selected were chosen systematically from the sample of schools to generate roughly equal numbers of classes from each of the designated grades for the entire sample.

- The classes selected for the posttest at each school consisted of three classes representing the same grades that were included in the baseline surveys, but the classes had different students to avoid conditioning bias.
- In general, classes were selected from those that are common to all students (e.g., home rooms) or from those for required subjects.
- Because this is a pretest and posttest study, one further stipulation was made in the selection of schools: that there be a sufficient number of students in each school to permit a selection of classes such as that described above for both the pretest and the posttest without surveying the same students twice.
- The sample consisted of all students in the selected classes who were present on the scheduled date of the survey.

For the elementary school sample, the procedures were the same as those described above, but the designated grades were 4 through 6 instead of 7 through 12.

2.2.2 Selection of Parents for Parent Telephone Interviews

The parents selected for interviews were not related to the youth and teen sample subjects; if they were, there was no way of knowing so because a school-based design (having no mechanism for obtaining an individual's identifying information) was used for collecting the youth and teen data. In order to guarantee each student's anonymity, no identifying information was collected from those participating in the school surveys. Therefore, even if some of the students' parents were interviewed by chance, it would not be possible to link the student and parent data. This means that the student and parent samples were independent samples.

The parent sample was a completely random sample (i.e., there was no clustering, as with the school sample, and therefore the sampling error was lower) since a random digit dialing technique (RDD) was used. A sample size of 175 was the design objective; RDD calls were made until the desired sample size was achieved. The resulting sample was demographically similar to that of the metropolitan area being sampled.

A power analysis was conducted to determine an adequate sample size for the parent survey for both the aggregated analyses and the within-market area analyses. The power of tests involving within-market area analyses of the parents' data is somewhat lower than that for the aggregated analyses, but the power of tests is still statistically adequate in terms of the probability of revealing expected changes over time in parents' awareness and attitudes. Parent sample sizes in the aggregated analyses were sufficient to detect small to moderate changes over time. The within-market parent sample of 175 was judged to provide sufficient statistical power to detect medium to large effects (changes of 10 percentage points or higher).

With regard to the sample design for the parent telephone survey, the universe for the study was all parents of children 18 years of age or younger in the market areas included in Phase 1 of the Media Campaign. A probability sample was drawn using the principles of RDD, which was enhanced to increase the incidence of reaching residential households (not businesses) with a working telephone. By using this methodology, it is possible to project the sample results to the relevant test universe. The latest government data show that 94 percent of households in the United States have telephone service; therefore, the sample of parents was generally representative of approximately 94 percent of the parents of children 18 years old or younger in the United States (FCC, 1998). For the parent sample, interviews were conducted by telephone from a central telephone interviewing location. Such random digit dialing gives households with unlisted telephone numbers the same chance of being sampled as households with listed phone numbers, which is critical because the demographics of households with unlisted numbers often are different from those of households with listed numbers.

The parent sample for each market area was drawn as follows:

- An RDD sample of telephone numbers was drawn from all exchanges within the market area.
- Each household contacted was screened to determine whether there were any qualified individuals in the household (a qualified individual was defined as any person who has a child aged 18 or younger). If there was only one qualified individual in the household, that person was selected for the interview. If there was more than one qualified individual in the household, one of them was randomly selected for the interview.
- Up to four callbacks were made to each telephone number sampled in order to find and interview a qualified respondent.
- The pretest and posttest interviews were conducted following the same procedures. The pretest and posttest samples were independent (i.e., individuals were not re-interviewed). Given the number of interviews per market, the odds of contacting the same parent were so small as to be negligible.

At least 175 parents were interviewed in each of the 24 sites at baseline and again at followup, using questions similar to those posed to youth. This met the goal of 175 parents interviewed per site.

The following procedures were used to meet the goal of 175 interviews with qualified individuals per site:

- For all households contacted, approximately 35 percent had members who were parents of children aged 18 or under. Of these, 38 percent at baseline, and 37 percent at followup completed an interview. A further 20 percent of households at each time period could not be reached after four attempts.

- The parent response rate was calculated by dividing the number of completed parent interviews by the estimated number of qualified parents who were contacted. The reason why the number of qualified parents contacted is estimated is because the vast majority of refusals are initial refusals, whereby one does not know whether or not anyone in the household is qualified (i.e., the household has refused to participate before any information could be obtained). For this reason, the number of those initial refusals that are *qualified* is estimated by taking the number of initial refusals times the incidence of qualification (as found for all households where qualification/non-qualification is determined). Thus, the calculation was as follows in Exhibit 2-9:

Exhibit 2-9 Calculation of Parent Response Rates

	Baseline	Follow-up
Completed interviews	4,314	4,211
Qualified refusals	225	325
Initial refusals	14,812	15,249
Incidence of qualification	31.0%	30.5%
Overall parent response rate	47%	46%

NOTE: Qualified initial refusals are estimated (at baseline) as 14,812 multiplied by 31.0%, or approximately 4,592. The response rate is then calculated as: number of completed interviews (4,314) divided by the sum of completed interviews, qualified refusals, and qualified initial refusals $(4,314 + 225 + 4,592) = 47\%$ response rate at baseline. Similarly, qualified initial refusals for followup was obtained by multiplying 15,249 by 30.5%, resulting in 4,650. The parent response rate at followup was calculated by dividing 4,211 by $(4,211 + 325 + 4,650)$, resulting in a **46% response rate**.

- This response rate is actually higher than the industry standard (for cooperation rates in marketing and opinion research). A response of 42 percent for a 10-minute survey with no incentive is what is typically obtained (CMOR, 1996).
- Efforts were made to boost response rates through multiple call-backs to qualified households. Call-backs were made more efficient and more effective through the practice of recording the best time to call back in instances when a specific call back time could be obtained. The Computer Assisted Telephone Interviewing system automatically dialed the phone number at the time scheduled for the interviewer. Thus, the interviewer did not have to remember call back times or keep paper records of call back schedules. In instances where no one in the household was reached on the first attempt, subsequent attempts were scheduled for different times and different days of the week. To maximize cooperation, a standard speech was developed for interviewers to use when respondents initially refused to cooperate.
- Once household members were identified as qualified and willing to participate, they were interviewed; this process was continued in each site until the goal of 175 interviews was met. In some sites, slightly more than 175 parents were interviewed—a result of the combined efforts of interviewers at those sites.

Parents were not asked about their own drug use nor were they asked about their child's usage. They were asked about discussion of drugs with their child. Overall, data were collected at baseline on 2,200 parents from target sites and 2,114 parents from comparison sites and, at followup, on 2,105 parents from target sites and 2,106 parents from comparison sites. The respondents interviewed at followup were *not* the same as those interviewed at baseline. The goal of 2,100 interviews (175 in 12 test and 12 comparison sites, at baseline and at followup) also was met. Interviewers continued to contact households until the goal was achieved (175 parent interviews per market). The breakdown of the number of completed parent interviews by site follows in Exhibit 2-10.

2.2.3 Survey Instruments

The student and parent questionnaires were developed from existing survey instruments used to assess responses to various PDFA campaigns and from the *Monitoring the Future Survey* and the *National Household Survey on Drug Abuse*. Because the paid advertisements used in the Phase I Media Campaign were developed by PDFA, these surveys were appropriate data collection tools, but they were modified significantly in order to adequately measure the goals of the Phase I Campaign. (See Appendix B for copies of the in-school and parent survey instruments and a guide that shows the different studies from which the survey questions were drawn.)

**Exhibit 2-10
Number of Completed Parent Interviews**

Target Site	No. of Respondents (% of Goal)		Comparison Site	No. of Respondents (% of Goal)	
	Baseline	Followup		Baseline	Followup
Atlanta	194 (110.9)	176 (100.1)	Memphis	175 (100.0)	175 (100.0)
Baltimore	183 (104.6)	176 (100.1)	Richmond	175 (100.0)	177 (101.1)
Boise	176 (100.1)	175 (100.0)	Eugene	175 (100.0)	175 (100.0)
Denver	186 (106.3)	175 (100.0)	Albuquerque	175 (100.0)	175 (100.0)
Hartford	195 (111.4)	175 (100.0)	Harrisburg	176 (100.1)	175 (100.0)
Houston	177 (101.1)	175 (100.0)	Dallas	185 (105.7)	177 (101.1)
Milwaukee	190 (108.6)	177 (101.1)	Nashville	176 (100.1)	177 (101.1)
Portland, OR	192 (109.7)	175 (100.0)	Spokane	175 (100.0)	175 (100.0)
San Diego	175 (100.0)	175 (100.0)	Phoenix	176 (100.1)	175 (100.0)
Sioux City	175 (100.0)	176 (100.1)	Duluth	175 (100.0)	175 (100.0)
Tucson	180 (102.9)	175 (100.0)	Austin	175 (100.0)	175 (100.0)
Washington, DC	177 (101.1)	175 (100.0)	Birmingham	176 (100.1)	175 (100.0)
Total	2,220	2,105		2,114	2,106

Note: The goal for each sample was 175 respondents.

The Student Instrument— Separate questionnaires were used for students in grades 4 through 6 (the Youth Survey) and for students in grades 7 through 12 (the Teen Survey). These student questionnaires were presented as 8-page booklets, each requiring about 15 minutes to complete. Student questionnaires were designed to be self-administered; instructions for filling out the questionnaire were printed on the instrument. The questionnaire consisted of close-ended questions generally using three- or four-point scales to measure awareness of anti-drug advertising, frequency of exposure to ads, perceived effectiveness of ads, awareness of drugs, attitudes and perceptions about drug usage, and sources of information about drugs. Also included were demographic items intended to classify respondents according to age, grade, sex, race, and household composition. Respondents were assured of their anonymity both in writing on the questionnaire and verbally by the professional moderator who distributed the questionnaire. No identification numbers were written on the surveys to assure students that their completed surveys could not be linked back to them.

The Parent Instrument— Parent questionnaires were administered by telephone by professional interviewers. The average interview length was 10 minutes. The parent survey covered awareness of anti-drug advertisements, perceptions of ad effectiveness, attitudes and perceptions about drugs, and frequency of talking to children about drugs. Demographic questions regarding children were asked, such as number of children in the household, their ages, and oldest child's age, grade, and sex. Demographic information was collected from parents, including their age, sex, race, marital status, education, and income. All respondents were assured that their anonymity would be maintained and that their answers would be kept confidential.

2.2.4 Measuring Change Using Survey Data

To ensure that the school-based survey sample was representative of the general population, survey numbers are weighted to population totals using design and balancing elements. The design element accounts for the fact that the probability of a school's being selected was proportional to its enrollment (i.e., variation in the actual number of interviews obtained in each school). The data were further weighted for each of the two areas (i.e., center city and non-center city) for each of the 20 markets in which the data were gathered.² For each of the resulting 40 segments (i.e., 20 center city sites and 20 non-center city sites), the estimate of 4th–6th or 7th–12th grade enrollments is equal to the proportion of grades in the school that those grades (meaning, the 4th–6th or 7th–12th grades) represent in that school, multiplied by the total enrollment in the school. The total of these estimates for all schools in the segment will be the estimated universe size. The universe estimate for each grade was calculated using the ratio of U.S. enrollment in grades 4, 5, and 6, and grades 7, 8, 9, 10, 11, and 12 from the latest U.S. Census School Enrollment data.

²Note that for the 4 comparison sites where student surveys were not completed, other comparison sites identified among the 8 remaining comparison sites served as replacements in the within-market analyses (i.e., some comparison sites were matched with more than one target site, but only in pair-wise comparisons, not in aggregate analyses).

For the parent data, the design weight is the Respondent Selection Frequency weight, which accounts for the fact that since only one person can be interviewed per household (by design), parents in households with more than one parent have a lower probability of being selected (i.e., one of the two parents will never be selected). A weight of 1 was given to respondents living in households containing only one parent and a weight of 2 was given to respondents living in households containing more than one parent (to bring them into balance with households with only one parent). For balancing elements, the 1990 Census was used to estimate sex and race counts for heads of families including children under age 18. These data were adjusted upward to allow for the fact that the age range for children could include 18-year-olds. The data also were adjusted with regard to race proportions for whatever shift occurred between 1990 and 1997. A detailed account of the weighting procedures can be found in Appendix C.

For parent responses to telephone interviews, the Significant Net Difference Test was used to distinguish change due to chance from statistically significant change. This test addresses each variable independently and compares the change in observed values for that variable (i.e., the change from baseline to followup for the target sites is compared to the change from baseline to followup for the comparison sites) in order to test whether the change in value for this variable in the target sites is significantly different from the change that was observed in the comparison sites.

For youth and teen responses to the in-school survey, the Significant Net Difference Test was used as well but it was customized to take into account the design effects of the sampling plan, specifically the clustering effects of recruitment by school and by classroom. A detailed account of this test of significance is presented in Appendix D.

2.2.5 Interpretation of Survey Findings

The media buying/advertising industries' standards of achievements regarding brand awareness and the recognition of individual commercials differ somewhat from survey research standards of statistical and practical significance. Bates USA, one of the media buying firms, used for Phases I and II, indicates the industry standard for the achievement of total brand awareness to be between 17 and 28 percent over a 12-month period from a zero baseline. Phase I, which had a substantially shorter time frame, resulted in statistically significant changes in awareness that in some cases were less than 10 percent but which were considered to be of great practical significance by the advertising industry. The media buyers noted that it is difficult to provide a comparable private-sector benchmark to the National Youth Anti-Drug Media Campaign as few individual brand advertising efforts have the number and diversity of individual ads as the ONDCP campaign (in the case of the media campaign, 61 different ads were used in various media in Phase I). In the advertising industry, advertisements usually are developed for individual products or for "corporate image" campaigns. As a result, a particular strategic message tends to be focused and then concentrated in a limited number of individual commercial executions rather than a wide range of executions as

employed in the Media Campaign (which is targeting a broader range of audiences and conveying numerous messages on a variety of drug issues rather than a single product). Generally, this much smaller number of ads achieve larger increases in recognition and awareness of executions accompanied by cumulative increases in GRP weight in support of them than the ads in the Media Campaign.

A number of additional considerations may have served as mitigating factors that may have resulted in lower overall increases in awareness than generally considered to be of practical significance in social science research. These considerations include the following:

- The majority of the ads used in Phase I for all media were preexisting PDFA ads, including TV PSAs that have aired for several years, resulting in high levels of baseline awareness. Also contributing to higher levels of baseline awareness was the difficulty in obtaining entrance into some of the schools. As a result, some baseline survey data was conducted after the intervention was implemented.
- Phase I was conducted over a much shorter time frame than the standard 12 months that serves as the benchmark in the private sector for achieving large increases in awareness.
- Each of the many anti-drug ad executions in the Media Campaign was supported by far fewer GRPs than required by private-sector advertising standards (approximately 1,000 GRPs versus an average of 200 GRPs for each campaign ad). **A multitude of ads were used with much smaller advertising weights (GRPs) behind them resulting in lower awareness of specific ads but the cumulative effort behind the many diverse messages is in many cases greater than that behind many branded products.**
- The actual versus planned media delivery overall was lower than anticipated, particularly among adults, according to the media buying firms.
- Since we used existing ads, the ONDCP Phase I campaign did not have a clear brand identity. The advertising industry often uses consistent branding as a strategy to enhance recognition and awareness for ad campaigns. For Phase III, we are currently considering options for developing a brand for the Media Campaign.

2.2.6 Presentation of Survey Findings

In Chapter 3 of this report, survey results are presented through cross-site analyses (i.e., all target site data are aggregated and compared with all aggregated data from comparison sites). Youth, teen, and parent findings are reported separately, and results are organized under the domains presented earlier (i.e., awareness of the ads; perception of the ads; effectiveness of the ads; awareness of the risk of drugs; attitudes toward drugs; and sources of information about drugs). Graphic displays are provided to illustrate the significant findings within each domain.

In Chapter 4, media monitoring data and site visit data are used to interpret and understand the significant findings from the aggregate analysis. Chapter 5 contains the market level analyses or “case studies.” Specifically, the site-level analysis examines awareness of ads by using baseline and followup survey data for comparing each target site with its matched comparison site. Site visit data and media monitoring data are used to interpret these survey findings at the MSA level. Within-market analyses also examine whether the pattern of significant differences in the aggregate held at the market level.

2.3 SITE VISIT STUDY METHODOLOGY³

This section includes a summary of the timing and purpose of site visits; the focus group participant and key informant selection processes; a description of the site visit protocol; and methodologies for measuring change between the baseline, intermediate, and followup visits.

Site Visit Data—Qualitative data on youth, teens, parents, and the local communities were gathered during site visits to all 12 target and 12 comparison sites. Data were collected through focus group discussions, key informant interviews with community members, and observations and review of materials by site visitors. Site visit data were collected at three points in time—before the Media Campaign pilot test began (baseline), 8 to 10 weeks into the Media Campaign (intermediate), and after the pilot test (followup). Site visit data are used in this report to interpret the youth, teen, and parent survey results and to obtain group opinion in target sites on ways to improve the focus and presentation of anti-drug messages used in the Media Campaign.

The qualitative data for each of the 24 sites were collected during site visits carried out over three points in time. These are referred to as the *baseline site visits* (conducted prior to the Media Campaign, from November 1997 through early January 1998), the *intermediate site visits* (carried out in March and April 1998) and the *followup site visits* (conducted after the completion of the Phase I Campaign, in June 1998). Site visits were conducted for approximately one week, with two researchers onsite for the entire period.

2.3.1 Conducting Focus Groups

Every effort was made to recruit focus groups from a variety of settings in both center city and non-center city communities. These included groups recruited from schools, Boys and Girls Clubs, other community organizations serving youth, and athletic clubs. Likewise, parents were selected for participation in focus groups from a wide range of settings such as Parent-Teacher Associations, parent support groups, and community centers. Because an effort was made to recruit focus group participants from a variety of settings, from center city and

³ More detailed information regarding the Phase I site visit methodology is contained in the report “Testing the Anti-Drug Message in 12 American Cities,” National Youth Anti-Drug Media Campaign, Phase I (Report No. 1), September 1998.

non-center city locales, and from all ages targeted by the Media Campaign, we believe the focus groups are sufficiently representative of students' and parents' views of the drug problem and their perceptions of anti-drug messages. Whenever possible, the actual selection of participants was done by researchers who were conducting the site visits. The focus group members were not purposely selected by any group that held a predisposition to the outcome of the study. Rather, researchers asked local community contacts during telephone conversations to provide some leads to begin the process of identifying groups. This was supplemented by the researchers' own identification of local contact persons to work as part of the research team to recruit students and parents for focus groups. Occasionally, a focus group was cancelled and a replacement group needed to be organized while the researchers were onsite. Focus groups were not intended to be nationally representative samples of youth, teens, and parents but were meant to reflect different age groups and center city/non-center city differences, since the focus group literature emphasizes the importance of these factors in organizing focus groups.

Eight focus groups were conducted at each site during the baseline, intermediate, and followup site visits (six with youth and teens and two with parents). Focus groups comprised students in elementary school (4th, 5th, and 6th graders), teens in middle school (7th, 8th, and 9th graders), and teens in high school (10th, 11th, and 12th graders). Focus groups were held in both center city and non-center city areas, and they included people in ethnic and minority groups, although researchers documented ethnic group status only through their observations and did not query participants about their ethnicity. Care was taken to follow established lessons from the focus group literature by not including youth of disparate ages in the same groups (e.g., middle school focus groups might have 7th and 8th graders together or 8th and 9th graders were together, but not 7th and 9th graders).

A deliberate effort was made to not recruit youth or teens from treatment programs or rehabilitative facilities because the focus of the Media Campaign is to prevent youth from beginning to use drugs. Therefore, the questions explored in the focus groups centered on prevention rather than on issues related to persons who were "known users" and who could bias the findings. Local Community Anti-Drug Coalitions of America representatives and State prevention coordinators helped identify local organizations to contact for assistance in organizing focus groups and recruiting participants (local Boys and Girls Clubs, scouting groups, local YMCAs and YWCAs, and afterschool programs were particularly helpful). Two researchers were present for each focus group; one staff member moderated the group discussion while the other served as notetaker. All focus groups were tape-recorded. Stipends of \$25 were paid to parents. High school students were paid a stipend of \$10 in the form of cash or a gift certificate, depending on the preference of the host agency. Refreshments were provided for all focus groups.

In a few cases, groups were organized through schools, but care was taken to ensure that youth and teens were not drawn from the same schools participating in the survey component of the evaluation.

To avoid having youth, teens, or parents who had already been exposed to questions about drugs and media, those who participated in baseline focus groups were not recruited to participate in intermediate site visit focus groups. However, the researchers maintained consistency in choice of location for the focus groups. For example, if a particular suburb was selected for all of the youth, teen, and parent focus groups at baseline, that same suburb was used again during the intermediate site visits.

The purpose of the baseline site visits was to assess youths', parents', and community leaders' awareness of and attitudes toward the drug problem and their views on the local drug context before the Media Campaign intervention (i.e., before the paid anti-drug messages appeared). Although youth and parents were asked in a general way if they thought anti-drug media messages could change attitudes toward drug use, no mention of the ONDCP Media Campaign itself was made at baseline. Instead, to ensure that participants' responses would be objective, they were told that ONDCP was conducting an opinion-based community study on the problem of drugs and youth in 24 cities.

Information also was collected on local drug-related events such as drug "busts," arrests, drug-related deaths, and on any local educational and prevention program activities that might have heightened local community awareness of the drug problem independently of the Media Campaign.

Focus group participants were selected to represent the target groups of the National Youth Anti-Drug Media Campaign: students in grades 4–6 (ages 8–10 years), grades 7–9 (ages 11–13 years); and grades 10–12 (ages 14–18 years); and their parents, from both center city and non-center city areas. Site visits also included discussions with key community members and leaders who were informed about the local drug problem; they were asked to describe their perceptions of youth and teen attitudes toward and awareness of drug use and share their knowledge of local programs or community events that had heightened awareness of drugs.

Confidentiality was maintained by using first names only. Focus group participants also were informed that since the sessions would be taped to ensure accurate recall, they should not mention names or give identifying information during discussions.

Focus group data from baseline, intermediate, and followup visits reflect discussions with approximately 576 different focus groups consisting of more than 4,600 youth, teen, and parent participants.

2.3.2 Conducting Key Informant Interviews

Local contacts such as the Community Anti-Drug Coalitions of America (CADCA) representatives and State prevention coordinators played an instrumental role in helping researchers identify key community informants in each of the target and comparison sites. Other persons were identified through

background research conducted on each of the sites (e.g., the names and telephone numbers of local law enforcement officials were identified).

The purpose of the key informant interviews was to collect information on aspects of the community such as the level of anti-drug advertisements in the local media, level of community awareness of the problems and dangers of drugs, attitudes toward drug use, recent local events related to drugs, and local prevention activities. This information was collected at the baseline, intermediate, and followup site visits and was used to account for and gauge Media Campaign-related and non-related changes, so that the true effectiveness of the Media Campaign could be accurately measured.

The rationale for conducting indepth discussions with key informants was the following: (1) they are leaders who are grounded in the community and have insights that can be highly useful in understanding the nature of the drug problem; (2) they can help develop hypotheses for testing in Phases II and III; and (3) they can provide an initial sense of how participants might perceive and react to the National Media Campaign.

The following categories of key informants were interviewed during the site visits to gain an overall view of the drug situation in each community from members knowledgeable in this area:

- Leaders in community-based prevention programs;
- Local government officials;
- Coalition leaders;
- Civic and voluntary group leaders, including members of the Civic Alliance;
- Law enforcement representatives;
- Counselors and/or administrators from drug treatment programs;
- Health department/health care representatives;
- Social service agency representatives;
- Local chamber of commerce members and business leaders;
- Educators, school administrators, and safe and drug-free school coordinators;
- Other youth program representatives and youth group leaders (e.g., Boys and Girls' Club directors and YMCA program coordinators);
- Clergy and other faith community representatives;
- Advocacy group leaders (e.g., the president of the Urban League);

- Media representatives (e.g., local TV and radio station managers, media traffic managers, and newspaper editors);
- Epidemiologists;
- Treatment specialists; and
- Before/afterschool care providers.

Two site visitors conducted the key informant interviews, usually working independently, to complete all the interviews within 1 week. Each interview was between 45 minutes and 1 hour long. Over the course of conducting baseline, intermediate, and followup site visits, approximately 1,800 interviews were conducted with key community informants.

2.3.3 Site Visit Protocol

Focus Group Discussion Guides and *Key Informant Interview Guides* were developed for each round of site visits. Copies of these can be found in the ONDCP report, *Testing the Anti-Drug Message in 12 American Cities, Phase I (Report No. 1)*. Interview and Discussion Group Guides were tailored for each type of key informant and for each age range of focus group participants.

The *Key Informant Interview Guides* utilized discussion topics and probes rather than structured questionnaires because of the need to maintain flexibility and to encourage the key informants to volunteer information on personal insights and emerging issues.

Focus group discussion topics and probes also were utilized for the youth, teen and parent focus groups. A modified format was used for elementary school youth, who were asked less direct questions about drugs. High school teens and their parents were asked an additional question about how teens cope with stress. Focus group discussion guides centered on information pertinent to prevention rather than on issues relating to current use by “known users” who could potentially bias group findings (e.g., participants recruited through a substance abuse treatment program or facility). The parent focus group guidelines followed a line of questioning similar to that used for youth and teens.

To determine awareness of anti-drug media messages, informants and focus group participants were asked open-ended questions as a form of “unaided recall” to test ad awareness. Participants described any anti-drug media message they could recall. To avoid biasing their answers, they were not provided with a list of specific Media Campaign ads, nor were they asked to confirm whether or not they had seen specific ads. This allowed the evaluation to test different methodologies in measuring ad awareness, since “aided recall” was used in the survey instruments.

2.4 MEDIA MONITORING METHODOLOGY

Paid and unpaid anti-drug television advertisements that appeared in target and comparison sites were tracked during the 3 months (October–December 1997) preceding the Media Campaign (the baseline period) and during the 5 months (January–May 1998) of the Phase I intervention period. Media Campaign ads aired on the radio and those that appeared on billboards and in newspapers were not monitored.

Data were collected on televised anti-drug ads (those sponsored by the Media Campaign and by others) as well as on ads related to other social issues such as cigarette smoking, gun safety, and drinking and driving prevention, beginning prior to the Media Campaign (baseline period) and continuing through the Phase I effort. Data were collected across several variables: the number of ads that aired, the parts of the day when the ads were shown, the types of drugs that the ads targeted, and the sponsors of the ads. In addition, the data were collected consistently across sites and over time to facilitate comparison of differences in exposure to and awareness of the anti-drug message between target and comparison sites. In this report the data are presented on a site-by-site basis and in the aggregate.

2.4.1 Television Monitoring

Anti-drug ads that aired on affiliates of the three major national television networks (ABC, CBS, and NBC), national cable WBN (Time-Warner cable), FOX, Univision, TBS, UPN, IND, and Telemundo (Spanish-language cable) were tracked in the target and comparison sites. Televised anti-drug ads in three target communities (Boise, Sioux City, and Tucson) and two comparison communities (Duluth and Eugene) were not electronically monitored. The television monitoring service also was unable to collect data on ads airing on several local cable stations (e.g., MTV and Nickelodeon), which were to be used to deliver an incremental 1,253 gross rating points per market in cable for the youth/teen audiences. Monitoring data was also unavailable for in-school Channel One, which was used to target youth/teens. Media monitoring is possible only in the 75 largest television markets nationally; of the 24 evaluation sites, only 19 are in that group. For the five sites where media monitoring is not possible, attempts to collect advertising information from the stations manually through monthly telephone interviews did not yield reliable or complete data and, therefore, are not included in this report. Television stations were monitored from 6:00 a.m. to 1:59 a.m., for a total of 20 hours per day.

Data were collected on variables such as sponsor, frequency, daypart, market share (proportion of ads addressing other social issues), and type of drug. The variables are defined in detail in Appendix A, which also includes a description of how these variables were measured.

Media tracking data on the variables cited above were collected on a monthly basis and were organized in both hard copy and electronic form. The hard copy included storyboards, which capture frames (in 4-second intervals) of

advertisements that aired. These storyboards were used to verify sponsor and content data. Data were reviewed for completeness and consistency. Quality control checks were performed to ensure that the data accurately reflect the subject and title of ONDCP advertisements and advertisement sponsors.

2.5 GROSS RATING POINTS AND OTHER MEDIA BUYING INFORMATION

In contrast to the media monitoring data which include both the paid and pro bono components and cover the period from baseline through 5 months of the intervention, the media buying information focuses only on the paid component—which Phase I sought to evaluate and covered January through June 1998. Thus, the planned media buy and post-buy information are critical for assessing audience exposure to ads and their correlation to changes in awareness. The initial goal for the media buying plan was to reach 90 percent of each of the target audiences (i.e., youth, teens, parents, and other adult influencers) with four exposures a week through the paid component of the campaign. For Phase 1, the Nielsen measured target definition of teens aged 12 to 17 and adults aged 25 to 54 were used for all local market broadcast media planning and buying purposes. As a result, the reach and frequency objectives were adjusted to reach 93 percent of youth and teens combined an average of 7.6 times per week and 92 percent of adults (aged 25–54) 5.9 times per week inclusive of all media types (i.e., television, radio, newspaper, and outdoor). It is important to note that GRP data for youth ads rely on teen GRPs as a proxy. Although youth are defined as 4th through 6th graders (ages 9–11), GRPs calculated for youth ads are based on Nielson's definition of the teen audience (ages 12–17).

As final post-audited data on the reach and frequency for Phase I was unavailable by medium as this report was being prepared, GRP data are used as proxy measures and are based on post-buy and planned media schedules. (Estimated variance between the buy information provided and the audited post-buy information is plus or minus 10 percent.)

A gross rating point is a unit of measurement of advertising audience size equal to one percent of the total potential audience universe. It is used to measure the exposure of one or more programs or commercials without regard to multiple exposure of the same advertising to individuals. A GRP is the product of media reach times exposure frequency.

As an example, if an ad were aired on a program that 40 percent of the population was exposed to, the rating for the program would be 40. The ad might also be aired on other programs yielding a total of 200 gross rating points. For the total number of programs, 80 percent of the population may ultimately be exposed to the ad at least one time. This would translate into a reach of 80 percent. The average frequency is derived by dividing the gross rating points (200) by the reach (80), resulting in an average frequency of 2.5 times. Reach, frequency, and GRPs are interrelated.

The media buying plan information was used to identify the specific ads comprising the intervention in each site and the total advertising weight delivered in each site and for the individual ads. The media buying contractor provided available data on analyses of “as purchased” or planned television activities for the youth/teen and adult television buys. This information includes the frequency, or number of times, each spot or ad aired in a site and the estimated gross rating points (GRPs) for each ad as well as average GRPs for each ad.

2.6 INTEGRATIVE ANALYTICAL APPROACH

An integrative analytical approach was used to bring together the different types of data collected in the evaluation—survey data, site visit information, media monitoring data, and media buy information. Chapter 4 presents the results of an analysis of media monitoring data and site visit data in order to interpret the survey patterns and results reported separately in Chapter 3. An assumption was made that any significant change in respondents’ awareness or attitudes, as measured by the baseline and followup surveys, was due to exposure to the Media Campaign; the integrative data analysis uses other data sources to help explain the significance of the survey findings. Chapter 4 also makes use of multiple data sources in order to explore any “rival” hypotheses that could account for significant change on survey measures.

Aggregate Level Analysis—For the aggregate analysis presented in Chapter 4, each survey domain is examined separately for youth, teens, and parents, and the findings are compared with media activity in both target and comparison sites, as documented in the media monitoring data. In addition, the aggregate findings are reviewed in light of the qualitative data obtained from site visit focus groups and interviews to help explain the presence or absence of change in target and comparison sites.

Site-Specific Analyses or “Case Studies”—The site-specific analyses, presented as case studies in Chapter 5, also use media monitoring, media buying, and site visit data, but they use it to interpret survey findings at individual sites. The site-specific analyses focus on local survey results that differ from aggregate level results and which therefore require further interpretation or explanation in view of the local and community context. They do not cover all study domains—only those with results that differ substantially from aggregate level results.

In Chapter 4 (Discussion of Cross-Site Survey Results) and Chapter 5 (Within-Market Results), the media monitoring data are used to examine whether the relative increases in awareness for specific Media Campaign ads are due to the relative frequency of exposure to specific ads and the time slots during which the ads were aired. The expectation is that significant movement or change in awareness from baseline to followup of a particular Media Campaign ad can be explained by media monitoring data which show that the respective ad was aired frequently and was shown during the best time slots.

The qualitative data on target group response and opinion and general community contextual events are crucial for interpreting unexpected results. These data are also used to examine effects that seem to be directly attributable to the Media Campaign intervention. The qualitative data, which have increased our understanding of respondents' changes from baseline to followup, also provide information that will be useful for the development, re-focusing, and presentation of ads in subsequent phases of the National Campaign.

The survey results in this report are presented in text and graphical form to highlight statistically significant findings. (A complete compilation of all survey data appears in the tables contained in Appendix E, a separately bound volume that accompanies this report.) Although we present all statistically significant results, when estimates of change are found to be significantly different, it does not necessarily imply that the difference is large or meaningful in a practical sense. However, statistical significance in itself is important because it means that one can conclude, with a small risk of error, that the new estimates would not be different from the old estimates if the survey were replicated with different samples drawn from the same population, using the same sampling procedures. That is, the differences cannot be attributed solely to sampling error. Keeping in mind that the goal of Phase I of the Media Campaign was to increase awareness of the Media Campaign and its paid anti-drug advertisements, the study results that address awareness of ads will be most salient to the reader.

2.7 REFERENCES

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3. AGGREGATE SURVEY RESULTS

This chapter presents the aggregate (cross-site) survey results of the evaluation of Phase I of the Office of National Drug Control Policy (ONDCP) National Youth Anti-Drug Media Campaign in 24 sites (12 target sites and 12 comparison sites). The evaluation encompasses six domains: (1) target group awareness of the paid ads (the main goal of Phase I); (2) effectiveness of the ads (to inform Phase II); (3) attitudes toward drugs; (4) drug awareness and use; (5) awareness of the risks of drugs (as measures of ongoing target group risk); and (6) parents' discussion of drugs with their children. The expected outcomes for Phase I were limited to changes in awareness of ads among students and parents. However, other changes, such as attitudinal shifts, also occurred that were unexpected given the short timeframe of the Phase I intervention.

Survey respondents from each of the three samples included in the evaluation (youth, teens, parents) were asked about their awareness of only a selection of all paid advertisements that were part of the Media Campaign. Youth were surveyed about four ads called *Noses*, *Long Way Home*, *Drowning*, and *Girlfriend*; teens were surveyed about six ads entitled *Alex Straight A's*, *Frying Pan*, *911*, *Layla*, *Free Ride*, and *Rite of Passage*; and parents responded to questions regarding *Burbs*, *O'Connor*, *Girl Interview*, *Under Your Nose*, and *Deal*. Teens in Portland were surveyed about three different ads that featured rock and roll groups as part of a pre-planned PDFA effort. (Section 2.2.5, Interpretation of Survey Findings, discusses implications of awareness findings in the context of advertising industry standards.)

The scheduling of these ads varied by city, resulting in some ads appearing as paid ads in certain sites but not in other sites. Hence, when a significant change in awareness of an ad is reported at the aggregate level, this change or increase in awareness is usually not as dramatic as would be seen at the level of the site where the paid ad was run. Overall, the aggregate results provide the most conservative estimate of increases in awareness from baseline to followup.

The main findings of this study pertain to awareness of these Media Campaign ads, as well as other key results for change in attitude and perceived effectiveness of ads. The main findings are the following:

- For all four of the paid ads viewed by youth in the target sites, there were statistically significant increases in awareness of these ads from baseline to followup, ranging from 31 to 59 percent change. Four of the six ads viewed by teens showed statistically significant increases that ranged from 50 to 188 percent change. Four of the five ads viewed by parents showed statistically significant increases ranging from 35 to 220 percent change. However, the change in awareness of only one of the parent ads was significant in a practical sense, indicating the statistically significant increases were meaningful.
- The increased awareness of these Media Campaign ads is closely tied to the frequency with which the ads were shown (i.e., those ads with the greatest increases in recall were the ads aired most often). This is discussed in Chapter 4.

- From baseline to followup, parents in target sites showed increases in perceptions of the risk of their children using marijuana, cocaine/crack, heroin, inhalants, and methamphetamine as well as trying inhalants, methamphetamines, heroin, and crack-cocaine. In comparison sites, the percentages of parents who perceived these drugs to be of risk to their children decreased. Although the differences were not great, the net difference between target and comparison sites was statistically significant, and the trend was in the expected direction; that is, comparison sites either experienced no change or a decline in the percentage of parents perceiving risk for their children while the percentage of parents in target sites perceiving risks increased from baseline to followup.
- All three questions on parents' perceived effectiveness of ads showed statistically significant increases, with percent change ranging from 8 to 30 percent. From baseline to followup, target site parents showed an increase in perceptions of the ads making them more aware of drug risks, educating them with new information, and heightening their concerns about the drug problem in our Nation, whereas perceptions of comparison site parents stayed the same or decreased.

The following sections describe the survey evaluation results in the aggregate for youth, teens, and parents. Each section is then followed by a description of the results by selected demographic characteristics (i.e., grade, locale, ethnicity, and gender). For further discussion and interpretation of the findings, please see Chapter 4.

3.1 YOUTH FINDINGS

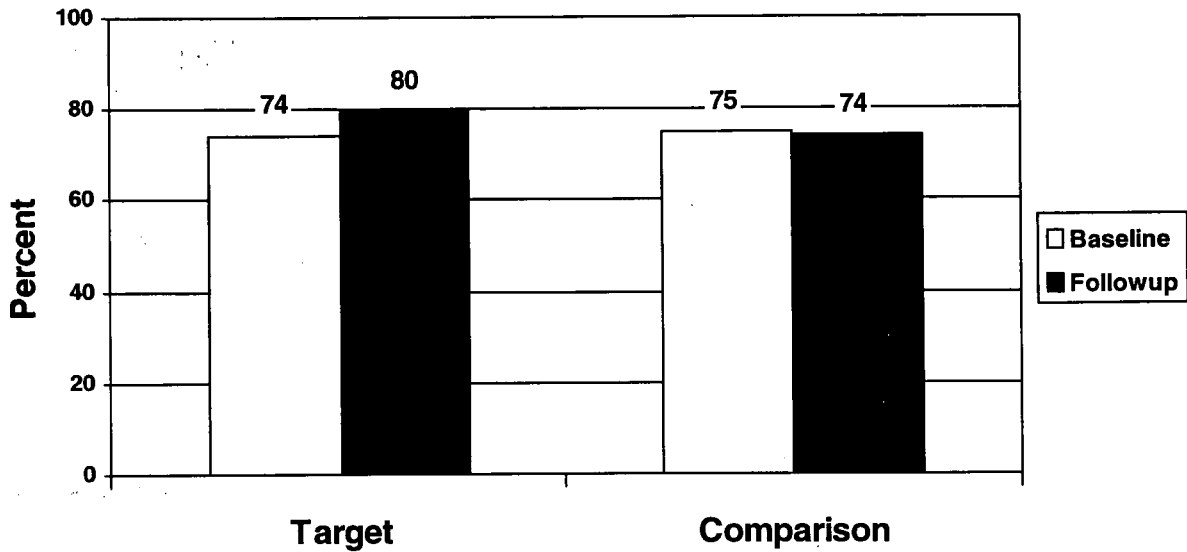
The following section presents results related to youth awareness of the ads, their perceived effectiveness of the ads, attitudes towards drugs, awareness of drugs, and of the risk of drugs. Exhibit 3-1 presents a key youth awareness finding. The sample was surveyed prior to the introduction of the intervention and 12 to 13 weeks into the intervention.

A sample of elementary school youth in grades 4–6 in the target and comparison sites were surveyed.

3.1.1 Sample Profile: Comparability of the Target and Comparison Youth Samples, and Consistency Between Baseline and Followup

Youth in target sites were similar to youth in comparison sites with regard to their demographic status as measured by grade, ethnicity, gender, and locale. The percentage of youth who had heard of marijuana, cocaine, crack, inhalants, methamphetamine, and heroin also was similar in target and comparison sites. Youth in all sites also spent similar amounts of time watching television. None of these characteristics changed significantly between the baseline and followup periods in target or comparison sites, with one exception: among Hispanic youth the percentage who watched TV every day increased significantly between

Exhibit 3-1
Increases, Due to Watching TV, in Youth Awareness of the Dangers of Drugs



Agreed that "TV ads or commercials make you more aware of how dangerous drugs are."*

*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

baseline and followup in the target sites. The percentage of youth who had heard of drugs was similar in target and comparison sites at both baseline and followup.

3.1.1.1 Race and Ethnicity

There were slight differences in race and ethnicity between target and comparison sites. Although across all sites similar percentages of the respondents were white (67% approximately), a smaller percentage of target site youth than comparison site youth were African American (14% compared with 19%). This difference was accounted for by a slightly higher percent of Hispanic and Asian youth in target sites (14% Hispanic and 3% Asian in target sites, compared with 10% and 1% respectively in comparison sites). Youth in target and comparison sites were similar in the amount of television they watched, with 88.6 percent watching every day or almost every day. There was one exception: the percentage of non-center city youth who watched TV every day decreased significantly in comparison sites.

3.1.1.2 Age

The sample data were not weighted by age because no good census-based universe estimates of age within classroom grades exist by Metropolitan Statistical Area (MSA). However, there were no significant differences in grade

distribution in either the target sites or the comparison sites between baseline and followup (see Exhibit 3-2).

3.1.1.3 Grade

Grade level was distributed evenly, with 33.0 percent of youth in fourth, fifth, and sixth grades respectively, in both target and comparison sites.

3.1.1.4 Family/Household Status

There were slight differences in family/household structure. At baseline and followup, approximately 66 percent of youth in target sites lived with both parents, compared with approximately 60 percent of youth in the comparison sites; and 15 percent of youth in target sites lived with their mother only, compared with approximately 19 percent in the comparison sites. Characteristics of the youth sample are presented in Exhibit 3-2. Youth responses to the survey questions are summarized in Exhibit 3-3.

3.1.2 Risk Status of Target and Comparison Site Populations: Drugs Youth “Have Heard Of”

To measure their degree of risk, youth were asked if they had “ever heard of marijuana, cocaine, crack, inhalants, methamphetamine, or heroin.” Baseline rates were similar in both target and comparison sites. The percentage of youth who had heard of each drug increased similarly between baseline and followup, in both the target and comparison sites, reflecting a secular trend of increasing awareness of drugs among all youth as the school year progresses.

Increase in awareness of the following four drugs was not statistically significant from baseline to followup when comparing the net difference between target and comparison sites.

- *Marijuana*—90 percent of target site youth had heard of marijuana at baseline, compared with 94 percent at followup. Among comparison site youth, 90 percent at baseline and 93 percent at followup had heard of marijuana.
- *Cocaine*—86 percent of target site youth had heard of cocaine at baseline, compared with 92 percent at followup. Among comparison site youth, 87 percent at baseline and 91 percent at followup had heard of cocaine.
- *Crack*—74 percent of target site youth had heard of crack at baseline, compared with 84 percent at followup. Among comparison site youth, 79 percent at baseline and 85 percent at followup had heard of crack.
- *Inhalants*—69 percent of target site youth had heard of inhalants at baseline, compared with 78 percent at followup. Among comparison site youth, 73 percent at baseline and 80 percent at followup had heard of inhalants.

Exhibit 3-2
Youth Sample Demographic Characteristics

Characteristics	Target Sites		Comparison Sites	
	Baseline %	Followup %	Baseline %	Followup %
Grade				
4	34	34	34	34
5	33	35	33	33
6	33	32	33	33
Race/Ethnicity				
White	66	67	67	68
African American	14	14	19	19
Hispanic	14	14	10	10
Asian	3	3	1	1
Other	1	1	1	1
Family Composition				
Both parents	66	65	61	60
Mother and stepfather	10	11	11	12
Father and stepmother	3	3	3	4
Mother only	15	16	20	19
Father only	4	3	3	4
Grandparents	5	5	5	5
All other	7	8	6	8
TV Watching				
Every day	54	55	60	57
Almost every day	35	33	30	32
At least once per week	7	8	6	7
Once or twice per month	1	1	1	1
Other	1	1	1	1

Note: Percentages may not add to 100 due to rounding.

Between baseline and followup, the percentage of target site youth who had heard of methamphetamine and heroin increased more substantially, as the following survey results indicate:

- *Methamphetamine*—There was a statistically significant increase in the number of youth within target sites who had heard of methamphetamine. At baseline, 35 percent of target site youth had heard of methamphetamine and 49 percent had heard of it by followup, compared with 38 percent at baseline and 44 percent at followup in the comparison sites.
- *Heroin*—At baseline, 58 percent of target youth had heard of heroin and 72 percent had heard of it by followup, compared with 59 percent at baseline and 64 percent at followup in the comparison sites. The increase within target sites was statistically significant, and the net difference between target and comparison sites was significant as well.

Increased awareness at followup of these two drugs among target site youth over the Media Campaign period is discussed further in Chapter 4.

Exhibit 3-3
Responses to Youth Questionnaire in Percentages:
Aggregate Target and Comparison Sites

Question	Target			Comparison			Overall % Change ¹
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
Youth who responded "yes" they have heard of...							
Marijuana	90	94	4*	90	93	3*	1
Cocaine	86	92	6*	87	91	3*	3
Crack	74	84	10*	79	85	6*	4
Inhalants	69	78	9*	73	80	7*	1
Methamphetamines	35	49	14*	38	44	7*	8
Heroin	58	72	14*	59	64	5	9*
Youth who responded "the drug is very dangerous, never should be used."							
Marijuana	80	81	1	80	80	0	1
Cocaine	79	85	6*	82	83	2	4
Crack	70	78	8*	74	79	5*	3
Inhalants	55	62	7*	59	61	2	5
Methamphetamines	33	46	13*	35	40	5	8
Heroin	57	69	12*	57	61	4	8*
Beer	25	24	-1	30	26	-4	3
Cigarettes	60	58	-2	59	55	-4	1
Youth who agreed "a lot" with the statement...							
I am scared of taking drugs.	74	70	-4*	73	72	-1	-4
I don't want to hang around people who use drugs.	79	73	-6*	75	75	-1	-5*
It is hard to say "no" when friends want you to try drugs.	35	36	1	33	34	1	0
Using drugs is dangerous.	88	88	0	86	88	2	-1
Things you sniff or huff to get high (like glue) can kill you.	61	67	6*	64	65	0	6*
Youth who reported they have tried...							
Marijuana	3	5	2*	4	5	1	1
Cocaine	1	2	1	1	2	1*	-1
Crack	1	2	0	2	2	1	0
Inhalants	7	8	2*	8	9	1	1
Methamphetamine	2	2	0	2	3	0	-1
Heroin	1	1	0	2	2	0	0
Alcohol	17	22	5*	18	21	3	2
Cigarettes	8	13	5*	14	16	2	3
Youth who responded they learn "a lot" that drugs are bad from...							
School class	72	69	-3	69	69	0	-3
Parents or grandparents	71	69	-1	71	68	-4*	-3
Brother or sister	37	35	-2	36	33	-3	0
Friends	42	35	-6*	39	37	-2	-4
TV commercials	44	49	5*	45	40	-5*	10*
TV shows, news, or movies	46	46	0	49	49	-1	0
On the street	40	35	-5	39	38	-1	-4
Youth who responded "yes" they hear messages that say drugs are bad from...							
TV	85	89	4*	86	87	1	3*
Large outdoor billboards	48	54	6*	49	52	3	3
Posters on buses, bus stops, or subways	53	51	-1	53	54	0	-1
School posters	85	84	-1	82	84	3	-4
Youth who responded "yes, I have seen the ad..."							
Noses	39	51	12*	36	37	1	11*
Long Way Home	43	68	25*	41	40	-2	26*
Drowning	30	44	14*	29	28	-1	15*
Girlfriend	27	43	16*	29	27	-2	18*

Question	Target			Comparison			Overall % Change ¹
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
Youth who responded that they agree with the following statement...							
TV ads or commercials tell you something you didn't know about drugs.	58	61	4	55	56	1	3
TV ads or commercials make you stay away from drugs.	66	67	2	61	58	-3	5
TV ads or commercials make you more aware of how dangerous drugs are.	74	80	6*	75	74	-1	7*
TV ads or commercials tell lies about how dangerous drugs are.	30	26	-4*	30	30	-	-4
Youth frequency of TV watching							
Every day	54	56	1	60	57	-3	5
Almost every day	35	33	-2	31	32	2	-4
At least once a week	7	8	1	6	8	1	-1
Once or twice a month	1	1	0	1	1	0	0
A few times a year	0	1	0	1	1	0	0
Never	1	1	0	1	1	0	0
No answer	1	1	-1	1	1	0	0

Note: Because of rounding, numbers may not add.

*Indicates significant difference at the 95% confidence level.

¹ Percentage change represents net difference in change between target and comparison sites (i.e., the target site difference in percentage points between baseline and followup, minus the comparison site difference).

3.1.3 Risk Status of Target and Comparison Site Youth: Trial Drug Use Among Youth

Risk status was not markedly different between target and comparison site youth. At baseline and followup, at all sites youth were asked if they had “ever tried beer, cigarettes, inhalants, marijuana, crack, cocaine, methamphetamine, or heroin.” Baseline drug use was similar across target and comparison sites. Although trial use of drugs among youth increased somewhat in both target and comparison sites, there was no significant difference in measures between the two types of sites. This suggests that trial use is part of a general secular trend of drug experimentation that increased with age in all sites. Findings include the following:

- *Inhalants*—At baseline, approximately 7 percent of all youth in all sites had tried inhalants; by followup, approximately 9 percent had tried them;
- *Marijuana*—At baseline, approximately 3 percent of all youth in all sites had tried marijuana; by followup, approximately 4 percent had tried it;
- *Crack*—Approximately 2 percent of all youth in all sites had tried crack at both baseline and followup;
- *Cocaine*—At baseline, approximately 1 percent of all youth in all sites had tried cocaine; by followup, approximately 2 percent had tried it;
- *Heroin*—Approximately 1 percent of all youth in all sites had tried heroin at baseline and followup;

- *Alcohol*—At baseline, approximately 17 percent of all youth in all sites had tried alcohol; by followup, approximately 21 percent had tried it;
- *Cigarettes*—At baseline, approximately 11 percent of all youth in all sites had tried cigarettes; by followup, approximately 14 percent had tried them; and
- *Methamphetamine*—Approximately 2 percent of all youth in all sites had tried methamphetamine at both baseline and followup.

Thus, as expected, the Media Campaign did not have an influence on drug use among youth. These data on usage are important, however, in that they show the comparability of youth in target and comparison sites at the outset of the Media Campaign.

(See Tables 23 to 26 in Appendix E, bound in a separate volume, for additional information on demographic and socioeconomic characteristics of the sample.)

3.1.4 Youth Awareness of the Ads

The survey queried youth about four indicator ads in order to measure awareness of the paid ads. However, youth also saw other ads, including ads targeting teens, during Phase I, some of which aired at a greater frequency than those included in the survey. The implications of this are discussed in Chapter 4, where overall exposure to ads and intensity of the Media Campaign are discussed.

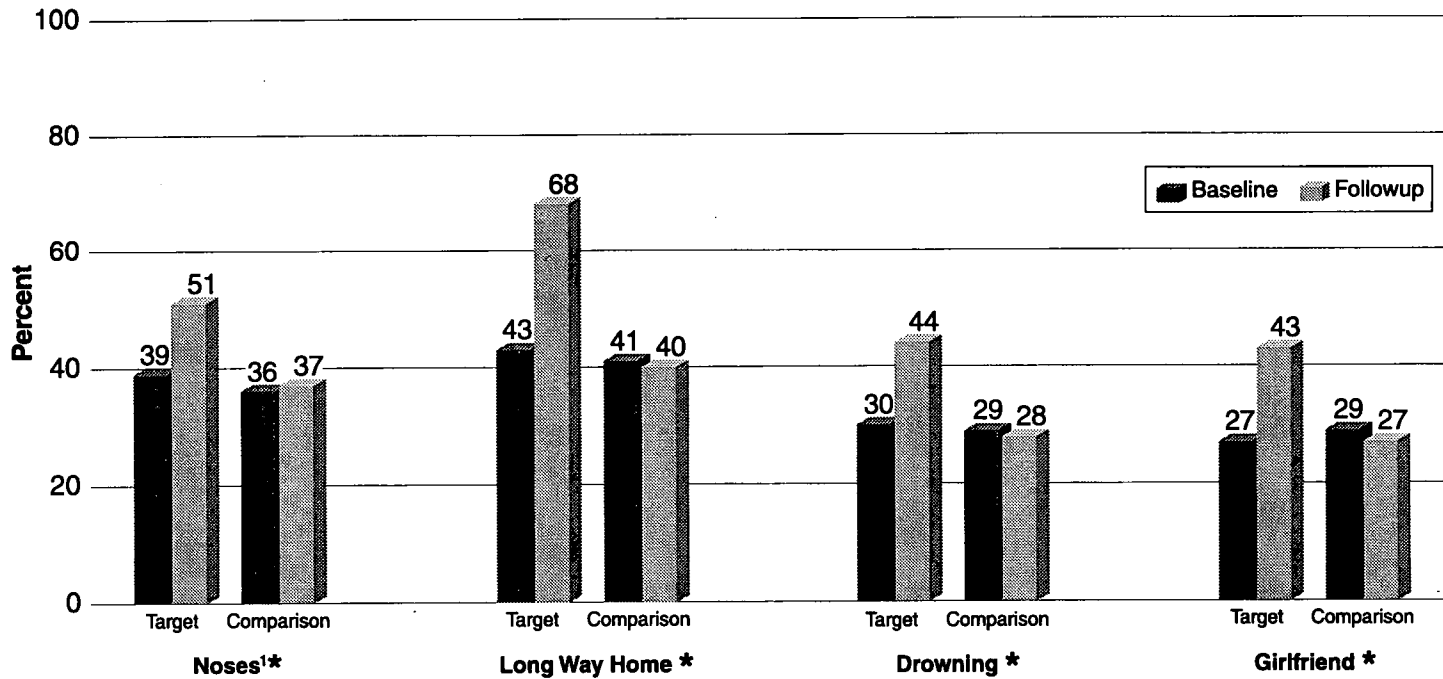
During the Phase I Media Campaign, the percentage of youth who answered “yes” when asked if they had seen specific anti-drug ads on TV increased substantially between baseline and followup in target sites, but remained unchanged in the comparison sites. For *Noses*, *Long Way Home*, *Drowning*, and *Girlfriend*, these increases were statistically significant. These results are presented in Exhibit 3-4.

Long Way Home—68 percent of youth in target sites recalled seeing this ad at followup, compared with 43 percent at baseline, a difference of 25 percentage points. There was a 58 percent change in target sites with regard to awareness of this ad. In comparison sites, approximately 40 percent of youth reported seeing the ad at followup or baseline, resulting in a statistically significant difference between target and comparison sites.

Girlfriend—43 percent of youth in target sites recalled seeing this ad at followup, compared with only 28 percent at baseline, a 54-percent increase. In comparison sites, approximately 27 percent of youth reported seeing the ad at followup and baseline, resulting in a statistically significant difference between target and comparison sites.

Drowning—44 percent of youth in target sites recalled seeing this ad at followup, compared with only 30 percent at baseline, an increase of 14 percentage points. In comparison sites, approximately 29 percent of youth reported seeing the ad at followup and 28 percent at baseline. This results in a significant difference

Exhibit 3-4 Ad Awareness: Percentage of Youth Who Saw Specific Ads "Often"



Note: Percentages are weighted. Youth Question 7.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

¹This Specific ad had the highest average GRPs across sites.

between target and comparison sites. The percent increase in target sites was 47 percent.

Noses— 51 percent of youth in target sites recalled seeing this ad at followup, compared with 39 percent at baseline. In comparison sites, approximately 37 percent of youth reported seeing the ad at followup or baseline, resulting in a statistically significant difference between target and comparison sites. There was a 31-percent increase in awareness of *Noses* at target sites.

It is important to note that for these four ads, aggregate data demonstrate that a level of awareness was already present at baseline—likely due to the fact that baseline surveys in some of the sites were completed after the Media Campaign was launched as well as the fact that some of these existing ads could have been airing as PSAs. Percent change in awareness would have been even higher if baseline data collection had been completed earlier (i.e., baseline awareness levels would be presumed to have been lower, allowing a greater opportunity for change).

(See Tables 1 to 6 in Appendix E, for additional information on youth awareness of the ads.)

3.1.5 Youth Awareness of the Ads: Differences by Four Demographic Characteristics— Grade, Sex, Ethnicity, and Locale

The increase in awareness between baseline and followup of *Noses*, *Long Way Home*, *Drowning*, and *Girlfriend* was analyzed by four demographic characteristics: grade, sex, ethnicity, and, locale. The increase in awareness of *Long Way Home*, *Drowning*, and *Girlfriend* was statistically significant among all demographic groups. The increases were not only statistically significant but of practical significance as well, with net differences ranging from 12 to 28 percent. Among those who saw *Noses*, increases were statistically significant for fifth and sixth graders, whites, females and males, and non-center city youth. For these groups, net differences ranged from 10 to 15 percent and had practical significance. A summary of these findings can be found in Exhibit 3-5. These increases in target sites were greater than the increases in comparison sites and were statistically significant.

3.1.6 Perceived Effectiveness of the Ads Among Youth

Youth responses also showed evidence of the ads' perceived effectiveness. At followup significantly more youth in target sites than in comparison sites agreed that the anti-drug messages they had seen or heard had been effective. Comparison group responses showed no change between baseline and followup.

Exhibit 3-5
Youth: Significant Differences in Responses From Baseline to Followup
Between Target and Comparison Sites, by Demographics

Question	Response	Grade			Sex		Race/Ethnicity				Locale	
		4	5	6	Male	Female	White	Black	Hispanic	Other	Center city	Non-center city
Have you ever seen the TV commercial...?												
<i>Noses</i>	Yes	-	○	●	●	●	●	-	-	-	○	●
<i>Long Way Home</i>	Yes	●	●	●	●	●	●	●	●	●	●	●
<i>Drowning</i>	Yes	●	●	●	●	●	●	●	○	●	●	●
<i>Girlfriend</i>	Yes	●	●	●	●	●	●	●	●	●	●	●
Agree with:												
"TV ads or commercials make you more aware of how dangerous drugs are."	Agree	-	○	●	-	●	●	-	-	-	○	●
Have you ever heard of...?												
Methamphetamine	Yes	●	●	-	●	-	●	-	-	-	-	○
Heroin	Yes	●	●	-	●	-	-	-	-	●	-	●
How dangerous is...?												
Methamphetamine	Very dangerous, never should be used	●	-	-	○	○	●	-	-	-	-	○
Heroin	Very dangerous, never should be used	●	○	-	●	○	●	-	○	○	-	●
Agree with:												
"I don't want to hang around people who use drugs."	Agree a lot	○	●	-	-	●	-	-	-	-	-	-
"Things you sniff or huff to get high (like glue) can kill you."	Agree a lot	-	-	●	-	●	●	-	-	-	-	●
How much do you learn that drugs are bad for you from TV commercials?												
	A lot	○	-	●	●	●	●	○	●	-	●	●
Do you ever see or hear messages that say drugs are bad...?												
On TV	Yes	○	-	-	-	●	●	-	-	-	●	-
On school posters	Yes	●	-	-	-	-	-	-	-	-	-	●

NOTE: Questions are in the Youth Questionnaire in Appendix A. Other includes all races/ethnicities other than white, black, and Hispanic.
 Key: ● indicates that significance is at the 95 percent confidence level. ○ indicates that significance is at the 90 percent confidence level.
 - indicates that there was no significant difference at the 90 percent or 95 percent levels.

Survey results for target site youth who agreed with the following statements about TV ads are as follows:

- *Made them more aware of how dangerous drugs are*—Agreement with this statement increased from 74 percent of youth at baseline to 80 percent at followup. In comparison sites approximately 74 percent of youth responded in this way at both baseline and followup with no change, resulting in a statistically significant difference between target and comparison sites. There was an 8-percent increase in agreement with this statement at target sites.
- *Tell you something you didn't know about drugs*—Agreement with this statement increased from 57 percent of youth at baseline to 61 percent at followup, an increase of 4 percentage points, but not significant in a practical sense. In comparison sites on average, approximately 55 percent of youth responded in this way at both baseline and followup. The percent change in target sites for this response was 8 percent. There was no significant difference between target and comparison sites.
- *Tell lies about how dangerous drugs are*—Agreement with this statement decreased from 30 percent of youth at baseline to 26 percent at followup, a decrease of 4 percentage points. In comparison sites 30 percent of youth responded in this way at both baseline and followup. There was no statistically significant difference between target and comparison sites.
- *TV ads make you stay away from drugs*—Agreement with this statement showed no significant increase, with 66 percent of youth agreeing at baseline and 67 percent agreeing at followup. In comparison sites, youth who responded in this way declined from 61 percent at baseline to 58 percent at followup. There was no significant difference between target and comparison sites. For the Phase I evaluation, we did not expect to find a change yet on this item.

(See Exhibit 3-5 and Tables 7 to 10 in Appendix E, for more information on effectiveness of the ads among youth.)

3.1.7 Perceived Effectiveness of the Ads Among Youth: Differences by Four Demographic Characteristics— Grade, Sex, Ethnicity, and Locale

When the data were analyzed by the demographic characteristics of the respondents, other patterns were revealed. There were significant increases between baseline and followup in target sites among all grades, males and females, all ethnic and racial groups, and in all locales, in the percentage of youth who agreed that “the ads made them more aware of how dangerous drugs are.” These increases were statistically significantly different between target and comparison sites. These findings are summarized in Exhibit 3-5.

(See Tables 7 to 10 in Appendix E for more information on effectiveness of the ads among youth, by demographic characteristics.)

3.1.8 Youth Awareness of the Risks of Drugs

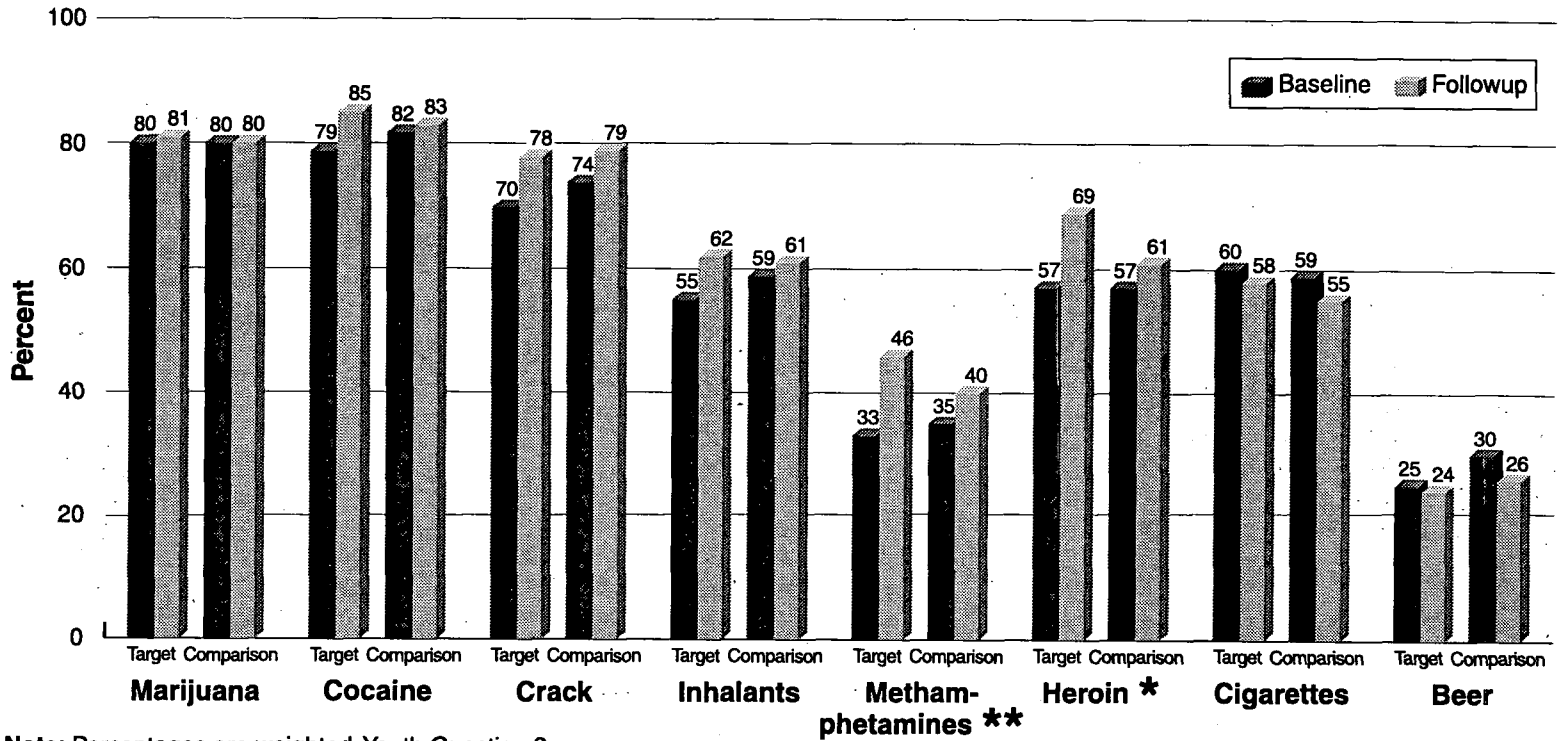
Between baseline and followup, in target sites, youth awareness of the risks of cocaine, crack, inhalants, methamphetamine, and heroin use increased significantly. There were similar increases in comparison sites, but these were not statistically significant, and there was no significant difference between target and comparison sites, except for methamphetamine.

These findings are summarized in Exhibit 3-6. The following are survey results for specific drugs:

- *Methamphetamine*—In target sites at followup, 46 percent of youth thought that methamphetamine was “very dangerous,” up from 33 percent at baseline. In comparison sites, 40 percent at followup thought this, up from 35 percent at baseline. This resulted in a significant difference between target and comparison sites. There was a 39-percent increase among target site youth who perceived methamphetamine to be very dangerous.
- *Heroin*—In target sites at followup, 69 percent of youth thought that heroin was “very dangerous,” up from 57 percent at baseline, an increase of 12 percentage points. In comparison sites, 61 percent at followup thought this, up from 57 percent at baseline. There was a statistically significant difference between target and comparison sites. The percent increase in target sites was 21 percent.
- *Cocaine*—In target sites at followup, 85 percent of youth thought that cocaine was “very dangerous,” up from 79 percent at baseline, an increase of 6 percentage points. In comparison sites 83 percent of youth at followup thought this, up from 82 percent at baseline. A statistically significant difference between target and comparison sites was found, with a 7.5 percent change in target sites in response to this question.
- *Crack*—In target sites at followup, 78 percent of youth thought that crack was “very dangerous,” up from 70 percent at baseline. In comparison sites 79 percent at followup thought this, up from 74 percent at baseline. No statistically significant difference between target and comparison sites was found.
- *Inhalants*—In target sites at followup, 62 percent of youth thought that inhalants were “very dangerous,” up from 55 percent at baseline, a change of 7 percentage points. In comparison sites 61 percent at followup thought this, up from 59 percent at baseline, an increase of 2 percentage points, with no statistically significant difference between target and comparison sites.

There was no increase in awareness of the risks associated with marijuana between baseline and followup in either target or comparison sites, where approximately 80 percent of all youth at baseline and followup in both target and comparison sites thought marijuana was “very dangerous.”

**Exhibit 3-6
Youth's Awareness of the Risks of Drugs:
Percentage Saying Drugs Are "Very Dangerous"**



Note: Percentages are weighted. Youth Question 2.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

**Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 90% confidence level.

Awareness of risk for cigarettes and beer actually decreased significantly at followup among both target and comparison site youth. This may be an indication that youth, in the absence of an intensive educational effort, begin to adjust to and accept societal levels of smoking and drinking as they move through the school year. Findings include the following:

- *Cigarettes*—Whereas 60 percent of target site youth at baseline said cigarettes were “very dangerous” only 57 percent believed this to be true at followup. In comparison sites 58 percent of youth at baseline said that cigarettes were “very dangerous”; by followup, only 55 percent thought this was the case.
- *Beer*—Although 25 percent of target site youth at baseline said that drinking beer was “very dangerous,” at followup, only 24 percent thought this was so. In comparison sites, 30 percent of youth at baseline said drinking beer was “very dangerous.” By followup, this was true for only 26 percent of youth.

(See also Tables 11 to 14 in Appendix E for more information on youth awareness of the risk of drugs.)

3.1.9 Youth Awareness of the Risks of Drugs: Differences by Four Demographic Characteristics— Grade, Sex, Ethnicity, and Locale

When the data were analyzed by the demographic characteristics of respondents, other patterns emerged. Increases in awareness of the risks associated with heroin between baseline and followup within target sites were statistically significant among the following groups: whites, males, non-center city youth, and fourth graders. These increases were statistically significantly greater in target sites than in comparison sites.

Risk awareness for methamphetamine increased significantly among fourth graders, whites, non-center city youth, and males and females. Increases in risk awareness for inhalants were significant among males only.

(See also Tables 11 to 14 in Appendix E for more information on youth awareness of the risk of drugs, by demographic characteristics.)

3.1.10 Youth Attitudes Toward Drugs

Youth were asked about their attitudes towards drugs. Specifically, they were asked whether or not they agreed with the following statements: (1) “using drugs is dangerous”; (2) “it is hard to say ‘no’ when friends want you to try drugs”; (3) “things you sniff or huff to get high can kill you”; (4) “I don’t want to hang around people who do drugs”; and (5) “I am scared of doing drugs.” (See Exhibit 3-3.)

- *Using drugs is dangerous*

Approximately 88 percent of all youth in both target and comparison sites “agreed a lot” with this statement, at both baseline and followup, with no significant

differences within target and comparison sites, nor between target and comparison sites.

- *It is hard to say “no” when friends ask you to do drugs*

Approximately 34 percent of all youth in both target and comparison sites “agreed a lot” with this statement, at both baseline and followup with no significant difference within target and comparison sites, nor between target and comparison sites.

- *Things you sniff or huff can kill you*

Attitudes towards inhalants, however, did change significantly between baseline and followup within target sites, and there was a significant difference between target and comparison sites.

At followup, 67 percent of youth “agreed a lot” with this statement, up from 61 percent at baseline, an increase of 6 percentage points. The change in comparison sites was from 64 to 65 percent, respectively, of all youth at both baseline and followup who “agreed a lot” with this statement.

- *I don’t want to hang around people who do drugs*

There was an actual decrease among target site youth who “agreed a lot” with this statement between baseline and followup. 79 percent of target site youth “agreed a lot” with the statement at baseline, but only 73 percent did so at followup (a decrease of 6 percentage points).

Comparison site youth showed no change in this measure, with about 75 percent at both baseline and followup “agreeing a lot” with this statement. The difference between the target and comparison sites was actually negatively statistically significant.

- *I am scared of taking drugs*

Fewer children in the target group agreed at followup with the statement “I am scared of taking drugs.” However, the change was small (from 74 percent to 70 percent), and was accompanied by a small decrease in the comparison group (from 73 percent to 72 percent). Thus, the difference between target and comparison sites was statistically insignificant. It is possible that this change may be accounted for by the aging of the population alone.

(See also Tables 15 to 18 in Appendix E for more information on youth attitudes toward drugs.)

3.1.11 Youth Attitudes Towards Drugs: Differences by Four Demographic Characteristics— Grade, Sex, Ethnicity, and Locale

When analyzed by demographic characteristics, these patterns emerged more clearly. In target sites, attitudes towards inhalants changed significantly between baseline and followup among whites, females, non-center city, and sixth-grade youth. These increases were statistically significantly greater in target sites than in comparison sites.

The percentage of youth agreeing a lot with the statement “I don’t want to hang around people who do drugs” declined between baseline and followup among fifth graders and females. This decline was statistically significantly greater in target than in comparison sites.

(See also Tables 15 to 18 in Appendix E, for more information on youth attitudes toward drugs by demographic characteristics.)

3.1.12 General Sources of Information on Drugs Among Youth

There was a substantial increase among youth in target sites who reported learning “a lot” about the negative aspects of drugs from TV ads (as opposed to TV shows, news, etc.).

At followup, 49 percent of youth said they learned “a lot” from TV ads, up from 44 percent at baseline, an increase of 5 percentage points over the same period. In comparison sites there was a decrease in the percentage of youth who said they had learned “a lot” from TV ads, at 45 percent at baseline, and 40 percent at followup. This resulted in a significant difference between target and comparison site responses.

All other sources of information—school class, parents or grandparents, siblings, friends, TV shows, news, and movies, and the street—showed either no increase or a decline in percentage of youth who said they had learned “a lot” from them. Overall, parents, grandparents, school, and friends remained the most important sources of information on drugs among youth. Specific survey results are as follows:

- 46 percent of youth at both baseline and at followup in target sites said they learned “a lot” from TV shows/news/movies, (as opposed to TV ads), with no change, compared with 49 percent at both baseline and followup, in comparison sites, with no significant difference between target and comparison sites.
- 72 percent of youth at baseline and 69 percent at followup in target sites—a decrease of 3 percentage points—said they learned “a lot” about drugs from school classes, compared with approximately 69 percent at both time periods in comparison sites, with no significant difference between target and comparison sites.

- 42 percent of youth at baseline and 35 percent at followup in target sites—a decrease of 7 percentage points—said they learned “a lot” from friends, compared with 39 percent and 37 percent of youth, respectively, in comparison sites, with no significant difference between target and comparison sites.
- 40 percent of youth at baseline and 35 percent at followup in target sites said they learned “a lot” about drugs on the street compared with 39 percent and 38 percent of youth, respectively, in comparison sites, with no significant difference between target and comparison sites.
- 37 percent of youth at baseline and 35 percent at followup in target sites said they learned that drugs are bad from a brother or a sister, compared with 36 percent and 33 percent of youth, respectively, at comparison sites, with no significant difference between target and comparison sites.
- 71 percent of youth at baseline and 69 percent at followup said that they learned that drugs are bad from parents or grandparents. In comparison sites, there was a decrease from 71 percent of youth at baseline to 68 percent at followup. There was no significant difference between target and comparison sites.

Youth were asked about their awareness of media sources of anti-drug ads. The number of target site youth who said they had seen anti-drug ads on TV increased significantly between baseline and followup, from 85 percent to 89 percent compared with a slight increase among comparison site youth from 86 percent to 87 percent. There was a 5-percent change among target site youth. Other sources of anti-drug ads—billboards; posters on buses, bus stops, or subways; and school posters—showed no significant increases between baseline and followup, with no significant difference between target and comparison sites when target sites were compared with comparison sites.

Approximately 84 percent of all youth surveyed at baseline and followup had seen anti-drug ads on school posters, and 52 percent had seen them on posters in other places. Approximately 48 percent of all youth at baseline saw anti-drug ads on large outdoor billboards; at followup 53 percent reported this. There was no difference between target and comparison sites on these measures.

(See also Tables 19 to 22 in Appendix E for more on “sources of information” on drugs among youth.)

3.1.13 Sources of Information on Drugs Among Youth by Four Demographic Characteristics— Grade, Sex, Ethnicity, and Locale

For every demographic group, there was either no increase, or an actual decline in percentages of target site youth compared to comparison site youth who said they “learned a lot” about the dangers of drugs from school classes, parents or grandparents, siblings, friends, TV shows, news, and movies, or on the street. There was, however, a substantial increase among target site youth compared with comparison site youth who reported learning “a lot” from TV ads. These increases

were statistically significant among all racial groups, at all locales, among both males and females. Responses among target site fourth and sixth graders (but not fifth grade) also increased significantly. These increases were statistically significantly greater in target sites than in comparison sites.

(See also Tables 14 to 22 in Appendix E for more on sources of information on drugs among youth, by demographic characteristics.)

3.2 TEEN FINDINGS

A sample of high school teens in grades 7–12 were surveyed. The following section presents results related to their awareness of the ads, perceived effectiveness of the ads, attitudes towards drugs, awareness of drugs, and awareness of the risk of drugs. Exhibits 3-7 and 3-8 present key teen findings. The survey asked questions about the following paid Media Campaign ads targeted to teens: *Alex Straight A's*, *Frying Pan*, *911*, *Layla*, *Free Ride*, *Rite of Passage*.

3.2.1 Teen Sample Profile: Comparability of the Target and Comparison Teen Samples Between Baseline and Followup

Teens in target and comparison sites were similar with regard to age, percentage male or female, distribution by grade, and type of household. These characteristics did not change from baseline to followup. There were slight differences in race and ethnicity; although similar percentages of teen respondents across all sites were white (69% on average), a smaller percentage of target site teens (13.6%), compared with comparison site teens (18.2%), were African American. This difference was accounted for by a slightly higher percentage of Hispanic and Asian teens in target sites (12.0% and 2.7%, respectively), compared with Hispanic and Asian teens in comparison sites (9.0% and 0.8%, respectively) Teens in target and comparison sites reported similar patterns of television viewing, with 84 percent watching television every day or almost every day. The sample profile is summarized in Exhibits 3-9 and 3-10.

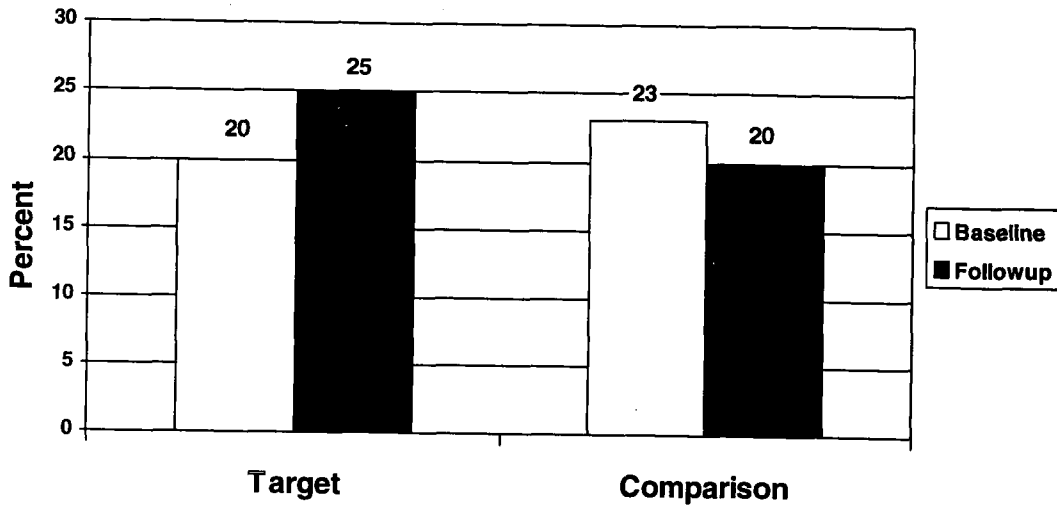
3.2.2 Risk Status of Target and Comparison Sites: Baseline Teen Drug Use

Risk status, as measured by drug use, did not differ at baseline in either target or comparison sites. Teen drug use in the past year and in the past 30 days increased marginally in both target and comparison sites over the course of the Media Campaign period, with no significant differences between the two. These increases probably are due to a maturation effect: as the school year progresses, teens are more likely to hear about and be exposed to drugs. This phenomenon is discussed in greater detail in Chapter 4. As expected, there was no significant change in teen behavior through exposure to the Media Campaign.

The following levels of drug use in the past 30 days were reported at baseline by teens at all sites:

- Marijuana (approximately 20%);

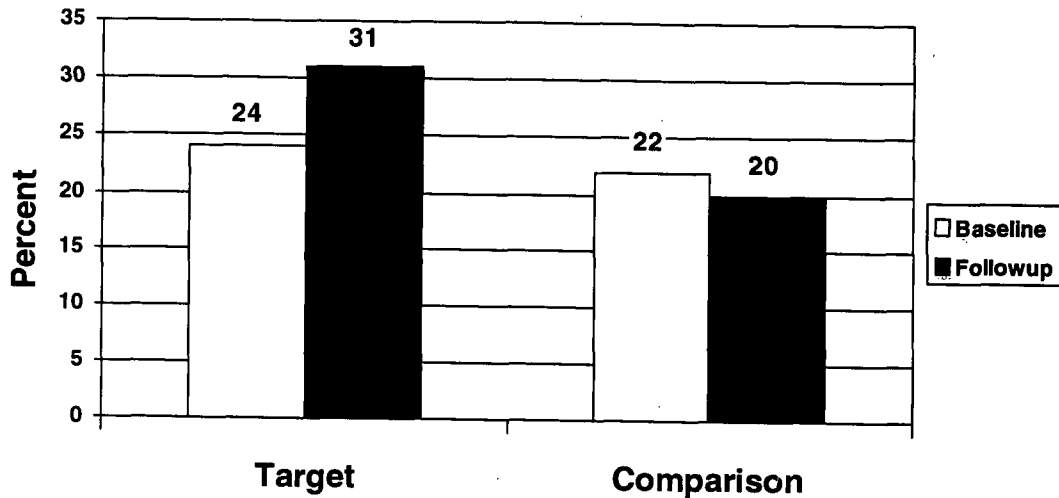
Exhibit 3-7 Increases in Teens Reporting TV Commercials as a Source of Information About the Risks of Drugs



Agreed they learned "a lot" about the risks of drugs from TV commercials.*

*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

Exhibit 3-8 Increases in Teens' Reported Level of Exposure to Anti-Drug Ads



Percentage reporting the "frequency of seeing or hearing commercials or ads telling them about drugs every day or almost every day significantly increased."*

*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

Exhibit 3-9
Teen Sample Demographic Characteristics

Characteristics	Target Sites		Comparison Sites	
	Baseline %	Followup %	Baseline %	Followup %
Grade				
7	16	16	16	17
8	18	17	17	17
9	15	15	15	16
10	20	20	20	18
11	16	16	15	16
12	15	16	16	15
Race/Ethnicity				
White	69	68	70	69
African American	13	14	18	19
Hispanic	12	12	9	9
Asian	3	3	1	1
Other	3	3	3	3
Family Composition				
Both parents	57	59	55	55
Mother and stepfather	13	12	14	13
Father and stepmother	4	4	5	5
Mother only	19	19	19	19
Father only	5	5	5	4
Grandparents	3	5	5	5
All other	11	12	11	12
TV Watching				
Every day	54	54	58	55
Almost every day	31	30	28	29
At least once per week	10	11	11	10
Once or twice per month	2	2	1	1
Other	3	3	2	3

Note: Percentages may not add to 100 due to rounding.

- Inhalants (approximately 5%);
- Cocaine (approximately 3%); and
- Crack (approximately 2%)
- Alcohol (approximately 39%);
- Cigarettes (approximately 29%);

The following levels of drug use in the past 12 months were reported by teens at baseline:

- Marijuana (approximately 35%);
- Inhalants (approximately 11%);

Exhibit 3-10
Responses to Teen Questionnaire in Percentages:
Aggregate Target and Comparison Sites

Questions	Target			Comparison			Overall % change ¹
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
Teens who strongly agreed with the following statements...							
Taking drugs scares me.	32	33	1	36	34	-2	4
I don't want to hang around anyone who uses marijuana.	29	26	-3	29	29	0	-3
I would try to talk a friend out of using drugs.	51	52	1	56	55	-1	1
The music that my friends and I listen to makes drugs seem cool.	9	10	1	11	12	1	0
Heroin is a dangerously addictive drug.	85	85	0	86	86	0	0
Heroin will ruin your life.	85	84	-1	84	85	0	-1
Teens who responded there is a great risk in trying once or twice...							
Marijuana	22	19	-3	24	22	-2	-1
Cocaine/crack	52	53	1	54	55	0	1
Methamphetamines	52	52	1	54	54	0	1
Heroin	56	56	0	58	59	1	-1
Teens who responded there is a great risk in using regularly...							
Marijuana	60	60	-1	59	56	-3	2
Cocaine/crack	86	85	0	84	84	0	0
Methamphetamines	82	84	2	82	82	0	2
Heroin	86	86	-1	84	84	0	-1
Teens who responded there is great risk the following will happen to someone who uses marijuana...							
Going on to harder drugs	61	60	-1	61	60	-1	0
Doing worse at school, work, or sports	55	56	0	56	52	-4	4
Getting hooked on marijuana	62	60	-2	62	61	0	-2
Becoming a loser	42	42	0	42	41	0	0
Messing up your life	59	56	-2	59	57	-1	-1
Acting stupidly and foolishly	52	54	1	53	53	-1	2
Missing out on the good things in life	53	52	-	53	54	1	-1
Upsetting their parents	72	73	1	74	72	-2	3
Teens who responded there is great risk the following will happen to someone who uses methamphetamines...							
Getting hooked on methamphetamines	78	80	1	80	80	0	1
Becoming violent	68	69	1	68	70	2	-1
Acting crazy	69	71	2	69	71	1	1
Teen frequency of seeing or hearing commercials or ads telling them about the risks of drugs...							
Not at all	7	4	-2*	7	10	3*	-6*
Less than once a month	11	7	-4*	12	13	1	-5*
1-3 times a month	23	15	-8*	23	24	1	-9*
1-3 times a week	23	23	0	23	21	-2	2
Every day or almost every day	24	31	7*	22	20	-2	9*
More than once a day	13	19	7*	11	11	-1	7
No answer	1	2	-	2	2	0	0
Teens who "agree a lot" that these commercials or ads have...							
Made you more aware of the risks of using drugs	31	34	3	32	31	-1	4
Made you less likely to try or use drugs	29	30	1	29	27	-2	3
Given you new information or told you things you didn't know about drugs	27	30	3	28	27	-1	4
Exaggerated the risks or dangers of marijuana	30	29	-1	31	30	-2	1

Questions	Target			Comparison			Overall % change ¹
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
Teens who agree they learned “a lot” from...							
School lessons or programs	46	45	0	42	42	-1	1
Parents or grandparents	35	35	-	40	40	0	0
Brother or sister	20	21	1	21	21	-1	1
Friends	31	33	2	35	33	-1	4
TV commercials	20	25	5*	23	20	-3	7*
TV shows, news, or movies	30	32	1	35	30	-5	6*
Radio	10	15	5*	10	10	-1	5*
Print ads in newspapers or magazines	16	15	-1	16	16	0	-2
Billboards outside	11	12	1	13	11	-2	3
Posters on buses, bus stops, or subways	9	10	2	11	10	-1	2
School posters	20	16	-4*	21	18	-3	-1
On the street	23	24	0	25	25	0	0
Teens who reported they have seen the commercials “often” in the past few months...							
<i>Alex Straight A's</i>	9	26	17*	7	7	-1	18*
<i>Frying Pan</i>	22	49	27*	16	16	1	27*
<i>911</i>	11	23	12*	8	9	1	11*
<i>Layla</i>	12	16	4*	11	12	1	3
<i>Free Ride</i>	7	10	3*	8	8	0	3
<i>Rite of Passage</i>	9	14	5*	9	8	0	5*

Note: Because of rounding, numbers may not add.

*Indicates significant difference at the 95% confidence level.

¹ Percentage change represents net difference in change between target and comparison sites (i.e., the target site difference in percentage points between baseline and followup, minus the comparison site difference).

- Cocaine (approximately 6%);
- Crack (approximately 4%);
- Alcohol (approximately 57%); and
- Cigarettes (approximately 44%).

Teens were not asked about their heroin use.

Additional information on teen drug use can be found in Appendix E, Tables 49–52 (bound in separate volume).

3.2.3 Awareness of the Ads

Teens were asked a general awareness question regarding whether they had seen or heard any ads telling them about the risks of drugs. In general, teen awareness of the ads increased substantially during the Phase I Media Campaign. In target sites, the percent of teens who saw such ads every day or almost every day increased from 24 percent at baseline to 31 percent at followup, an increase of 7 percentage points and a 29 percent change. The change in comparison sites was 22 percent at baseline and 20 percent at followup, resulting in a significant difference between target and comparison sites. Teens also were asked about six specific Media Campaign ads.¹ The following findings are summarized in Exhibit 3-11.

¹ Teens may have seen more ads over the Media Campaign period; but six were selected as indicators of awareness of paid ads.

Alex Straight A's— 26 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 9 percent in the baseline period, a significant increase of 17 percentage points and a percent change of 188 percent in target sites. In comparison sites approximately 7 percent of teens reported this level of recall at baseline and followup, resulting in a significant difference between target and comparison sites. The percentage of teens who ever saw this ad (including those who saw *Alex Straight A's* either “often” or “a few times”) was 64 percent at followup in target sites, with 35 percent of comparison site teens reporting having ever seen the ad at followup.

Frying Pan— 49 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 22 percent in the baseline period, a significant increase of 27 percentage points and a percent change of 122 percent. In comparison sites approximately 16 percent of teens reported this level of recall at either baseline or followup, resulting in a significant difference between target and comparison sites.

911— 23 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 11 percent in the baseline period, a significant increase of 12 percentage points and a 109-percent change. In comparison sites 8 percent and 9 percent of teens reported this level of recall at baseline and followup, respectively, with no significant difference between target and comparison sites. Forty-six percent of target site teens reported having ever seen the ad *911* at followup, whereas 29 percent of comparison site teens had ever seen the ad.

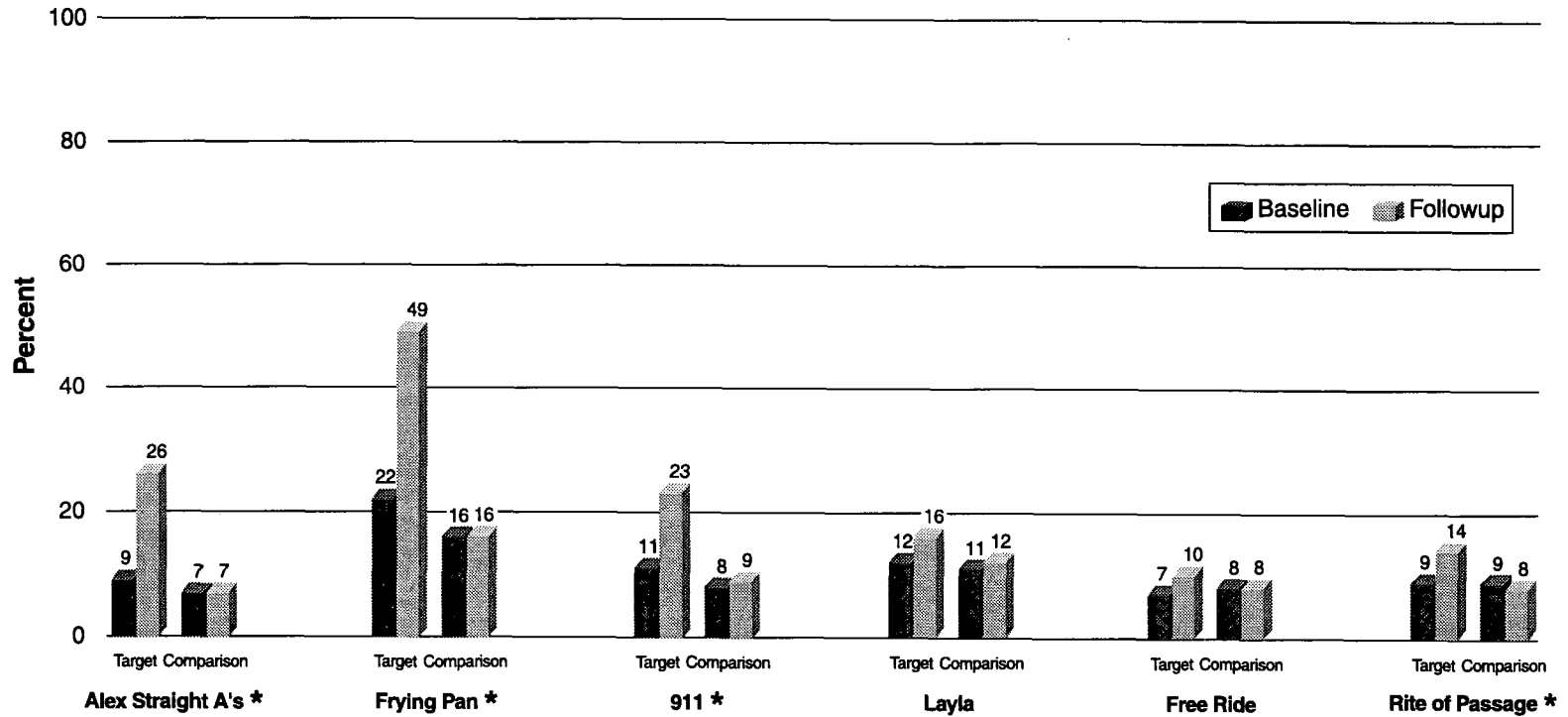
Rite of Passage— 14 percent of teens in target sites recalled seeing this ad “often” at followup, compared with 9 percent in the baseline period, a significant increase of 5 percentage points. There was a 56-percent change in the target sites. In comparison sites, approximately 9 percent of teens reported this level of recall at either baseline or followup, resulting in a significant difference between target and comparison sites.

There was no significant difference in results between target and comparison sites for the following two ads.

Free Ride— Target site teen recall was 7 percent at baseline, and 10 percent at followup, compared to 8 percent in both target and comparison sites, with no change over time and with no significant difference between target and comparison sites.

Layla— Target site teen recall was 12 percent at baseline, and 16 percent at followup, a significant increase of 4 percentage points compared with 11 percent at baseline and 12 percent at followup in comparison sites, with no significant differences between target and comparisons sites.

Exhibit 3-11 Ad Awareness: Percentage of Teens Who Saw Ads “Often”



Note: Percentages are weighted. Teen Question 9.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

Although there was no significant difference between target and comparison sites at the aggregate level on awareness of the ads *Layla* and *Free Ride*, this may be attributed to site-level variation in the airings of these ads. In the eight sites where *Layla* was scheduled to run as a paid ad, significant differences in awareness between the target and comparison sites were found in Denver and Sioux City. And although *Layla* was part of the media plan in Milwaukee and Portland, it did not air in these two sites as a paid ad. *Free Ride* was scheduled as a paid ad in four sites, and in two of these (Atlanta and Baltimore), the ad did show statistically significant increases in awareness between the target and comparison sites. The implications of these results are discussed in more detail in Chapter 5.

Additional information on teen awareness of the ads can be found in Appendix E, Tables 27–32.

3.2.4 Awareness of the Ads Among Teens: Differences by Four Demographic Characteristics: Grade, Locale, Ethnicity, Gender

Among all demographic groups, the percent of target site teens increased at followup for those reporting they had seen or heard ads that told them about the risks of drugs. When teen responses were analyzed by demographic characteristics, additional patterns emerged, and these findings are summarized in Exhibit 3-12. Selected findings include the following:

- Increases in the percentage of teens who had seen *Alex Straight-A's* “often” were statistically significant among teens in all grades, both sexes, all locales, and among African Americans and whites;
- Increases in the percentage of teens who had seen *Frying Pan* and *911* “often” were statistically significant for all subcategories of the four demographic groups;
- Increases in the percentage of teens who had seen *Layla* “often” were statistically significant among females and non-center city residents;
- Increases in the percentage of teens who had seen *Free Ride* “often” were statistically significant among whites, males, and non-center city residents; and
- Increases in the percentage of teens who had seen *Rite of Passage* “often” were statistically significant among 7th through 10th graders, whites, Hispanics, females, and non-center city residents.

These increases were statistically significantly greater in target sites than in comparison sites. Additional information on teen awareness of the ads by demographic characteristics can be found in Appendix E, Tables 27–32.

Exhibit 3-12

Teens: Significant Differences in Responses From Baseline to Followup
Between Target and Comparison Sites, by Demographics

Question	Response	Grade			Sex		Race/Ethnicity				Locale	
		7-8	9-10	11-12	Male	Female	White	Black	Hispanic	Other	Center city	Non-center city
In the past few months, how frequently have you seen or heard commercials or ads telling you about the risks of drugs?												
	Almost every day or more often	●	●	●	●	●	●	-	-	●	●	●
How much have you learned about the risks of drugs from...?												
TV commercials	Learned a lot	-	●	●	●	○	●	-	-	-	-	●
TV shows, news, or movies	Learned a lot	-	-	●	●	-	●	-	-	●	-	●
Radio	Learned a lot	●	-	-	●	●	●	-	-	-	●	●
Have you seen the advertisement...?												
<i>Alex Straight A's</i>	Often	●	●	●	●	●	●	●	-	-	●	●
<i>Frying Pan</i>	Often	●	●	●	●	●	●	●	●	●	●	●
<i>911</i>	Often	○	●	●	●	●	●	●	●	●	●	●
<i>Layla</i>	Often	-	-	-	-	●	-	-	-	-	-	○
<i>Free Ride</i>	Often	-	-	-	○	-	●	-	-	-	-	●
<i>Rite of Passage</i>	Often	●	●	-	-	●	●	-	○	-	-	●

NOTE: Questions are in Teen Questionnaire in Appendix A. Other includes all races/ethnicities other than white, black, and Hispanic.

Key: ● indicates significance in change at the 95% confidence level.

○ indicates significance in change at the 90% confidence level.

- indicates that there was no significant difference at the 90% or 95% confidence level.

3.2.5 Perceived Effectiveness of the Ads Among Teens

There were no significant increases between baseline and followup in the percentage of teens in target or comparison sites who “agreed a lot” with specific statements about the ads as the following survey results indicate:

- “Made them more aware of the risks of using drugs” (approximately 32% overall);
- “Made them less likely to try or use drugs” (approximately 29% overall);
- “Gave them new information or told them things they didn’t know about drugs” (approximately 28% overall); and
- “Exaggerated the risks or dangers of marijuana” (approximately 31% overall).

Additional information on the perceived effectiveness of the ads among teens by their demographic characteristics can be found in Appendix E, Tables 33–36.

3.2.6 Perceived Effectiveness of the Ads Among Teens: Differences by Grade, Locale, Ethnicity, Gender

When responses were analyzed by demographic characteristics, no further information emerged.

3.2.7 Awareness of the Risks of Drugs Among Teens

Teens’ responses to questions about the risks of drugs did not show an increase in awareness, either within or between the target and comparison sites. Awareness of the risks of marijuana, crack-cocaine, methamphetamine, and heroin remained the same throughout the Media Campaign.

- *Crack/Cocaine*: Approximately 53 percent of all teens at all sites at baseline and followup thought there was “great risk” in trying crack-cocaine once or twice; 86 percent of target site teens at baseline and 85 percent at followup and 84 percent of comparison site youth at both baseline and followup thought there was “great risk” in using crack-cocaine regularly; and
- *Methamphetamine*: Approximately 53 percent of all teens at all sites at baseline and followup thought there was “great risk” in trying methamphetamine once or twice; 82 percent thought there was “great risk” in using it regularly; and 80 percent thought there was “great risk” of becoming addicted.

With regard to the social and psychological risks associated with methamphetamine, teens at baseline and at followup, in both target and comparison sites, thought that users were at “great risk” for acting crazy (approximately 70%) and becoming violent (approximately 68%).

- *Heroin:* Approximately 57 percent of teens thought there was “great risk” in trying heroin; and approximately 85 percent thought there was “great risk” in using it regularly.
- *Marijuana:* Approximately 22 percent of teens thought there was “great risk” in trying marijuana; 60 percent of teens at baseline and followup in target sites thought there was “great risk” in using it regularly; 59 percent at baseline and 56 percent at followup perceived this in comparison sites. Two-thirds of teens also thought marijuana users were at “great risk” for “getting hooked” (61%); or “going on to harder drugs” (60%).

There was no change in teen awareness of the social and academic risks associated with marijuana. The following percentages of teens at baseline and followup in both target and comparison sites thought that marijuana users were at “great risk” for the following:

- Doing worse at school, work, or sports (approximately 55%);
- Becoming a loser (approximately 42%);
- Messing up their lives (approximately 57%);
- Missing out on the good things in life (approximately 52%); and
- Acting foolishly and doing stupid things (approximately 53%).

However, more teens thought that marijuana users were at “great risk” for the following:

- Upsetting their parents (approximately 72%).

Additional information on awareness of the risk of drugs can be found in Appendix E, Tables 37–40.

3.2.8 Awareness of the Risks of Drugs Among Teens: Differences by Grade, Locale, Ethnicity, and Gender

When responses to questions about awareness of the risks of drugs were further analyzed, there were no statistically significant differences between target and comparison sites by demographic characteristics.

3.2.9 Attitudes Towards Drugs Among Teens

Teens showed no change in their attitudes toward drugs during Phase I. The percentage of teens saying they “agree strongly” with the following statements remained unchanged between baseline and followup in both target and comparison groups:

- “Taking drugs scares me” (approximately 33%);

- “I don’t want to hang around anyone who uses marijuana” (approximately 28%);
- “I would try to talk a friend out of using drugs” (approximately 53%);
- “The music that my friends and I listen to makes drugs seem cool”; (approximately 10%);
- “Heroin is a dangerously addictive drug” (approximately 85%); and
- “Heroin will ruin your life” (approximately 84%).

The implications of these results are detailed in Chapter 4. The low percentages of responses to the first three questions seem at odds with responses to the last three. This may be because teens understood the questions in an unintended way. For example, the first question may have been taken to mean “I am scared that I might try drugs,” and the second could be interpreted to mean “I might be tempted to give in to peer pressure if I hang around people who use drugs.” Since the question is specific to marijuana, it may mean that use of marijuana by friends does not exclude them from being friends.

Additional information on teen attitudes towards drugs can be found in Appendix E, Tables 41-44.

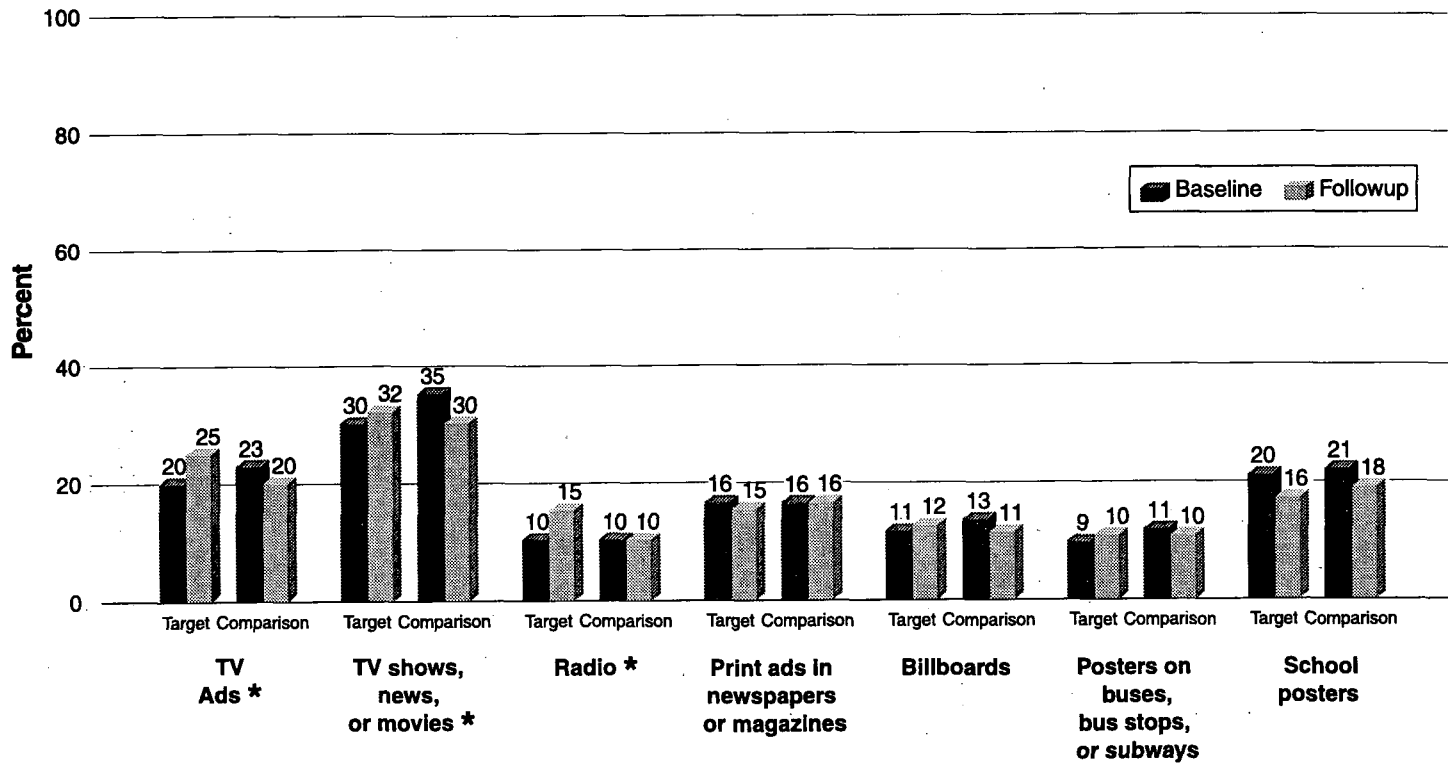
Analysis of teen attitudes by demographic characteristics did not reveal any additional information.

3.2.10 Sources of Information About Drugs Among Teens

Teens were asked to identify different sources of information about drugs. The percentage of target site teens who said they learned “a lot” about the risks of drugs from TV ads, and from TV shows, news, movies, and radio increased significantly from baseline to followup. These findings are summarized in Exhibit 3-13.

- 25 percent of target site teens at followup “learned a lot” from TV commercials, compared with 20 percent at baseline, an increase of 5 percentage points and a 25-percent change. In comparison sites, 20 percent responded this way at followup, compared with 23 percent at baseline, a decrease of 3 percentage points. This resulted in a significant difference between target and comparison sites.
- 32 percent of target site teens at followup “learned a lot” from TV shows, news, and movies, compared with 30 percent at baseline, an increase of 2 percentage points. In comparison sites, 30 percent responded this way at followup, and 35 percent at baseline, a decrease of 5 percentage points, resulting in a significant difference between target and comparison sites.

Exhibit 3-13
Sources of Information About Drugs: Percentage of Teens Who Said They Learned "a Lot" About Drugs From Specific Media



Note: Percentages are weighted. Teen Question 8.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

- 15 percent of target site teens at followup “learned a lot” from radio, compared with 10 percent at baseline. In comparison sites, 10 percent responded this way at both followup and baseline, resulting in a significant difference between target and comparison sites.

However, there was no change in the percentages of teens at either baseline or followup in target or comparison sites who responded they “learned a lot” about drugs from other sources of information:

- School lessons or programs (approximately 44%);
- Parents or grandparents (approximately 34% in target sites and 39% in comparison sites);
- Friends (approximately 33%);
- The streets (approximately 24%);
- School posters (approximately 19%);
- Siblings (approximately 21%);
- Print ads (approximately 16%);
- Billboards outside (approximately 12%); and
- Posters on buses, bus-stops, subways (approximately 10%).

These findings are particularly strong evidence that during the Phase I pilot test, teens were more likely to learn about the dangers of drugs from the Media Campaign than from other sources.

3.2.11 Sources of information About Drugs Among Teens: Differences by Grade, Locale, Ethnicity, and Gender

When their responses were analyzed by demographic characteristics, increases in the percentage of teens who said they had “learned a lot” from TV commercials were statistically significant within target sites and between target and comparison sites among 9th–12th graders, males and females, whites, and non-center city residents. Increases in the percentage of teens who said they had “learned a lot” from TV shows, news, or movies were statistically significant among 11th and 12th graders, males, whites, “other” racial and ethnic groups, and non-center city residents. Increases in the percentage of teens who said they had “learned a lot” from radio, were statistically significant among 7th and 8th graders, whites, males and females, and center city and non-center city residents. These increases were statistically significantly greater in target than in comparison sites. These findings are summarized in Exhibit 3-12.

Additional information on sources of information for teens can be found in Appendix E, Tables 45-48.

3.3 PARENT FINDINGS

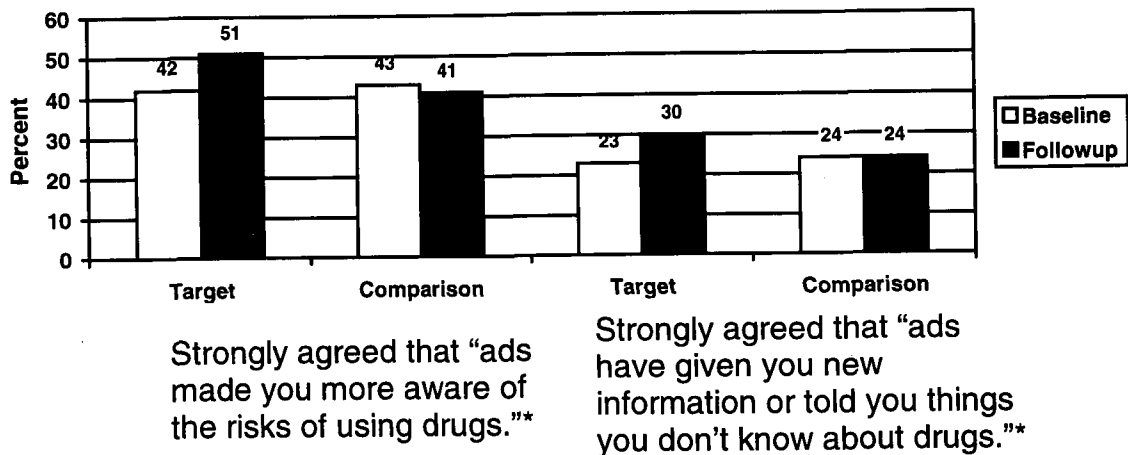
Parents of children age 18 and younger were asked about their awareness of five selected² ads: *Burbs*, *O'Connor*, *Girl Interview*, *Under Your Nose*, and *Deal*. Parents also were asked about their perceptions of the effectiveness of these ads, their attitudes toward drug use, and communication with their children about drugs. Exhibit 3-14 presents key findings for parents.

3.3.1 Sample Profile: Comparability of the Target Site and Comparison Site Parent Samples, Between Baseline and Followup

Parents in target sites were similar to parents in comparison sites with regard to their demographic characteristics and socioeconomic status as measured by age, ethnic background, marital status, education, and household income. Parents in all sites also spent similar amounts of time watching television. None of these characteristics changed significantly between the baseline and followup periods.

During Phase I across all sites the following percentages were reported for both target and comparison sites:

Exhibit 3-14
Increases in Parents Reporting Ads as Sources of Information About the Risk of Drugs



*Significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

² Parents may have seen many more than the five ads over the course of the Media Campaign, but five were selected as indicators of awareness of paid ads.

- 34 percent to 36 percent of all parents were between ages 18 and 34, 43 percent to 45 percent were between ages 35 and 44, and 19 percent to 22 percent were age 45 older.
- 74 percent to 76 percent of all parents were white, 10 percent to 11 percent were African American, and 9 percent to 11 percent were Hispanic. Another 1 percent to 2 percent were Asian.
- 77 percent to 79 percent of all parents were married; 11 percent to 13 percent were divorced, separated, or widowed; and 6 percent to 8 percent were single and had never married.
- 33 to 36 percent of all parents had no college education, 26 to 29 percent of all parents had completed high school, and 64 percent to 67 percent had some college or had graduated from college;
- 6 percent to 7 percent of all parents had household incomes of \$14,999 or less, 41 percent to 44 percent had incomes between \$15,000 and \$49,999, and 35 percent to 46 percent had incomes of more than \$50,000.
- 53 percent to 55 percent of all parents watched television every day; and another 23 percent to 26 percent watched almost every day. The sample profile is displayed in Exhibits 3-15 and 3-16; Additional information on TV viewing can be found in Tables 59 and 60 in Appendix E, bound as a separate volume.

3.3.2 Risk Status in Target and Comparison Sites: Parental Attitudes Towards Drugs

Parental attitudes towards drugs were similar at baseline and followup in target and comparison sites.

In addition, parental attitudes showed no change between baseline and followup when compared on the following measures:

- *“My child knows exactly how I feel about him/her using drugs”* (approximately 86% of all parents at baseline and followup in both target and comparison sites “agreed strongly” with this statement);
- *“What I say will have little influence over whether my child tries marijuana”* (approximately 17% of all parents at baseline and followup in target and comparison sites “agreed strongly” with this statement);
- *“It wouldn’t worry me if my child tried sniffing things to get high, like glue”* (approximately 9% of all parents at baseline and followup in target and comparison sites “agreed strongly” with this statement);
- *“I don’t think it is so bad if my child tries marijuana”* (approximately 5% of all parents at baseline and followup in target and comparison sites “agreed strongly” with this statement); and

Exhibit 3-15
Parent Sample Demographic Characteristics

Characteristics	Target Sites		Comparison Sites	
	Baseline %	Followup %	Baseline %	Followup %
Age of Parent				
18–34	35	36	34	34
35–44	43	44	45	43
45+	22	19	21	22
Unknown	0	1	0	1
Race/Ethnicity				
White	75	74	76	76
African American	10	10	11	11
Hispanic	11	11	9	9
Asian	2	2	1	1
Other	3	2	3	2
Marital Status				
Married	79	78	79	77
Single	10	11	9	10
Divorced/separated/widowed	11	11	12	13
Education				
No college	33	34	36	34
Some college	25	26	25	28
Completed college	42	39	39	36
Income				
\$0–\$14,999	6	6	7	7
\$15,000–\$49,999	42	41	44	44
\$50,000+	42	39	38	35
TV Watching				
Every day	55	55	55	53
Almost every day	26	25	25	23
At Least once per week	16	16	16	18
Once or twice per month	2	2	3	2
Other	2	2	3	3

Note: Percentages may not add to 100 due to rounding.

- *“I would be upset if my child tried marijuana.”* (At baseline, 65% of target site parents “agreed strongly” they “would be upset if [their] child ever tried marijuana,” and 66% agreed at followup. Comparison site parents agreeing with that statement decreased from 67 percent at baseline to 64 percent at followup.)

Disagreeing “strongly” to the last statement and agreeing “strongly” to the three statements before that is a proxy measure of the levels of “at risk” families surveyed in target and comparison sites. Parents agreeing with these statements include parents who believe they cannot influence their children, parents who have permissive attitudes towards drugs, or parents who deny or do not

Exhibit 3-16
Responses to Parent Questionnaire in Percentages:
Aggregate Target and Comparison Sites

Questions	Target			Comparison			Overall % change ¹
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
Parents who responded they think there is great risk in trying once or twice...							
Marijuana	51	55	4*	53	55	2	2
Cocaine/crack	87	89	1	88	86	-2	3*
Inhalants	83	85	3*	83	82	-1	4*
Methamphetamines	83	86	3*	84	81	-2	5*
Heroin	90	90	1	90	88	-2*	3*
Parents who responded they think there is great risk in using regularly...							
Marijuana	80	83	3*	80	80	-1	3*
Cocaine/crack	91	92	1	91	90	-1	2*
Inhalants	90	92	2	90	89	-1	3*
Methamphetamines	89	91	2*	90	89	-1	4*
Heroin	91	92	1	92	90	-2	3*
Frequency with which parents talked to their children about drugs during the past year...							
Never	5	5	0	6	6	-1	1
Not in the past year	2	1	0	1	2	1*	-2*
Once	3	4	1	4	5	1	1
Two or three times	17	16	-1	18	17	-1	0
Four or more times	50	50	0	50	49	-1	1
Don't know / no answer / not asked	24	23	1	21	22	1	0
Parents who "agree strongly" with the following...							
What I say will have little influence over whether my child tries marijuana.	17	18	1	18	17	-1	1
My child knows exactly how I feel about him/her using drugs.	86	85	-2	86	87	1	-2
I don't think it is so bad if my child tries marijuana.	5	6	1	4	5	1	0
I would be upset if my child ever tried marijuana.	65	66	1	67	64	-3	4
It wouldn't worry me if my child tried sniffing things to get high, like glue.	8	10	2*	8	9	1	1
Parents who "agree a lot" that...							
Commercials or ads made you more aware of the risks of using drugs.	42	51	9*	43	41	-2	11*
Commercials or ads have given you new information or told you things you didn't know about drugs.	23	30	7*	24	24	-1	8*
Commercials or ads made you aware that America's drug problem is something that all families should be concerned about.	65	70	5*	66	66	0	5*
Parents who reported they saw each ad "often" in the past few months							
Burbs	15	23	8*	13	17	5*	3*
O'Connor	20	27	7*	15	18	3*	5*
Girl Interview	6	16	11*	3	4	1	10*
Under Your Nose	4	10	6*	5	6	1	5*
Deal	17	21	4*	15	17	2	2

Note: Because of rounding, numbers may not add.

*Indicates significant difference at the 95% confidence level.

¹ Percentage change represents net difference in change between target and comparison sites (i.e., the target site difference in percentage points between baseline and followup, minus the comparison site difference).

understand the risks of drugs. The significance of these findings is discussed in Chapter 4.

(See also Tables 71–75 in Appendix E for more information on parental attitudes toward drugs.)

3.3.3 Awareness of the Ads Among Parents

Awareness of anti-drug ads among parents increased substantially between baseline and followup during the Phase I Media Campaign, and there were substantial differences in this change between target site parents and comparison site parents.

Awareness of all five selected paid ads targeting parents increased significantly within target sites from baseline to followup, and, with exception of *Deal*, this increase in awareness was significantly greater in the target sites than in the comparison sites. These findings are summarized in Exhibit 3-17.

The following paragraphs summarize the results for the five parent-oriented ads.

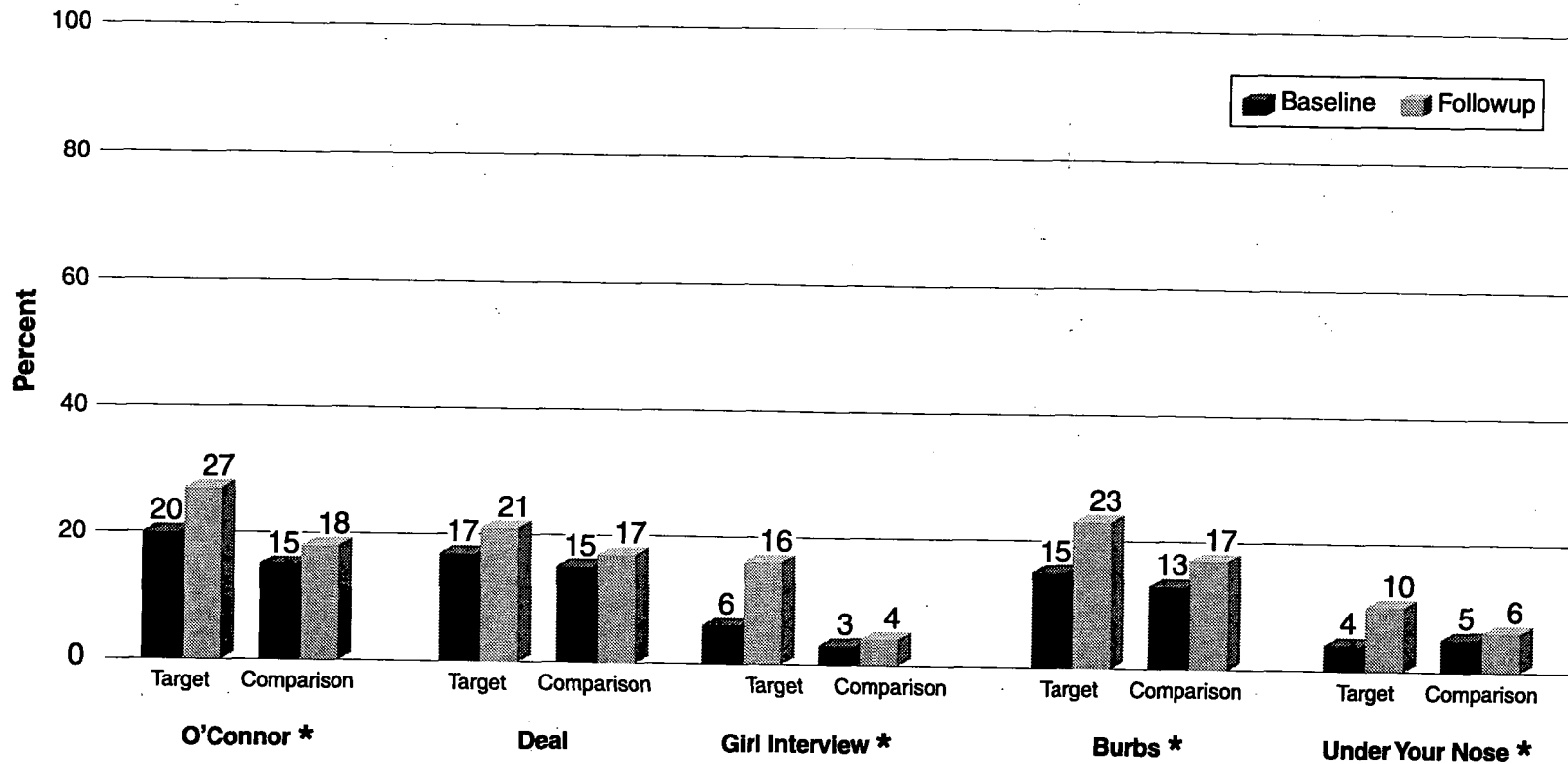
O'Connor—27 percent of parents in target sites recalled seeing this ad “often” at followup, compared with 20 percent at baseline, an increase of 7 percentage points and a 35-percent change. In comparison sites only 18 percent of parents reported seeing the ad at followup, up from 15 percent at baseline, an increase of 20 percent.

Girl Interview—16 percent of parents in target sites recalled seeing this ad “often” at followup, compared with only 5 percent at baseline, an increase of 11 percentage points and a 220-percent change. In comparison sites only 4 percent of parents reported seeing the ad at followup, up from 3 percent at baseline, a 33-percent change. Although an awareness level of 16 percent is not particularly dramatic, when considering those parents who saw *Girl Interview* a “few times” in addition to those who saw the ad “often,” 41 percent of target site parents report having ever seen the ad, whereas only 16 percent of comparison site parents ever saw it.

Burbs—23 percent of parents in target sites recalled seeing this ad “often” at followup, compared with only 15 percent at baseline, an increase of 8 percentage points and a 53-percent change. In comparison sites only 17 percent of parents recalled seeing this ad “often” at followup, compared with 13 percent at baseline, a 31-percent change.

Under Your Nose—10 percent of parents in target sites had seen this ad “often” at followup, compared with 4 percent at baseline, an increase of 150 percent. In comparison sites only 5 percent had seen this ad “often” at baseline compared with 6 percent at followup, an increase of only 20 percent. While this finding is statistically significant, 10 percent awareness is not particularly meaningful. However, because of the nature of this ad’s content and potential concern that it could influence youth in a negative way, *Under Your*

**Exhibit 3-17
Ad Awareness: Percentage of Parents Who Saw Specific Ads "Often"**



Note: Percentages are weighted. Parent Question 12.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

Nose was usually run in the late fringe daypart (i.e., between 11:30 p.m. and 6:00 a.m.). This could account for the low level of awareness of this ad among parents. As discussed in Chapter 5, the site where *Under Your Nose* did run often and in prime viewing hours (Atlanta) showed a significant increase in parents' awareness. Further, the difference between Atlanta and its comparison site, Memphis, was significant.

Deal—Parental awareness of this ad increased within sites, but the change was not significant between target sites and comparison sites; 21 percent of parents in target sites recalled seeing this ad “often” at followup, up from 17 percent in the baseline period. In comparison sites 17 percent of parents reported this level of recall at followup, and 15 percent recalled seeing it “often” at baseline. There was a 24-percent change in target sites and a 13-percent change in comparison sites. For this ad alone, there was no significant difference between target and comparison sites.

In order to measure their overall exposure to anti-drug ads, parents were asked a general awareness question regarding how often they had seen or heard ads telling them about the risks of drugs. At followup in target sites, 41 percent of parents said they had seen or heard ads telling them about the risks of drugs “almost every day or more often,” compared with 25 percent at baseline, a 64-percent change. There was no change in comparison sites, where only 21 percent of parents at baseline and 22 percent at followup reported this, a difference of only 1 percentage point.

The effect of exposure to the ads and intensity of the Media Campaign in target and comparison sites is discussed in Chapter 4.

(See Tables 53 to 58 in Appendix E for additional information on parents' awareness of the ads.)

3.3.4 Awareness of the Ads Among Parents: Differences by Five Demographic Characteristics: Parental Age, Age of Their Children, Level of Education, Household Income, Gender, and Ethnicity

Parental responses to questions regarding how often they had seen the ads were analyzed by demographic groupings. These analyses show that target site increases between baseline and followup remained significant for all the ads among the groups, as displayed in Exhibit 3-18 but were not practically significant in all cases. These increases were statistically significantly greater in target sites than in comparison sites.

O'Connor—There were significant increase among parents who saw the ad “often” among parents with no college and those who had completed college, high-income parents, fathers, parents between ages 35 and 44, and those with children in the 4th through 9th grades.

Exhibit 3-18
Parents: Significant Differences in Responses From Baseline to Followup
Between Target and Comparison Sites, by Demographics

Question	Response	Education (College)			Age Group			Income Level			Race/Ethnicity			Grade of Child				Sex	
		None	Some	Completed	18-34	35-44	45+	Low	Middle	High	White	Black	Hispanic	0-3	4-6	7-9	10-12	Male	Female
Agreement with...																			
"Frequency of seeing ads about the risks of using drugs."	Everyday or more often	●	●	●	●	●	-	●	●	●	●	-	●	●	●	●	●	●	●
How often you saw...in the past few months																			
<i>O'Connor</i>	Often	●	-	●	-	●	-	-	-	●	-	-	-	-	●	●	-	●	-
<i>Deal</i>	Often	-	-	-	-	-	-	-	-	●	-	●	-	-	●	●	-	-	-
<i>Girl Interview</i>	Often	●	●	●	●	●	●	●	●	●	●	●	-	●	●	●	●	●	●
<i>Burbs</i>	Often	-	-	-	-	●	-	-	-	●	-	-	-	-	-	-	-	-	●
<i>Under Your Nose</i>	Often	●	-	-	●	●	-	●	●	●	●	-	-	-	●	●	-	●	●
Agreement with...																			
"Ads made you aware that America's drug problem is something that all families should be concerned about."	Agree a lot	-	-	●	-	●	-	-	●	-	-	●	-	●	-	●	-	-	●
"Ads have given you new information or told you things you didn't know about drugs."	Agree a lot	●	-	-	●	●	-	●	●	-	●	-	-	-	-	-	●	-	●

NOTE: Questions are in the Parent Questionnaire in Appendix A.
 Key: ● indicates that significance is at the 95% confidence level.
 ○ indicates that significance is at the 90% confidence level.
 - indicates that there was no significant difference at the 90% or 95% confidence level.

Question	Response	Education (College)			Age Group			Income Level			Race/Ethnicity			Grade of Child				Sex	
		None	Some	Completed	18-34	35-44	45+	Low	Middle	High	White	Black	Hispanic	0-3	4-6	7-9	10-12	Male	Female
"Ads have made you more aware of the risks of using drugs."	Agree a lot	●	●	●	●	●	-	●	●	●	●	●	●	-	●	-	●	-	●
How much overall risk there is in trying...																			
Marijuana	Great risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	●
Cocaine-crack	Great risk	●	-	●	-	●	-	-	-	-	●	-	-	-	-	●	-	-	●
Inhalants	Great risk	-	-	●	-	●	-	-	-	●	-	-	-	-	-	●	-	-	●
Methamphetamine	Great risk	-	-	●	●	●	-	●	●	-	●	-	●	●	-	●	-	-	●
Heroin	Great risk	-	-	●	-	●	-	-	-	-	-	-	●	-	-	●	-	-	●
How much overall risk there is in using... regularly																			
Marijuana	Great risk	●	-	-	-	●	-	-	-	-	-	●	-	-	●	-	-	-	●
Crack-cocaine	Great risk	●	-	-	-	●	-	●	-	-	-	●	-	-	●	-	-	-	●
Inhalants	Great risk	-	-	●	-	●	-	-	-	●	-	-	●	-	-	●	-	-	●
Methamphetamine	Great risk	-	-	-	●	●	-	-	●	●	-	●	●	●	-	●	-	-	●
Heroin	Great risk	-	-	●	-	●	-	-	-	●	-	-	●	-	●	●	-	-	●

NOTE: Questions are in the Parent Questionnaire in Appendix A.

Key: ● indicates that significance is at the 95% confidence level.

○ indicates that significance is at the 90% confidence level.

- indicates that there was no significant difference at the 90% or 95% confidence level.

Deal— There were significant increases among parents who saw the ad “often” among parents with children in the fourth through ninth grades, African American parents, and high-income parents.

Girl Interview— There were significant increases among parents who saw the ad “often” among all demographic groups.

Burbs— There were significant increases in seeing the ad “often” among mothers, whites, high-income parents, and parents between ages 35 and 44.

Under Your Nose— There were significant increases in seeing the ad “often” among parents with no college, mothers and fathers, whites, parents of all income groups, parents under age 45, and those with children in the fourth through ninth grades.

When data on overall exposure to anti-drug ads were analyzed by demographic subgroups, there were increases among parents who said they had seen anti-drug ads telling them about the risks of drugs “almost every day or more often.” These increases were significant for mothers and fathers, parents under age 45, parents with children in all grades, parents of all income levels, and white and Hispanic parents.

(See Tables 53 to 58 in Appendix E for additional information on parents’ awareness of the ads, by demographic status.)

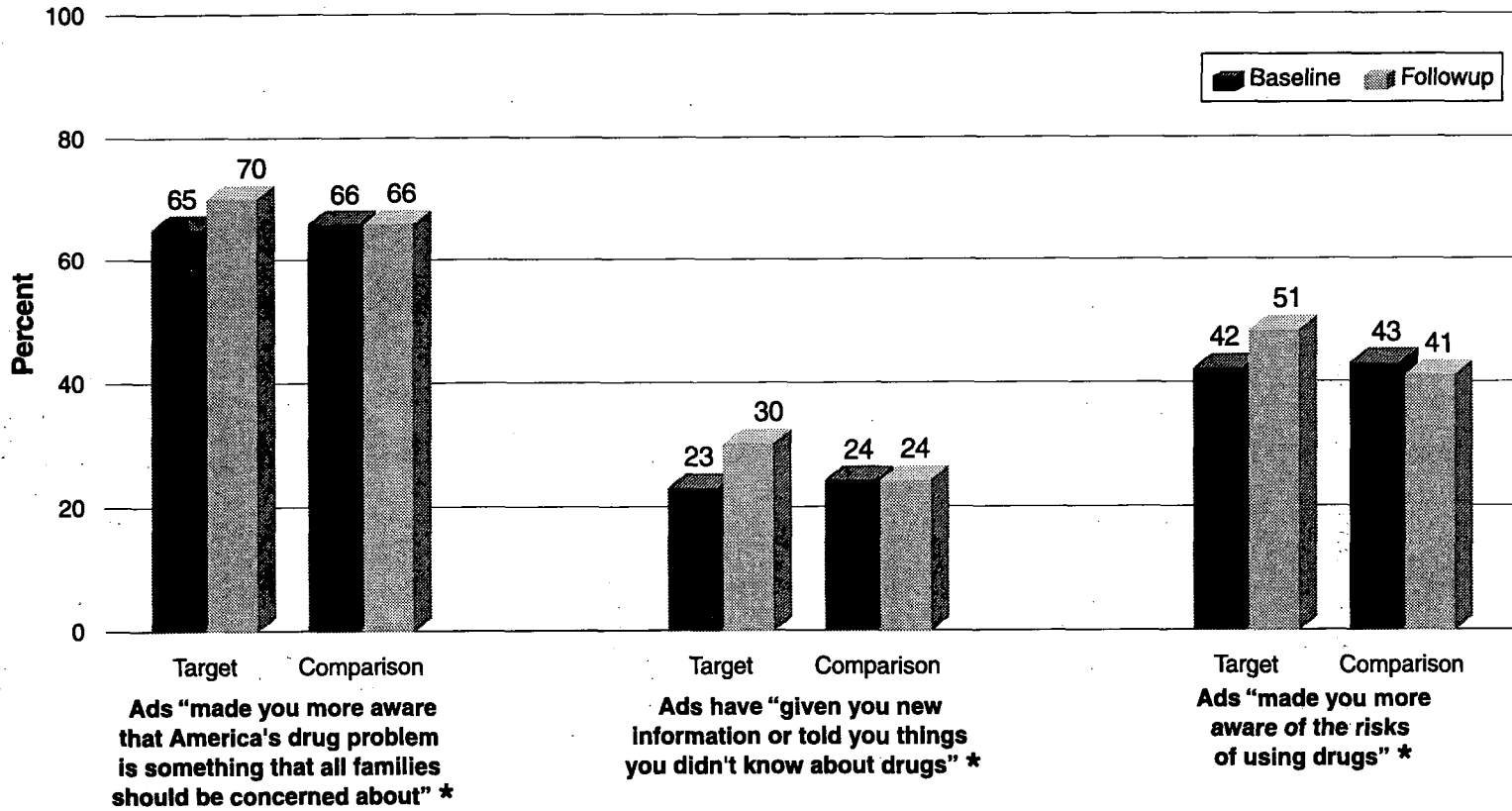
3.3.5 Perceived Effectiveness of the Ads Among Parents

At followup, significantly more target site than comparison site parents “agree[d] a lot” that the anti-drug messages they had seen or heard had been effective. Comparison site responses showed no significant change between baseline and followup. These findings are displayed in Exhibit 3-19.

Survey results for target site parents who agreed with the following statements about TV ads are as follows:

- *Made them aware that America’s drug problem is something that all families should be concerned about*—Agreement with this statement increased from 65 percent at baseline to 70 percent at followup, an 8-percent increase. In comparison sites, only 66 percent of parents at baseline or at followup agreed with this, resulting in a significant difference between target and comparison sites.
- *Gave them new information or told them things they didn’t know about drugs*—Agreement with this statement increased from 23 percent at baseline to 30 percent at followup, an increase of 7 percentage points and a 30-percent increase. In comparison sites, 24 percent of parents at baseline and followup agreed, resulting in a significant difference between target and comparison sites.

Exhibit 3-19
Effectiveness of Ads: Percentage of Parents Saying They "Agree a Lot" With the Statement...



Note: Percentages are weighted.

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

- *Made them more aware of the risks of using drugs*—Agreement with this statement increased from 42 percent at baseline to 50 percent at followup, a 19-percent increase. In comparison sites, only 43 percent of parents at baseline and 41 percent at followup agreed, resulting in a significant difference between target and comparison sites.

(See Tables 53 to 58, Appendix E, for additional information on parents' awareness of the ads.)

At target sites, the more frequently parents saw the ads, the more likely they were to rate them as effective. Parents who saw the ads almost every day or more often were almost 20 times more likely to rate the ads as effective than parents who saw them less than 1 to 3 times per week. (See Tables 59 and 60 in Appendix E.)

3.3.6 Perceived Effectiveness of the Ads Among Parents: Differences by Five Demographic Characteristics— Parental Age, Age of Their Children, Level of Education, Household Income, Gender, and Ethnicity

When the parent survey data regarding the perceived effectiveness of the ads were analyzed by demographic subgroups, additional statistically significant patterns emerged, as summarized below and as illustrated in Exhibit 3-18.

- *The ads made parents aware that America's drug problem is something that all families should be concerned about*—The percentage of parents who “agree[d]” a lot with this statement increased significantly among parents who had completed college, mothers, parents ages 35 through 44, parents with children in school below 4th grade, African American parents, and middle-income parents;
- *Made parents more generally aware of the risks of using drugs*—The percentage of parents who “agree[d]” a lot with this statement increased significantly among all educational levels, all income groups, all racial and ethnic groups, mothers, parents under age 45, and parents with children in grades 4–6, and 10–12; and
- *Gave parents new information or told them things they didn't know about drugs*—The percentage of parents who “agree[d]” a lot with this statement increased significantly among those with no college education, mothers, parents under age 45, those with children in grades 7–9, whites, and low- and middle-income parents.

All of these increases were statistically significant and were greater in target than in comparison sites.

(See Tables 53 to 58 in Appendix E for additional information on parents' awareness of the ads, by demographic status.)

3.3.7 Parental Attitudes Toward Drug Use

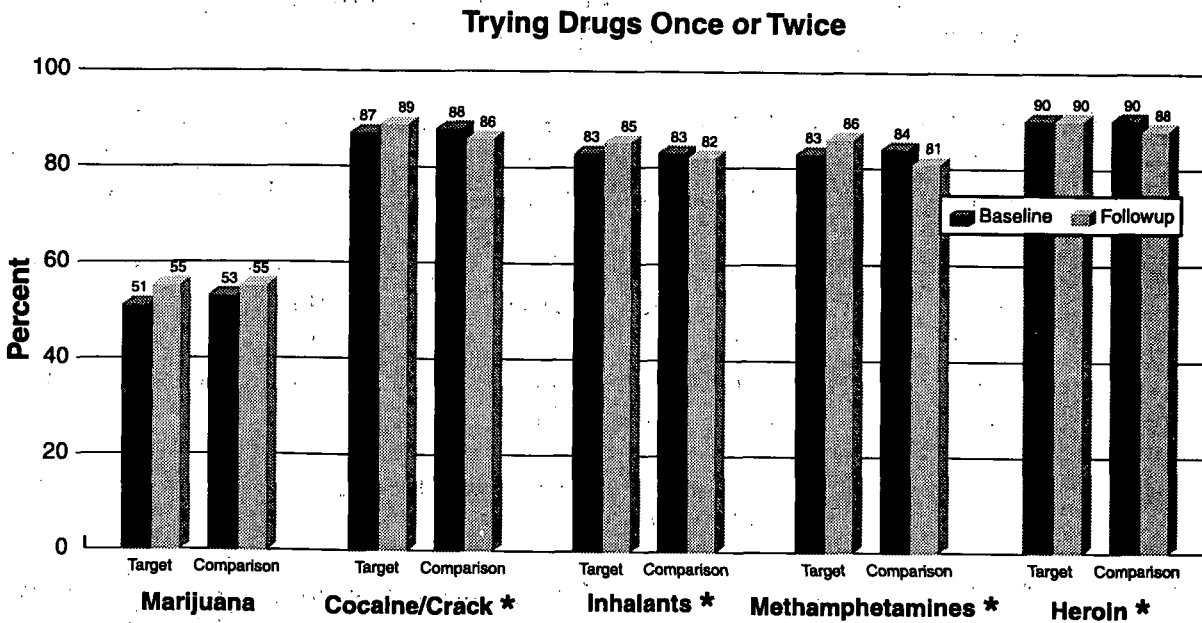
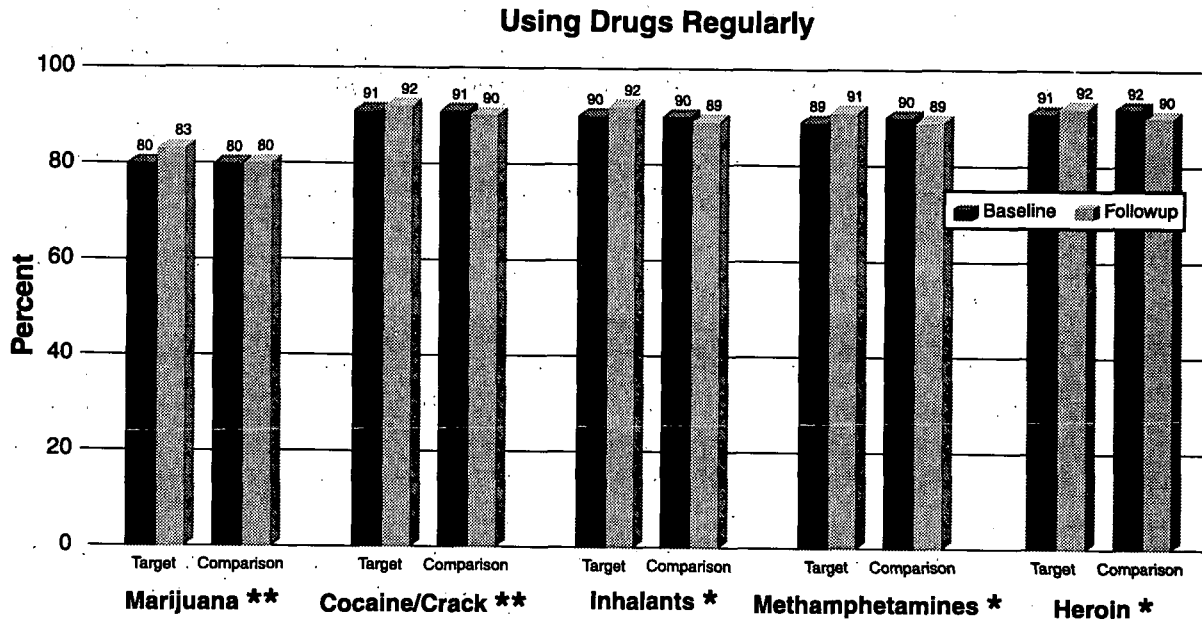
As mentioned in the previous section, the ads made parents more generally aware of the risks of using drugs. On all of the more specific measures, with the exception of one (perceived risk in trying marijuana) parents in target sites showed significant increases in negative attitudes toward, and awareness of risks of drug use, when compared with parents in comparison sites. These findings are displayed in Exhibit 3-20.

- *Trying marijuana*—Perceived risk of trying marijuana did not change between baseline and followup. Approximately between 51 percent and 55 percent of all parents at baseline and at followup, in both target and comparison sites, thought there was “great risk” in trying marijuana.

Survey results for the other drugs are as follows:

- *Trying crack-cocaine*—Responses increased from 87 percent of target site parents at baseline to 88 percent at followup, compared with 88 percent and 86 percent, respectively, at comparison sites, resulting in a significant difference between target and comparison sites;
- *Trying inhalants*—Responses increased from 82 percent of target site parents at baseline to 85 percent at followup, a 4-percent increase, compared with 83 percent and 82 percent, respectively, at comparison sites, resulting in a significant difference between target and comparison sites;
- *Trying methamphetamine*—Responses increased from 83 percent of target site parents at baseline to 86 percent at followup, an increase of 3 percentage points, compared with 84 percent and 81 percent, respectively, at comparison sites, a decrease of 3 percentage points, resulting in a significant difference between target and comparison sites;
- *Trying heroin*—Responses increased from 89 percent of target site parents at baseline to 90 percent at followup, compared with 90 percent and 87 percent, respectively, at comparison sites, a decrease of 3 percentage points, resulting in a significant difference between target and comparison sites;
- *Using crack-cocaine regularly*—Responses increased from 91 percent of target site parents at baseline to 92 percent at followup, compared with 91 percent and 90 percent, respectively, at comparison sites, resulting in a significant difference between target and comparison sites;
- *Using inhalants regularly*—Responses increased from 90 percent of target site parents at baseline to 92 percent at followup, compared with 90 percent and 89 percent, respectively, at comparison sites, resulting in a significant difference between target and comparison sites;
- *Using methamphetamine regularly*—Responses increased from 89 percent of target site parents at baseline to 91 percent at followup, an increase of

Exhibit 3-20
Parents' Awareness of the Risk of Drugs:
Percentage Saying There Is "Great Risk" in...



Note: Percentages are weighted. Parent Question #

*Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 95% confidence level.

**Indicates significant difference in change from baseline to followup between target and comparison sites; significance is at the 90% confidence level.

2 percent, compared with 90 percent and 89 percent, respectively, at comparison sites, resulting in a significant difference between target and comparison sites;

- *Using heroin regularly*—Responses increased from 91 percent of target site parents at baseline to 92 percent at followup, compared with 91 percent and 90 percent, respectively, at comparison sites. This resulted in a significant difference between target and comparison sites; and
- *Using marijuana regularly*—Responses increased from 80 percent of target site parents at baseline to 83 percent at followup, a percent change of 4, compared with 80 percent and 78 percent, respectively, at comparison sites, a 3-percent decrease, resulting in a significant difference between target and comparison sites.

For 9 of the 10 instances mentioned above (the exception being trying marijuana once or twice), significant differences in perceived risk over time were the result of declines in perceived risk among comparison site parents in conjunction with modest increases in perceived risk among target site parents. This strongly suggests that during the pilot test, the Media Campaign led to changes in target site parent attitudes toward drugs. Interpretations of this finding are presented in Chapter 4.

(See also Tables 66–70 in Appendix E for more information on parents' awareness of the risk of drugs.)

3.3.8 Parental Awareness of the Risks of Drugs: Differences by Five Demographic Characteristics— Parental Age, Age of Their Children, Level of Education, Household Income, Gender, and Ethnicity

When the parent data were analyzed by demographic subgroupings, there were significant increases among various groups who thought there was “great risk” in trying some drugs. The following is a summary of survey results regarding parents who thought there was great risk in “trying” the following drugs; the findings are displayed in detail in Exhibit 3-18:

- *Marijuana*—A significant increase occurred among mothers and parents with children in the grades 7–9;
- *Crack-cocaine*—A significant increase occurred among mothers, parents with children in grades 7–9, parents of low and high (but not middle) educational levels, white parents, and parents between ages 35 and 44;
- *Inhalants*— A significant increase occurred among mothers, parents with children in grades 7–9, parents of high educational level, high-income parents, and parents between ages 35 and 44;
- *Methamphetamine*— A significant increase occurred among mothers, parents with children in school below fourth grade and grades 7–9, parents of high

educational level, those under age 45, white parents, Hispanic parents, and low- and middle-income parents; and

- *Heroin*— A significant increase occurred among mothers, parents with children in the seventh through ninth grades, parents of high educational level, those ages 35 to 44, and Hispanic parents.

There also were significant increases among parents of some demographic groups who thought there was “great risk” in “regular use” of the following drugs:

- *Marijuana*—There was a significant increase among mothers, parents with children in grades 7–9, parents with no college, those between ages 35 and 44, parents of low educational level, and Hispanic parents;
- *Crack-cocaine*—A significant increase occurred among mothers, parents with children in grades 7–9, parents with no college, those between ages 35 and 44, parents of low income, parents with low educational level, and Hispanic parents;
- *Inhalants*—A significant increase occurred among mothers, parents with children in grades 7–9, parents who had completed college, those between ages 35 and 44, parents of high income, and Hispanic parents;
- *Methamphetamine*—A significant increase occurred among mothers, parents with children in school under 4th grade and in ninth grades 7–9, those under age 45, middle- and high-income parents, and Hispanic parents; and
- *Heroin*—There was a significant increase among those who thought there was “great risk” in regular use of heroin for mothers, parents with children in grades 4–9, parents who had completed college, those ages 35 to 44, high-income parents, and Hispanic parents.

These increases all resulted in statistically significant differences between target and comparison sites.

(See also Tables 66–70 in Appendix E for more information on parents’ awareness of the risk of drugs by demographic status.)

3.3.9 Discussion of Drugs With Child

When asked whether they had spoken with their child about drugs in the past year, the percentage of parents who responded affirmatively did not increase from baseline to followup. In target sites, approximately 65 percent of parents at both baseline and followup said they had spoken with their children about drugs four or more times in the past year. In comparison sites approximately 62 percent of parents had done so. Approximately 22 percent of all parents reported that they had spoken to their children about drugs two or three times in the past year.

(See also Tables 76–80 in Appendix E for more information on discussion of drugs with children.)

3.3.9.1 Discussion of Drugs With Children: Differences by Parental Age, Age of Their Children, Level of Education, Household Income, Gender, and Ethnicity

When data on parental discussion with children about drugs were analyzed by demographic subgroupings, no new patterns emerged.

(See also Tables 76–80 in Appendix E for more information on discussion of drugs with children, by demographic status.)

3.4 CONCLUSION

Taken as a whole, the aggregate results presented in this chapter indicate that the domain where change was expected during Phase I of the Media Campaign (i.e., awareness of paid anti-drug ads) was, in fact, influenced by the intervention. For the majority of survey ads that respondents were queried about, youth, teens, and parents in target sites showed increased awareness from baseline to followup—change that was statistically significant and change that was greater than the change occurring in comparison sites. The fact that other significant changes also were detected so soon after implementation of the Media Campaign on measures of additional domains in the survey is promising. These early findings help to identify other ways in which the Media Campaign can be expected to have an impact once it has been implemented for a longer duration than the Phase I pilot period.

4. DISCUSSION OF CROSS-SITE SURVEY RESULTS

The purpose of this chapter is to examine key survey findings (presented in Chapter 3) from Phase I of the ONDCP Media Campaign¹ in the context of other data sources: media monitoring, media buy, and site visits (data from comparison sites are used only when they clarify target site issues). Several distinctions in the media monitoring and media buy data sources are noteworthy. Media monitoring report data on paid Campaign ads and PSAs in target and comparison sites during the baseline period (October – December 1997) and five months of the intervention period (January – May 1998). Although media monitoring data are available for June, data for this month are not included in the analysis because the surveys were completed in late May and early June. Consequently, respondents who completed the surveys would not have been exposed to or influenced by June broadcasts of the ads. In addition, media monitoring data are presented in terms of the average monthly number of times an ad aired. Media buy data refer only to paid Campaign ads that were planned to air in target sites from January through June 1998. Furthermore, media buy data present the actual number of times paid ads were scheduled to air and their estimated GRPs. Data from these additional sources are used to help explain, clarify, or elaborate on survey findings about youth (4th–6th graders), teenagers (7th–12th graders), and parents.

Survey findings in Chapter 3 show that ad awareness and frequency of seeing or hearing anti-drug ads at target sites increased substantially between baseline and followup and that there were significantly higher levels of awareness at target sites than at comparison sites. The combined analyses and integration of the data sources indicate that Phase I of the Media Campaign has achieved its intended goal of raising people's awareness of anti-drug messages among youth, teens, and parents.

Exhibit 4-1 on the following page presents aggregate Campaign survey data. The data reflect youth, teen, and parent awareness concerning the specific paid Campaign ads directed toward each group. Several important caveats, however, should be noted. First, due to the fact that the response categories on the youth survey differed from teens and parents, the youth percentages are higher. That is, the response category on the youth survey is based on a "yes" response (youth have *ever* seen the paid ad), whereas the response categories for teens and parents are based on the response category "often" (teens and parents remember seeing the paid ad "*often*").

Second, all paid Campaign ads included in the survey instruments did not air in all target sites. In fact, the number of sites where paid ads aired ranged from 3 to 12 sites (for a complete list detailing the schedule for which ads were to be purchased aired in target sites refer to the matrix in Appendix A). Only five paid ads were purchased in all sites (*Long Way Home*, *Alex Straight A's*, *Frying Pan*,

¹Throughout this chapter we refer simply to the *Media Campaign*. The three successive site visits are called *baseline*, *intermediate*, or *followup*. Sites are either *target* or *comparison*. The term *youth* refers to a student in 4th–6th grades while *teen* refers to a student in 7th–12th grades. *Campaign ads* refers to anti-drug ads used in the Media Campaign whether aired as paid ads or public service announcements.

Girl Interview, O'Connor). So when analyzing the aggregate effectiveness of particular ads, it is important to note the number of sites in which the ads aired as paid advertisements. With this in mind, Exhibit 4-1 also includes the number of sites in which the ads were scheduled as paid ads. It should be noted that not all ads scheduled as paid ads aired as paid ads. For example, *Layla* was planned but did not appear as a paid ad in Milwaukee or Portland.

Third, the reach and frequency for each ad varied by site and oftentimes the ads listed in the survey instruments may not have been those with the greatest reach and frequency in the site; thus, these findings likely understate overall awareness of the Campaign's ads.

Fourth, the post-buy information provided by the media buyers indicates that the adult target audience were more likely to see the youth and teen ads than the ads geared to parents and other adult care givers. For example, the adult gross rating points (an indicator of reach and frequency) for the teen-targeted ad *Frying Pan* were higher than for any individual adult-oriented ad, with the exception of the parent ad *Kitchen* in three sites. Also potentially affecting awareness of particular ads is the fact that while the target audiences and ads were broken down by age groups, the ability to purchase ads was limited to time slots favoring youth aged 12-17 and adults aged 25-54.

This chapter is organized around six key topics: awareness of specific media campaign ads, perceived effectiveness of anti-drug ads, awareness of risk of

Exhibit 4-1 Awareness of Campaign Ads: Aggregate Youth, Teen, and Parent Data

Campaign Survey Data			Target			Comparison			Overall % Difference
			Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
YOUTH									
PAID ADS	<i>Drowning</i>	(8 sites) ¹	30	44	14*	29	27	-2	16*
	<i>Girlfriend</i>	(7 sites) ¹	27	43	16*	29	27	-2	18*
	<i>Long Way Home</i>	(12 sites) ¹	43	68	25*	41	40	-1	26*
	<i>Noses</i>	(8 sites) ¹	39	51	12*	36	37	1	11*
TEENS									
PAID ADS	<i>911</i>	(6 sites) ¹	11	23	12*	8	8	0	12*
	<i>Alex Straight A's</i>	(12 sites) ¹	9	25	16*	7	7	0	16*
	<i>Free Ride</i>	(4 sites) ¹	7	10	3*	8	8	0	3
	<i>Frying Pan</i>	(12 sites) ¹	22	49	27*	16	16	0	27*
	<i>Layla</i>	(8 sites) ¹	12	16	4*	11	12	1	3
	<i>Rite of Passage</i>	(5 sites) ¹	9	14	5*	9	8	-1	6*
PARENTS									
PAID ADS	<i>Burbs</i>	(4 sites) ¹	15	23	8*	13	17	4*	4*
	<i>Deal</i>	(6 sites) ¹	17	21	4*	15	17	2	2
	<i>Girl Interview</i>	(12 sites) ¹	6	16	10*	3	4	1	9*
	<i>O'Connor</i>	(12 sites) ¹	20	27	7*	15	18	3*	4*
	<i>Under Your Nose</i>	(8 sites) ¹	4	10	6*	5	6	1**	5*

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

¹ Indicates the number of sites where the ad was scheduled to air as a paid advertisement.

Note: Additional paid ads aired in sites via cable and Channel One.

drugs, attitudes toward drugs, sources of information about drugs, and parent-child discussions about drugs. In each section, we first summarize relevant survey findings and then examine (a) media monitoring data, when appropriate; and (b) site visit data that lend an interpretation or better understanding of these survey findings. Information from the media buying plan and post-buy data, particularly gross rating points which serve as a proxy for reach and frequency, are also included as appropriate.

4.1 AWARENESS OF SPECIFIC MEDIA CAMPAIGN ADS

Following the Phase I of the Media Campaign, survey findings indicate substantial increases in target site youth, teen, and parent awareness of ONDCP's paid anti-drug ads relative to comparison sites. Media monitoring and site visit data support these findings. In fact, a strong correlation exists between the frequency with which paid ads air and awareness of these ads.

4.1.1 Summary of Survey Findings on Awareness of Specific Ads

- Awareness of the anti-drug ads included in the survey increased substantially among target site youth between baseline and followup but remained unchanged in the comparison sites.
- The increase in awareness of the paid Campaign ads *Long Way Home*, *Girlfriend*, *Drowning*, and *Noses* was statistically significant among all demographic groups. Among those who saw *Noses*, increases were statistically significant for fourth graders, whites, females, and center city youth.
- Teen awareness of the paid Campaign ads increased substantially during the Phase I Media Campaign as evidenced by the change in awareness of four of six ads, all of which was significant when differences in target sites were compared with differences in comparison sites.
- From baseline to followup, the percent of teens that reported "often" seeing all six teen-targeted ads increased significantly in the target sites.
- Parent awareness of the paid Campaign ads increased substantially during the Phase I Media Campaign as evidenced by the change in awareness of four of the five parent targeted ads, all of which was significant when differences in target sites were compared with differences in comparison sites.
- From baseline to followup, the percent of parents that reported "often" seeing all five parent-targeted ads increased significantly in the target sites.
- At followup in target sites, 40.6 percent of parents reported that they had seen or heard ads telling them about the risks of drugs "almost every day or more often" compared with 25.4 percent at baseline. By contrast, responses in the comparison sites remained constant at about 20 percent.

4.1.2 Use of Media Monitoring Data to Interpret Survey Findings

As indicated in Exhibit 4-1, following Phase I of the Media Campaign significantly more youth, teens, and parents in the target sites reported seeing paid Campaign ads than comparison site respondents. Among youth, survey findings indicate that the percent of youth that recognized the four Campaign ads, included in the survey instruments, increased significantly. For example, target site youth recall of *Long Way Home* increased from 43 percent at baseline to 68 percent at followup, while youth recall in the comparison sites decreased slightly from 41 percent at baseline to 40 percent at followup.

Correspondingly, *Long Way Home* aired in all 12 target sites—more than any other of the subset of youth-targeted paid Campaign ads during the intervention period. In addition, whereas *Long Way Home* aired as a paid ad 138.2 times a month (or 34.6 times a week) in target sites, in comparison sites the ad aired as a PSA only 19.2 times a month (or 4.8 times a week).

Furthermore, media monitoring data suggest that the hour in which the paid ads aired contributed to the substantial increases in target site awareness of Campaign ads relative to comparison site responses. For example, *Long Way Home* aired in target sites seven times more often in viewing periods when youth most often watch TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). Similarly, *Girlfriend*, *Drowning*, and *Noses* aired 4, 6, and 15 times more often during prime viewing hours for youth.

Media monitoring data help to explain survey findings with respect to increases in teen ad awareness. For example, recall of *Frying Pan* increased more than any other teen-targeted paid Campaign ad that respondents were asked about. In fact, nearly half of teens in target sites recalled seeing the paid ad *Frying Pan* at followup. Not surprisingly, *Frying Pan* aired in more sites than any other of the paid teen ads included in the survey instruments with the exception of *Alex Straight A's* (both ads appeared in 12 sites). Media monitoring data show that as a PSA *Frying Pan* did not air in either the target or comparison sites during the baseline period. In the intervention period, however, the ad aired only once in the comparison sites as a PSA while averaging 137 a month or 34.3 times a week as a paid Campaign ad in target sites. What is more, 55.7 percent of the time *Frying Pan* aired as a paid Campaign ad, and it ran during optimal teen viewing periods (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). According to the media buy data, *Frying Pan* aired 638 times as a paid ad on broadcast TV alone.

Alex Straight A's aired as a paid Campaign ad in all 12 target sites during the intervention period. Available media monitoring data show that as a PSA *Alex Straight A's* did not air during the entire baseline period in the target sites. During the intervention period, however, *Alex Straight A's* aired an average of 114.6 times a month or 28.7 times a week in target sites, 52.6 percent of the time in prime teen viewing periods. Media buy data indicate this ad aired a total of 670

times on broadcast TV, not including cable and Channel One. *Alex Straight A's* did not air at all in the comparison sites.

The paid Campaign ad *911* aired in six target sites. On average *911* aired in the target sites 29.2 times a month or 7.3 times weekly during the intervention period. Moreover, 36.6 percent of the time *911* aired in prime teen viewing periods. By contrast, in the comparison sites *911* aired on average less than three times a month in the baseline period, decreasing to less than one time a month in the intervention period. While the average number of times that *911* aired is lower than the other two paid ads, *Frying Pan* and *Alex Straight A's*, that increased to significant degrees across sites, it is worth noting that media monitoring data was available for only three of the six target sites. Therefore, the aforementioned data may actually underestimate the average number of times that *911* aired as a paid ad.

The paid Campaign ad *Rite of Passage* aired in five target sites. On average *Rite of Passage* aired in the target sites 38.2 times a month or 9.6 times weekly during the intervention period. While the average number of times that *Rite of Passage* aired is lower than the other two paid teen ads (*Frying Pan* and *Alex Straight A's*) that experienced significant increases in teen recall across sites, media monitoring data was available for only four of the five target sites. Post-buy media purchase data indicate this ad aired 181 times in the sites where it was a paid ad, not including Channel One and local cable buys. Again therefore, the data may actually underestimate the average number of times that *Rite of Passage* aired as a paid ad. Moreover, 46.1 percent of the time *Rite of Passage* aired in prime teen viewing periods. By contrast, *Rite of Passage* aired as a PSA in comparison sites at baseline on average 2.3 times a month and not at all during the intervention period.

The two paid ads that did not show significant cross-site increases in teen recall (*Free Ride* and *Layla*) did however show significant increases within site. It is worth noting that of the six teen-targeted Campaign ads *Free Ride* aired in the fewest number of sites (4 of 12 target sites) a total of 156 times on broadcast TV according to media buy information. Arguably, this may have contributed to the lack of a significant increase across sites. With respect to *Layla*, the ad aired in fewer target sites as a paid ad than planned. *Layla* was scheduled to air as a paid ad in Portland and Milwaukee, but post-buy data indicate the ad was broadcast as a PSA in these two target sites.

Among parents, survey findings indicate that across sites the percent of youth that recognized four of the five Campaign ads, that were included in the survey and were directed toward parents, increased significantly. Within site analysis shows that the percentage of parents that recalled all five ads increased to a statistically significant degree—*Burbs*, *Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose*. It should be noted the adult-targeted ad with the greatest monthly frequency and GRPs was *Kitchen*, which was not included in the survey instruments.

Media monitoring data clearly identify why target site parents' recall of *Girl Interview*, *Under Your Nose*, and *O'Connor* increased significantly across and

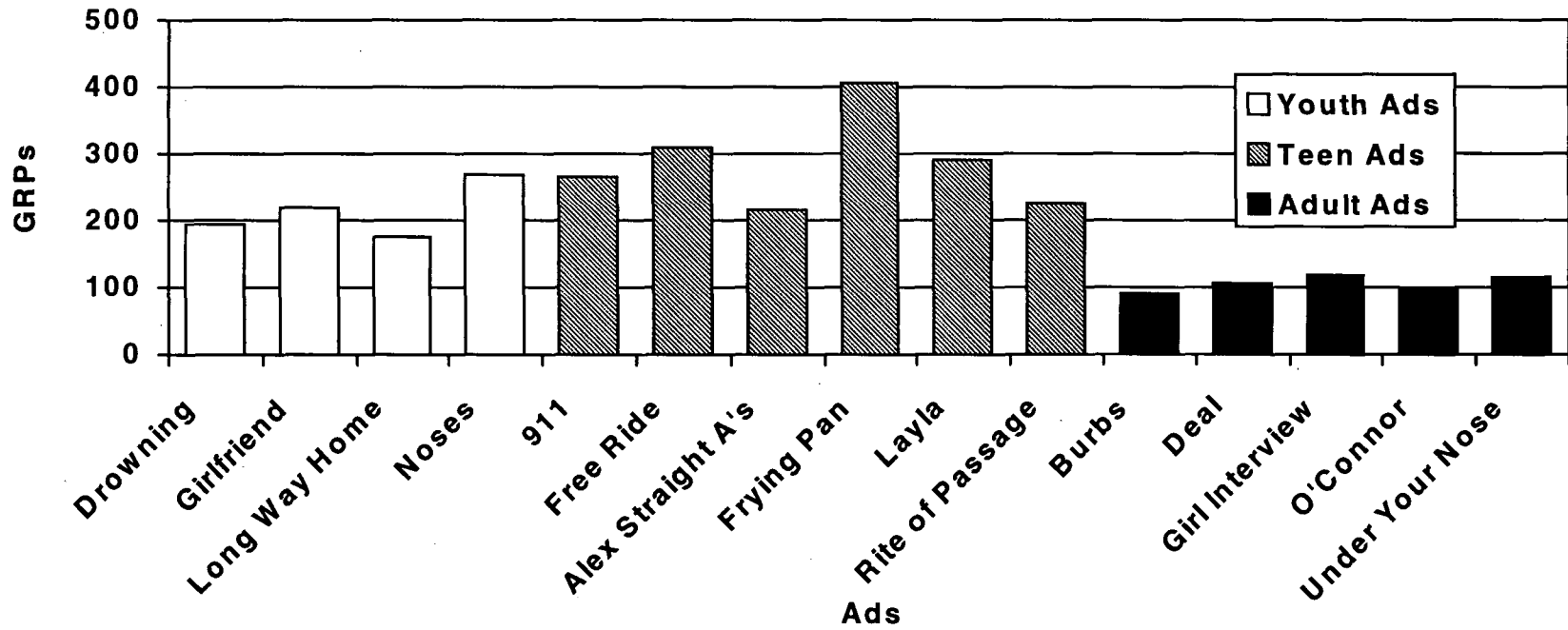
within sites. For example, the average number of times *Girl Interview* aired in target sites increased from 31 per month (or once a day) at baseline to 122.2 per month (or 4 times a day) during the intervention. Over the same time period, the average number of times *Girl Interview* aired in comparison sites actually remained constant and low.

Similarly, from baseline to intervention the average number of times *Under Your Nose* aired increased from 0.6 to 71.6 airings per month and according to the media buy data, totaled 100 times across sites. By contrast, the ad aired infrequently in the comparison sites. Media monitoring further show that, while the average number of times that *O'Connor* aired at baseline was comparable between the target and comparison sites (target sites 40.7 per month, comparison sites 43.7 per month), during the intervention the average decreased in the comparison site while increasing substantially in the target sites (to 140.2 per month).

4.1.3 Use of Media Buy Information To Interpret Survey Findings

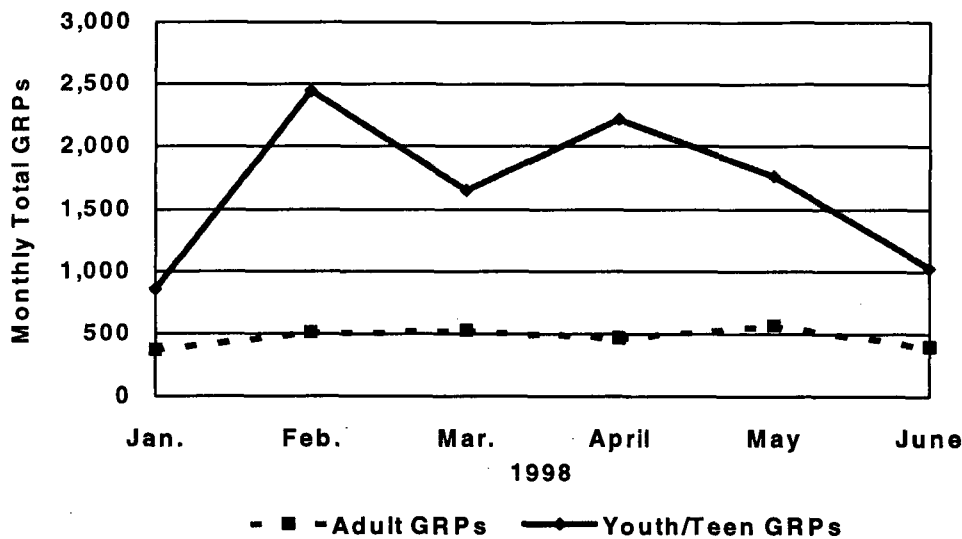
Planned media buying information and post-buy data also were used to help explain increases in awareness for particular ads that were included in the survey instruments. As discussed previously, the Campaign sought to reach 90 percent of each target audience with an average of four exposures each week. Post-audited media buy information indicate that for television and radio combined, the primary media used in Phase I, that approximately 79 percent of each target audience saw or heard three of the anti-drug messages each week. As final data on reach and frequency are not yet available, gross rating points (GRPs) are used as a proxy for each ad's reach and frequency with higher GRPs indicating that the ad was reaching a larger percentage of the audience with greater frequency. Exhibit 4-2 provides estimates of average GRPs for the paid ads that were included in the survey instruments. The highest GRPs for the youth ads were for *Noses*, for teens, *Frying Pan* had the highest GRPs, and for parents and other adult influencers, *Girl Interview* had the highest GRPs. The monthly breakdown of planned GRP distribution for all media combined by target audience is provided in Exhibit 4-3. This exhibit illustrates the emphasis on youth and teens and shows the peaks and valleys in terms of exposure to Media Campaign messages. Exhibit 4-4, in contrast to Exhibit 4-3, includes spill-over effects, which refers to adults' exposure to ads targeting youth and teens and youth's and teens' exposure to ads targeting adults. Exhibits 4-3 and 4-4 partially explain the lack of significant increases in parents' and other adults' awareness of the adult-targeted ads. As illustrated in Exhibit 4-4, the number of ads designed for each target audience that aired is much lower for adults than for youth and teens. The incorporation of youth/teen ads that adults were exposed through intentional and unintentional spill-over boosts the Campaign's reach and frequency with adults. Post-media buy information indicate, for example, that more adults saw *Frying Pan* than any of the ads designed to specifically target adults.

Exhibit 4-1
Estimated Average GRPs for the Paid Anti-Drug Television Ads Included
in Phase I Survey Instruments



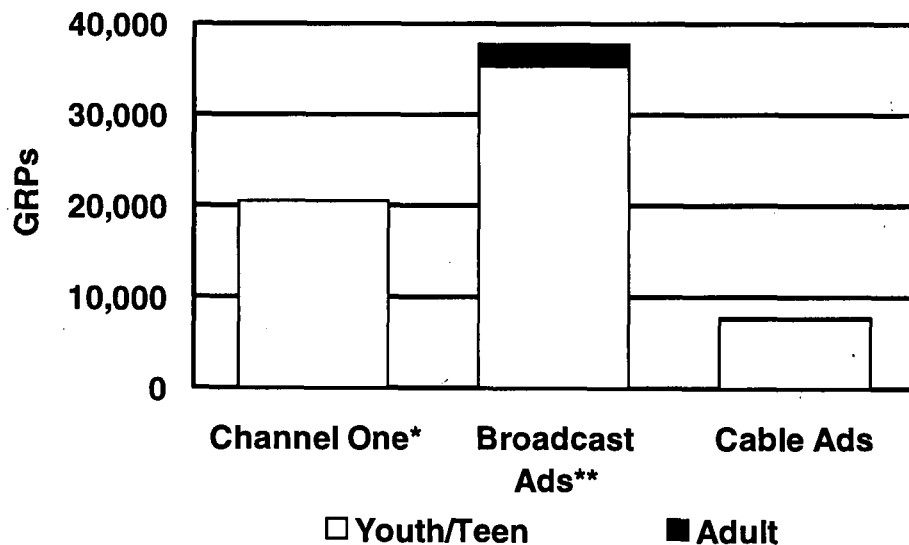
Source: Bates, 2/16/99

Exhibit 4-2 Phase I Planned Monthly GRP Distribution for All Media Combined



Source: Bates, 2/16/99

Exhibit 4-3 Total Estimated Purchased GRPs for Broadcast and Cable TV



*Channel One is an in-school network used to reach youth and teens.

**GRPs are provided for the ads designed for the particular audience; e.g., the youth/teen GRPs are for ads that were designed to target youth and teens and not for any youth/teen ads that were purchased to air during an adult time slot with the intention of reaching a portion of the adult audience.

Note: Cable and Channel One were used to increase the reach and frequency to the youth and teen audiences, while other media were used to increase the reach and frequency to adults.

For ads appearing on cable, only the total number and the total estimated purchased GRPs of paid ads were available, but the media buying plan indicates the cable spots were primarily used to increase reach and frequency among the youth and teen audiences. Exhibit 4-5 illustrates the estimated total number of ads airing by target site for cable and broadcast television. Exhibit 4-6 provides the GRPs for the ads purchased through cable and broadcast TV.

4.1.4 Use of Site Visit Data To Interpret Survey Findings

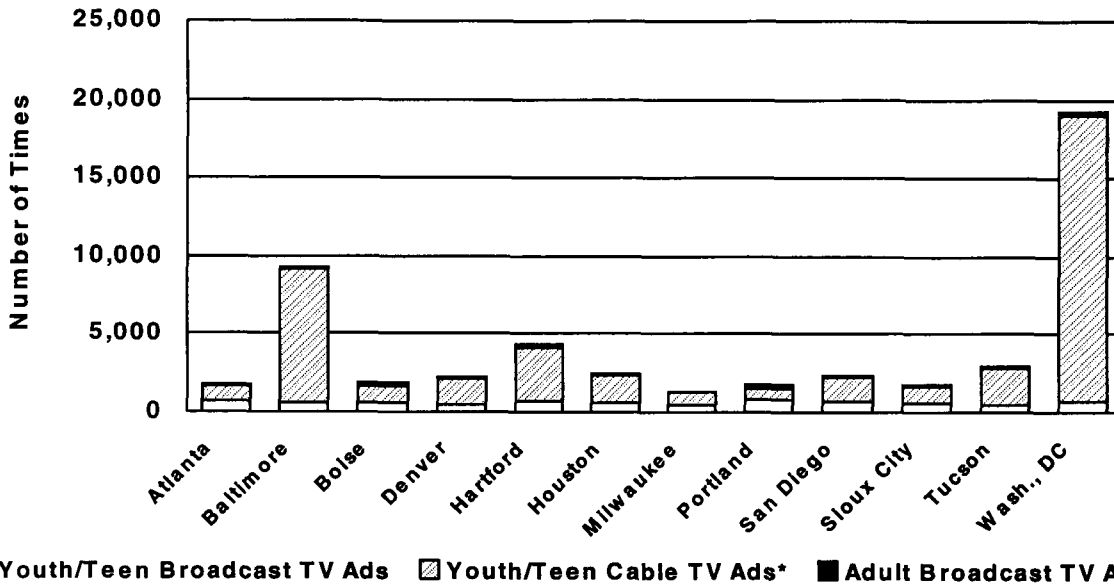
Focus groups were conducted during site visits with 4th-6th graders, 7th-9th graders, 10th-12th graders and parents. Of the four ads that the survey asked 4th-6th graders about (*Long Way Home*, *Girlfriend*, *Drowning*, and *Noses*), only *Long Way Home* and *Drowning* were mentioned with any regularity in focus groups. This generally holds for the three other focus group categories (i.e., junior high school students, high school students, and parents). The majority of references to Media Campaign ads offered by teens (7th-12th graders) and parents participating in the focus groups came from those living in the target sites.

Frying Pan was the one ad that relatively large numbers of youth focus group participants (i.e., youth focus groups participants in 11 of 12 target sites) recalled. In fact, *Frying Pan* was the most frequently cited ad by participants in all four focus group categories. Although the *Frying Pan* ad was not targeted for 4th-6th graders, many of them knew about it and talked about it.

Comments from the followup site visit reports help to explain focus group participants' widespread familiarity with the *Frying Pan* ad. At an Atlanta center city middle school, "One girl was particularly impressed by '*Frying Pan*,' saying, 'I didn't know most drugs can turn out to be like that.'" At a Baltimore center city middle school, "All of the participants had seen the '*Frying Pan*' ad and said that the message they got was 'don't do that, it will mess with your brain and hurt your family.'"

In summary, survey data on youth, teen, and parent awareness of Media Campaign ads explicitly demonstrate that people in target sites recalled seeing the Media Campaign ads. Media monitoring data demonstrate that the Media Campaign ads mentioned in youth, teen, and parent surveys were aired much more frequently during the Media Campaign intervention in target sites than they were in comparison sites. Focus group data confirm the same pattern of ad awareness.

Exhibit 4-1 Frequency of Airing of Paid Anti-Drug Ads, by Target Site for Cable and Broadcast

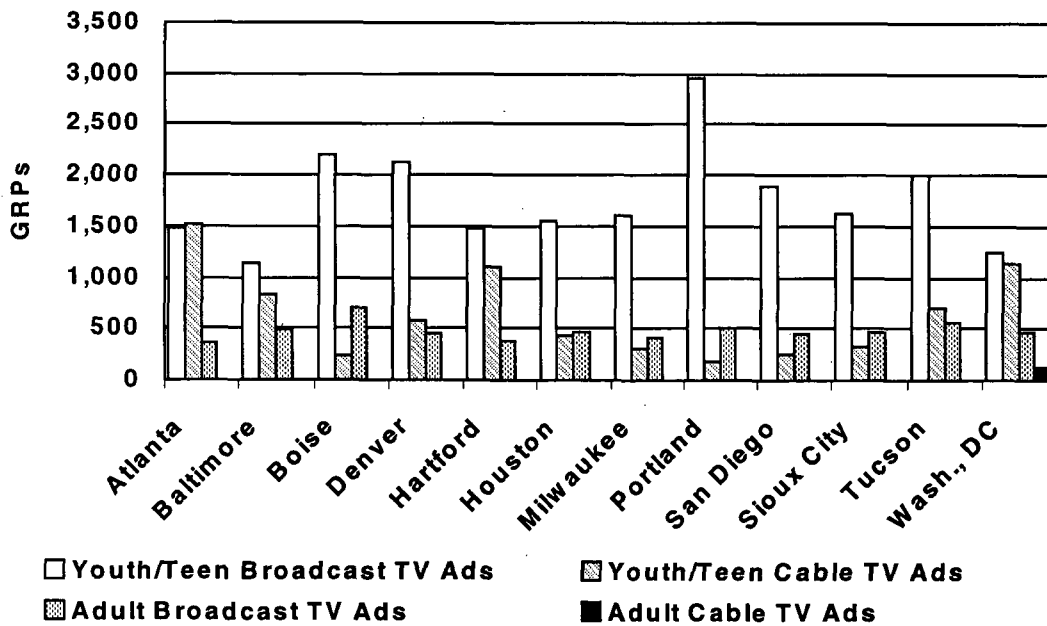


□ Youth/Teen Broadcast TV Ads ▨ Youth/Teen Cable TV Ads* ■ Adult Broadcast TV Ads

*The local cable buys were used primarily to increase reach and frequency for the youth and teen audiences, with other media being used for adults.

Source: Bates, 2/16/99

Exhibit 4-2 Estimated Purchase GRP Delivery for Youth/Teen and Adult Television Buys



*The local cable buys were used primarily to increase reach and frequency for the youth and teen audiences, with other media being used for adults.

Sources: Bates, 2/16/99 and 3/10/99

4.2 PERCEIVED EFFECTIVENESS OF ANTI-DRUG ADS

4.2.1 Summary of Survey Findings on Perceived Effectiveness of Anti-Drug Ads

- Youth responses also showed evidence of the ads' effectiveness. At followup significantly more youth in target sites than in comparison sites agreed that the anti-drug messages they had seen or heard had been effective.
 - *The ads made them more aware of how dangerous drugs are*— Agreement with this statement increased from 74.1 percent of youth at baseline to 80.4 percent at followup. In comparison sites approximately 74 percent of youth responded in this way at both baseline and followup.
 - *The ads tell you something you didn't know about drugs*— Agreement with this statement increased from 57.5 percent of youth at baseline to 61.4 percent at followup. In comparison sites on average, approximately 55 percent of youth responded in this way at both baseline and followup.
 - *The ads tell lies about how dangerous drugs are*— Agreement with this statement decreased from 29.7 percent of youth at baseline to 26.0 percent at followup. In comparison sites 29.7 percent of youth responded in this way at both baseline and followup.
- There were no significant increases between baseline and followup in the percentage of teens in target or comparison sites who “agreed a lot” with specific statements about the ads such as “made them more aware of the risks of using drugs,” “made them less likely to try or use drugs,” “gave them new information or told them things they didn’t know about drugs,” and “exaggerated the risks or dangers of marijuana.”
- At followup, significantly more target site than comparison site parents “agree[d] a lot” that the anti-drug messages they had seen or heard had been effective. Comparison site responses showed no significant change between baseline and followup.
- At target sites, the more frequently parents saw anti-drug ads, the more likely they were to rate them as effective. Parents who saw the ads almost every day or more often were almost 20 times more likely to rate the ads as effective than parents who saw them less than 1 to 3 times per week.

4.2.2 Use of Site Visit Data To Interpret Survey Findings

Although media monitoring data were not appropriate for understanding responses to questions pertaining to perceived effectiveness of ads, site visit data

were analyzed under this domain. Focus group participants in 4th–6th grades offered few comments about ad effectiveness, but 7th–9th graders, 10th–12th graders, and parents were more candid. Among 7th–9th graders, the most commonly cited category of effectiveness was “ad increases people’s awareness about the danger of drugs.” These focus group participants also commented frequently that the “ads help change people’s attitudes about drugs.”

Among 10th–12th graders, the following kinds of comments were commonly offered: (1) “ad reaches younger children, the most important target audience;” (2) “ad is graphic, dramatic, visual, shocking, or eye-catching;” (3) “ad increases people’s awareness about the dangers of drugs;” and (4) “ad helps change people’s attitudes about drugs.” Parents participating in the focus groups often cited the fact that the ads “help parents and young people talk with each other.”

Elementary school youth repeatedly described anti-drug ads that make drugs “seem real scary [non-center city Baltimore 4th–6th grade student].” Because this age group typically views drugs negatively (i.e., they have not yet experienced the peer pressure, curiosity about, and exposure to drugs that characterize the middle school years), they appear predisposed not to try them. In Phase I the ads targeting youth appeared to reinforce the negative views toward drugs that these youth have already acquired from other sources.

Teenagers participating in the focus groups often reported being exposed first hand to drugs at home, through a sibling’s or parent’s use. In center city areas, some teenagers spoke about witnessing the public use and sale of drugs in their neighborhoods. For these reasons, anti-drug ads may be providing more new information about drugs and significantly increasing awareness of drugs for a smaller group of teenagers than they are for elementary school youth. The elementary school youth often are encountering anti-drug information from school, peers, parents, or media for the first time.

Teen focus group members favorably mentioned the following specific ads or types of ads: *Teeth* because “it shows that drugs can make you ugly” [Atlanta non-center city 7th–9th grade female]; “the 911 phone call ad regarding a methamphetamine overdose” [Tucson 7th–9th grader]; the anti-methamphetamine ads, because they reinforce values and “make you feel better about your decision not to use drugs” [Denver non-center city 10th–12th grader]; *Long Way Home* and an ad with “JJ the basketball player, whose dream was destroyed by drugs” [Atlanta center city 10th–12th grader]; and *Frying Pan* because “it makes you see how a drug can make you act wild and how it can affect your family” [Atlanta non-center city 7th–9th grader].

Some teenagers at nearly every site claimed that the ads would not affect their attitudes or behavior regarding drug use. They often fully acknowledged knowing the risks of drug use behavior and stated that the decision to use or not use was personal and contingent on factors other than the message of a television advertisement. For example, one Birmingham high school focus group participant explained, “It’s basically a mind thing. People do what they want. It has more to do with what they want to do themselves than with what other people say.”

Ads targeting marijuana occasionally provoked confusion. One center city Houston high school student responded to a specific ad, “The one ‘smoking marijuana’ one is dumb; they send a message, but also say that you can get high.” A Duluth teenager claimed he did not understand the point of *Burbs*, an ad featuring a non-center city boy on a skateboard which cautions parents that marijuana smoking is a non-center city as well as an center city phenomenon. A Duluth center city parent also misinterpreted this ad, saying that it encouraged youth in the suburbs to smoke marijuana. Two girls in a Denver non-center city focus group warned that the *Cannabis Stupida* billboard probably had the opposite of its intended effect, because the marijuana leaf “looks attractive if you smoke weed, and it looks like an ad for marijuana if you don’t read the words.” (This ad is not longer being used because of such feedback).

Parent comments addressed ad effectiveness from two points of view: how the ads affected parents personally and how parents thought the ads would affect youth and teenagers. The general consensus of the majority of parents in nine of the twelve target sites (Boise, Denver, Hartford, Houston, Milwaukee, Portland, San Diego, Tucson, and Washington, D.C.) was that the ads provide a positive contribution to a wider, more comprehensive effort to address youth and adult drug use. Most parent focus group members deemed the ads effective particularly those targeting adults.

Parents in focus groups at eight target sites (Baltimore, Denver, Hartford, Milwaukee, Portland, Sioux City, Tucson, and Washington, D.C.) believed that anti-drug ads that target parents are especially effective. They believe that parents themselves are most likely to learn from the ads and to alter their behavior in response to the messages. Parents indicated they generally have fewer sources of drug information than do teenagers. A mother explained (Denver) that the *Frying Pan* ad made her realize that teenagers were using drugs other than marijuana. Many parents seem to underestimate the drug problem, and anti-drug advertisements serve to increase that awareness significantly.

Parents reported that the ads encourage parents to initiate a dialogue with their children about drugs. One non-center city Hartford parent explained, “Conversations do happen when there are more opportunities to see and discuss and address the issue.” Portland focus group participants agreed that open-ended ads were most useful because “they don’t preach but leave it open-ended so you have to start discussions.” Parents in a Milwaukee focus group spoke of an inhalant ad that had encouraged them to talk to their children about the dangers of sniffing household products. One Washington, D.C., mother said that the ads she had seen helped her talk to her children about drugs.

In nine of the twelve target sites (Boise, Denver, Hartford, Houston, Milwaukee, Portland, San Diego, Tucson, and Washington, D.C.), participants agreed that anti-drug advertising was at least somewhat effective in reaching youth and teenagers. Most parents said that the ads should be one component of a wider education effort. As one Portland father commented, the ads tied in nicely with “school and everything they [his children] are exposed to.” A Hartford father thought watching anti-drug ads repeatedly could condition youth and adult

attitudes, thereby gradually creating a less drug-tolerant atmosphere in the community.

Atlanta, Baltimore, and Sioux City parents expressed the view that ads would probably not influence a significant number of youth. Non-center City Baltimore parents thought that only a small minority would be reached. Sioux City parents thought ads would have to be run much more frequently and that only younger children (who had not yet encountered peer influence) would respond to them. Another parent cautioned that drug income helps support many single-parent homes, adding, “You are not going to get rid of drugs because it’s an underground economy.”

Most parents believed that ads targeting younger children were far more effective than those targeting older youth or teenagers. Community informants agreed with this view, explaining that changes in attitudes would occur primarily among younger children but not as much among teenagers. They attribute this to peer pressure and the fact that many teenagers do not think marijuana is dangerous. Hartford non-center city parents believed that ads could influence youth or teenagers who are considering whether to try drugs but not those who are already using drugs. They agreed that those who want to use would use, despite anti-drug advertising, but that ads can reinforce the decision “not to use.”

4.2.2.1 Recommendations for Improving Anti-Drug Ads

Focus group participants’ made a number of recommendations for improving ads. The consensus among participants in the 4th–6th grade, 7th–9th grade, 10th–12th grade, and parent focus groups was that ads should “show real (including negative) consequences of drug use such as degraded physical appearance, before/after contrasts, and use testimonials from real, local people who relate their experiences.” For three of the four groups (7th–9th graders, 10th–12th graders, and parents), participants frequently recommended use of ads that “are shocking, eye-catching, dramatic.”

High school and middle school focus group discussions offered detailed insights into the qualities that many teenagers think make ads more effective for their peers. Teenagers who believed that the anti-drug ads are beneficial suggested (as did their younger counterparts) that ads must present graphic depictions of real situations of drug use and stress their negative consequences. Immediate and long-term consequences cited by youth include degraded physical appearance, loss of friends, jobs, money, health, and sometimes life, as well as legal consequences and the impact of drug use on others.

The following are some specific suggestions for improving the effectiveness of ads:

- “Show someone sick from drinking, or someone dying from a heroin overdose” [Atlanta non-center city 10th–12th grader];

- “Show crack heads who are dirty, with no teeth and no money” [Denver center city 10th–12th grader];
- “Have the ad in black and white, scan faces of people who have done drugs, and then show a graveyard” [Hartford non-center city 10th–12th grader]; and
- “Show a mother who takes drugs while pregnant and the baby comes out small or dies” [Washington, D.C., non-center city 10th–12th grader].

Ads that were the most detailed, eye-catching, creative, and frightening were thought to be most likely to capture the attention of teenagers, and as one Portland high school student explained, “[it has] to be graphic in this desensitized world to have it get to you.”

Similarly, parents suggested that ads should depict the many types of realistic consequences of drug use. Suggestions for ways to best illustrate reality included:

- Using people who have gone through addiction and rehabilitation;
- Showing that even the good students are on drugs [Houston];
- Comparing the lives of two groups of youth [one that uses drugs and one that does not] over a 10-year period and pose the question, “Which person do you want to end up being?;
- Depicting a youth paralyzed by a drive-by shooting along with scenes of a funeral home or cemetery; portraying a teenaged girl who denies she has a drinking problem until she is date-raped and discarded [Milwaukee];
- Portraying a jail scene, or local people whose lives have been ruined;
- “Includ[ing] toe tags;”
- Deglamorizing the distribution of drugs; and
- Showing a beautiful girl whose physical appearance is ravaged by drugs use [Portland].

Parents in some focus groups also called for realistic images of the ravages of drug use and real testimonies from various spokespersons that had direct experience with the dangers of drugs. Suggestions included interviewing a teenager in recovery [non-center city Baltimore], using sports figures to give their own histories of drug use and arrests [non-center city Portland], and using a local community person who had set a good example (e.g., a father in the focus group who had participated in a rehabilitation program as a teenager, turned his life around, and become a counselor in the same prevention program) [Atlanta].

Responses to the survey on the effectiveness of Media Campaign ads show that overall, youth and parents in target sites believed the ads they had seen or heard were effective in that they learned new information from the ads about drugs.

Focus group data, however, were extremely useful in identifying the specific content of anti-drug ads that people consider to be effective or influential, which in turn offers possible explanations for why survey respondents perceived the Media Campaign ads to be effective.

4.3 AWARENESS OF RISK OF DRUGS

4.3.1 Summary of Survey Findings on Awareness of Risk of Drugs

- Within both target and comparison sites, awareness among youth of the risks of drugs was greater at followup than at baseline for cocaine, crack, inhalants, methamphetamine, and heroin. Increases in the awareness of the risks of methamphetamine and heroin were significantly higher in target sites than in comparison sites.
- Approximately 80 percent of all youth at baseline and followup in both target and comparison sites thought marijuana was “very dangerous.”
- Awareness of risk of cigarette and beer use actually decreased significantly at followup among both target and comparison site youth. This may be an indication that youth, in the absence of an intensive educational effort, begin to adjust to and accept societal levels of smoking and drinking as they move through the school year.
- Increases in awareness of the risks associated with heroin use between baseline and followup within target sites, and differences between target sites and comparison sites, were statistically significant among the following groups: all races, males and females, non-center city youth, and fourth and fifth graders. For methamphetamine, risk awareness increased significantly among whites, males and females, non-center city youth, and fourth graders.
- Teens’ responses to questions about the risks of drugs did not demonstrate that their awareness had increased, either within or between the target and comparison sites. Awareness of the risks of marijuana, cocaine/crack, methamphetamine, and heroin remained unchanged throughout the Media Campaign.
- There was no change in teen awareness of the social and academic risks associated with marijuana. When asked about the risk among marijuana users of “going on to harder drugs,” there was an increase in the percentage of female and Hispanic target site teens that thought there was “great risk.”
- The ads made more parents aware of the risks of using drugs. On every measure, with the exception of one (perceived risk in trying marijuana) parents in target sites showed significant increases in awareness of risks when compared with parents in comparison sites.

4.3.2 Use of Media Monitoring Data To Interpret Survey Findings

Survey findings indicate that target site youth believe that cocaine, crack, inhalants, methamphetamine, and heroin pose dangerous risks. Media monitoring data provide some context to this finding and strongly suggest that the Media Campaign is largely responsible for the increases in educating youth about the risks of drugs. The total number of all ads (Media Campaign, PDFAs, and other sponsors) focusing on inhalants increased sharply across the target sites during the intervention period, from 81.6 per month (or 2.7 times a day) to 364.8 per month (or 12.2 times a day) during the intervention. In fact, the overall number of inhalant ads ranked third behind general drug-related ads and marijuana ads.

By contrast, the average monthly number of inhalant ads decreased slightly in the comparison sites from baseline to intervention. At baseline an average of 118.7 inhalant ads aired in comparison sites per month (or 4 per day). During the intervention the average number of inhalant ads that aired actually decreased in comparison sites to 100.2 per month (or 3.3 per day). Therefore, 269.7 percent more Media Campaign/PDFAs inhalant ads aired daily in the target sites than in the comparison sites over the course of the intervention. It is worth noting that fully 82.3 percent of all inhalant ads that aired during the intervention period in target sites were Media Campaign/PDFAs ads (thus airing in better time slots than would be expected for public service announcements), which strongly suggests that the Media Campaign influenced youth with respect to inhalant use.

It is also worth noting that two of the five youth-targeted Media Campaign ads—*Noses* and *Drowning*—focused on inhalants. These ads aired during the intervention period 228.6 times a month across all target sites—much more often than any other youth-targeted ad. In fact, together the two youth-targeted Media Campaign inhalant ads increased by 600 percent in the intervention period. By sharp contrast, in comparison sites youth ads focusing on inhalants aired only 9.4 times a month, down 9.6 percentage points from the baseline period.

Media monitoring data show that approximately 42 percent of all Media Campaign ads included in the evaluation specifically targeted parents. These ads, *Burbs*, *Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose*, showed a 516 percent increase in broadcast frequency from baseline to followup in target sites, which helps explain why parental awareness of risk increased in these sites.

A review of the total number of anti-drug ads targeting specific drugs that actually aired in target sites versus comparison sites supports the assertion that, in target sites, viewing ads increased parents' awareness of drug risks. During the intervention period, an average of 337.4 ads per month focused on crack/cocaine ads (219.2 of which were Media Campaign/PDFAs ads), 300.4 ads per month focused on heroin (157.6 of which were Media Campaign/PDFAs ads), 364.8 ads per month focused on inhalants (300.2 of which were Media Campaign/PDFAs ads), and 81.4 ads per month focused on methamphetamine (29.2 of which were Media Campaign/PDFAs ads).

It is important to note that many more anti-drug ads of all types aired in target sites than in comparison sites and that the Media Campaign ads typically aired during programming and time slots during which target audience viewership was highest. These same ads, when aired as PSAs in comparison sites, usually reached a much smaller percentage of their intended audience due to the fact that PSAs typically air in time slots during which the target audience was lowest. Also, the majority of anti-drugs ads airing in comparison sites as public service announcements were Media Campaign ads targeted toward parents as opposed to those targeted toward youth and teenagers.

During the intervention, media monitoring data show that 30.6 percent of the Media Campaign ads included in the survey were targeted toward teenagers. Although the percentage of Media Campaign ads that targeted teenagers was smaller than that targeting youth (27.9 percent) or parents (41.5 percent), the airing of teen ads increased dramatically in target sites from baseline to intervention (from 6 per month to 420 per month). Over the same period, the average number of airings decreased (from 4.7 at baseline to 3.6 at intervention) in comparison sites. This helps to explain survey findings that show increased awareness among teens in target sites (when compared with that for comparison sites) of nearly all Media Campaign ads targeted toward that age group (*911, Alex Straight A's, Frying Pan, Layla, Right of Passage, and Portland-specific ads Everclear, Lauryn Hill, and Sublime*²).

4.3.3 Use of Site Visit Data To Interpret Survey Findings

The methamphetamine ad *Battery Acid* was recalled by 4th–6th grade focus group participants in non-center city Sioux City, non-center city Tucson, and both center city and non-center city Denver. The fact that methamphetamine distribution is concentrated in select areas nationally, combined with the fact that methamphetamine ads targeted only those areas, may explain why only 46 percent of target site youth and 40 percent of comparison site youth view methamphetamine use as “very dangerous.” This low percentage also may be attributed in part to lack of familiarity with the drug among younger children. Particularly noteworthy, however, is that youth across target sites showed significant increased awareness of this drug from baseline to followup, in spite of the fact that only half of the target sites aired a Media Campaign ad that targeted methamphetamine use.

Increased awareness of risk in target sites that have a methamphetamine problem also may be attributed to heightened public awareness in those cities that have publicized methamphetamine-related incidents, or where projects are underway to combat the problem. For example, in Boise a methamphetamine-related homicide occurred (May 1998), an incidence of hotel arson was attributed to a man whose mother reported that “meth had eaten [her] son’s brain up,” and a former police officer from a nearby community was arrested for selling methamphetamine.

² Portland-specific results are discussed in Chapter 5.

Youth peer norms, as supported by focus group and other site visit data, are predominantly anti-drug, despite some youths' vast knowledge of, and exposure to drug use environments. Anti-drug education in schools and at home, along with anti-tobacco campaigns, appears to have been largely effective in instilling these anti-drug attitudes in younger children, who make few distinctions between the risks of different drugs.

Youth in 4th–6th grades commonly view all drugs, especially alcohol and tobacco, as very dangerous, typically commenting that “drugs can hurt you,” “you can die,” and “Why waste your life?” [Portland]. Many of these youth quickly mention tobacco-related health problems in their families or family members who have gotten sick from alcohol. Most youth are familiar with marijuana, as in the case of a San Diego focus group whose members viewed smoking as negative but do not make a clear distinction between smoking marijuana and smoking tobacco. Hartford youth aptly summarized a view held by most 4th–6th grade youth—that youth their age think that drugs are “un-cool,” and that individuals who opt not to use drugs are smarter than those who choose to use them.

Youth in 4th–6th grade focus groups at most sites repeatedly expressed anti-tobacco views, and many of the ads they described were graphic television ads or posters that display the detrimental effects of smoking. Perhaps in the absence of intensive, ongoing national anti-tobacco and alcohol campaigns, youth's perceptions of risks associated with these drugs have eroded over time, as indicated by youth on the survey. It may also indicate that, as the focus of anti-drug ads (both Media Campaign and others) targets illegal drugs, youth begin to forget about the risks of alcohol and tobacco, or to view them as less risky in comparison.

Middle and high school students in focus group discussions made frequent distinctions between types of drugs, viewing some as more dangerous than others, and making distinctions between the frequency of use, type of drug used, and circumstances surrounding use. One Portland teenager expressed the opinion that “shrooms and acid are okay every once in a while.” Parents in a Denver focus group asserted that teenagers are clearly aware of the line between social use and addiction. Teenagers' comments often reflected this distinction, as described by one high school student: “occasional drug use at a private residence or rural field party, when friends are present, and you don't have to drive home, is not dangerous” [an Austin non-center city high school student].

Nowhere are distinctions more clearly pronounced than in teenagers' views concerning the primary drugs of choice—tobacco, alcohol, and marijuana—and their views of other serious drugs. Teenagers across all sites described tobacco, alcohol, and marijuana as the most prevalent drugs of choice and agreed that the majority of their peers view these drugs as acceptable. At the same time, they see other drugs as unacceptable. Parents in Tucson agreed that teenagers think alcohol and marijuana are “harmless,” and one non-center city San Diego mother stated that teenagers do not even view alcohol and marijuana as drugs. This observation was reinforced during a Hartford center city middle school focus group

discussion, when some participants acknowledged the presence of “weed” at parties, but others casually reported the same parties to be “drug-free.”

Site visit data collected from teenager and parent focus groups help to explain some of the factors that affect teenagers’ perceptions of drug risk and hence can provide further insight into the survey findings on risks of drugs. The consensus among teenagers in focus groups at eight target sites (Boise, Denver, Hartford, Houston, Milwaukee, Portland, San Diego, and Sioux City) and among parents at four target sites (Baltimore, Denver, Houston, and Tucson) was that most teenagers know a great deal about the risks of drugs yet still choose to try them. Teenagers in seven target sites (Baltimore, Boise, Denver, Hartford, Portland, San Diego, and Washington, D.C.) and parents in three target sites (Atlanta, Baltimore, and Portland) cautioned that even when teenagers know the risks, they do not believe that the dangers will affect them personally.

This common feeling of invincibility among adolescents, or “immunity,” as a group of Boise students described it, is blamed for many high-risk behaviors in which middle and high school youth engage, despite repeated warnings from school, parents, and the media. One center city Boise 7th–9th grade focus group participant explained, “With health classes everyone knows the dangers of drugs. But we have the teen mentality, and until we get knocked down, we don’t think anything bad will happen to us.”

Many of the teenagers commented that even when their peers do believe in the risk, they see drug use as “cool,” and as one center city high school student stated, “so cool that it outranks that it’s dangerous” (center city Houston). Teenagers in Portland suggested that only significant events such as a local drunk driving incident or a case of pregnancy complications attributed to drug use might change beliefs about alcohol and drugs. A Denver high school student echoed this sentiment, when he responded to the question, “What makes a kid stop taking drugs?” with the answer, “Seeing family members die.”

One of the main reasons teenagers, parents, and community informants offered for teenagers’ willingness to use drugs in spite of their awareness of the risks is peer pressure. Teenage focus group participants in five target sites (Atlanta, Boise, Houston, San Diego, and Washington, D.C.) spoke openly about the pressure they feel from their friends. One 9th grade girl in Boise stated that the decision on whether or not to use drugs depended on peer influence, saying, “Depends on their environment. If their friends are using them, then they’ll want to follow the crowd.”

Awareness of risk appears to diminish among teenagers as they gain firsthand experience with drug use, often by trying drugs or alcohol themselves or by witnessing drug and alcohol use among peers and adults. Teenagers hear the prevention messages, but the messages do not match what they actually see with their friends. The ads preach “gloom and doom,” yet their friends use drugs recreationally and do not seem to be suffering from it [Sioux City site report]. A non-center city Washington, D.C., high school student noted that youth go

through the D.A.R.E. program in middle school, but then “they try drugs, nothing happens, so they keep going.”

This ambiguity about the relative risks of some people using particular drugs under certain circumstances is accentuated by a variety of mixed messages that teenagers receive from their environment. Even though there is an increase in teen’s recognition of anti-drug ads in the media, many pro-drug messages from beer commercials, cigarette ads, movies, and popular music are competing for their attention [Milwaukee and Tucson]. Teenagers in a Portland focus group described what they saw as a general desensitization within their peer group and among adults regarding adolescent drug usage. One student in the group commented that “teachers don’t approach you unless you are ‘blasted!’”

A major source of this mixed message about the risks of drugs often cited by teenagers, parents, and community informants is parents who use drugs themselves or who allow their children to use drugs. Both parents and teenagers in focus groups described situations in which parents sanction the use of alcohol or marijuana for teenagers. An incensed Milwaukee parent related, “I’m seeing that we’re even having parents who are inviting either middle school or freshman, sophomore-age high schoolers to their home and allowing them...you know...freely, to drink alcohol and even sometimes supplying alcohol.” Parents in a Denver focus group asserted that some parents give beer and marijuana to children as young as 14 or 15, because “They figure it’s better doing it at home with them than out on the street.”

The majority of parents are receptive to and complementary of anti-drug messages they have seen in the media. They admit that ads remind them of the risks, inform them about specific drugs and about the scope of the national drug problem, encourage them to open a dialogue about drugs with their children, and encourage them to act as responsible role models. Parents see anti-drug ads as a positive component of a wider program of anti-drug education, and though they do not look to advertising to single-handedly mend the complex problem of youth drug use, they do want to see more anti-drug ads more frequently that are realistic and frightening enough to get their children’s attention.

One of the major goals of the Media Campaign, in addition to raising awareness of anti-drug ads and their content, is to encourage local communities to mobilize their own anti-drug initiatives and education campaigns. Although developing partnerships to encourage community-level anti-drug activities is a focus of Phase II and III rather than Phase I, site visit data at followup indicate that many anti-drug events and initiatives have occurred in target sites since the Media Campaign began in January. A number of new anti-drug efforts are being planned for future implementation. For example in Baltimore, Maryland Public Television participated in the national outreach campaign, TAKE A STEP, an education and prevention initiative designed to supplement the Bill Moyers series on addiction. Nearby Anne Arundel County released a long-range strategic plan for substance abuse prevention, “Mission Possible: A Drug-Free Community,” scheduled to be implemented in Fall 1998, and another Maryland county near Baltimore recently implemented a D.A.R.E. program for parents. All of these community activities

could have heightened the awareness of the risks of drugs among young people and parents in the target sites.

In addition, shortly after the Media Campaign began, “Assets for Colorado Youth” began its own media campaign in an effort to highlight positive youth behaviors through radio and newspaper advertisements. The Drug Enforcement Administration’s office of Demand Reduction has stepped up its mentorship programs at Boys and Girls Clubs of greater Houston, and the City of Hartford Youth Services Department has initiated several new local prevention efforts, including a Summer Youth Employment program through which youth will receive training on substance abuse issues and peer education so that they can host workshops throughout the city. These other events may have contributed to increasing community members’ perceptions that drugs pose a serious risk.

Youth and parent survey responses show that perceptions of the risk of drugs increased significantly among those in target sites who were exposed to the Media Campaign. Media monitoring data are useful for demonstrating how perceived risk could be influenced by exposure to anti-drug ads, particularly ads targeting specific types of drugs. Site visit data also help to clarify how young people’s perceptions of risk are influenced by peer norms as well as by a range of other contextual factors in addition to the Media Campaign.

4.4 ATTITUDES TOWARD DRUGS

4.4.1 Summary of Survey Findings on Attitudes Toward Drugs

- Attitudes toward inhalants changed significantly between baseline and followup among target site youth. At followup 66.6 percent agreed that “things you sniff or huff to get high can kill you,” up from 60.7 percent at baseline.
- Changes in attitude were not expected within the short timeframe of Phase I, and the survey results indicate that attitudes toward drugs among youth remained largely unchanged between baseline and followup in both target and comparison sites. Approximately 93 percent of all youth agreed that “using drugs is dangerous,” and an average of 34 percent of all youth agreed that “it is hard to say ‘no’ when friends want you to try drugs.”
- The percentage of youth who “agree a lot” with the statement “I don’t want to hang around people who do drugs” declined between baseline and followup among all demographic groups in target sites. The percentage of female and of non-center city youth that “agree a lot” with the statement “I am scared of taking drugs” also declined significantly between baseline and followup in target sites.
- Teens showed no change in their attitudes toward drugs during Phase I. The percentage of teens saying they “agree strongly” with the following statements remained unchanged between baseline and followup in both target

and comparison groups. Teens said “Taking drugs scares me,” “I don’t want to hang around anyone who uses marijuana,” “I would try to talk a friend out of using drugs,” “The music that my friends and I listen to makes drugs seem cool,” “Heroin is a dangerously addictive drug,” and “Heroin will ruin your life.”

- Parental attitudes toward drugs remained largely unchanged between baseline and followup, with the exception of those parents saying they “agree strongly” or “agree somewhat” that they “would be upset if [their] child ever tried marijuana.” Target site parents agreeing with that statement increased from 79.7 percent at baseline to 81.8 percent at followup. Comparison site parents agreeing with that statement decreased from 81.8 percent at baseline to 80.0 percent at followup.

4.4.2 Use of Media Monitoring Data To Interpret Survey Findings

Media monitoring data help to explain youth survey findings related to their views on the risks of using inhalants. More inhalant-specific Media Campaign ads were broadcast at the target sites than in the comparison sites. In fact, in the target sites, at baseline, on average, 55 inhalant-specific ads aired per month, while during the intervention period on average 300.2 aired per month. By contrast, on average only 18 inhalant ads aired per month in the comparison sites during the Media Campaign.

The average number of times that inhalant-specific ads aired further explains the significant increase in the percentage of target site youth who, according to survey findings, believe that inhalants are life threatening. For example, the average number of times that *Noses*, an ad targeted to youth, aired increased in the target sites from 27 per month at baseline to 99.6 per month during the intervention. In the comparison sites, *Noses* aired 17.3 per month at baseline, and these broadcasts decreased over the time of the Media Campaign. The frequency of *Drowning*, also aimed at youth, increased from 27.3 per month to 129 per month during the intervention in target sites. This ad was not shown as a PSA in most of the comparison sites. The frequency of *Under Your Nose*, aimed at parents, increased in the target sites from .7 per month at baseline to 71.6 per month during the intervention but aired as a PSA only a few times in one of the 12 comparison sites.

The media monitoring data specific to heroin suggest that the lack of change in teenagers’ attitudes about this substance does not appear to be due to limited broadcasting of ads focused on heroin. Indeed, heroin ads increased during the Media Campaign to a greater degree in the target sites than in the comparison sites. The average number of heroin ads directed to parents, teenagers, and youth increased from 52 per month to 300.4 per month over time in the target sites; there was a much smaller increase in frequency of airing these ads in the comparison sites.

4.4.3 Use of Site Visit Data To Interpret Survey Findings

Site visit data help to explain survey results related to perceived risk of using inhalants and other drugs. Focus group discussions at followup revealed some of the factors influencing these attitudes. First, students in seven of the target sites and five of the comparison sites indicated that they have recently been exposed to anti-drug education programs in school or in community-based organizations. This recent exposure to drug education programming could have helped reinforce their anti-drug attitudes.

Discussions with focus groups at followup in 11 of the target and 10 of the comparison sites indicated that most youth believe that drug use is dangerous. For example, non-center city Tucson youth perceived that “drugs are stupid.” They also noted health consequences such as “killing brain cells.” Non-center city Portland youth consistently expressed the view that drugs can “hurt you” and “you can die.” This attitude has no doubt been reinforced by the community-based prevention efforts often directed toward youth. For example, during the baseline site visit to Hartford, site visitors reported that the Capitol Area Substance Abuse Council (CASAC), a regional initiative, administered community education programs for professionals on inhalant abuse prevention. News stories on inhalant use were also broadcast on two major television stations in Hartford. At the time of the intermediate site visit, site visitors noted that CASAC provided inhalant abuse prevention and awareness training for DARE officers, PTAs, churches, prevention specialists, drug counselors, and youth groups.

At followup heroin mentions in the teen focus groups in both the target and comparison sites were very limited. When heroin was mentioned, teenagers noted that the level of tolerance for this drug and other drugs is much less than that for marijuana. The consensus was that heroin, is not sanctioned by this age group. This suggests that the most effective strategy may be the use of Media Campaign ads that focus on substances that teenagers use commonly.

Site visit data also help to support survey findings related to teen attitudes toward marijuana use. A Washington, D.C., center city high school student made the following comment about marijuana: “It comes from the ground, so it’s good for you.” Teenagers, especially those in high school, said at baseline that they like marijuana because it is accessible, cheap, transportable, easy to cover up, and relaxing. Thus, if teen norms indicate that marijuana use is prevalent and teens’ attitudes toward it are permissive, it is not surprising that most teenagers disagreed with the statement, “I don’t want to hang around anyone who uses marijuana.” Agreeing with that statement would mean having to give up many friends and parties. It appears that many nonusers accept or tolerate marijuana use among their peers because they perceive its use as widespread.

Followup focus group discussions revealed some factors that may affect teenagers’ reluctance to influence their friends. As with youth, many teenagers (7th–12th graders at 7 target sites and 6 comparison sites) said they and their peers were fully aware of the dangers of drugs. At the same time, they perceived

that drug use is perceived as cool. Teenagers mentioned a variety of factors that outweigh the dangers of drug use for them and their peers, including a feeling of personal immunity, a don't-care attitude about risks, and a desire to want to look or be cool.

Peer pressure was mentioned as a factor by many focus group participants at baseline and followup but was mentioned more often by middle school students than by high school students. A middle school student in Boise said, "Depends on their environment. If their friends are using them, then they'll want to follow the crowd." A Washington, D.C., middle school student found peer pressure to use drugs very strong and said that "If youth resist, they are called names and put down."

Participants in a majority of the middle and high school focus groups conducted at baseline and followup in the target and comparison sites said that they or their peers had been exposed to drug use often at parties, at school, or in their neighborhoods. Center city high school students in Portland agreed there was a general desensitization among both peers and adults regarding adolescent drug use.

In summary, survey responses for youth that showed a change in attitude toward drugs were limited to specific subgroups. Although this domain of the study was not expected to change during the relatively short Media Campaign in Phase I, media monitoring data are helpful in showing that youth in target sites were exposed to an extensive array of anti-drug advertising, which could account for some of their changed attitudes. Site visit data on youth confirmed that their attitudes are similar across sites and identified various community efforts that reinforce youth's anti-drug attitudes. Focus group data on teenagers also provide insight into their attitudes and why those attitudes may be more difficult to change.

4.5 SOURCES OF INFORMATION ABOUT DRUGS

4.5.1 Summary of Survey Findings on Sources of Information About Drugs

- There was a substantial increase among youth in target sites that reported learning "a lot" about the negative aspects of drugs from TV ads.
- Overall, parents, grandparents, school, and friends remained the most important sources of information on drugs among youth.
- Target site youth who said they had seen anti-drug ads on TV increased significantly between baseline and followup (from 85% to 89%) compared with the increase among comparison site youth (from 86% to 87%).
- Recognition of anti-drug ads on billboards, posters on buses, bus stops, or subways, and school posters showed no significant increases when target sites were compared with comparison sites.

- The percentage of target site teens that said they “learned a lot” about the risks of drugs from TV ads, TV shows, news, movies, and the radio increased from baseline to followup. Changes in responses were statistically significant when compared with decreases in the same measures within comparison sites.
- The percentage of teens who said they had “learned a lot” from TV ads was statistically significant within target sites and between target and comparison sites among 9th–12th graders, males and females, whites, and non-center city residents.
- Increases in the percentage of teens who said they had “learned a lot” from radio, were statistically significant among 7th and 8th graders, males and females, whites, and center-city and non-center city residents.

4.5.2 Use of Media Monitoring Data To Interpret Survey Findings

Media monitoring data suggest why statistically significant changes occurred between baseline and followup in the percentage of youth that learned from television, and specifically television ads, that drugs are bad for them. The average number of all anti-drug ads—PSAs and the paid Campaign ads—was similar during the baseline period in target and comparison sites. In fact, media monitoring data show that only 9 percent more ads aired in target sites than in comparison sites at baseline.

During the Media Campaign, however, media monitoring detected 96.5 percent more anti-drug television ads in target sites than in comparison sites (3,992.6 paid anti-drug ads per month and PSAs in target sites compared to 2,031.6 anti-drug ads per month in comparison sites). The difference in the volume of ads between target and comparison sites is even more pronounced when the focus is narrowed to ads targeted at youth during the Media Campaign. These ads included *Noses*, *Long Way Home*, *Girlfriend*, *Drowning*. During the intervention period, those ads were shown 8.7 times more often in target sites than in comparison sites (446.2 per month in target sites compared to 51.4 per month in comparison sites).

4.5.3 Use of Media Buy Information To Interpret Survey Findings

The media buying information, which focuses only on the paid component of the Campaign, provides valuable information on the target audience exposure to the paid ad demonstrating a correlation between the gross rating points achieved and changes in awareness. As final post-audited data on the reach and frequency for Phase I was unavailable as this report was being prepared, GRP data are used as proxy measures. (Estimated variance between the buy information provided and the audited post-buy information is plus or minus 10 %.) As mentioned previously a GRP is a unit of measurement of advertising audience size, equal to one percent of the total potential audience universe. It is used to measure the exposure of one or more programs or commercials without regard to multiple exposure of the same advertising to individuals. Thus, a GRP is the product of media reach times exposure frequency. GRP data indicate that paid Campaign ads aired during prime

viewing times with a frequency that ensured that the majority of the target audiences were exposed to the ads.

4.5.4 Use of Site Visit Data To Interpret Survey Findings

Focus group data from intermediate and followup site visits generally confirm the impact of the Media Campaign in target sites. Youth in focus groups in target sites had seen and could remember Media Campaign ads and understood their message to be that drugs are bad for them. Although youth in focus groups in comparison sites also understood the message of anti-drug ads, they typically could not recall specific ads or were more likely to recall an anti-tobacco ad.

As with youth, baseline focus groups with teenagers confirmed, with some exceptions, how they learn about drugs. Focus groups were conducted with two groups of teenagers—7th–9th graders and 10th–12th graders (i.e., usually middle school and high school students). School was the most frequently mentioned source for information about drugs. In many sites, teenagers reported that they had attended D.A.R.E. classes when they were in fifth grade, and they continued to receive instruction about drugs in health classes in middle and high school. School also was a negative source of information for some teenagers, who said they learned about drugs from other students who use drugs. Other teenagers described hallways smelling of marijuana, students using drugs near school, violent drug-related incidents in school restrooms, and drug arrests in school. Other frequently mentioned sources were friends, parents, television, personal and family experience, and “on the street.” Many of the teenagers in focus groups had used drugs themselves (usually marijuana), and some had sold drugs. “It’s all about the money,” said one non-center city teenager.

Focus group data from intermediate and followup site visits confirm that teenagers in target sites saw the Media Campaign ads and could recall them, often in great detail. Focus group participants in target sites also confirmed hearing Media Campaign radio spots. Many high school students reported that they listen to the radio more frequently than they watch television. Focus groups of young people from all three age groups could recite lines from *Stupid* and variations on *Just Say Nah*.

In summary, youth and teen survey responses clearly indicate that television, and especially television anti-drug ads, became a common source of information about the risks of drugs in target sites during Phase I of the Media Campaign. Focus group data confirm the sources from which youth and teenagers learn about drugs, and media monitoring data help explain why there were statistically significant changes in the percentages of youth and teenagers who “learned a lot” about drugs from television.

4.6 PARENT-CHILD DISCUSSIONS ABOUT DRUGS

4.6.1 Summary of Survey Findings on Parent-Child Discussions About Drugs

- Changes in behavior were not expected during the short timeframe of Phase I. The percentage of parents who responded affirmatively when asked whether they had spoken with their children about drugs in the past year did not increase from baseline to followup. In target sites approximately 64.6 percent of parents at both baseline and followup said they had spoken with their children about drugs four or more times in the past year. In comparison sites approximately 62.0 percent of parents had done so.

4.6.2 Use of Site Visit Data To Interpret Survey Findings

Media monitoring data were not applicable to understanding survey results on parents' communication with their children. However, site visit findings support the survey data that point to the powerful role parents can play in preventing youth drug use. Focus group parents at all sites stressed the importance of talking to children about the risks and dangers of drug use and communicating values about staying away from drugs. Focus group parents across all target sites reported that Media Campaign ads provided an opportunity for them to initiate conversations about drugs with their children. Comments from youth confirmed the parents' perceptions. For example, focus group youth named parents as one of the major sources of information about drugs (along with school, peers, and the media). A focus group of 10th–12th graders said that fear of getting in trouble with their parents was a reason why they did not use drugs.³

The strongest evidence from the focus group data on this topic comes from a content analysis of parents' comments on what makes current anti-drug ads effective. Among eight categories of ad effectiveness cited, "helping parents and young people talk with each other" was ranked number one by a considerable number of parents participating in focus groups. This is very strong evidence of parents' agreement that helping parents communicate with their children about the dangers of drugs was the most effective part of current ads included in the Media Campaign.

Comments about ad effectiveness from followup target site visit reports include the following: "Non-center city [Hartford] parents were in general agreement that anti-drug ads could change attitudes toward drugs. They believed that the increased exposure to the issue as a result of anti-drug ads could help parents broach the subject of drugs with their children and that, as one member pointed

³ These focus group and survey findings support other recent survey results regarding parents' influence on their children's drug use. For example, the University of Minnesota's Adolescent Health Program found that parent-child connectedness was protective against several health risk behaviors, including substance use (Resnick et al., 1997). And the Parents' Resource Institute for Drug Education (PRIDE) found that students who reported that their parents talked to them "a lot" about alcohol and other drugs were less likely to report illicit drug use than students whose parents "never" discussed drugs with them (PRIDE, 1998).

out, ‘...Conversations do happen when there are more opportunities to see and discuss and address the issue.’ ” In Milwaukee, “Non-center city parents spoke openly about the effectiveness of ads to parents because they served as reminders about the need to dialogue with children.”

Furthermore, a non-center city [Portland] parent focus group noted that “some of the ads may serve as positive ‘lead-ins’ to discussions with their children about drugs.” One participant felt that “this was true if children are not already on drugs.” “Center city [Portland] parents commented that many of the ads were ‘good.’ One participant noted that she liked the fact that “the ads were ‘open-ended’; they don’t preach but leave it open-ended so you have to start discussions.” Parents in the Non-center City [Tucson] focus group were able to identify several ads geared to parents, and it was noted that the ads could be “an effective way to bring up the topic with your child and increase your awareness as a parent about drugs.”

Conversely, many parents described reasons that parents did not talk to their children about drugs nor had difficulties doing so effectively. These included parent drug use, past or present (both legal and illegal drugs); lack of information about drugs, the youth drug culture, or how and when to present information to their children; denial that the problem could ever affect their children; and acceptance of youth drug use. In Baltimore focus group parents reported that “the ads have changed parents’ attitudes about the community in general, but their attitudes about their own children concerning drugs will be impervious.”

Parent responses to the survey showed clearly that the vast majority of parents are talking to their children about drugs. While media monitoring data were not useful for understanding more about this finding, focus group data proved to be extremely valuable in identifying ways in which the Media Campaign has helped to facilitate parent-initiated discussions with their children. Further, focus group data are useful for understanding possible reasons behind the survey responses for parents who do not talk with their children about drugs.

4.7 CONCLUSION

This discussion of cross-site survey findings integrates data from the surveys, media monitoring, and site visits to help explain significant findings in six key areas. Most importantly, Phase I of the Media Campaign has achieved its intended goal of raising awareness about specific anti-drug messages among youth, teens, and parents. The increase in awareness is correlated with an increased frequency of exposure to the Media Campaign ads, particularly TV ads, and includes recognition by youth and parents in target sites of the risks of drugs. Additionally, the paid Media Campaign ads were aired during programming and time slots for which target audience viewership was the highest. The site visit data explain how increased awareness and perceptions of risk are influenced by young people’s peer norms and attitudes as well as a range of other contextual factors to which they are exposed. Furthermore, youth and parents in the target sites agreed that the anti-drug messages that they had seen or heard had been effective. Focus

group participants of all ages recommended the use of ads that depict the consequences of drug use including graphic representations of real situations.

Study findings also provided clues to understanding change or lack of change in other areas such as attitudes and behavior, which were not, intended goals of the Phase I Media Campaign. For example, as expected, the attitudes of youth, teens, and parents in the target sites did not change within the short time frame of Phase I compared with those in the comparison sites except for youth's attitudes pertaining to inhalants. Although there was no major change regarding whether parents had spoken with their children about drugs over the past year, focus groups parents from all target sites reported that Media Campaign ads provided starting points for initiating conversations about drugs with their children. In summary, an integration of data from the survey findings, media monitoring, and site visits indicates an increased awareness of anti-drug ads as well as the dangers of drug use, and the Phase I Media Campaign has played a major role in achieving these results.

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5. SITE-LEVEL RESULTS

This chapter presents site-level results for each target site using a case study format. The focus of each case study is on survey findings at the site level, using site-specific findings from site visits, media monitoring, GRP data, and other media buying plan information to explain and interpret the survey results for each site. As in Chapter 4, media monitoring data refer to Campaign ads and PSAs, whereas media buy data refer only to paid Campaign ads.

Media monitoring data are presented in terms of the average monthly number of times that ads aired. Media buy data present the actual number of times that paid ads were scheduled to air and estimates of audience exposure in terms of GRPs. The case studies are presented in alphabetical order by target site, and each case study is organized into the following sections:

- **Introduction**— Includes a brief summary of the demographics of the target site's Metropolitan Statistical Area (based on 1990 census data and the 1995 Uniform Crime Reports), the scope of the drug problem in the area, and the drug problem among youth and teens;
- **Intervention**— Lists the TV ads included on the evaluation surveys for youth, teens, and parents that were detected by media monitoring in the target site¹; for each case study, a table is presented which includes the specific paid ads and PSAs for the respective site about which students and parents were surveyed;
- **Survey Findings**— Summarizes the main findings for target and comparison site; identifies the comparison site; presents findings that are statistically significant across the target and comparison sites for youth, teens, and parents; and discusses results of media monitoring and how these data may have affected survey findings at the site-level;
- **Community Impact**— Describes the target site's response to Phase I of the Media Campaign, as indicated by such factors as increased calls for information and assistance regarding drug abuse, efforts to support the Media Campaign (e.g., a school poster contest based on anti-drug ads seen by the children), any local media efforts in the target and comparison sites; or new program initiatives inspired by the Campaign; and
- **Summary of Findings**— Presents a summary of the survey findings for youth, teens, and parents, as well as impact of the Media Campaign on the community.

The focus throughout is on the target site, with data from the comparison site used to explain statistically significant differences between the sites. In this chapter, the term "cross-site" refers to the analysis that compares a specific target site with its specific, matched comparison site. The site-level analyses draw upon data from

¹ A comprehensive listing of all Phase I advertisements is presented in Appendix A.

media monitoring, media buying, focus groups, and community respondent interviews to support reliable interpretation of the data. Media monitoring data were not available for three target sites (Boise, Sioux City, and Tucson) and two comparison sites (Eugene and Duluth). Fuller contextual descriptions of the target and comparison sites are available in *Testing the Anti-Drug Message in 12 American Cities: National Youth Anti-Drug Media Campaign, Phase I (Report No. 1)* (September 1998).

Description of the Phase I Media Campaign intervention in the target site is subject to several limitations. Because the emphasis in the case studies is on survey findings at the site level, and because the surveys do not address specific radio, newspaper, or other media advertisements, the description in the Intervention section is limited to television ads. The description is further limited in that it does not include all of the anti-drug TV ads—either from the Media Campaign or from other sources—detected in the target site by media monitoring.

The listing of television ads discussed in this chapter is confined to those that were included in the survey instruments for each of the three age groups and were classified as PSAs or paid ads according to the media buying plan for that site. For youth (grades 4–6), the ads were included in the survey instrument were *Noses*, *Long Way Home*, *Drowning*, and *Girlfriend*. For teens (grades 7–12), ads included on the survey were *Alex Straight A's*, *Frying Pan*, *911*, *Layla*, *Free Ride*, and *Rite of Passage*. TV ads on the parent survey were *Burbs*, *Girl Interview*, *Under Your Nose*, *Deal*, and *O'Connor* (see Section 2.2.5, Interpretation of Survey Findings, for a discussion of the implications of awareness of these ads).

The media buying plans varied for each site, and it should be noted that the buying plans were not always implemented as planned which affected the frequency of the ads as well as their placement, and thus, percentage of the target audience reached. For example, *Layla* was part of the media buying plan for Portland and Milwaukee but according to post-buy data did not air as a paid ad. Furthermore, local cable (e.g., Nickelodeon and MTV) was purchased in each target site in bulk to reach youth and teens. The only data currently available on the cable purchases is the number of ads purchased in each site. The planned Phase I buy intended to deliver an incremental 1,253 GRPs per market in cable.

As discussed in the target site findings, the number of ads varies by market based on the number of systems purchased and the buying groups' determination of the number of units needed to reach the ad awareness goal. Advertising time was also purchased in each site on in-school Channel One increased the reach and frequency of some of the ads, including ads not part of the buying plan for the sites. Another limitation is that TV was not the primary medium used to reach parents. Thus the parent ads aired fewer times than those targeting teens and youth, resulting in lower levels of awareness of specific adult targeted ads.

In addition to the media monitoring data, information on gross rating points and the frequency with which paid ads aired are used in the site-level descriptions to assist in verifying that the ads identified in the buying plan and included in the survey instruments reached the target audiences. Gross rating points reflect

audience share, one unit of GRP is equal to one percent of the total potential audience universe. GRPs are used to measure the exposure of one or more programs or commercials without regard to the multiple exposure of the same advertising to individuals.

Another point of clarification is that not all of the ads mentioned above were shown in all target sites as paid Media Campaign ads. For example, one ad directed at teens—911—was purchased only in sites that experienced a methamphetamine problem. Exhibits 5-1 through 5-12 display the mix of paid ads and PSAs specific to each of the target sites. The distinction between paid ads and PSAs for each site was determined by the Media Campaign implementation plan.

Three other facts about the media monitoring data help explain the information presented in the Survey Findings section of each case study. First, in spite of the limitations that arise in the discussion of survey ads, media monitoring detected other TV ads that may have influenced awareness and attitudes. Therefore, discussion of “ads from all sources” includes ads included in the surveys, other paid Media Campaign television ads, and ads produced by other sponsors—such as the Partnership for a Drug-Free America or local organizations—that aired as part of the pro bono component or as public service announcements (PSAs).

Second, although the Phase I Media Campaign spanned 26 weeks from January through June 1998, media monitoring data presented are for five months only, from January through May. June data are not included in the analysis because the evaluation surveys were completed in late May and early June. Therefore, respondents that had already completed the surveys would not have been exposed to or influenced by the June broadcasts of the ads. Third, comparisons between baseline and intervention periods span unequal timeframes. While the intervention period, for purposes of this analysis, covered the five months from January through May, the baseline period spanned only three months (October, November, and December 1997). To compensate for the difference in length of periods, data are presented as much as possible in terms of monthly averages. Another important note is that Media Campaign ads on cable TV were not tracked by the media monitoring component.

The Survey Findings sections of the Baltimore, Denver, Hartford, and Portland case studies include an explanation of substitutions made for youth and teen data in their comparison sites. In each instance, arrangements to conduct the student surveys could not be made with a sufficient number of schools in the original comparison site (Richmond, Albuquerque, Harrisburg, and Spokane, respectively). For purposes of analysis, substitutions were made using youth and teen survey data—along with relevant media monitoring data for youth and teen ads—from another, comparable comparison site (Memphis, Austin, Nashville, and Eugene, respectively). The substitutions were possible because data collection in all three modalities—survey, site visit, and media monitoring—was identical in all 24 sites. In other words, the same kinds of data that were collected in Richmond were collected in Memphis, so that data for youth and teens in Memphis could be substituted for Richmond data. At the same time, the

discussion of findings for parents uses survey and media monitoring data from the original comparison sites.

The site-level analysis focuses on awareness of the Media Campaign ads included in the survey. Site-specific analyses of ad awareness (comparing each target site with its matched comparison site) are presented for each of the 12 target sites. At the aggregate level (all target sites together and all comparison sites together), data analyses revealed statistically significant differences in ad awareness for all four of the ads targeted at youth, four of the six ads targeted at teens, and four of the five ads targeted at parents. In this chapter we examine ad awareness in more detail by controlling for whether an ad aired as a paid in a target site, and how this may have affected recognition of the ad.

In addition, it is important to note that the percentages of ad awareness among youth are higher than teens and parents due to the response categories that were examined. Youth responses were based on a “yes” category, youth who ever saw the ads. Teens’ and parents’ responses are based on an “often” or “a few times” category. If the categories “often” and “a few times” were combined to provide an indicator of those who ever saw the ads, the percentage of teens and parents that recognized ads would have been higher. Therefore, in some instances in the case studies, significant differences in awareness are reported for an ad in terms of those who had “ever” seen an ad.

In addition to the television advertisements, 20 other items from the youth, teen, and parent surveys showed significant differences at the aggregate level and were therefore examined at the site level. Those 20 items were distributed over four other areas covered by this evaluation: effectiveness of ads, awareness of the risk of using drugs, attitudes toward drugs, and sources of information about drugs. (As expected, no significant difference was found in Phase I for use of drugs). The reason for examining the other 20 items was to determine if the pattern of significant differences detected at the aggregate level was repeated at the site level. The items that showed statistically significant differences at the site level for a given target site are highlighted in the case study for that site. If a variable did not differ significantly for that site, it is discussed only to provide important contextual information. Site-level data that were examined are included in tables that appear in Appendix E.

5.1 ATLANTA

Atlanta is the capital of Georgia and the largest commercial, industrial, and financial center in the Southeast. Located between the southeast Atlantic coast and the gulf coast, it also is a major transportation center. Interstate highways radiate from Atlanta like spokes on a wheel, and the area is served by one of the largest and busiest airports in the country. The Atlanta metropolitan area encompasses 20 counties spread over a wide geographic area, much of which is rural. The total population of the metropolitan statistical area is 2,833,511, of which 71 percent are white and 25 percent African American. The city itself, however, is 67 percent African American and 31 percent white. Children between the ages of 5 and 17 are 18 percent of the population, and nearly 14 percent of children under age 18 live below the poverty level.

The city of Atlanta and surrounding Fulton and neighboring DeKalb counties have been designated a High Intensity Drug Trafficking Area (HIDTA). Although cocaine, crack-cocaine, heroin, and methamphetamine are available, the drug of choice among Atlanta-area youth is marijuana. Underage drinking also is a major problem. Drug Use Forecasting data for 1996 indicated that of young men ages 15 to 20 arrested in the city of Atlanta, 76 percent tested positive for marijuana. Safe and Drug-Free School survey data for 1997 for Atlanta and immediately surrounding cities and counties showed that 29 percent of 10th graders have smoked marijuana, and 48 percent of 8th graders and 61 percent of 10th graders have used alcohol.

Open-air drug markets in Atlanta and resulting high center city arrest rates make it appear as if drug use and trafficking are primarily center city problems. Key informants, however, reported that the incidence of youth substance abuse is as high in the affluent non-center city communities as in center city Atlanta.

5.1.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Atlanta on January 20, 1998. Phase I used existing ads available through the Partnership for a Drug Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. The media buying plan for Atlanta included 19 different TV ads with 13 additional ads that aired on Channel One in schools. Youth, teens, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-1 presents those paid ads and PSAs for Atlanta that were included in the survey instruments.

The subset of paid Campaign ads for Atlanta focused on the following drugs: drugs in general (35.4%), inhalants (21.6%), crack (21.4%), marijuana (12.9%), and heroin (8.7%). Paid advertisements directed at youth included *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. *Alex Straight A's*, *Free Ride*, *Frying Pan*, and *Layla* were the paid ads directed at teens, and *Deal*, *Girl Interview*,

O'Connor, and *Under Your Nose* were the paid ads directed at parents. PSA ads included *911* and *Rite of Passage* for teens, and *Burbs* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in Atlanta/Memphis**

Campaign Survey Data	Atlanta (Target)			Memphis (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)								
Paid ads								
	<i>Drowning</i>	48	63	15*	37	24	-13*	28*
	<i>Girlfriend</i>	43	65	22*	37	29	-8	30*
	<i>Long Way Home</i>	41	78	37*	60	50	-10	47*
	<i>Noses</i>	44	58	14*	61	58	-3	17**
TEENS (Response = Often)								
Paid ads								
	<i>Alex Straight A's</i>	4	16	12*	9	8	-1	13*
	<i>Free Ride</i>	10	20	10*	13	10	-3	13*
	<i>Frying Pan</i>	21	43	22*	21	18	-3	25*
	<i>Layla</i>	20	22	2	12	16	4	-2
PSAs								
	<i>911</i>	6	7	1	12	8	-4	5
	<i>Rite of Passage</i>	11	12	1	13	10	-3	4
PARENTS (Response = Often)								
Paid ads								
	<i>Deal</i>	24	36	12*	16	22	6	6
	<i>Girl Interview</i>	9	13	4	4	5	1	3
	<i>O'Connor</i>	17	27	10*	14	19	5	5
	<i>Under Your Nose</i>	4	13	9*	8	6	-2	11*
PSAs								
	<i>Burbs</i>	22	25	3	12	20	8*	-5

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.1.2 Survey Findings

- Survey data show statistically significant increases in the percent of Atlanta youth compared to Memphis youth that reported seeing all four paid Campaign ads “often”—*Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*.
- Survey data show statistically significant increases in the percent of Atlanta teens compared to Memphis teens that reported seeing three of the four paid ads “often”—*Frying Pan*, *Alex Straight A's*, and *Free Ride*.
- Survey data show statistically significant increases in the percent of Atlanta youth compared to Memphis youth that reported seeing all four paid Campaign ads “often”—*Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*.
- Survey data show statistically significant increases in the percent of Atlanta teens compared to Memphis teens that reported seeing the fourth paid ad “often” or “a few times”—*Layla*.
- Survey data show statistically significant increases in the percent of Atlanta parents compared to Memphis parents that reported seeing one of the four paid Campaign ads “often”—*Under Your Nose*.

- Survey data show statistically significant increases in the percent of Atlanta parents from baseline to followup that report seeing three of the four paid Campaign ads directed at parents—*Under Your Nose*, *Deal*, and *O'Connor*.

Surveys were administered to youth and teens in schools, and parents via telephone before and near the end of the Phase I Media Campaign in the target site, Atlanta, and its comparison site, Memphis. This section compares survey results from Atlanta and Memphis, focusing on statistically significant differences. Data from media monitoring and focus groups are presented to support reliable interpretation of the survey data.

Survey findings may have been affected by the existence of other anti-drug media campaigns in each city. In Atlanta, Mission New Hope sponsored a media campaign, using PDFAs, in 1997. In Memphis, the Shelby County Sheriff's Initiative, featuring radio and some television ads, had been in effect for several years prior to the Campaign and continued through the period of the Phase I Media Campaign.

5.1.2.1 Youth

Four paid Campaign ads were directed toward youth in Atlanta—*Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. When comparing Atlanta and Memphis youth responses from baseline to followup, survey data show a statistically significant increase in the percentage of target site youth in Atlanta that learned “a lot from TV commercials” about the negative effects that drugs have on them. In fact, the data indicate an 11 percent increase (from 40 % at baseline to 51 % at followup) in Atlanta, compared to a 6 percent decrease in Memphis (from 57 % at baseline to 51 % at followup).

Correspondingly, survey data show statistically significant increases in youth awareness of all four paid Campaign ads—*Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*—between the target site teens in Atlanta and the comparison site teens in Memphis when youth were asked if they had seen the ads “often”. The percent increases in recall of the four paid Campaign ads are as follows: *Long Way Home* (41% to 78% in Atlanta, 60% to 50% in Memphis), *Girlfriend* (43% to 65% in Atlanta, 37% to 29% in Memphis), *Drowning* (48% to 63% in Atlanta, 37% to 24% in Memphis), and *Noses* (44% to 58% in Atlanta, 61% to 58% in Memphis).

Media monitoring and GRP data help explain the statistically significant cross-site increases in recall of the four paid Campaign ads directed at youth in Atlanta. Although *Long Way Home* did not air in either the baseline or intervention period in the comparison site, the ad aired in both periods in the target site. Monitoring data suggest that the time of day when the ad aired contributed to the dramatic increase in youth awareness of *Long Way Home* at followup. For example, although *Long Way Home* aired at a similar rate in the target site during the baseline and intervention period in Atlanta (*baseline*: 20.4 times a month or 5.1 a week; *intervention*: 22.4 times a month or 5.6 a week), the ad aired twice as often during hours when youth were most likely to be watching TV (prime access:

7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). Media buying data further indicate that *Long Way Home* was scheduled to air as a paid ad 40 times for a total of 216 GRPs during the intervention period.

Media monitoring data further support survey findings that indicate a statistically significant cross-site increase in youth awareness of the paid ad *Drowning*. Like the ad *Long Way Home*, *Drowning* did not air in either the baseline or intervention period in the comparison site but aired during both periods in the target site. In addition, the average number of times that *Drowning* aired substantially increased in Atlanta—from 13.6 times a month (or 3.4 times a week) at baseline to 24.6 times a month (or 6.2 times a week) during the intervention according to media monitoring data. What is more, as a paid Campaign ad *Drowning* aired nearly three times more often in viewing periods when youth were most likely to be watching TV than when it aired as a PSA in the baseline period. The media buy data indicate *Drowning* aired the most frequently of all youth-targeted TV ads for a total of 63 times and 275 GRPs.

The remaining two paid Campaign ads directed at youth are *Girlfriend* (which did not air in the baseline or intervention period in the comparison site), and *Noses* (which did air in the baseline period and aired only a few times in the intervention period in the comparison site). Although according to media monitoring data *Girlfriend* and *Noses* aired fewer times than *Long Way Home* and *Drowning*, survey data indicate cross-site statistically significant increases in youth recall of the ads. Not surprisingly, during the intervention *Girlfriend* and *Noses* aired 62.2 percent and 77.0 percent of the time in prime youth viewing hours when youth were most likely to be watching TV, respectively. The media buy data indicate *Girlfriend* was scheduled to air as a paid ad 53 times for 254 GRPs and *Noses*, 19 times for 201 GRPs.

5.1.2.1 Teen

When comparing target to comparison site teen responses, survey data show statistically significant increases in the percent of Atlanta teens that report “often” seeing three of the four paid Campaign ads included in the survey—*Frying Pan*, *Alex Straight A’s*, and *Free Ride*. What is more, survey data show even greater statistical significance with regard to the percentage of teens that report seeing all four paid ads “often” or “a few times”.

In fact, the percentage of teens that recalled seeing *Frying Pan* “often” or “a few times” increased from 52 percent at baseline to 69 percent at followup, while decreasing in the comparison site from 47 percent to 40 percent. Similarly, the percentage of Atlanta teens that recalled the paid ad *Layla* increased from 44 percent to 62 percent, relative to only a marginal increase in Memphis from 45 percent to 46 percent. Additionally, the percentage of Atlanta teens that recalled seeing *Alex Straight A’s* rose from 40 percent to 54 percent, while increasing only slightly in Memphis from 34 percent to 36 percent. Lastly, the percentage of Atlanta teens recalling *Free Ride* increased from 24 percent to 41 percent compared to a decrease in Memphis from 32 percent to 24 percent.

Media monitoring data provide some explanation of these findings. First, the data indicate that the four paid ads directed at teens in Atlanta did not air during the baseline period in either Atlanta or Memphis. During the intervention, however, the average number of times the paid ads aired increased substantially in the target site, while airing only a few times in the comparison site. In the target site during the intervention, *Frying Pan* aired 20.6 times a month (or 5.2 times a week). Similarly, *Layla* aired 19.8 times a month (or 5 times a week). *Free Ride* aired 13.2 times a month (or 3.3 times a week). And *Alex Straight A's* aired 10.6 times a month (or 2.7 times a week). Also, it should be noted that *Frying Pan* was a new ad and thus, may have attracted more notice and that *Layla* and *Frying Pan* aired the most frequently and achieved the highest reach of the teen ads, airing 68 times for 367 GRPs and 61 times for 319 GRPs, respectively.

Media monitoring data further support survey findings when analyzing the times of day during which the paid Campaign ads aired. For example, although *Alex Straight A's* aired fewer times than any of the other three paid Campaign ads in Atlanta, 60.4 percent of the time it aired during times when teens were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). Similarly, *Layla* and *Free Ride* aired 56.6 percent and 51.5 percent of the time in prime viewing hours, respectively. Lastly, *Frying Pan* aired 42.7 percent of the time in prime viewing hours. As expected, teen awareness of the PSAs, *911* and *Rite of Passage*, remained low in Atlanta and Memphis in the baseline and intervention period.

5.1.2.2 Parents

Five Campaign ads were directed toward parents in Atlanta, four of which were included in the survey instrument. *911* and *Rite of Passage* were two PSAs directed toward parents. When comparing target to comparison site parent responses from baseline to followup, survey data show statistically significant increases in the percentage of Atlanta parents that reported seeing one of the four paid Campaign ads “often”—*Under Your Nose*. Media monitoring data support this finding. Although *Under Your Nose* did not air in the target or comparison site during the baseline period, it aired on average 20.4 times a month (or 5.1 times a week) in the target site for a total of 39 GRPs. In addition, *Under Your Nose* aired 41.6 percent of the time during hours when parents were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.).

Moreover, when asked if parents had seen the paid ads “often” or “a few times”, survey data show that parent recall in Atlanta increased, while remaining relatively constant in Memphis. For example, parent recollection of *O'Connor* rose from 69 percent at baseline in Atlanta to 75 percent at follow-up, while only slightly increasing in Memphis from 64 percent to 67 percent. Similarly, parent recollection of *Deal* increased from 56 percent to 66 percent from baseline to followup, while rising to a lesser degree in Memphis from 50 percent to 55 percent. Moreover, recall of *Under Your Nose* increased from 36 percent to 44 percent from baseline to followup in Atlanta, but fell from 37 percent to 28

percent in Memphis. And lastly, parent recognition of *Girl Interview* increased from 31 percent at baseline to 36 percent at followup, while holding constant at 18 percent in the comparison site. *Girl Interview* aired more frequently than any other paid ad included in the survey, airing 13 times according to the media buy information.

It is also worth noting the statistically significant within-site percent increases in Atlanta from baseline to followup with respect to parents' recall of three of the four paid Campaign ads—*Deal*, *O'Connor*, and *Under Your Nose*. Media monitoring data provide some explanation of the increases in parent recollection of *O'Connor* and *Deal*. First, *O'Connor* aired nearly 10 times more often in Atlanta during the intervention period than at baseline, 46 percent of which occurred during prime parent viewing hours. And second, from the baseline to intervention period the average number of times *Deal* aired increased in Atlanta from less than one time a month to 33.4 (or 8.4 times a week), while increasing in Memphis from less than one time a month to 6 times a month. Increases in Atlanta parents' awareness of *Deal* is further explained by the fact that 46 percent of the time *Deal* aired during prime viewing hours (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.).

Media monitoring data provide some explanation why three of the four paid ads—*O'Connor*, *Deal*, and *Girl Interview*—did not show cross-site statistically significant differences from baseline to followup. For example, the average number of times *O'Connor* aired increased in both the target and comparison site (Atlanta, *baseline*: 2.3 times a month compared to *intervention*: 13.6; Memphis, *baseline*: 5 times a month compared to *intervention*: 8.2). Similarly, monitoring data show substantial increases from baseline to intervention in the average number of times that *Deal* aired in both the target and comparison site. *Girl Interview* aired substantially more often than any of the other parent targeted Campaign ads during the baseline period, and the rate at which the ad aired remained constant from the baseline to the intervention period. It is also worth noting that while the average number of times *Burbs* aired as a PSA in Atlanta and Memphis increased substantially from the baseline to the intervention period, awareness rose only slightly. As expected, media monitoring data show that *Burbs* aired as a PSA in non-prime parent viewing hours 74 percent of the time in the target site and 83 percent in the comparison site.

5.1.3 Community Impact

Key informants reported increased awareness in anti-drug messages from TV. One coalition director attributed that to the major anti-drug media campaign that had been conducted in the Atlanta area in 1997, for which 1,962 PDFA ads ran. During part of that time, all ads were tagged with a special "211" telephone number, through which callers were referred by United Way to the center or program appropriate for their needs. United Way of Metropolitan Atlanta received 950 substance abuse-related calls through the 211 number during that period.

In addition, during the Media Campaign, the local coalition that provides anti-drug information and referrals reportedly received three to four additional calls per week, compared with the same period the previous year. No increase in the rate of calls was noted by the 211 help line.

5.1.4 Summary of Findings

Survey data from the target site Atlanta and the comparison site Memphis indicate increases in youth, teen, and parent awareness of anti-drug messages via the television. Indeed, data clearly show increases in awareness of paid Campaign ads directed at all three groups.

More specifically, survey data show cross-site statistically significant increases in awareness of all four paid Campaign ads directed at youth: *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. Media monitoring data clearly indicate that during the intervention the majority of paid ads aired during viewing hours when youth were most likely to be watching TV.

In addition, survey data show statistically significant cross-site increases in awareness of three of the four paid Campaign ads directed at teens—*Frying Pan*, *Alex Straight A's*, and *Free Ride* (response: “often”). Survey data also indicate statistically significant cross-site increases in awareness of the fourth paid Campaign ad—*Layla* (responses: “often” or “a few times”). Media monitoring data suggest that the increases in awareness correlate with the high percentage of paid ads that aired in prime teen TV viewing hours.

Lastly, survey data show cross-site statistically significant increases in awareness of one of the four paid Campaign ad directed at parents—*Under Your Nose*. In addition, survey data indicate within-site statistically significant increases in awareness of three of the four paid Campaign ad directed at parents—*Under Your Nose*, *Deal*, and *O'Connor*. Media monitoring data support these findings, indicating that the average number of times paid Campaign ads aired increased substantially during the intervention period.

5.2 BALTIMORE

Located near the head of Chesapeake Bay, Baltimore is the largest city in Maryland and part of the densely populated Boston-Washington corridor. The Baltimore Metropolitan Statistical Area (MSA) includes the city of Baltimore and surrounding Baltimore County; neighboring Hartford, Carroll, Howard, and Anne Arundel Counties; and, across the bay, Queen Anne's County. The population of the Baltimore MSA is 2,383,172 and includes urban, suburban, and rural areas with a variety of geographical, economic, and social conditions. In contrast, Baltimore City is a center city community of 726,096 with declining economic opportunities for its residents. In the Greater Baltimore area, 71 percent of residents are white and 25 percent are African American. The population of the city is 60 percent African American and 39 percent white. The official unemployment rate in the MSA is 4.8 percent, and the 1995 crime rate was 1,335 per 100,000 residents. Sixteen percent of the population is between ages 5 and 17, and 34 percent of children under age 18 live below the poverty level.

The city of Baltimore and Baltimore, Howard, and Anne Arundel Counties are part of the Washington/Baltimore High Intensity Drug Trafficking Area (HIDTA), created in 1992 to address drug distribution in the Baltimore-Washington corridor. In spite of the introduction of crack-cocaine in Baltimore in the 1980s, heroin has reportedly retained its historic hold on the addicted population. The introduction of crack did, however, affect Baltimore's drug-trafficking culture. In some parts of the city, drugs are sold openly on street corners, where customers include non-center city residents.

Key informants reported that marijuana is the drug of choice among teens in the Baltimore area, with alcohol and tobacco use also common. Some teens reportedly regard marijuana not as an illicit drug, but as something to smoke as routinely as cigarettes. Law enforcement authorities report that, in addition to drug use, youth and teens frequently engage in drug trafficking.

5.2.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Baltimore on January 13, 1998. Phase I used existing ads available through the Partnership for a Drug-Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Baltimore received several paid television Campaign ads and PSAs. Youth, teens, and parents were surveyed about their awareness on a subset of these ads. Exhibit 5-2 presents those paid Campaign ads and PSAs for Baltimore that were included in the survey instruments.

The subset of paid Campaign ads for Baltimore focused on the following drugs: drugs in general (27.6%), inhalants (26.0%), crack (17.4%), heroin (17.2%), and marijuana (11.7%). The paid advertisements directed at youth included *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. *Alex Straight A's*, *Free Ride*, *Frying Pan*, and *Layla* were the paid ads directed at teens, and *Deal*, *Girl Interview*,

O'Connor, and *Under Your Nose* were the paid ads directed at parents. PSA ads included *911* and *Rite of Passage* for teens, and *Burbs* for parents. These 11 ads collectively were shown an average of 179.0 times a month in Baltimore during Phase 1.

**Exhibit 5-1
Awareness of Campaign Ads in Baltimore/Memphis¹**

Campaign Survey Data	Baltimore (Target)			Memphis/Richmond (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)				(Memphis)				
Paid ads								
	<i>Drowning</i>	36	58	22*	37	24	-13*	35*
	<i>Girlfriend</i>	35	46	11	37	29	-8	19**
	<i>Long Way Home</i>	46	67	21*	60	50	-10	31*
	<i>Noses</i>	50	71	21*	61	58	-3	24*
TEENS (Response = Often)				(Memphis)				
Paid ads								
	<i>Alex Straight A's</i>	10	31	21*	9	8	-1	20*
	<i>Free Ride</i>	11	18	7**	13	10	-3	10**
	<i>Frying Pan</i>	22	68	46*	21	18	-3	49*
	<i>Layla</i>	17	22	5	12	16	4	1
PSAs								
	<i>911</i>	9	9	0	12	8	-4	4
	<i>Rite of Passage</i>	9	9	0	13	10	-3	3
PARENTS (Response = Often)				(Richmond)				
Paid ads								
	<i>Deal</i>	21	22	1	24	22	-2	3
	<i>Girl Interview</i>	5	18	13*	3	2	-1	14*
	<i>O'Connor</i>	16	29	13*	17	21	4	9
	<i>Under Your Nose</i>	6	11	5**	3	7	4**	1
PSAs								
	<i>Burbs</i>	16	21	5	14	24	10*	-5

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

¹Memphis replaces the comparison site of Richmond for youth and teen data; Richmond serves as the comparison site for parents because parent surveys were completed in that site (see Chapter 2).

Note: Additional paid ads aired via cable and Channel One.

5.2.2 Survey Findings

- Survey data show statistically significant increases from baseline to followup in the percentage of Baltimore youth, compared to Memphis youth, that reported “often” seeing all four paid Campaign ads—*Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*.
- Survey data show statistically significant increases from baseline to followup in the percentage of Baltimore teens, compared to Memphis teens, that reported “often” seeing of three of the four paid Campaign ads—*Alex Straight A's*, *Free Ride*, and *Frying Pan*.
- Survey data show a statistically significant increase from baseline to followup in the percentage of Baltimore parents, compared to Richmond parents, that reported “often” seeing the paid Campaign ad *Girl Interview*.

- Survey data show statistically significant increases from baseline to followup among Baltimore parents who reported “often” seeing three of the four paid Campaign ads—*Girl Interview*, *O’Connor*, and *Under Your Nose*.

The comparison site for Baltimore was Richmond, Virginia, where telephone surveys were conducted with a sample of parents. Because too few schools were available in Richmond to conduct the in-school youth and teen surveys, Memphis, Tennessee was substituted as the comparison site for those two groups. Both Richmond and Memphis are comparable to Baltimore in demographics and community characteristics.

Surveys were administered to youth, teens, and parents before and near the end of the Media Campaign. This section compares survey results from Baltimore and Memphis for youth and teens, and Baltimore and Richmond for parents. The focus of the comparison is on statistically significant differences. Data from media monitoring and focus groups are presented to support reliable interpretation of the survey data.

Survey findings in all three sites may have been affected by other, local anti-drug advertising. In Baltimore, prior to the Media Campaign, residents were exposed to a statewide, multimedia anti-substance-abuse campaign conducted by the Media Advertising Partnership for a Drug-Free Maryland. In addition, two local television programs, *Straight Talk* and *Steering Clear*, address drug and violence issues in Baltimore during each broadcast. In Memphis, the Shelby County Sheriff’s Initiative, featuring anti-drug radio and television ads, had been in effect for several years prior to and throughout the period of the Phase I Media Campaign. In Richmond, during the 5 months of the Media Campaign, the Metro Richmond Coalition Against Drugs ran PDFAs, including some used in the Media Campaign, televising the Coalition’s name and toll-free telephone number.

5.2.2.1 Youth

The increase in the percentage of Baltimore youth that recalled seeing all four paid Campaign ads (*Drowning*, *Long Way Home*, *Noses*, and *Girlfriend*) “often” from baseline to followup was statistically significant when compared with the change in recognition of the same ads by Memphis youth. From baseline to followup, recognition of *Drowning* increased in Baltimore (from 36% of youth surveyed to 58%) and decreased in Memphis (from 37% to 24%); recognition of *Long Way Home* increased in Baltimore (from 46% to 67%) and decreased in Memphis (from 60% to 50%); recognition of *Noses* increased in Baltimore (from 50% to 71%) and decreased in Memphis (from 61% to 58%); and recognition of *Girlfriend* increased in Baltimore (from 35% to 46%) and decreased in Memphis (from 37% to 29%).

Media monitoring data help explain the survey findings. *Drowning*, *Long Way Home*, and *Girlfriend* were not shown in Memphis during the intervention period, and *Noses* was shown less than once a month during the same period. By contrast, media monitoring data indicate *Drowning* aired a monthly average of 11.4 times in Baltimore; *Long Way Home* was shown 26.2 times; *Girlfriend* aired 9.2 times;

and *Noses* 26.8 times. In addition, 46.6 percent of these four ads aired in Baltimore during hours when youth were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). Overall, Baltimore youth were exposed to the four paid Campaign ads an average of 73.6 times per month, while Memphis youth, during the same time period, were exposed to only one of these ads—*Noses*—an average of less than once per month. Hence, it is not surprising that youth recognition of all four paid Campaign ads showed statistically significant cross-site increases from baseline to followup.

5.2.2.2 Teens

Baltimore teens were surveyed on how much they learned about the risks of drugs from various sources of information. Survey findings indicate that there was a statistically significant increase in teens reporting TV commercials as a source of drug information in Baltimore—from 19 percent at baseline to 33 percent at followup. By contrast, TV commercials declined as a source of drug information among Memphis teens from 36 percent at baseline to 31 percent at followup.

The increased percentage of Baltimore teens that “learned a lot” from TV commercials corresponds to an increase in the volume of paid anti-drug ads aired during the Media Campaign. The four paid Campaign ads targeted at teens in Baltimore were *Alex Straight A's*, *Free Ride*, *Frying Pan*, and *Layla*. The percentage of Baltimore teens that recalled seeing *Alex Straight A's*, *Free Ride* and *Frying Pan* “often” increased significantly compared to the figure in Memphis from baseline to followup. The change in recognition of these three ads from baseline to followup are as follows: *Alex Straight A's* (10% to 31% in Baltimore, 9% to 8% in Memphis); *Free Ride* (11% to 18% in Baltimore, 13% to 10% in Memphis); and *Frying Pan* (22% to 68% in Baltimore, 21% to 18% in Memphis).

Media monitoring and media buy data support these survey findings. Media monitoring data indicate that the average monthly airings of *Frying Pan* were greater than the average monthly airings of all other paid teen ads combined: 30.8 times per month for *Frying Pan*, compared with 16.0 times per month for *Free Ride* and *Layla* combined. Furthermore, over half (56.5%) of the *Frying Pan* ads aired during hours when teens were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). Not surprisingly, *Frying Pan* was the ad most frequently mentioned by all focus group participants in Baltimore. Moreover, the media buy data indicate that *Frying Pan* was scheduled to air more frequently and to achieve the highest reach of any of the Phase I TV ads, airing 87 times for a total of 482 GRPs. *Alex Straight A's* was the second most purchased ad, with the buying plan indicating 62 paid spots for a total of 411 GRPs. *Free Ride* aired a monthly average of 5.2 times in Baltimore, but did not air at all in Memphis. Finally, the fact that 66.7 percent of *Layla* ads aired when teens were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.) may have contributed to the

increased recognition of *Layla* among Baltimore teens between baseline and followup.

5.2.2.3 Parents

Parent survey data from Baltimore are compared with parent survey data from Richmond.

Four paid Campaign ads targeted at parents—*Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose*—aired in Baltimore. The increase in the percentage of Baltimore parents that recalled seeing *Girl Interview* often was statistically significant across sites. Parent recall of these three paid Campaign ads showed a statistically significant increase from baseline to followup: *Girl Interview* (5% to 18% in Baltimore, 3% to 2% in Memphis), *O'Connor* (16% to 29% in Baltimore, 17% to 21% in Memphis), and *Under Your Nose* (6% to 11% in Baltimore, 3% to 7% in Memphis).

Media monitoring data help explain Baltimore parents' increased awareness of *O'Connor*, *Girl Interview*, and *Under Your Nose*. *O'Connor* was shown in Baltimore an average of 5 times per month during baseline, but nearly twice that often (9.2 times per month) during the intervention. By contrast, in Richmond the monthly average number of times *O'Connor* aired decreased slightly, from 2 to 1.4 times. Following a similar pattern, *Girl Interview* aired an average of 1.7 times per month at baseline, but increased to 8.8 times per month during the intervention in Baltimore, compared with a decrease from 1.7 to 1.4 times per month in Richmond. The ad *Under Your Nose* aired 8.4 times per month in Baltimore during the intervention period but was not shown at all in Richmond during that same time. Furthermore, 35.7 percent of *Under Your Nose* ads aired in Baltimore during hours when parents were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). The media buy data indicate these ads were scheduled to air between 5 and 11 times each during Phase I.

5.2.3 Community Impact

Key informants in the Baltimore area observed that awareness of the drug problem in the community may have been raised slightly by the Media Campaign, but awareness there is reported to be historically high. The magnitude of the drug problem in the Baltimore area over the past several years has attracted numerous Federal, State, local, and foundation grants, as well as private donations from philanthropists to address drug use and trafficking. Several new or experimental approaches to the drug problem have kept the issue in the public eye.

5.2.4 Summary of Findings

Survey data from Baltimore and its two comparison sites show that awareness of anti-drug messages on television increased during the Phase I Media Campaign

among youth, teens, and parents surveyed in Baltimore. All three groups reported increased awareness of individual ads that were described in the surveys.

The increase in ad recognition by Baltimore youth was statistically significant for all four paid Campaign ads targeted at them: *Drowning*, *Long Way Home*, and *Noses*. Among Baltimore teens, survey findings indicate that there was a statistically significant increase in TV commercials as a source of drug information. Survey data also show statistically significant cross-site increases for three of the four paid Campaign ads targeted at teens: *Alex Straight A's*, *Free Ride*, and *Frying Pan*. *Frying Pan* was also the ad most frequently mentioned by all focus group participants in Baltimore.

Recognition of *Girl Interview* showed a statistically significant cross-site increase among Baltimore parents and, survey data show within site statistically significant increases in awareness for three of the four paid Campaign ads targeted at them (*Girl Interview*, *O'Connor*, and *Under Your Nose*). These findings clearly demonstrate that all three target groups in Baltimore—youth, teens, and parents—increased their awareness of anti-drug messages via the ONDCP Media Campaign.

5.3 BOISE

Located in western Idaho, Boise is a small city with a population of 205,775. The Boise Metropolitan Statistical Area (MSA), known as the Treasure Valley because it is surrounded by mountains, in addition to being suburban and rural. This area is fast-growing, relatively affluent, and politically and socially conservative. The MSA consists of Ada and Canyon Counties, and its population as well as that of the city of Boise has grown in recent years. The population of the MSA is 96 percent white, 2 percent Hispanic, 0.5 percent African American, and 1.5 percent other (Native American, Asian, and other). Minority residents tend to be concentrated in the center-city. The annual crime rate of the city is 366 per 100,000 residents, and 10.9 percent of children under age 18 live below the poverty level. The unemployment rate of the city is 4 percent, and 20 percent of the population is between ages 5 and 17.

Recently Boise has experienced a number of drug and drug-related problems such as youth-related shootings and a rise in the use of methamphetamines by teens. Methamphetamine drug arrests are common in the area, though police say that no single group of traffickers exclusively controls the methamphetamine market, because the drug is so prevalent and easy to manufacture. Alcohol consumption also is viewed as a serious problem among young people. The local cultivation of marijuana also has proven a persistent problem in the Boise area, and law enforcement data indicate marijuana possession is the most common juvenile drug-related offense in Boise.

5.3.1 Intervention

In January 1998 a senior representative of the Office of National Drug Control Policy (ONDCP) kicked off the Media Campaign. Phase I of the Media Campaign used existing ads available through PDFA, including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Boise received several paid ads and PSAs. Youth, teen, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-3 presents those ads and PSAs for Boise that were included in the survey instruments.

The paid Campaign ads for Boise focused on the following drugs: marijuana, drugs in general, heroin, and methamphetamine. Only one of the paid advertisements that was directed at youth was included in the survey instrument—*Long Way Home. 911, Alex Straight A's, Frying Pan, and Layla* were the paid ads directed at teens, and *Burbs, Girl Interview, and O'Connor* were paid ads directed at parents and included in the survey instrument.

**Exhibit 5-1
Awareness of Campaign Ads in Boise/Eugene**

Campaign Survey Data		Boise (Target)			Eugene (Comparison)			Overall % Difference
		Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
YOUTH (Response = Yes)								
Paid ads	<i>Long Way Home</i>	38	71	33*	34	37	3	30*
PSAs	<i>Drowning</i>	17	17	0	24	25	1	-1
	<i>Girlfriend</i>	20	23	3	26	20	-6*	9*
	<i>Noses</i>	24	26	2	30	33	3	-1
TEENS (Response = Often)								
Paid ads	<i>911</i>	12	31	19*	5	5	0	19*
	<i>Alex Straight A's</i>	8	35	27*	6	5	-1	28*
	<i>Frying Pan</i>	20	42	22*	9	21	12	10
	<i>Layla</i>	11	9	-2	8	6	-2	0
PSAs	<i>Free Ride</i>	6	3	-3*	4	3	-1	-2
	<i>Rite of Passage</i>	8	8	0	5	5	0	0
PARENTS (Response = Often)								
Paid ads	<i>Burbs</i>	23	28	5	13	17	4	1
	<i>Girl Interview</i>	2	24	22*	3	7	4**	18*
	<i>O'Connor</i>	46	52	6	13	15	2	4
PSAs	<i>Deal</i>	13	18	5	10	14	4	1
	<i>Under Your Nose</i>	4	5	1	3	5	2	-1

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.3.2 Survey Findings

- The percent of Boise youth that reported learning about the negative effects of drugs from television ads increased significantly from baseline to followup.
- The percent of Boise youth that recalled “often” seeing the one paid Campaign ad included in the survey directed toward youth, *Long Way Home*, increased significantly.
- After Phase I of the Media Campaign, the percent of Boise youth that reported that methamphetamine, cocaine, and heroin were dangerous increased at statistically significant levels.
- At followup, the percent increase of Boise teens that reported seeing the ads *911* and *Alex Straight A's* “often” were statistically significant when compared with recognition of the ads among Eugene teens. In addition, the percent of Boise teens that recalled seeing the paid Campaign ad *Frying Pan* “often” or “a few times” increased to a statistically significant degree within-site.
- Survey data show that a statistically significant percent of Boise parents recalled seeing *Girl Interview* “often”, compared to Eugene parents. And the percent of Boise parents that recalled seeing *Burbs* and *O'Connor* increased as well but not to a statistically significant level.

- The percent of parents that reported seeing *Burbs* “often” or “a few times” increased to a statistically significant degree from baseline to followup in Boise.

The data presented in this section focus on findings reported by youth, teens, and parents surveyed in the Boise metropolitan area and the Eugene, Oregon, comparison community before and near the end of the Phase I Media Campaign. Surveys for youth and teens were administered in schools, while the parent survey was conducted over the telephone. Findings are presented for survey questions where significant differences between the two communities were identified. Data collected from focus groups and community respondent interviews are presented to support reliable interpretation of the survey data (media monitoring data were not available).

An intervening variable in Boise that may have influenced the study findings was the existence of a family responsibility and anti-drug media campaign called Community In Action—Enough Is Enough. This campaign was initiated in 1997 through a partnership between a local television station and the Boise Mayor’s Office. The program targeted 7th–12th graders and was designed to stimulate community activism and raise community consciousness of drug-related issues. A week-long visit in April 1997, including a rally at the Boise State Pavilion, by inspirational speaker Milton Creagh was the foundation of the campaign. Also as part of this campaign, the local NBC affiliate aired five prime time, commercial-free broadcasts on the hazards of drugs. These broadcasts reached more than 250,000 viewers. A second motivational rally took place in April 1998.

5.3.2.1 Youth

Only one of the paid Campaign ads directed toward Boise youth, *Long Way Home*, was included in the survey instrument. The other youth ads included in the survey—*Drowning*, *Girlfriend*, and *Noses*—aired as PSAs. When youth were asked on the survey where they learned information about drugs, the percent of Boise youth that reported learning about the negative effects of drugs from television ads increased from 32 percent to 41 percent from baseline to followup. This increase is statistically significant when compared with the decrease among Eugene youth, from 41 percent to 37 percent.

Over the same period, Exhibit 5-3 above clearly indicates an increase in the percent of Boise youth that recalled “often” seeing the one paid Campaign ad directed toward Boise youth, *Long Way Home*. In fact, the increase from baseline to followup was statistically significant, rising from 38 percent to 71 percent, compared to only a slight increase among Eugene youth from 34 percent to 37 percent. The media buying plan estimates that the ad was purchased to air 19 times during prime viewing hours for youth. As expected, youth recognition of two other PSAs directed at youth, *Drowning* and *Noses*, remained constant and low.

Local key community informants report that methamphetamines are one of the most serious drugs used by young people in the Boise metropolitan area.

Following Phase I of the Media Campaign, survey findings clearly indicate that the percent of Boise youth that find methamphetamine use to be dangerous increased substantially, from 49 percent of those surveyed at baseline to 73 percent at followup. This is statistically significant when compared to Eugene youth (from 43% to 46 %).

Similarly, focus group discussions with Boise youth indicate that youth learn of the dangers of methamphetamine use from ads they see on television. In fact, center-city and non-center city focus group youth in Boise were aware of many anti-drug ads on television, were able to name them, and understood their messages. What is more, Boise youth focus groups report that the anti-drug ads they see on TV encourage them never to use drugs. Lastly, survey data show that, compared to the baseline period, after Phase I of the Media Campaign, a statistically significant percent of Boise youth responded that using cocaine (increased from 82 % to 91 %) and heroin (increased from 72 % to 83 %) was dangerous.

5.3.2.2 **Teens**

Results for four of the paid Campaign ads directed toward Boise teens—*911*, *Alex Straight A's*, *Frying Pan*, and *Layla*—are provided below. Survey data clearly show increases in recognition of three of the four paid ads. Increases from baseline to followup in the percentage of Boise teens that reported seeing the ads *911* and *Alex Straight A's* “often” were statistically significant when compared with recognition of the ads among Eugene teens. In addition, the percent of Boise teens that recalled seeing the paid Campaign ad *Frying Pan* “often” or “a few times” increased to a statistically significant degree within-site, increasing from 20 percent at baseline to 42 percent at followup.

Survey data show that the percentage of youth that recalled the three aforementioned paid Campaign ads was substantially greater when teens were asked if they had seen the ads “often” or “a few times”. In fact, Boise teen recognition of *Alex Straight A's* increased from 44 percent to 77 percent, while the percent of Eugene teens that recognized the ad increased only slightly, from 30 percent to 35 percent. Similarly, Boise teen recall of *911* increased from 34 percent to 66 percent, compared with recognition among Eugene teens, which fell from 24 percent to 19 percent. And Boise teen recall of *Frying Pan* increased from 46 percent to 82 percent, while increasing to a lesser degree in Eugene from 38 percent to 49 percent. The media buy data support the findings of increased awareness. *911* and *Alex Straight A's* aired the most frequently of these ads at 105 and 61 times, respectively. In addition, *Frying Pan* was purchased to air 29 times during prime viewing hours to achieve 200 GRPs, compared to almost 500 for *911* and 460 for *Alex Straight A's*.

Teen focus group participants in Boise were vocal in their reaction to the Media Campaign ads. Middle and high school participants in Boise said, “even if you are already doing drugs, the ads will make you think” and that every time you see an ad, “it will have a deeper impact.”

5.3.2.3 Parents

Of the five Campaign ads targeting parents and included on the parent survey instrument, three aired as paid ads: *Burbs*, *Girl Interview*, and *O'Connor*. Parents were asked how often they had seen or heard ads telling them about the risks of drugs. From baseline to followup, the percentage of Boise parents that said they had seen or heard ads on TV “almost every day” or “more often” doubled from 24 percent to 50 percent. This percent change was statistically significant when compared to the slight increase among Eugene parents, from 18 percent to 23 percent. It should be noted that, although TV was not the primary medium used to reach parents, media buy data indicate that adults not only were exposed to ads targeted to adults but also to ads targeted to youth and teens.

With regard to the effectiveness of the anti-drug ads they had seen, a statistically significant percentage of Boise parents responded that the ads they saw on TV made them aware that America’s drug problem is something that all families should be concerned about. In fact, from baseline to followup positive responses to this question increased (from 63% to 74%), compared to a slight decline among Eugene parents (from 58% to 56%).

Of the three paid Campaign ads that were directed toward parents in Boise—*Girl Interview*, *O'Connor*, and *Burbs*—survey data show that a statistically significant percentage of Boise parents recalled seeing *Girl Interview* “often”, compared to Eugene parents. Exhibit 5-3 clearly shows the percentage of Boise parents that reported “often” seeing *Girl Interview* increased substantially from baseline to followup (from 2% to 24%), compared to a much smaller increase among Eugene parents (from 3% to 7%). However, media buy data indicate this ad was only scheduled to air once as a paid ad; thus, this ad likely aired with much greater frequency as a part of the pro bono match requirement.

Moreover, the percentage of parents that reported seeing *Burbs* “often” or “a few times” increased to a statistically significant degree from baseline to followup in Boise (from 57% to 73%). *Burbs* was scheduled to run 11 times as a paid ad in Boise, the most of paid adult-targeted ads. In addition, the percentage of Boise parents that recalled seeing *O'Connor* increased but not to a statistically significant level. As expected, during the intervention period the percentage of Boise parents that reported seeing the ads *Deal* and *Under Your Nose*, which aired as PSAs in the target site, was far lower than for the paid Campaign ads.

Finally, non-center city focus group parents in Boise recalled televised local anti-drug ads as well as Media Campaign ads. Non-center city focus group parents in Boise reported that the ads provided information along with an opportunity to talk to their children about drug use. These parents believed the ads were effective and should be used in conjunction with family- and school-based education. Similarly, youth influencers (adult mentors) also reported that the anti-drug messages provided them with an opportunity to talk to the children they worked with.

5.3.3 Community Impact

In support of Phase I of the Media Campaign, the local Regional Alcohol Drug Awareness Resources (RADAR) center posted a toll-free telephone number on its Web site. The local representative from Parents and Youth Against Drug Abuse (PAYADA) sent speakers into the schools to prepare school counselors and administrators for the Media Campaign, and to make sure that printed information pertaining to drugs was available and being distributed in the schools.

In June 1998 the Partnership for a Drug-Free America presented a preview via satellite of its newest anti-methamphetamine TV and radio advertisements. This presentation was held at an Idaho National Guard facility and included presentations from local law enforcement officials. In attendance were 22 participants from agencies that serve juveniles, private practice substance abuse treatment providers, and grass-roots anti-drug groups. These participants saw a video presentation of the latest ONDCP/PDFA television and radio ads. The Media Campaign presentation provided representatives of public and private organizations and agencies from different fields a chance to network with one another. Three local television stations covered the event, and one station aired one of the ads as part of an evening news story about the Media Campaign.

5.3.4 Summary of Findings

Survey data show that awareness of the anti-drug message increased in the target site following Phase I of the Media Campaign. For example, the percentage of Boise youth that reported learning about the negative effects of drugs from television ads increased significantly from baseline to followup from 32 percent of those surveyed to 41 percent. More specifically, the percent of Boise youth that recalled "often" seeing the one paid Campaign ad included in the survey directed toward Boise youth, *Long Way Home*, rose significantly from 38 percent to 71 percent. In addition, from baseline to followup, the percentage of Boise youth that reported that methamphetamine, cocaine, and heroin use were dangerous increased to statistically significant degrees.

With respect to the paid Campaign ads directed toward teens, at followup, the percentage of Boise teens that reported seeing the ads *911 and Alex Straight A's* "often" was statistically significant when compared with recognition of the ads among Eugene teens. In addition, the percentage of Boise teens that recalled seeing the paid Campaign ad *Frying Pan* "often" or "a few times" increased to a statistically significant degree within-site.

Furthermore, survey data show that a statistically significant percentage of Boise parents recalled seeing *Girl Interview* "often", compared to Eugene parents. In addition, the percentage of parents that reported seeing *Burbs* "often" or "a few times" increased to a statistically significant degree from baseline to followup in Boise (from 57 % to 73 %). The percentage of Boise parents that recalled seeing *O'Connor* increased but not to a statistically significant level. Finally, Boise parents reported that the Media Campaign ads were effective because the ads made them aware that America's drug problem is something about which all

families should be concerned. And non-center city focus group parents and youth influencers stated that the ads provided an opportunity for them to talk with youth about drug use.

Therefore, parents, youth, and teens in Boise were clearly aware of the paid ONDCP Media Campaign. In addition to recognizing the ads directed toward them, the three groups became much more aware of the dangers and risks of illegal drugs from these ads. Lastly, the Media Campaign also affected the community as indicated by outreach activities in the schools and a PDFA ad preview event in June 1998, which brought together a wide range of public- and private-sector organizations.

5.4 DENVER

Denver is the capital of Colorado and the largest city in the Rocky Mountain area. The Denver metropolitan area includes the city and county of Denver, Adams County to the north and east of Denver, Arapahoe County to the east and south, Jefferson County to the west, and Douglas County to the south and west. These counties stretch from the east slope of the Rocky Mountains into the Great Plains and encompass the urban center, industrial areas, affluent suburbs, and rural expanses. The total population of 1,622,980 is approximately 80 percent white, 12 percent Hispanic, 5 percent African American, 2 percent Asian, and less than 1 percent American Indian. About 18 percent of the population is between the ages of 5 and 17, and 13.4 percent of children under 18 live below the poverty level.

Denver is recognized as the center of drug distribution activities for the Rocky Mountain region. Colorado, Utah, and Wyoming have been designated a High Intensity Drug Trafficking Area (HIDTA). Marijuana, methamphetamine, cocaine, crack-cocaine, and heroin come into Denver from Mexico via the Southwest Border States and California. Marijuana is grown throughout Colorado, and the sparsely populated areas in the State are a haven for methamphetamine labs. Reports from the Community Epidemiology Work Group (CEWG) indicate that methamphetamine use increased steadily in Denver from 1992 to 1997, and also that cocaine and marijuana were the predominant drugs of abuse from 1991 to 1995, as measured by drug treatment admissions. Key informants report that the drugs of choice among teens are marijuana, alcohol, and tobacco.

5.4.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Denver on January 20, 1998, with the Substance Abuse and Mental Health Services Administration (SAMHSA) administrator, and representatives from the offices of U.S. Senator Ben Nighthorse Campbell and the mayor of Denver. Phase I used existing ads available through the Partnership for a Drug Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A.

Denver received several paid TV ads and PSAs. Youth, teens, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-4 presents those paid ads and PSAs that were included in the survey instruments. The subset of paid campaign ads for Denver focused on the following drugs: drugs in general (43.9%), marijuana (40%), methamphetamine (10.1%), and heroin (6%). One paid advertisement included in the survey, *Long Way Home*, was directed at youth. *911*, *Alex Straight A's*, *Frying Pan*, *Layla*, and *Rite of Passage* were the paid ads directed at teens. *Burbs*, *Girl Interview*, and *O'Connor*, and were among the paid ads directed at parents. PSAs, included, but were not limited to, *Free Ride* for teens and *Deal* and *Under Your Nose* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in Denver/Austin¹**

Campaign Survey Data	Denver (Target)			Austin/Albuquerque (Comparison)			Overall % Difference
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
YOUTH (Response = Yes)							
(Austin)							
Paid ads <i>Long Way Home</i>	46	78	32*	28	25	-3	35*
PSAs <i>Drowning</i>	27	22	-5	27	26	-1	-4
<i>Girlfriend</i>	22	34	12**	21	18	-3	15*
<i>Noses</i>	36	42	6	29	28	-1	7
TEENS (Response = Often)							
(Austin)							
Paid ads <i>911</i>	11	36	25*	5	7	2	23*
<i>Alex Straight A's</i>	5	37	32*	5	6	1	31*
<i>Frying Pan</i>	11	47	36*	11	11	0	36*
<i>Layla</i>	8	22	14*	8	8	0	14*
<i>Rite of Passage</i>	7	29	22*	7	6	-1	23*
PSAs <i>Free Ride</i>	4	7	3	4	4	0	3*
PARENTS (Response = Often)							
(Albuquerque)							
Paid ads <i>Burbs</i>	13	22	9**	14	14	0	9
<i>Girl Interview</i>	6	13	7*	3	2	-1	8*
<i>O'Connor</i>	20	20	0	13	16	3	-3
PSAs <i>Deal</i>	15	12	-3	12	11	-1	-2
<i>Under Your Nose</i>	4	9	5**	5	5	0	5

* Significant difference at the 95% confidence level.
 ** Significant difference at the 90% confidence level.

¹Austin replaces the comparison site of Albuquerque for youth and teen data; Albuquerque serves as the comparison site for parents because parent surveys were completed in that site (see Chapter 2).

Note: Additional paid ads aired via cable and Channel One.

5.4.2 Survey Findings

- Survey data show statistically significant differences in the percent of Denver youth compared to Austin youth from baseline to comparison that report seeing or hearing messages from the TV about the negative effects of using drugs.
- Survey data show a cross-site statistically significant increase from baseline to followup among Denver youth that reported “often” seeing the one paid Campaign ad directed toward youth—*Long Way Home*.
- Survey data show cross-site statistically significant increases from baseline to followup among Denver teens that reported “often” seeing all five paid Campaign ads directed at teens—*Frying Pan, Alex Straight A's, 911, Rite of Passage, and Layla*.
- Survey data show a cross-site statistically significant increase from baseline to followup among Denver parents that reported “often” seeing one paid Campaign ad—*Girl Interview*.

- Survey data show a within-site statistically significant increase from baseline to followup among Denver parents that reported “often” seeing the paid Campaign ad, *Burbs*.

The comparison site selected for Denver was Albuquerque, New Mexico, where telephone surveys were conducted with a sample of parents. Because not enough schools were available for conducting surveys of youth and teens, Austin, Texas was selected as a substitute comparison site for those age groups. Both Albuquerque and Austin are comparable to Denver in demographic and community characteristics.

Surveys were administered to youth, teens, and parents before and near the end of the Media Campaign in the Denver target site and in the Albuquerque and Austin comparison sites. This section compares survey results for youth and teens in Denver and Austin and for parents in Denver and Albuquerque. The results presented focus on differences that are statistically significant. Media monitoring and focus group data also are presented to support reliable interpretation of the survey data.

Survey findings in Denver may have been affected by a second media campaign. In 1997 the Colorado Trust funded a 5-year, \$10 million project with the Minneapolis-based Search Institute to operate Assets for Colorado Youth. That project supports communities in their implementation of the Institute’s Asset Building Model. Assets for Colorado Youth launched a media campaign in January 1998 that began with radio spots and advertisements in the *Rocky Mountain News*. The 3-year public awareness campaign will include television spots, outdoor billboards, and bus bench and movie theater advertisements—all spotlighting assets for positive youth development.

5.4.2.1 Youth

Long Way Home was the only paid Campaign ad on the survey instrument directed toward Denver youth. Survey data clearly indicate increased awareness among target site youth in Denver with respect to learning about the anti-drug message from television. For instance, in response to the question “do you ever see/hear messages that say drugs are bad on TV,” 95 percent of the Denver youth surveyed at followup responded “yes,” compared with 85 percent at baseline. Although the positive response rate in Austin was comparable to that for Denver at baseline (84%), it was unchanged at followup; thus the 10-percent increase in Denver is statistically significant across sites.

In line with these findings, exhibit 5-4 above shows statistically significant differences in youth awareness of the one paid Campaign ads directed at youth in Denver—*Long Way Home*. In fact, target site youth recognition of *Long Way Home* increased substantially from 46 percent at baseline to 78 percent at followup in Denver, compared with a decline from 28 percent to 25 percent in Austin. Media monitoring suggest that the time of day during which the paid ad aired contributed to the statistically significant increase in awareness. For example, the percentage of times *Long Way Home* aired during hours when youth

were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.) increased from 6 percent at baseline to 63 percent during the intervention period. According to the media buy plan, the ad was scheduled to air 33 times as a paid ad for a total of 197 GRPs.

Other anti-drug PSA ads directed at youth in the Denver included *Drowning*, *Girlfriend*, and *Noses*. Although the percent difference between the target site youth in Denver and the comparison site youth in Austin with respect to seeing the ad *Girlfriend* “often” was statistically significant, the difference was less than half as great as the difference in recognition of the paid ad *Long Way Home* (a 15% increase compared to a 35% difference). As expected, the difference in recall of *Noses* was less dramatic (from 36% to 42% in Denver and from 29% to 28% in Austin). Lastly, recollection of the remaining PSA mentioned in the survey, *Drowning*, decreased in both sites (from 27% to 23% in Denver and from 27% to 26% in Austin).

5.4.2.2 **Teens**

Five paid Campaign ads, included in the survey instrument, were directed toward Denver teens—*911*, *Alex Straight A’s*, *Frying Pan*, *Layla*, and *Rite of Passage*. In addition, *Free Ride* was one of the PSAs directed toward teens. Survey data suggest that the Media Campaign had a significant impact on teens in Denver. For example, from the baseline to intervention period, between the target site youth in Denver and the comparison site youth in Austin, survey data indicate a substantial change in the percentage of teens that learned “a lot” about the risks of drugs from TV commercials. In fact, the percentage of teens in Denver that “learned a lot” about the risks and dangers of drugs from TV increased to a statistically significant degree—from 15 percent at baseline to 23 percent at followup, compared with a decrease from 19 percent to 12 percent in Austin.

Furthermore, survey data suggest that this increase in teen awareness of the risks of using drugs may be attributed to the paid Campaign. For example, when teens were asked if they had seen paid Campaign TV ads “often”, the data show statistically significant differences with respect to awareness of all five of the ads directed at teens—*Frying Pan*, *Alex Straight A’s*, *911*, *Rite of Passage*, and *Layla*. Likewise, increases in teen awareness of the five paid ads show even greater statistical significance for the percentage of teens that report ever seeing the paid ads (response: “often” or “a few times”).

Indeed, the percent of teens that reported seeing the paid ads “often” or “a few times” increased in the target site for *Frying Pan* from 42 percent to 79 percent, *Alex Straight A’s* from 28 percent to 71 percent, *911* from 35 percent to 68 percent, *Rite of Passage* from 33 percent to 56 percent, and *Layla* 43 percent to 60 percent. At the same time, recall of these ads remained relatively low and constant in the comparison site. It is also worth noting that teen recall of *Free Ride*, which aired as a PSA in the target site, remained constant from baseline to intervention (from 21 % to 25 %).

Media monitoring data further explain the dramatic increases in target site recollection of all five paid Campaign ads directed at teens. For example, in Denver four of the five paid ads—*Frying Pan*, *Alex Straight A's*, *Rite of Passage*, and *Layla*—aired 50 percent of the time during hours when teens were most likely watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). The media buy data indicate that among these ads, *Alex Straight A's* reached the greatest share of teens, achieving 333 GRPs from the 51 times it aired as a paid ad. The number of airings and GRPs for *Frying Pan*, *Layla*, and *Rite of Passage* were 33 times for 224 GRPs, 36 times for 181 GRPs, and 30 times for 193 GRPs, respectively. Although media monitoring data indicate *911* aired more than any other paid ad in Denver, the media buy data estimate the ad aired 17 times. (It should be noted that the media monitoring data include the number of times the ad aired as a paid ad and as a PSA as part of the pro bono component.)

Focus group data further support survey and media monitoring findings. Specifically, Denver teens reported seeing *Alex Straight A's*, *911*, *Layla*, and *Frying Pan*. Moreover, *Frying Pan* was the TV ad recalled most frequently by members of all teen focus groups (middle school and high school students in center city and non-center city locales). Opinions of the ads and their effectiveness varied, but three boys in the center city high school focus group reported that the paid Campaign ad, *911*, was “scary” and convinced them not to use methamphetamine.

5.4.2.3 Parents

Parent survey data from Denver are compared with parent survey data from Albuquerque. Three paid Campaign ads were directed toward Denver parents—*Burbs*, *Girl Interview*, and *O'Connor*. Survey data suggest that the Media Campaign had a significant impact on Denver parents. For example, from the baseline to intervention period, the target and comparison site survey data indicate a significant change in the percent of Denver parents that learned “a lot” about the risks of drugs from TV commercials. In fact, the percent of parents that saw TV ads “every day or almost every day” or “more than once a day” focusing on the risks of drugs increased to a statistically significant degree—from 21 percent at baseline to 38 percent at followup, while remaining constant at about 25 percent in Albuquerque.

With respect to Denver parents’ recall of the paid Campaign ads directed toward them, a statistically significant percent of Denver parents from baseline to followup reported seeing the paid ad, *Girl Interview* “often” compared to Albuquerque parents. Moreover, although parent recollection of the paid ad *Burbs* did not increase to a statistically significant degree across sites, from baseline to followup, survey data indicate a statistically significant within-site increase in the percent of Denver parents that saw the paid ad *Burbs* “often”.

Media monitoring data suggest why parent recall of the third paid ad, *O'Connor*, did not increase to a statistically significant degree either across sites or within site. First, at baseline in Denver parent awareness of *O'Connor* was the highest of

the three paid ads. In fact, during the baseline period *O'Connor* aired in the target site 12.3 times a month (3.1 times a week). And second, nearly half of the times *O'Connor* aired as a PSA in the comparison site it aired during prime time. Lastly, as expected, parent recall of the two PSAs targeted at Denver parents, *Deal* and *Under Your Nose*, did not increase to a statistically significant degree across sites.

5.4.3 Community Impact

The concurrent media campaign launched in January 1998 by Assets for Colorado Youth may have affected survey responses. A second factor also may have influenced the impact of the Media Campaign in the Denver community. Since the so-called "Summer of Violence" in 1993, the city of Denver has institutionalized prevention programs within its government structure. The Safe City Office, the District Attorney's Office, the Denver Juvenile Justice Integrated Treatment Network, and the Denver Housing Authority all operate primary or secondary prevention programs. The Safe City Office coordinates the SafeNite Curfew Program, administers the Mayor's Summer Youth Program, and sponsors the annual Safe City Youth Summit, conducted by the Colorado office of Youth Power (formerly Just Say No). The Safe City Office also administers \$1 million in grants to other prevention programs in Denver. The most recent prevention effort in Denver not directly related to the Media Campaign was the formation of the Commission to Develop a Drug Control Strategy in the spring of 1998. The Commission includes representatives from the mayor's office, the district attorney's office, law enforcement agencies, and prevention and treatment providers. The Denver Drug Control Strategy is to be modeled on ONDCP's annual National Drug Control Strategy.

Notwithstanding that level of established prevention programs, the impact of the Media Campaign on the community can be measured by responses to the ads, as monitored by the two local sponsors. The Colorado Prevention Resource Center generally received calls the same day an anti-drug ad appeared in the newspaper. *The Power of a Grandmother* reportedly has drawn the most response, with several calls asking if it is available as a poster. The Connecting Colorado Prevention Coalition also received calls, some of which were protests from those who are pro-marijuana. The project director for Connecting Colorado reported that additional local drug prevention activity was expected during Phase III of the Media Campaign.

5.4.4 Summary of Findings

Survey data from Denver and its two comparison sites show increases in awareness of the anti-drug message on television across all three age groups in Denver (youth, teen, and parents) following Phase I of the Media Campaign. In fact, the percentage of youth that reported seeing messages that "drugs are bad" increased in Denver from 85 percent at baseline to 95 percent of those surveyed at followup. In addition, teens in Denver that "learned a lot" about the risks of drugs from TV commercials increased from 15 percent to 23 percent. And parents that

reported seeing or hearing TV ads telling them about the risks of drugs increased from baseline to followup from 21 percent to 38 percent.

Moreover, survey data show statistically significant increases in youth, teen, and parent awareness of specific paid Campaign ads. For example, the data indicate increased youth awareness in Denver of the one paid Campaign ad directed towards youth, *Long Way Home*. Survey data also show statistically significant differences in teen awareness of all five paid Campaign ads directed at teens—*Frying Pan*, *Alex Straight A's*, *911*, *Rite of Passage*, and *Layla*. Lastly, survey data indicate a statistically significant increase in Denver parents' awareness in two of the three paid Campaign ads directed toward them—*Girl Interview* and *Burbs*. These findings strongly suggest that the frequency and placement of anti-drug advertising heighten awareness of the anti-drug message.

5.5 HARTFORD

Hartford is the capital of Connecticut and is located in the central part of the State. It is a medium-sized city of 1,123,678 residents. In the metropolitan area, 86.3 percent of residents are white, 8.4 percent are African American, and 6.6 percent are Hispanic. Hispanics compose the largest ethnic group of center city residents, at 23 percent. Rural and non-center city communities that surround Hartford are characterized by strong economic, social, and educational institutions, while economic opportunity within the center city is declining. Hartford's annual crime rate is 482 per 100,000 residents and the unemployment rate is 4.8 percent. The percentage of the population between the ages of 5 and 17 is 15.7 percent, with 11.4 percent of children under 18 living below the poverty level.

Youth drug use is a significant problem in the greater Hartford area, as indicated by the increasing rate of juvenile drug-related crime and associated gang activity. Arrests for drug offenses for people under age 21 have increased since the early 1990s. More youth are selling drugs, including hard drugs such as heroin and crack. Temporary correctional facilities are insufficient for the number of juvenile arrests; in response, Hartford has imposed a curfew of 9:00 p.m. in an effort to keep youth off the streets. The most commonly used substances in Hartford are alcohol and marijuana. A 1997 Connecticut Department of Mental Health and Addiction Services study found that 45 percent of 7th–12th graders in the greater Hartford area admitted using alcohol and 28 percent admitted having used marijuana.

In 1981, Connecticut legitimized the medical use of marijuana for patients with glaucoma and as a treatment for nausea and other side effects of chemotherapy.

5.5.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Hartford on January 26, 1998. Phase I used existing ads available through the Partnership for a Drug-Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Hartford received several paid television Campaign ads and PSAs. Youth, teens, and parents were surveyed about their awareness on a subset of these ads. Exhibit 5-5 presents those paid Campaign ads and PSAs for Hartford that were included in the survey instruments.

The subset of paid Campaign ads for Hartford focused on the following drugs: inhalants (40.4%), drugs in general (29.9%), marijuana (13.9%), crack (8.0%), and heroin (7.7%). The paid advertisements directed at youth included *Girlfriend*, *Long Way Home*, *Drowning*, and *Noses*, the latter two airing in both English and Spanish. *Alex Straight A's*, *Frying Pan*, *Layla*, and *Rite of Passage* were the paid ads directed at teens, with *Rite of Passage* broadcast in both English and Spanish. *Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose* were the paid ads directed at parents, with *Under Your Nose* airing in both English and Spanish. PSA ads

included *911* and *Free Ride* for teens, and *Burbs* for parents. These 12 paid ads collectively were shown an average of 212.2 times a month in Hartford during Phase 1.

**Exhibit 5-1
Awareness of Campaign Ads in Hartford/Nashville¹**

Campaign Survey Data	Hartford (Target)			Nashville/Harrisburg (Comparison)			Overall % Difference
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
YOUTH (Response = Yes)							
				(Nashville)			
Paid ads							
<i>Drowning</i>	20	67	47*	25	29	4	43*
<i>Girlfriend</i>	22	42	20*	29	32	3	17*
<i>Long Way Home</i>	46	62	16*	62	52	-10**	26*
<i>Noses</i>	30	56	26*	35	40	5	21*
TEENS (Response = Often)							
				(Nashville)			
Paid ads							
<i>Alex Straight A's</i>	8	36	28*	7	6	-1	29*
<i>Frying Pan</i>	16	66	50*	18	15	-3	53*
<i>Layla</i>	13	20	7	10	11	1	6
<i>Rite of Passage</i>	11	20	9*	8	7	-1	10**
PSAs							
<i>911</i>	10	3	-7**	6	9	3	-10**
<i>Free Ride</i>	10	5	-5**	5	6	1	-6
PARENTS (Response = Often)							
				(Harrisburg)			
Paid ads							
<i>Deal</i>	19	22	3	16	16	0	3
<i>Girl Interview</i>	4	14	10*	4	6	2	8*
<i>O'Connor</i>	24	36	12*	16	11	-5	17*
<i>Under Your Nose</i>	2	9	7*	4	6	2	5
PSAs							
<i>Burbs</i>	12	19	7**	11	25	14*	-7

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

¹Nashville replaces the comparison site of Harrisburg for youth and teen data; Harrisburg serves as the comparison site for parents because parent surveys were completed in that site (see Chapter 2).

Note: Additional paid ads aired via cable and Channel One.

5.5.2 Survey Findings

- Survey data show statistically significant increases from baseline to followup in the percentage of Hartford youth, compared to Nashville youth, that reported “often” seeing all four paid Campaign ads directed at youth—*Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*.
- Survey data show statistically significant increases from baseline to followup in the percentage of Hartford teens, compared to Nashville teens, that reported “often” seeing three of the four paid Campaign ads directed at teens—*Alex Straight A's*, *Frying Pan*, and *Rite of Passage*.
- Survey data show statistically significant increases from baseline to followup in the percentage of Hartford parents, compared to Nashville parents, that reported “often” seeing two of the four paid Campaign ads directed at parents—*Girl Interview* and *O'Connor*.

- Survey data show statistically significant increases from baseline to followup in Hartford parents' awareness of three of the four paid Campaign ads directed at them—*Girl Interview*, *O'Connor*, and *Under Your Nose*.

The comparison site selected for Hartford was Harrisburg, Pennsylvania, where telephone surveys were conducted with a sample of parents. Because not enough schools were available for conducting surveys of youth and teens, Nashville, Tennessee was selected as a substitute comparison site for those age groups.

The data presented in this section focus on findings reported by youth, teens, and parents surveyed in the Hartford target community as well as in the Nashville and Harrisburg comparison communities (Nashville for youth and teen surveys and Harrisburg for parent surveys and site visit results). The findings presented below are those for which there are statistically significant differences between the two communities. Data collected from media monitoring and data obtained from focus groups and community respondent interviews conducted during site visits are presented to support reliable interpretation of the survey data.

5.5.2.1 Youth

Survey data indicate that recognition all four paid Campaign TV ads increased significantly from baseline to followup among Hartford youth when compared to Nashville youth. Percent changes in youth recognition of the ads in Hartford and Nashville are as follows: *Noses* (Hartford: 30% to 56%, Nashville 35% to 40%); *Long Way Home* (Hartford: 46% to 62%, Nashville: 62% to 52%); *Drowning* (Hartford: 20% to 67%; Nashville: 25% to 29%), and *Girlfriend* (Hartford: 22% to 42%, Nashville: 29% to 32%).

Media monitoring data indicate that the four paid Campaign ads directed at youth aired much more frequently over time in Hartford compared to Nashville. At baseline, the four ads were not shown at all as a PSA in Hartford and were shown between an average of 0 and 8.7 times monthly in Nashville. During the intervention, however, the average monthly number of times the ads aired increased substantially in the target site (e.g., *Drowning*: 0 to 51.4; *Girlfriend*: 0 to 8.2; *Long Way Home*: 0 to 14.8; and *Noses*: 0 to 27.2). By contrast, the same ads either did not air or the number of times they aired remained relatively constant during the intervention in the comparison site (e.g., *Drowning*: 0 to 0; *Girlfriend*: 1 to 1.2; *Long Way Home*: 8.7 to 11.0; and *Noses*: 0 to 0).

Media monitoring data further support survey findings when analyzing the times of day during which the paid Campaign ads aired. Over a third (35.6%) of the paid ads aired during hours when youth were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). The media buy data indicate these ads were scheduled to air more than 150 times for a total of 776 GRPs, not including the purchases for cable.

Survey data also indicate attitudes toward inhalants changed significantly over time among Hartford youth when compared to Nashville youth. Between the

baseline and followup periods, the percentage of youth in Hartford that said that they agreed “a lot” with the statement, “using inhalants can kill you” increased significantly (56% to 72%). By contrast, recall remained steady among Nashville youth (69% to 70%). Media monitoring data support this finding. Of the total number paid Campaign ads included in the survey that aired, 40.4 percent focused on inhalants (*Drowning*, *Noses* and *Under Your Nose*). What is more, from the baseline to intervention period, average monthly broadcasts of the two anti-inhalant ads directed at youth increased sharply in the target site (*Drowning*: 0 to 51.4; *Noses*: 0 to 27.2). Furthermore, during the same period, these ads did not air at all in the comparison site.

Increased awareness among youth concerning the dangers of inhalant use also may be attributed to the anti-inhalant ad *Under Your Nose*, which was targeted to Hartford parents. From the baseline to intervention periods, broadcasts of *Under Your Nose* increased from a monthly average of 0 to 7.2. In all, Hartford television viewing households were exposed to three different paid Campaign ads that focused specifically on inhalant use. These ads aired an average total of 85.8 times a month or nearly 3 times a day during the intervention period. Discussions with focus group youth further support these findings. Youth reported that they learn about the risks and dangers of drug use from television as well as from their parents and from school.

In addition to an increase in inhalant-specific ads, community-based prevention programs may have had some impact on changes in youth attitudes about inhalants. Concurrent with the Media Campaign, the Capitol Area Substance Abuse Council (CASAC) provided inhalant abuse prevention and awareness training for DARE officers, PTAs, churches, prevention specialists, drug counselors, and youth groups. Additionally, CASAC and Drugs Don’t Work provided inhalant information packages to schools, physicians, and legislators.

5.5.2.2 *Teens*

Survey data show statistically significant increases in awareness of three of the four paid Campaign ads targeted at teens—*Alex Straight A’s*, *Frying Pan*, and *Rite of Passage*—among Hartford teens when compared to Nashville teens. The increase in Hartford teens’ recall of ads from baseline to followup included: *Alex Straight A’s*, from 8 percent to 36 percent; *Frying Pan*, from 16 percent to 66 percent; and *Rite of Passage*, from 11 percent to 20 percent. In Nashville, on the other hand, the percentage of teens recognizing these same ads actually decreased from baseline to followup: *Alex Straight A’s*, 7 percent to 6 percent; *Frying Pan*, 18 percent to 15 percent; and *Rite of Passage*, 8 percent to 7 percent.

Media monitoring data support these findings. The ads *Alex Straight A’s*, *Frying Pan*, and *Rite of Passage* aired with increasing frequency in Hartford from baseline to intervention (*Alex Straight A’s*, monthly average: 0 to 23.8; *Frying Pan*: 0 to 16.4; and *Rite of Passage*: 0.3 to 10.0). However, in Nashville *Alex Straight A’s* and *Frying Pan* did not air in either period; and *Rite of Passage* only aired once at baseline, with less than one broadcast per month. Media buy estimates indicate that *Layla* aired fewer times as a paid ad in Hartford and

achieved less GRPs than any of these four ads. *Alex Straight A's* aired as a paid ad the most frequently at 104 times, for a total of 429 GRPs, followed by *Frying Pan*, which aired 78 times and achieved an estimated 325 GRPs.

Media monitoring data suggest the time of day the three paid Campaign ads aired contributed to the significant difference in ad recognition between Hartford teens and Nashville teens. In the target site, 69.7 percent of *Alex Straight A's* ads aired during hours when teens were most likely to be watching television (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). Similarly, *Frying Pan* and *Rite of Passage* aired during these prime teen viewing periods 61.0 percent and 46.2 percent of the time, respectively.

Two anti-drug PSAs on the teen survey included *911* and *Free Ride*. Not surprisingly, teen recognition of the PSAs either decreased or remained relatively stable from baseline to intervention in all sites. The percentage of teens that recalled seeing *911* decreased from 10 percent at baseline to 3 percent at followup in Hartford and increased only slightly from 6 percent to 9 percent in Nashville. Changes in teen recognition of *Free Ride* followed a similar pattern: 10 percent to 5 percent in Hartford; and 5 percent to 6 percent in Nashville.

5.5.2.3 Parents

In Hartford, parental awareness of anti-drug ads increased in several ways. There was a significantly greater change in the percentage of parents that reported seeing or hearing ads frequently in Hartford. The ads informed them of the risks of drugs either “almost every day or more often” (20% at baseline to 35% at followup). During the same period, the change among parents surveyed in Harrisburg decreased from 19 percent to 14 percent. Media monitoring data indicate similar findings. Indeed, from the baseline to the intervention period the monthly average number of all anti-drug ads that aired increased sharply in Hartford (from 259 to 499.2), while remaining relatively stable in the Harrisburg (from 216 to 245).

Focus group discussions with both the center city and non-center city Hartford parents revealed that they had seen anti-drug ads. These parents agreed that the anti-drug TV ads are aired frequently and reported that they view two or three different ads daily. Non-center city parents reported they see anti-drug TV ads approximately three times per week. In addition, 18 of the 20 community informants who were interviewed recalled having seen or heard anti-drug ads, and 16 of these informants recalled ads by name.

Survey data show statistically significant differences in awareness of two of the four paid Campaign ads included in the survey—*Girl Interview* and *O'Connor*—between Hartford parents and Harrisburg parents. (Media buy data indicate that a total of 5 ads targeting adults were purchased in Hartford, compared to 13 ads for youth and teens.) From the baseline to followup period, parent recall of *Girl Interview* rose from 4 percent to 14 percent in the target site, while increasing only marginally from 4 percent to 6 percent in the comparison site. Recall was

potentially affected by the fact that this was the newest of the PDFA ads used in the Campaign to target adults. Recognition of the ad *O'Connor* increased from 24 percent to 36 percent in Hartford, but fell from 16 percent to 11 percent in Harrisburg. In addition, recognition of one of the two remaining paid ads directed at parents—*Under Your Nose*—increased significantly from baseline to followup (2% to 9%) within Hartford.

Media monitoring data help explain Hartford parents' increased awareness of *Girl Interview*, *O'Connor*, and *Under Your Nose*. In Hartford, the frequency with which *Girl Interview* aired increased dramatically (monthly average: 0.7 to 8.6) and even more dramatically for *O'Connor* (monthly average: 6 to 32.6) from the baseline to intervention period. By contrast, the airings of these ads actually decreased over the same period in Harrisburg, from 1.7 to 1.6 for *Girl Interview*, and 2.0 and 1.8 for *O'Connor*. With respect to the ad *Under Your Nose*, media monitoring data reveal that average monthly broadcasts of the ad rose from 0 at baseline to 7.2 during the intervention in Hartford.

Media monitoring data also explain why awareness of the parent-targeted ad, *Deal*, did not increase significantly in Hartford. While the paid Campaign ad *Deal* aired more frequently from the baseline to intervention period (monthly average: 6.7 to 8.8), it increased at a lower rate than any of the other three ads targeted at Hartford parents. The media buy data indicate this ad was only purchased to air 8 times compared to *O'Connor* and *Under Your Nose*, which were purchased to air 21 and 22 times, respectively.

When parents were surveyed about their perception of the effectiveness of the ads shown during the intervention period, a greater percentage of Hartford parents reported that the ads had made them aware of the risks of drugs compared to parents in Harrisburg. From baseline to followup, the percentage of the Hartford parents who "agreed a lot" that they had become aware of the risks of drugs increased significantly from 43 percent to 58 percent, compared with a decrease from 46 percent to 42 percent of the Harrisburg parents. Focus group discussions among the Hartford parents support these findings. Most of the center city parents agreed that the anti-drug ads have given them "the opportunity to start a conversation." These parents, most of whom were Hispanic, reported having the ads in Spanish and English raises the awareness of parents who speak only one of the two languages. Furthermore, non-center city Hartford parents and most of the key community informants recalled ads that portrayed the risk of drugs, such as *Frying Pan*, along with their messages about the risks of using drugs, such as "doing drugs destroys everything."

Hartford parents also thought the anti-drug ads were effective because they provide new information about drugs. The percentage of parents holding this view increased significantly from 20 percent to 31 percent over time, compared to a decrease from 28 percent to 23 percent in Harrisburg. The center city focus group parents in Harrisburg generally agreed that anti-drug ads could be effective in shaping or modifying individual views regarding the dangers associated with drug use. Some of the parents also said that the ads offered an opportunity to present and explain new information to their children about drugs.

5.5.3 Community Impact

The Connecticut Coalition to Reduce Underage Drinking was formed in response to the Media Campaign. It is composed of local community coalitions and focuses on creating broad-based strategies to improve preexisting school programs and enforcement in addition to other prevention efforts regarding alcohol abuse. Both parents and youth are targeted in this effort. Specific strategies will vary from community to community.

5.5.4 Summary of Findings

After approximately 5 months of exposure to the Media Campaign, all three age groups in Hartford (youth, teens, and parents) reported increased awareness of paid Campaign ads.

Survey data show statistically significant increases in awareness of all four paid Campaign ads directed at Hartford youth: *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. Media monitoring data indicate these four ads were broadcast with increasing frequency in Hartford from the baseline to the intervention periods. In addition, survey data show attitudes toward inhalants changed significantly among Hartford youth. An increased percentage of them agreed “a lot” with the statement that “using inhalants can kill you” (56% to 72%). Media monitoring data strongly support this finding. The data indicate an increased frequency of airing of two inhalant ads in Hartford directed towards youth—*Noses* and *Drowning*—as well as a substantial increase in the total number of Campaign survey ads that focused on inhalants (monthly average: 0 to 85.8). In addition, community-based inhalant prevention and awareness training programs may have contributed to changed attitudes because they occurred concurrently with the Media Campaign.

Survey data show statistically significant increases in the percentage of Hartford teens when compared to Nashville teens that reported “often” seeing three of the four paid Campaign ads directed at teens—*Alex Straight A’s*, *Frying Pan*, and *Rite of Passage*—from baseline to followup. Media monitoring data suggest that the increases in awareness correlate with the high percentage of paid ads aired in prime teen TV viewing hours.

During the Media Campaign, Hartford parents reported seeing anti-drug ads almost every day or more often about the risks of using drugs. Survey data show statistically significant cross-site increases in awareness of two of the four paid Campaign ads directed at parents—*Girl Interview* and *O’Connor*. In addition, survey data show within-site statistically significant increases in Hartford parents’ awareness of three of the four paid Campaign ads—*Girl Interview*, *O’Connor*, and *Under Your Nose*. These ads were broadcast substantially more after the Media Campaign began in Hartford than prior to its inception. Parents indicated that viewing anti-drug ads made them aware of the risks of using drugs. The ads also provided new information about the drug problem. Discussions with focus group parents in Hartford supported these perceptions.

Youth, teens, and parents are clearly aware of the television ads included in the paid Media Campaign sponsored by ONDCP and as a result, appear to be much more aware of the dangers of illegal drug use. An outcome of the Media Campaign is the formation of The Connecticut Coalition to Reduce Underage Drinking.

5.6 HOUSTON

Located in southeastern Texas near the Gulf of Mexico, Houston is the fourth largest city in the Nation and the largest city in Texas, with a population of 3,322,025. In the Houston metropolitan area, 66 percent of residents are white, 21 percent are Hispanic, and 18.4 percent are African American.² Due to its immense size and lack of zoning regulations, Houston's MSA has many small cities within "the city." The city of Houston is divided into wards. African Americans are the primary residents of the third and fifth wards, while Hispanics heavily populate the fourth ward and whites predominate in the non-center city areas. The city's annual crime rate is 856 per 100,000 residents, and 20.2 percent of children under age 18 live below the poverty level. The city's unemployment rate is 6.7 percent, and children between ages 5 and 17 represent 20.9 percent of the population.

Houston is one of the largest seaports in the United States, which makes it a major destination for drug trafficking. Houston's shipping ports, airports, railroad lines, and major interstate highways make it a transshipment point for all types of heroin from around the world. Houston's proximity to Mexico also makes it a dominant transshipment point for Mexican and Colombian cocaine. The Houston international airport is a major port for distribution of drugs into and out of the city. Traffickers transport illicit substances across the U.S.-Mexican border and along the gulf coast into Texas.

The Houston area has a widespread drug use and abuse problem among youth. Substance abuse and experimentation cross ethnic and demographic boundaries. The most common drugs youth use are alcohol, tobacco, marijuana, and inhalants. Of these, alcohol is the most widely used, but marijuana is easily available and its use is increasing.

5.6.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Houston during the third week of January 1998. Phase I used existing ads available through the Partnership for a Drug-Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Houston received several paid television Campaign ads and PSAs. Youth, teens, and parents were surveyed about their awareness on a subset of these ads. Exhibit 5-6 presents those paid Campaign ads and PSAs for Houston that were included in the survey instruments.

The subset of paid Campaign ads for Houston focused on the following drugs: inhalants (30.9%), illegal drugs in general (27.1%), crack (20.2%), marijuana (13.8%), and heroin (8.0%). The paid advertisements directed at youth included *Drowning, Girlfriend, Long Way Home, and Noses. Alex Straight A's, Frying*

² Total is more than 100 percent because some Hispanics are counted in more than one category.

Pan, Layla, and Rite of Passage were the paid ads directed at teens, and *Deal, Girl Interview, O'Connor, and Under Your Nose* were the paid ads directed at parents. These 12 ads collectively aired an average of 157.8 times per month according to media monitoring data.

**Exhibit 5-1
Awareness of Campaign Ads in Houston/Dallas**

Campaign Survey Data	Houston (Target)			Dallas (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)								
Paid ads								
	<i>Drowning</i>	49	58	9	37	38	1	8
	<i>Girlfriend</i>	45	55	10	37	37	0	10
	<i>Long Way Home</i>	72	77	5	37	42	5	0
	<i>Noses</i>	51	55	4	42	44	2	2
TEENS (Response = Often)								
Paid ads								
	<i>Alex Straight A's</i>	17	16	-1	11	9	-2	1
	<i>Frying Pan</i>	35	52	17*	14	14	0	17*
	<i>Layla</i>	17	17	0	19	18	-1	1
	<i>Rite of Passage</i>	16	22	6	10	10	0	6
PSAs								
	<i>911</i>	4	4	0	9	12	3	-3
	<i>Free Ride</i>	7	8	1	9	10	1	0
PARENTS (Response = Often)								
Paid ads								
	<i>Deal</i>	9	27	18*	11	17	6	12*
	<i>Girl Interview</i>	3	7	4	4	5	1	3
	<i>O'Connor</i>	16	23	7	13	20	7**	0
	<i>Under Your Nose</i>	6	11	5	6	9	3	2
PSAs								
	<i>Burbs</i>	10	20	10*	9	14	5	5

* Significant difference at the 95% confidence level.
 ** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.6.2 Survey Findings

- Survey data show increases in youth recognition all four paid Campaign ads from baseline to followup—*Noses, Long Way Home, Drowning, and Girlfriend*—in Houston.
- Survey data show statistically significant increases from baseline to followup among Houston teens that reported “often” seeing the paid Campaign ad, *Frying Pan*.
- Survey data show statistically significant increases from baseline to followup among Houston parents that reported “often” seeing the paid Campaign ad, *Deal*.
- Survey data show statistically significant increases in the percentage of Houston parents that perceived “great risk” in using cocaine/crack, methamphetamines, and marijuana regularly.

- Survey data show statistically significant increases in the percentage of Houston parents that perceived “great risk” in experimenting with methamphetamines and heroin.
- Survey data indicate a statistically significant increase in the percentage of Houston parents that “agreed a lot” that anti-drug ads made them aware of the risks of using drugs.

The data presented in this section focus on findings reported by youth, teens, and parents surveyed in the Houston metropolitan area and the Dallas comparison community. The findings presented below are those for which there are statistically significant differences between the two communities. Data collected from media monitoring and data obtained from focus groups and community respondent interviews conducted during site visits are presented to support reliable interpretation of the survey data.

5.6.2.1 Youth

Following Phase I of the paid Media Campaign, recognition increased among Houston youth for all four paid Campaign ads targeted at them—*Noses*, *Long Way Home*, *Drowning*, and *Girlfriend*. The increases in recall from baseline to followup among Houston youth were: *Drowning*, 49 percent to 58 percent; *Girlfriend*, 45 percent to 55 percent; *Long Way Home*, 72 percent to 77 percent; and *Noses*, 51 percent to 55 percent. The media buy data indicate that *Girlfriend* and *Drowning* aired the most frequently and had the greatest reach of this group of paid ads. *Girlfriend* was purchased to air 42 times and *Drowning* 31 times.

Although recognition of all four paid Campaign ads did not increase to a statistically significant degree between the target and comparison sites, survey data indicate a high level of awareness among youth in Houston at baseline. For example, a substantial percentage of youth reported seeing the ads “often” or “a few times” (*Drowning*, 49%; *Girlfriend*, 45%; *Long Way Home*, 72%; and *Noses*, 51%). Arguably, cross-site significant increases in awareness of the paid ads was mitigated by the fact that nearly half to three-quarters of Houston youth exposed to the four ads prior to the Media Campaign. Thus, it is not surprising that the increases in awareness at followup were not statistically significant. Moreover, high baseline levels of awareness of the paid Campaign ads can be attributed to the fact that the majority of Houston youth baseline surveys were administered after the Media Campaign had begun.

5.6.2.2 Teens

Survey data show that increased recognition of *Frying Pan* among Houston teens was statistically significant when compared with the change in recognition of the same ad among teens in Dallas. The change in recognition from baseline to followup is as follows: Houston, 35 percent to 52 percent; and Dallas, 14 percent

to 14 percent. Media monitoring and media buy data support this finding. The data indicate that the average monthly number of times *Frying Pan* aired in Houston increased from 0 at baseline to 12.6 intervention and that the ad was scheduled to air 42 times as a paid ad. By contrast, the ad was not shown in Dallas.

Survey data show greater percent increases in teen recall of *Alex Straight A's*, *Rite of Passage*, and *Layla* when teens report seeing the ads “often” or “a few times”. For example, the percent of teens that recalled *Alex Straight A's* increased 10 percentage points from 43 percent to 53 percent; likewise *Rite of Passage* increased by 9 percentage points from 38 percent to 47 percent, while remaining constant at 38 percent in Dallas. *Layla* increased only slightly from 45 percent to 46 percent, but decreased in Dallas from 58 percent to 52 percent. Moreover, the remaining ads targeted at Houston teens—*Alex Straight A's*, *Layla*, and *Rite of Passage*—aired during hours that teens were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.) during the intervention: *Alex Straight A's*, 51 percent; *Layla*, 50 percent; and *Rite of Passage*, 41 percent.

5.6.2.3 Parents

Survey findings show that the increased recognition of the paid ad *Deal* among Houston parents was statistically significant when compared with the change in recognition of this ad among Dallas parents. The change in parental recall of *Deal* from baseline to followup is as follows: Houston, 9 percent to 27 percent; and Dallas, 11 percent to 17 percent. This finding is explained partly by the fact that *Deal* aired more than any other ad mentioned on the parent survey. The frequency of broadcasts of this ad in Houston increased greatly from baseline to followup (monthly average: from 0.6 to 23.8) compared with Dallas (monthly average: from 0.3 to 12). *Deal* was also purchased to air more often and with greater reach than the other ads targeting adults. *Deal* is estimated to air 10 times as a paid ad and to achieve 44 GRPs.

In addition, survey findings show within-site increases in recognition among Houston parents who reported having seen ads “often” or “a few times” for three of the four paid Campaign ads targeted at them. The statistically significant increases in recognition of these ads are as follows: *Deal*, 50 percent to 63 percent; *Girl Interview*, 18 percent to 31 percent; and *Under Your Nose*, 30 percent to 47 percent. It should be noted that *Under Your Nose* was scheduled to air later in the evening so that youth would be less likely to be exposed to the ad, the content of which educated adults about inhalants.

When parents were surveyed about their perception of the overall risk in using specific drugs regularly, a significantly higher percentage of Houston parents perceived “great risk” in using cocaine/crack, methamphetamines, and marijuana, compared to parents in Dallas. The changes in parents’ perception of these drugs from baseline to followup are as follows: cocaine/crack (87 % to 92% in Houston, 93% to 88% in Dallas); methamphetamines (84% to 90% in Houston, 92% to 87% in Dallas); and marijuana (81% to 84% in Houston, 87% to 79% in Dallas).

Media monitoring data suggest a correlation between the broadcast frequency of cocaine/crack and marijuana ads and parental perceptions of great risk involved in regular use of these drugs. When examining ads from all sources, ads focusing on cocaine/crack increased at a higher rate in Houston from baseline to intervention (monthly average: from 5 to 56) than in Dallas (monthly average: from 1 to 14.2). In Houston, this translates to nearly two cocaine/crack ads per day. In addition, the increase in Campaign cocaine/crack ads (*Girlfriend* and *Deal*) that aired from baseline through intervention was much higher in Houston (from .7 to 31.8) than in Dallas (from .3 to 12).

Media monitoring data also support survey findings pertaining to marijuana. A higher number of anti-marijuana ads from all sources aired at baseline and during the intervention in the comparison site than in the target site. During the intervention, however, Houston experienced a higher increase in the frequency of these ads (482.8%) than did Dallas (142.2%).

Parents also were asked a question about their perception of the overall risk in trying drugs just once or twice. Houston parents perceived “great risk” in experimenting with two illegal substances. The change in the percentage of Houston parents indicating “great risk” increased significantly from baseline to followup when compared with the change among Dallas parents: methamphetamines (78% to 86% in Houston, 87% to 84% in Dallas); and heroin (86% to 90% in Houston, 93% to 87% in Dallas).

Media monitoring data suggest why the percentage of Houston parents that perceived great risk in trying heroin once or twice increased slightly during the Media Campaign. At baseline the average monthly number of television ads (from all sources) focusing on heroin was 2.3 in Houston and 4.7 in Dallas. However, during the intervention period, the frequency of heroin-focused ads increased markedly in Houston. Heroin ads aired 21.6 times a month, and half of these broadcasts were *Frying Pan* ads. In Dallas only 8.6 anti-heroin ads aired during the same period.

Finally, when asked about the effectiveness of anti-drug ads, Houston parents who “agreed a lot” that the ads had made them aware of the risks of using drugs increased from 45 percent of those surveyed at baseline to 54 percent at followup. This is a statistically significant increase when compared with the decrease, from 49 percent to 44 percent, among Dallas parents.

5.6.3 Community Impact

Houston Crackdown is a division of the Mayor’s Office that coordinates and supports projects in the areas of substance abuse prevention, substance abuse treatment, and law enforcement. Houston Crackdown coordinated the Phase I Media Campaign in Houston. Schools figured prominently in the kick-off event, with students taking part in a general discussion about drugs. The Houston Independent School District videotaped the event for broadcast on community access television and on the school district’s closed-circuit television system.

One of the by-products of the Media Campaign was the heightened role of Houston Crackdown in the anti-drug movement. Community informants recognized the Media Campaign as a project of Houston Crackdown and/or ONDCP. Copies of the Houston Crackdown newsletter featured details about the Media Campaign. Officials of this organization reported they observed parents talking more among themselves and with their children about drug issues as a result of the Media Campaign.

Several nonprofit community-based provider organizations that specifically focus on drugs and alcohol were very cognizant of the Phase I Media Campaign. One of these organizations provided youth participants for the Media Campaign kick-off. Another was asked to preview some of the ads. In addition, a conference called Peace Talks was held in May 1998 in the Gulfton area. At this conference youth were exposed to a series of drug abuse prevention messages. All the Phase I Media Campaign ads were shown at this conference.

5.6.4 Summary of Findings

After approximately 5 months of exposure to the Media Campaign in Houston, teen recognition of the paid Campaign ad *Frying Pan* increased significantly from 35 percent at baseline to 52 percent at followup. Media monitoring data indicate the number of times the ad aired increased over time in Houston.

In addition, survey data indicate that recognition of the paid Campaign ad targeting parents—*Deal*—increased by a statistically significant degree from baseline to followup among Houston parents, when compared to Dallas parents. Media monitoring data indicate it was shown more frequently in Houston than in Dallas.

Houston parents also acquired a greater awareness of the danger involved in using various drugs. The percentage of parents that perceived “great risk” in using cocaine/crack, methamphetamines, and marijuana regularly increased significantly over time compared with parents in the comparison site. This finding appears to be related to an increased frequency of broadcasting crack/cocaine and marijuana ads in Houston. Furthermore, Houston parents perceived great risk in experimenting just once or twice with methamphetamines or heroin. The heroin-related finding appears related to the increased frequency of anti-heroin ads. Finally, in assessing the effectiveness of the ads, Houston parents agreed the ads had made them aware of the risks of using drugs. This finding was reinforced in the focus group discussions with Houston parents.

Teens and parents in Houston clearly were aware of some of the ads included in the ONDCP-sponsored paid Media Campaign. As a result they appeared much more aware of the dangers of illegal drug use. Finally, the Media Campaign affected the community through the efforts of the group that coordinated the Media Campaign in Houston, Houston Crackdown, as well as through the participation of other community-based organizations in Media Campaign and anti-drug activities.

5.7 MILWAUKEE

Located on the banks of Lake Michigan, Milwaukee is a medium-sized city with a population of 1,432,149, of whom 18.6 percent are between ages 5 and 17. In the Greater Milwaukee area, 83 percent of residents are white, 14 percent are African American, and 3 percent are Hispanic. The city's MSA has evolved into two areas: the city, where most of the region's poor and minorities live, and the more affluent Milwaukee County suburbs and the three surrounding counties (Washington, Osaukee, and Waukesha). The city of Milwaukee's annual crime rate is 533 per 100,000 residents, and 19.4 percent of children under age 18 live below the poverty level. The unemployment rate of the city is 5.4 percent.

Milwaukee has always been known for its breweries, which were among the first in the Nation to use bottles and kegs. Today, this industry continues to affect the area. There are numerous neighborhood taverns per capita and a low tax on beer. In addition, beer manufacturers often provide funding for community projects. Beer and wine are reportedly the most commonly used substances by teens. The high alcohol use among teens is closely followed by use of tobacco products and marijuana.

Milwaukee once was a heavy goods trade center with abundant high-paying manufacturing jobs. Today its economy and employment opportunities have shifted to lower paying service jobs. Because of its proximity to Chicago (only 100 miles) and high population movement between the two cities, new drug trends, gang activity, and distribution networks spill over to Milwaukee. Recently Milwaukee was officially designated as a High Intensity Drug Trafficking Area (HIDTA). The HIDTA operations began in early June 1998.

Drug prevalence data for 1997 from Wisconsin's Bureau of Substance Abuse Services indicate that Milwaukee County has the greatest number of adult and youth alcohol and drug abusers among the four counties composing the Milwaukee metropolitan area. Narcotic and drug arrest data for adults and youth in the city of Milwaukee and by county indicate an increase during the past several years. In 1996 in the city of Milwaukee, 50 percent of the adults and 80 percent of the juveniles arrested for possession of drugs had marijuana. In addition, law enforcement officials believe the majority of the serious and petty crimes committed in Milwaukee are connected to the drug trade.

5.7.1 Intervention

Representatives of the Office of National Drug Control Policy (ONDCP) kicked off Phase I of the Media Campaign in Milwaukee on January 13, 1998. Phase I used existing ads available through the Partnership for a Drug Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Milwaukee received several paid TV ads and PSAs. Youth, teens, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-7 presents

those paid ads and PSAs for Milwaukee that were included in the survey instruments.

The subset of paid campaign ads for Milwaukee focused on the following drugs: drugs in general (37.2%), crack (25.3%), heroin (11.1%), inhalants (10.1%), marijuana (9.0%), and methamphetamine (7.4%). Paid advertisements directed at youth included *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. *911*, *Alex Straight A's*, *Free Ride*, and *Frying Pan* were the paid ads directed at teens, and *Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose* were the paid ads directed at parents. PSA ads included *Layla* and *Rite of Passage* for teens, and *Burbs* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in Milwaukee/Nashville**

Campaign Survey Data	Milwaukee (Target)			Nashville (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)								
Paid ads	<i>Drowning</i>	30	44	14*	25	29	4	10
	<i>Girlfriend</i>	34	61	27*	29	32	3	24*
	<i>Long Way Home</i>	37	59	22*	62	52	-10**	32*
	<i>Noses</i>	48	59	11	35	40	5	6
TEENS (Response = Often)								
Paid ads	<i>911</i>	11	27	16*	6	9	3	13*
	<i>Alex Straight A's</i>	10	13	3	7	6	-1	4
	<i>Free Ride</i>	7	10	3	5	6	1	2
	<i>Frying Pan</i>	33	53	20*	18	15	-3	23*
PSAs	<i>Layla</i>	6	7	1	10	11	1	0
	<i>Rite of Passage</i>	7	6	-1	8	7	-1	0
PARENTS (Response = Often)								
Paid ads	<i>Deal</i>	15	22	7**	24	27	3	4
	<i>Girl Interview</i>	1	12	11*	2	4	2	9*
	<i>O'Connor</i>	18	21	3	16	23	7	-4
	<i>Under Your Nose</i>	5	13	8*	9	7	-2	10*
PSAs	<i>Burbs</i>	13	20	7**	16	15	-1	8

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.7.2 Survey Findings

- Survey data indicate a statistically significant increase in the percentage of youth in Milwaukee that report seeing or hearing anti-drug messages on TV.
- Survey data show statistically significant increases in youth that reported “often” seeing three of the four paid Campaign ads targeted Milwaukee youth—*Long Way Home*, *Girlfriend*, and *Drowning*. The percentage increase in awareness of the third ad, *Drowning*, was statistically significant within-site from baseline to followup.
- Survey data indicate statistically significant increases in the percentage of Milwaukee teens that reported “often” seeing two of the four ads directed at teens, *Frying Pan* and *911* compared to Nashville teens. The percent of

Milwaukee youth that recalled the two other ads directed at teens—*Alex Straight A's* and *Free Ride*—increased from baseline to intervention but not to a statistically significant degree.

- Survey data show a statistically significant increase in the percent of parents in Milwaukee that reported seeing or hearing commercials or ads on TV about the risks of drugs “almost every day or more often”.
- Survey data indicate statistically significant increases in awareness of three of the four paid Campaign ads directed toward parents— *Deal*, *Girl Interview*, and *Under Your Nose*.

The data presented in this section focus on findings reported by youth, teens, and parents surveyed in the Milwaukee target community as well as in the Nashville comparison community. The findings presented below focus on statistically significant differences between the two communities. Data from media monitoring and data collected in focus groups and community respondent interviews are presented to support reliable interpretation of the survey data.

5.7.2.1 Youth

The paid Campaign ads included in the survey instrument targeted at Milwaukee youth were *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. Over the course of the intervention, youth in Milwaukee became increasingly aware of particular anti-drug ads. In fact, survey data indicate a statistically significant increase in the percentage of youth in Milwaukee that reported seeing or hearing anti-drug messages on TV (from 85 % at baseline to 91 % at followup). Likewise, Exhibit 5-7 shows that there were statistically significant increases in youth awareness of three of the four paid Campaign ads targeted Milwaukee youth—*Long Way Home*, *Girlfriend*, and *Drowning*. The percent difference between the target site youth in Milwaukee and the comparison site youth in Nashville was statistically significant for two of the three paid ads, *Long Way Home* and *Girlfriend*. The percent increase of the third ad, *Drowning*, was statistically significant within-site from baseline to followup.

Media monitoring data support survey findings and suggest that the average number of times anti-drug ads air and the times of day during which they air correspond to increases in youth recall of the ads. For instance, Milwaukee youth recall of *Long Way Home* increased by 22 percent from baseline to followup from 37 percent to 59 percent, while decreasing among comparison site youth in Nashville from 62 percent to 52 percent. Over the same period, the average number of times that *Long Way Home* aired in the target site as both a paid ad and as a PSA increased from 0 to 12.2 a month (or 3 times a week). The media buy estimates the ad was purchased to air 31 times during prime viewing hours for youth. By contrast, youth recall actually decreased by 10 percent in Nashville due to the fact that nearly half of the times *Long Way Home* aired as a PSA was during the late fringe viewing period (11:30 p.m. - 5:59 a.m.) when youth were least likely be watching TV.

Similarly, as a PSA *Girlfriend* aired in the target site during the baseline period nearly eight times a month (or twice a week), but only 34 percent of youth recalled the ad. During the Campaign intervention, the number of times *Girlfriend* aired doubled to 16 times a month or 4 times a week as a paid ad and as a PSA. The ad was purchased to air 36 times for 184 GRPs indicating the ad aired during hours when youth were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). In turn, 27 percent more youth in Milwaukee recalled the paid ad *Girlfriend* at followup. As exhibit 5-7 shows, the percentage of target site youth recalling the ad increased from 34 percent to 61 percent, while rising only slightly in Nashville from 29 percent to 32 percent.

Survey findings show that Milwaukee youth recall of *Drowning* increased within-site by a statistically significant degree from 30 percent at baseline to 44 percent at followup, while increasing only slightly in the comparison site (from 25 % to 29 %). Media monitoring data provide some explanation of these findings. The average number of times that *Drowning* aired increased from 2 times a month as a PSA in the baseline period to nearly 5 times a month as a paid Campaign ad during the intervention period. Furthermore, about 42 percent of the time *Drowning* aired during hours when youth were most likely watching TV as indicated by the media buy data which estimates the ad aired 31 times as a paid ad and achieved 185 GRPs. Media monitoring data do not show that *Drowning* aired in either the baseline or intervention period in Nashville.

In the intervention period, survey data show that Milwaukee youth recall of the fourth paid ad, *Noses*, increased from 48 percent to 59 percent in Milwaukee, while only increasing from 35 percent to 40 percent in Nashville. Media monitoring data provide some explanation of why this increase does not reflect a statistically significant increase within-site or across sites. *Noses* aired fewer times on average than other Campaign ads targeting Milwaukee youth, airing less than 4 times a month. According to the media buying plan, the ad was only scheduled to air 17 times but all during prime viewing times as the ad achieved 177 GRPs. Nearly 53 percent of the time *Noses* aired during hours when youth were most likely to be watching TV.

5.7.2.2 Teens

Five paid Campaign ads were directed toward Milwaukee teens—*911*, *Alex Straight A's*, *Free Ride*, *Frying Pan*, and *Layla*. *Rite of Passage* was one of the PSAs also directed toward Milwaukee teens. Although scheduled as a paid ad, the estimated delivery from the media buy indicates *Layla* did not air as a paid ad, and therefore it is listed as a PSA. Survey data in Exhibit 5-7 show that a greater percentage of Milwaukee teens from baseline to followup recalled the paid Campaign ads targeted toward them. In fact, survey data indicate statistically significant increases in the percentage of Milwaukee teens that reported seeing two of the four ads directed at teens, *Frying Pan* and *911* compared to Nashville teens. The percentage of Milwaukee teens that recalled seeing *Frying Pan* increased from 33 percent to 53 percent, while Nashville teen recall decreased

from 18 percent to 15 percent. Similarly, the percentage of Milwaukee teens that saw *911* increased from 11 percent to 27 percent. By comparison, Nashville teen recall of *911* increased only slightly from 6 percent to only 9 percent.

Media monitoring and media buying data support survey findings. Indeed, monitoring data show that *Frying Pan* and *911* did not air in the baseline period in either Milwaukee or Nashville. However, *Frying Pan* aired on average 12.4 times a month (or 3.1 times a week) and *911* aired on average 8.2 times a month (or 2 times a week) during the intervention period in Milwaukee. Moreover, approximately 50 percent of the time *Frying Pan* and *911* aired during hours when Milwaukee teens most likely were watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.).

The percentage of Milwaukee teens that recalled the two other ads directed at teens—*Alex Straight A's* and *Free Ride*—increased from baseline to intervention but not to a statistically significant degree. Media monitoring data show that *Alex Straight A's* aired 9.2 times per month (or 2.3 times per week) in Milwaukee during intervention. However, only 24 percent of the time did the ad air during prime viewing hours for teens. This is supported by the media buy data which indicate the ad aired 46 times but only achieved GRPs of 267, a much lower reach than was achieved by *Frying Pan*, which aired 40 times but achieved GRPs of 354. In addition, monitoring data show that *Free Ride* aired fewer times than *Alex Straight A's* or *Frying Pan* and achieved a lower reach than any other paid Campaign ad directed at Milwaukee teens during the intervention. Still, awareness of the ad increased slightly due to the fact that *Free Ride* aired 41.2 percent of the time during prime viewing hours. Lastly, as expected, survey findings indicate that teen awareness of the two PSAs directed toward teens remained low and unchanged.

5.7.2.3 Parents

Four paid Campaign ads were directed toward parents in Milwaukee—*Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose*. In addition, *Burbs* was a PSA directed toward parents. Survey data suggest that the Media Campaign had a significant impact on Milwaukee parents. For example, the data show a statistically significant increase in the percentage of parents in Milwaukee that reported seeing or hearing commercials or ads on TV “almost every day or more often” about the risks of drugs (increase from 22% at baseline to 32 % at followup). More specifically, survey data indicate statistically significant increases in awareness of three of the four paid Campaign ads directed toward parents—*Under Your Nose*, *Girl Interview*, and *Deal*. Compared to Nashville parents, a statistically significant percentage of Milwaukee parents from baseline to followup reported seeing the paid ads *Under Your Nose* and *Girl Interview*. Moreover, from baseline to followup a statistically significant percent of Milwaukee parents reported seeing the paid ad *Deal*.

Media monitoring data support survey findings, suggesting that the times of day during which the ads aired contributed to increases in awareness of the ads. For

example, parent awareness of the paid Campaign ad *Under Your Nose* increased to a statistically significant degree despite the fact that the ad aired fewer times than any of the other paid Campaign ads directed toward parents (only 2.6 times a month). Media monitoring data show, however, that nearly 70 percent of the time *Under Your Nose* aired during prime viewing hours (prime access: 7:00 p.m. - 7:59 p.m.; prime time 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). Similarly, monitoring data explain the statistically significant increase in Milwaukee parent awareness of *Deal*. In addition to airing 12.2 times a month (or more than 3 times a week), *Deal* aired more than 60 percent of the time during prime viewing hours. In contrast, the media buy indicates *Girl Interview* only aired once as a paid ad, *O'Connor* three times, *Under Your Nose* seven times, and *Deal* eight times. It is possible that these ads aired with much greater frequency as PSAs as part of the pro bono match component, which is included in the media monitoring but not media buy data.

Exhibit 5-7 shows that a lower percentage of Milwaukee parents at baseline recalled seeing *Girl Interview* “often” than any of the other ads included in the survey. However, at followup awareness increased to a statistically significant cross-site level, by 11 percent. By contrast, survey data show that Milwaukee parents were most familiar with the ad *O'Connor* at baseline. However, after Phase I of the intervention parent awareness increased slightly (from 18% to 21%). Media monitoring suggest that this may be due to the fact that nearly 30 percent of the time *O'Connor* aired during the late fringe viewing period (11:30 p.m. - 5:59 a.m.).

Survey data indicate that from baseline to followup a statistically significant percentage of Milwaukee parents reported “often” seeing *Burbs*, which aired only as a PSA (increasing from 13% to 20%). Media monitoring data provide support for the increased awareness of the PSA. Not only did the average number of times the ad aired increase from 5 per month to 11.5 per month (or 2.9 per week), but also 40 percent of the time the ad aired during prime viewing hours.

Non-center city Milwaukee focus group parents reported they had seen more anti-drug ads during the intervention period and thought the ads were well done. One of these parents referred to *Girl Interview*, and stated that it helped her “realize the need to talk to children before they start using.” Key community informants also identified *Girl Interview* as effective because it gave parents a message about the importance of talking to their children about the dangers of drugs. Some of these informants believed that anti-drug ads directed to parents served to change the timing of parental dialogue with youth, in that the dialogue took place sooner rather than later and helped parents to be more observant of their children. Similarly, some adult mentors believed that ads urging parents to talk with their children about drugs could be effective. In fact, one stated that these types of ads inspire mentors who find themselves “somewhere between a friend and a parent.” Thus, they have the opportunity to successfully relate to youth.

5.7.3 Community Impact

The Milwaukee community was very supportive of the Phase I Media Campaign, and a number of community organizations planned activities to complement or support it. For example, the Milwaukee Council on Alcoholism and Drug Dependence (MCADD) Substance Abuse Network formed a Media Task Force in response to the Bill Moyers series (aired in March) and the Media Campaign. By June 1998 the Task Force decided it would work on maximizing the impact of the Media Campaign.

MCADD was involved in the following activities:

- Coordinating with community prevention agencies (e.g., schools and churches) to use anti-drug ads;
- Using their local Helpline number in newspaper anti-drug ads;
- Showing and discussing the ads with youth focus groups;
- Planning to expand the impact of the Media Campaign into the Drug-Free Workplace Network (a component of MCADD); and
- Emphasizing mentoring programs with the Volunteer Center and Interfaith Conference.

There is some preliminary evidence of an increase in calls to MCADD's local Helpline number after they incorporated the number in the ONDCP Media Campaign newspaper ads. It is not certain whether the focus of all calls, placed from March 1998 through April 1998, was on alcohol and other drug issues. However, the number of Helpline calls for which the callers said they saw the local telephone number in newspaper ads increased during this period. In addition, a community informant representing a substance abuse prevention agency reported that the anti-drug ads on mentoring had resulted in increased phone calls from areas outside of the Milwaukee area (e.g., Green Bay and Madison). Callers asked how to set up mentoring programs.

Outreach and prevention efforts by other community-based organizations included the Wisconsin Elk's Drug Awareness Committee's dissemination of ONDCP's anti-drug ads in February 1998 to State news media (TV and radio) in 35 communities where their lodges were located. In return the Elks asked the media to report the response to the ads and amount of airtime given them. In addition, a youth-serving agency strategically timed its events (e.g., training of youth workers) to coincide with ONDCP's Media Campaign.

In another supportive effort, a representative of the Drug-Free Workplace Network helped organize a component of ONDCP Director Barry McCaffrey's visit to Milwaukee in May 1998. That visit included a large breakfast with members of the Network, a visit to a local business, and discussions pertaining to drug-free workplace issues such as workers' compensation.

5.7.4 Summary of Findings

Survey findings suggest that the Media Campaign had a positive impact on Milwaukee youth, teens, and parents. For example, the data indicate a statistically significant increase in the percentage of youth in Milwaukee that reported seeing or hearing anti-drug messages on TV (from 85 % at baseline to 91 % at followup). More specifically, data show statistically significant increases in youth awareness of three of the four paid Campaign ads targeted at Milwaukee youth—*Long Way Home*, *Girlfriend*, and *Drowning*. In addition, the percentage increase of the third ad, *Drowning*, was statistically significant within-site from baseline to followup.

Furthermore, survey data indicate statistically significant increases in the percentage of Milwaukee teens that reported seeing two of the four ads directed at teens, *Frying Pan* and *911* compared to Nashville teens. Moreover, the percentage of Milwaukee youth that recalled the two other ads directed at teens—*Alex Straight A's* and *Free Ride*—increased from baseline to intervention but not to a statistically significant degree. Survey data also show a statistically significant increase in the percentage of parents in Milwaukee that reported seeing or hearing commercials or ads on TV “almost every day or more often” about the risks of drugs (increase from 22 % at baseline to 32 % at followup). Moreover, survey data indicate statistically significant increases in awareness of three of the four paid Campaign ads directed toward parents—*Under Your Nose*, *Girl Interview*, and *Deal*.

Focus group discussions with Milwaukee teens and parents confirmed their awareness of some of the ads identified in the survey. Parents and mentors believed that ads targeted to them heightened their awareness of the need to communicate with young people about drugs. Finally, the Media Campaign had a direct impact on the Milwaukee community through the creation of a Media Task Force as well as the conduct of a variety of community-based anti-drug outreach.

5.8 PORTLAND

Portland is located in northwest Oregon at the confluence of the Willamette and Columbia Rivers. It is the largest city in Oregon, and its metropolitan statistical area (MSA) includes surrounding Multnomah County and neighboring Columbia, Washington, Yamhill, and Clackamas Counties, as well as the City of Vancouver and Clark County, Washington, across the Columbia River. The total population of the Portland metropolitan area is approximately 1.5 million, of which 91 percent is white, 3 percent Hispanic, 3 percent Asian/Pacific Islander, 2 percent African American, and 1 percent Native American. The metropolitan area is relatively well integrated with regard to race, ethnicity, and income, with no large concentration of low-income populations in the center city. In fact, much of the MSA is rural, spreading into the foothills of the Cascade Range to the east, across the Willamette Valley, and into the Coastal Range to the west. The MSA unemployment rate is 5.4 percent, and the crime rate is 726 per 100,000 residents per year. The percentage of the population between the ages of 5 and 17 is 18.4; 12.4 percent of children under 18 live below the poverty level.

The legal status of the use of marijuana in Oregon has been under debate throughout the course of this evaluation. Possession of less than one ounce of marijuana by an adult has been decriminalized for some time, and five initiatives for legalization were on the November 1998 ballot. The common perception is that large quantities of marijuana are grown in the extensive remote areas of the State and that heavy trafficking occurs between the north and south borders along Interstate 5. (Interstate 5 runs from Mexico through the length of California into Oregon, through the middle of Portland, and north through Seattle to Canada.)

Key informants in the Portland area unanimously agreed that alcohol use is the most serious problem among young people, with marijuana use being a close second. A recent survey of schools in the MSA shows that the drug problem does not differ by race, ethnicity, socioeconomic status, or urban/rural residence. The 1996 Portland Public School Survey shows that since 1990, past-month use of marijuana has tripled among 8th graders and increased 68 percent among 11th graders.

5.8.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Portland on January 22, 1998. Phase I used existing ads available through the Partnership for a Drug-Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Portland received several paid television Campaign ads and PSAs. Youth, teens, and parents were surveyed about their awareness on a subset of these ads. Exhibit 5-8 presents those paid Campaign ads and PSAs for Portland that were included in the survey instruments.

The subset of paid Campaign ads for Portland focused on the following drugs: drugs in general (55.7%), heroin (18.5%), and marijuana (25.8%). The paid

advertisements directed at youth included *Drowning* and *Long Way Home*. *Alex Straight A's*, *Everclear*, *Frying Pan*, *Lauryn Hill*, and *Sublime* were the paid ads directed at teens, and *Burbs*, *Girl Interview*, and *O'Connor* were the paid ads directed at parents. These ads collectively were shown an average of 162.2 times a month in Portland during Phase 1.

**Exhibit 5-1
Awareness of Campaign Ads in Portland/Eugene¹**

Campaign Survey Data		Portland (Target)			Eugene/Spokane (Comparison)			Overall % Difference
		Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
YOUTH (Response = Yes)		(Eugene)						
Paid ads	<i>Drowning</i>	27	31	4	24	25	1	3
	<i>Long Way Home</i>	40	65	25*	34	37	3	22*
PSAs	<i>Girlfriend</i>	20	28	8*	26	20	-6*	14*
	<i>Noses</i>	33	35	2	30	33	3	-1
TEENS (Response = Often)		(Eugene)						
Paid ads	<i>Alex Straight A's</i>	9	20	11*	6	5	-1	12*
	<i>Frying Pan</i>	30	34	4	9	21	12	-8
	<i>Everclear</i>	10	26	16*	NA	NA	NA	NA
	<i>Lauryn Hill</i>	7	15	8*	NA	NA	NA	NA
	<i>Sublime</i>	12	27	15*	NA	NA	NA	NA
PSAs	<i>911</i>	5	5	0	5	5	0	0
PARENTS (Response = Often)		(Spokane)						
Paid ads	<i>Burbs</i>	13	26	13*	13	14	1	12*
	<i>Girl Interview</i>	5	13	8*	5	2	-3	11*
	<i>O'Connor</i>	10	20	10*	18	17	-1	11*
PSAs	<i>Deal</i>	15	15	0	10	14	4	-4
	<i>Under Your Nose</i>	1	9	8*	4	4	0	8*

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

¹Eugene replaces the comparison site of Spokane for youth and teen data; Spokane serves as the comparison site for parents because parent surveys were completed in that site (see Chapter 2).

- Note:
- A) Portland was the only site where *Everclear*, *Lauryn Hill*, and *Sublime* were aired as paid ads during the intervention; Portland teens were the only students surveyed about these ads, so only the change within the target site is reported.
 - B) The questions pertaining to *Everclear*, *Lauryn Hill*, and *Sublime* replaced recognition questions for Portland teens on *Free Ride*, *Layla*, and *Rite of Passage*.
 - C) Additional paid ads aired via cable and Channel One.

5.8.2 Survey Findings

- Survey data show statistically significant increases in the percentage of Portland youth that reported “often” seeing one of the two paid Campaign ads directed at youth—*Long Way Home*—compared to Eugene youth from baseline to followup.
- Survey data show statistically significant increases in the percentage of Portland teens that reported “often” seeing one of the paid Campaign ads—*Alex Straight A's*—compared to Eugene teens from baseline to followup.
- Survey data show statistically significant increases in teen awareness of all three paid Campaign ads only shown in Portland—*Everclear*, *Lauryn Hill*, and *Sublime*—from baseline to followup.

- From baseline to followup, survey data show statistically significant increases in Portland parents' awareness of three of the four paid Campaign ads—*Burbs*, *Girl Interview*, and *O'Connor*—compared to parents in Spokane.

The comparison site for Portland was Spokane, Washington, where telephone surveys were conducted with a sample of parents. Due to a shortage of available schools in Spokane at which to conduct the youth and teen surveys, a substitution for those surveys was made, Eugene, Oregon, as the comparison site for those two groups. Both Spokane and Eugene are comparable to Portland in demographic and community characteristics.

Surveys were administered to youth, teens, and parents before and near the end of the Phase I Media Campaign in Portland and in the two comparison sites. This section compares survey results from Portland and Eugene for youth and teens and from Portland and Spokane for parents. The comparison focuses on differences between communities that are statistically significant. Data from media monitoring and parent focus groups in Spokane and Portland are presented to support reliable interpretation of the parent survey data. Because media monitoring data are not available for Eugene, information to help explain survey results for youth and teens is limited to focus group data.

Portland teens were asked how often they had seen five paid Campaign ads—*Alex Straight A's*, *Frying Pan*, *Everclear*, *Lauryn Hill*, and *Sublime*. Of these five ads, the last three—*Everclear*, *Lauryn Hill*, and *Sublime*—were described on a special survey administered only in Portland; thus, responses for those ads are not available from Eugene for comparison.

Survey findings in Portland and Eugene may have been affected by two other media efforts. First, a Statewide anti-tobacco campaign also was underway, which included TV and radio spots along with ads on billboards and buses. Second, PDFAs have been distributed to media organizations throughout the State since 1996 by Portland's Regional Drug Initiative (RDI), the State affiliate with PDFAs for the Partnership for a Drug-Free Oregon. Thus, youth and teens in Portland and Eugene were being exposed to anti-tobacco advertising at the same time they were exposed to anti-drug advertising, and they may well have seen some of the anti-drug ads prior to the Media Campaign.

5.8.2.1 Youth

Media monitoring data are only available for the target site Portland. Although no comparisons can be made to Eugene, media monitoring may still provide valuable insight on changes in awareness within the target site. Survey data indicate that increased recognition of two Campaign ads (*Long Way Home* which aired as a paid ad and *Girlfriend* which aired as a PSA) by youth in Portland was statistically significant when compared with the change in recognition of the same two ads by youth in Eugene. From baseline to followup, changes in youth recognition of the ads in Portland and Eugene are as follows: *Girlfriend* (Portland: 20% to 28%; Eugene: 26% to 20%) and *Long Way Home* (Portland: 40% to 65%; Eugene 34% to 37%).

Media monitoring and media buy data help explain the statistically significant increase in youth recognition of the ad *Long Way Home*. In Portland, *Long Way Home* was shown an average of less than once a month at baseline but increased substantially to 14.8 during the intervention. The ad was scheduled to air 44 times and to achieve 232 GRPs. Although *Girlfriend* was not scheduled as a purchased ad, it may have aired frequently as a PSA under the pro bono match component, contributing to increases in awareness. Furthermore, *Long Way Home* aired nine times more often during hours when youth were most likely to be watching television (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.) during the intervention period than in the baseline period.

Responses to the second survey question also suggest that television anti-drug ads had an effect on Portland youth. The survey asked youth how dangerous they think several drugs are. The increase in the percentage of youth in Portland that responded heroin is “very dangerous” was statistically significant (59% at baseline to 72% at followup in Portland, compared with a decrease from 62% to 60% in Eugene). Although none of the ads about which youth were asked in the survey dealt specifically with heroin, media monitoring data show that two anti-heroin ads targeted at teens—*Frying Pan* and *Sublime*—aired in Portland an average total of 30 times per month or once a day during the intervention. *Frying Pan* aired 87 times with GRPs totaling 431. In addition, participants in Portland focus groups reported seeing two other anti-heroin ads that were part of the Media Campaign but were not included in the evaluation surveys—*Johnny Street* and *Teeth*. Therefore, youth may have been exposed to a number of anti-heroin ads during the Campaign, which would have increased their awareness of the danger of using heroin.

5.8.2.2 Teens

Survey data indicate increased awareness of anti-drug ads on television among teens in Portland. Survey data also show statistically significant differences in awareness of the ad *Alex Straight A's* between target site teens in Portland and the comparison site teens in Eugene when teens were asked if they had seen the ads “often”. The percentage of Portland teens that reported seeing *Alex Straight A's* “often” increased from 9 percent at baseline to 20 percent at followup compared with a slight decrease among Eugene teens from 6 percent to 5 percent. The three ads shown only in Portland—*Everclear*, *Lauryn Hill*, and *Sublime*—all showed statistically significant increases within site. The change in “often” responses for *Sublime* increased from 12 percent to 27 percent; for *Everclear*, 10 percent to 26 percent; and for *Lauryn Hill*, 7 percent to 15 percent.

Media monitoring data indicate why four of the paid Campaign ads directed at Portland teens showed significant changes in awareness. None of the four ads was detected by media monitoring during the baseline period. During the Media Campaign, *Alex Straight A's* aired a monthly average of 14.2 times, *Everclear* aired 26.4 times, *Lauryn Hill* aired 22.4 times, and *Sublime* aired 20.6 times. The ads *Everclear*, *Sublime*, and *Lauryn Hill* aired 254 times and achieved more than

1,100 total GRPs. The four ads combined were shown a total of 83.6 times per month or nearly 3 times per day. Moreover, 37.6 percent of the four ads aired during hours when teens were most likely to be watching television (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.).

Teen recognition of the remaining paid Campaign ad—*Frying Pan*—did not increase by a statistically significant degree across sites. However, survey data indicate a markedly high awareness among teens in Portland that reported seeing the ad “often” or “a few times” at baseline (71%). With almost three-quarters of Portland teens exposed to the ad prior to the Media Campaign, it is not surprising that the increase in awareness at followup was not statistically significant. Moreover, high baseline awareness of the ad *Frying Pan* can be attributed to the fact that the majority of Portland teen baseline surveys were administered after the Media Campaign had begun.

5.8.2.3 Parents

Parents were asked how often they had seen ads about the risks of drugs. The percentage of parents responding “almost every day or more often” was similar in the two sites at baseline—24 percent in Portland and 23 percent in Spokane. At followup, however, the percentage increased to 41 in Portland, and remained unchanged in Spokane (23%).

Media monitoring data reflect the increase in awareness. The data show that three of the four paid ads targeted at parents in Portland—*Deal*, *Girl Interview*, and *O’Connor*—were shown in both sites both prior to and during the period of the Media Campaign. The three ads together were shown a monthly average of 36.6 times during the intervention in Portland, which is more than eight times the monthly average for the baseline period (4.4). By contrast, in Spokane, broadcasts of the three ads remained consistently low—from 2.6 at baseline to 3.6 during intervention. Clearly, parents in Portland were exposed to more ads during the Media Campaign. Indeed, if they watched television with their children, they could have seen as many as 6 anti-drug ads per day.

Survey data show statistically significant differences in awareness of two of the three paid Campaign ads—*Girl Interview* and *O’Connor*—between target site parents in Portland and the comparison site parents in Spokane when parents were asked if they had seen the ads “often”. From baseline to followup, parents who responded “often” for *O’Connor* increased from 10 percent to 20 percent in Portland but decreased slightly from 18 percent to 17 percent in Spokane. Significant change was also found with respect to *Girl Interview*. Five percent of parents in both sites reported “often” seeing the ad at baseline. At followup, however, “often” responses increased to 13 percent in Portland but decreased to 2 percent in Spokane. Lastly, parent recognition of the ad *Under Your Nose*, which aired as a PSA, increased significantly from 1 percent at baseline to 9 percent at followup in Portland but remained constant over time at 4 percent in Spokane. This may be due in part to the ad airing frequently as a PSA as part of the pro bono requirement.

Media monitoring and buy data again help explain the changes. The ad *O'Connor* aired an average of 2.7 times per month during the baseline period in Portland and increased to 14.4 times per month during the intervention. In Spokane, *O'Connor* was shown 2 times per month during baseline and slightly less frequently (1.6 times per month) during the intervention period. *Girl Interview* aired an average of 2 times per month during baseline in Portland and then increased to an average monthly showing of 13 during the Media Campaign. Media buy data indicate the ad was scheduled to air six times as a paid ad during prime viewing times for adults. Media monitoring data show that, in Spokane, the ad aired an average of 1.7 times during baseline and 1.2 times during the intervention.

Anti-drug advertising had an effect on parents in Portland, as measured by their responses to a three-part survey question. Changes in responses for two of the parts were statistically significant across sites. Parents were asked how much they agreed that ads had made them aware of the risks of drugs. Of parents surveyed in Portland, 32 percent “agreed a lot” at baseline increasing to 46 percent at followup. In Spokane, the percentage at baseline was 33, but it decreased slightly to 31 at followup. Parents also were asked how much they agreed that the ads had given them new information or told them things they didn’t know about drugs. In Portland, responses of parents who “agreed a lot” rose from 14 percent at baseline to 24 percent at followup. In Spokane, “agreed a lot” responses fell from 21 to 17 percent.

Focus group data for parents provide additional information on parent awareness of ads. During the intermediate and followup site visits, both center city and non-center city focus group parents commented about the value of the anti-drug ads in “breaking the ice” for starting discussions with their children about drugs and drug use. It was also noted during focus groups that the ads provide an opportunity for children to ask their parents about drugs.

5.8.3 Community Impact

The Media Campaign also had an effect on the Portland community as a whole. The local coordinator of the Media Campaign, RDI, reported a larger-than-anticipated number of requests for information in response to various ads. Especially popular were the grandparent ads in the newspaper. RDI sent out information to youth, teens, parents, and grandparents in Portland and the surrounding area. In addition, a private business requested permission to use newspaper ads from the Media Campaign in its company newspaper. RDI sponsored a press conference in April to address the five proposed measures concerning marijuana legalization. Participants cited the Media Campaign as an important and exemplary message to counteract these proposals. Local teens participated in the press conference, citing media messages they believed are effective with their peers.

5.8.4 Summary of Findings

Survey data show that awareness of anti-drug messages on television increased over the course of the Media Campaign among all three age groups surveyed in Portland. Increases in recognition were statistically significant across sites for two paid Campaign ads described in the youth survey (*Girlfriend* and *Long Way Home*). Additionally, the increase in recognition was statistically significant across sites for one paid Campaign ad targeted at teens (*Alex Straight A's*), and the three ads targeted only at Portland teens (*Everclear*, *Lauryn Hill*, and *Sublime*). All of these ads showed statistically significant increases within site. Finally, awareness of three paid Campaign ads targeted at Portland parents—*Girl Interview*, *O'Connor*, and *Under Your Nose*—showed a statistically significant increase from baseline to followup.

A number of other indicators suggest that Media Campaign ads had an effect on parents. Increases between the target and comparison sites are statistically significant for responses to two additional questions: Portland parents reported both an increase in the frequency with which they had seen ads describing the risks of drugs, and an increased awareness in the effect the ads had on them.

The Media Campaign also had an impact on the Portland community. RDI, the local coordinator, received a large number of requests for additional information about drugs. At a press conference in April, RDI used the message of the Media Campaign to counteract arguments for legalization of marijuana in Oregon. *Assessment.*

5.9 SAN DIEGO

San Diego is located in the southern tip of California and is just across the border from Tijuana, Mexico. It has a population of approximately 2.5 million and a crime rate of 794 per 100,000 residents per year. The San Diego metropolitan area is 90 percent urban, and the racial/ethnic breakdown is 75 percent white, 19 percent Hispanic, and 6 percent African American. San Diego has the largest concentration of U.S. Navy bases on the West Coast, employing thousands of young men and women; the unemployment rate for the city is 6.1 percent. About 16 percent of the population is between ages 5 and 17, and 16.2 percent of all children in San Diego under the age of 18 are living below the poverty level. The city has both a large student population and a laid-back “beach culture,” which makes it a popular vacation destination.

San Diego’s proximity to the Mexican border creates two special problems regarding teen drug use. In Mexico, it is easy to obtain illegal drugs in small quantities at relatively low cost, and the underage drinking culture there lures American teens across the border. On weekend evenings, thousands of teens cross the border to attend clubs and other outlets that cater to young people. The legal drinking age in Mexico is 18, but under-age drinking laws reportedly are not strictly enforced, which has resulted in an increased number of injuries and fatalities from automobile accidents. San Diego has been designated a High Intensity Drug Trafficking Area (HIDTA) and is working to stem the flow of narcotics across the border from Mexico.

San Diego has several serious drug problems. Marijuana is readily available and is the preferred drug among teens. San Diego is among the leaders in the country in the production and consumption of methamphetamine. Drug Use Forecasting (DUF) data indicate that after a slight drop in the number of arrestees testing positive for methamphetamine in 1995, use rose again in 1996, particularly among women and juveniles. Drug experimentation and use are not unique to high-risk neighborhoods but are found in neighborhoods across the socioeconomic spectrum in San Diego.

5.9.1 Intervention

Representatives of the Office of National Drug Control Policy (ONDCP) kicked off Phase I of the Media Campaign in San Diego on January 9, 1998. Phase I used existing ads available through the Partnership for a Drug Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. San Diego received several paid TV ads and PSAs. Youth, teens, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-9 presents those paid ads and PSAs for San Diego that were included in the survey instruments.

The subset of paid campaign ads for San Diego focused on the following drugs: drugs in general (42.1%), inhalants (16.9%), methamphetamine (12.0%),

marijuana (10.9%), heroin (10.9%), and crack (7.1%). Paid advertisements directed at youth included *Girlfriend*, *Long Way Home*, and *Noses. 911*, *Alex Straight A's*, *Frying Pan*, and *Rite of Passage* were the paid ads directed at teens. *Girl Interview*, *O'Connor*, and *Under Your Nose* were the paid ads directed at parents. PSA ads included *Drowning* for youth, *Free Ride* and *Layla* for teens, and *Burbs* and *Deal* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in San Diego/Phoenix**

Campaign Survey Data	San Diego (Target)			Phoenix (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)								
Paid ads	<i>Girlfriend</i>	21	54	33*	29	28	-1	34*
	<i>Long Way Home</i>	38	62	24*	35	40	5	19*
	<i>Noses</i>	47	61	14*	39	42	3	11**
PSAs	<i>Drowning</i>	31	35	4	38	35	-3	7
TEENS (Response = Often)								
Paid ads	<i>911</i>	9	34	25*	8	14	6*	19*
	<i>Alex Straight A's</i>	6	14	8*	5	7	2	6**
	<i>Frying Pan</i>	13	43	30*	18	21	3	27*
	<i>Rite of Passage</i>	7	20	13*	5	12	7*	6
PSAs	<i>Free Ride</i>	4	7	3	8	12	4	-1
	<i>Layla</i>	10	9	-1	8	13	5	-6
PARENTS (Response = Often)								
Paid ads	<i>Girl Interview</i>	2	11	9*	3	3	0	9*
	<i>O'Connor</i>	13	17	4	17	14	-3	7
	<i>Under Your Nose</i>	5	13	8*	3	7	4**	4
PSAs	<i>Burbs</i>	13	19	6	16	13	-3	9
	<i>Deal</i>	14	16	2	13	18	5	-3

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.9.2 Survey Findings

- Survey data indicate statistically significant increases in the percentage of target site youth that reported learning from TV commercials that drugs are bad for them.
- Survey data show statistically significant increases from baseline to followup in the percentage of San Diego youth that reported “often” seeing all three paid Campaign ads directed at youth—*Girlfriend*, *Long Way Home*, and *Noses*.
- From baseline to followup, a significantly greater percentage of teens in San Diego, compared to teens in Phoenix, reported that they learned “a lot” about the risks of drug use from anti-drug ads on TV.
- From baseline to followup, a significantly greater percentage of teens in San Diego, compared to teens in Phoenix, reported “often” seeing three of the

four paid Campaign ads directed at teens—*911*, *Alex Straight A's*, and *Frying Pan*.

- Survey data show a statistically significant increase in the percentage of parents that reported seeing or hearing TV commercials “almost every day or more often” that educated them about the risks of drugs.
- From baseline to followup, survey data show that a statistically greater percentage of San Diego parents recalled two of the paid ads directed toward them—*Girl Interview* and *Under Your Nose*.

This section focuses on survey findings of youth, teens, and parents in both the San Diego target community and the Phoenix comparison community. Media monitoring, media buy data, and focus group and community respondent interview data also are presented to support reliable interpretation of the survey data.

5.9.2.1 Youth

Three paid Campaign ads included in the survey were directed at San Diego youth—*Girlfriend*, *Long Way Home*, and *Noses*. Survey data show that youth in San Diego were positively affected by the paid Media Campaign. In fact, survey data indicate statistically significant increases in the percentage of youth that learn from TV commercials that drugs are bad for them (increasing in San Diego from 51% to 65% and decreasing in Phoenix from 58% to 41%).

Not surprisingly, all three paid Campaign ads directed toward San Diego youth—*Girlfriend*, *Long Way Home*, and *Noses*—demonstrated statistically significant increases from baseline to followup, compared to awareness over the same period in the comparison site, Phoenix. Media monitoring and media buy data suggest that the increases in awareness are due to increases in the average number of times the paid ads aired in the target sites, and the times of day during which these ads aired.

For example, awareness of the paid Campaign ad, *Girlfriend*, increased to a statistically significant degree (from 21% to 54%) in San Diego, while remaining relatively constant in Phoenix (from 29% to 28%). Media monitoring and media buy data support these findings. From the baseline to the intervention period the average number of times *Girlfriend* aired in San Diego increased from 0 to 6.4 times per month (or 1.6 times a week during the intervention). Media buy data show that the ad was scheduled to air 35 times for a total of 166 GRPs. Over the same time period, *Girlfriend* did not air in Phoenix.

In addition, the percentage of San Diego youth that reported seeing *Long Way Home* increased to a statistically significant degree between the target and comparison sites (from 38% to 62% in San Diego; and from 35% to 40%) in Phoenix. Media monitoring and media buy data support these findings. The average number of times that *Long Way Home* aired increased from 0 to 10.4 times per month (2.6 times per week), 34.6 percent of which aired during prime

viewing hours for youth (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; and weekend daytime: 6:00 a.m. - 5:00 p.m.). According to the media buy data, the ad aired 47 times as a paid ad and achieved 227 GRPs, indicating the ad reached a significant percentage of the target audience.

By sharp contrast, although the average number of times *Long Way Home* aired during the intervention period increased substantially in Phoenix, the percent of Phoenix teens that recalled the ad did not increase to a statistically significant degree. Not surprisingly, media monitoring data show that 90 percent of *Long Way Home* ads aired as a PSA during the late fringe period (11:30 p.m. - 5:59 a.m.) in Phoenix, when youth were unlikely to be watching TV.

Moreover, the percentage of San Diego youth that recalled “often” seeing *Noses* increased to a statistically significant degree from baseline to followup (from 47% to 61%), compared to a smaller increase over the same time period in Phoenix (from 39% to 42%). Media monitoring data indicate that the average number of times that *Noses* aired increased from 0 to 10 times per month (2.5 times per week), 56 percent of which occurred during prime viewing hours for youth. In addition, *Noses* did not air in the comparison site, Phoenix.

As expected, the percent of San Diego youth that recalled *Drowning*, which aired as a PSA, did not increase to a statistically significant degree in the target or comparison site (increasing from 31% to 35% in San Diego but decreasing from 38% to 35% in Phoenix). Media buy data indicate that *Drowning* aired 49 times as a paid ad in San Diego and was shown during prime viewing hours for the target audience, as indicated by the fact that the ad achieved 271 GRPs.

Focus group discussions further confirm that, following Phase I of the Media Campaign, youth are more aware of the risks and dangers associated with drug use. Both center city and non-center city elementary school students in San Diego were able to identify the major illegal drugs and spoke about drugs in general as dangerous. And center city students said, “It stinks,” “It can ruin your life forever,” “You can get one of your lungs taken out,” and “You can die.”

5.9.2.2 Teens

Survey data suggest that target site teens learned “a lot” about the risks of drugs from TV commercials. In fact, from the baseline to the followup period, a significantly greater percentage of teens in San Diego (31% at baseline to 51% at followup), compared with those in Phoenix (21% to 32%) reported that they learned “a lot” about the risks of drug use from TV anti-drug ads.

The four specific paid ads directed at San Diego teens included *911*, *Alex Straight A’s*, *Frying Pan*, and *Rite of Passage*. In addition, *Free Ride* and *Layla* aired as PSAs. San Diego youth awareness of all four ads increased by a statistically significant degree. In fact, from baseline to followup the percent of teens that reported “often” seeing three of the four paid ads directed at teens—*911*, *Alex Straight A’s*, and *Frying Pan*—was statistically significant when compared to

recognition in Phoenix. In addition, the percent of San Diego teens that recalled seeing the fourth ad, *Rite of Passage*, increased significantly within site.

What is more, survey data show even greater statistical significance with regard to the percent of teens that reported seeing the paid ads “often or “a few times”. For example, the percentage of teens that recalled seeing *Frying Pan* increased from 44 percent to 70 percent in San Diego, compared to a smaller increase in Phoenix from 43 percent to 51 percent. Media monitoring data show that in San Diego the average number of times *Frying Pan* aired increased from 0 to nearly 10 times per month (or 2.5 times per week). Media buy data indicate that the ad was purchased to air 40 times and to achieve 253 GRPs. Furthermore, 65.3 percent of the time *Frying Pan* aired during prime TV viewing hours for teens.

Similarly, the percentage of target site teens that recalled seeing *911* increased from 32 percent to 64 percent in San Diego, while increasing to a lesser degree in Phoenix (from 27% to 33%). Media monitoring data show that the average monthly number of times *911* aired increased from 0 at 10.6 (or 2.7 times per week) times per month in San Diego, 39.6 percent of which occurred in prime viewing hours for teens. As a paid ad, *911* aired 35 times. Over the same period, *911* did not air in Phoenix.

Likewise, survey data show that the percentage of target site teens that recognized *Alex Straight A's* increased from 34 percent at baseline to 56 percent during the intervention, compared to a smaller increase in Phoenix (from 30% to 34%). The average monthly number of times that *Alex Straight A's* aired increased in San Diego from 0 to 9.8 times per month (2.5 times per week), 79.6 percent of which occurred during prime viewing hours for teens (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). *Alex Straight A's* aired the most frequently of the ads (66 times) and achieved GRPs similar to *Frying Pan* at 268 GRPs. In addition, *Alex Straight A's* did not air in Phoenix during either the baseline or intervention periods.

Moreover, San Diego teen recall of *Rite of Passage* increased significantly within-site from 31 percent at baseline to 48 percent at followup, while increasing at a slower rate in Phoenix (from 28% to 33%). Media monitoring data indicate that the average number of times *Rite of Passage* aired in San Diego increased from 0 to an average of 8.6 times per month (or 2.2 times per week) during the intervention period. *Rite of Passage* aired a total of 54 times as a paid ad with GRPs comparable to *Alex Straight A's* and *Frying Pan*, indicating the ads reached almost the same proportion of the teen audience. In addition, nearly half (48.8%) of the airings occurred during prime TV viewing hours for teens. Finally, as expected teen recall of *Free Ride* and *Layla*, which aired as PSAs, remained constant and low.

Focus group discussions among San Diego middle school students support the finding that television anti-drug ads are important as a source of information on drugs. Both center city and non-center city teens reported that they watch TV extensively, and reported detailed descriptions of the anti-drug and anti-smoking ads they saw. Non-center city teens said the anti-drug ads were trying to show

how dangerous drugs are. In addition, the majority of middle school students stated that the ads made them think about the dangers of drugs. Some center city teens believed that anti-drug ads could make people change their minds about using drugs.

5.9.2.3 Parents

Three paid Campaign ads included in the survey were directed toward San Diego parents—*Girl Interview*, *O'Connor*, and *Under Your Nose*. Over the course of Phase I of the Media Campaign, survey data show a statistically significant increase in the percentage of parents that reported seeing or hearing TV commercials “almost every day or more often” that helped educate them about the risks of drugs. In fact, from the baseline to intervention period the percentage of parents that agreed with this statement increased in San Diego from 20 percent to 45 percent, while remaining constant at 34 percent in Phoenix.

With respect to specific ads targeted toward San Diego parents, survey data show that the percentage of San Diego parents that recalled two of the ads, *Girl Interview* and *Under Your Nose*, increased to statistically significant levels. The percentage of San Diego parents that recalled the third paid Campaign ad, *O'Connor*, increased from baseline to followup in the target site but not by a statistically significant degree even though it aired more frequently than the other two ads. As expected, San Diego parent recall of *Deal* and *Burbs*, which aired as PSAs, did not increase significantly.

Moreover, survey data show that the percentage of San Diego parents that reported “often” seeing *Girl Interview* significantly increased from baseline to follow up, compared to parent recall of the same ad in Phoenix. In addition, when parents were asked if they had seen all three paid ads directed toward parents “often” or “a few times”, survey data show that parent recall in San Diego increased even more. This result could be due in part to the fact that parents were more likely to see youth and teen ads than adult ads, because TV was not used as heavily to reach the adult audience.

For example, with regard to the paid ad *Girl Interview* parent recognition increased significantly from 15 percent at baseline to 35 percent during the intervention in San Diego, while remaining constant at about 15 percent in the comparison site. Media monitoring data indicate that the average number of times *Girl Interview* aired increased from about once per month at baseline to 11 times per month (or 2.8 times per week including paid and unpaid) during the intervention in San Diego. Moreover, 47.2 percent of the airings occurred during prime TV viewing hours for parents (prime access: 7:00 p.m.-7:59 p.m.; prime time: 8:00 p.m.-10:59 p.m.; and weekend daytime: 6:00 a.m.-5:00 p.m.).

In addition, target site parent recall of *Under Your Nose* increased significantly within San Diego from 26 percent to 36 percent, but also increased in Phoenix from 27 percent to 34 percent. Media monitoring data show that the average number of times *Under Your Nose* aired in San Diego increased from 0 to 5 times per month from baseline to intervention, 73 percent of which were during prime

TV viewing hours for parents. The ad was only purchased to air 8 times, indicating that the ad was widely used as a PSA. In addition, over the same time period, *Under Your Nose* did not air in Phoenix.

Lastly, media monitoring data explain why San Diego parent recall of *O'Connor* did not increase significantly. At baseline, the ad aired 18 times a month (or 4.5 times a week) in the comparison site, 40 percent of which aired during prime viewing hours for parents. This helps to explain why such a large percentage of comparison site parents recalled *O'Connor* at baseline. In the target site at baseline, *O'Connor* aired only twice a month but increased during the intervention to 7.8 times per month (or twice per week). In turn, awareness of the ad increased from 59 percent to 63 percent.

Awareness of the risks of using marijuana regularly also increased significantly among San Diego parents—from 76 percent at baseline to 82 percent at followup. Focus group data support this finding. For example, center city parents in San Diego focus groups discussed children's marijuana use, both in terms of ads they recalled and the issues presented by the ads. They recalled an anti-marijuana ad that was not part of the ONDCP Media Campaign that portrayed a train accident caused by an engineer who was smoking marijuana. Several mothers stated that children's use of marijuana is a major issue in the community, especially children around the age of 14.

In addition, discussions with key community informants in San Diego indicate increases in parents' awareness of the Campaign survey ads. A local prevention program representative who was involved with the Media Campaign reported that her agency had received many calls from parents and other adults. The callers usually referred to the Media Campaign and said that they wanted to discuss the drug issue with their own children or others with whom they worked. She noted, "People have been crying for help and guidance on how to talk about this issue. Parents really lack the resources to do that, and the Campaign has really opened the door."

5.9.3 Community Impact

Communities Against Substance Abuse (CASA) formalized its relationship with Partnership for a Drug-Free America (PDFA) and created an alliance called Partnership for a Drug-Free San Diego. This alliance helped organize the kickoff for Phase I of the Media Campaign. Its primary role was to encourage pro bono support for the Media Campaign via newspaper, radio, and TV ads. CASA worked with schools to provide educational materials and presentations on the dangers of drugs; CASA also planned to show anti-drug ads in classrooms to reach more students. CASA added its local phone number to Media Campaign newspaper ads so that callers could contact referral and support services.

According to CASA, many calls (more than 100 phone calls in 2 weeks) were received in response to the Media Campaign ads—most of them from parents. They also reported sending out all the printed information they had—about 300 booklets—to parents and school educators. They have had to supplement their

store of informational materials with other items from local resources. Community informants also reported that since the Media Campaign began, they have succeeded in convincing the *Union-Tribune* (newspaper) to provide one pro bono ad for each paid Media Campaign ad—something that they were unable to do before the Media Campaign was launched.

5.9.4 Summary of Findings

Survey data from the target site San Diego and the comparison site Phoenix indicate significant increases in youth, teen, and parent awareness of the Media Campaign. For example, survey data indicate statistically significant increases in the percentage of youth that learn from TV commercials that drugs are bad for them. Likewise, from baseline to followup, a significantly greater percentage of teens in San Diego, compared with teens in Phoenix, reported that they learned a lot about the risks of drug use from anti-drug ads on TV. Moreover, survey data indicate a statistically significant increase in the percentage of parents that reported seeing or hearing TV commercials educating them about the risks of drugs “almost every day or more often”.

With respect to specific paid Campaign ads, all three of these ads directed toward San Diego youth—*Girlfriend*, *Long Way Home*, and *Noses*—demonstrated statistically significant increases in awareness from baseline to followup. In addition, from baseline to followup, a significantly greater percentage of teens in San Diego reported seeing three of the four paid ads “often”—*911*, *Alex Straight A's*, and *Frying Pan*—compared to the recognition in Phoenix. And lastly, from baseline to followup, survey data show that a statistically greater percentage of San Diego parents recalled two of the paid ads directed toward parents—*Girl Interview* and *Under Your Nose*.

After the Phase I intervention, parents, youth, and teens were more aware of the ads included in the paid ONDCP Media Campaign. They also appeared to be much more aware of the dangers of illegal drugs after watching these ads. Finally, the Media Campaign had an impact on the community, resulting from the work of the Partnership for a Drug-Free San Diego, outreach efforts by community organizations in the schools, and phone calls received in response to the ads.

5.10 SIOUX CITY

Sioux City is located in northwest Iowa on the Missouri River at the juncture of Iowa, South Dakota, and Nebraska, an area referred to locally as “Siouxland.” In addition to Sioux City, the metropolitan statistical area (MSA) includes surrounding Woodbury County and, across the Missouri River, Dakota County, Nebraska. The population of the MSA is approximately 115,000, of which 92 percent is white, 3 percent Hispanic, 2 percent African American, 2 percent Native American, and 2 percent Asian/Pacific Islander. Children between the ages of 5 and 17 compose 19 percent of the total population, and 17.8 percent of children under age 18 live below the poverty level. The unemployment rate in the MSA is 4.9 percent, while the crime rate is 1,271 per 100,000 residents per year.

The meat packing industry is one of the major employers in the area and reportedly recruits labor from the States along the Mexican border. The growing Hispanic population is reflected in the Sioux City public school system, where minorities—primarily Hispanic—made up approximately 25 percent of the student body in 1997.

Woodbury County, Iowa, and Dakota County, Nebraska, along with five neighboring counties in South Dakota, comprise the Midwest High Intensity Drug Trafficking Area (HIDTA). The highways that pass through the area combine with the Missouri River and its tributaries to create a network of routes for transporting illegal drugs. The three-state juncture complicates law enforcement greatly because of conflicting State laws, which are often manipulated by criminals who cross State lines. Local officials are working to develop tri-state policies to facilitate cooperation across jurisdictions. Methamphetamine manufacture and use is a high-visibility problem in the Sioux City area. Key informants reported that the drugs of choice among young people are tobacco, alcohol, marijuana, methamphetamine, and inhalants. The informants generally agreed that any differences in drug use are a function of economic status rather than of race, ethnicity, or specific neighborhood in the city.

5.10.1 Intervention

The ONDCP Director kicked off Phase I of the Media Campaign in Sioux City on January 15, 1998. Phase I used existing ads available through the Partnership for a Drug-Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Sioux City received several paid television Campaign ads and PSAs. Youth, teens, and parents were surveyed about their awareness on a subset of these ads. Exhibit 5-10 presents those paid Campaign ads and PSAs for Sioux City that were included in the survey instruments.

The subset of paid Campaign ads for Sioux City focused on the following drugs: inhalants, marijuana, heroin, methamphetamine, crack and drugs in general. The paid advertisements directed at youth included *Long Way Home*, *Drowning*, and *Noses*, the latter two in both English and Spanish. *Alex Straight A's*, *Frying Pan*,

911, and Layla were the paid ads directed at teens. For parents, paid television ads included *Burbs*, *Girl Interview*, *O'Connor*, and *Under Your Nose*, with *Under Your Nose* broadcast in both English and Spanish. PSA ads included *Free Ride* and *Rite of Passage* for teens, and *Deal* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in Sioux City/Duluth**

Campaign Survey Data	Sioux City (Target)			Duluth (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)								
Paid ads	<i>Drowning</i>	24	68	44*	25	23	-2	46*
	<i>Long Way Home</i>	39	66	27*	42	44	2	25*
	<i>Noses</i>	38	72	34*	31	29	-2	36*
PSAs	<i>Girlfriend</i>	23	30	7*	30	31	1	6
TEENS (Response = Often)								
Paid ads	<i>911</i>	36	62	26*	5	5	0	26*
	<i>Alex Straight A's</i>	4	38	34*	6	3	-3**	37*
	<i>Frying Pan</i>	19	42	23*	16	11	-5**	28*
	<i>Layla</i>	9	15	6*	9	6	-3**	9*
PSAs	<i>Free Ride</i>	3	4	1	6	4	-2	3
	<i>Rite of Passage</i>	7	8	1	9	4	-5*	6**
PARENTS (Response = Often)								
Paid ads	<i>Burbs</i>	23	39	16*	14	21	7**	9
	<i>Girl Interview</i>	22	39	17*	2	5	3	14*
	<i>O'Connor</i>	30	36	6	13	19	6	0
	<i>Under Your Nose</i>	6	12	6**	1	5	4**	2
PSAs	<i>Deal</i>	28	19	-9**	15	13	-2	-7

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.10.2 Survey Findings

- Survey data show statistically significant increases in the percentage of Sioux City youth, compared to Duluth youth, that reported “often” seeing all three paid Campaign ads directed at youth—*Drowning*, *Long Way Home*, and *Noses*—from baseline to followup.
- Survey data show statistically significant increases in the percentage of Sioux City teens, compared to Duluth teens, that reported “often” seeing all four paid Campaign ads directed at teens—*911*, *Alex Straight A's*, *Frying Pan*, and *Layla*—from baseline to followup.
- Survey data show a statistically significant increase in the percentage of Sioux City parents, compared to Duluth parents, that reported “often” seeing one of the paid Campaign ads directed at parents—*Girl Interview*—from baseline to followup.
- Survey data show statistically significant increases in the percentage of Sioux City parents that reported “often” seeing three of the four paid Campaign ads

directed at parents—*Burbs*, *Girl Interview*, and *Under Your Nose*—from baseline to followup.

Surveys were administered to youth, teens, and parents before and near the end of the Media Campaign in both Sioux City and its comparison site, Duluth, Minnesota. This section compares survey results from Sioux City and Duluth, focusing on differences between the communities that are statistically significant. Media monitoring data are not available for the two cities, but data from focus groups with youth, teens, and parents are presented to help explain survey results.

5.10.2.1 Youth

Survey data indicate statistically significant increases in the percentage of Sioux City youth that reported “often” seeing all three paid Campaign ads—*Drowning*, *Long Way Home*, and *Noses*—compared to Duluth youth from baseline to followup. In Sioux City, 24 percent of youth surveyed reported seeing *Drowning* at baseline, with an increase to 68 percent at followup; the percentage of positive responses in Duluth was nearly the same at baseline (25%) but declined slightly to 23 percent at followup. Youth recognition of the ad *Noses* increased from 38 percent to 72 percent in Sioux City compared with a decrease in Duluth from 32 percent to 29 percent. The percentage of youth in Sioux City that reported seeing *Long Way Home* increased from 39 at baseline to 66 at followup, whereas recall among Duluth youth increased only slightly from 42 percent to 44 percent. *Drowning* and *Noses* each aired a total of 40 times as paid ads, while *Long Way Home* was only purchased to air 10 times. In addition, participants in youth focus groups in Sioux City reported seeing the three ads daily and sometimes several times a day during the intermediate and followup site visits.

A second survey question asked youth how much they learn from various sources that drugs are bad for them. There was a statistically significant difference between the target and comparison sites in the percentage of youth that responded that they learned “a lot” about the risks of drugs from “TV commercials.” Youth who responded that they learned “a lot” increased in Sioux City from 45 percent at baseline to 50 percent at followup, while in Duluth, youth responding “a lot” to “TV commercials” decreased from 38 percent to 35 percent. Survey data also indicate a statistically significant differences in the percentage of youth that reported having ever seen anti-drug messages on TV. The percentage of Sioux City youth that reported seeing anti-drug messages increased from 85 percent at baseline to 90 percent at followup, while youth recall in Duluth remained constant at 86 percent.

Focus group data from the baseline site visit confirm the importance of television as a source of information for youth. Sioux City youth described watching television as one of their common free-time activities, and they recalled seeing anti-drug ads on television.

Survey data also show the percentage of youth that changed their attitudes toward inhalants increased significantly from baseline to followup. One survey question asked youth the extent to which they agreed with the following statement: “Using

inhalants can kill you.” At baseline, 58 percent of youth in Sioux City responded “agree a lot,” a number that increased to 72 percent at followup. The percentage increased less in Duluth, from 66 percent to 70 percent. Another survey question asked youth how dangerous they think inhalants are. The percentage of target site youth that reported “very dangerous” increased significantly from 54 percent at baseline to 71 percent at followup, while the increase in the comparison site was only moderate, from 63 percent to 68 percent. The increases in Sioux City youth who recognized that inhalants can be dangerous or fatal correspond with the 72 percent of survey respondents who reported having seen *Noses* and the 68 percent that reported seeing *Drowning*, both of which address the dangers of inhalants.

5.10.2.2 Teens

Survey data indicate a statistically significant change across sites in the percentage of Sioux City teens, compared to Duluth teens, that reported learning “a lot” about the risks of drugs from TV ads from baseline to followup. In Sioux City, the percentage of teens that said they learned “a lot” increased significantly from 19 percent at baseline to 31 percent at followup, while in Duluth the percentage fell from 17 percent to 12 percent.

Survey data also show statistically significant increases in teen awareness of all four of the paid Campaign ads—*911*, *Alex Straight A’s*, *Frying Pan*, and *Layla*—between the target site teens in Sioux City and the comparison site teens in Duluth. Of all the teen targeted ads, recognition was highest for *911*. At baseline, 36 percent of Sioux City teens reported they had seen *911* “often”, and at followup awareness rose to 62 percent. Correspondingly, media buy data indicate that *911* aired more frequently than the other paid ads and achieved the highest number of GRPs, airing 56 times for 261 GRPs. In Duluth there was no change in teen awareness, remaining at 5 percent.

In addition to seeing the ad *911*, participants in teen focus groups during the intermediate and followup site visits reported seeing *Frying Pan*. *Frying Pan* was seen “often” by 19 percent of teens in Sioux City at baseline and increased to 42 percent at followup. By contrast, in the comparison site recognition of *Frying Pan* decreased from 16 percent at baseline to 11 percent at followup. Media buy data indicate *Frying Pan* aired fewer times and achieved the lowest number of GRPs of all teen targeted Campaign ads in Sioux City. However, the ad may have aired more often as a PSA as part of the pro bono match requirement.

Recognition of *Alex Straight A’s* rose appreciably in Sioux City from 4 percent at baseline to 38 percent at followup but dropped from 6 percent to 3 percent in Duluth. Teen recall of the ad *Layla* increased from 9 percent to 15 percent in the target site, compared to a decrease from 9 percent to 6 percent in the comparison site.

5.10.2.3 Parents

Survey results include several indicators of increased parent awareness in Sioux City. One survey question asked parents how often they have seen or heard advertisements telling them about the risks of drugs. The increase in the percentage of Sioux City parents responding “almost every day or more often” to this question was statistically significant. In Sioux City, 33 percent of parents surveyed at baseline reported they had seen or heard such ads almost every day or more often, and this figure rose to 55 percent at followup. In contrast, the percentage of Duluth parents responding almost every day or more often fell from 26 at baseline to 24 at followup.

The four paid ads directed at Sioux City parents were *Burbs*, *Girl Interview*, *O’Connor*, and *Under Your Nose*. Survey data indicate that the percentage of Sioux City parents that reported “often” seeing *Girl Interview*—significantly increased from baseline to followup, compared to parent recall of the same ad in Duluth. *Girl Interview* was seen “often” by 22 percent of parents in Sioux City at baseline and by 39 percent at followup, compared with much lower numbers in Duluth, where the percentage rose from 2 to 5 percent. *Girl Interview* also was the newest of the ads and may have aired frequently as a PSA.

Survey data also show statistically significant increases in awareness among Sioux City parents with respect to three of the four paid Campaign ads targeted at them—*Burbs*, *Girl Interview*, and *Under Your Nose*—from baseline to followup. The increases in parent awareness of these ads are as follows: 23 percent to 29 percent for *Burbs*, 22 percent to 39 percent for *Girl Interview*, and 6 percent to 12 percent for *Under Your Nose*. Media buy data indicate that *Burbs* and *Girl Interview* both aired 10 times as paid ads while *Under Your Nose* aired 5 times.

Clearly, the ads seen by parents during the Media Campaign in Sioux City had some effect, as indicated by responses to another survey question that showed a statistically significant change. Parents were asked how much they agreed that anti-drug ads had given them new information about drugs. In Sioux City, parents who agreed “a lot” increased significantly from 29 percent at baseline to 43 percent at followup, compared with a decrease from 27 percent to 22 percent in Duluth.

Parents’ perception of the risk of using or trying drugs also changed over time. Parents were asked how much overall risk they think is associated with five different drugs, either in trying them once or twice or in using them regularly. The five drugs were heroin, cocaine/crack-cocaine, methamphetamine, marijuana, and inhalants. The change in the percentage of parents that reported “great risk” was statistically significant for regular use of cocaine/crack-cocaine, inhalants, and methamphetamine and for experimental use of inhalants. The percentage changes of parents that reported “great risk” for regular use of specific drugs are as follows: cocaine/crack-cocaine (93% at baseline to 95% at followup in Sioux City; 93% to 86% in Duluth), inhalants (92% to 94% in Sioux City; 92% to 84% in Duluth), and methamphetamines (90% to 94% in Sioux City; 92% to 84% in Duluth). In addition, the perception of the risk of experimental use of inhalants

was the same in both communities at baseline, with 85 percent of parents saying there was “great risk”. At followup, 88 percent of parents in Sioux City perceived “great risk”, while in Duluth, the percentage fell to 77 percent.

5.10.3 Community Impact

Stakeholders within the Sioux City community were supportive of the Media Campaign exhibited through their numerous contributions. The Waitt Family Foundation (the Waitt family owns the Gateway 2000 computer company) and United Parcel Service (UPS) provided matching funds for the Media Campaign in Sioux City. From the outset in January, some of the local television and radio stations aired the Media Campaign ads during the slots paid for by the Campaign but did so as a public service. The stations then donated the money from paid ads to local community-based prevention programs. At followup, a local treatment facility reported an increase in the number of parents seeking information about drug abuse, which was attributed to the Media Campaign.

5.10.4 Summary of Findings

Survey data show statistically significant increases in youth recognition of all three paid Campaign ads targeted at Sioux City youth—*Drowning, Noses, and Long Way Home*. Increases in awareness of these ads also were statistically significant within the target site. In addition, a significantly greater percentage of Sioux City teens, compared to Duluth teens, reported “often” seeing all four paid campaign ads targeting teens—*911, Alex Straight A’s, Frying Pan, and Layla*—from baseline to followup. Survey data also indicate a statistically significant increase in awareness among Sioux City parents, compared to Duluth parents, of one paid Campaign ad—*Girl Interview*. Moreover, the increase in parent recall of three paid Campaign ads—*Girl Interview, O’Connor, and Under Your Nose*—from baseline to followup was statistically significant within Sioux City.

The percentage of youth that reported seeing messages describing the dangers of drugs on television increased significantly from baseline to followup in Sioux City while remaining the same in Duluth. Similarly, the percentage of youth who learned “a lot” from television commercials describing the risks of drugs increased significantly during the Media Campaign in Sioux City but decreased in Duluth. One survey question for teens revealed significant changes on attitudes toward drugs. Asked how much they learned about the risks of drugs from various sources, the percentage of teens who learned “a lot” changed significantly across sites for TV ads.

Changes were also significant for several indicators of increased parent awareness in Sioux City. The percentage of parents surveyed that reported seeing or hearing anti-drug ads almost every day or more often increased from 33 to 55. The change was also statistically significant for the percentage of Sioux City parents that “agreed a lot” that anti-drug ads had given them new information or told them things they didn’t know about drugs. In addition, the change in percentage of parents that reported “great risk” was statistically significant for regular use of

cocaine/crack-cocaine, inhalants, and methamphetamines, and for experimental use of inhalants.

The Media Campaign also had an impact on the Sioux City community. Two local sources provided matching funds for the Campaign, some television and radio stations aired the paid ads as a public service and donated the money to local prevention programs. Lastly, one local treatment facility reported an increase in parents seeking information about drug abuse.

5.11 TUCSON

Tucson is located in Pima County, Arizona, 64 miles north of Nogales, Mexico. It is a medium-sized city of more than 660,000 residents, most of whom (579,000) live in the center city. In the metropolitan area, 78 percent of the residents are white, 24 percent are Hispanic, 3 percent are African American, and 3 percent are Native American. These groups tend to reside in specific areas: Native Americans live primarily on one of several reservations outside the city; Hispanic families reside primarily in the Westside and West Central Park neighborhoods of Tucson and in the city of South Tucson. White families live in the Foothills, East Tucson, and Northwest neighborhoods of Tucson. Tucson's annual crime rate is 877 per 100,000 residents, and its unemployment rate is 7.5 percent. Children ages 5 through 17 compose 16 percent of the population, and more than 23 percent of children under age 18 live below the poverty level.

Tucson experiences a constant influx of illegal immigrants, and serves as the first contact point and distribution hub for illegal drugs passing from Nogales, Mexico, to Pima County. Investigations by needs assessment and evaluation task forces in border counties and by the University of Arizona Rural Health Office revealed that border youth are more likely than non-border youth to use alcohol and tobacco, to try illegal drugs such as marijuana and cocaine, and to begin using all of these drugs before age 13. In addition, a disproportionately high percentage of people ages 15 to 24 visit border emergency rooms for reasons related to substance abuse. One out of every seven people arrested for substance abuse-related offenses in the border counties of Yuma, Cochise, and Santa Cruz in 1991 were juveniles. In 1995, out of a group of 842 high school students interviewed in Nogales, 90 percent reported that alcohol was easy to obtain and a slightly higher percentage stated that marijuana was easy to obtain.

The drug situation in Tucson includes several other important features. Tucson has been designated a High Intensity Drug Trafficking Area (HIDTA) and is characterized by a high prevalence of methamphetamine production and use. Furthermore, in November 1996, Proposition 200, which legalized marijuana for medicinal purposes, was passed in Arizona, and Arizona voters reaffirmed their approval of this measure in November 1998.

5.11.1 Intervention

Representatives of the Office of National Drug Control Policy (ONDCP) kicked off Phase I of the Media Campaign in Tucson in January 1998 at an event attended by local community leaders and others with an interest in drug abuse prevention. Phase I used existing ads available through the Partnership for a Drug Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Tucson received several paid TV ads and PSAs. Youth, teens, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-11 presents those paid ads and PSAs for Tucson that were included in the survey instruments.

The subset of paid campaign ads for Tucson focused on the following drugs: drugs in general, methamphetamine, marijuana, and heroin. Paid advertisements directed at youth included *Long Way Home*, *911*, *Alex Straight A's*, *Frying Pan*, and *Rite of Passage* were the paid ads directed at teens, and *Girl Interview* and *O'Connor* were the paid ads directed at parents. PSA ads included *Drowning*, *Girlfriend*, and *Noses* for youth, *Free Ride* and *Layla* for teens, and *Burbs*, *Deal*, and *Under Your Nose* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in Tucson/Austin**

Campaign Survey Data	Tucson (suburbs) (Target)			Austin (suburbs) (Comparison)			Overall % Difference	
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference		
YOUTH (Response = Yes)								
Paid ads	<i>Long Way Home</i>	30	68	38*	25	22	-3	41*
PSAs	<i>Drowning</i>	23	17	-6	24	25	1	-7
	<i>Girlfriend</i>	14	28	14*	18	15	-3	17*
	<i>Noses</i>	32	25	-7**	27	28	1	-8
TEENS (Response = Often)								
Paid ads	<i>911</i>	4	45	41*	5	5	0	41*
	<i>Alex Straight A's</i>	4	25	21*	6	4	-2	23*
	<i>Frying Pan</i>	12	35	23*	11	11	0	23*
	<i>Rite of Passage</i>	9	15	6	5	4	-1	7
PSAs	<i>Free Ride</i>	4	6	2	5	4	-1	3
	<i>Layla</i>	8	9	1	8	1	-7	8
PARENTS (Response = Often)								
Paid ads	<i>Girl Interview</i>	4	12	8*	2	4	2	6*
	<i>O'Connor</i>	10	18	8*	12	17	5	3
PSAs	<i>Burbs</i>	15	22	7**	11	17	6	1
	<i>Deal</i>	15	13	-2	11	11	0	-2
	<i>Under Your Nose</i>	4	6	2	5	5	0	2

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: A) Data reported above for youth and teens were collected from the non-center city area only (see Chapter 2). Data presented for parents include both center city and non-center city.

B) Additional paid ads aired via cable and Channel One.

5.11.2 Survey Findings

- The percentage of Tucson youth that recalled “often” seeing the one paid Campaign ad directed toward Tucson youth, *Long Way Home*, increased significantly.
- After Phase I of the Media Campaign, the percent of Tucson youth that reported that methamphetamine and heroin were dangerous increased significantly.
- From baseline to followup, the percentage increase in Tucson teens that reported “often” seeing the ads *911*, *Alex Straight A's*, and *Rite of Passage* was significant when compared to recognition of the ads among Austin teens.

- Survey data show that a statistically significant percentage of Tucson parents recalled seeing *Girl Interview* “often”, compared to Eugene parents. In addition, the percentage of parents that reported “often” seeing *O’Connor* increased significantly from baseline to followup in Tucson.

The data presented in this section focus on findings reported by youth, teens, and parents surveyed in the Tucson target community and the Austin comparison community. Findings are presented for survey questions where significant differences between the two communities were identified. Data from media monitoring (available only for Austin) and data collected in focus groups and community respondent interviews are presented to support reliable interpretation of the survey data.

5.11.2.1 Youth

Over the course of the intervention, youth became increasingly aware of anti-drug messages on the TV. For example, from baseline to followup, the percentage of Tucson youth that reported seeing or hearing TV commercials about the negative effects of drugs increased significantly (from 87% to 94%), when compared with a smaller increase among youth in Austin (84% to 86%).

In addition, youth awareness of the dangers of two drugs, heroin and methamphetamine, increased among youth in Tucson from baseline to followup. Tucson youth increasingly reported that heroin and methamphetamines were very dangerous (from 45% to 76% and from 36% to 64%, respectively). By comparison, Austin youth’s awareness of the risk of these drugs decreased (from 59% to 49% and from 31% to 30%). Moreover, the difference between Tucson and Austin was statistically significant.

One paid Campaign ad was directed at youth—*Long Way Home*. The remaining three ads included in the youth survey—*Drowning*, *Girlfriend*, and *Noses*—aired as PSAs in Tucson. Survey data indicate an increase in the percentage of Tucson youth that reported “often” seeing the paid Campaign ad *Long Way Home*. In fact, the increase from baseline to followup was statistically significant, rising from 30 percent to 68 percent in Tucson, compared to a decrease from 25 percent to 22 percent in Austin youth. As expected, the percent of Tucson youth that recalled seeing the two PSAs, *Drowning* and *Noses*, decreased. Interestingly, Tucson youth recall of the third PSA, *Girlfriend*, increased from 14 percent to 28 percent, while Austin youth recognition of that ad decreased from 18 percent to 15 percent.

Focus group discussions among Tucson youth support the above findings in two ways. First, both center city and non-center city youth recalled specific TV ads pertaining to methamphetamine. Second, and more generally, all elementary school children in the youth focus groups expressed the belief that drug use was bad and dangerous. The non-center city students stated that “drugs can hurt you” and that “they can get people in trouble.” They also reported the anti-drug ads they saw on TV conveyed these messages. In addition, most of the community informants that were interviewed believed there was an increased awareness

among youth about the dangers of drug use, and they attributed this to the Media Campaign.

5.11.2.2 **Teens**

Survey data indicate statistically significant increases in the percent of teens that reported that they “learned a lot” about the risks of drugs from TV Commercials in Tucson (from 20% to 24%), compared to a decrease in Austin (from 20% to 11%). Likewise, the percent of teens that reported that they see or hear commercials or ads telling about the risks of drugs “almost every day or more often” increased significantly from baseline to followup in Tucson (from 37% to 57%). This increase also was found to be statistically significant when compared to the decrease from 29 percent to 21 percent in Austin. Moreover, focus group youth in Tucson supported these findings, indicating they learned a lot about drugs from TV.

Four paid Campaign ads were directed toward Tucson teens—*911*, *Alex Straight A's*, *Frying Pan*, and *Rite of Passage*. The two PSAs directed at Tucson teens included *Free Ride* and *Layla*. Survey data clearly show increases in recognition of three of the four paid ads. Increases from baseline to followup in the percentage of Tucson teens that reported “often” seeing the ads *911*, *Alex Straight A's*, and *Frying Pan* were statistically significant when compared with recognition of the ads among Austin teens. In addition, the percentage of Tucson teens that recalled “often” seeing *911*, *Alex Straight A's*, and *Frying Pan* increased to a statistically significant degree in Tucson from baseline to followup.

Survey data show that the percentage of teens that recalled the three aforementioned paid Campaign ads was substantially greater when teens were asked if they had seen the ads “often” or “a few times”. The percentage of teens that reported seeing *911* increased from 31 percent to 73 percent in Tucson, while decreasing from 24 percent to 21 percent in Austin. Media buy data indicate that *911* aired more than the other four ads, appearing 95 times and achieving more than 400 GRPs.

Likewise, teen recall of *Frying Pan* increased from 39 percent to 72 percent in Tucson, while decreasing from 35 percent to 31 percent in Austin. *Frying Pan* also aired frequently and achieved a high reach, appearing 53 times and totaling 426 GRPs—higher than those achieved by *911*. Teen recollection of *Alex Straight A's* increased from 31 percent to 61 percent in Tucson, while only increasing slightly from 32 percent to 34 percent in Austin. Teen recall of *Rite of Passage*, the fourth paid Campaign ad directed at teens, increased from 28 percent to 37 percent in Tucson, while dropping from 24 percent to 18 percent in Austin. Media buy data indicate that *Rite of Passage* aired 11 times as a paid ad for a total of 26 GRPs. Not surprisingly, awareness of the two remaining ads directed at teens—*Free Ride* and *Layla*—which aired only as PSAs in Tucson, dropped from 24 percent to 21 and from 41 percent to 35 percent, respectively.

5.11.2.3 Parents

Two paid Campaign ads included in the survey, were directed toward parents in Tucson—*Girl Interview* and *O'Connor*. The three PSAs directed at parents included *Burbs*, *Deal* and *Under Your Nose*. Parents were asked how often they had seen or heard ads telling them about the risks of drugs. From baseline to followup, the percent of Tucson parents that reported they had seen or heard ads on TV “almost every day or “more often” increased from 31 percent to 47 percent. This percent change was statistically significant when compared to the slight increase among Austin parents, from 20 percent to 22 percent.

Survey data show a statistically significant increase in the percent of Tucson parents that recalled “often” seeing *Girl Interview*, compared to Austin parents. From baseline to followup the percentage of Tucson parents that saw *Girl Interview* “often” increased greatly from 4 percent to 12 percent compared with a much smaller increase from 2 percent to 4 percent among Austin parents. Media buy data indicate the ad aired 4 times for a total of 12 GRPs in Tucson.

Moreover, the percent of parents that reported seeing *Girl Interview* “often” or “a few times” increased from 12 percent to 44 percent in Tucson. Again, this increase was found to be statistically significant when compared to the slight increase in Austin from 11 percent to 13 percent. The percent of parents that reported seeing *O'Connor* increased to a significant degree within-site in Tucson from 58 percent to 66 percent while dropping in Austin from 64 percent to 60 percent. Media buy data indicate that *O'Connor* aired 5 times as a paid ad in Tucson.

Not surprisingly, Tucson parent awareness of the PSAs, *Deal* and *Under Your Nose*, did not increase significantly from baseline to followup. In fact, the percent of parents that recognized *Deal* decreased from 51 percent at baseline to 40 percent at followup in Tucson, while only slightly increasing from 46 percent to 49 percent in Austin. The percentage of parents that recognized *Under Your Nose* increased only slightly in Tucson (from 26% to 29%), while remaining unchanged at 24 percent in Austin.

Further evidence that the Media Campaign positively affected Tucson parents is found in the significant increased awareness of the risks of using or trying two specific drugs. From baseline to followup, Tucson parents perceived greater risk involved in “sniffing things like glue to get high regularly” (from 88% to 96%) and in “trying methamphetamine once or twice” (from 81% to 92%).

The increase in the percentage of Tucson parents that perceived great risk in methamphetamine use was significant when compared with the decrease in the percentage of Austin parents that held these perceptions (from 89% at baseline to 88% at followup and from 83% at baseline to 77% at followup, respectively). Although media monitoring data are unavailable for Tucson, arguably, this finding may be due in part to the fact that the paid Campaign ad *911* which aired during the intervention focuses on methamphetamine use. However, another factor that must be taken into consideration is that a separate anti-

methamphetamine campaign was launched in the early spring of 1998 by the Arizona National Guard.

Furthermore, survey data show that Tucson parents perceived that the anti-drug ads they saw on TV were effective in two important ways. A greater percentage of Tucson parents than Austin parents agreed that the ads they saw during the Media Campaign made them aware of the risks of drugs, and that America's drug problem is something all families should be concerned about. Specifically, from baseline to followup, the percent of Tucson parents that agreed that the Campaign ads apprised them of the risks of drugs increased from 43 percent to 48 percent, compared with a decrease among Austin parents from 44 percent to 33 percent. In addition, from baseline to followup, a slightly greater percent of Tucson parents (from 65% to 67%) reported that the ads made them aware that all families should be concerned about the drug problem in America, compared with a substantial decrease among Austin parents (from 70% to 56%).

Furthermore, focus group data show that center city and non-center city parents in Tucson see a wide variety of ads regularly on major television networks, including Spanish-speaking stations, as well as on billboards, posters, and on the radio. They report that the messages conveyed to youth by the ads were that drugs are dangerous, they can ruin your life, and they can kill you. Youth influencers (mentors) also reported seeing anti-drug messages several times per day on television.

In addition, focus group discussions with Tucson parents supported the finding that exposure to the Media Campaign ads resulted in increased awareness of the risks of drugs. Parents reported that the ads provided them with a natural lead-in for discussing drug use with their children. This was particularly true when parents and their children had watched an anti-drug ad on television together. Center city parents reported that ads educate parents about how to talk with their children and stay away from drugs. In addition, several community informants reported an increase over the past 6 months in the number of parents calling for either information on drugs or treatment options.

5.11.3 Community Impact

One local coalition, Pima Prevention Partnership, has been involved in ongoing activities to support the Media Campaign. These activities include talking with project partners, sending out supplemental information on alcohol and other drugs, coordinating with the Pima County Office of Health Care, submitting newspaper articles, speaking publicly at local schools, and coordinating with the local teen court program. Coalition representatives reported that the community has responded favorably to the Media Campaign. Coalition representatives have noticed more community members talking about the Media Campaign ads and making phone calls requesting information and asking for referrals. They particularly noted numerous calls from concerned grandparents who wanted help to prevent their grandchildren from using drugs.

5.11.4 Summary of Findings

Following approximately 5 months of exposure to the Media Campaign, Tucson youth increasingly believed that heroin and methamphetamine are very dangerous (from 45% to 76% and from 36% to 64%, from baseline to followup, respectively). Tucson youth showed significant increases in awareness of the one youth-targeted paid Campaign ad: *Long Way Home* (from 30% to 68%). Focus group interviews with youth and discussions with community informants supported these findings.

The most important sources of anti-drug information for Tucson teens were radio, TV, movies, and news. Focus group discussions with the Tucson teens indicated that anti-drug ads were particularly influential in showing teens the various effects of drugs. Awareness of the paid Campaign ads directed at teens—*911*, *Alex Straight A's*, and *Frying Pan*—increased at statistically significant levels in Tucson from baseline to followup when compared to teens in Austin.

Tucson parents' awareness increased in several ways. Over the course of the Media Campaign, parents reported they had seen or heard anti-drug ads that told them about the risks of drugs almost every day or more often. Discussions with focus group parents, community informants, and key influencers all supported the fact that a wide array of anti-drug ads were seen and heard frequently. Awareness of the paid Campaign ads directed at parents—*Girl Interview* and *O'Connor*—increased at statistically significant levels from baseline to followup in Tucson. The increase in awareness of *Girl Interview* also was found to be statistically significant when compared to the increase in awareness of parents in Austin.

It is likely that the Tucson parents' increased awareness influenced their perceptions of the effectiveness of the Media Campaign ads. They believed the ads made them aware of the risks of drugs and that the Nation's drug problem must be a concern for all families. Lastly, discussions with focus group parents, community informants, and key influencers in Tucson all revealed a keen awareness of the nature of the drug problem in their community.

5.12 WASHINGTON, D.C.

Washington, D.C., the Nation's capital, is encircled by major suburban communities in Maryland and Northern Virginia. Centrally located in the Mid-Atlantic region, the MSA has a population of 3,923,574. Socioeconomic stratification and demographic dispersion characterize this large and diverse metropolitan area, which is linked by a thorough transportation system connecting non-center city and center city areas. In the Washington, D.C., metropolitan area, 65 percent of residents are white, 26 percent are African American, 5 percent are Hispanic, and 4 percent are other (Native American, Asian, or other). The percentages of African Americans and whites are reversed in center city Washington, D.C.; African Americans make up two-thirds of the population and whites nearly one-third. The unemployment rate in the MSA is 3.7 percent, and the annual crime rate is 716 per 100,000 residents. Sixteen percent of the population is between ages 5 and 17, and 7.9 percent of children under age 18 live below the poverty level.

Washington, D.C., is a major hub on the north-south drug trafficking route following Interstate 95 north to Boston and south to Florida, and has been designated a High Density Drug Trafficking Area (HIDTA). Drug use is not confined to high-risk center city environments or to particular racial or ethnic groups. It is widespread in such relatively affluent non-center city communities as Fairfax County, Virginia, and Prince George's, Howard, and Montgomery Counties in Maryland. The diversity of languages spoken in the area (English, Spanish, Nigerian, Chinese, Korean, Vietnamese, and Russian, among others) presents a special challenge for law enforcement officials involved in drug interdiction, because traffickers often encode communication through their native language (Washington/Baltimore HIDTA, 1997).

5.12.1 Intervention

Representatives of the Office of National Drug Control Policy (ONDCP) kicked off Phase I of the Media Campaign in Washington, D.C. in December 1997. Phase I used existing ads available through the Partnership for a Drug Free America (PDFA), including television and radio spots, newspaper ads, and billboards. A comprehensive listing of all Phase I advertisements is presented in Appendix A. Washington, D.C. received several paid TV ads and PSAs. Youth, teens, and parents were surveyed about their awareness of a subset of these ads. Exhibit 5-12 presents those paid ads and PSAs for Washington, D.C. that were included in the survey instruments.

The subset of paid campaign ads for Washington, D.C. focused on the following drugs: drugs in general (32.6%), crack (22.5%), inhalants (18.1%), marijuana (16.9%), and heroin (9.9%). Paid advertisements directed at youth included *Drowning*, *Girlfriend*, *Long Way Home*, and *Noses*. *Alex Straight A's*, *Free Ride*, *Frying Pan*, *Layla*, and *Rite of Passage* were the paid ads directed at teens, and *Deal*, *Girl Interview*, *O'Connor*, and *Under Your Nose* were the paid ads directed at parents. PSA ads included *911* for teens, and *Burbs* for parents.

**Exhibit 5-1
Awareness of Campaign Ads in Washington, DC/Birmingham**

Campaign Survey Data	Washington, DC (Target)			Birmingham (Comparison)			Overall % Difference
	Baseline %	Followup %	% Difference	Baseline %	Followup %	% Difference	
YOUTH (Response = Yes)							
Paid ads							
<i>Drowning</i>	23	44	21*	15	17	2	19*
<i>Girlfriend</i>	29	52	23*	20	19	-1	24*
<i>Long Way Home</i>	39	60	21*	33	28	-5	26*
<i>Noses</i>	35	56	21*	22	23	1	20*
TEENS (Response = Often)							
Paid ads							
<i>Alex Straight A's</i>	16	26	10*	9	7	-2	12**
<i>Free Ride</i>	11	19	8*	12	12	0	8
<i>Frying Pan</i>	34	58	24*	20	21	1	23*
<i>Layla</i>	17	24	7**	14	16	2	5
PSAs							
<i>911</i>	10	9	-1	10	8	-2	1
<i>Rite of Passage</i>	11	10	-1	12	13	1	-2
PARENTS (Response = Often)							
Paid ads							
<i>Deal</i>	14	31	17*	18	17	-1	18*
<i>Girl Interview</i>	4	18	14*	1	4	3	11*
<i>O'Connor</i>	19	26	7	23	24	1	6
<i>Under Your Nose</i>	4	12	8*	6	6	0	8*
PSAs							
<i>Burbs</i>	12	15	3	13	14	1	2

* Significant difference at the 95% confidence level.

** Significant difference at the 90% confidence level.

Note: Additional paid ads aired via cable and Channel One.

5.12.2 Survey Findings

- From baseline to followup a statistically significant increase in the percentage of D.C. youth reported that TV ads or commercials made them aware of how dangerous drugs were, while this figure decreased in the comparison site, Birmingham.
- Survey data show statistically significant increase in the percentage of youth that reported “often” seeing all four paid Campaign ads directed at them—*Long Way Home, Drowning, Girlfriend, and Noses.*
- Survey data show statistically significant increases in awareness of four of the five paid Campaign ads directed at D.C. teens—*Frying Pan, Alex Straight A's, Free Ride, and Layla.*
- From baseline to followup, the percentage of D.C. parents that responded they had seen or heard such ads “almost every day” or “more often” increased significantly when compared to responses from Birmingham parents.
- Survey data show statistically significant increases in the percentage of D.C. parents that reported seeing three of the four paid Campaign ads “often” and all four ads “often” or “a few times”—*Deal, Girl Interview, and Under Your Nose.*

The comparison site for Washington, D.C., was Birmingham, Alabama. The data presented in this section focus on findings reported by youth, teens, and parents surveyed in the Washington, D.C., metropolitan area and in Birmingham. The findings presented below are those for which there are statistically significant differences between the two communities. Data collected from media monitoring, focus groups, and community respondent interviews conducted during site visits are presented to support reliable interpretation of the survey data.

5.12.2.1 Youth

Four paid Campaign ads were directed toward youth in Washington, D.C.—*Drowning, Girlfriend, Long Way Home, and Noses*. Followup survey data show statistically significant differences in the percentage of Washington, D.C. youth compared to Birmingham youth, that reported seeing effective anti-drug ads on TV. In fact, from baseline to followup a statistically significant increase occurred in the percentage of D.C. youth that reported TV ads or commercials made them aware of how dangerous drugs were (from 72% at baseline to 81% at followup), while decreasing from 80 percent to 77 percent in the comparison site, Birmingham. In addition, a significantly greater percentage of Washington, D.C. youth from baseline to followup reported seeing or hearing messages on TV that drugs are bad for them (from 81% to 86%).

Not surprisingly, when youth were asked if they had “often” seen the four paid Campaign ads directed at them—*Drowning, Girlfriend, Long Way Home, and Noses*—survey data show statistically significant increases in awareness of all four ads in Washington, D.C. Media monitoring and media buy data support survey findings, showing a substantial increase in the average number of times that the paid Campaign ads aired in the target site, and the number of times the paid ads aired during prime TV viewing hours.

Of the four paid ads directed at D.C. youth, survey data show that awareness of *Long Way Home* increased most substantially. In fact, D.C. youth recall of *Long Way Home* increased from 39 percent at baseline to 60 percent at followup, while dropping from 33 percent to 28 percent in Birmingham. Media monitoring and buy data help explain these findings. In fact, *Long Way Home* aired more often than any other of the four paid Campaign ads in D.C. directed at youth. From the baseline to the intervention period, the average number of times *Long Way Home* aired increased from 0 to 20.8 times per month (or 4.2 times per week). Media buy data also indicate the ad aired frequently and achieved the second highest reach of the four ads, airing 56 times for 296 GRPs. By sharp contrast, *Long Way Home* did not air in the comparison site during the baseline or intervention periods.

Similarly, D.C. youth recollection of the paid Campaign ad *Girlfriend* increased significantly from 29 percent at baseline to 52 percent at followup, while decreasing from 20 percent to 19 percent in Birmingham. Media monitoring and buy data support these findings. In Washington, D.C., from baseline to intervention the average number of times *Girlfriend* aired increased from 0 to 14.6 times per month (or 3.7 times per week). Media buy data indicate the ad

aired the most frequently and achieved the highest number of GRPs of the four ads, appearing 65 times and achieving 328 GRPs. By comparison, *Girlfriend* did not air in the comparison site during the baseline or intervention periods.

Survey and media monitoring data explain further the statistically significant increases in D.C. youth recall of the paid Campaign ads, *Noses* and *Drowning*. Recall of *Noses* increased from 35 percent at baseline to 56 percent at followup in Washington, D.C, while increasing only slightly from 22 percent to 23 percent in Birmingham. Monitoring data show that from baseline to intervention the average number of times *Noses* aired increased in Washington, D.C. from 0 to 9.8 times a month (or 2.5 times a week). What is more, 61.2 percent of the time *Noses* aired during viewing hours when D.C. youth were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). By contrast, *Noses* did not air in the comparison site during the baseline or intervention periods

In addition, from baseline to followup Washington, D.C. youth recall of *Drowning* increased by 21 percent (from 23 % at baseline to 44 % at followup), compared to only a slight increase in Birmingham (from 15 % to 17 %). Over the same period, the average number of times *Drowning* aired increased in Washington, D.C. from 1.2 times a month to 14.6 times a month (or 3.7 times a week). Furthermore, 56 percent of the time *Drowning* aired during viewing hours when D.C. youth were most likely to be watching TV. Over the same period, *Drowning* did not air in the comparison site, Birmingham.

It is also worth noting that *Noses* and *Drowning* focused on educating youth about the dangers of using inhalants. Interestingly, both ads experienced significant increases in the percentage of D.C. youth that recognized the ads at followup. *Noses* and *Drowning* aired 44 and 46 times respectively, achieving GRPs of 397 and 188. Therefore, it is not surprising that from baseline to followup a statistically significant percentage of D.C. youth reported that they thought inhalant use could kill them (an increase from 55 % to 71 %), compared to only a slight decrease in Birmingham youth, from 65 percent to 64 percent. Focus group discussions with D.C. youth included comments such as “the brain goes crazy on drugs”, “we don’t want to end up like that”, and “when you watch commercials and see them talk about drugs and violence, you see how they can mess up the future and your dreams.”

5.12.2.2 Teens

Four paid Campaign ads included in the survey were directed toward teens in Washington, D.C.—*Alex Straight A’s*, *Free Ride*, *Frying Pan*, and *Layla*. Survey data show statistically significant increases in awareness for all four of the paid Campaign ads. Media monitoring and media buy data support survey findings, showing a substantial increase in the average number of times that the paid Campaign ads aired in the target site, and the number of times the paid ads aired during prime TV viewing hours.

When teens were asked if they had “often” seen the paid Campaign ads directed toward them, from baseline to followup survey data show statistically significant increases in D.C. teens’ awareness of the ads *Frying Pan* and *Alex Straight A’s*, compared to Birmingham teens over the same period. Moreover, survey data show that even a greater percentage of D.C. teens recalled seeing the Campaign ads “often” or “a few times.”

For example, at followup D.C. teen recollection of *Frying Pan* increased by 22 percent (from 61 % to 83 %), while remaining unchanged at 44 percent in the comparison site, Birmingham. Media monitoring and buy data support these findings. Over the same period, the average number of times *Frying Pan* aired increased in Washington, D.C. from 0 to 19 times a month (or 4.8 times a week). Moreover, 65.3 percent of the time *Frying Pan* aired during viewing hours when D.C. teens were most likely to be watching TV. *Frying Pan* aired the most frequently of the four ads and achieved the highest of GRPs at 85 and 497, respectively.

Correspondingly, from baseline to followup, the percentage of D.C. teens that recalled ever seeing the paid Campaign ad, *Alex Straight A’s*, increased from 50 percent to 68 percent, compared to Birmingham teen recall which remained unchanged at 40 percent. Media monitoring data support these findings. Over the course of the Phase I intervention, the average number of times *Alex Straight A’s* aired increased in Washington, D.C. from 0 at baseline to 16.2 times a month (or 4.1 times a week). What is more, 44.4 percent of the time *Alex Straight A’s* aired during viewing hours when D.C. teens were most likely to be watching TV (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.).

In addition, survey data in Exhibit 5-12 show statistically significant within-site increases in D.C. teen recall of the paid Campaign ads, *Free Ride* and *Layla*. From baseline to followup, the percentage of D.C. teens that recalled ever seeing the paid Campaign ad, *Free Ride*, increased from 35 percent to 46 percent, but dropped from 30 percent to 29 percent in Birmingham. Media monitoring data support survey findings. Over the same period, the average number of times *Free Ride* aired increased in Washington, D.C. from 0 to 9.2 times a month (or 2.3 times a week). Moreover, 60.9 percent of the time *Free Ride* aired during viewing hours when D.C. teens were most likely to be watching TV.

Additionally, when D.C. teens were asked if they recalled seeing the paid Campaign ad, *Layla*, “often”, recall increased to a statistically significant degree within site. Media monitoring and media buy data support this finding. From baseline to intervention, the average number of times *Layla* aired increased in Washington, D.C. from 0 to 16.2 times a month (or 4.1 times a week). Media buy data show that the ad *Layla* aired 63 times as a paid ad and achieved 331 GRPs, indicating the ad aired during prime viewing hours. Lastly, media monitoring data show that 44.4 percent of the time *Layla* aired during viewing hours when D.C. teens were most likely to be watching TV.

5.12.2.3 Parents

Four paid Campaign ads directed toward parents in Washington, D.C., were included in the survey instrument. The one PSA targeting parents was *Burbs*. Survey data suggest strongly that the Media Campaign contributed to statistically significant increases in the percentage of D.C. parents that reported seeing or hearing ads on TV informing them of the risks of drug use. In fact, from baseline to followup, the percentage of D.C. parents that responded they had seen or heard such ads “almost every day” or “more often” increased significantly (from 25% to 34%) when compared with responses from Birmingham parents (from 20% to 24%).

Survey data show statistically significant increases in the percentage of D.C. parents that reported seeing three of the four paid Campaign ads “often”—*Deal*, *Girl Interview*, and *Under Your Nose*. When D.C. parents were asked if they had seen the ads “often” or “a few times,” increases in awareness were significant for all ads, including *O’Connor*. Survey data show even greater statistical significance with respect to the percentage of parents that reported ever seeing the aforementioned four paid Campaign ads. Media monitoring and media buy data support survey findings, showing a substantial increase in the average number of times that the paid Campaign ads aired in the target site, and the number of times the paid ads aired during prime TV viewing hours. What is more, the adult-targeted ads aired in D.C. with a much greater reach and frequency than in any of the other target sites.

At followup, D.C. parent recollection of *Deal* increased by 14 percent (from 50% to 64%), while decreasing by 6 percent in the comparison site, Birmingham (from 50% to 44%). Media monitoring and buy data support these findings. Over the same period, the average number of times *Deal* aired increased in Washington, D.C. from 0 to 28.6 times a month (or 7.2 times a week). Media buy data indicate that *Deal* aired 27 times as a paid ad and achieved GRPs totaling 86. Moreover, 60 percent of the time *Deal* aired during viewing hours when D.C. parents were most likely to be watching TV.

Likewise, from baseline to follow up D.C. parent recollection of the paid Campaign ad, *Girl Interview*, increased significantly (from 19% to 44%), while decreasing in Birmingham from 18 percent to 16 percent. The average number of times *Girl Interview* aired increased from less than three times per month during the baseline period in Washington, D.C. to 14.8 times per month (or 3.7 times per week) during the intervention. Media buy data indicate that *Girl Interview* aired 26 times and achieved GRPs of 104. Furthermore, 44.6 percent of the time *Girl Interview* aired during prime viewing hours (prime access: 7:00 p.m. - 7:59 p.m.; prime time: 8:00 p.m. - 10:59 p.m.; weekend daytime: 6:00 a.m. - 5:00 p.m.). By comparison, *Girl Interview* aired an average of only 1.4 times per month in Birmingham during the intervention period, none of which occurred during prime viewing hours.

Parent recall of the paid Campaign ad *Under Your Nose* increased to a statistically significant degree in Washington, D.C. from 30 percent to 42 percent, compared

to a much smaller increase in Birmingham from 36 percent to 37 percent. Media monitoring and buy data support these findings. The average number of times that *Under Your Nose* aired increased from 0 at baseline to 10.4 during times per month (2.6 times per week) during intervention, 63.5 percent of which occurred during prime viewing hours for parents. *Under Your Nose* aired as a paid ad more frequently than *Girl Interview* but reached a smaller portion of the adult audience, achieving 72 GRPs. Over the same period, *Under Your Nose* did not air at all in the comparison site, Birmingham.

Media monitoring data further support survey findings that indicate a statistically significant increase in the percent of D.C. parents that ever saw the paid campaign ad, *O'Connor*. In fact, parent recall increased from 58 percent to 73 percent, in Washington, D.C., while dropping from 71 percent to 69 percent in Birmingham. Media monitoring data support these findings. In Washington, D.C., the average number of times *O'Connor* aired increased from 4.3 times per month during baseline to 17.8 times per month (4.5 per week) during the intervention period as both a paid ad and as a PSA. In addition, during the baseline period, 40 percent of the time *O'Connor* aired during prime viewing hours for parents. Media buy data support this, indicating the ad aired 35 times as a paid ad and achieved 95 GRPs among the adult audience. Lastly, *O'Connor* aired on average only 1.6 times a month during the intervention in Birmingham.

As expected, the percentage of D.C. parents that recalled seeing the ad *Burbs*, which aired only as a PSA, showed no significant increase. Interestingly, however, media monitoring data show that *Burbs* aired in the baseline period an average of 11 times per month and during the intervention period an average of 15 times per month. In Birmingham, the average number of times *Burbs* aired as a PSA increased from 4.3 times a month at baseline to 12.8 times a month during the intervention. Similarly, the percentage of Birmingham parents that recalled seeing the ad “often” remained constant and low.

5.12.3 Community Impact

The D.C. Community Prevention Partnership was directly involved in Phase I of the Media Campaign. It conducted monthly conference calls with the other 11 target sites for debriefing and produced a newsletter. Representatives from civic organizations attended the Media Campaign kickoff and disseminated Media Campaign messages to their membership. Since the inception of the Media Campaign, community informants representing prevention providers reported a 30-percent increase in hotline phone calls from people searching for information on substance abuse prevention and treatment.

5.12.4 Summary of Findings

After Phase I of the Media Campaign, survey findings clearly indicate increases in awareness among youth, teens, and parents in Washington, D.C. As a result, they appear to be much more aware of the dangers of illegal drug use. For example, from baseline to followup D.C. youth awareness of the dangers of drug

use increased 10 percent (from 72% to 82%), while remaining constant in the comparison site, Birmingham. In addition, a significantly greater percentage of Washington, DC youth, from baseline to followup, reported seeing or hearing messages on TV that drugs are bad for them (increasing from 81% to 86%). Likewise, from baseline to followup, the percentage of D.C. parents that responded they had seen or heard such ads almost every day or more often increased significantly (from 25% to 34%) when compared with responses from Birmingham parents (from 20% to 24%). Additionally, survey data indicate a statistically significant increase in the percentage of D.C. youth that reported learning of the dangers of inhalant use (increased from 55% at baseline to 71% at followup) when compared to the percent change of Birmingham youth over the same period.

With respect to specific Campaign ads targeted toward youth, the data show statistically significant increases in awareness of four of these ads in D.C.—*Long Way Home*, *Drowning*, *Girlfriend*, and *Noses*. Media monitoring data suggest that the rise is correlated with the increase in the average number of times and the hours of the day the paid Campaign ads aired.

In addition, survey data show statistically significant increases in awareness of four of the five paid campaign ads directed at D.C. teens—*Frying Pan*, *Alex Straight A's*, *Free Ride*, and *Layla*. Similarly, survey data show statistically significant increases in the percentage of D.C. parents that reported seeing three of the four paid Campaign ads “often” and all four ads “often” or “a few times”—*Deal*, *Girl Interview*, and *Under Your Nose*. Lastly, data obtained through interviews with key local informants show that the Campaign is contributing to collaboration and outreach efforts of organizations such as CADCA as well as increasing the number of hotline phone calls received from the public about substance abuse prevention and treatment.

5.13 REFERENCES

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6. LESSONS LEARNED

The evaluation of the Phase I National Youth Anti-Drug Media Campaign included baseline and followup surveys with youth, teens, and parents; a series of three site visits to the 12 target and 12 comparison sites, scheduled at the beginning, midpoint, and at the end of the Campaign; and ongoing monitoring of media activity in many of these sites. Based on analyses of these multiple data sets, certain themes and issues repeatedly emerged. Some of the lessons learned support definitive conclusions about the effectiveness of the Phase I Campaign. Others support the formulation of recommendations that may influence subsequent phases of the Campaign.

To review, the Phase I Campaign began in January 1998, running in twelve test communities for six months, and has served as a “learning lab” phase in which paid anti-drug advertising was targeted to elementary, middle, and high school students, parents, and other influential adults. Phase I featured its messages primarily on television, radio, and newspaper print, using ads that had been developed by the Partnership for a Drug Free America. The objective of Phase I was to help youngsters, parents, and other adults to become more aware of anti-drug ads being aired. Secondary expectations, although not clearly articulated objectives, were to heighten citizens’ awareness of the risks associated with using drugs, and to influence the target communities to undertake collateral activities in support of the Media Campaign.

Based on the preliminary findings of the evaluation of Phase I, it appears that the first important step, the raising of awareness of ads and risks associated with using drugs, has been accomplished.

In the months to come, the national Campaign will harness a diverse media mix including television, video, radio, print, and Internet and other forms of new media to deliver anti-drug messages. Each successive Phase of the Campaign will be evaluated to determine whether it meets its objectives.

Once the full-scale Media Campaign is launched, with new creative ads on a national basis, goals will be even more ambitious: to change youths’ use of illegal drugs, to postpone the age when they begin to use drugs, and to convince occasional users of these and other drugs to stop using them.

The major findings presented in this Chapter are organized into two major sections: (1) lessons learned that support clear evidence of the effectiveness of the Phase I Campaign; and (2) lessons learned that can serve to inform subsequent activities and efforts to be undertaken by the national campaign.

6.1 LESSONS RELATING TO THE EFFECTIVENESS OF THE PHASE I CAMPAIGN

6.1.1 Lesson 1: Phase I Resulted in Increased Awareness of Anti-Drug Advertisements

The major objective of the Phase I Campaign, tested in 12 communities, was to increase awareness of anti-drug ads paid for by the Campaign. This was a critical concern, because unless youth, parents, and other adults targeted by the Phase I Campaign became more aware of these ads, there would be little justification for launching the Campaign nationally.

Comparisons of baseline and follow-up surveys and media monitoring results clearly indicate that both young people and parents saw or heard more anti-drug ads in target communities. Concentrated broadcasting of anti-drug use advertisements in prime time slots produced a greater awareness of those anti-drug ads. As expected, ad awareness measures for youth, teens and parents showed substantial increases from baseline to follow-up and substantial differences between target and comparison sites. Given this information, the following conclusions can be drawn about the impact of the Phase I Campaign on its audiences:

- Repeated broadcasts of individual advertisements on drug use dangers raised viewer awareness of anti-drug ads regardless of the viewer's age;
- The use of paid television ads as a source of anti-drug information for youth and teens was effective in reaching these target groups (media monitoring data demonstrate that awareness of ads is greater when ads are broadcast frequently and aired in prime dayparts when more viewers are watching);
- The content of drug-specific ads was appropriately matched with the audiences targeted (e.g., inhalants with youth);
- The campaign advertisements were shown with sufficient repeated broadcasts to significantly increase viewer awareness in the target communities.

Three recommendations are pertinent here:

- Survey questions should be expanded in the future to include other media formats used (e.g., print ads, radio ads) so that the Media Campaign can test the effectiveness of components other than television. Focus group responses indicate that ads presented through media formats like radio are especially attractive to particular groups and ages. For example, teens in Hartford said that they learn more about drug risks from radio than from other media; center-city Hartford teens recommended placing ads in all types of media, plus developing anti-drug school posters. Teens in Sioux City focus groups said they listen to radio more than they watch TV. Teens in Washington, DC said they learned about drug risks from the radio than through other types of media.

- Other-than-English language ads should be developed in sites with appreciable ethnic populations; focus groups document that non-English-speaking groups show a preference for media messages aired in their own language. Further analysis of existing site-level data can produce valuable detail on how best to target and develop such ads.
- Media monitoring data should be collected for any subsequent Media Campaign efforts because these data provide critical information to help explain why awareness is higher for certain ads; in addition, daypart information is important for understanding awareness of Campaign ads when they are appearing in both paid spots and as PSAs.

6.1.2 Lesson 2: Perceptions of the Effectiveness of Phase I Ads Varied By Age of the Viewer

Survey results revealed some age group differences in perceptions of ad effectiveness. Parents and youth tended to perceive ads as being effective in their presentation, while teens found the ads to be less effective. Focus group sessions with teens revealed that they are influenced by their own feelings of invincibility as well as the impact of peer pressure. Unlike younger youth, they have had an opportunity for firsthand experience with drug use either by trying drugs themselves or by witnessing use among peers or adults. Parents and community informants agreed with the teens' views; they believed that ads targeting children were more effective than those directed to older youth or teenagers.

These findings support the following recommendations:

- Phase I methods of presentation of ads targeting parent and youth groups should be continued as the media campaign progresses; and
- Efforts should be made to further study what aspects of ads targeting teens can be fine-tuned or revised to raise teens' perceptions of effectiveness.

The finding that there was minimal change in teen awareness seems to reinforce the importance of intervening with prevention messages when young people are still at an age when they will pay attention. A recommendation is that subsequent Media Campaign efforts should explore whether other vehicles can be more effective in reaching the teenage population. This fits with teens' own recommendations about how ads could be improved to be more effective with teens:

- Develop ads with more realistic presentations of drug dangers; involve teens themselves in designing and producing ads; have persons well-known to teens (but not celebrities) as actors in the ads; and make the ads' settings as locally based and recognizable as possible.

6.1.3 Lesson 3: Youth and Parents Did Learn Some New Facts About the Risks of Using Drugs

While the major expectation of the Phase I Campaign was to increase awareness of the anti-drug ads shown, a secondary objective was to start the difficult road toward influencing Campaign target audiences' understanding of the risks associated with using drugs. Analyses linking survey and media findings strongly suggest that increases in the monthly total number of ads lead to greater awareness of drug problems across age groups. Findings also indicate that increased frequency of drug-specific ads lead to greater recognition of the drug risks and dangers addressed by those ads. For example, increases in the frequency of inhalant ads paralleled the significantly increased percentage of target site youth who viewed inhalants as life threatening as compared to comparison site youth.

Additionally, survey findings revealed a significant increase in the percentage of target site youth who reported learning about the negative aspects of drugs from TV ads, and the percentage of target site teens who learned this information from the radio, contrasted with the comparison site youth and teens.

Likewise, parents gained new knowledge about the risks of using drugs from the Campaign aired in the 12 target sites, compared with parents in other communities where the Campaign was not in place. For example, before the Campaign was launched, many parents did not understand how serious the problem was in their community. After the Campaign had been in place for several months, parents in target sites, compared with parents in comparison sites, reported a much higher level of awareness of how important it is to talk with their youngsters about the dangers of drug use. In addition, the consensus of parents in 9 of the 12 target sites was that the ads shown had provided a positive contribution to a wider, more comprehensive effort to address youth and adult drug use. Survey results for parents confirm that by the end of Phase I, target site parents increased their perceptions of the risks posed by the use of cocaine, inhalants, heroin, and methamphetamines.

Given these findings, the following conclusions can be made about the impact of the Phase I Campaign on increasing knowledge about the risks associated with using drugs:

- Youth did learn some new facts about the dangers of using drugs, particularly the use of inhalants; and
- Parents learned more about the pervasiveness of the drug problem in this country; the risks associated with drug use, and the importance of communicating with their youngsters about the risks of using drugs.

These data also suggest the following recommendation:

- Future evaluations should consider research designs that enable parent and child data to be linked in order to examine how parents' responses correlate

with their child's and the extent to which family members' perceptions of drugs and media messages are disparate or congruent.

6.1.4 Lesson 4: The Media Campaign Changed Some Attitudes Towards Drug Use

We know from other health promotion and education campaigns and prevention research, that it takes up to two years to change people's attitudes and behavior (Monitoring the Future). It is first necessary to educate citizens about risky behavior, increase their awareness of messages about these risks, and influence their attitudes about this behavior. Only then can a real impact be made on changing their behavior, in this case, the use of drugs. Given the link between changing awareness, attitudes, and behavior, and the normally anticipated timing of such changes, ONDCP recognized that it would be unrealistic to expect the Phase I Media Campaign to have any real impact on changing the attitudes and behavior of the youth, parents, and other adults targeted by the Campaign. Therefore, the goals to change people's attitudes and behavior, related to drug use, have been set aside as the focus of the national campaign.

Nonetheless, Phase I resulted in some change in attitudes that were not expected so early. While survey results confirm that most attitudes, across all age groups of youth, did not change during the period of the Phase I Media Campaign, there were a few findings suggesting that even this short Campaign effort has made some inroads to changing youth and parents' attitudes toward drug use.

The percentage of target site youth who believed that the use of inhalants was risky increased during the Campaign compared with comparison youth. By the end of the Campaign the percentage of youth who thought that "things you sniff or huff to get high can kill you", was significantly higher than before the Campaign, compared with those youth in communities where the Campaign was not in place.

The Campaign has also achieved some modest success in changing parents' attitudes about drug use. For example, before the Campaign fewer parents thought that "America's drug problem is something that all families should be concerned about." After the Campaign, the percentage of parents holding this view increased significantly. Likewise, the percentage of parents who were "aware of the risks of using drugs" increased significantly by the end of the Phase I Campaign.

The following conclusions are supported by these and many other findings presented in earlier chapters:

- Drug-specific ads aimed at youth, used in Phase I, appear to have had the greatest effect on changing their attitudes about the use of drugs; and
- More attention needs to be focused on identifying what different advertising approaches are most effective in changing youth, teen, and parent attitudes.

6.1.5 Lesson 5: The Media Campaign Did Have an Impact on Target Communities

Media campaigns have been used to prevent or reduce consumption of illegal drugs and smoking and risky behaviors such as driving under the influence of alcohol or without seat belts. For all their power to inform and persuade, the media alone are not likely to bring about large, sustained changes in drug use behavior. The Campaign will be successful only if media efforts can be coordinated with other initiatives in the community. While community-level efforts were not a stated goal of Phase I, in fact the Media Campaign did encourage local communities to mobilize their own anti-drug initiatives and education campaigns. Site visit data collected toward the end of the Campaign suggest that many such events have occurred in the 12 target communities since the Campaign began last year. Observation of these early activities suggests that it is important to local communities that they become involved with initiating activities that can support a media campaign. It appears that the launching of a major media campaign may be the ideal time to build on the enthusiasm and momentum and encourage communities to become active.

Teachers, police officers, mayors, and local community leaders in all 12 target communities were asked what they thought about the Media Campaign. In almost all 12 communities, these citizens reported that, after the Media Campaign was launched, other activities were started to support the Campaign. Some of these anti-drug activities were school based, and others worked through local churches and community organizations.

Eleven of the 12 target communities reported anti-drug activities that built on the Campaign's momentum and were directly attributable to it. These activities included, for example, an increase in local hotline calls for substance abuse information or referral; outreach/education activities carried out by the organizations coordinating the Media Campaign; involvement of staff and students in local schools; pro-bono support from the media; presentations about the Media Campaign at conferences or seminars; and provision of matching funds for the Campaign by the business community.

Based on these findings, we recommend that target communities should continue to be encouraged to use the Media Campaign as an opportunity to increase their involvement in many types of anti-drug initiatives. The importance of community-level efforts to the success of the Campaign cannot be overestimated. Accordingly, it is recommended that further site-level analyses be undertaken:

- Conduct an indepth analysis of Phase I site-level survey data to identify how youth's, teens', and parents' responses may be influenced by local contextual factors in the community in addition to the Media Campaign intervention. This analysis will help to identify the types of community conditions where anti-drug media messages have a stronger impact.

6.2 LESSONS THAT WILL INFORM THE NATIONAL MEDIA CAMPAIGN

6.2.1 Lesson 6: Inconsistent Teen Views About Marijuana Affect Their Perceptions of Anti-Marijuana Ads

Survey results indicated that teens awareness of the risk of marijuana either within or between the target and comparison sites remained unchanged throughout the Media Campaign. Survey results also underscored the degree to which teens seem confused about the dangers of marijuana use. Results showed that many teens perceived health risks as being less important than social/behavioral risks. A relatively small proportion of teens thought that there was “great risk” in trying marijuana; however, many more thought there was “great risk” in using it regularly. Two-thirds also thought that marijuana users were at “great risk” for “getting hooked” or “going on to harder drugs.” Approximately three quarters thought that marijuana users were at “great risk” for upsetting their parents.

Focus group discussions indicated that the majority of teens view the use of marijuana as acceptable and as one of their drugs of choice. Teenagers, especially those in high school, said that they like marijuana because it is cheap, transportable, easy to cover up, and relaxing. Most teens disagreed with the statement, “I don’t want to hang around anyone who uses marijuana.”

Based on this information, the following recommendations are offered:

- Future campaign ads targeting marijuana use should be clear and precise in describing the effects of regular marijuana use on teens; and
- Media campaign ads targeting marijuana use by teens should also incorporate the following in their content: (1) the transition from casual marijuana use to chronic use; (2) the differences between popular misconceptions and facts on the physical, personal and psychological effects of marijuana use; and 3) the strong impact of peer influence on marijuana use.
- Additional, non-TV media should be used to reach teens, especially in communities whose focus groups have identified those preferences.
- Further analysis of survey data should be undertaken on the relationship between teens’ own use of marijuana and their awareness of its risks. As indicated in the Phase I focus groups, even teens who are highly aware of the risks nevertheless use the drug. One explanation, often advanced both by teens and by those who observe them, concerns the notion of teen “invincibility.” Other explanations may require further analysis of existing survey data. Site-level analyses also would allow for the relationship between drug use and awareness of risk to be examined in the context of local factors (e.g., a highly publicized drug-related event).

6.2.2 Lesson 7: Parents Are One of the Key Information Sources on Drug Use Dangers

Survey results indicated that parents are one of the most important sources of information about drugs among youth. Yet, survey data show serious discrepancies in parents' claims about their drug-related communication with their children. Despite the fact that most parents agreed that *my child knows exactly how I feel about him/her using drugs*, at target sites far fewer at baseline and at follow-up said that they had spoken with their children about drugs four or more times in the past year.

Parents in focus group discussions at all target and comparison sites stressed the importance of talking to their children about the risks and dangers of drug use and communicating values about avoiding drugs. These parents reported that they used the Media Campaign ads as starting points or icebreakers for initiating conversations about drugs with their children. However, many parents described the reasons they did not talk to their children about drugs or had difficulties doing so effectively. These included the parents' own past or present drug use, lack of information about drugs, the youth drug culture, how and when to present information to their children, denial that the problem could affect their children, and acceptance of youth drug use.

Our observations indicate that parents strongly *desire* to engage their children in discussions of drug use and its consequences, but do not know how to approach the subject or how to proceed effectively even when the subject is raised by their children. Parents in focus groups frequently praised the ads as "ice breakers," enabling them to raise the subject of drug use with their children. But they also expressed their wish for other kinds of materials designed to help them talk to their children more effectively about drugs.

In light of these findings, the following recommendations are offered:

- Parents urgently need to know more about drugs, their risks, what they look like, and how young people gain access to them;
- A significant portion of national Campaign ads should be devoted to the improvement of communication between parents and their children on the subject of drug use;
- Ads on parent-child communication should point out the possible discrepancies between young people's knowledge and experience with drugs and parents' perceptions about how much their children know; and
- Ads on improving parent-child communication should move beyond stressing the general importance of parent-child communication and present specific methods to parents that can be expected to be effective in communicating dangers of drug use to their children.

- Additional materials should be developed and made available to parents in order to give them the support and guidance they seek in talking with their children. Parents frequently mentioned materials could provide some “modeling” about how to raise the subject and could be presented in ads and in coordinated, supplemental, written materials. The development of videos for home use is a further suggestion.
- The Campaign ads should make greater use of realistic role-playing interactions between parents and their children. The role-playing may reflect a variety of scenarios according to the parent’s sex, the age and sex of the child, and the type of drug being focused upon. This approach can be developed effectively for TV or radio. Given the wide latitude in artistic and presentational style, messages could be designed in a manner that is both informative and interesting.
- Future plans of the Media Campaign should examine the best times to air ads targeting adults. Parents did not have high-level awareness of the ads targeting them, but focus group data indicate that parents saw ads targeting youth and teens.

6.2.3 Lesson 8: Anti-Drug Media Ads Can Be Improved

There was considerable agreement among focus group participants across center city and non-center city neighborhoods and community representatives from all sites about how to improve ads. It is noteworthy that one ad, *Frying Pan*, was frequently identified by large numbers of focus group participants in all age categories. This ad features a white woman who demolishes an egg and most of the contents of a kitchen with a frying pan to illustrate the damaging effect of heroin on the user, the user’s friends, and ultimately the user’s life.

There was considerable agreement across sites and among communities, community representatives, youth, and parents about how to improve ads. Focus group participants, community individuals who were interviewed and youth and parents who were surveyed agreed that ads need to be realistic, present the facts, and use local contact numbers for referrals. Other suggestions include the following:

- Ads should demonstrate the physical effects of drug use, including negative changes in physical appearance;
- Ads should show recognizable local (or at least regional) settings;
- Celebrities used in the ads should be local personalities;
- There should be more first-person testimonials, especially by youth peers.
- There should be more advice on how to improve parent-child communication about drugs.

- Ads should be age-appropriate, with younger and older children targeted with specific ads;
- Ads should be customized toward specific ethnic and income groups; and
- In addition to targeting young children with certain ads, the Media Campaign should involve more young children.

These suggestions were made regularly by youth, parents, and community representatives living in both cities and suburbs.

6.2.4 Lesson 9: Surveying Students in School Settings Is Problematic

The research design for gathering survey data from youth and teens involved sampling public schools and administering the survey to respondents during the school day. However, in this effort many barriers were encountered. The in-school surveys could not take place if the school or school district refused entry. Some districts were participating in other national surveys, experienced difficulty obtaining signed parent consent forms, or did not gain approval from their Institutional Review Board in time for the survey. Also, in a number of sites, unrelated legal issues resulted in last minute refusals to participate.

Student survey data were gathered in all 12 target sites and in 8 of the 12 comparison sites. The implications of not getting into schools in some comparison sites meant that there was not a unique comparison site for every target site. Thus, some comparison sites were used more than once as replacements. Although this did not affect the aggregate analyses, some comparisons such as those looking at center city and non-center city differences, were not able to be made at the market level. Thus, the following recommendation is made:

- Future on-site research should not rely on in-school surveys. The issue of gaining parental consent is only one of the problems encountered in conducting school-based research. The methodological issues regarding parental consent in school-based research have been the subject of a number of recent reviews (e.g., Anderman et al., 1995; Dent et al., 1993). These two studies concur on several findings of relevance to this Report: that students with and without active parental consent have different demographic characteristics (including SES and ethnicity), thus leading to potential sample bias; that teenagers without active parental consent are higher in risk-taking and in marijuana use, thus reducing the generalizability of the results; and that teenagers with active consent are more likely to have seen information on alcohol, tobacco, and drug use—again with implications for valid interpretations of survey findings.

It is important to note that the Phase I Media Campaign results were not adversely affected by the problems reported above because adequate data were available: appropriate substitute schools were selected when school access was denied, and survey findings were cross-checked against data from focus groups, key

informant interviews, and media monitoring to ensure reliability and validity of findings.

6.3 SUMMARY

Youth and teen survey responses clearly indicate that television, and especially television anti-drug ads, became a common source of information about the risks of drugs in the 12 target communities during the Phase I Media Campaign. Parents, likewise, were very aware of the ads aired during the Campaign. Youth and parents in these communities reported that they learned new information about the risks of using drugs. Further, many local community efforts were undertaken over the course of the campaign to build on the Phase I Campaign efforts.

6.4 REFERENCES

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APPENDIX A
TELEVISION MEDIA MONITORING DATA

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2. PHASE I MEDIA CAMPAIGN INTERVENTION: TELEVISION, RADIO, NEWSPAPER,
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TELEVISION DATA USER GUIDE

Anti-drug ads that aired on affiliates of the three major national television networks (ABC, CBS, and NBC), national cable WBN (Time-Warner cable), FOX, Univision, TBS, UPN, IND, and Telemundo (Spanish-language cable) were tracked in the target and comparison sites by a television monitoring service.¹ Data were not collected on ads airing on several local cable stations (e.g., MTV and Nickelodeon) and in-school Channel One, which were used to target the youth/teen audiences. Televised anti-drug ads in three target communities (Boise, Sioux City, and Tucson) and two comparison communities (Duluth and Eugene) were also not electronically monitored. Media monitoring is possible only in the 75 largest television markets nationally; of the 24 evaluation sites, only 19 are in that group. For the five sites where media monitoring is not possible, attempts to collect advertising information from the stations manually through monthly telephone interviews did not yield reliable or complete data and, therefore, are not included in this report. Television stations were monitored from 6:00 a.m. to 1:59 a.m., for a total of 20 hours per day.

Appendix A comprises three sets of graphs.

- *SET 1:* The first set includes data with regard to the total number of TV Ads, which includes (1) *Campaign/PDFA Ads*, (2) *Other Anti-Drug Ads*, and (3) *Other Social Issue Ads*. Page A-1 presents aggregate data—all target sites vs. all comparison sites. Note that the shaded region refers to the intervention period (the upper graph), and the non-shaded region refers to the baseline period. Note further that all target sites appear on the upper half of the page, and comparison sites on the lower. For the comparison site, the baseline and intervention periods are both non-shaded (they did not receive the intervention). Pages A-2-A-10 present site-level data in exactly the same manner as in the aggregate.
- *SET 2:* The second set also includes data with regard to the total number of TV Ads (*Campaign/PDFA Ads* and *Other Anti-Drug Ads*). However, this set divides the anti-drug ads according to the specific type of drugs upon which the ads focus (e.g., crack, inhalants, drugs in general, heroin, and methamphetamine). Page 11 presents aggregate data—all target sites vs. all comparison sites. Again, note that the shaded region refers to the intervention period (the upper graph), and the non-shaded region refers to the baseline period. Pages A-12-A-20 present site-level data.
- *SET 3:* The third set includes three subsets of data on the parts of day when (1) *Campaign/PDFA Ads* and *PDFA Ads* air, (2) *Other Anti-Drug Ads* air and (3) *Other Social Issue Ads* air (e.g., early morning, daytime, kids, early fringe, early news, prime access, prime time, late news, late fringe, weekend daytime). Page 21 presents aggregate daypart data—all target sites vs. all comparison sites—for *Campaign/PDFA Ads* and *PDFA Ads*. Pages A-22–A-30 present site specific daypart data for *Campaign/PDFA Ads* and *PDFA*

¹ The television monitoring service used to track ads was National Media Inc.

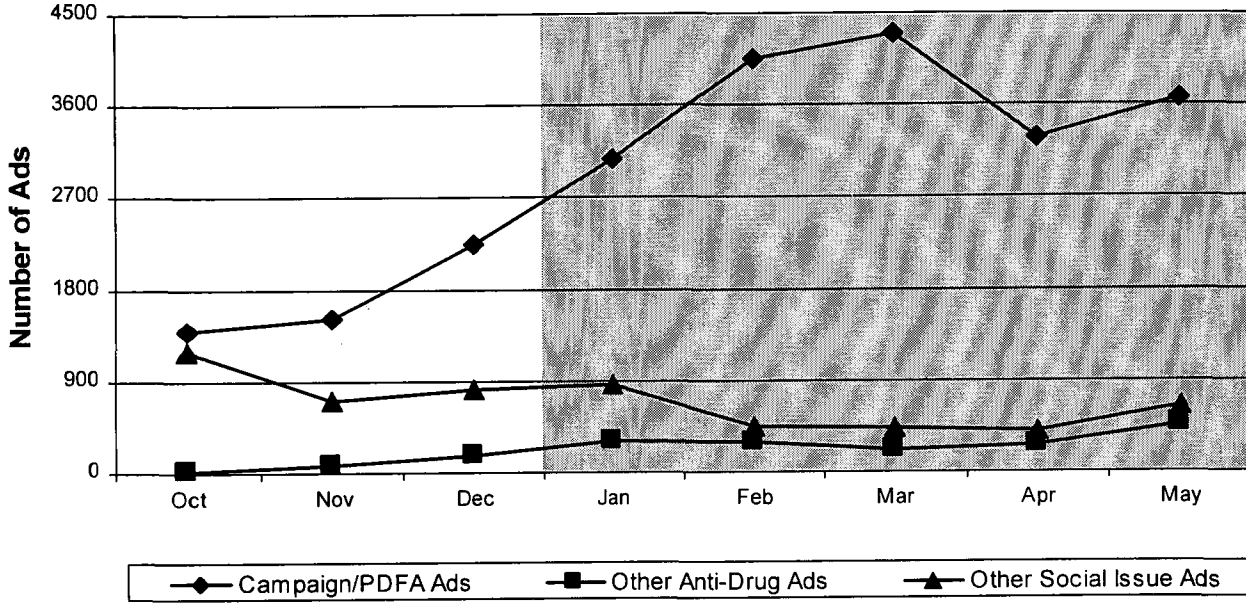
Ads. Note that the shaded region refers to the intervention period (the upper graph), and the non-shaded region refers to the baseline period. The second and third subset are presented in the same fashion, dealing *Other Anti-Drug Ads* and *Other Social Issue Ads*, respectively.

The Phase I Media Campaign Intervention matrix appears on page A-52.

APPENDIX A
TELEVISION MEDIA MONITORING DATA

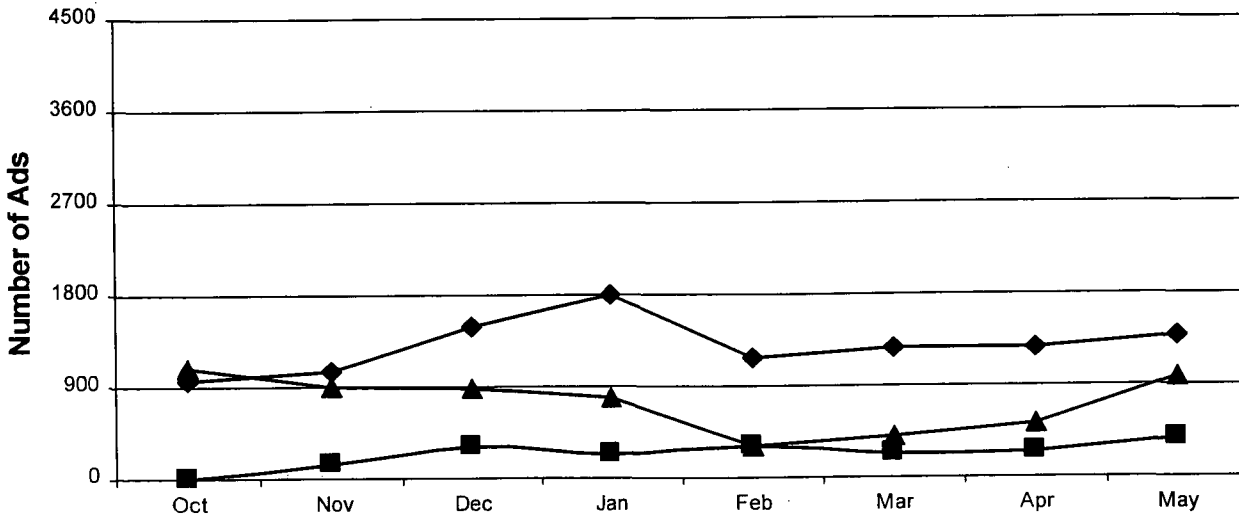
Total Number of TV Ads by Sponsor Target vs. Comparison

All Target Sites



Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

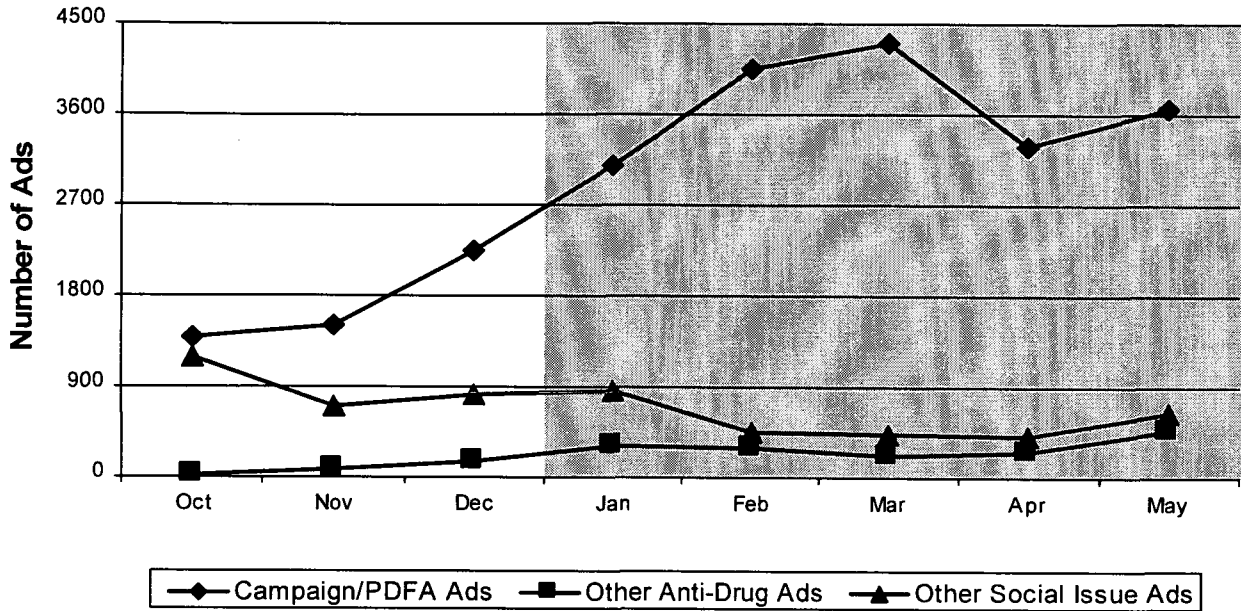
All Comparison Sites



Note: Phoenix, an outlier, is not included in the aggregate data for comparison sites.

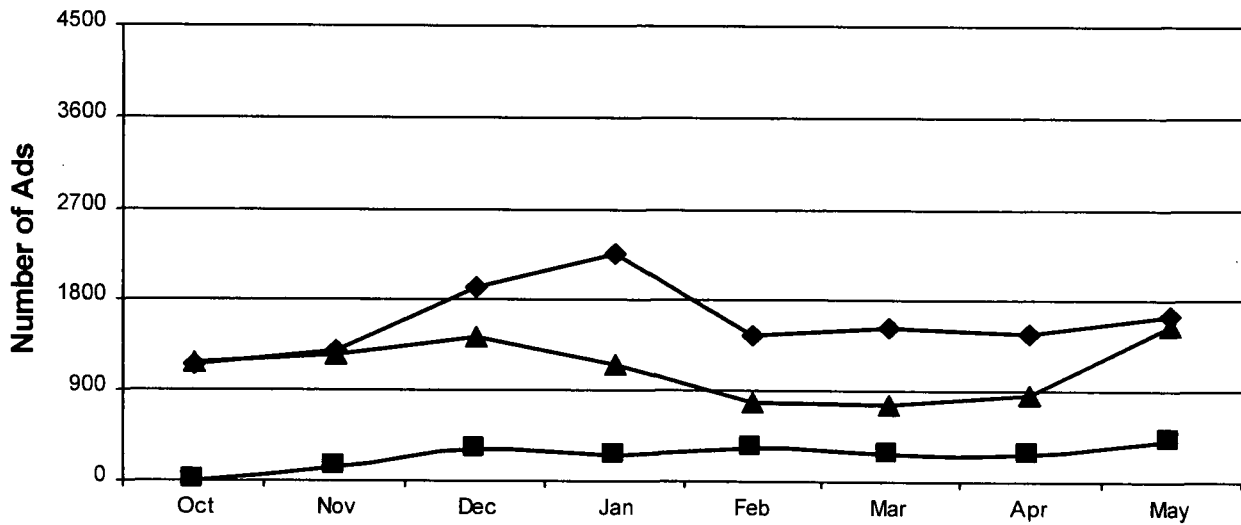
Total Number of TV Ads by Sponsor Target vs. Comparison

All Target Sites



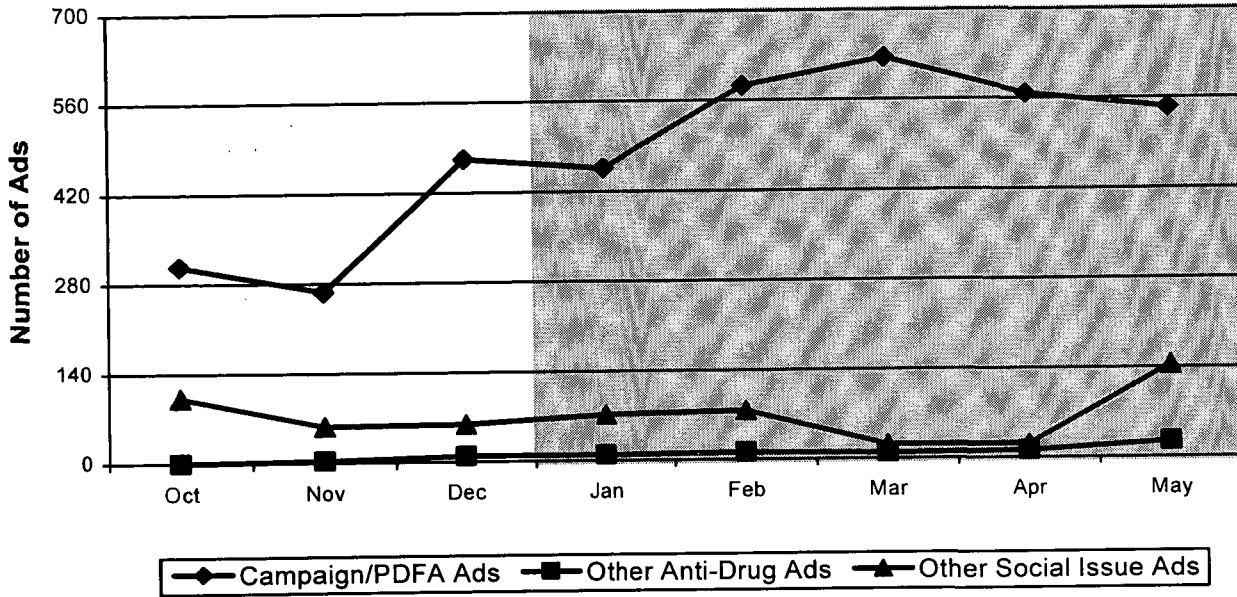
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

All Comparison Sites



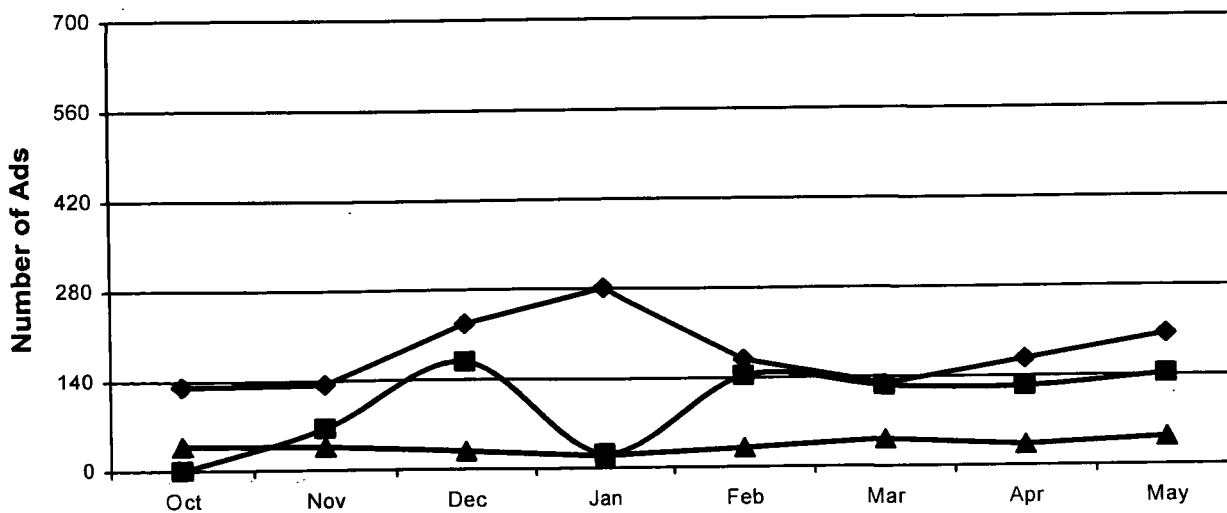
Total Number of TV Ads by Sponsor Target vs. Comparison

Atlanta (Target Site)



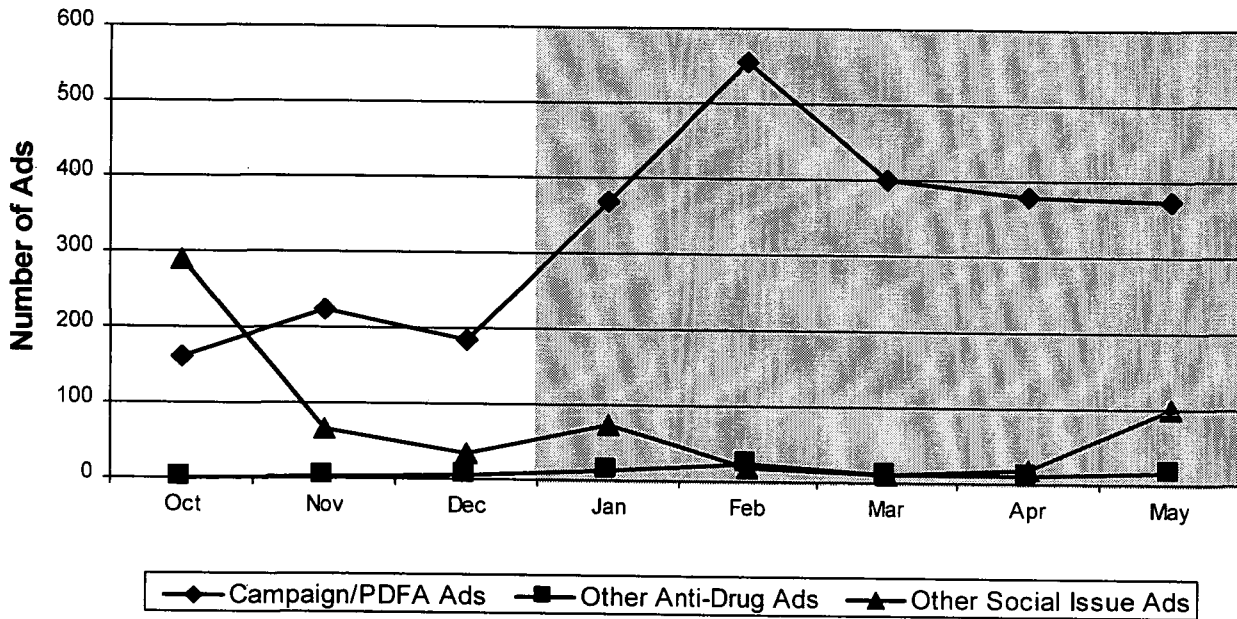
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Memphis (Comparison Site)



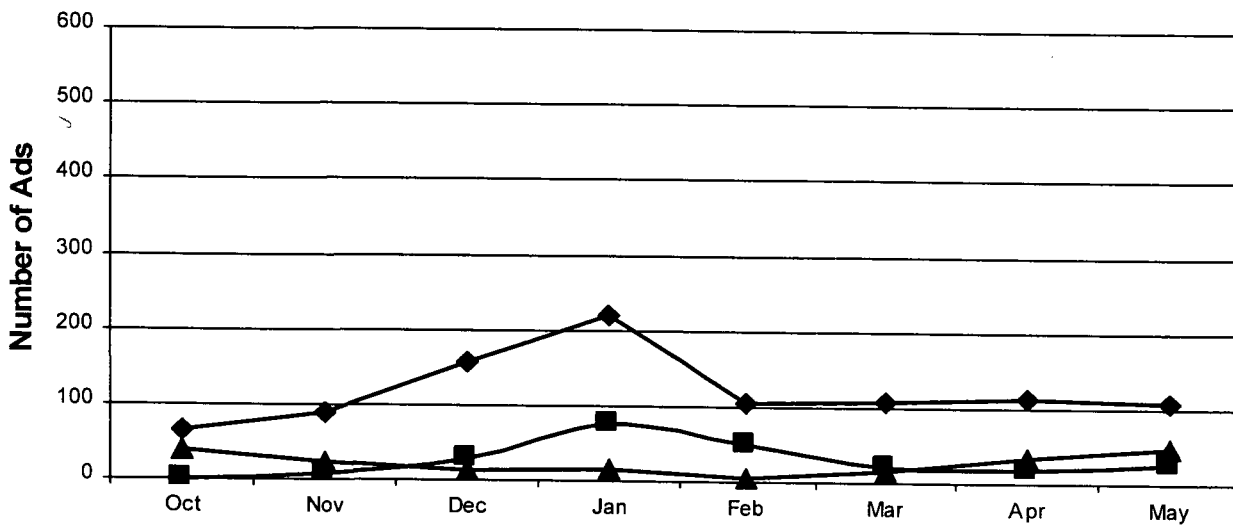
Total Number of TV Ads by Sponsor Target vs. Comparison

Baltimore (Target Site)



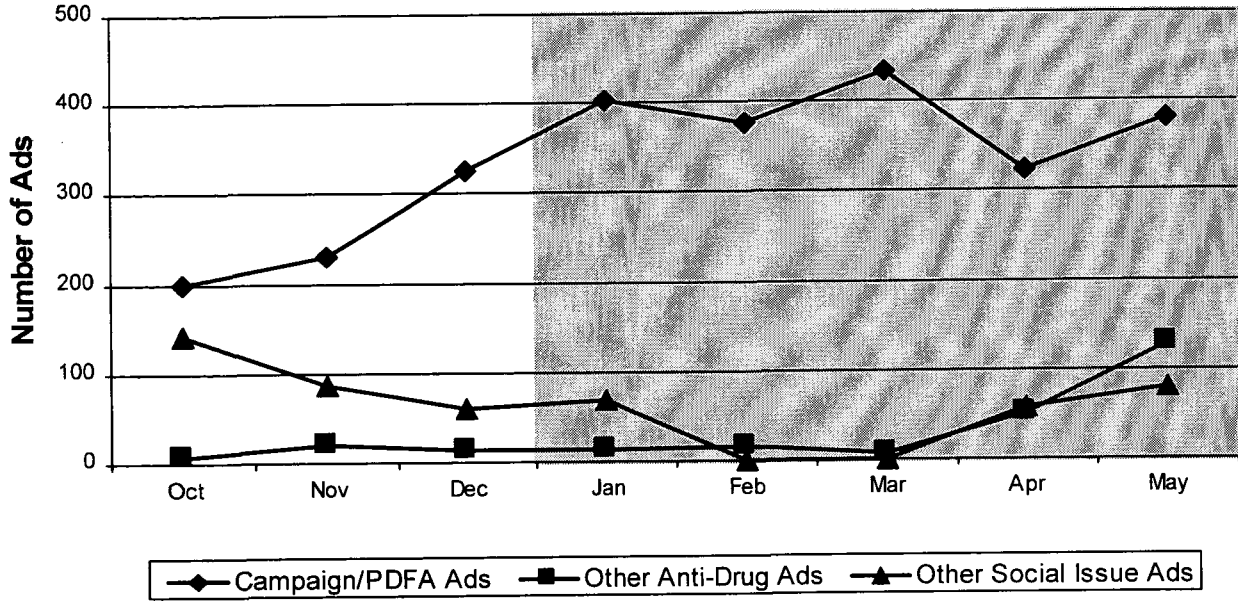
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Richmond (Comparison Site)



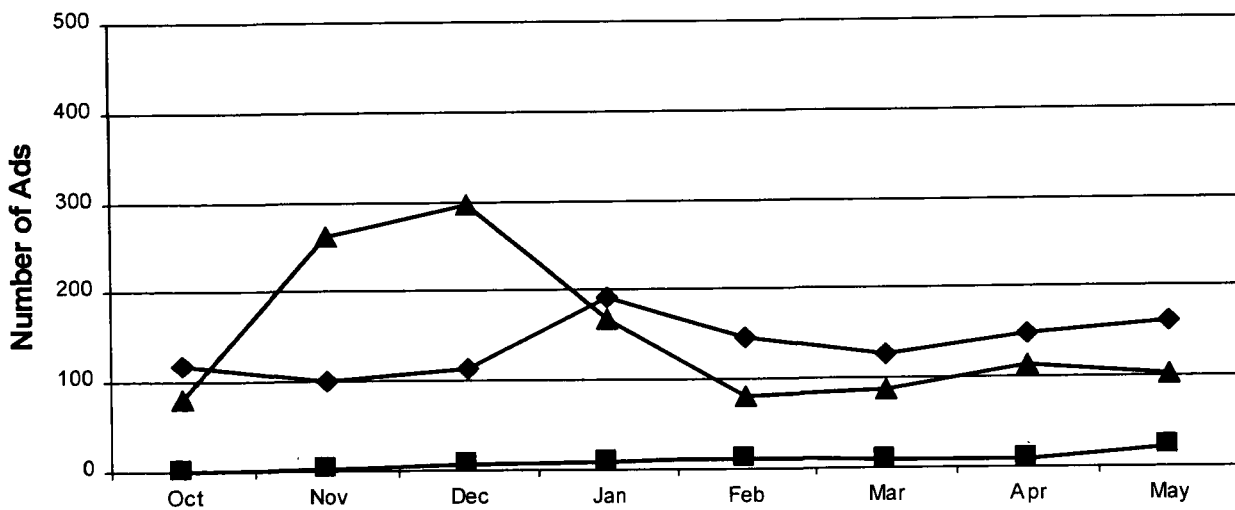
Total Number of TV Ads by Sponsor Target vs. Comparison

Denver (Target Site)



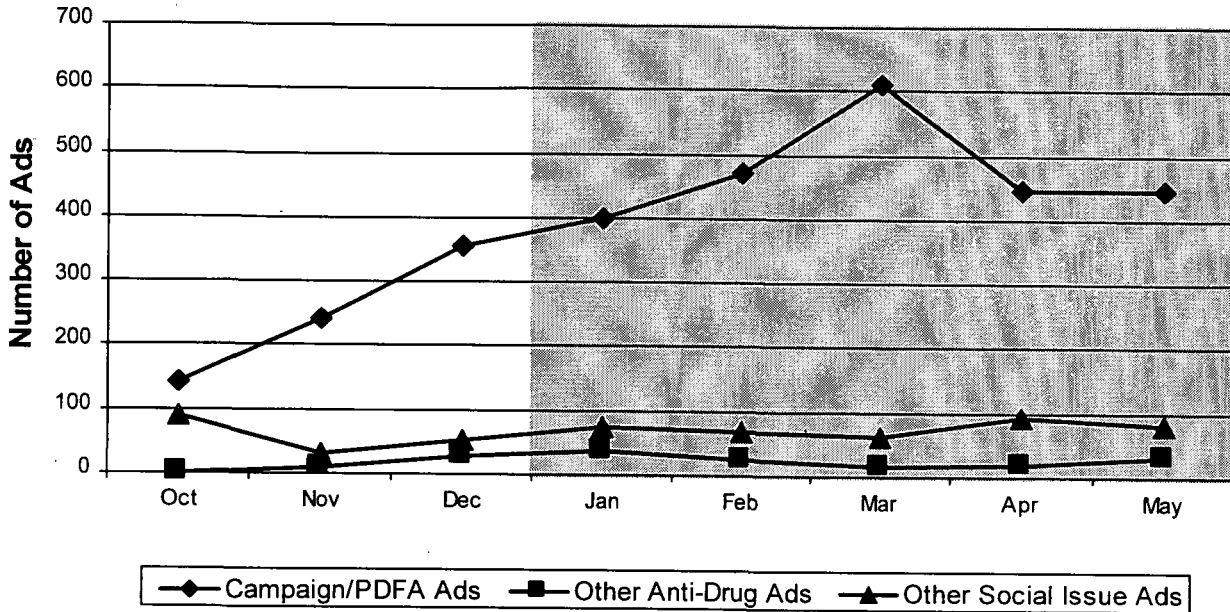
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Albuquerque (Comparison Site)



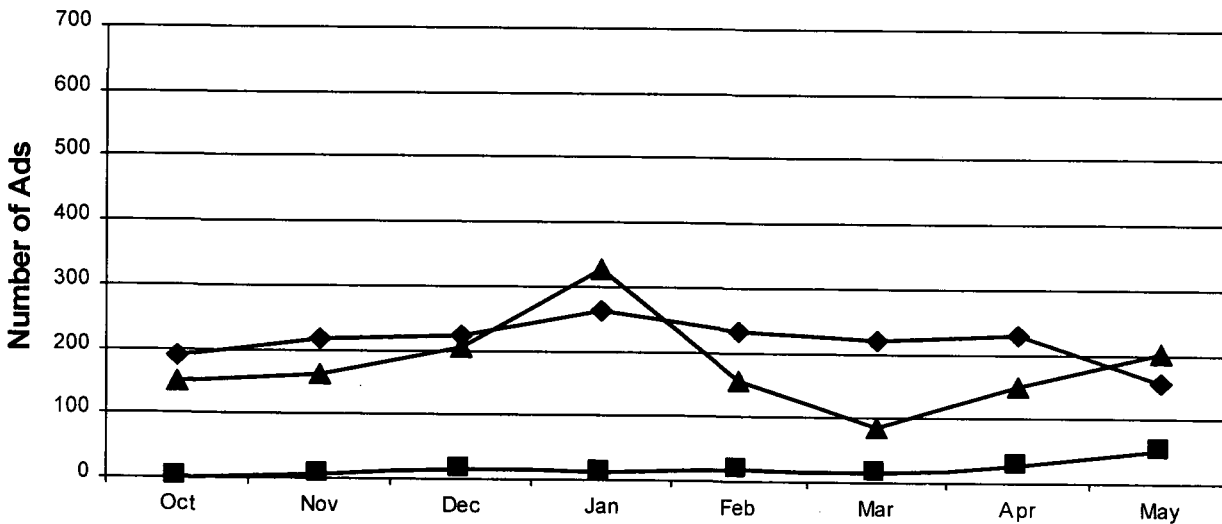
Total Number of TV Ads by Sponsor Target vs. Comparison

Hartford (Target Site)



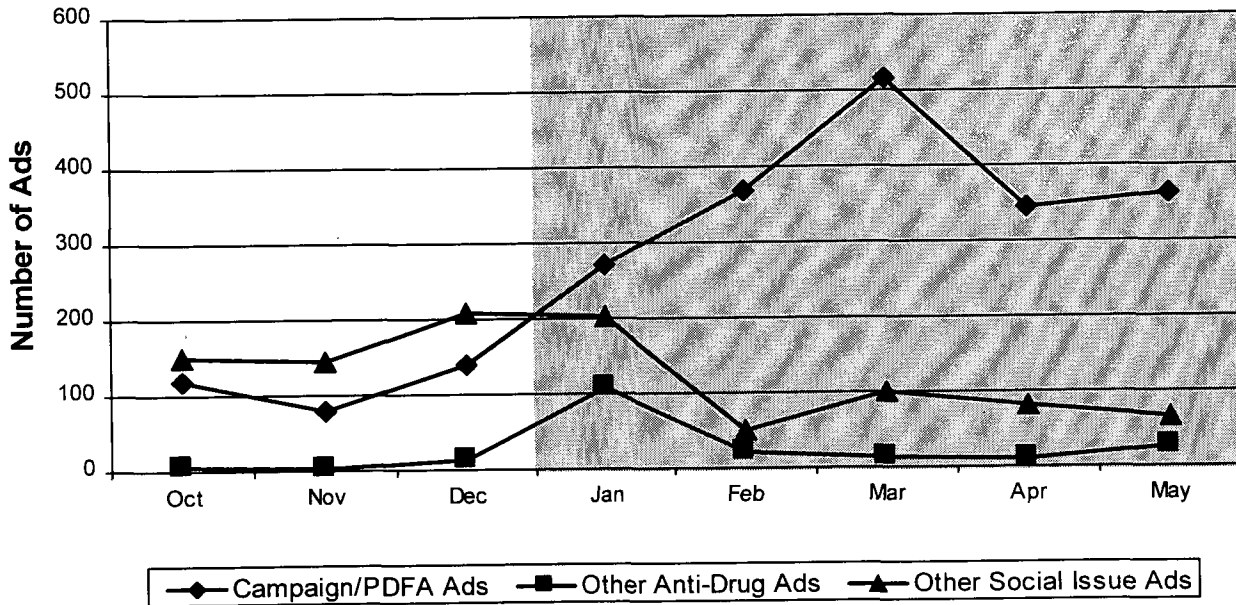
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Harrisburg (Comparison Site)



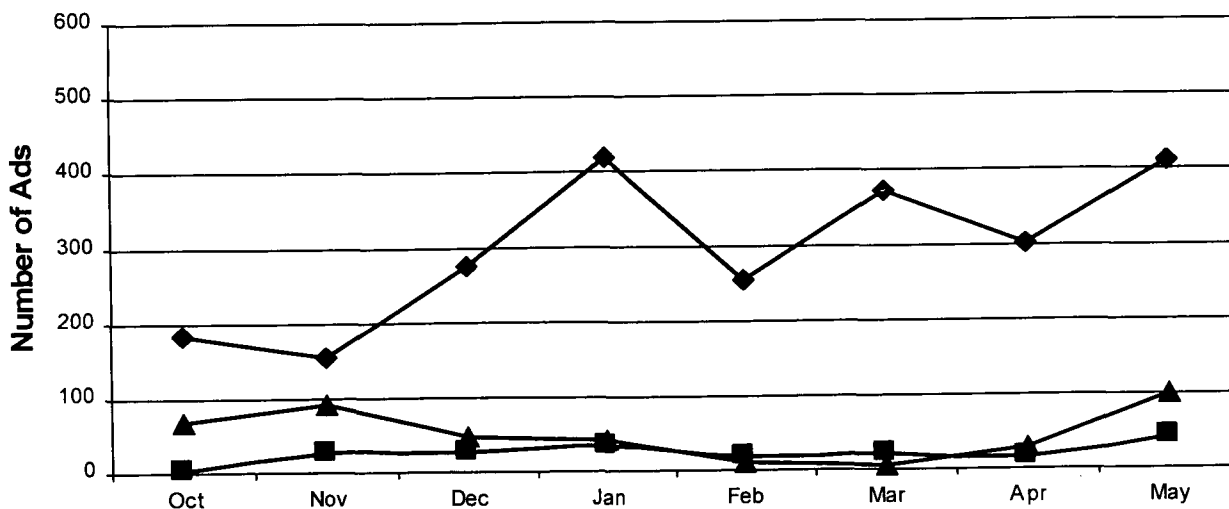
Total Number of TV Ads by Sponsor Target vs. Comparison

Houston (Target Site)



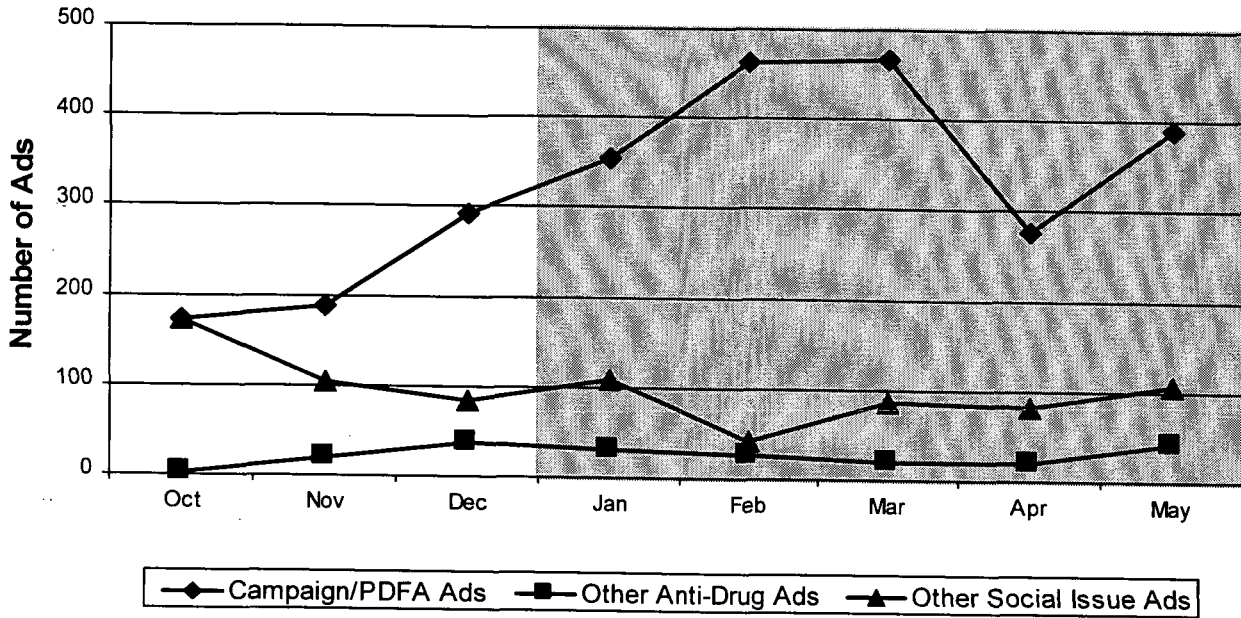
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Dallas (Comparison Site)



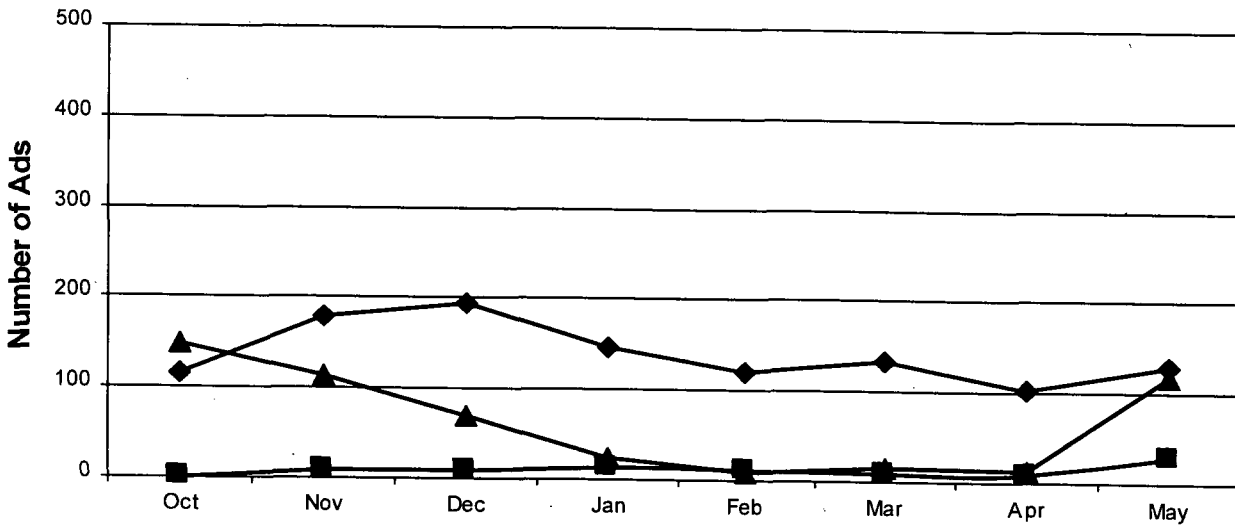
Total Number of TV Ads by Sponsor Target vs. Comparison

Milwaukee (Target Site)



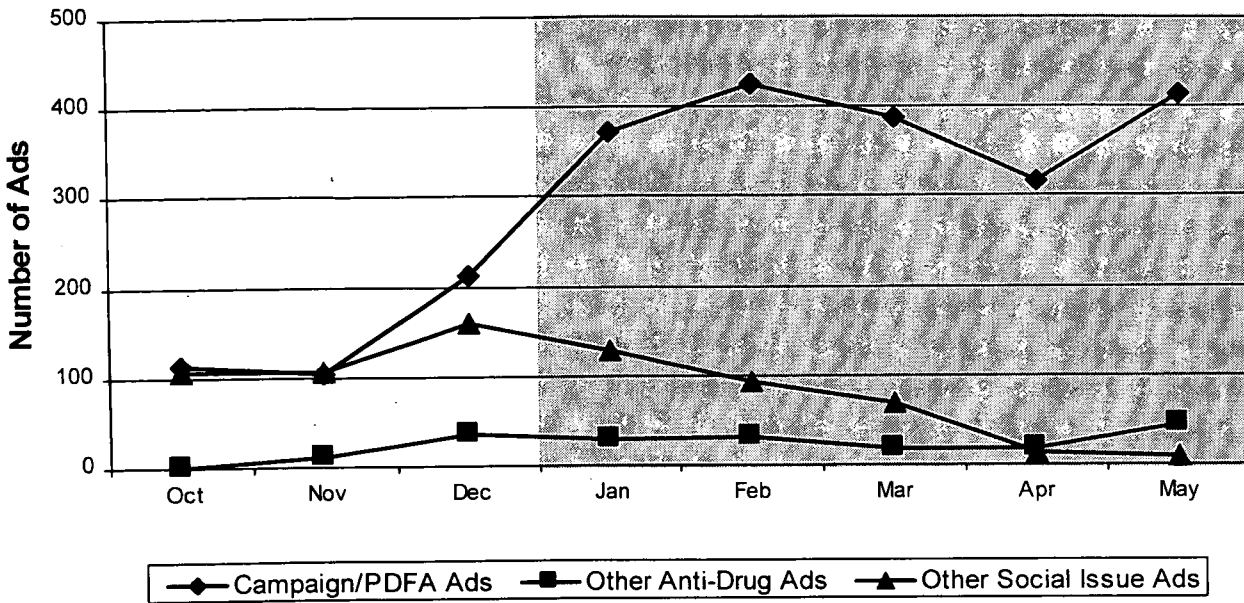
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Nashville (Comparison Site)



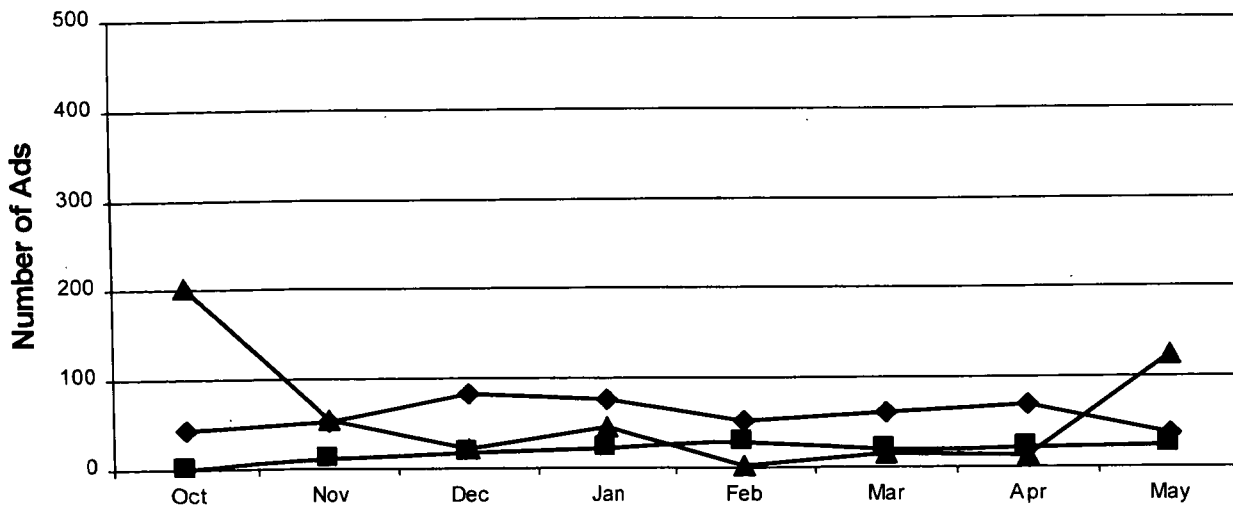
Total Number of TV Ads by Sponsor Target vs. Comparison

Portland, OR (Target Site)



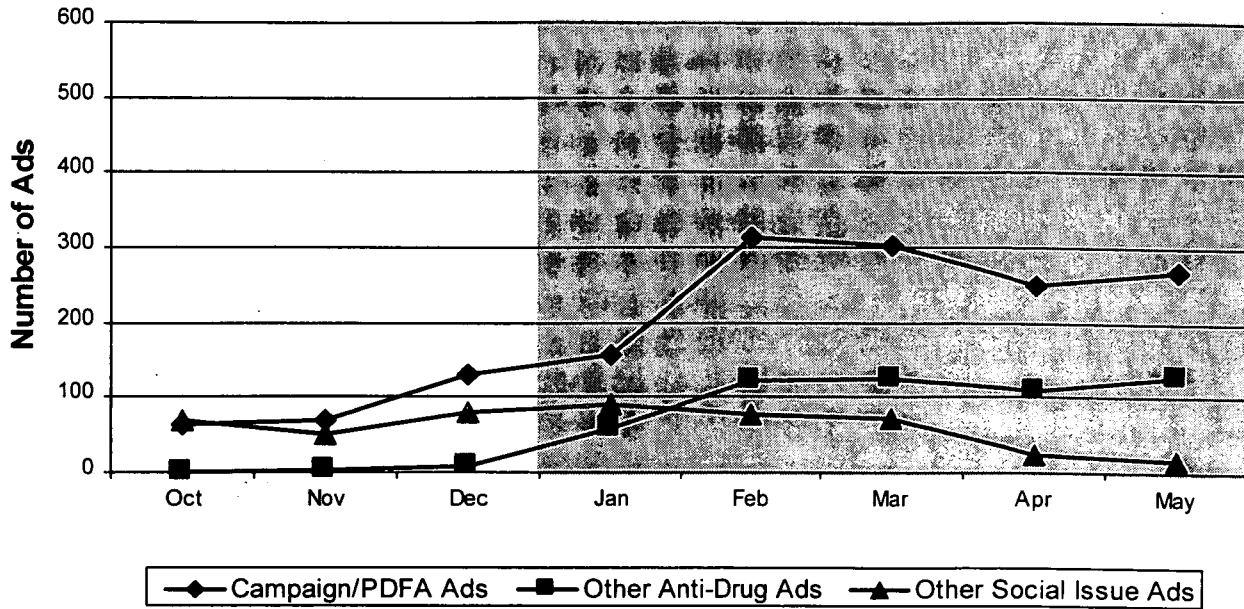
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Spokane (Comparison Site)



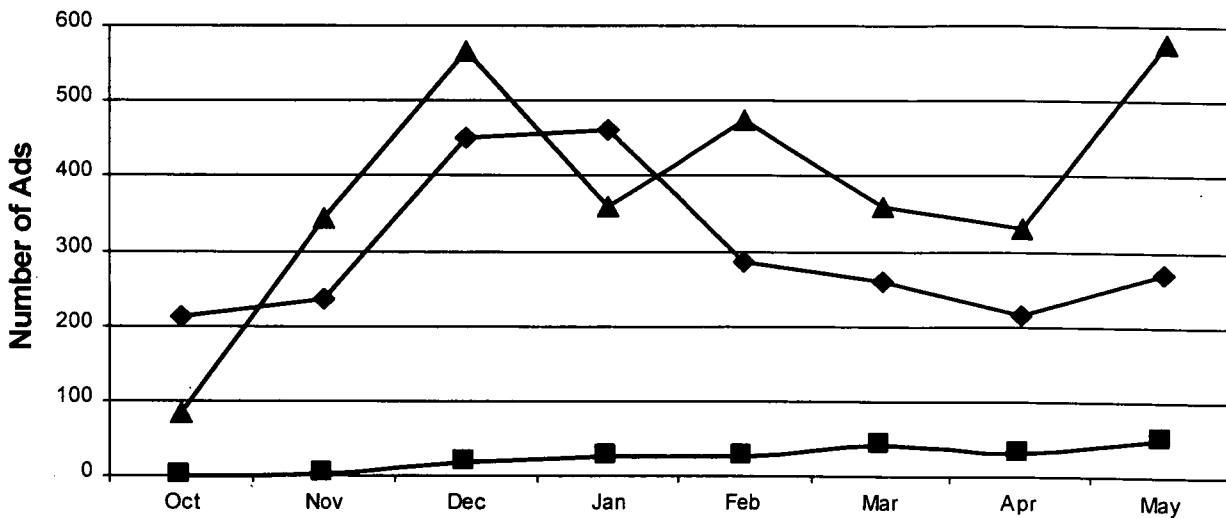
Total Number of TV Ads by Sponsor Target vs. Comparison

San Diego (Target Site)



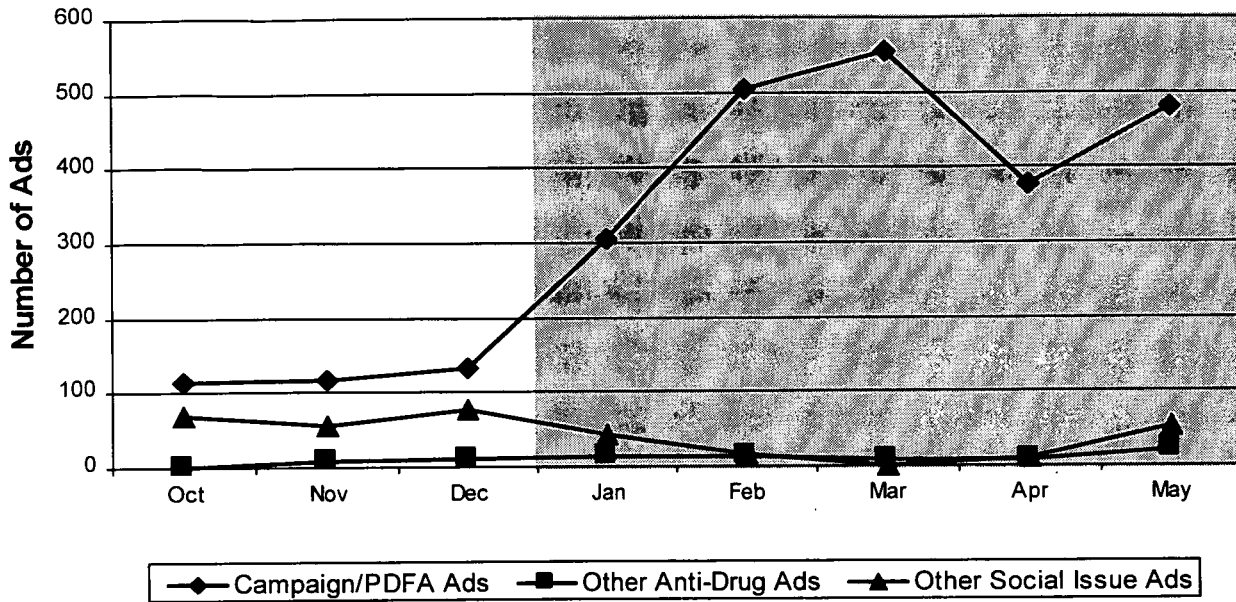
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Phoenix (Comparison Site)



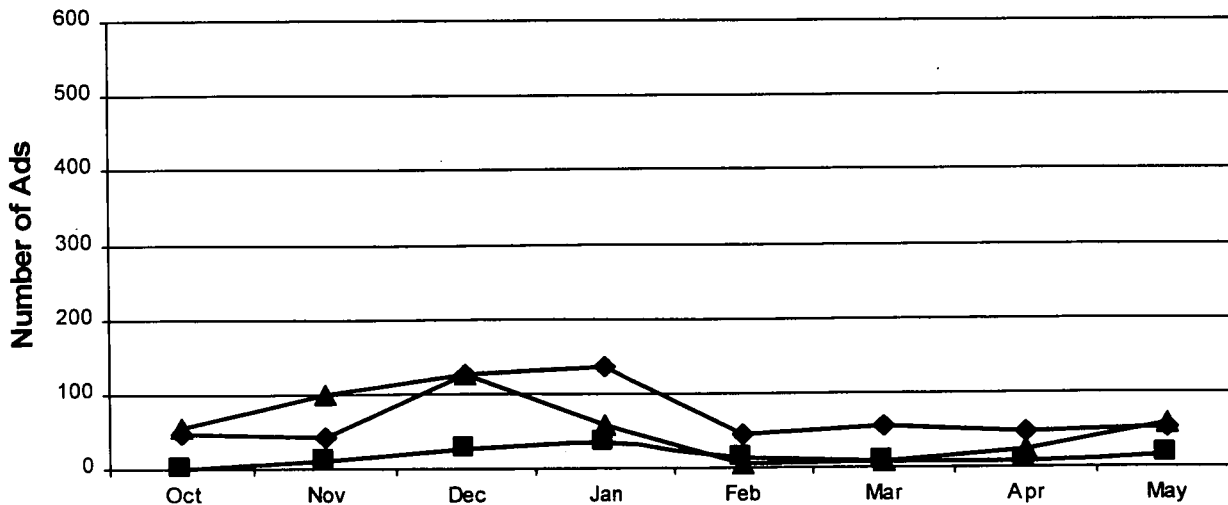
Total Number of TV Ads by Sponsor Target vs. Comparison

Washington, DC (Target Site)



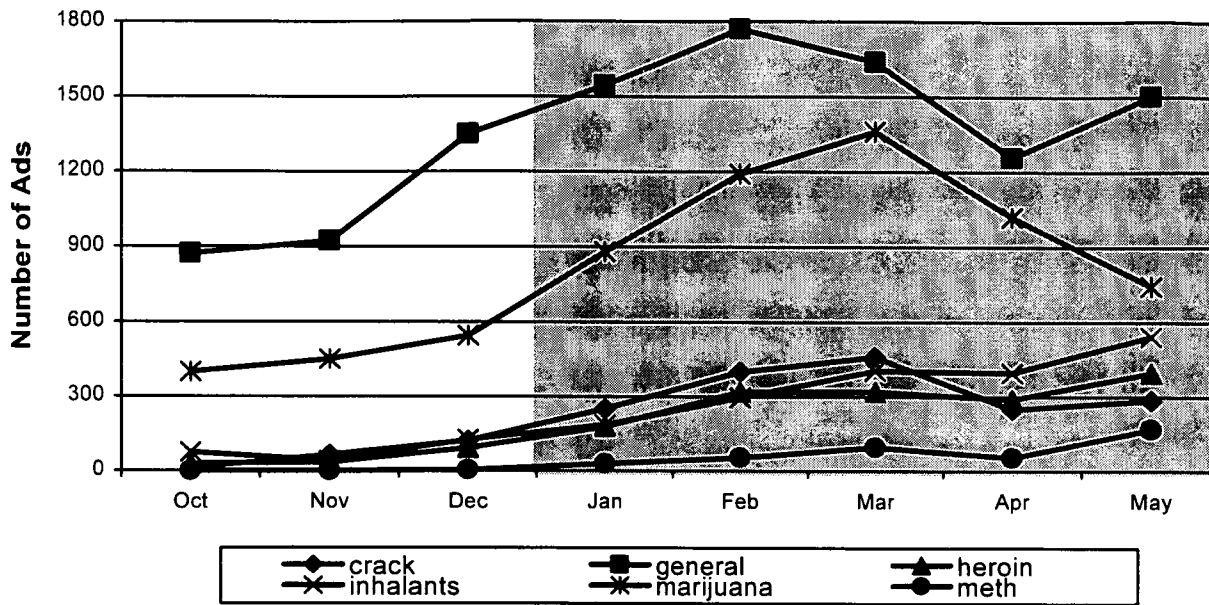
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Birmingham (Comparison Site)



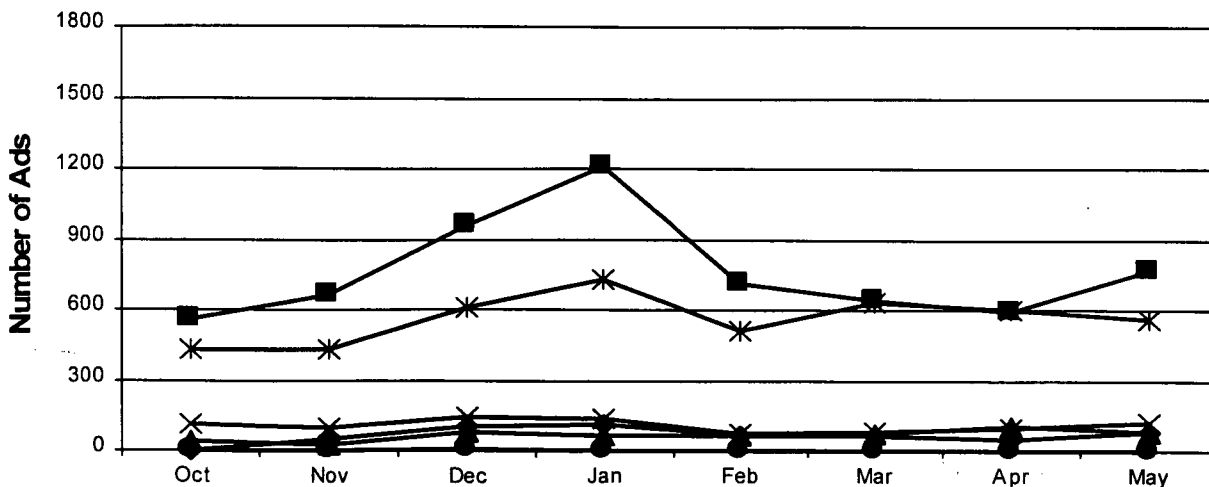
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

All Target Sites Campaign/PDFA Ads



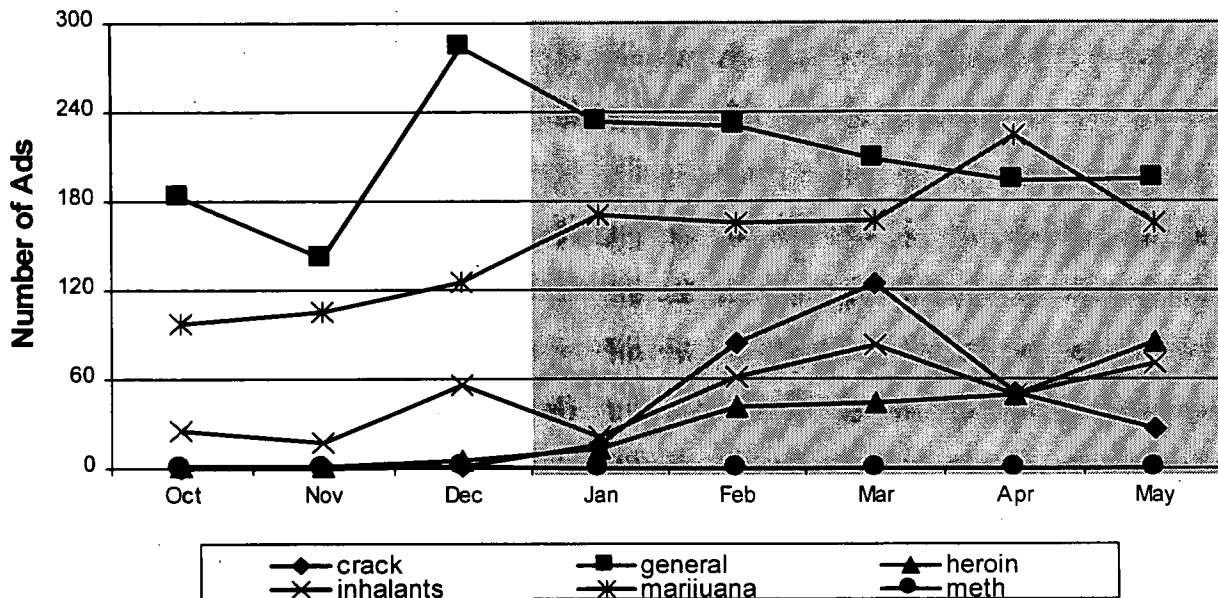
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

All Comparison Sites PDFA Ads



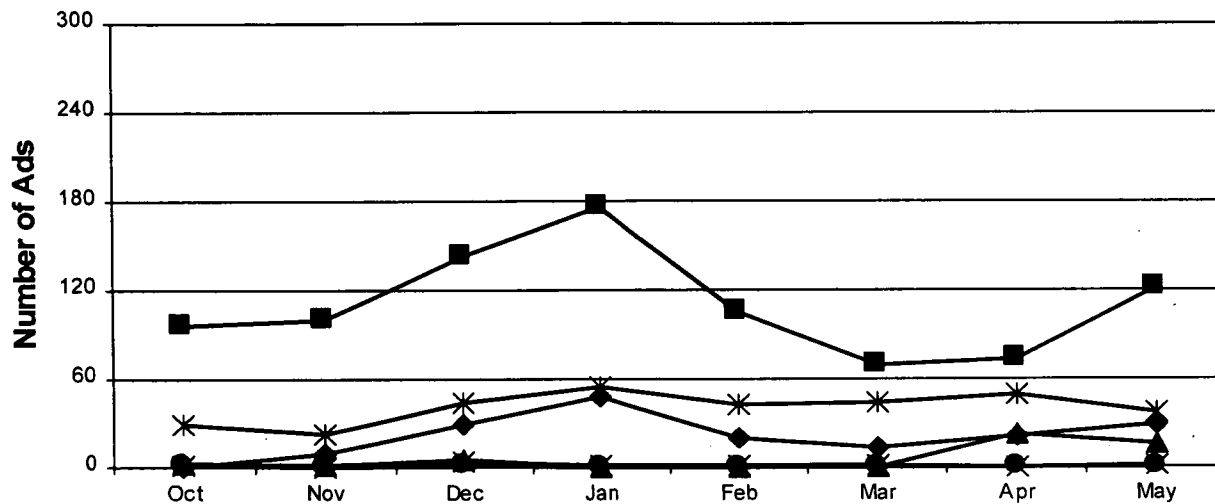
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Atlanta (Target Site) Campaign/PDFA Ads



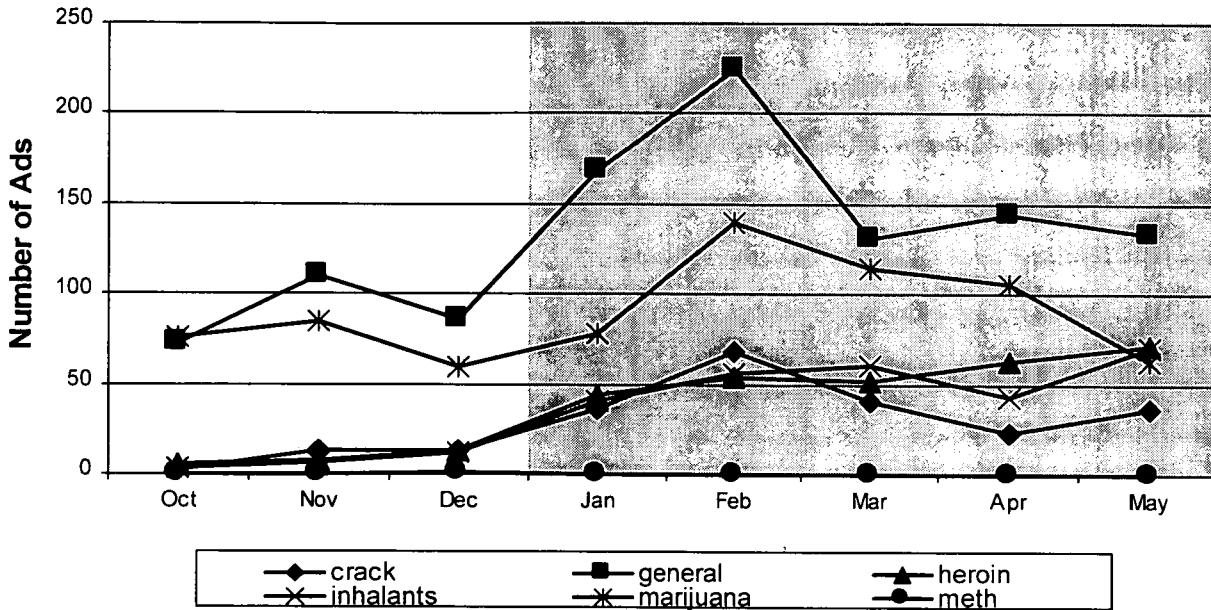
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Memphis (Comparison Site) PDFA Ads



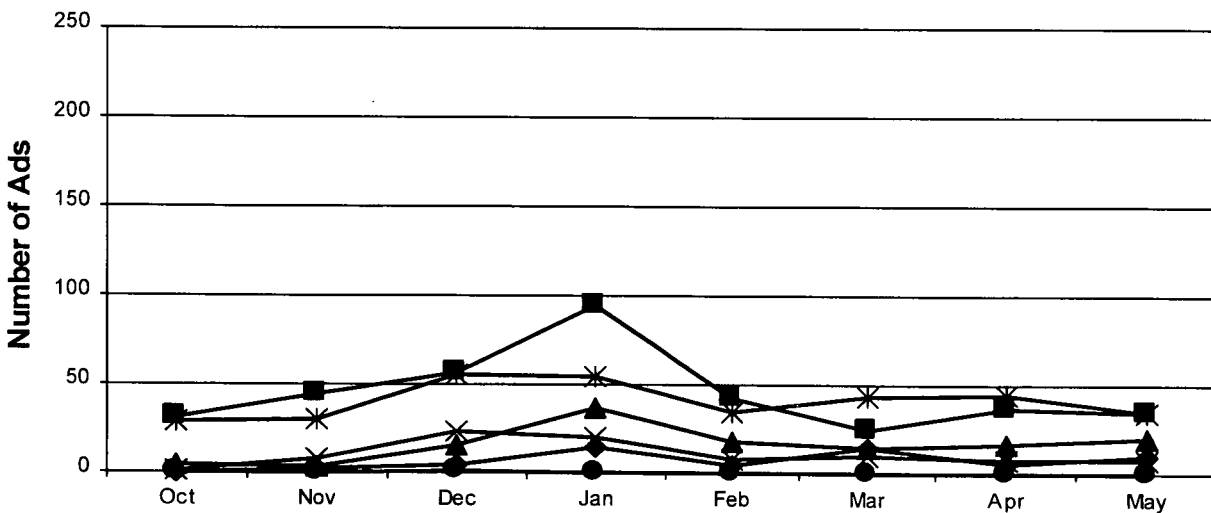
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Baltimore (Target Site) Campaign/PDFA Ads



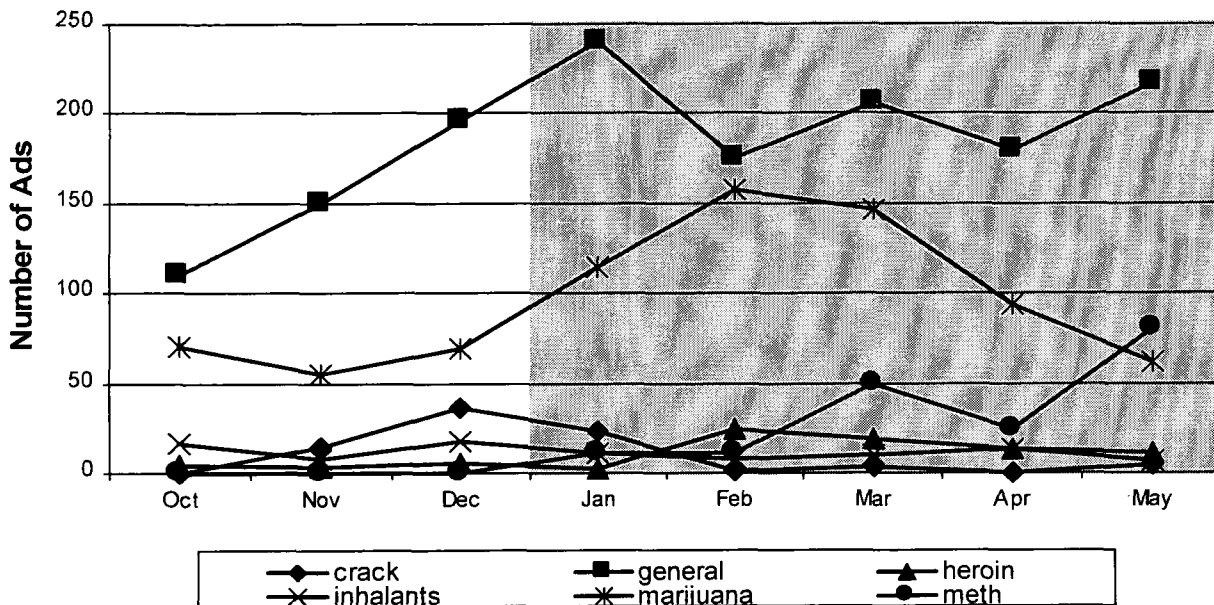
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Richmond (Comparison Site) PDFA Ads



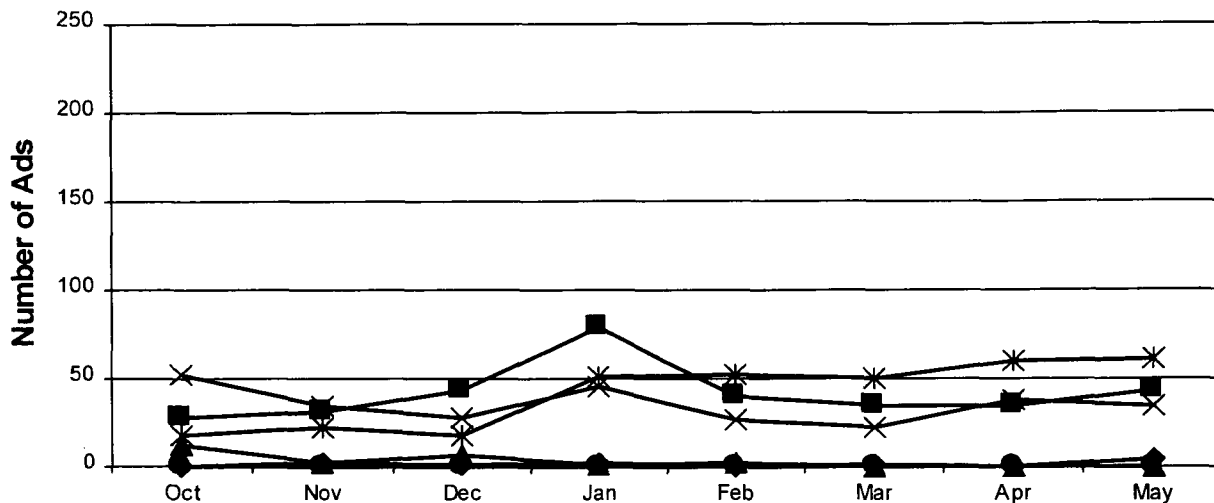
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Denver (Target Site) Campaign/PDFA Ads



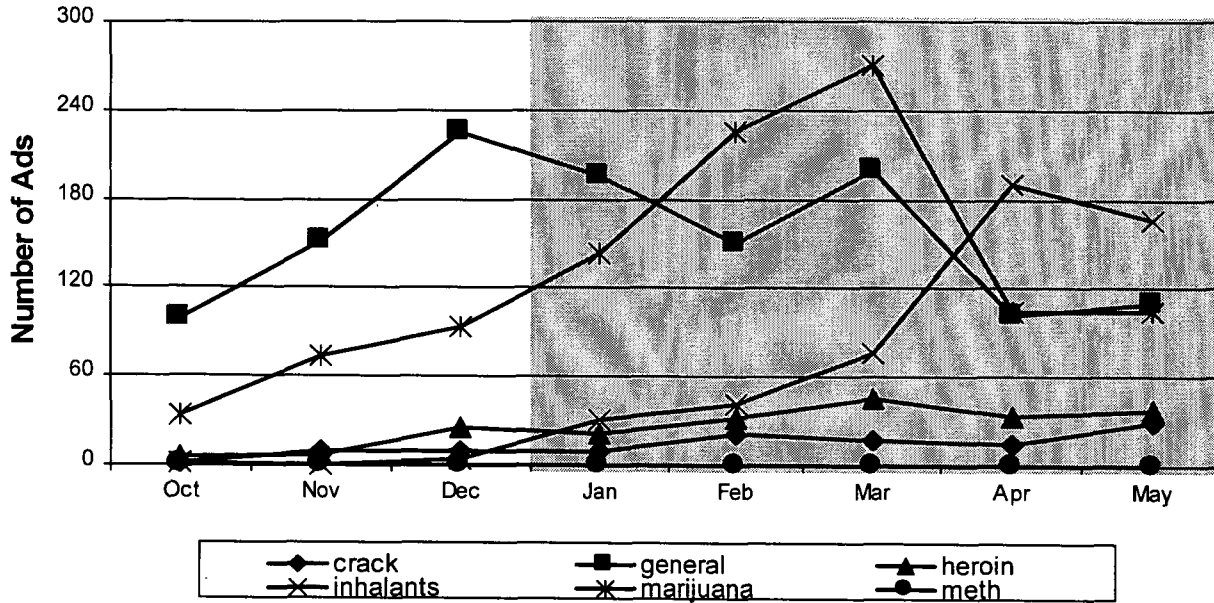
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Albuquerque (Comparison Site) PDFA Ads



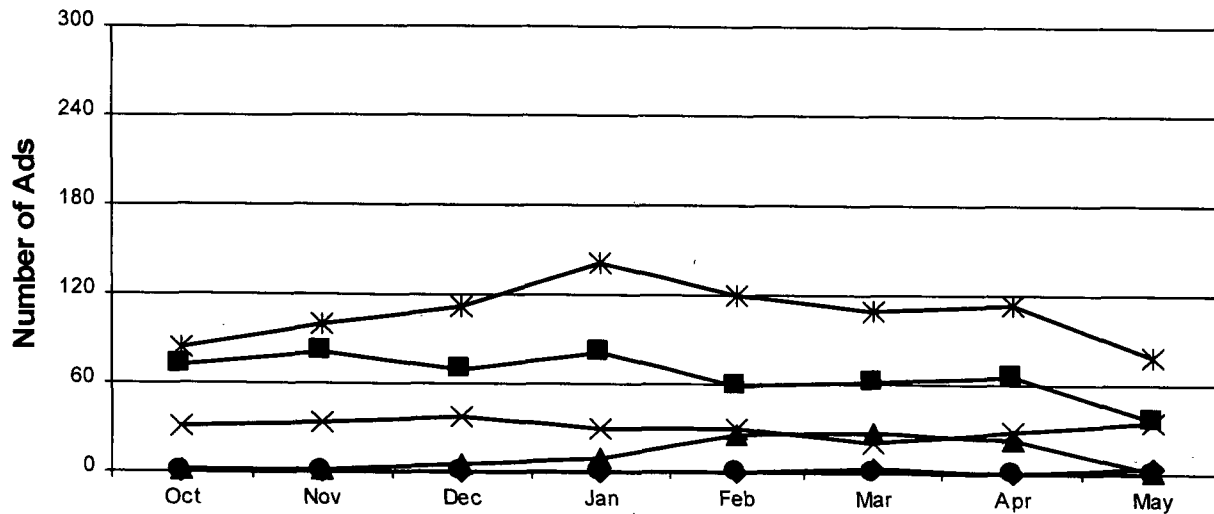
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Hartford (Target Site) Campaign/PDFA Ads



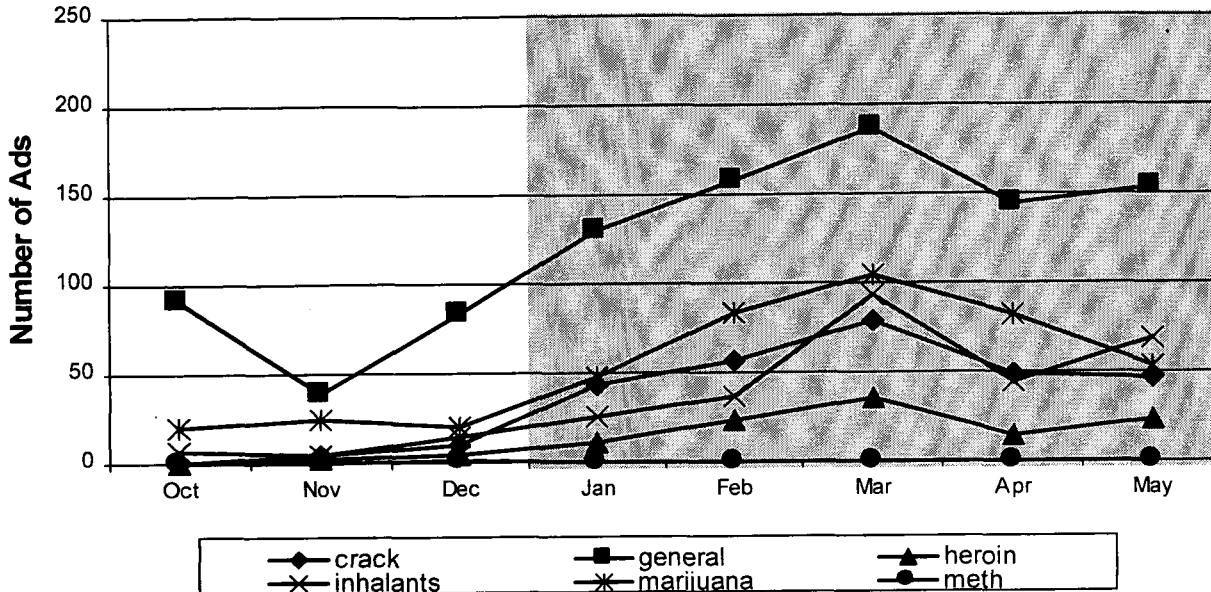
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Harrisburg (Comparison Site) PDFA Ads



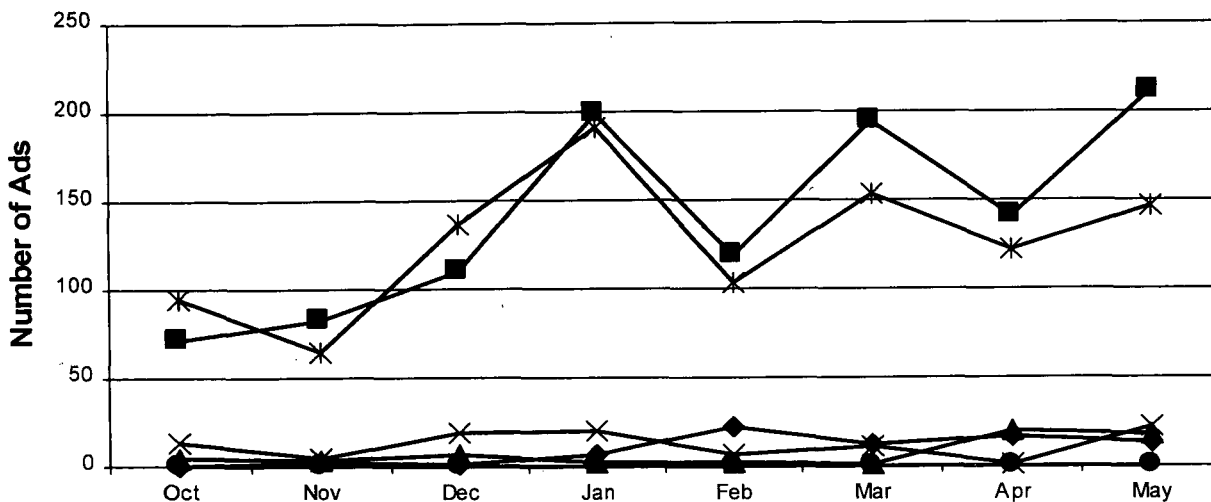
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Houston (Target Site) Campaign/PDFA Ads



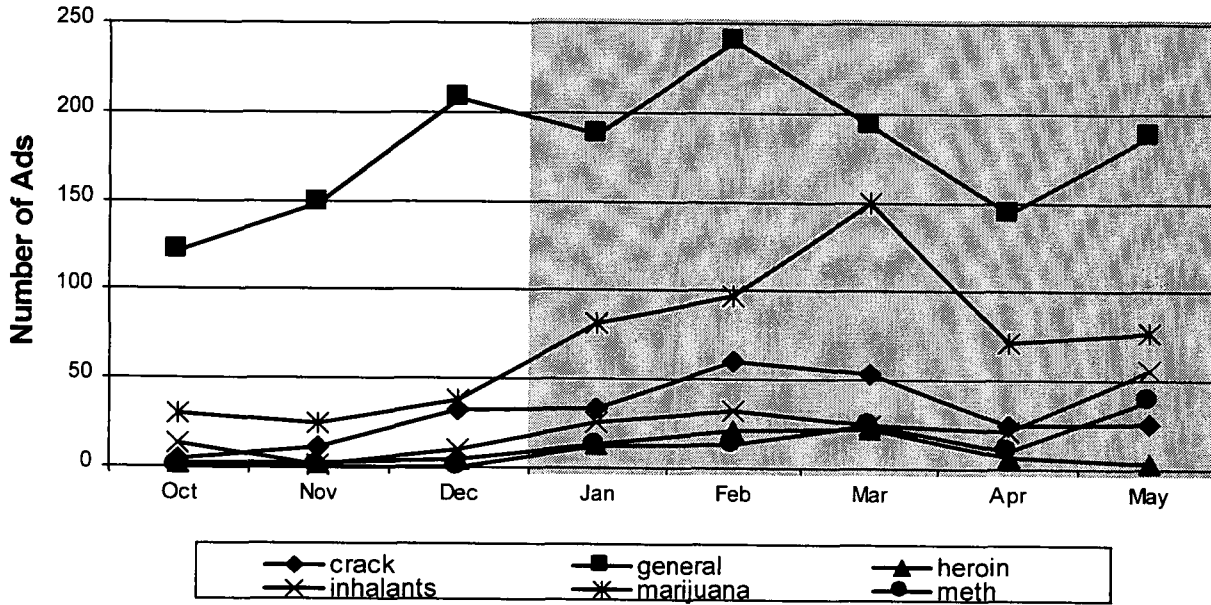
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Dallas (Comparison Site) PDFA Ads



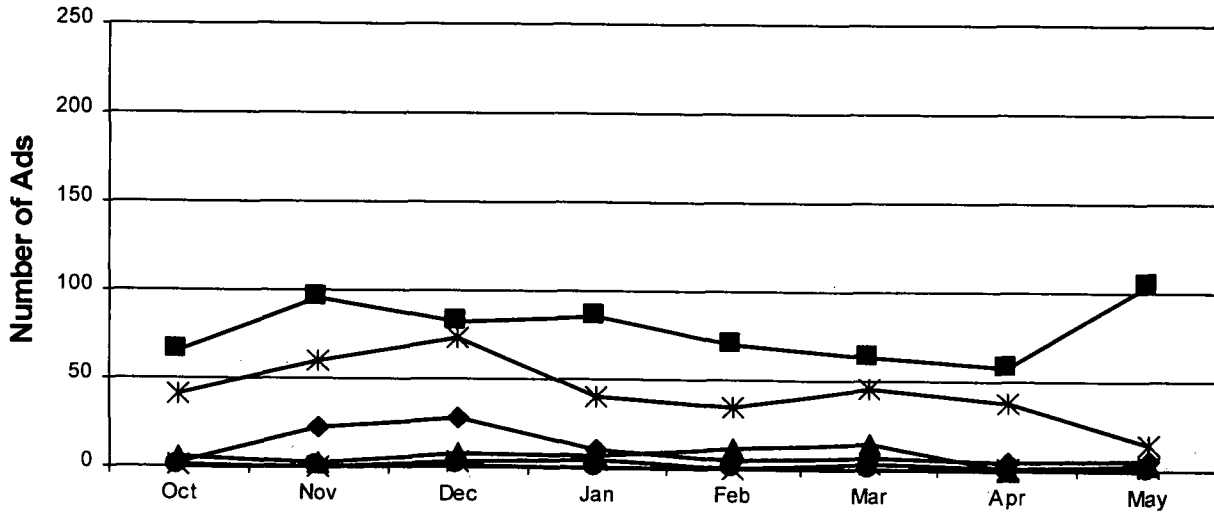
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Milwaukee (Target Site) Campaign/PDFA Ads



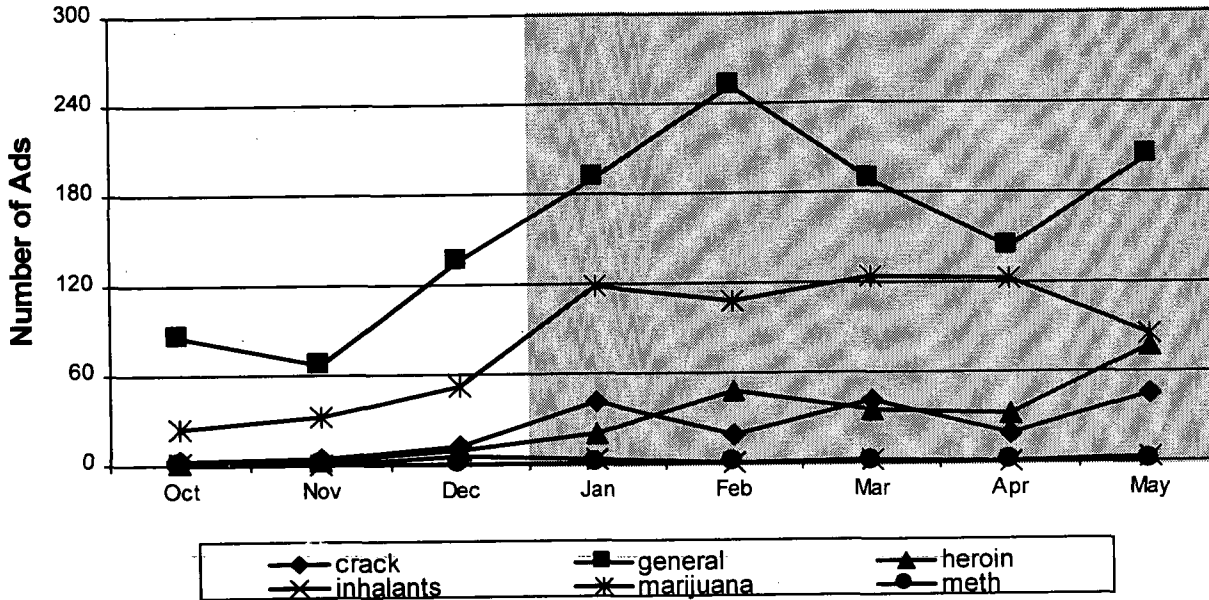
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Nashville (Comparison Site) PDFA Ads



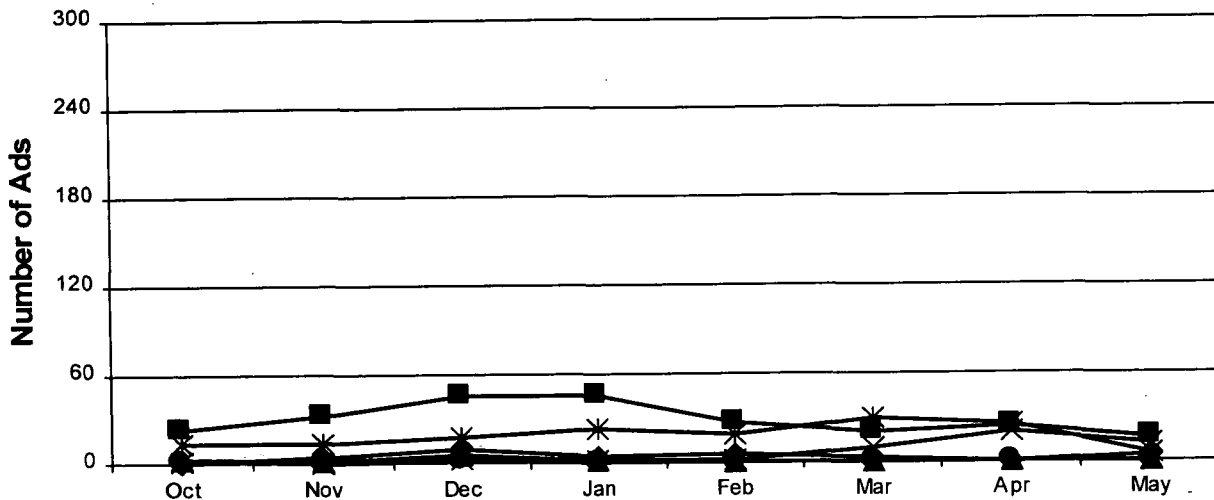
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Portland, OR (Target Site) Campaign/PDFA Ads



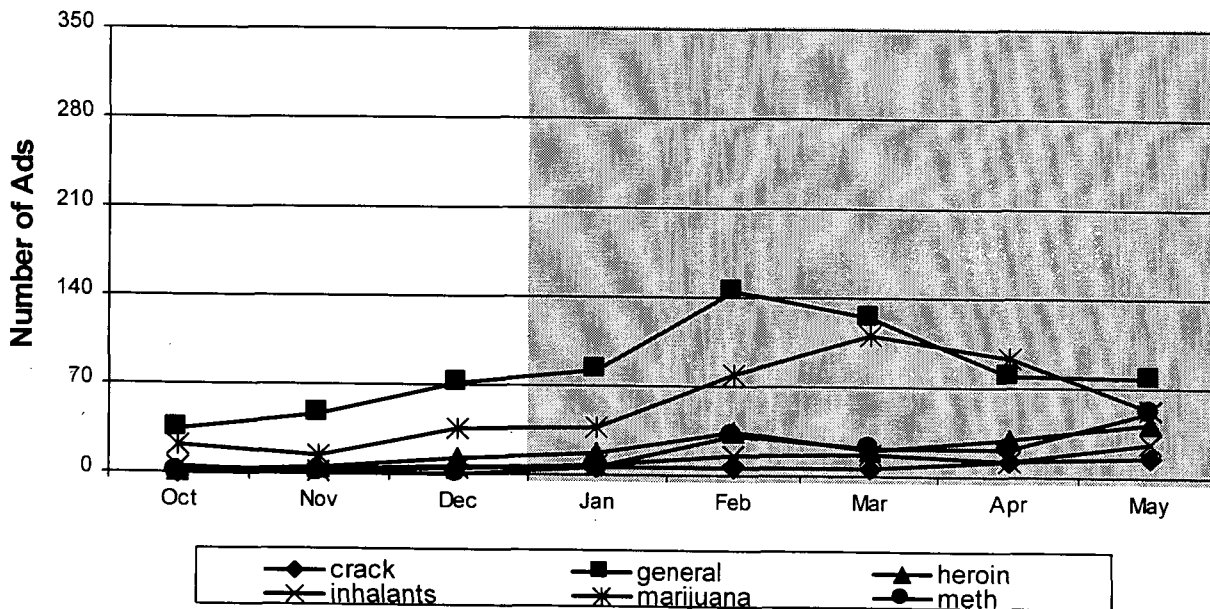
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Spokane (Comparison Site) PDFA Ads



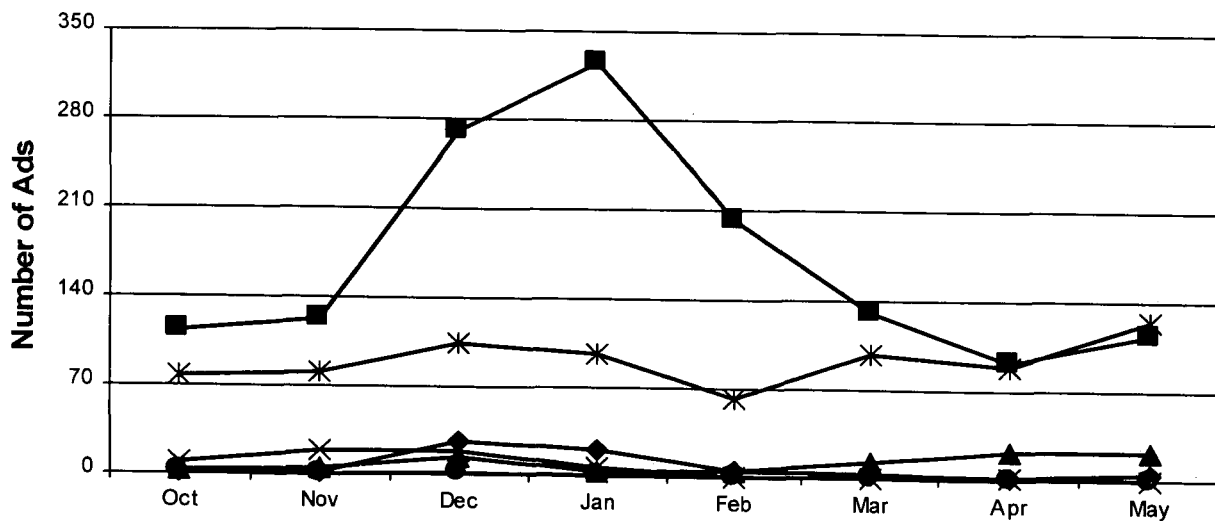
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

San Diego (Target Site) Campaign/PDFA Ads



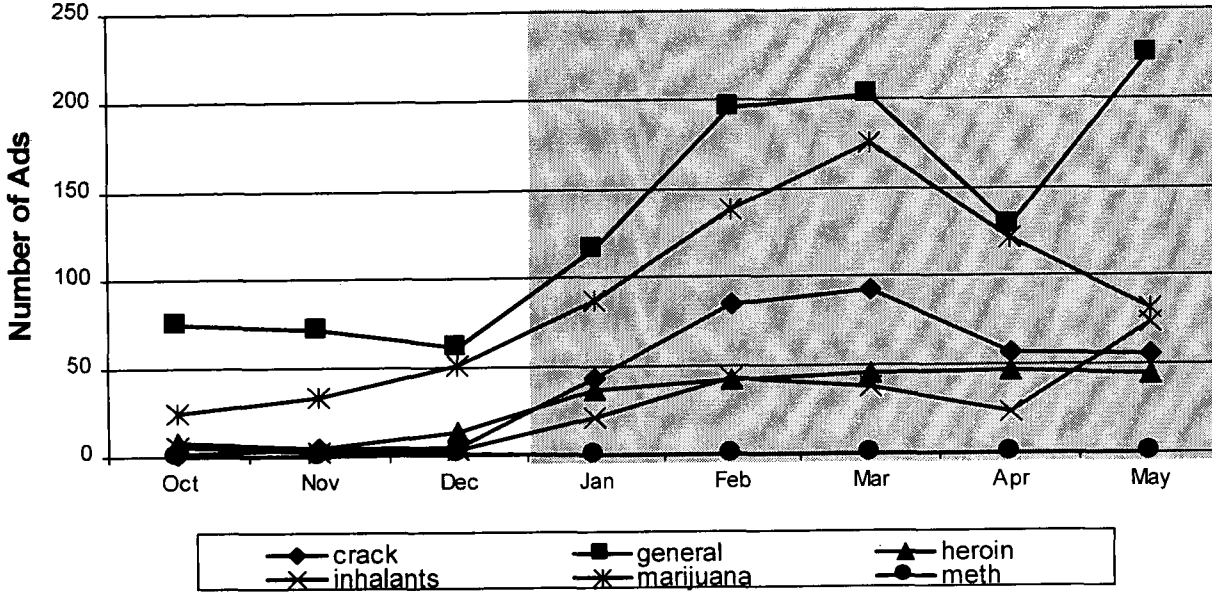
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Phoenix (Comparison Site) PDFA Ads



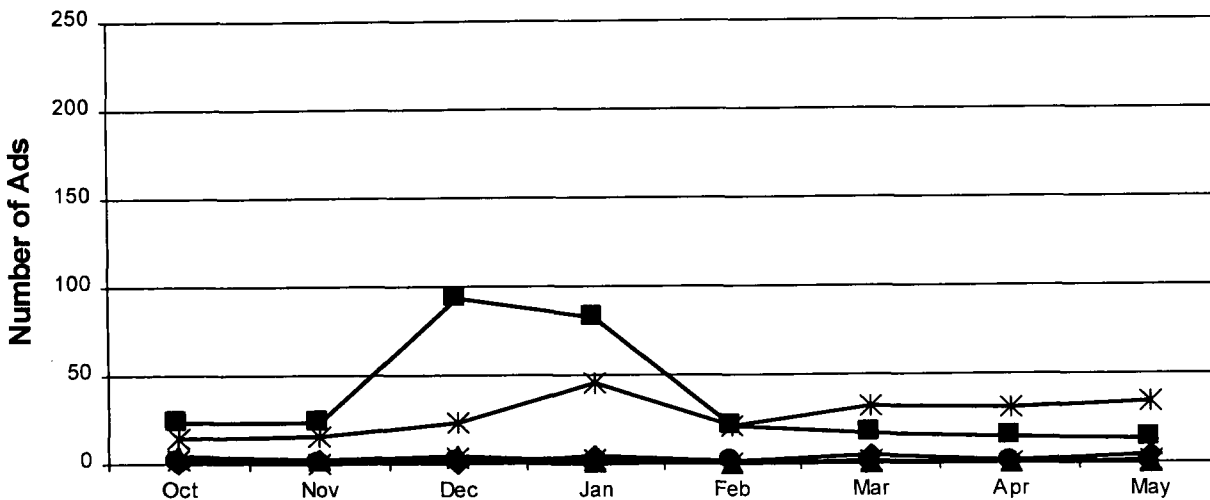
Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Type of Drug

Washington, DC (Target Site) Campaign/PDFA Ads



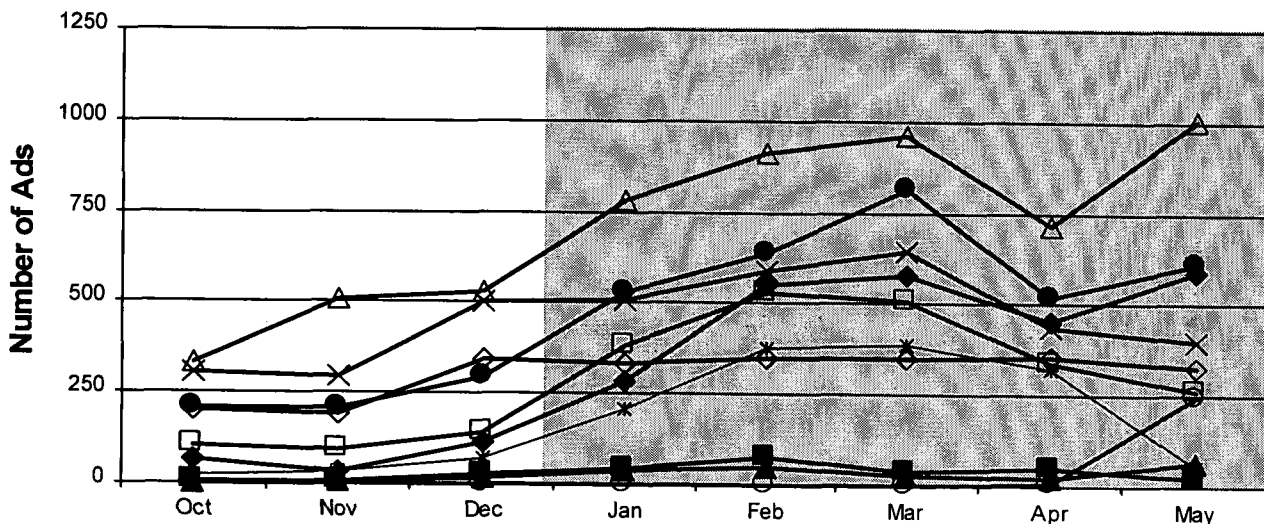
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Birmingham (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

All Target Sites Campaign/PDFA Ads

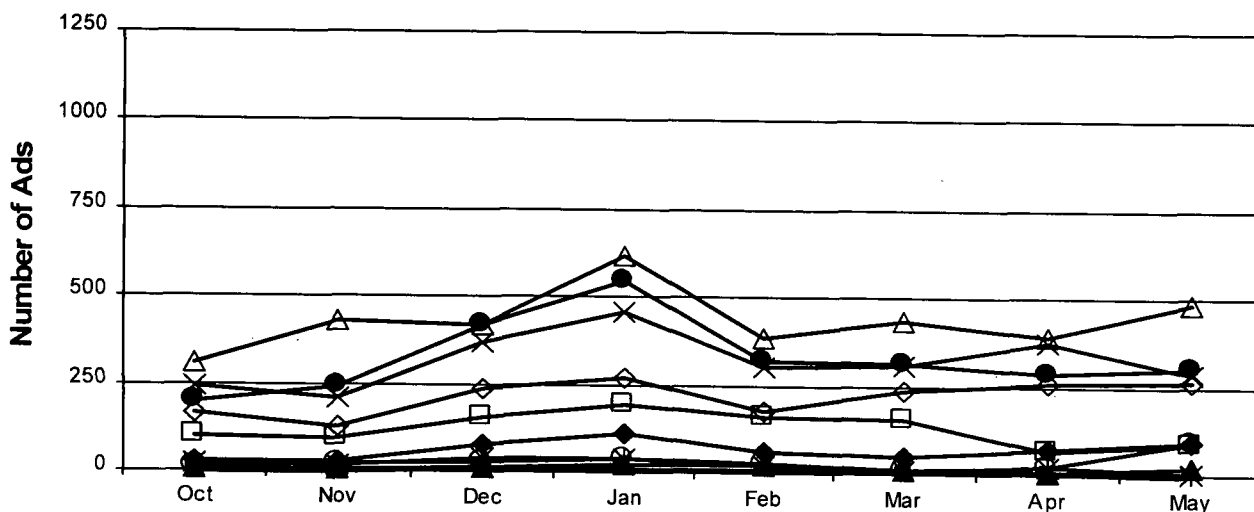


◆ Early Morning	◆ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
◆ Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

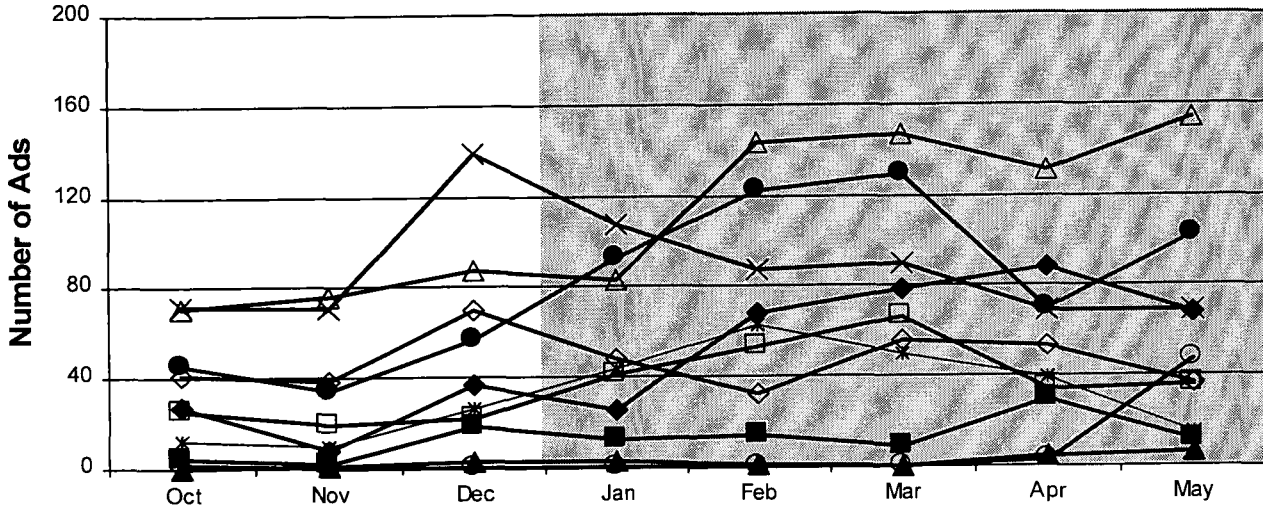
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

All Comparison Sites PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

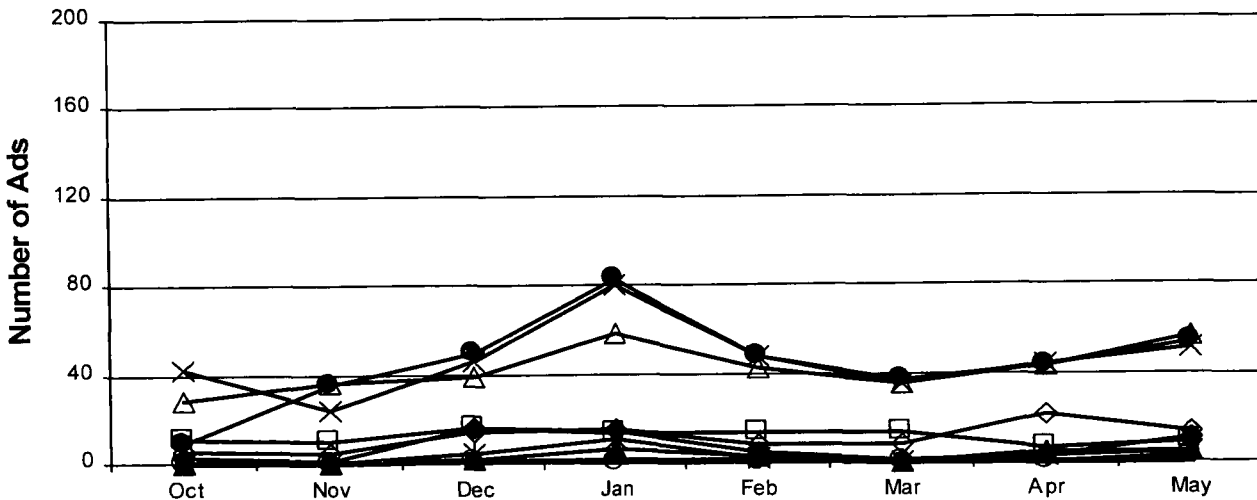
Atlanta (Target Site) Campaign/PDFA Ads



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

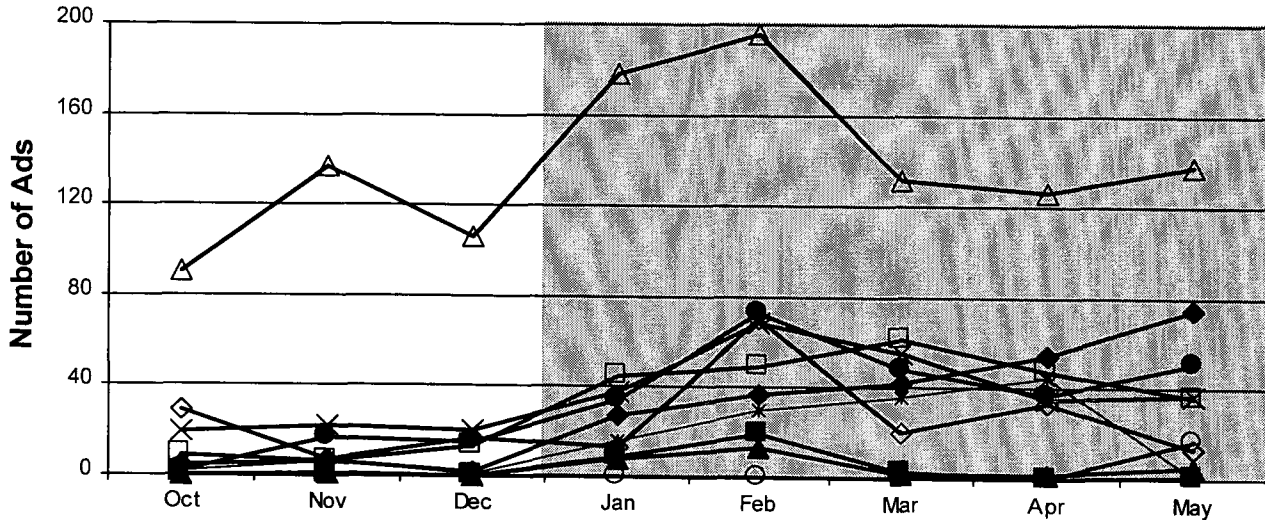
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Memphis (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

Baltimore (Target Site) Campaign/PDFA Ads

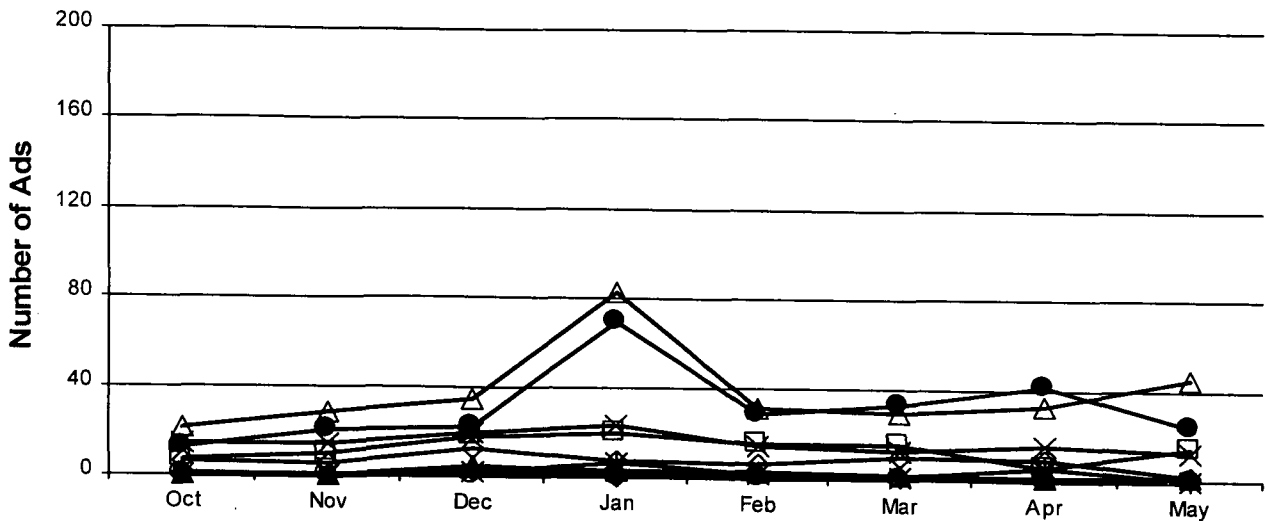


◆ Early Morning	■ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
◆ Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

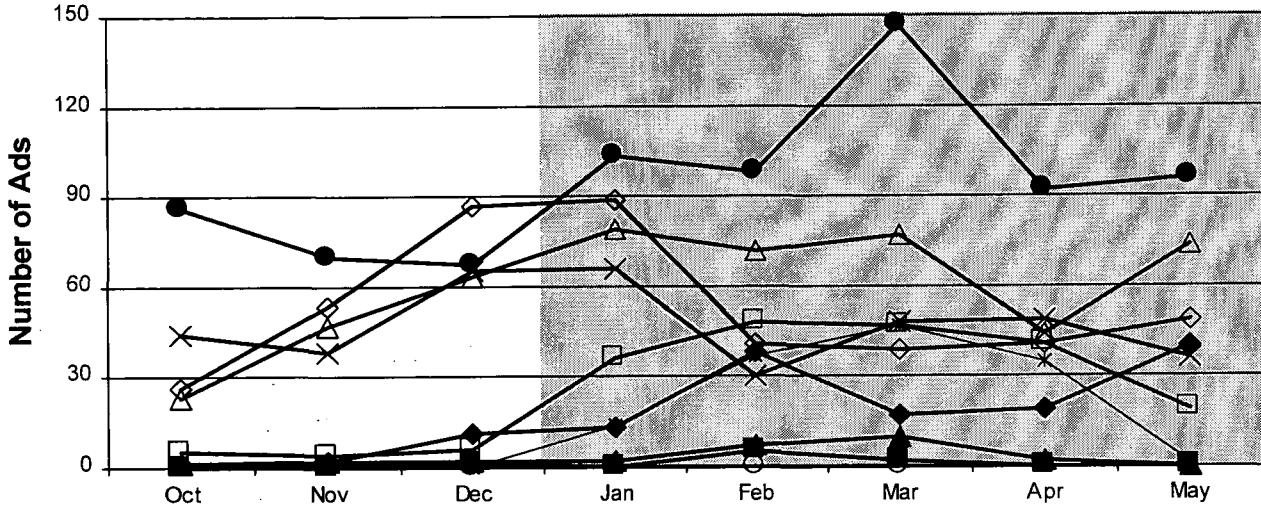
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Richmond (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

Denver (Target Site) Campaign/PDFA Ads

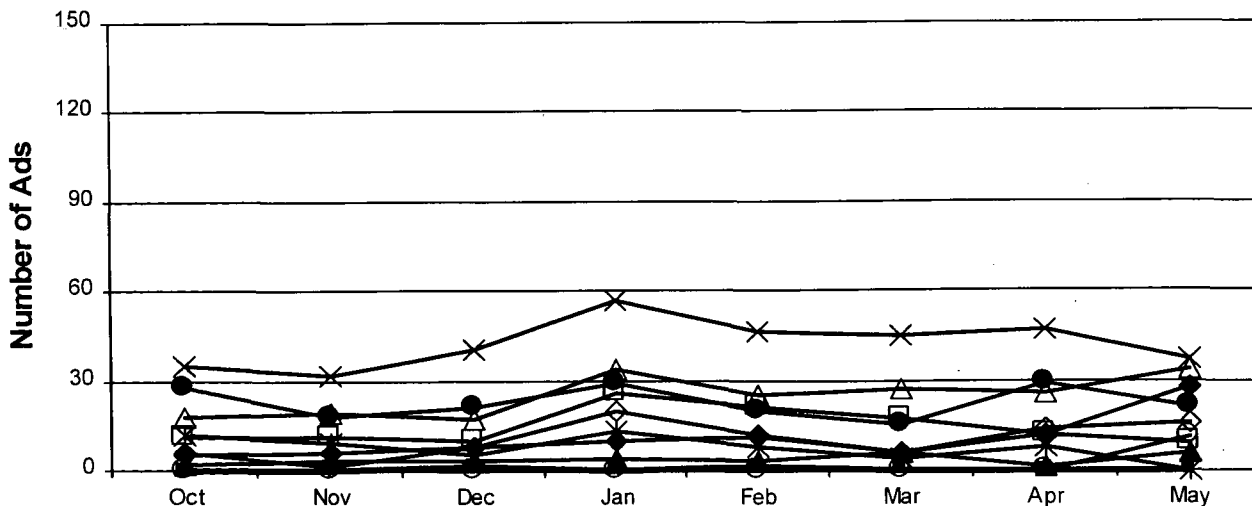


◆ Early Morning	◆ Early News	▲ Late News
× Daytime	× Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
◆ Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

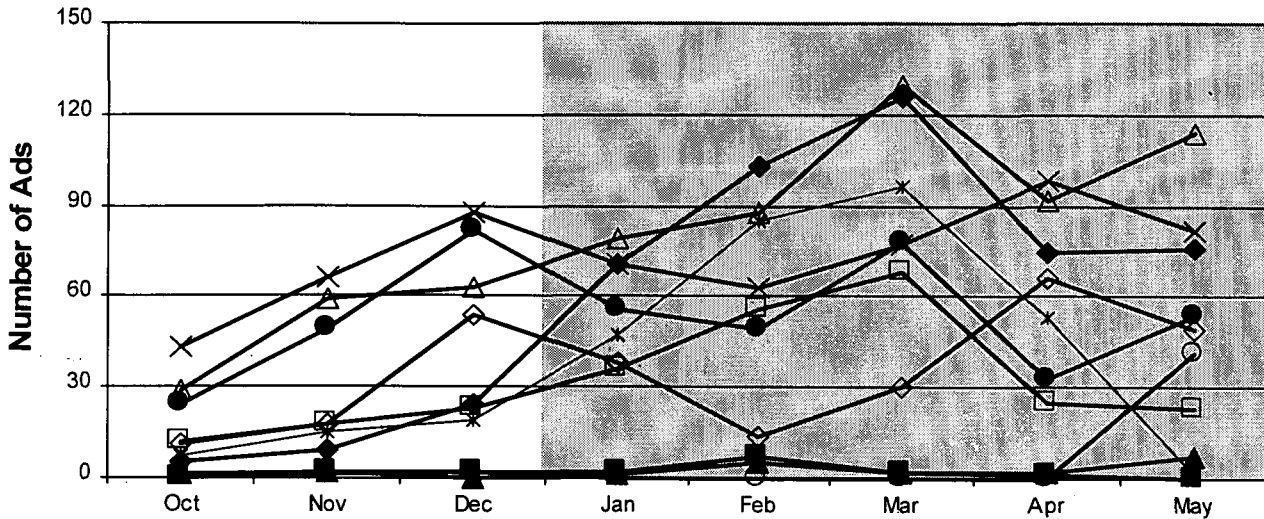
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Albuquerque (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

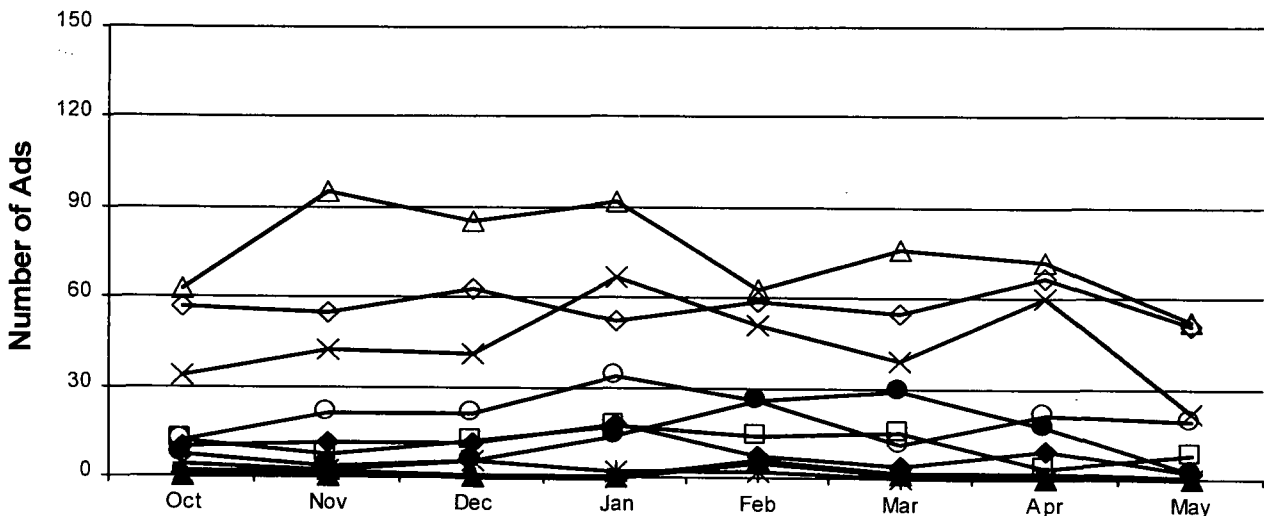
Hartford (Target Site) Campaign/PDFA Ads



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

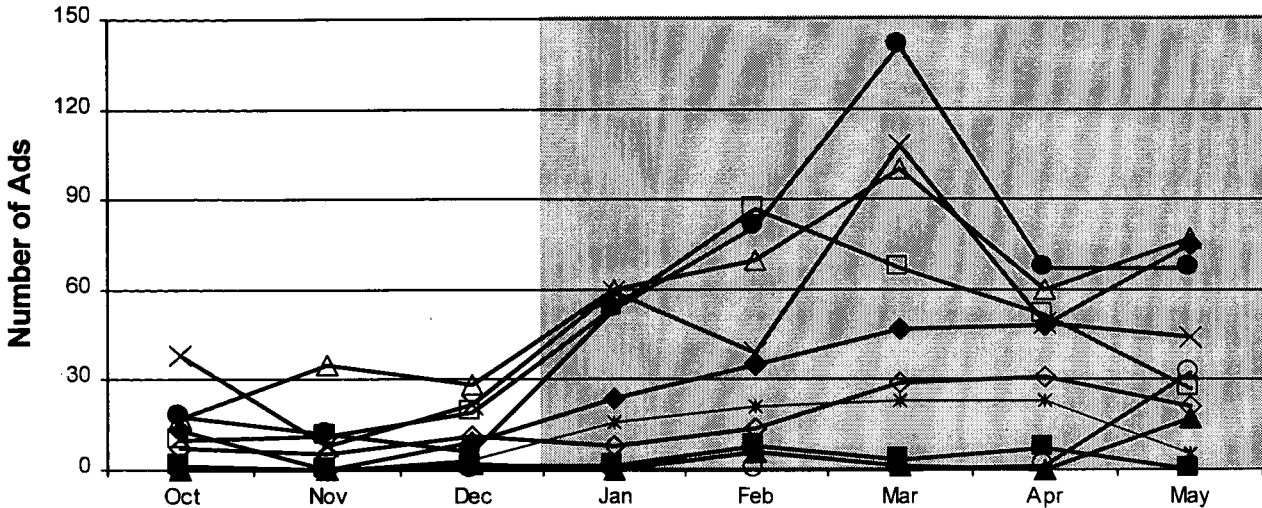
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Harrisburg (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

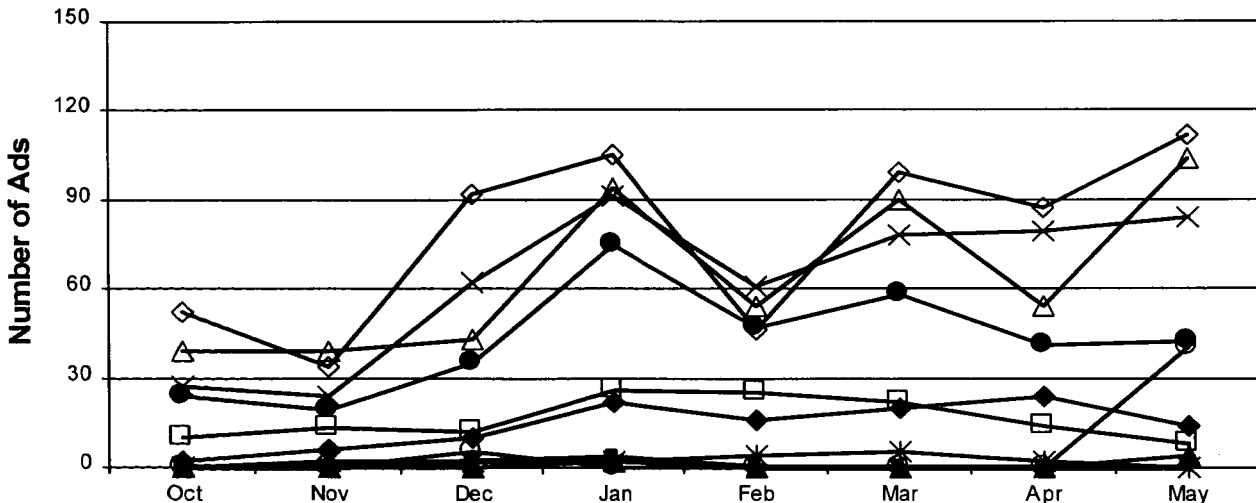
Houston (Target Site) Campaign/PDFA Ads



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

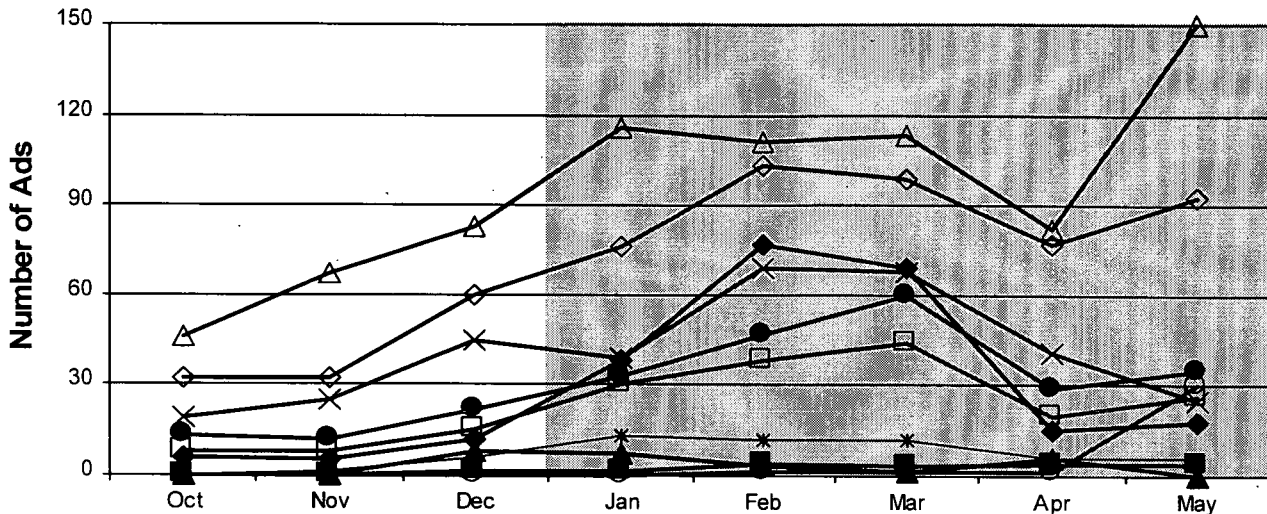
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Dallas (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

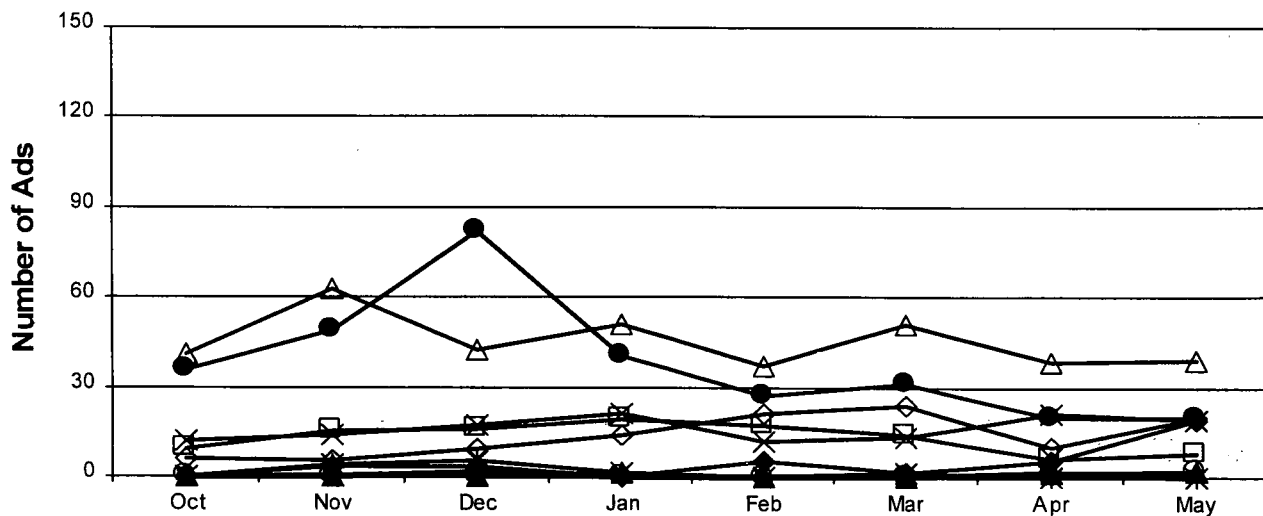
Milwaukee (Target Site) Campaign/PDFA Ads



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

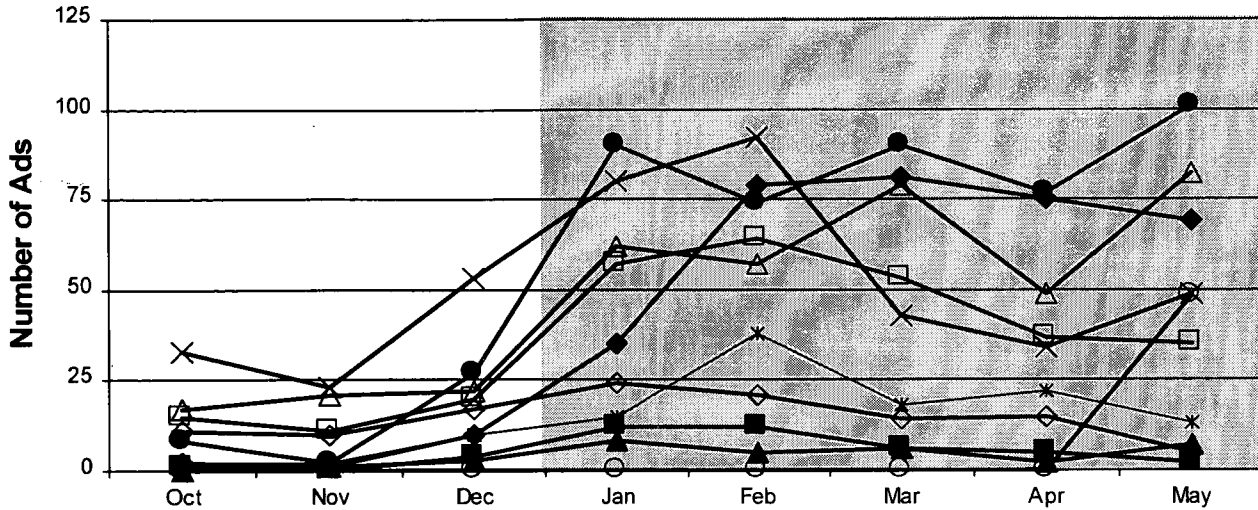
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Nashville (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

Portland, OR (Target Site) Campaign/PDFA Ads

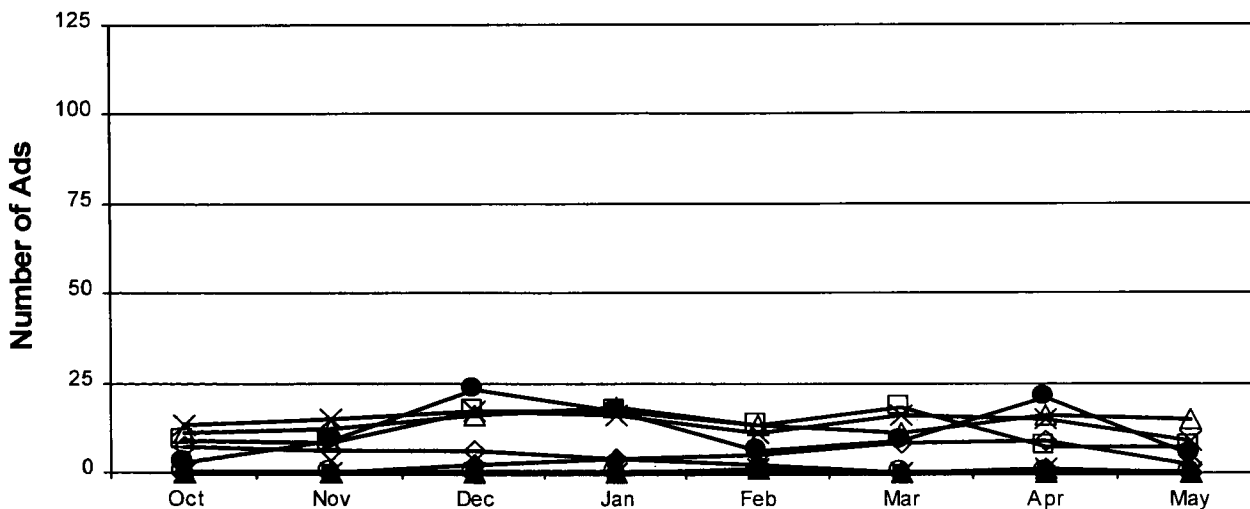


◆ Early Morning	◆ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
◻ Kids	◻ Prime Time	◻ Weekend Daytime
● Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

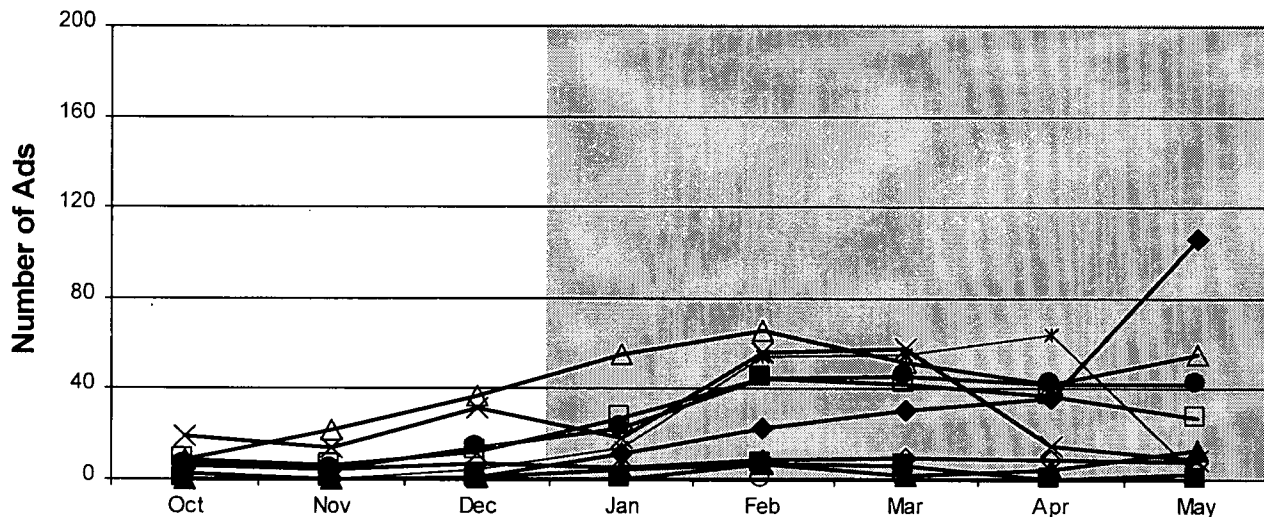
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Spokane (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

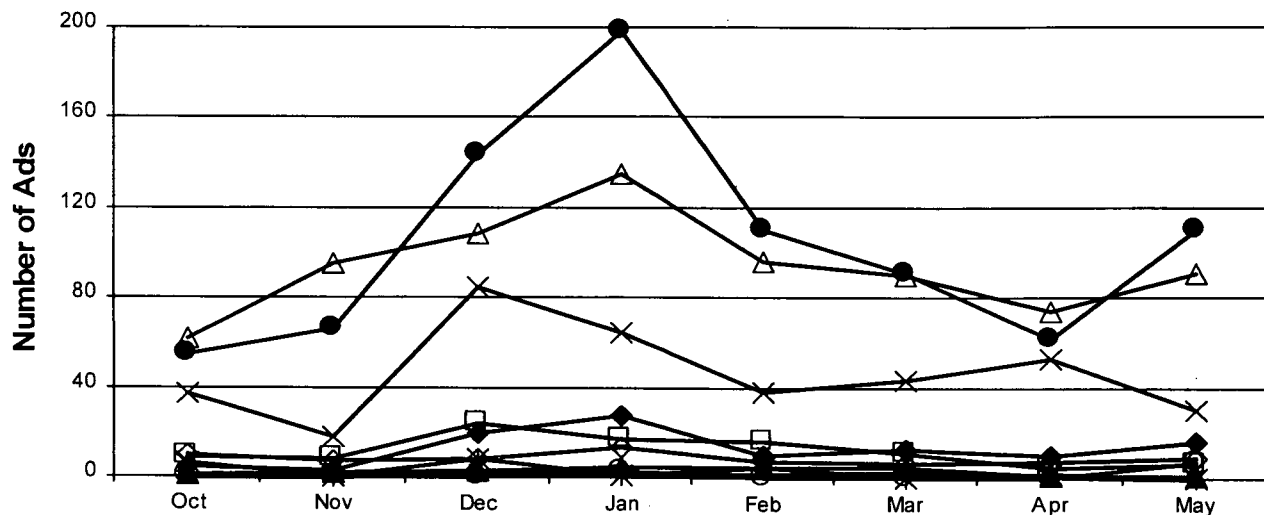
San Diego (Target Site) Campaign/PDFA Ads



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

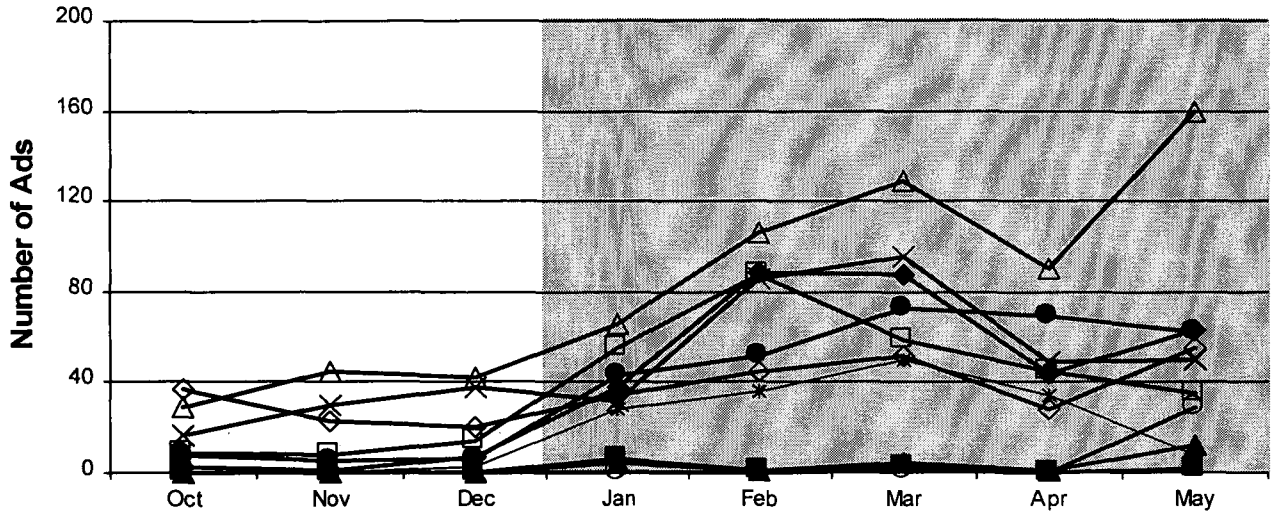
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Phoenix (Comparison Site) PDFA Ads



Total Number of TV Ads: Campaign/PDFA Ads and PDFA Ads Target vs. Comparison by Daypart

Washington, DC (Target Site) Campaign/PDFA Ads

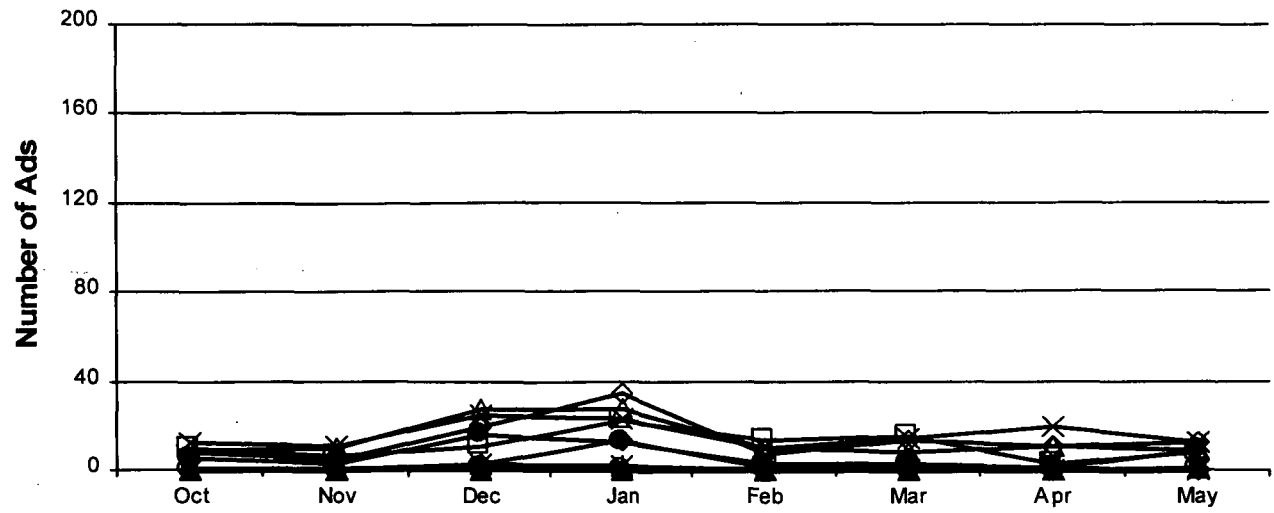


Early Morning	Early News	Late News
Daytime	Prime Access	Late Fringe
Kids	Prime Time	Weekend Daytime
Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

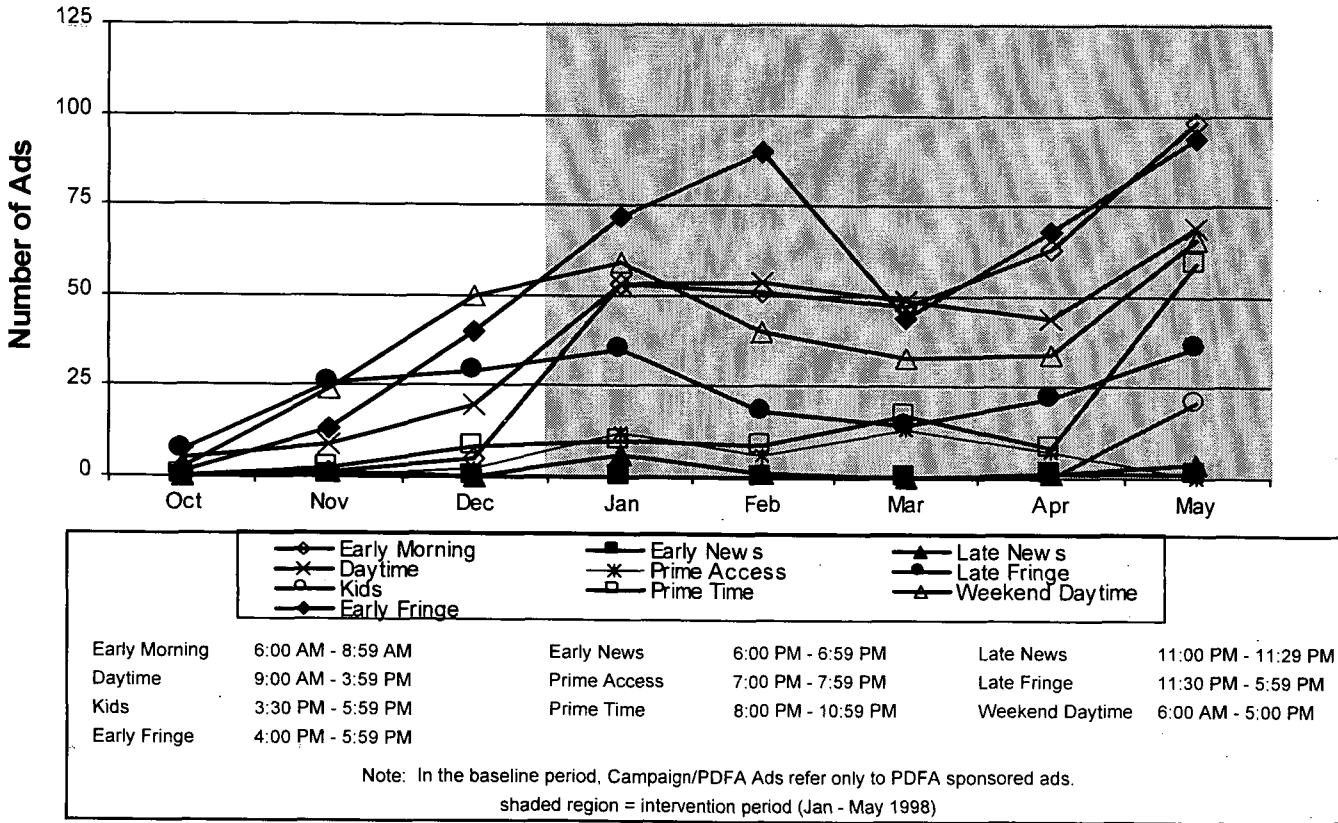
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Birmingham (Comparison Site) PDFA Ads

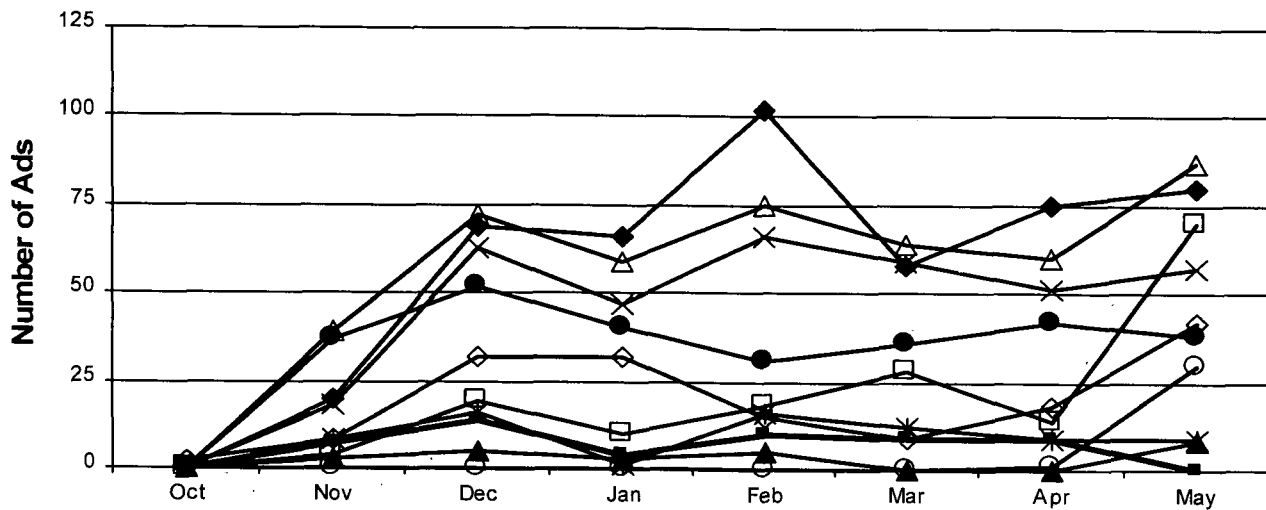


Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

All Target Sites

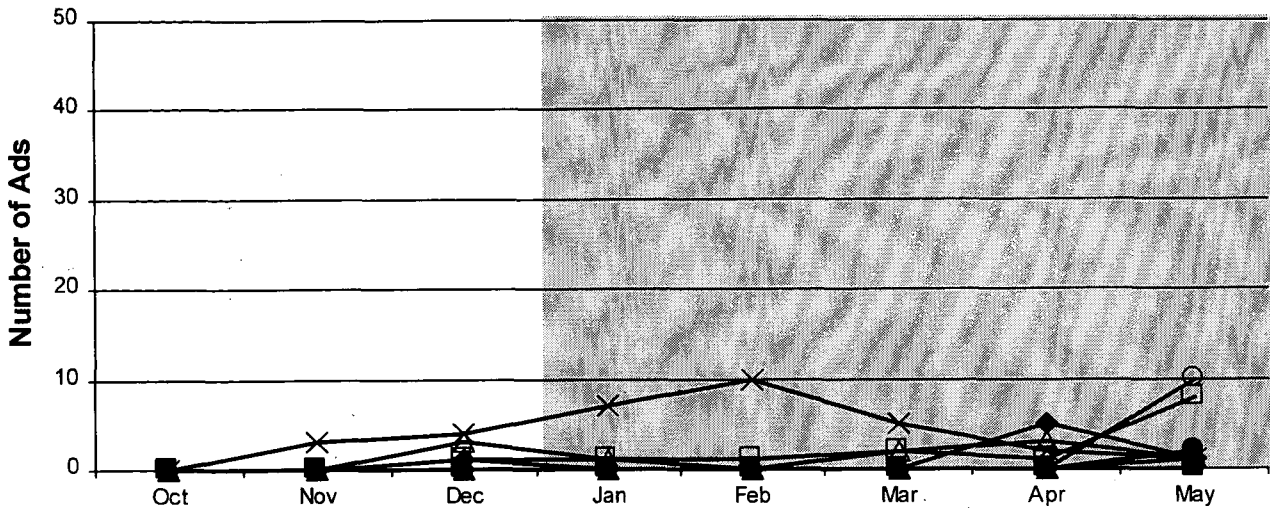


All Comparison Sites



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

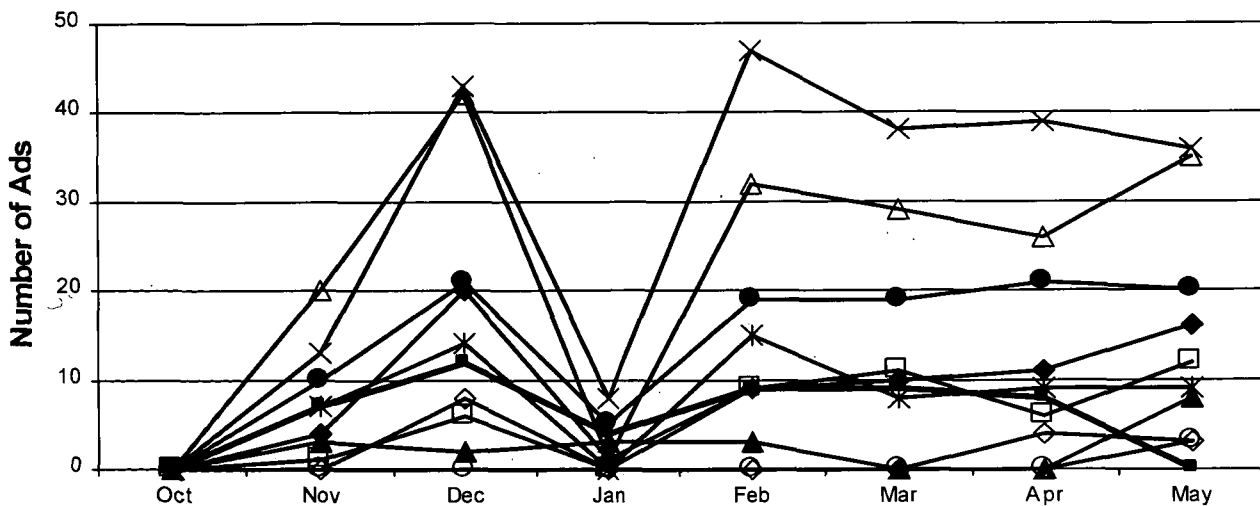
Atlanta (Target Site)



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

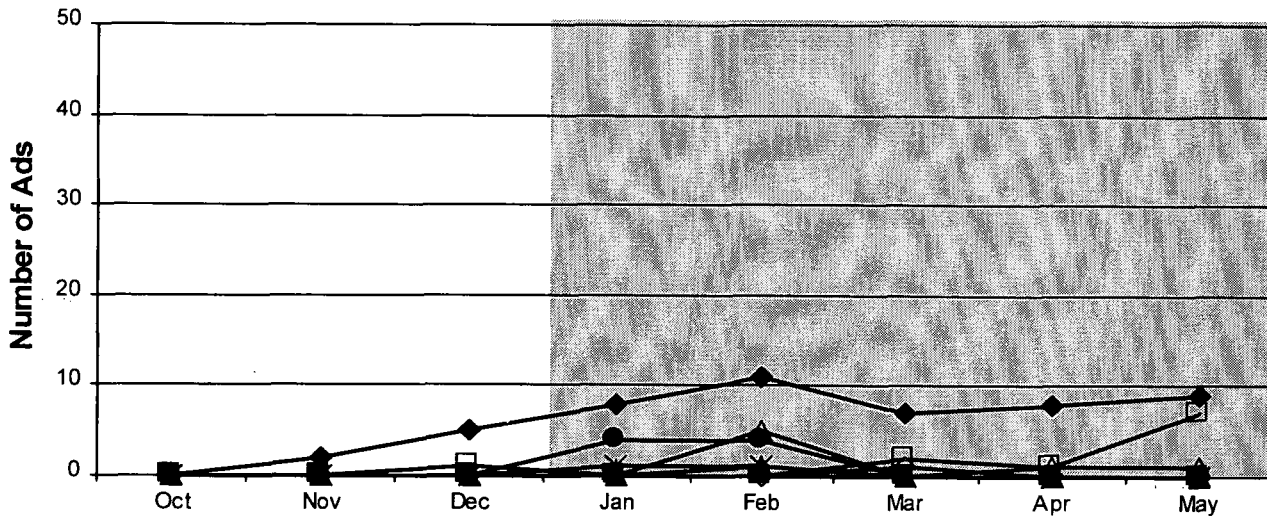
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Memphis (Comparison Site)



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

Baltimore (Target Site)

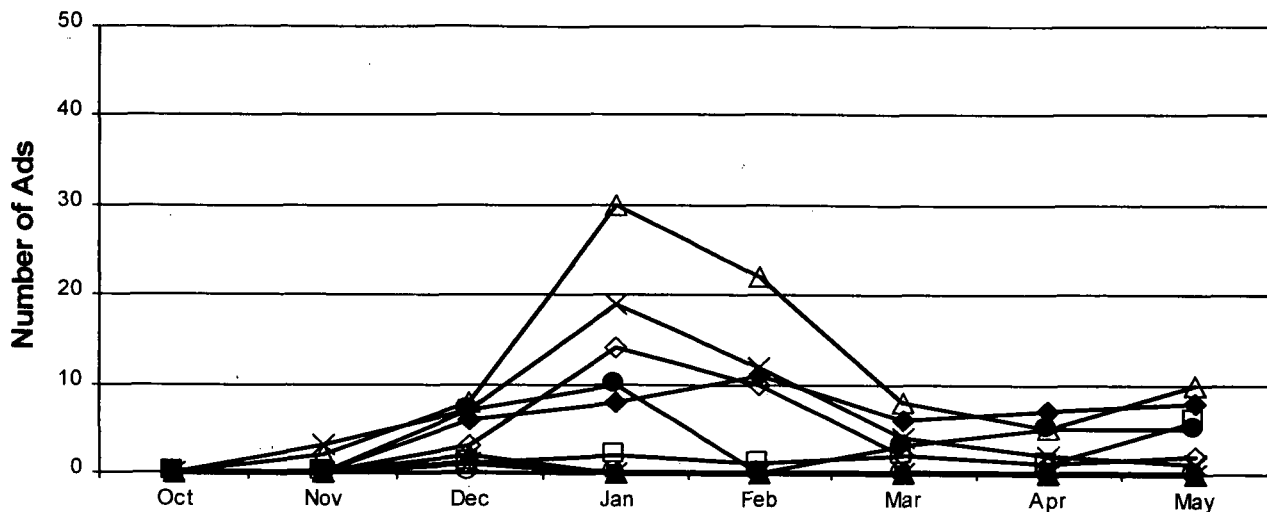


Early Morning	Early News	Late News
Daytime	Prime Access	Late Fringe
Kids	Prime Time	Weekend Daytime
Early Fringe		

Early Morning	Early News	Late News
6:00 AM - 8:59 AM	6:00 PM - 6:59 PM	11:00 PM - 11:29 PM
Daytime	Prime Access	Late Fringe
9:00 AM - 3:59 PM	7:00 PM - 7:59 PM	11:30 PM - 5:59 PM
Kids	Prime Time	Weekend Daytime
3:30 PM - 5:59 PM	8:00 PM - 10:59 PM	6:00 AM - 5:00 PM
Early Fringe		
4:00 PM - 5:59 PM		

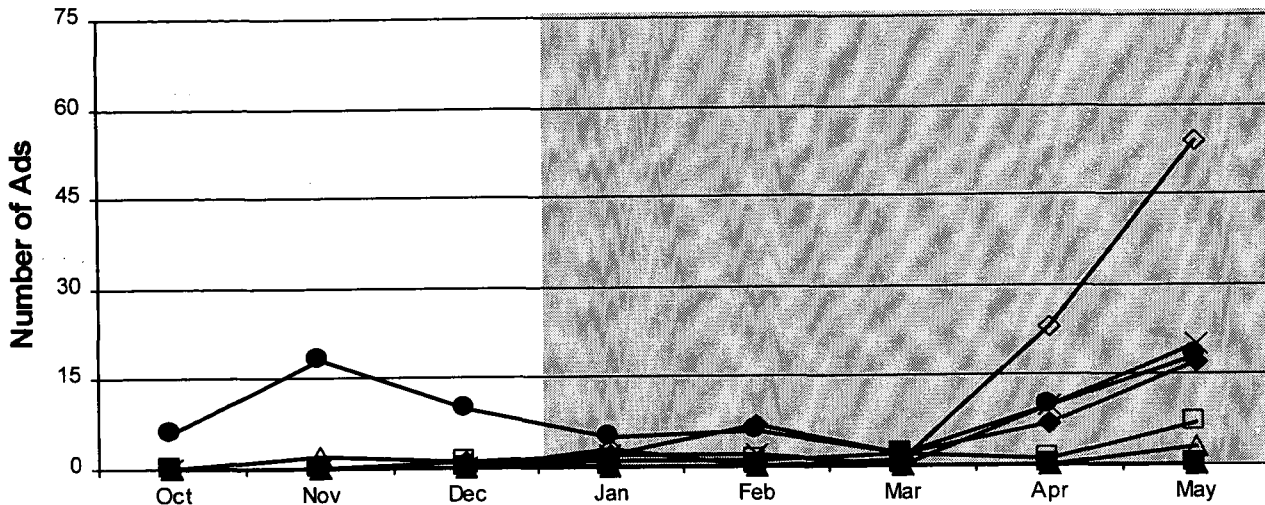
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Richmond (Comparison Site)



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

Denver (Target Site)

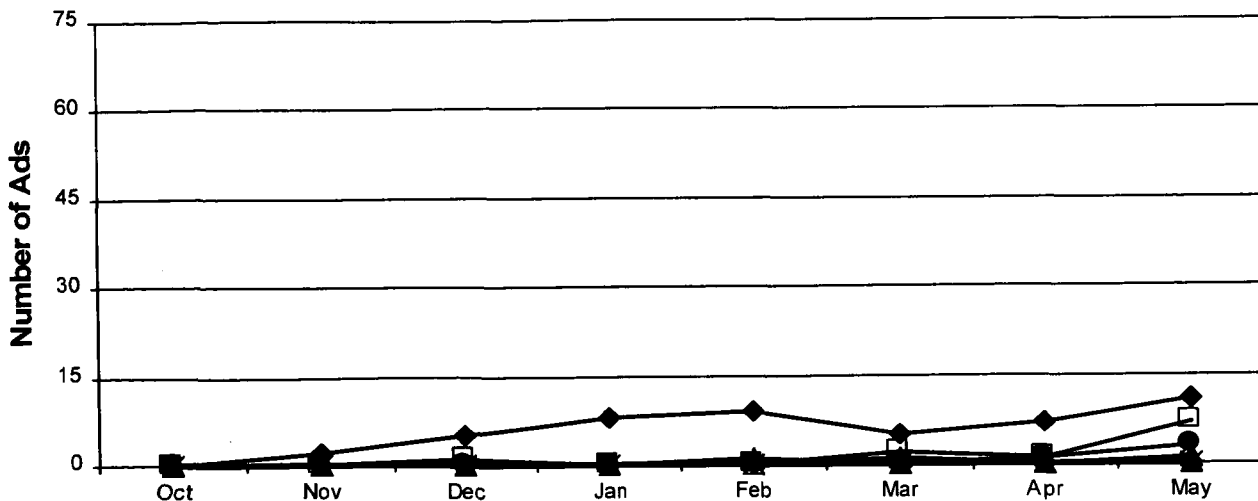


Early Morning	Early News	Late News
Daytime	Prime Access	Late Fringe
Kids	Prime Time	Weekend Daytime
Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

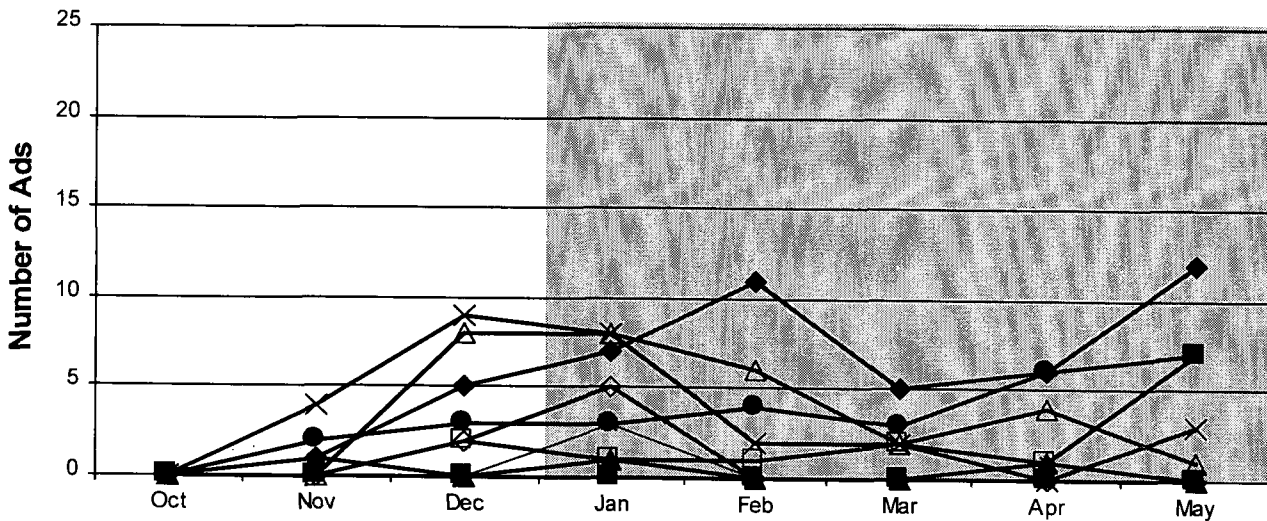
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Albuquerque (Comparison Site)



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

Hartford (Target Site)

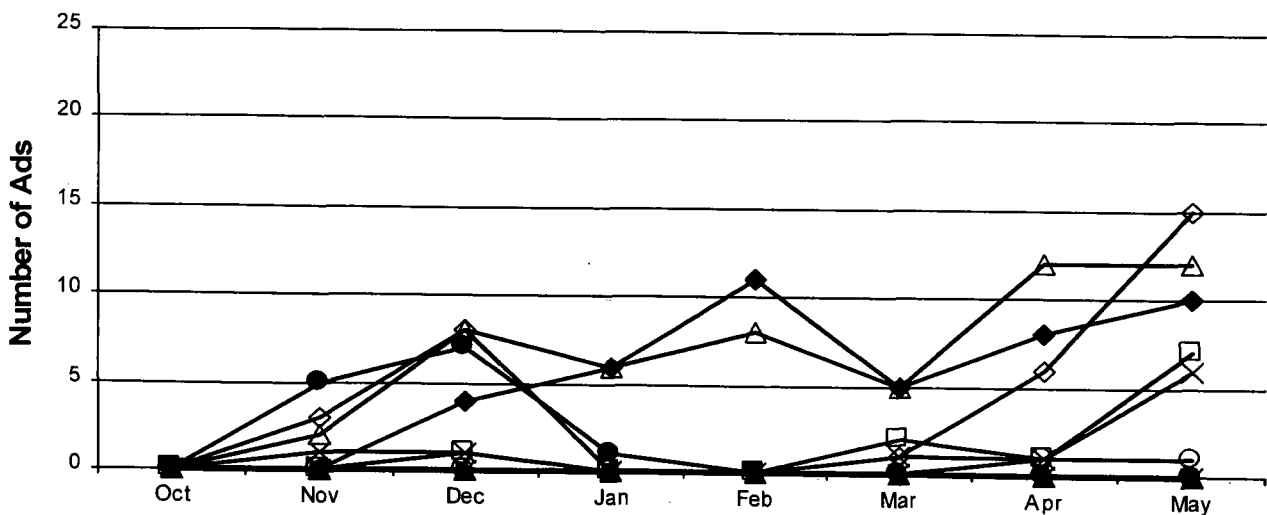


Early Morning	Early News	Late News
Daytime	Prime Access	Late Fringe
Kids	Prime Time	Weekend Daytime
Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

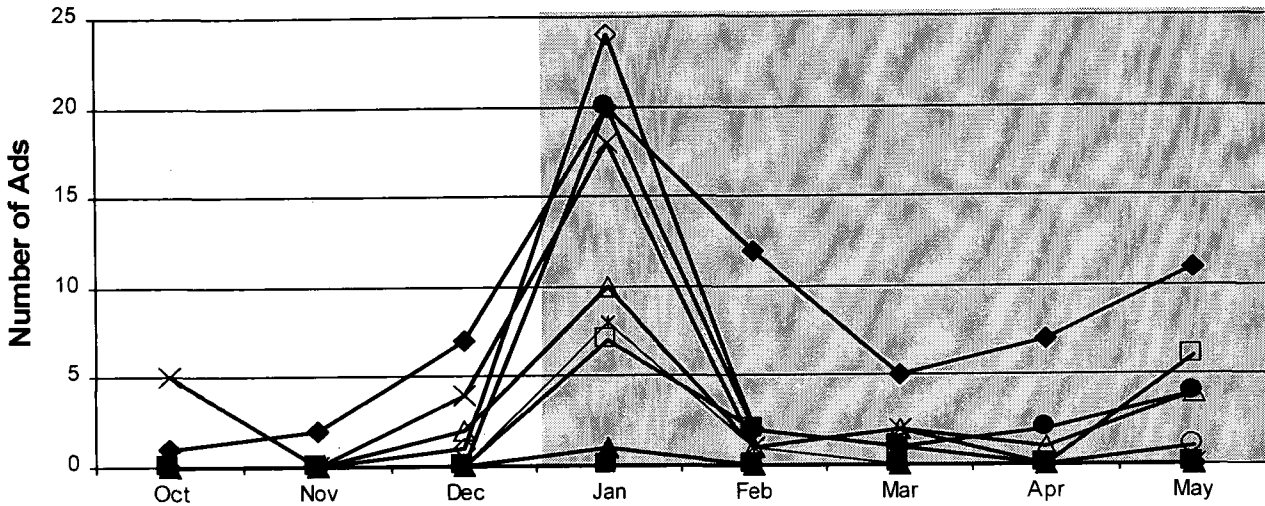
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Harrisburg (Comparison Site)



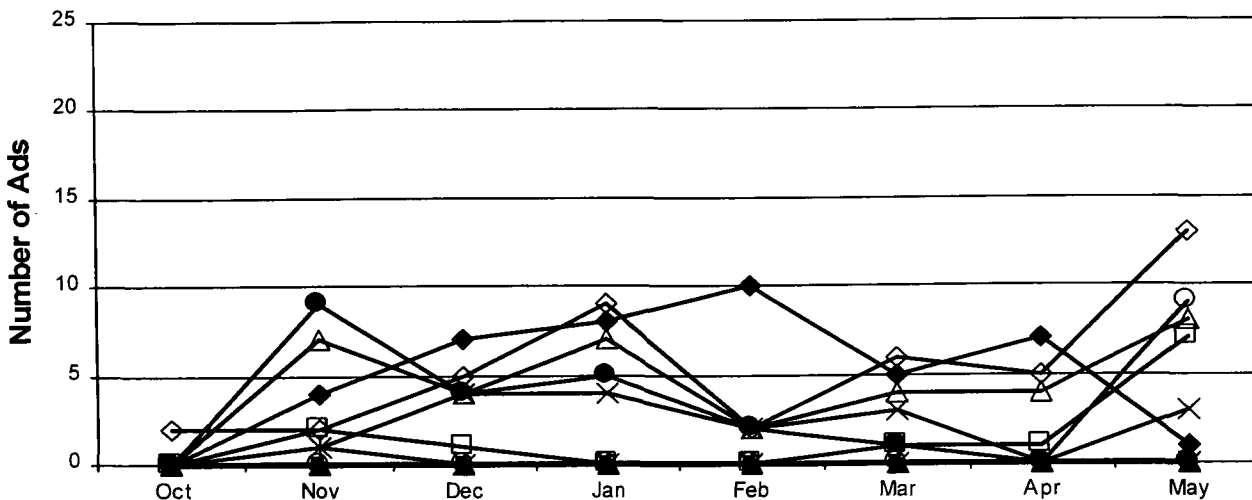
Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

Houston (Target Site)



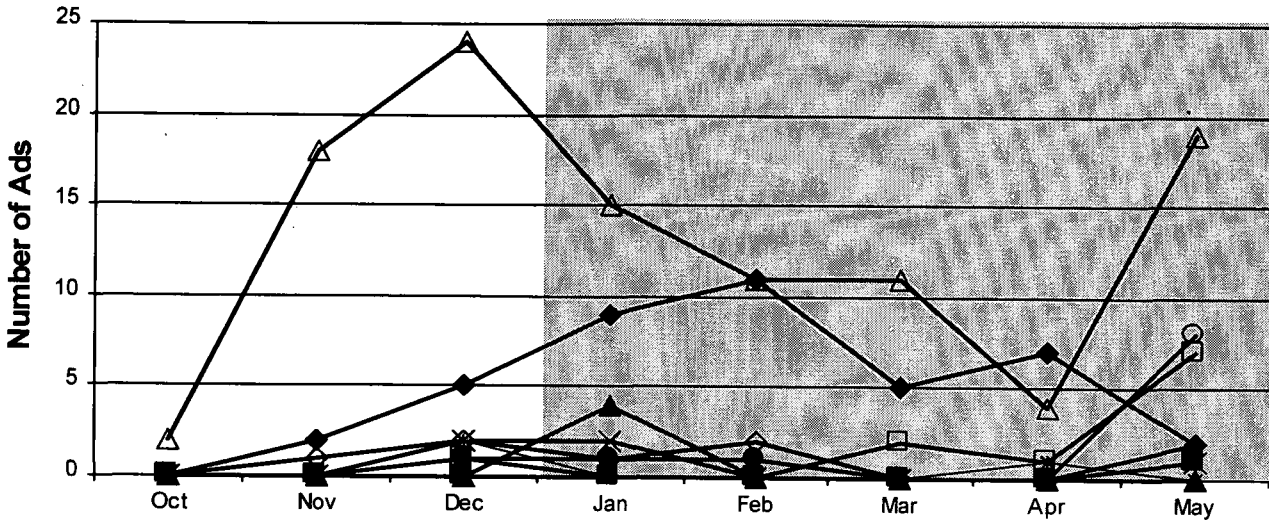
<ul style="list-style-type: none"> ◊ Early Morning × Daytime ○ Kids ◆ Early Fringe 	<ul style="list-style-type: none"> ■ Early News * Prime Access □ Prime Time 	<ul style="list-style-type: none"> ▲ Late News ● Late Fringe △ Weekend Daytime
<p>Early Morning 6:00 AM - 8:59 AM</p> <p>Daytime 9:00 AM - 3:59 PM</p> <p>Kids 3:30 PM - 5:59 PM</p> <p>Early Fringe 4:00 PM - 5:59 PM</p>	<p>Early News 6:00 PM - 6:59 PM</p> <p>Prime Access 7:00 PM - 7:59 PM</p> <p>Prime Time 8:00 PM - 10:59 PM</p>	<p>Late News 11:00 PM - 11:29 PM</p> <p>Late Fringe 11:30 PM - 5:59 PM</p> <p>Weekend Daytime 6:00 AM - 5:00 PM</p>
<p>Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads. shaded region = intervention period (Jan - May 1998)</p>		

Dallas (Comparison Site)



Total Number of Ads: Other Anti-Drug Ads by Daypart

Milwaukee (Target Site)

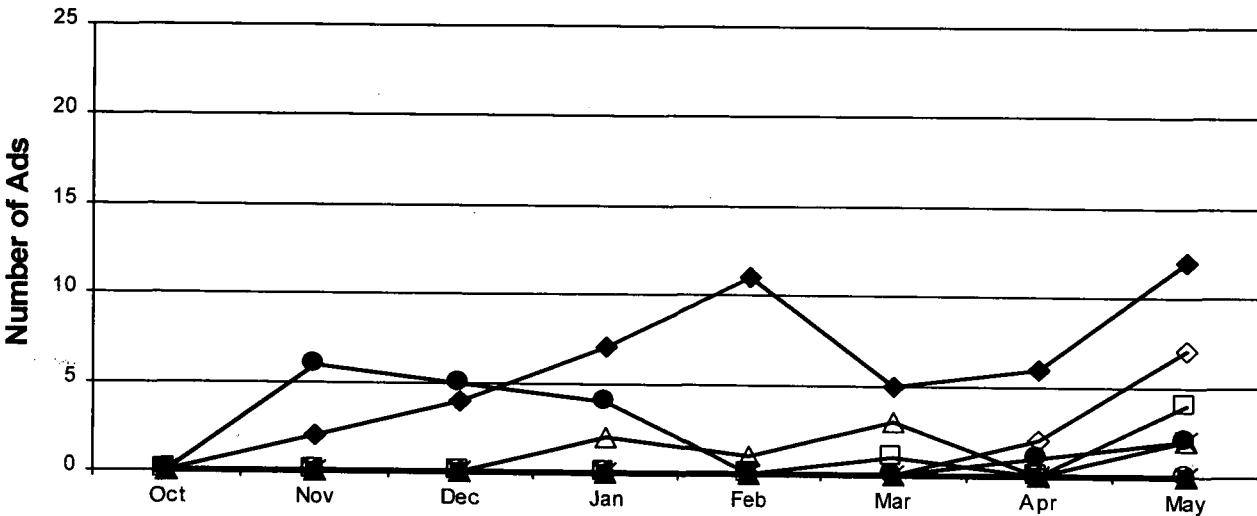


◆ Early Morning	◆ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
□ Kids	□ Prime Time	△ Weekend Daytime
● Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

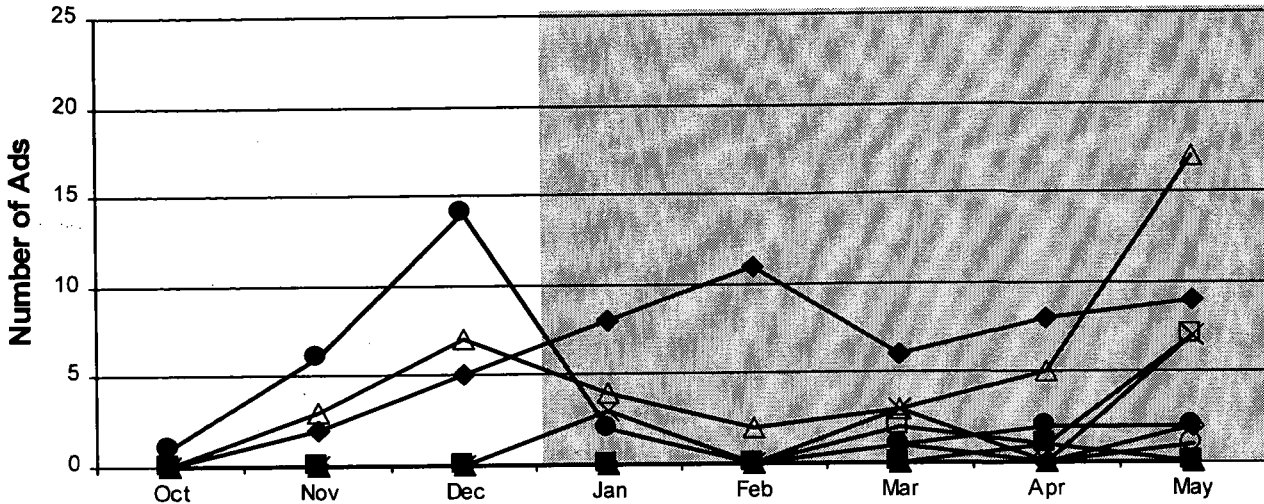
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Nashville (Comparison Site)



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

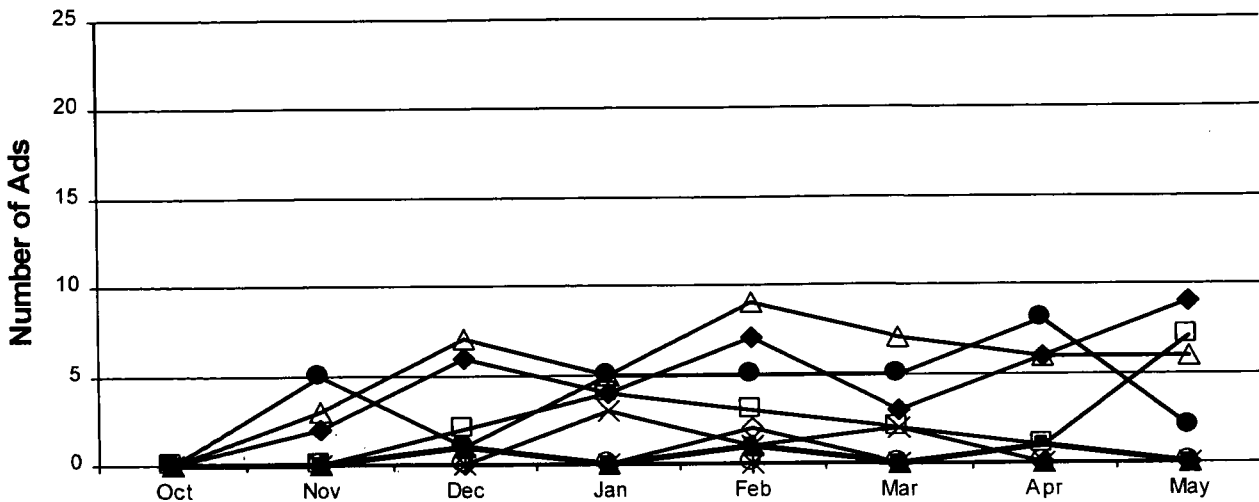
Portland, OR (Target Site)



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

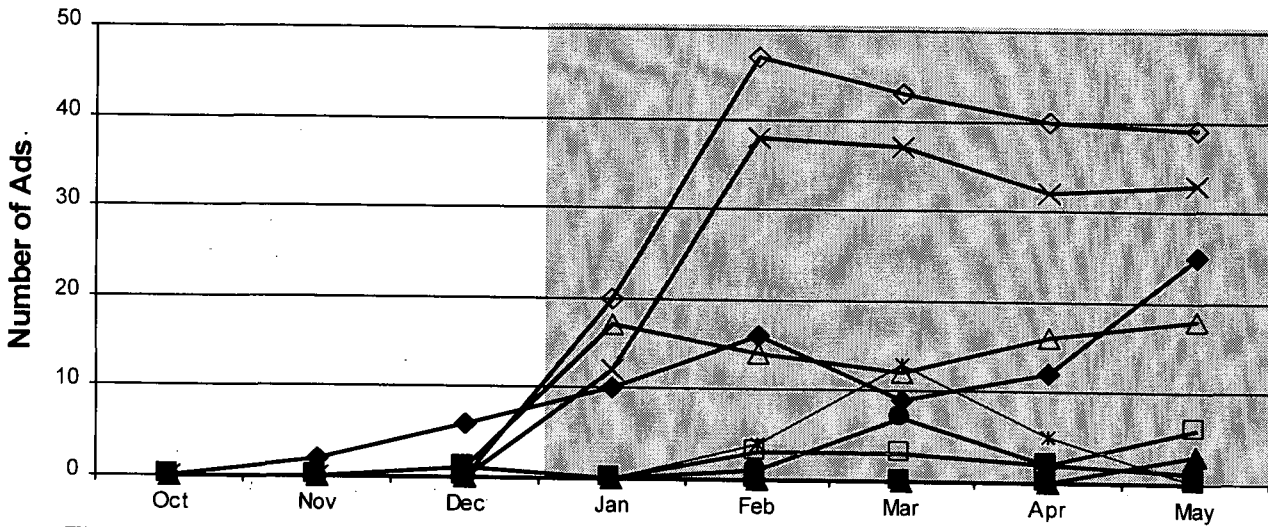
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Spokane (Comparison Site)



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

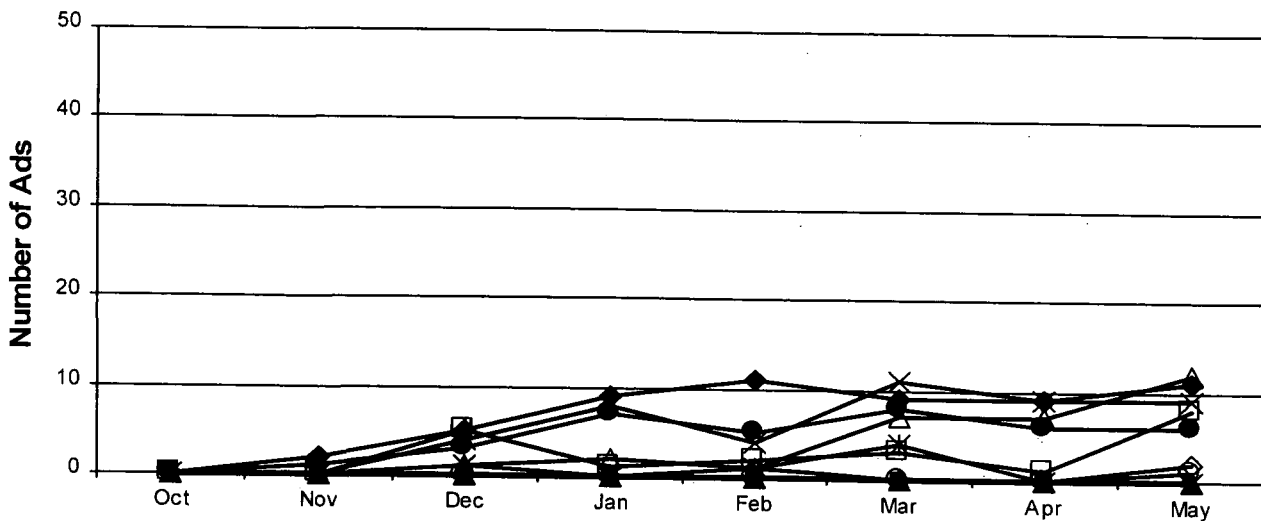
San Diego (Target Site)



<ul style="list-style-type: none"> ◆ Early Morning × Daytime ○ Kids ◆ Early Fringe 	<ul style="list-style-type: none"> ■ Early News * Prime Access □ Prime Time 	<ul style="list-style-type: none"> ▲ Late News ● Late Fringe △ Weekend Daytime 			
Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

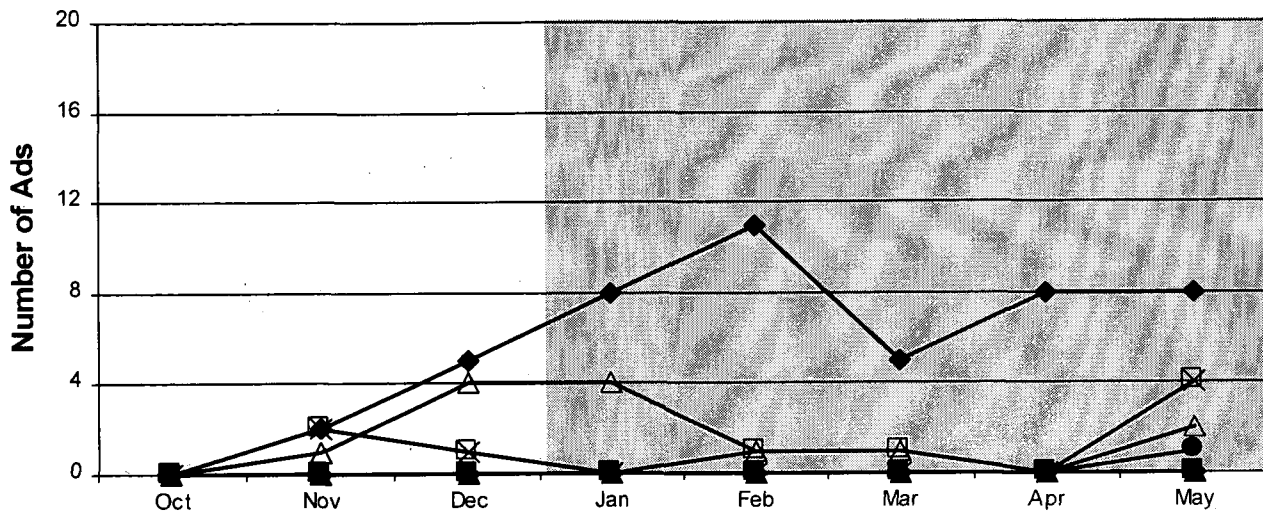
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Phoenix (Comparison Site)



Total Number of TV Ads: Other Anti-Drug Ads Target vs. Comparison by Daypart

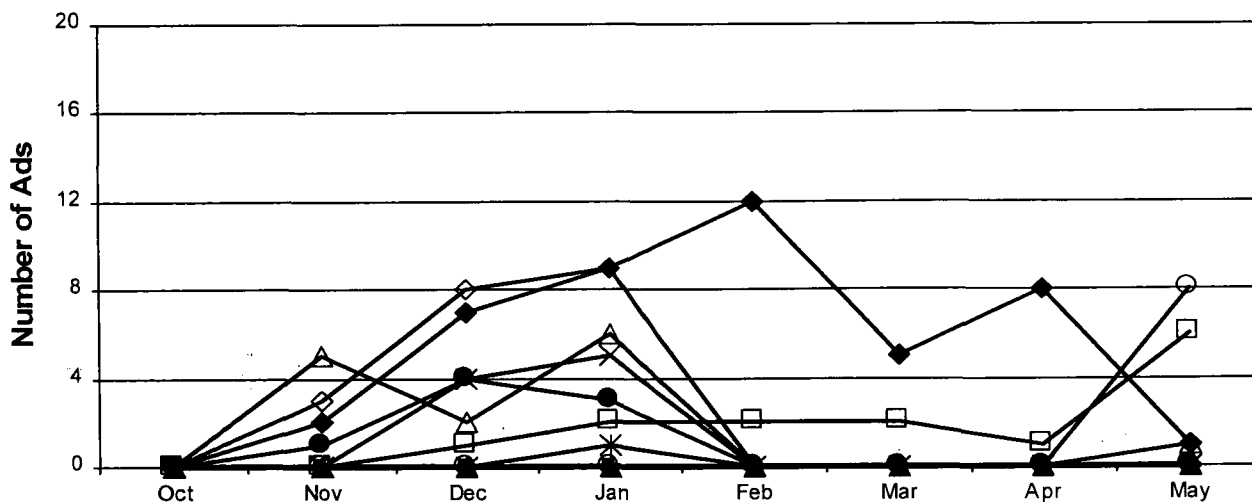
Washington, DC (Target Site)



Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

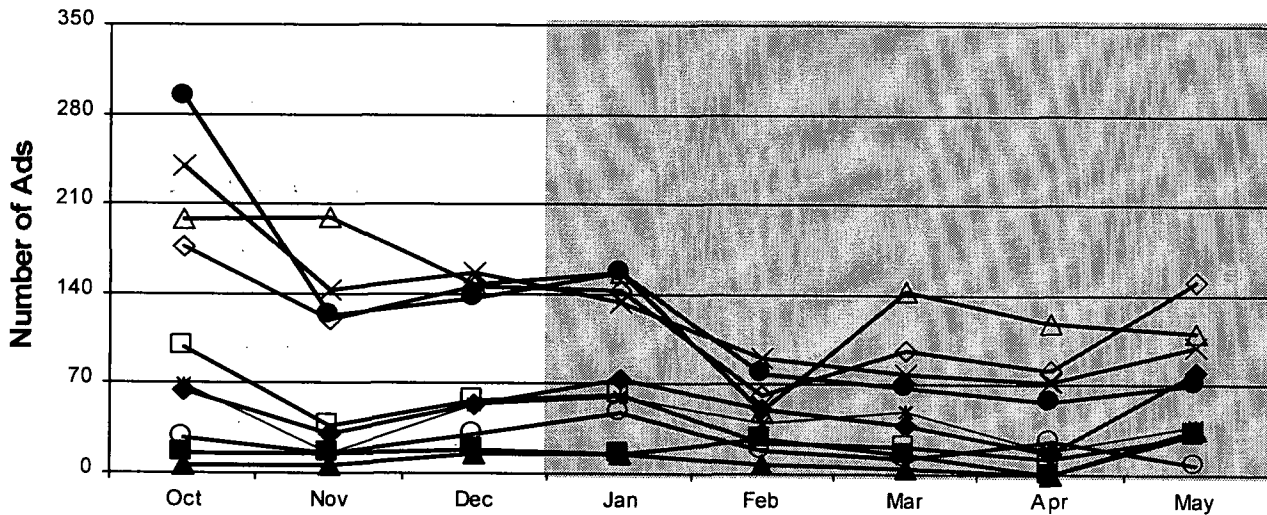
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Birmingham (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

All Target Sites

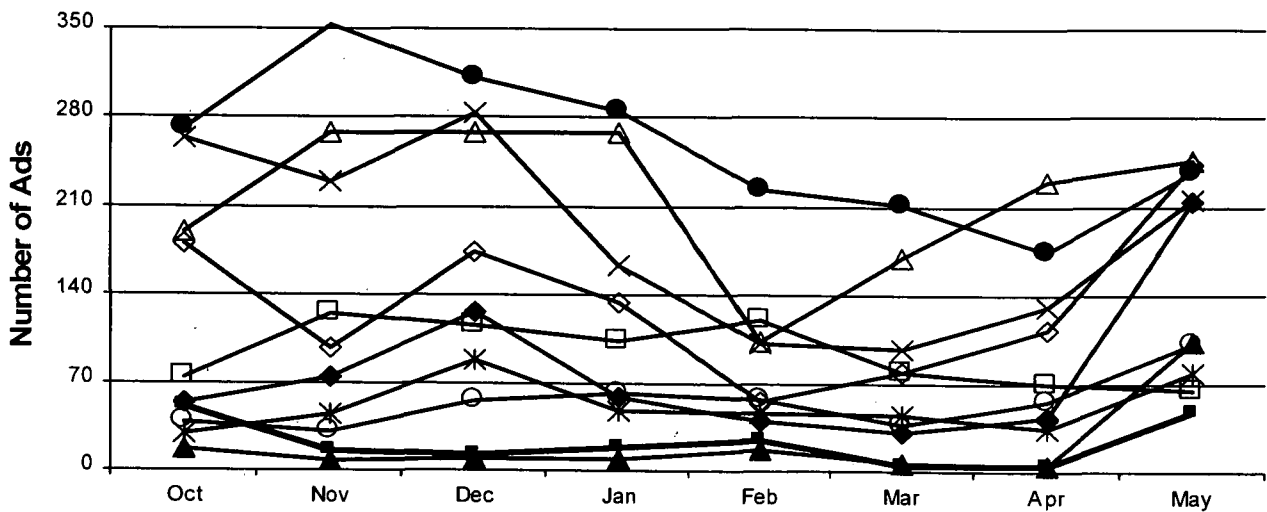


Early Morning	Early News	Late News
Daytime	Prime Access	Late Fringe
Kids	Prime Time	Weekend Daytime
Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

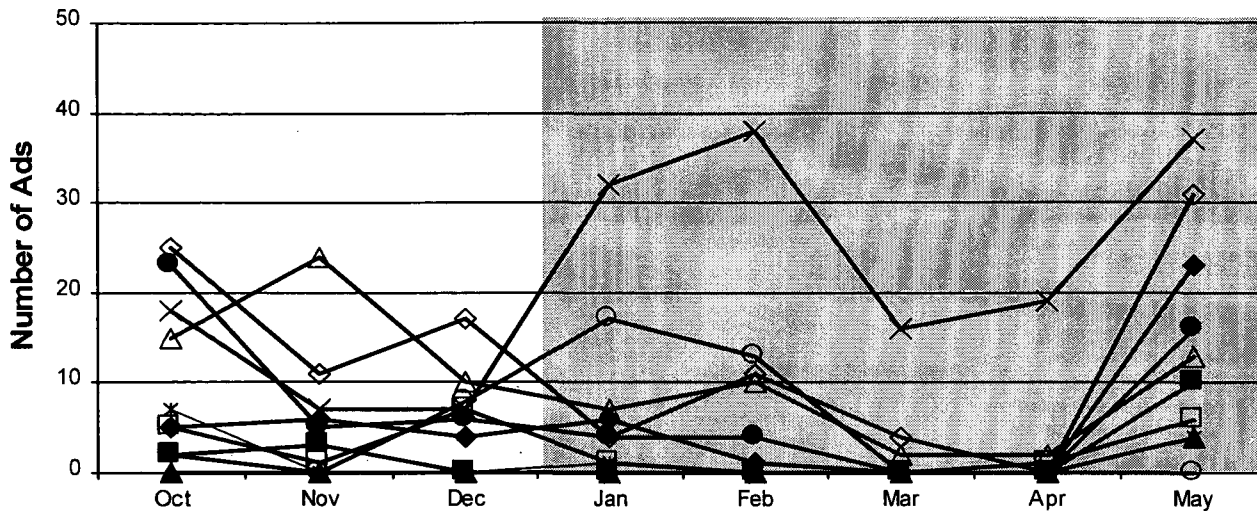
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

All Comparison Sites



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

Atlanta (Target Site)

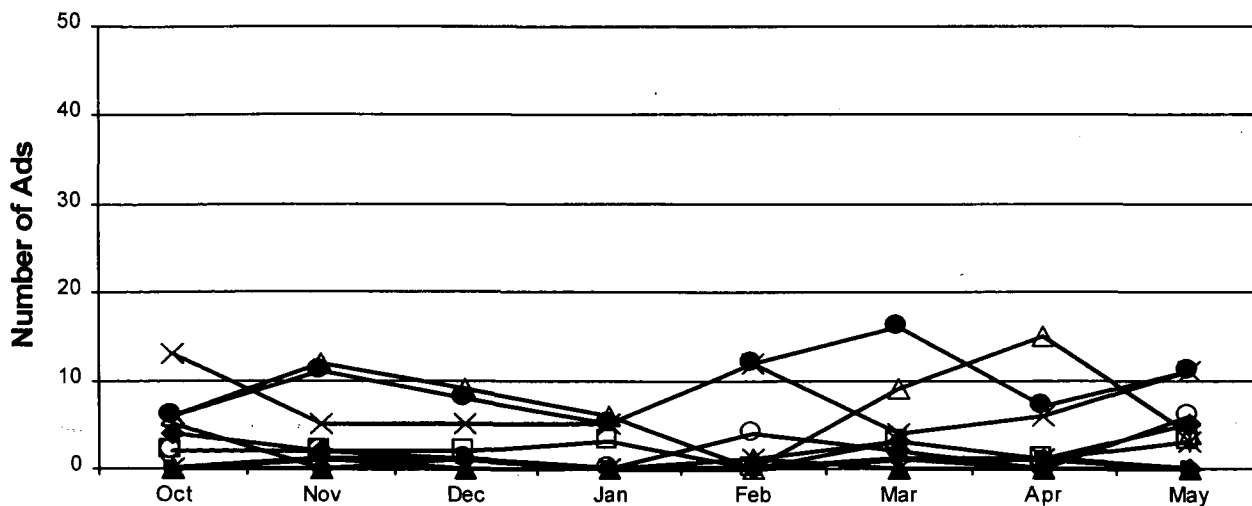


◆ Early Morning	■ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
◆ Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

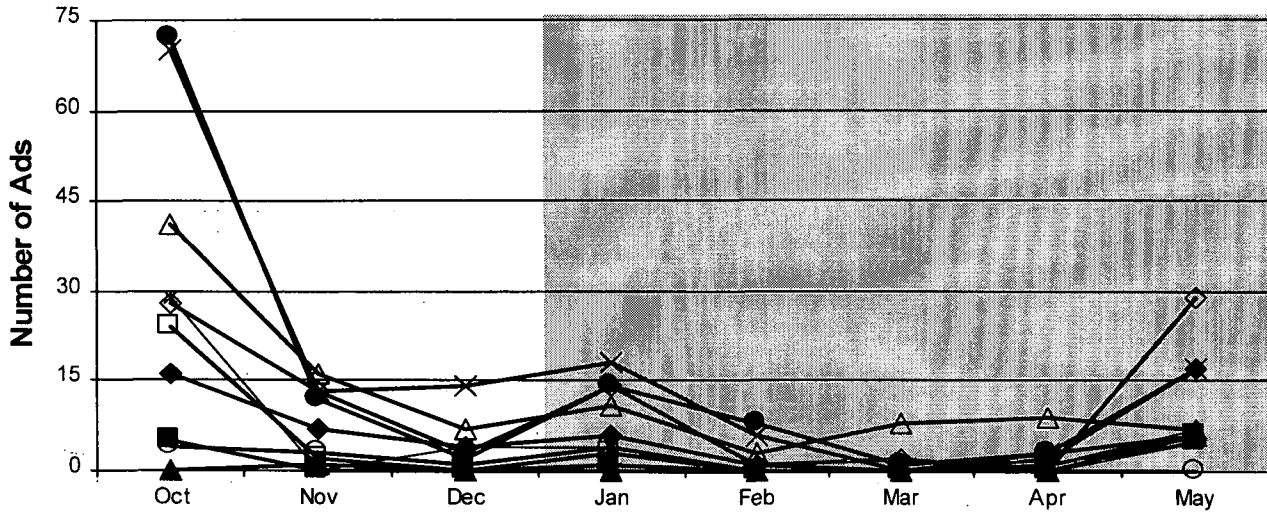
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Memphis (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

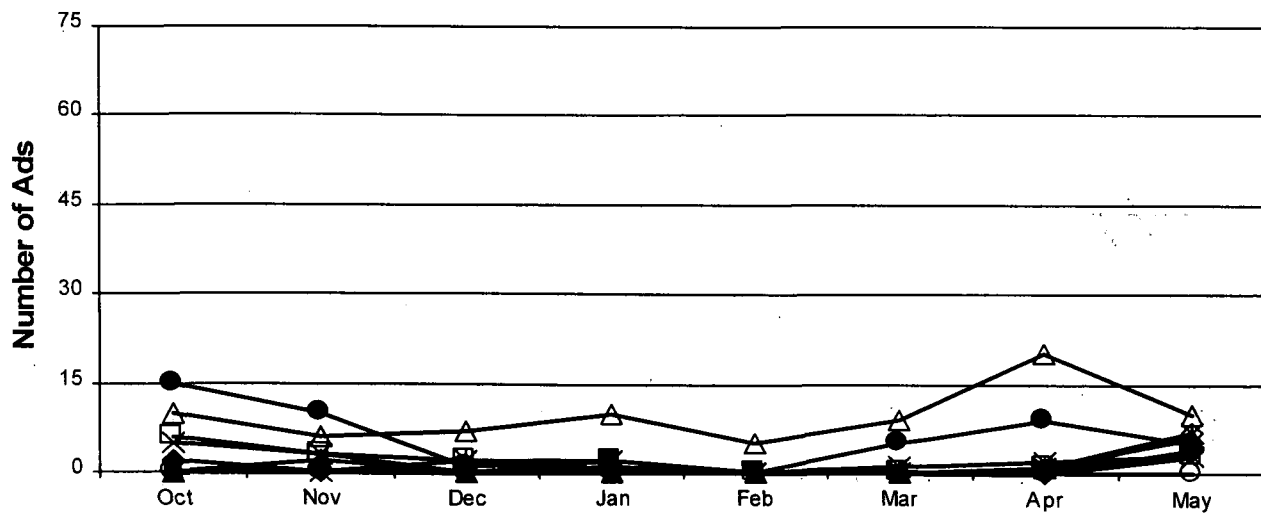
Baltimore (Target Site)



Daypart	Time Range	Daypart	Time Range	Daypart	Time Range
Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

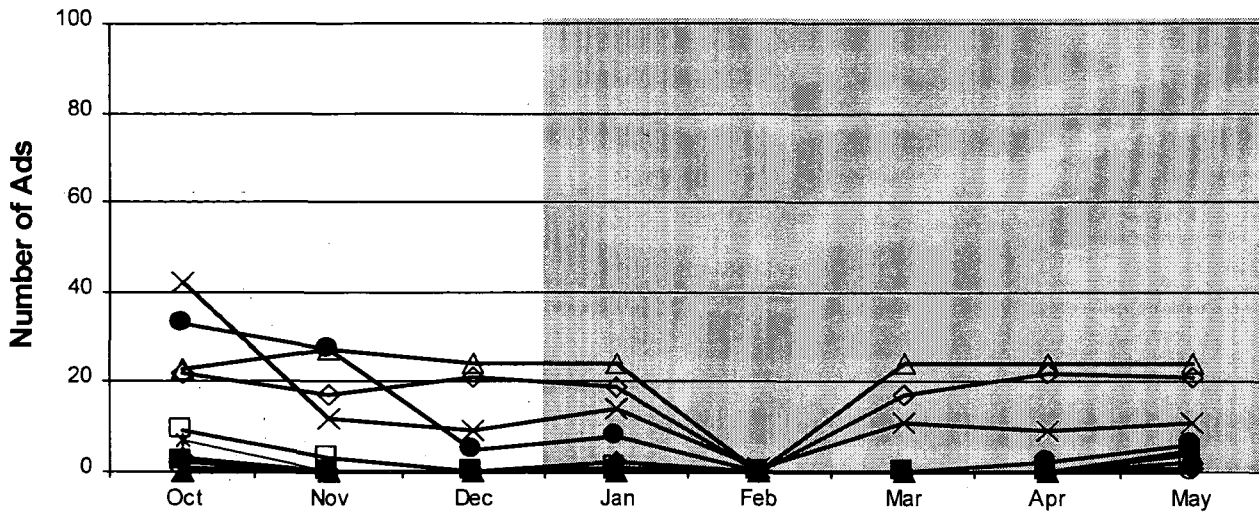
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Richmond (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

Denver (Target Site)

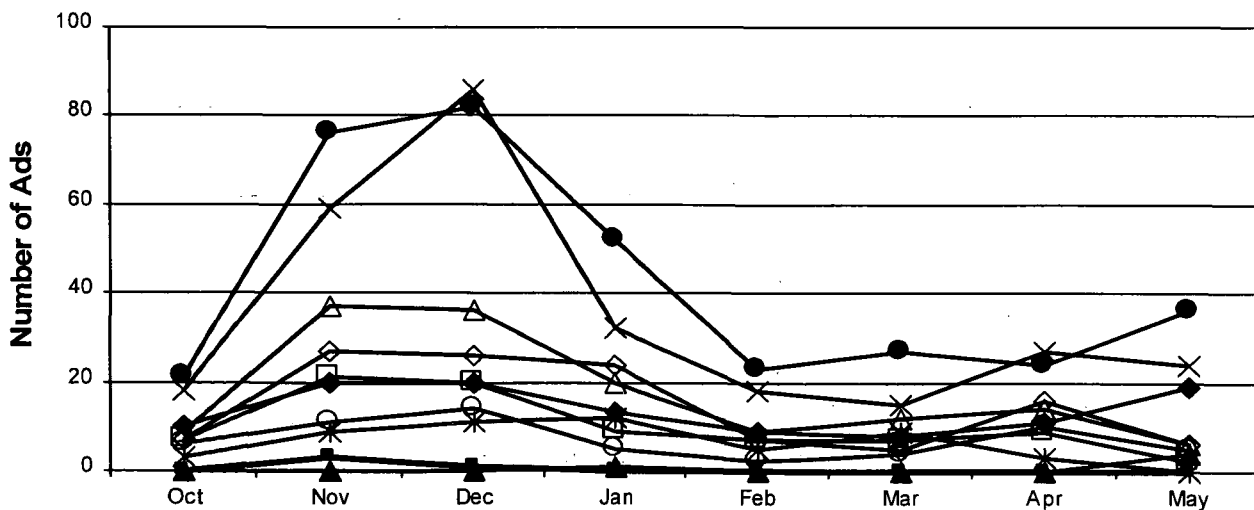


◆ Early Morning	■ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
● Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

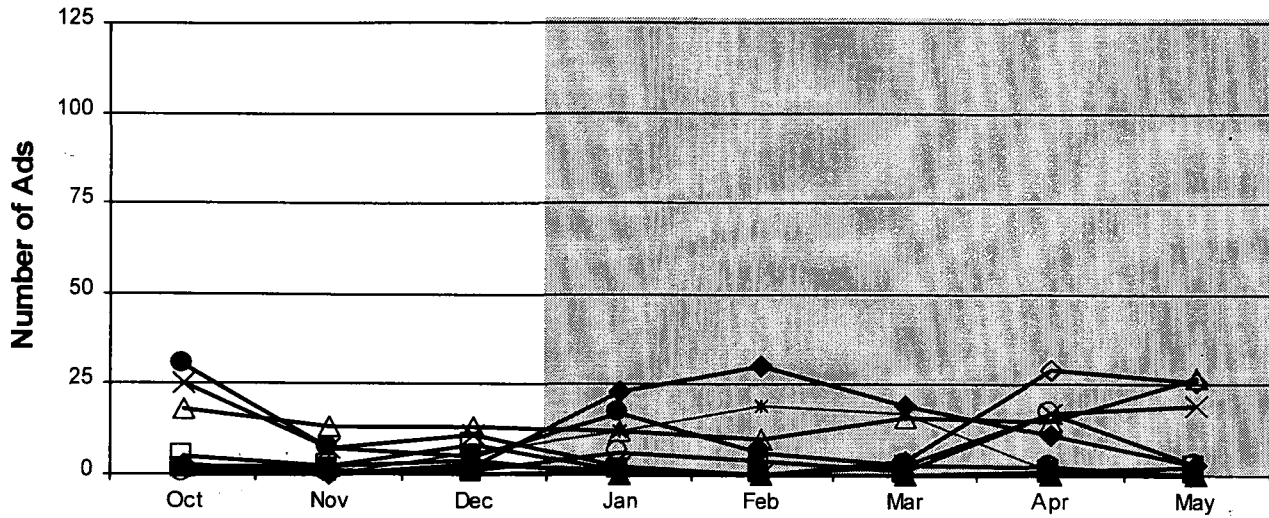
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Albuquerque (Comparison Site)



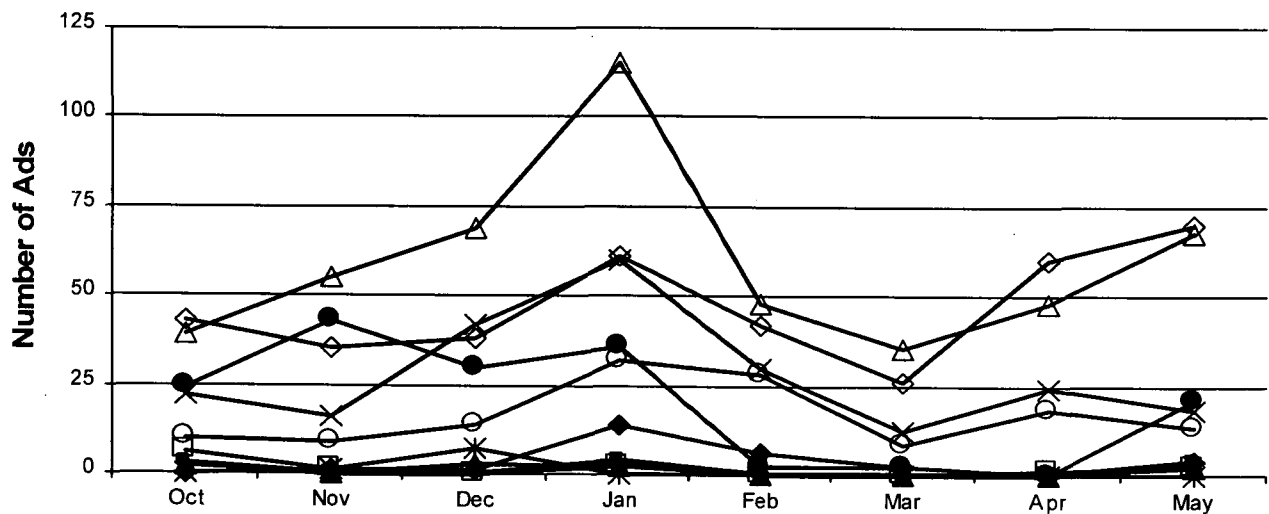
Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

Hartford (Target Site)



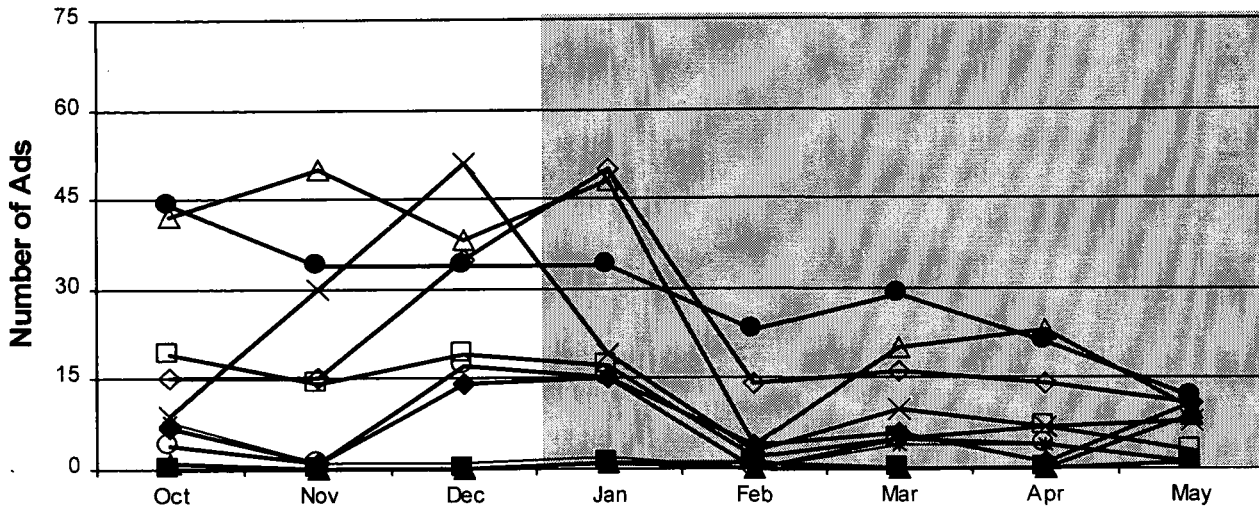
<ul style="list-style-type: none"> ◆ Early Morning × Daytime ○ Kids ◆ Early Fringe 	<ul style="list-style-type: none"> ■ Early News * Prime Access □ Prime Time 	<ul style="list-style-type: none"> ▲ Late News ● Late Fringe △ Weekend Daytime
Early Morning 6:00 AM - 8:59 AM Daytime 9:00 AM - 3:59 PM Kids 3:30 PM - 5:59 PM Early Fringe 4:00 PM - 5:59 PM	Early News 6:00 PM - 6:59 PM Prime Access 7:00 PM - 7:59 PM Prime Time 8:00 PM - 10:59 PM	Late News 11:00 PM - 11:29 PM Late Fringe 11:30 PM - 5:59 PM Weekend Daytime 6:00 AM - 5:00 PM
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads. shaded region = intervention period (Jan - May 1998)		

Harrisburg (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

Houston (Target Site)

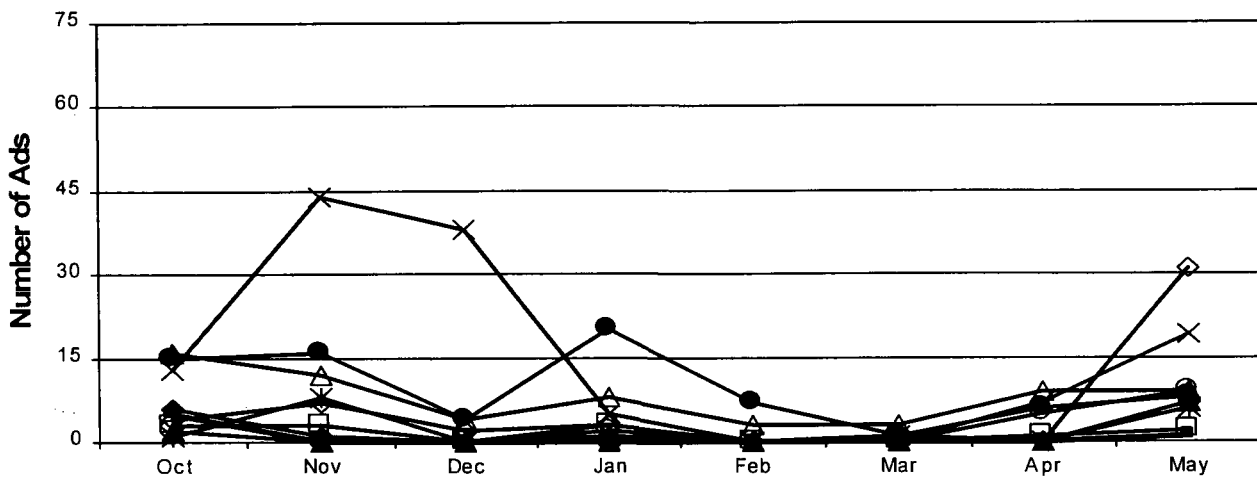


◆ Early Morning	■ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
◇ Kids	□ Prime Time	△ Weekend Daytime
◆ Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

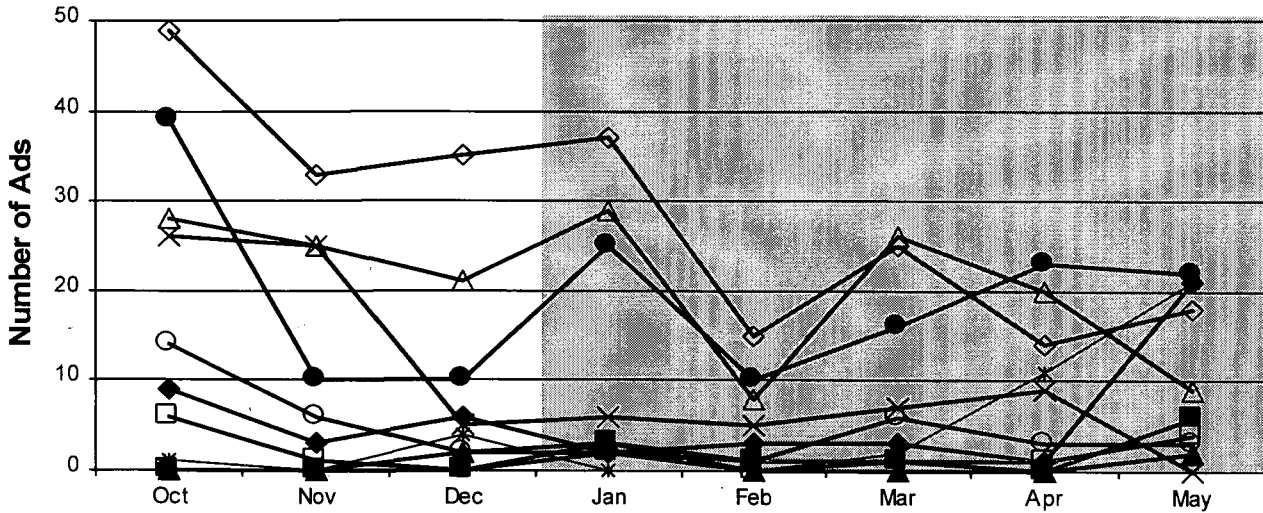
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Dallas (Comparison Site)



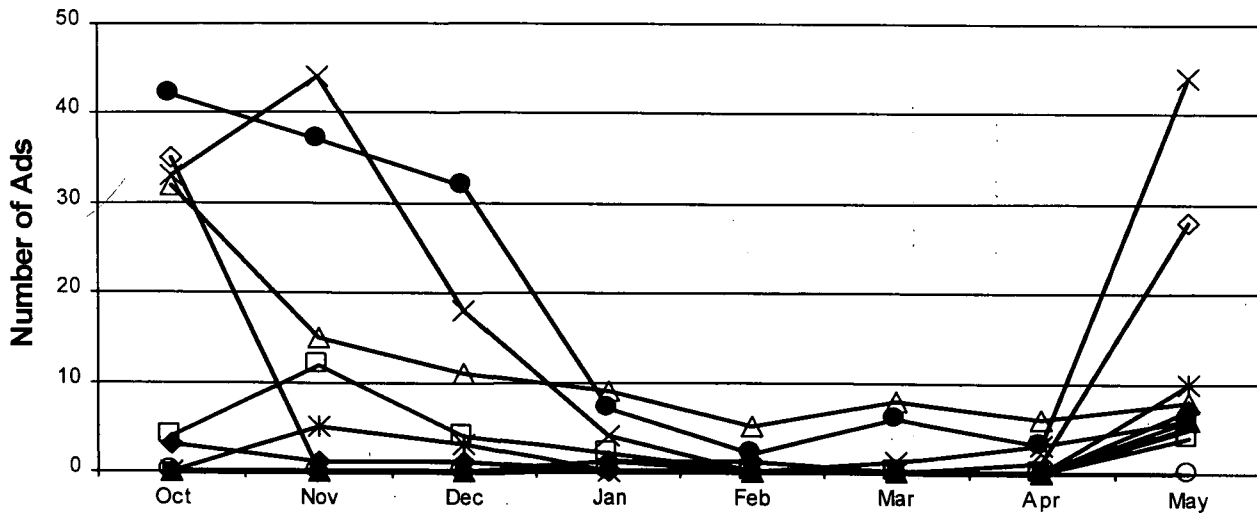
Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

Milwaukee (Target Site)



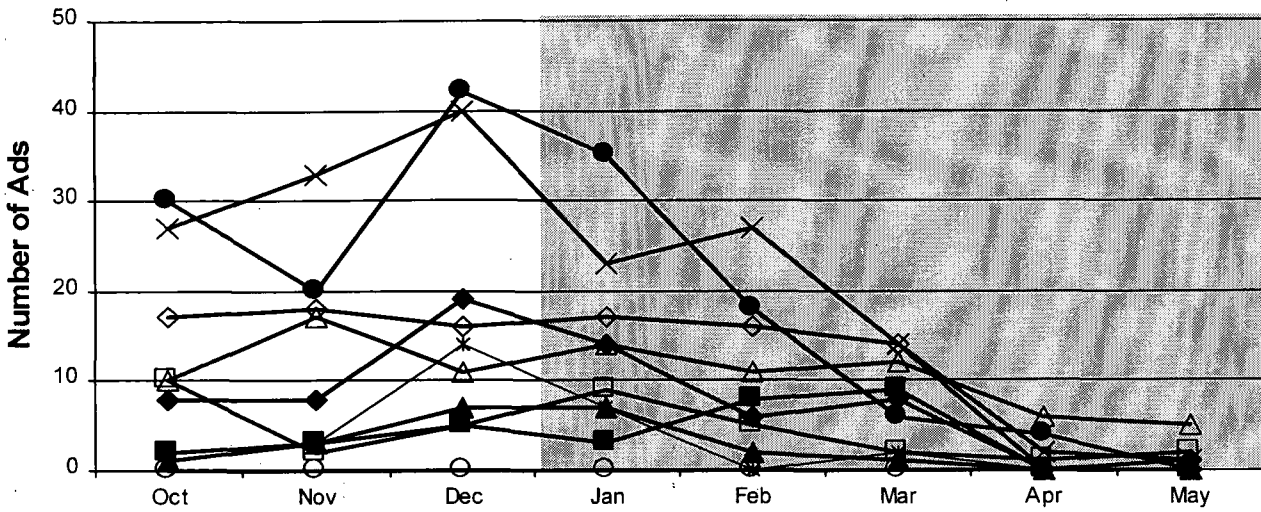
<ul style="list-style-type: none"> ◆ Early Morning × Daytime ○ Kids ● Early Fringe 	<ul style="list-style-type: none"> ■ Early News * Prime Access □ Prime Time 	<ul style="list-style-type: none"> ▲ Late News ● Late Fringe △ Weekend Daytime
<p>Early Morning 6:00 AM - 8:59 AM</p> <p>Daytime 9:00 AM - 3:59 PM</p> <p>Kids 3:30 PM - 5:59 PM</p> <p>Early Fringe 4:00 PM - 5:59 PM</p>	<p>Early News 6:00 PM - 6:59 PM</p> <p>Prime Access 7:00 PM - 7:59 PM</p> <p>Prime Time 8:00 PM - 10:59 PM</p>	<p>Late News 11:00 PM - 11:29 PM</p> <p>Late Fringe 11:30 PM - 5:59 PM</p> <p>Weekend Daytime 6:00 AM - 5:00 PM</p>
<p>Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads. shaded region = intervention period (Jan - May 1998)</p>		

Nashville (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

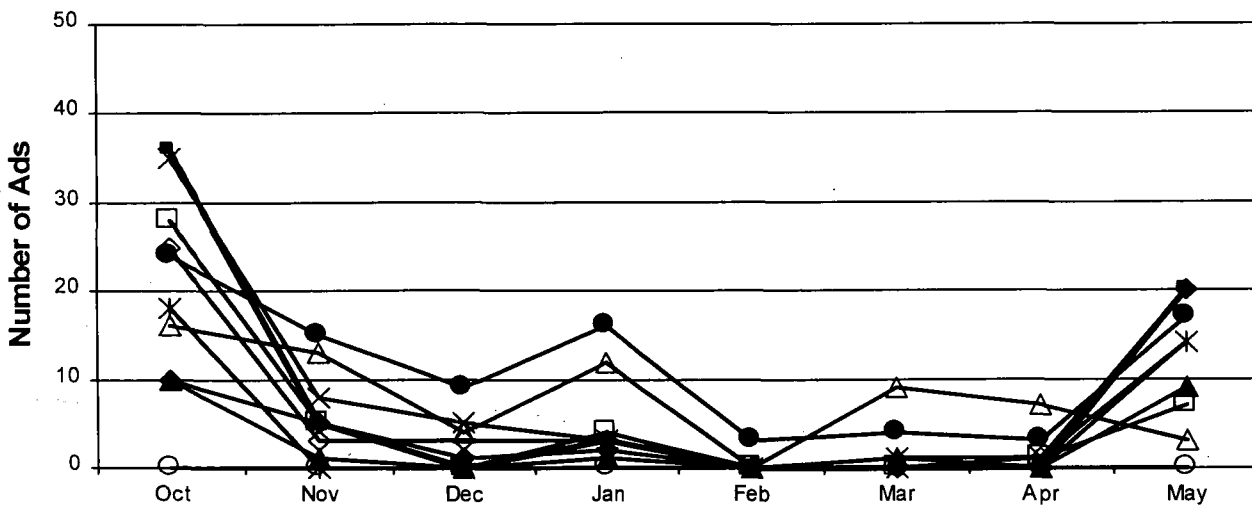
Portland, OR (Target Site)



<ul style="list-style-type: none"> ◆ Early Morning × Daytime ○ Kids ● Early Fringe 	<ul style="list-style-type: none"> ■ Early News * Prime Access □ Prime Time 	<ul style="list-style-type: none"> ▲ Late News ● Late Fringe △ Weekend Daytime 			
Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

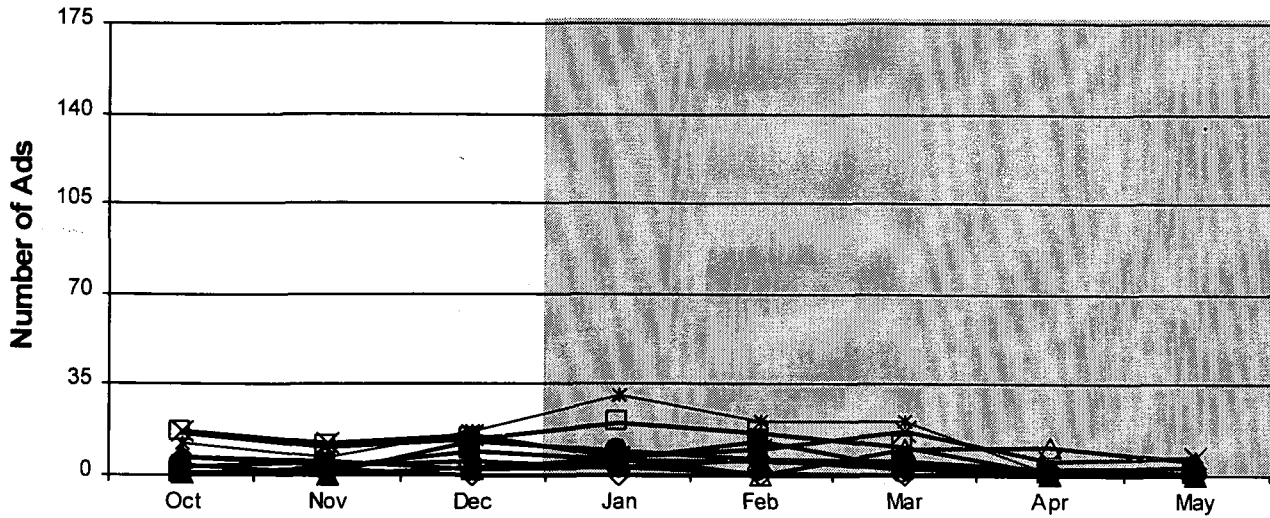
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Spokane (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

San Diego (Target Site)

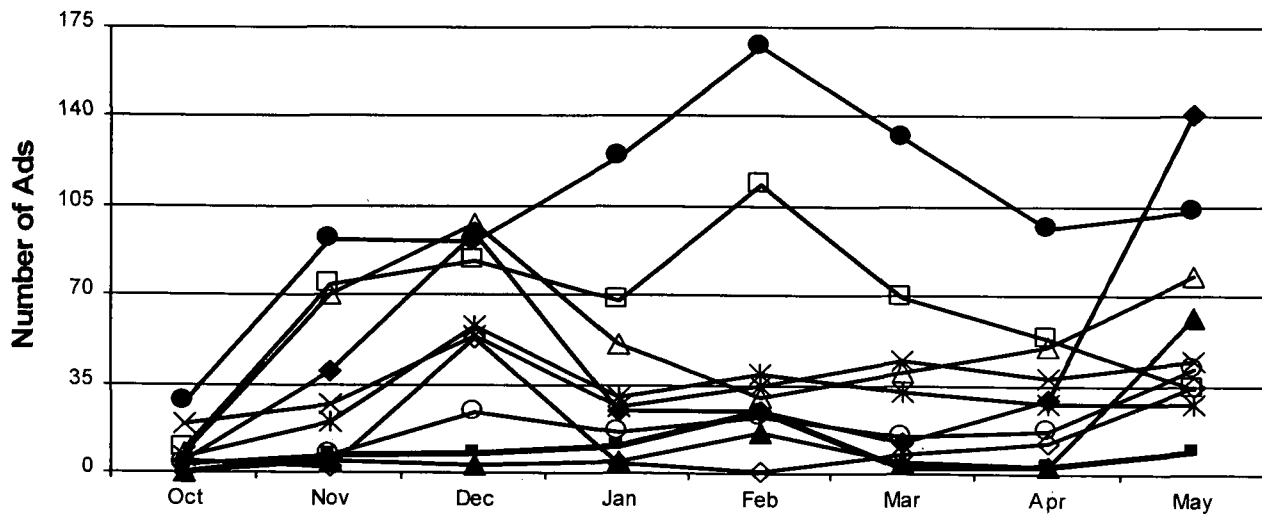


◆ Early Morning	■ Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
◆ Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

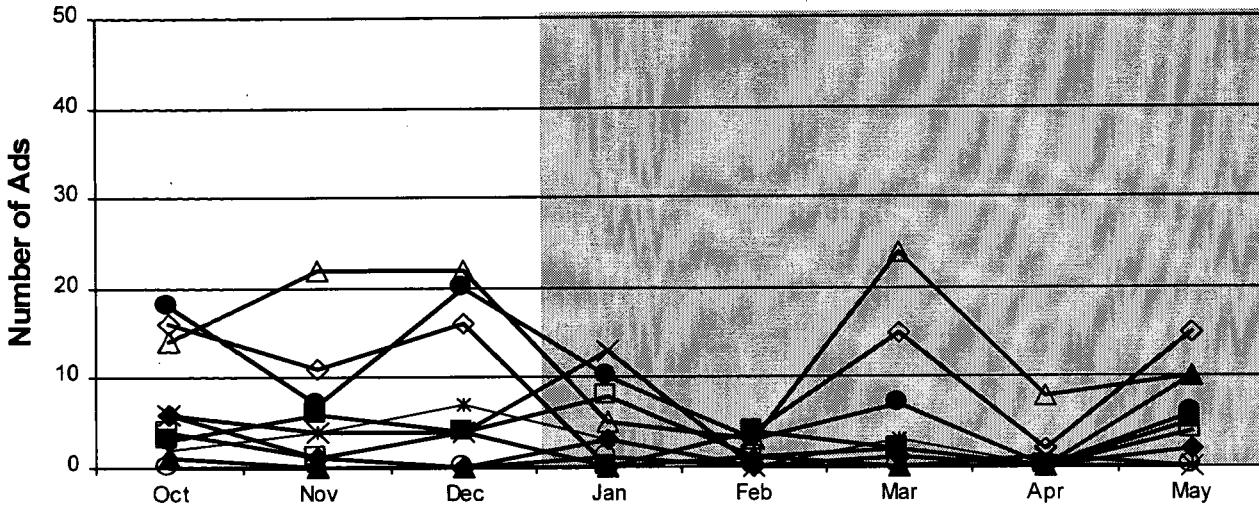
Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Phoenix (Comparison Site)



Total Number of TV Ads: Other Social Issue Ads Target vs. Comparison by Daypart

Washington, DC (Target Site)

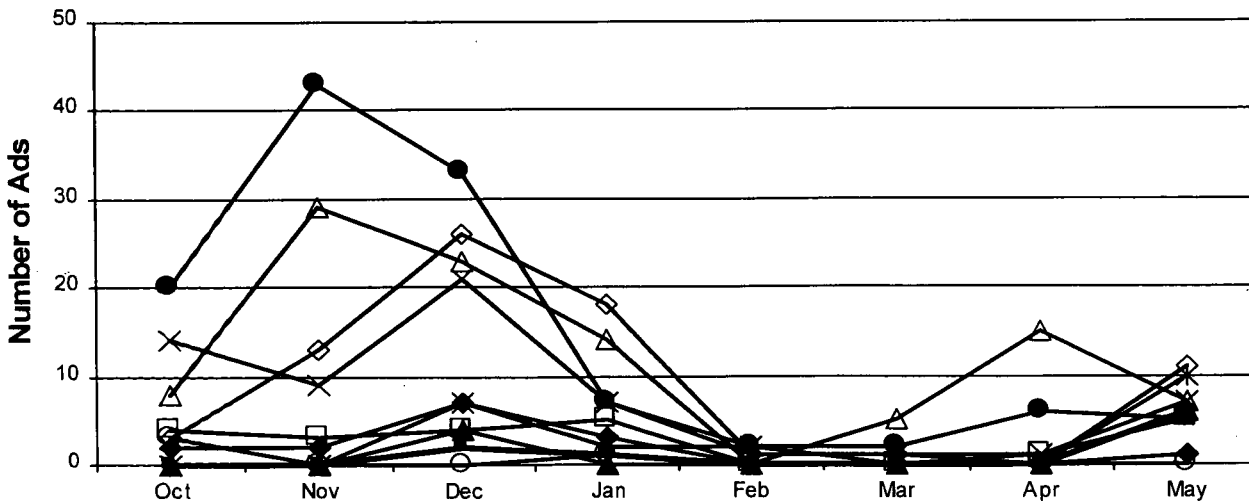


◆ Early Morning	● Early News	▲ Late News
× Daytime	* Prime Access	● Late Fringe
○ Kids	□ Prime Time	△ Weekend Daytime
● Early Fringe		

Early Morning	6:00 AM - 8:59 AM	Early News	6:00 PM - 6:59 PM	Late News	11:00 PM - 11:29 PM
Daytime	9:00 AM - 3:59 PM	Prime Access	7:00 PM - 7:59 PM	Late Fringe	11:30 PM - 5:59 PM
Kids	3:30 PM - 5:59 PM	Prime Time	8:00 PM - 10:59 PM	Weekend Daytime	6:00 AM - 5:00 PM
Early Fringe	4:00 PM - 5:59 PM				

Note: In the baseline period, Campaign/PDFA Ads refer only to PDFA sponsored ads.
shaded region = intervention period (Jan - May 1998)

Birmingham (Comparison Site)



Phase I Media Campaign Intervention Television, Radio, Newspaper, Channel One, and Outdoor

Type of Intervention	Atlanta	Baltimore	Boise	Denver	Hartford	Houston	Milwaukee	Portland	San Diego	Sioux City	Tucson	Washington, DC
TELEVISION												
911			✓	✓			✓		✓	✓	✓	
Alex Straight A's	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Average Kid	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Basketball	✓							✓			✓	✓
Battery Acid			✓	✓			✓		✓	✓	✓	
Brothers											✓	
Burbs			✓	✓				✓		✓		
Deal	✓	✓			✓	✓	✓					✓
Drowning	✓	✓			✓	✓	✓	✓		✓		✓
Drowning (Spanish)					✓	✓						✓
Everclear								✓				
Free Ride	✓	✓					✓					✓
Frying Pan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Girl Interview	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Girlfriend	✓	✓			✓	✓	✓		✓			✓
Johnny Street	✓	✓		✓	✓	✓		✓	✓			✓
Kid Brother (Spanish)				✓							✓	
Kitchen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lauryn Hill								✓				
Layla	✓	✓	✓	✓	✓	✓				✓		✓
Long Way Home	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Moment of Truth	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Noses	✓	✓			✓	✓	✓		✓	✓		✓
Noses (Spanish)					✓	✓			✓			✓
Not Your Friend (Spanish)				✓	✓	✓			✓		✓	✓
O'Connor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rite of Passage				✓	✓	✓			✓		✓	
Rite of Passage (Spanish)				✓	✓	✓			✓		✓	
Questions (Spanish)				✓	✓	✓			✓		✓	✓
Sublime				✓	✓	✓		✓				
Teeth	✓	✓		✓	✓	✓		✓	✓			✓
Unnatural Acts (Spanish)				✓		✓					✓	
Under Your Nose	✓	✓			✓	✓	✓		✓	✓		✓
Under Your Nose (Spanish)					✓	✓			✓			✓
RADIO												
911			✓	✓			✓		✓	✓	✓	
Don't	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
Rob/Never Me	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Russell/I Did It	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Russell/Kicked Out	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
So What	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
Tisa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Donuts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Copa Dude	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Just Say Nah	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stupid I Said	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Type of Intervention	Atlanta	Baltimore	Boise	Denver	Hartford	Houston	Milwaukee	Portland	San Diego	Sioux City	Tucson	Washington, DC
<i>Girl Interview</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Rest Easy</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Numbers</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Not Okay</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Happy B'day</i>	✓	✓			✓	✓	✓	✓	✓	✓		✓
<i>Mom Says</i>	✓	✓			✓	✓	✓	✓	✓	✓		✓
NEWSPAPER												
<i>America's Drug Problem</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Are You Waiting...</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Ashley Myth/Reality</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Bob Payne</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Disconnect</i>	✓		✓	✓		✓		✓			✓	
<i>Grandpa</i>			✓					✓			✓	
<i>Grandma</i>		✓		✓	✓		✓		✓	✓		✓
<i>Half as Uncomfortable</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>How to Talk to Your Kids...</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Poison Ivy</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Sex Drugs</i>	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
<i>Sniffing Inhalants</i>	✓	✓			✓	✓	✓		✓	✓		✓
<i>Unnatural Acts</i>			✓	✓				✓			✓	
CHANNEL ONE												
<i>Alex Straight A's</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Basketball</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Everclear</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Free Ride</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Frying Pan</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Girlfriend</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Lauryn Hill</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Layla</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Long Way Home</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Moment of Truth</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Noses</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Rite of Passage</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Sublime</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OUTDOOR												
<i>Are You Waiting...</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Cannabis Stupida</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTE: Ads airing on cable TV are not included in this chart.

DEFINITIONS OF MEDIA TERMS

Daypart: Daypart refers to the specific period of the day when an advertisement aired. The following are specific time periods referred to in the Phase 1 Final Report.

Early Morning	6:00 a.m. – 8:59 a.m.
Daytime	9:00 a.m. – 3:59 p.m.
Kids	3:30 p.m. – 5:59 p.m.
Early Fringe	4:00 p.m. – 5:59 p.m.
Early News	6:00 p.m. – 6:59 p.m.
Prime Access	7:00 p.m. – 7:59 p.m.
Prime Time	8:00 p.m. – 10:59 p.m.
Late News	11:00 p.m. – 11:29 p.m.
Late Fringe	11:30 p.m. – 5:59 a.m.
Weekend Daytime	6:00 a.m. – 5:00 p.m.

N.B.: The “Kids” daypart period overlaps with “Early Fringe.” Ads that aired between 3:30 p.m. and 5:59 p.m. during children’s television programs (such as cartoons) are categorized under “Kids.” Ads that aired between 4:00 p.m. and 5:59 p.m. in non-children’s television programs are categorized under “Early Fringe.” The “Kids” daypart period also overlaps with “Daytime” under the same conditions.

Gross Rating Point: A unit of measurement of advertising audience size, equal to one percent of the total potential audience universe. It is used to measure the exposure of one or more programs or commercials without regard to multiple exposure of the same advertising to individuals. GRP is the product of media reach times exposure frequency.

Share of Market: Share of Market provides a general estimate of the proportion of airtime drug prevention ads receive relative to other major social issues. These other topics include heart/health, lung disease prevention, general health, tobacco control and prevention, gun violence, environmental protection, and drinking and driving prevention. The following are specific sponsors monitored as part of the Phase 1 Evaluation.

American Cancer Society	Drunk Driving Prevention
American Heart Association	Great American Smoke Out
American Lung Association	Gun Safety
Cancer Awareness	Health Awareness
Century Council	Kiwanis International
Clean Air Campaign	Produce/Better Health
Department of Public Health	Quit Smoking
Don't Smoke	Tobacco Helping Youth
Don't Smoke/Pregnant	Violence Prevention

Sponsor: Sponsor data were separated into Campaign/PDFA Ads, Other Anti-Drug Ads, and Other Social Issue Ads.

Type of Drug: Type of Drug refers to the focus of the advertisement (e.g., crack/cocaine, general, heroin, inhalants, marijuana, and methamphetamine.)

APPENDIX B
YOUTH, TEEN, AND PARENT SURVEYS

APPENDIX B: YOUTH, TEEN¹, AND PARENT SURVEYS

Unless otherwise indicated by an “N,” “MF,” or “T,” all questions appearing on the survey instruments were used in the national studies conducted for the Partnership Attitudes Tracking Study (PAT). Any questions or subquestions marked with N, MF, or T, indicate the following:

- N = New question or subquestion. This means a new item was added to the question format.
- MF = This question or subquestion, or one almost exactly like it, was asked in the Monitoring the Future Study.
- T = A question which was new to the Parents’ Questionnaire, but had been asked previously in Audits and Surveys Worldwide’s national teen study.

Although descriptions of the ads called *Bugs*, *Pothead*, and *What Would Make You* were printed on the survey instruments, when the Phase I Media Campaign was implemented in January 1998 a decision had been made not to run *Bugs* and *What Would Make You*. Furthermore, *Pothead* was pulled shortly after the Media Campaign began. Hence, data are not reported for awareness of these three ads.

¹ Identical survey instruments were used in every site, both target and comparison, except for Portland. In Portland, ad awareness questions were tailored to reflect the different mix of ads airing in that MSA. Specifically, Portland was the only site scheduled to receive paid airings of *Everclear*, *Sublime*, and *Lauryn Hill*. Consequently, the teen survey instrument for Portland measured responses to these three ads. This change is explained by PDFA having selected Portland as a test site for ads featuring musical bands because of the city’s lively music culture. In order to accommodate PDFA’s pre-existing plan, the Media Campaign was implemented in Portland using these three “music band” ads to test the effectiveness of ads featuring musicians/music groups versus other types of ads used in the Media Campaign.

**DRUG ATTITUDES STUDY
YOUTH QUESTIONNAIRE
GRADES 4-6**

1998
AUDITS & SURVEYS WORLDWIDE
New York, NY

OMB Control No. 3201-0004

CSR
MARKETS-W2

DRUG ATTITUDES STUDY

This study is being conducted by Audits & Surveys to find out how people feel about the use of various drugs.

This is not a test. We want to know what you think. **Your answers are completely confidential.** Just put an “X” next to whatever answer is right for you. If you don’t find an answer that fits exactly, use the one which comes closest. If you are uncomfortable answering any question or feel you cannot answer it honestly, just leave it blank.

Please **do not write your name anywhere** on the questionnaire. All questionnaires will therefore be completely anonymous, and it will be impossible to identify who filled out which one. Moreover, no one from your school will look at any of the questionnaires. When you have finished the questionnaire, put it in the box that will be passed around, so that it will be mixed together with all the other questionnaires.

Your answers will be combined with those of other people from around the country.

Thank you for participating in this important research study.

When answering questions, please place an “X” in the box next to the answers you select.

There are small numbers alongside the answer boxes. **Do not pay attention to these small numbers**—they are only there to help us in data processing.

This information is being collected by the Office of National Drug Control Policy (ONDCP) as part of its national strategy for confronting drug abuse in the U.S. Information collection will be used to provide data on groups of individuals in participating geographic areas. The estimated hourly burden of this collection of information is not estimated to exceed .25 per student response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to:

Terry Zobeck
Reports Clearance Officer
Office of National Drug Control Policy
(202) 395-5503
Washington, DC 20503

and to:

Office of Management and Budget
Paperwork Reduction Project
OMB Control Number 3201-0004
Washington, DC 20503

1. Have you ever heard of these drugs: ("X" ONE ANSWER FOR EACH DRUG)

	<u>Yes</u>	<u>No</u>	
Marijuana (also called weed, reefer, pot).....	□-1	□-2	(7)
Cocaine	□-1	□-2	(8)
Crack	□-1	□-2	(9)
Things you sniff or huff to get high, like glue	□-1	□-2	(10)
Methamphetamines (also called meth, speed, crystal, ice, bennies, black beauties, crank, etc.).....	□-1	□-2	(11)
Heroin	□-1	□-2	(12)

2. For each of the following questions, please mark the box that shows how **dangerous** you think the drug is.

a. How dangerous is **marijuana (also called weed, reefer, pot)**? ("X" ONE ANSWER)

- Very dangerous, never should be used □-1 (13)
- A little dangerous, but ok to try once or twice □-2
- Not at all dangerous, ok to use □-3
- Don't know what it is..... □-4

b. How dangerous is **cocaine**? ("X" ONE ANSWER)

- Very dangerous, never should be used □-1 (14)
- A little dangerous, but ok to try once or twice □-2
- Not at all dangerous, ok to use □-3
- Don't know what it is..... □-4

c. How dangerous is **crack**? ("X" ONE ANSWER)

- Very dangerous, never should be used □-1 (15)
- A little dangerous, but ok to try once or twice □-2
- Not at all dangerous, ok to use □-3
- Don't know what it is..... □-4

d. How dangerous are **things you sniff or huff to get high, like glue**? ("X" ONE ANSWER)

- Very dangerous, never should be used □-1 (16)
- A little dangerous, but ok to try once or twice □-2
- Not at all dangerous, ok to use □-3
- Don't know what it is..... □-4

- e. How dangerous is **heroin**? ("X" ONE ANSWER)
- Very dangerous, never should be used -1 (17)
- A little dangerous, but ok to try once or twice -2
- Not at all dangerous, ok to use -3
- Don't know what it is -4

- f. How dangerous are **methamphetamines (also called meth, speed, crystal, ice, bennies, black beauties, crank, etc.)**? ("X" ONE ANSWER)
- Very dangerous, never should be used -1 (18)
- A little dangerous, but ok to try once or twice -2
- Not at all dangerous, ok to use -3
- Don't know what it is -4

- g. How dangerous is **beer**? ("X" ONE ANSWER)
- Very dangerous, never should be used -1 (19)
- A little dangerous, but ok to try once or twice -2
- Not at all dangerous, ok to use -3
- Don't know what it is -4

- h. How dangerous are **cigarettes**? ("X" ONE ANSWER)
- Very dangerous, never should be used -1 (20)
- A little dangerous, but ok to try once or twice -2
- Not at all dangerous, ok to use -3
- Don't know what it is -4

3. Mark the box that shows what you think about each sentence: ("X" ONE ANSWER FOR EACH ITEM)

		<u>Agree A Lot</u>	<u>Agree A Little</u>	<u>Disagree A Little</u>	<u>Disagree A Lot</u>	
a.	I am scared of taking drugs.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(21)
b.	I don't want to hang around people who use drugs	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(22)
c.	It is hard to say "no" when friends want you to try drugs.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(23)
d.	Using drugs is dangerous.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(24)
e.	Things you sniff or huff to get high (like glue) can kill you	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(25)

N

4. Have you ever tried: ("X" ONE ANSWER FOR EACH ITEM)

	<u>Yes</u>	<u>No</u>	
Alcohol (more than just a sip)	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(26)
Cigarettes	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(27)
Marijuana (also called weed, reefer, pot)	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(28)
Cocaine	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(29)
Crack	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(30)
Things you sniff or huff to get high, like glue	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(31)
N			
Heroin.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(32)
Methamphetamines (also called meth, speed, crystal, ice, bennies, black beauties, crank, etc.)	<input type="checkbox"/> -1	<input type="checkbox"/> -2	(33)

5a. How much do you learn that drugs are bad from your school class?

- | | | |
|----------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (34) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |

5b. How much do you learn that drugs are bad from your parents or grandparents?

- | | | |
|----------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (35) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |

5c. How much do you learn that drugs are bad from your brother or sister?

- | | | |
|---------------------------------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (36) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |
| Don't have brother
or sister | <input type="checkbox"/> -4 | |

5d. How much do you learn that drugs are bad from your friends?

- | | | |
|----------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (37) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |

5e. How much do you learn that drugs are bad from TV commercials?

- | | | |
|----------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (38) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |

5f. How much do you learn that drugs are bad from TV shows, news or movies?

- | | | |
|----------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (39) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |

5g. How much do you learn that drugs are bad on the street?

- | | | |
|----------|-----------------------------|------|
| A lot | <input type="checkbox"/> -1 | (40) |
| A little | <input type="checkbox"/> -2 | |
| Nothing | <input type="checkbox"/> -3 | |

6a. Do you ever **see or hear messages that say drugs are bad** on TV?

- | | | |
|-----|-----------------------------|------|
| Yes | <input type="checkbox"/> -1 | (41) |
| No | <input type="checkbox"/> -2 | |

6b. Do you ever **see or hear messages that say drugs are bad** on large outdoor billboards?

- | | | |
|-----|-----------------------------|------|
| Yes | <input type="checkbox"/> -1 | (42) |
| No | <input type="checkbox"/> -2 | |

6c. Do you ever **see or hear messages that say drugs are bad** on posters that are on buses, bus stops, or subways?

- | | | |
|-----|-----------------------------|------|
| Yes | <input type="checkbox"/> -1 | (43) |
| No | <input type="checkbox"/> -2 | |

6d. Do you ever **see or hear messages that say drugs are bad** on school posters?

- | | | |
|-----|-----------------------------|------|
| Yes | <input type="checkbox"/> -1 | (44) |
| No | <input type="checkbox"/> -2 | |

7. The next few questions are about TV ads or commercials. Please mark "Yes" if you have seen the ad **in the past few months**, and "No" if you have not seen the ad **in the past few months**. ("X" ONE ANSWER FOR EACH QUESTION)

Have you seen the TV ad or commercial where...

a. You see all types of colorful, funny cartoon noses called different things: ski slope, snout, schnoz, booger factory. A voice says that if you sniff household products to get high you could get brain damage or die.

- | | | |
|-----|-----------------------------|------|
| Yes | <input type="checkbox"/> -1 | (45) |
| No | <input type="checkbox"/> -2 | |

b. A young boy is running through alleys and jumping over fences—taking "the long way home"—to avoid drug dealers in his neighborhood. The announcer says, "We hear you; don't give up."

- | | | |
|-----|-----------------------------|------|
| Yes | <input type="checkbox"/> -1 | (46) |
| No | <input type="checkbox"/> -2 | |

Have you seen the TV ad or commercial where...

- c. To show how dangerous using inhalants is, a girl drowns when her bedroom fills with water. The ad says that sniffing household products to get high keeps your brain from getting oxygen—just like drowning—and you can die.

Yes -1 (47)
No -2

- d. In a cartoon, a guy with a beard gets hit on the head with a cooking pot over and over as a way of saying that if you smoke marijuana and turn into a "pot-head," you can get dumber and dumber.

Yes -1 (48)
No -2

- e. An African-American girl talks about a crack-head who got shot, and about drug-related violence in the streets. Unlike people who get involved with drugs and violence, this girl wants to be a teacher and a nice woman, and take time to plant flowers. The commercial ends with the announcer saying, "Girlfriend, you are beautiful."

Yes -1 (49)
No -2

8. Do you agree or disagree with the following: ("X" ONE ANSWER FOR EACH LINE)

- | | <u>Agree</u> | <u>Disagree</u> | |
|---|-----------------------------|-----------------------------|------|
| a. TV ads or commercials tell you something you didn't know about drugs | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | (50) |
| b. TV ads or commercials make you stay away from drugs | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | (51) |
| c. TV ads or commercials make you more aware of how dangerous drugs are | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | (52) |
| d. TV ads or commercials tell lies about how dangerous drugs are | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | (53) |

TURN TO THE NEXT PAGE



N

9. How often do you watch TV?

- Every day.....-1 (54)
- Almost every day-2
- At least once a week-3
- Once or twice a month-4
- A few times a year-5
- Never-6

10. Are you a:

- Boy.....-1 (55)
- Girl-2

11. What grade are you in?

- 4th.....-1 (56)
- 5th.....-2
- 6th.....-3

12. What is your race? ("X" ONE RACE ONLY)

- White-1 (57)
 - Black.....-2
 - Oriental / Asian.....-3
 - Other (Please write your race below).....-4
-

13. Are you Hispanic?

- Yes.....-1 (58)
- No-2
- Don't Know-3

14. How old are you?

- 8 years old or under-1
- 9 years old.....-2
- 10 years old.....-3
- 11 years old-4 (59)
- 12 years old-5
- 13 years old or over.....-6

15. Who do you live with? ("X" ALL THAT APPLY)

- Both parents.....-1 (60)
- Mother only-2
- Father only-3
- Mother and stepfather.....-4
- Father and stepmother-5
- Grandparents-6
- Other relatives.....-7
- Other adults (not relatives)-8

THANK YOU VERY MUCH FOR YOUR HELP!

**DRUG ATTITUDES STUDY
TEEN QUESTIONNAIRE
GRADES 7-12**

1998
AUDITS & SURVEYS WORLDWIDE
New York, NY

OMB Control No. 3201-0004

CSR
MARKETS-W2

DRUG ATTITUDES STUDY

This study is being conducted by Audits & Surveys to find out how people feel about the use of various drugs.

This is not a test. We want to know what you think. **Your answers are completely confidential.** Just put an “X” next to whatever answer is right for you. If you don’t find an answer that fits exactly, use the one which comes closest. If you are uncomfortable answering any question or feel you cannot answer it honestly, just leave it blank.

Please **do not write your name anywhere** on the questionnaire. All questionnaires will therefore be completely anonymous, and it will be impossible to identify who filled out which one. Moreover, no-one from your school will look at any of the questionnaires. When you have finished the questionnaire, put it in the box that will be passed around, so that it will be mixed together with all the other questionnaires.

Your answers will be combined with those of other people from around the country.

Thank you for participating in this important research study.

When answering questions, please place an “X” in the box next to the answers you select.

There are small numbers alongside the answer boxes. **Do not pay attention to these small numbers**—they are only there to help us in data processing.

This information is being collected by the Office of National Drug Control Policy (ONDCP) as part of its national strategy for confronting drug abuse in the U.S. Information collection will be used to provide data on groups of individuals in participating geographic areas. The estimated hourly burden of this collection of information is not estimated to exceed .25 per student response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to:

Terry Zobeck
Reports Clearance Officer
Office of National Drug Control Policy
(202) 395-5503
Washington, DC 20503

and to:

Office of Management and Budget
Paperwork Reduction Project
OMB Control Number 3201-0004
Washington, DC 20503

SECTION I

Attitudes and Beliefs about Drugs

1. Listed below are some statements about drugs like marijuana and heroin. Please "X" one answer for each statement to tell how much you agree or disagree with it.

		<u>Agree Strongly</u>	<u>Agree Somewhat</u>	<u>Disagree Somewhat</u>	<u>Disagree Strongly</u>
a.	Taking drugs scares me.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (7)
b.	I don't want to hang around anyone who uses marijuana	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (8)
c.	I would try to talk a friend out of using drugs.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (9)
d.	The music that my friends and I listen to makes drugs seem cool.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (10)
e.	Heroin is a dangerously addictive drug	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (11)
N					
f.	Heroin will ruin your life.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (12)

MARIJUANA

2. Now, for each of the statements below, please "X" the answer which describes how much overall risk there is in using marijuana...

		<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>
MF					
a.	Trying marijuana once or twice.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (13)
MF					
b.	Using marijuana regularly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (14)

3. How much risk is there that each of the following would happen to someone who uses marijuana?

		<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>
a.	Going on to harder drugs.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (15)
b.	Doing worse at school, work or sports	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (16)
c.	Getting hooked on marijuana.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (17)
d.	Becoming a loser.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (18)
e.	Messing up your life.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (19)
f.	Acting stupidly and foolishly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (20)
g.	Missing out on the good things in life	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (21)
h.	Upsetting their parents.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4 (22)

COCAINE/CRACK

4a. For each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **cocaine/crack**...

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
MF					
a. Trying cocaine/crack once or twice.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(23)
MF					
b. Using cocaine/crack regularly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(24)

METHAMPHETAMINES (Meth, Speed, Crystal, Ice, Bennies, Black Beauties, Crank, etc.)

4b. For each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **methamphetamines** (meth, speed, crystal, ice, bennies, black beauties, crank, etc.)...

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
a. Trying methamphetamines once or twice....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(25)
b. Using methamphetamines regularly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(26)

4c. How much risk is there that each of the following would happen to someone who uses **methamphetamines** (meth, speed, crystal, ice, bennies, black beauties, crank, etc.)?

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
a. Getting hooked on methamphetamines	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(27)
b. Becoming violent	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(28)
N					
c. Acting crazy	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(29)

HEROIN

4d. For each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **heroin**...

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
MF					
a. Trying heroin once or twice.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(30)
N					
b. Using heroin regularly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(31)

COCAINE/CRACK

4a. For each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **cocaine/crack**...

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
MF					
a.	Trying cocaine/crack once or twice. <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(23)
MF					
b.	Using cocaine/crack regularly..... <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(24)

METHAMPHETAMINES (Meth, Speed, Crystal, Ice, Bennies, Black Beauties, Crank, etc.)

4b. For each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **methamphetamines (meth, speed, crystal, ice, bennies, black beauties, crank, etc.)**...

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
a.	Trying methamphetamines once or twice.... <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(25)
b.	Using methamphetamines regularly..... <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(26)

4c. How much risk is there that each of the following would happen to someone who uses methamphetamines (meth, speed, crystal, ice, bennies, black beauties, crank, etc.)?

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
a.	Getting hooked on methamphetamines <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(27)
b.	Becoming violent <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(28)
N					
c.	Acting crazy <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(29)

HEROIN

4d. For each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **heroin**...

	<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
MF					
a.	Trying heroin once or twice. <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(30)
N					
b.	Using heroin regularly..... <input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(31)

SECTION I
Attitudes and Beliefs about Drugs

1. Listed below are some statements about drugs like marijuana and heroin. Please "X" one answer for each statement to tell how much you agree or disagree with it.

		<u>Agree Strongly</u>	<u>Agree Somewhat</u>	<u>Disagree Somewhat</u>	<u>Disagree Strongly</u>	
a.	Taking drugs scares me.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(7)
b.	I don't want to hang around anyone who uses marijuana	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(8)
c.	I would try to talk a friend out of using drugs.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(9)
d.	The music that my friends and I listen to makes drugs seem cool.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(10)
e.	Heroin is a dangerously addictive drug	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(11)
N						
f.	Heroin will ruin your life.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(12)

MARIJUANA

2. Now, for each of the statements below, please "X" the answer which describes how much **overall risk** there is in using **marijuana**...

		<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
MF						
a.	Trying marijuana once or twice.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(13)
MF						
b.	Using marijuana regularly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(14)

3. How much risk is there that each of the following would happen to someone who **uses marijuana**?

		<u>Great Risk</u>	<u>Moderate Risk</u>	<u>Slight Risk</u>	<u>No Risk</u>	
a.	Going on to harder drugs.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(15)
b.	Doing worse at school, work or sports	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(16)
c.	Getting hooked on marijuana.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(17)
d.	Becoming a loser.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(18)
e.	Messing up your life.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(19)
f.	Acting stupidly and foolishly.....	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(20)
g.	Missing out on the good things in life	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(21)
h.	Upsetting their parents.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	(22)

DRUG ATTITUDES STUDY

This study is being conducted by Audits & Surveys to find out how people feel about the use of various drugs.

This is not a test. We want to know what you think. **Your answers are completely confidential.** Just put an “X” next to whatever answer is right for you. If you don’t find an answer that fits exactly, use the one which comes closest. If you are uncomfortable answering any question or feel you cannot answer it honestly, just leave it blank.

Please **do not write your name anywhere** on the questionnaire. All questionnaires will therefore be completely anonymous, and it will be impossible to identify who filled out which one. Moreover, no-one from your school will look at any of the questionnaires. When you have finished the questionnaire, put it in the box that will be passed around, so that it will be mixed together with all the other questionnaires.

Your answers will be combined with those of other people from around the country.

Thank you for participating in this important research study.

When answering questions, please place an “X” in the box next to the answers you select.

There are small numbers alongside the answer boxes. **Do not pay attention to these small numbers**—they are only there to help us in data processing.

This information is being collected by the Office of National Drug Control Policy (ONDCP) as part of its national strategy for confronting drug abuse in the U.S. Information collection will be used to provide data on groups of individuals in participating geographic areas. The estimated hourly burden of this collection of information is not estimated to exceed .25 per student response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to:

Terry Zobeck
Reports Clearance Officer
Office of National Drug Control Policy
(202) 395-5503
Washington, DC 20503

and to:

Office of Management and Budget
Paperwork Reduction Project
OMB Control Number 3201-0004
Washington, DC 20503

**DRUG ATTITUDES STUDY
TEEN QUESTIONNAIRE
GRADES 7-12**

Portland, OR

1998
AUDITS & SURVEYS WORLDWIDE
New York, NY

OMB Control No. 3201-0004

CSR
MARKETS-W2

TV VIEWING

N

10. How often do you watch TV?

- Every day -1 (69)
Almost every day -2
At least once a week..... -3
Once or twice a month..... -4
A few times a year -5
Never -6

SECTION III Demographics and Background

11. How old are you?

- Under 13 ... -1 16 -5 (70)
13 -2 17 -6
14 -3 18 -7
15 -4 19 or older . -8

12. Your sex:

- Male -1 (71)
Female -2

13. What grade are you in?

- 7th -1 10th -4 (72)
8th -2 11th -5
9th -3 12th -6

14. Race:

- White -1 (73)
Black..... -2
Oriental / Asian -3
Other (Please Write Your Race Below)..... -4
-

15. Are you Hispanic?

- Yes -1 (74)
No..... -2

16. Who do you live with? ("X" ALL THAT APPLY)

- Both parents..... -1 (75)
Mother only -2
Father only -3
Mother and stepfather..... -4
Father and stepmother -5
Grandparents -6
Other relatives..... -7
Other adults (not relatives) -8

THANK YOU VERY MUCH FOR YOUR HELP!

HAVE YOU SEEN ANY OF THESE COMMERCIALS?

9. Below are short descriptions of anti-drug television commercials that may or may not have been shown in your area over the past few months. Please read each description and tell us whether you have seen the advertisement often, a few times or not at all. How often have you seen the following ads **in the past few months?** ("X" ONE ANSWER FOR EACH ITEM)

Have Seen In Past Few Months

- | | <u>Often</u> | <u>A Few Times</u> | <u>Not At All</u> | |
|---|-----------------------------|-----------------------------|-----------------------------|------|
| a. A teenage boy, seen in close-up, tells us how he used to be a straight-A student, but getting involved with marijuana got him thrown out of his house. | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (61) |
| b. A young woman in a kitchen smashes an egg with a frying pan, and then smashes up the kitchen, to show how heroin wrecks your body and your life. | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (62) |
| c. You hear very upset people phoning 911 because someone is in trouble from using methamphetamines (speed). The announcer gives you a phone number to call for information. | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (63) |
| d. You see a series of scenes: a girl seated at her mirror, a group of boys graduating, a little boy on a seesaw. For each scene, you hear a voice asking: What would make you claw at your skin until it scarred, What would make you rob a convenience store, What would make you cut off your son's head? The spot ends by asking: What would make you try crystal meth? | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (64) |
| e. Troy Nowell, the widow of Brad Nowell, lead singer in the band Sublime, sits with her little son Jake. Troy tells how Brad died of a heroin overdose and now Jake doesn't have a father. They both miss Brad. Troy says that heroin kills, and that you shouldn't get involved with heroin, you shouldn't let anyone miss <i>you</i> . | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (65) |
| f. The three members of the band Everclear introduce themselves in front of a bright orange background. One of the band members talks about how drugs take your life away from you, and how by using drugs he threw away 14 years of his own life. He urges you to "figure it out yourself" what a mistake using drugs is. | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (66) |
| g. Lauryn Hill, of the band the Fugees, is standing on a city sidewalk. She talks about how people's potential is so much greater than any chemical substance, and how she is soon to be a mother so she thinks a lot about these things. She ends by saying, "Stay away from the drugs; there's no place positive you can get with that route." | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (67) |
| h. You see a boy lying in bed, paranoid and hallucinating that bugs are crawling all over him. The announcer says that you can get these hallucinations when you're hooked on meth, which you see being heated and bubbling in a spoon, and in a syringe. The commercial ends by saying, "Sweet dreams." | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (68) |



SECTION II

6. In the past few months, how frequently have you seen or heard commercials or ads telling you about the risks of drugs?

- Not at all..... -1 (44)
- Less than once a month..... -2
- 1-3 times a month..... -3
- 1-3 times a week..... -4
- Every day or almost every day..... -5
- More than once a day..... -6

(If you checked "Not at all" to Question 6, skip to Question 8.)

7. How much do you agree or disagree that these commercials or ads have:

- | | <u>I Agree
A Lot</u> | <u>I Agree
A Little</u> | <u>I Don't
Agree At All</u> | |
|---|-----------------------------|-----------------------------|---------------------------------|------|
| a. Made you more aware of the risks of using drugs ... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (45) |
| b. Made you less likely to try or use drugs <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (46) |
| c. Given you new information or told you things
you didn't know about drugs..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (47) |
| d. Exaggerated the risks or dangers of marijuana <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (48) |

8. How much have you **learned about the risks of drugs** from each of the following?

- | | <u>A Lot</u> | <u>A Little</u> | <u>Nothing</u> | |
|---|-----------------------------|-----------------------------|----------------|------|
| a. School lessons or programs..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (49) |
| b. Parents or grandparents..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (50) |
| c. Brother or sister..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (51) |
| d. Friends <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (52) |
| e. TV commercials <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (53) |
| f. TV shows, news or movies..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (54) |
| g. Radio <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (55) |
| h. Print ads in newspapers or magazines <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (56) |
| i. Billboards outside <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (57) |
| j. Posters on buses, bus stops or subways <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (58) |
| k. School posters..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (59) |
| l. On the street..... <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | | (60) |

DRUG USE

		<u>Never</u>	<u>Once</u>	<u>2-3</u> <u>Times</u>	<u>4-9</u> <u>Times</u>	<u>10-19</u> <u>Times</u>	<u>20+</u> <u>Times</u>	
MF	5a. How many times have you used marijuana...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(32)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(33)

MF	5b. How many times have you used cocaine...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(34)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(35)

MF	5c. How many times have you used crack...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(36)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(37)

MF	5d. How many times have you sniffed or huffed things like glue, solvents, or inhalants to get high...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(38)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(39)

5e. How many times have you smoked cigarettes...								
In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5		(40)
In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5		(41)

MF	5f. How many times have you used alcohol...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(42)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5	(43)

DRUG USE

	<u>Never</u>	<u>Once</u>	<u>2-3</u>	<u>4-9</u>	<u>10-19</u>	<u>20+</u>	
			<u>Times</u>	<u>Times</u>	<u>Times</u>	<u>Times</u>	
MF							
5a. How many times have you used marijuana...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (32)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (33)

MF							
5b. How many times have you used cocaine...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (34)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (35)

MF							
5c. How many times have you used crack...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (36)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (37)

MF							
5d. How many times have you sniffed or huffed things like glue, solvents, or inhalants to get high...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (38)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (39)

5e. How many times have you smoked cigarettes...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (40)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (41)

MF							
5f. How many times have you used alcohol...							
	In the past 12 months?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (42)
	In the past 30 days?.....	<input type="checkbox"/> -0	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	<input type="checkbox"/> -4	<input type="checkbox"/> -5 (43)

SECTION II

6. In the past few months, how frequently have you seen or heard commercials or ads telling you about the risks of drugs?

- (44)
- Not at all..... -1
 Less than once a month..... -2
 1-3 times a month..... -3
 1-3 times a week..... -4
 Every day or almost every day..... -5
 More than once a day..... -6

(If you checked "Not at all" to Question 6, skip to Question 8.)

7. How much do you agree or disagree that these commercials or ads have:

- | | <u>I Agree
A Lot</u> | <u>I Agree
A Little</u> | <u>I Don't
Agree At All</u> | |
|---|-----------------------------|-----------------------------|---------------------------------|------|
| a. Made you more aware of the risks of using drugs ... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (45) |
| b. Made you less likely to try or use drugs | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (46) |
| c. Given you new information or told you things
you didn't know about drugs..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (47) |
| d. Exaggerated the risks or dangers of marijuana | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (48) |

8. How much have you **learned about the risks of drugs** from each of the following?

- | | <u>A Lot</u> | <u>A Little</u> | <u>Nothing</u> | |
|--|-----------------------------|-----------------------------|-----------------------------|------|
| a. School lessons or programs..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (49) |
| b. Parents or grandparents..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (50) |
| c. Brother or sister..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (51) |
| d. Friends | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (52) |
| e. TV commercials | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (53) |
| f. TV shows, news or movies..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (54) |
| g. Radio | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (55) |
| h. Print ads in newspapers or magazines | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (56) |
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| k. School posters..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (59) |
| l. On the street..... | <input type="checkbox"/> -1 | <input type="checkbox"/> -2 | <input type="checkbox"/> -3 | (60) |

HAVE YOU SEEN ANY OF THESE COMMERCIALS?

9. Below are short descriptions of anti-drug television commercials that may or may not have been shown in your area over the past few months. Please read each description and tell us whether you have seen the advertisement often, a few times or not at all. How often have you seen the following ads **in the past few months?** ("X" ONE ANSWER FOR EACH ITEM)

		<u>Have Seen In Past Few Months</u>			
		<u>Often</u>	<u>A Few Times</u>	<u>Not At All</u>	
a.	A teenage boy, seen in close-up, tells us how he used to be a straight-A student, but getting involved with marijuana got him thrown out of his house.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(61)
b.	A young woman in a kitchen smashes an egg with a frying pan, and then smashes up the kitchen, to show how heroin wrecks your body and your life.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(62)
c.	You hear very upset people phoning 911 because someone is in trouble from using methamphetamines (speed). The announcer gives you a phone number to call for information.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(63)
d.	You see a series of scenes: a girl seated at her mirror, a group of boys graduating, a little boy on a seesaw. For each scene, you hear a voice asking: What would make you claw at your skin until it scarred, What would make you rob a convenience store, What would make you cut off your son's head? The spot ends by asking: What would make you try crystal meth?	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(64)
e.	A teenage girl talks about how she didn't think marijuana would be a problem: she'd just smoke and hang out with friends. But she found that smoking marijuana led her to other drugs, including crack. She ends by saying that you have to think about the consequences of smoking marijuana.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(65)
f.	The commercial shows different scenes of a teenage girl in the city, hanging out with a guy who looks like a drug dealer. The announcer says that some girls think hanging out with a drug dealer is a way to live "the good life." But the teenage girl and her baby accidentally end up in the rifle sight of a sniper on the roof who is trying to shoot the dealer.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(66)
g.	The commercial follows a teenage girl called Maria as she walks through the city. Different people tempt her, offering her drugs, but she rejects their offers. The commercial ends by saying that when Maria refuses the drugs, she is one day stronger, one day freer.	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(67)
h.	You see a boy lying in bed, paranoid and hallucinating that bugs are crawling all over him. The announcer says that you can get these hallucinations when you're hooked on meth, which you see being heated and bubbling in a spoon, and in a syringe. The commercial ends by saying, "Sweet dreams."	<input type="checkbox"/> -1	<input type="checkbox"/> -2	<input type="checkbox"/> -3	(68)

TURN TO THE NEXT PAGE



TV VIEWING

N

10. How often do you watch TV?

- Every day -1 (69)
Almost every day -2
At least once a week..... -3
Once or twice a month..... -4
A few times a year -5
Never -6

SECTION III Demographics and Background

11. How old are you?

- Under 13 ... -1 (70)
13 -2
14 -3
15 -4
16 -5
17 -6
18 -7
19 or older . -8

12. Your sex:

- Male -1 (71)
Female -2

13. What grade are you in?

- 7th -1 (72)
8th -2
9th -3
10th -4
11th -5
12th -6

14. Race:

- White -1 (73)
Black..... -2
Oriental/Asian..... -3
Other (Please Write Your Race Below)..... -4
-

15. Are you Hispanic?

- Yes -1 (74)
No..... -2

16. Who do you live with? ("X" ALL THAT APPLY)

- Both parents..... -1 (75)
Mother only -2
Father only -3
Mother and stepfather..... -4
Father and stepmother -5
Grandparents -6
Other relatives..... -7
Other adults (not relatives) -8

THANK YOU VERY MUCH FOR YOUR HELP!

CATI SCREENER

**DRUG ATTITUDES STUDY
PARENT QUESTIONNAIRE
(PARENTS OF CHILDREN 18 AND UNDER)**

TELEPHONE INTERVIEW

1997-1998
AUDITS & SURVEYS WORLDWIDE
New York, NY

OMB Control No. 3201-0004

CSR-Markets
Parents W1 and W2

Hello. I'm _____ of Audits & Surveys, a national market research company. We're conducting a national survey to find out how people feel about the use of various drugs.

Your answers will be completely confidential. If you feel uncomfortable answering any question or you feel you cannot answer it honestly, you can choose not to answer.

This is not a test. We just want to know what you think.

1. How many members of your household are the parent of child aged 18 or younger (including yourself)?

- IF NONE, TERMINATE.
- IF ONE, ASK TO SPEAK TO THAT PERSON.
- IF NECESSARY, SCHEDULE CALLBACK.

IF TWO OR MORE, ASK:

2. Of these people, may I speak to the one who has the next birthday?

YES → CONTINUE
NO → TERMINATE

- IF NECESSARY, SCHEDULE CALLBACK.

**WHEN PERSON COMES TO PHONE, RE-INTRODUCE SELF.
VERIFY THAT PERSON IS THE PARENT OF A CHILD AGED
18 OR YOUNGER.**

1. How many children age 18 or under do you have?

1..... • -1
2..... • -2
3..... • -3

4..... • -4
5..... • -5
6 or more • -6

2. How many are

Under 5 years old _____

5-8 years old..... _____

9-12 years old..... _____

13-15 years old..... _____

16-17 years old..... _____

18 years old..... _____

Attitudes and Beliefs about Drugs

3. I'm going to read you some statements. For each statement, please tell me whether doing it would be a GREAT RISK, a MODERATE RISK, a SLIGHT RISK, or NO RISK.

How much **overall risk** do you think there is in...

- a. **Trying marijuana once or twice**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- b. **Using marijuana regularly**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- c. **Trying cocaine/crack once or twice**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- d. **Using cocaine/crack regularly**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- e. **Sniffing things like glue to get high once or twice**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- f. **Sniffing things like glue to get high regularly**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- T**
- g. **Trying methamphetamines once or twice**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- T**
- h. **Using methamphetamines regularly**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- N**
- i. **Trying heroin once or twice**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk
- N**
- j. **Using heroin regularly**
Would you say there is Great Risk, Moderate Risk, Slight Risk, or No Risk?
 Great Risk Moderate Risk Slight Risk No Risk

Now I'm going to ask you a set of statements about **your child's** experiences and how he or she feels about drugs. Please think about **your oldest child who is 18 years of age or younger**.

4. First of all, what is the age of your oldest child who is 18 years of age or younger?

- | | | | | |
|---------|------|----------------------|----|------|
| Under 6 | • -1 | → SKIP TO Q.9 | 11 | • -1 |
| 6 | • -2 | | 12 | • -2 |
| 7 | • -3 | | 13 | • -3 |
| 8 | • -4 | | 14 | • -4 |
| 9 | • -5 | | 15 | • -5 |
| 10 | • -6 | | 16 | • -6 |
| | | | 17 | • -7 |
| | | | 18 | • -8 |

5. What sex is that child?

- | | |
|--------|------|
| Male | • -1 |
| Female | • -2 |

6. What grade is that child currently enrolled in?

- | | | | | | |
|--------------|------|-----|------|---------------|------|
| Pre-school | • -1 | 4th | • -6 | 9th | • -1 |
| Kindergarten | • -2 | 5th | • -7 | 10th | • -2 |
| 1st | • -3 | 6th | • -8 | 11th | • -3 |
| 2nd | • -4 | 7th | • -9 | 12th | • -4 |
| 3rd | • -5 | 8th | • -0 | College | • -5 |
| | | | | Not in school | • -6 |

7. Have you ever talked to your child about drugs?

- | | | |
|-----|------|-----------------------------|
| Yes | • -1 | → ANSWER QUESTION 8 |
| No | • -2 | → SKIP TO QUESTION 9 |

IF "YES" TO QUESTION 7, ANSWER QUESTION 8:

8. In the past year, how often have you talked to your child about drugs?

- | | |
|--------------------|------|
| Never | • -1 |
| Once | • -2 |
| Two or three times | • -3 |
| Four or more times | • -4 |

9. For each statement, please tell me whether you AGREE STRONGLY, AGREE SOMEWHAT, DISAGREE SOMEWHAT, or DISAGREE STRONGLY.

- a. **What I say will have little influence over whether my child tries marijuana.**
Do you Agree Strongly, Agree Somewhat, Disagree Somewhat, or Disagree Strongly?
 Agree Strongly Agree Somewhat Disagree Somewhat Disagree Strongly
- b. **My child knows exactly how I feel about him/her using drugs.**
Do you Agree Strongly, Agree Somewhat, Disagree Somewhat, or Disagree Strongly?
 Agree Strongly Agree Somewhat Disagree Somewhat Disagree Strongly
- c. **I don't think it is so bad if my child tries marijuana.**
Do you Agree Strongly, Agree Somewhat, Disagree Somewhat, or Disagree Strongly?
 Agree Strongly Agree Somewhat Disagree Somewhat Disagree Strongly
- d. **I would be upset if my child ever tried marijuana.**
Do you Agree Strongly, Agree Somewhat, Disagree Somewhat, or Disagree Strongly?
 Agree Strongly Agree Somewhat Disagree Somewhat Disagree Strongly
- e. **It wouldn't worry me if my child tried sniffing things to get high, like glue.**
Do you Agree Strongly, Agree Somewhat, Disagree Somewhat, or Disagree Strongly?
 Agree Strongly Agree Somewhat Disagree Somewhat Disagree Strongly

T
10. In the past few months, how frequently have you seen or heard commercials or ads telling you about the risks of drugs? Would you say . . . (READ LIST)

- Not at all
- Less than once a month
- 1-3 times a month
- 1-3 times a week
- Every day or almost every day
- More than once a day

(If respondent indicates "Not at all," interviewer should skip to Question 12.)

T
11a. How much do you agree or disagree that these commercials or ads have. . .
made you more aware of the risks of using drugs
Do you Agree a Lot, Agree a Little, Disagree a Little, or Disagree a Lot?
 Agree a Lot Agree a Little Disagree a Little Disagree a Lot

T
11b. How much do you agree or disagree that these commercials or ads have. . .
given you new information or told you things you didn't know about drugs
Do you Agree a Lot, Agree a Little, Disagree a Little, or Disagree a Lot?
 Agree a Lot Agree a Little Disagree a Little Disagree a Lot

T
11c. How much do you agree or disagree that these commercials or ads have. . .
made you aware that America's drug problem is something that all families should be concerned about
Do you Agree a Lot, Agree a Little, Disagree a Little, or Disagree a Lot?
 Agree a Lot Agree a Little Disagree a Little Disagree a Lot

12. Now I'm going to read you some short descriptions of anti-drug television commercials that may or may not have been shown in your area over the past few months. For each ad I'd like you to tell me how often you saw it in the past few months.

- a. **A boy skateboards through a safe-looking suburban neighborhood and then smokes a marijuana joint with his friend.**

In the past few months, did you see this advertisement Often, a Few Times or Not at All?

___ Often ___ A Few Times ___ Not at All

- b. **Carroll O'Connor (who played Archie Bunker on TV) talks about how his son killed himself after using drugs and urges you to get between your kids and drugs any way you can.**

In the past few months, did you see this advertisement Often, a Few Times or Not at All?

___ Often ___ A Few Times ___ Not at All

- c. **A young girl is being interviewed in a classroom. She is asked how she knows so much about the dangers of matches and strangers. She replies "My mommy told me." When asked about drugs, the girl is silent.**

In the past few months, did you see this advertisement Often, a Few Times or Not at All?

___ Often ___ A Few Times ___ Not at All

- d. **As you move from room to room in a suburban house, you learn that ordinary household products, when inhaled or sniffed, can kill kids.**

In the past few months, did you see this advertisement Often, a Few Times or Not at All?

___ Often ___ A Few Times ___ Not at All

- e. **A boy and his father, standing outside in a playground, practice how to say no to drug dealers.**

In the past few months, did you see this advertisement Often, a Few Times or Not at All?

___ Often ___ A Few Times ___ Not at All

TV VIEWING

- N
13. How often do you watch TV? (READ LIST)

___ Every day
___ Almost every day
___ At least once a week
___ Once or twice a month
___ A few times a year
___ Never

DEMOGRAPHICS

I now have a few final questions just for classification purposes.

14. Which one of the following age groups are you in? Please stop me when I reach your age group. Are you. . . **(READ LIST)**

18 to 24	45 to 54
25 to 34	55 to 64
35 to 44	65 or older

15. Are you white, black, Oriental or Asian, or some other ethnic group?

White
Black
Oriental/Asian
Other (Specify: _____)

16. Are you of Hispanic origin?

Yes
No

17. Are you **(READ LIST)**

Married
Single, never married
Single, never married, and living with opposite sex
Divorced or separated
Widow or widower

18. What is the highest level of schooling you have **completed?** **(DO NOT READ LIST)**

Some high school or less
Completed high school
Some college
Completed college
Graduate school

19. Which of the following income groups best describes the total yearly income of all members of your household combined last year **(READ LIST)**

Under \$10,000
\$10,000-\$14,999
\$15,000-\$24,999
\$25,000-\$34,999
\$35,000-\$49,999
\$50,000-\$74,999
\$75,000-\$99,999
\$100,000 or over

20. What is your 5-digit zip code? _ _ _ _ _

21. **CODE SEX:**

Male
Female

**THANK YOU VERY MUCH FOR PARTICIPATING
IN THIS IMPORTANT RESEARCH STUDY.**

APPENDIX C
WEIGHTING PROCEDURES

APPENDIX C: WEIGHTING PROCEDURES

WEIGHTING FOR SCHOOL POPULATIONS

In each wave of the study, data were separately weighted for the two student populations (4th-6th grades; 7th-12th grades). Within each of these populations, data were separately weighted for each of the 20 markets, and within each market, data were separately weighted for the central city and the non-central city portions of the market.

Schools were originally selected with probability proportional to size, separately for each market, and within each market separately for central city vs. non-central city. For this reason, an equal number of classes was assigned per school, in such a way as to yield an equal number of classes for each grade within each of the sampling segments (i.e., central city vs. non-central city within each market). Since the design called for 3 classes per school and 16 schools per market (in total), this would yield a total of 48 classes per market. Half of these were central city and half non-central city, or 24 classes for each of these categories. Within each of these categories, half the classes (or 12) were from the 4th-6th grades, and half from the 7th-12th grades. At the bottom line, this means that there were 4 classes from each of grades 4 through 6 from central city schools and 4 classes from each of these grades from non-central city schools; there were 2 classes from each of grades 7 through 12 from central city schools and 2 classes from each of these grades from non-central city schools. In this way, classes were selected within schools with equal probability under the assumption that class sizes in a given school for a particular subject matter and grade will be approximately equal.

In an analytical study such as this, the usual first step would have been to weight the data by the probability of selection, which (given the present sampling design) would have reduced to a weight of the form c/n_i , where c is a constant and n_i is the number of completed interviews in a given school. In the present study sites and subsites were predetermined, having been selected on the basis of the composition of the market and the needs of the research. For each of the two school studies (youth and teen) a sample of four schools was drawn for each particular subsite (where by subsite, we refer to one of the two subdivisions – city or suburbs – of one of the markets in the study). Because of the small number of schools drawn for each subsite and the requirement that results be projected to the total enrollment for that subsite, there were several constraints involved in the drawing process. The set of four schools had to meet several criteria: stratification by ethnicity, including the right combination of grades available for selection (e.g., a simple probability sample drawn proportional to eligible students for the elementary study could, unless controlled, yield 4 schools, all including only grades K-5, which would make it impossible to include 6th graders), etc.

Because of these constraints, the selection probability could not be simply described as “probability proportional to eligible student enrollment.” By the original sample design (which is essentially self-weighting), we would expect the

relative sample selection weights to approach a constant. Two surrogates, therefore, for the “true” selection probability weight were considered: either adjust the sample as if the probability of selection were, in fact, probability proportional to enrollment (using the original selection probability, which was proportional to enrollment) or consider the sample self-weighting as to sample selection probability (and use a constant). The difference in the relative impact of these two approaches was tested for two of the markets and found to be negligible.¹ For this reason, it was decided to favor simplicity and to treat the sample as self-weighting with regard to sample selection.

The weighting performed was the projection weight, which was a balance weighting or a “weighting adjustment.” In calculating results from the school studies, projection weighting to universe values was carried out for selected demographics. Data were weighted only to balance by grade, sex, and ethnicity within subsites within sites. In this process, the universe counts are determined (or estimated from available census data) for each cell of a weighting diagram by the three demographics—grade, sex, and ethnicity—within each subsite. Then, cell by cell, each sample cell count is weighted up to the desired universe count for that cell. Expressed as a formula:

$$w_{ijkl} = N_{ijkl} / n_{ijkl},$$

where: w_{ijkl} is the weight for subsite i , grade j , gender k , and ethnicity l ,

N_{ijkl} is the (estimated) universe count for subsite i , grade j , gender k , and ethnicity l ,

n_{ijkl} is the sample count for subsite i , grade j , gender k , and ethnicity l .

In the analyses of these survey data, a nonresponse adjustment was implicitly performed because of the use of estimated universe counts in the weighting procedure. Consequently, a separate nonresponse adjustment was not necessary.

When applying weights to point estimates for any result (for example, the proportion of students seeing a specific ad), the projection weights that are calculated generate individual respondent weights—that is, at the end of the weighting process, each respondent is assigned the weight calculated for the cell into which that respondent fell. This weight is then permanently associated with that specific individual respondent’s data. Thereafter, any “weighted” data is obtained by summing these weights across all specified respondents (for any particular specification).

¹ For these markets, the average difference between these two weighting approaches on analytical measures in the study was less than two tenths of one percentage point.

For example, the weighted percent of students seeing a specific ad at an individual school would be calculated by taking the sum of the weights for each respondent at that school who saw the ad, and dividing that total by the sum of the weights for all respondents at the school. The same calculation applies for a given site or subsite (summing over the entire site or subsite instead of over the school). Since projections were originally made to a constant for each site, the result for the combination of all sites would also be done in the same manner, simply summing over all respondents in all sites combined. Each site would then have the same weight in the composite figure.

Universe Counts—The total number of students in the relevant grades for a given segment was calculated based on the Market Data Retrieval database of public schools. For each school in the database, the number of students in the relevant grades was computed by multiplying the proportion of grades that qualified in the school times the total students enrolled. For example, if a given school consisted of grades K through 6 (a total of 7 grades), the number of students in grades 4 through 6 was estimated by multiplying the total enrollment of the school times $3/7$ (the proportion of grades that qualified for the elementary sample).

- The ethnic breakdown for a given segment was obtained from the same database (which includes the ethnic composition for each school), by multiplying the ethnic breakdown per school times the estimated number of students in the school in qualifying grades, then summing over all schools in the segment.
- The proportion of students in each grade was estimated from Table 3 of the U.S. Census report on “School Enrollment- Social and Economic Characteristics of Students: October 1996” (P20-500).
- The proportion of students by sex was also estimated from the U.S. Census report on “School Enrollment—Social and Economic Characteristics of Students: October 1996” (P20-500).

Undesignated on Demographics— Adjustments were made to deal with undesignated sex and ethnicity; site, subsite, and grade were never missing.

- Respondents who were undesignated on sex were assigned the average weight for male and female respondents in the same grade and segment of the market. This occurred among 1.1% of students at baseline, and among 1.1% of students at follow-up. The weights for all three sex categories (male/female/undesignated) were then adjusted down to maintain the original total weighted count for the given grade within the given segment of the market.
- Respondents who were undesignated on ethnicity were similarly given average weights for the other ethnicities for the given grade, sex, and segment of the market. Undesignated responses on ethnicity occurred among 1.5% of students at baseline and among 1.3% of students at follow-up. In the case of

ethnicity, this was accomplished by adjusting the target cell counts, as follows: The ethnic breakdown for the market was first calculated for 5 categories: white, black, Hispanic, other, and undesignated, where the last percent was taken to be the percent undesignated in the sample for this market, and the first four percentages were computed to add to 100 percent minus the undesignated percent, using the correct 4-way ratio for these categories for the market. The five categories were then collapsed to four by including “Undesignated” in the “Other” category, both for the sample data and for the target counts.

Empty Cells and Extreme Weights— Adjustments for empty cells and extreme weights were carried out in the following manner:

- In some cases, a cell was found to be empty for a particular segment of a market. Typically, this might occur when a cell was likely to be extremely small to begin with (for example, black 4th-grade boys in the Duluth non-central city segment). In this case, the other cells for the same sex, grade and segment (i.e., central city vs. non-central city) were weighted up to keep the total (for this sex, grade and segment) at the level required for the target population. (i.e., the data was “pooled” across ethnic groups). The reason for pooling across ethnic groups (rather than across sex or grade) is that other data sources indicate that key measures—such as drug usage—tend to be more highly correlated with sex and grade than with ethnicity.
- When the process resulted in a cell which had an excessive weight, (where excessive was, on average, about 8 times the average weight for a given market) the excessive weight was truncated at the maximum allowable value, and the difference made up by a process of pooling similar to that just described for empty cells.

Approach for Handling Exceptional Cases— The specific approach taken with regard to handling of exceptional cases in the weighting is demonstrated through the following procedures:

For Ethnicity, the target proportion of “All Other” ethnicity was adjusted for each site, such that the proportion of non-responses would remain constant from the unweighted to the weighted data. For example, suppose that for a given site, the ethnic breakdown for population was:

White:	75%
Black:	14%
Hispanic:	6%
Other:	5%

Suppose that for this same site, the sample proportion who did not answer the question was 5%. The target percentage were then adjusted as follows:

White:	71.25% (75% White times 95% designated)
--------	---

Black: 13.30% (14% Black times 95% designated)
 Hispanic: 5.70% (6% Hispanic times 95% designated)
 All Other: 9.75% ((5% Other times 95% designated) plus 5% undesignated)

Sample data for the site then were weighted up to the adjusted target percentages for that site.

Sex was handled in a similar fashion. Any respondents for whom sex was undesignated were given weights such that the results will not inflate nor deflate the proportion of “No Answers” on sex, (i.e., the ratio of male to female was maintained as per the population data for the site, but the target proportions of males plus females totalled the proportion designated in the sample). For example, suppose that for a given site, the proportion male and female is the following:

Males: 47%
 Female: 53%

Suppose further, that 2% of the sample did not answer the “Sex of Respondent” question. The adjusted target percentages would become:

Males: 46.06% (47% male times 98% designated)
 Females: 51.94% (53% female times 98% designated)
 No Answer 2.00% (maintain the 2% undesignated found in the sample)

Thus, the ratio of male to female was adjusted to reflect the ratio found in the population, while maintaining the percent undesignated found in the sample.

With regard to Empty cells, in the case where an empty cell was found in the sample distribution for a particular site, data were pooled across ethnicity (since historically, both grade and sex are more strongly correlated with key measures such as drug usage, than is ethnicity). That is, if a cell in the sample distribution for a given site was found to be empty, the other cells for the same grade and sex within that site were weighted up to make up the difference. For example, suppose that the target cell numbers for female 5th grade in the suburbs of Baltimore were:

White: 17.8
 Black: 5.4
 Hispanic: 2.1
 All Other: 2.3
 Total: 27.6

And suppose that the sample distribution for female 5th graders in this subsite were:

White: 21

Black:	10
Hispanic:	0
All Other:	5
Total	36

By simply mechanically calculating the weights for these cells, we obtain the following:

White:	.85 (17.8, the target, divided by 21, the number of interviews)
Black:	.54 (5.4, the target, divided by 10, the number of interviews)
Hispanic:	NA (there are no interviews in this cell)
All Other:	.46 (2.3, the target, divided by 5, the number of interviews)

This would yield:

White:	17.8
Black:	5.4
Hispanic:	0
All Other:	2.3
Total	25.5

But we know that we want a total of 27.6 female 5th graders. So, to make up for the fact that the Hispanic cell is empty, each of the other three weights would be increased by a constant proportion to bring the total female 5th graders up to 27.6. This constant increment would be 27.6 divided by 25.5, or 1.08235. Thus, the “pooled” weights would be the previous weights times this constant, as follows:

White:	.92 (.85 times 1.08235)
Black:	.58 (.54 times 1.08235)
Hispanic:	NA (there are no interviews in this cell, so it's irrelevant)
All Other:	.50 (.46 times 1.08235)

This would yield the following weighted totals for these cells:

White:	19.3
Black:	5.8
Hispanic:	0.0
All Other:	2.5
Total:	27.6

This brings the total number of female 5th graders up to the desired target of 27.6, while maintaining the correct proportions for those ethnicities that were represented in the sample.

Since, in general, empty cells occur most frequently for those combinations of demographics which are least common in each site, the adjustments resulting from this type of pooling are generally small, and maintain demographic proportions well for both site and subsite.

In sum, the data are considered projectable to all students present on the day of the interviewing process who chose to participate, since these are all the students from whom data were collected. Thus, to the degree to which participation levels may vary by participating class, the degree of participation is reflected in the final data and reflects the actual mix of students who participated in the study.

The following tables represent the distribution of weights for the elementary and secondary samples, for the two waves of interviewing. Weights are presented relative to the average (i.e., “1.0” would be a weight that happened to be exactly the average for the particular sample and wave, “2.0” would be a weight that was twice the average, etc.).

Elementary Sample			Secondary Sample		
Range of Weights	Wave 1	Wave 2	Range of Weights	Wave 1	Wave 2
0.0 – 0.2	7%	8%	0.0 – 0.2	9%	8%
0.2 – 0.4	15%	13%	0.2 – 0.4	15%	15%
0.4 – 0.6	17%	18%	0.4 – 0.6	17%	16%
0.6 – 0.8	12%	12%	0.6 – 0.8	11%	10%
0.8 – 1.0	9%	10%	0.8 – 1.0	8%	10%
1.0 – 1.2	10%	11%	1.0 – 1.2	9%	11%
1.2 – 1.4	7%	9%	1.2 – 1.4	9%	8%
1.4 – 1.6	5%	6%	1.4 – 1.6	8%	8%
1.6 – 1.8	5%	3%	1.6 – 1.8	4%	3%
1.8 – 2.0	3%	3%	1.8 – 2.0	2%	3%
2.0 – 3.0	5%	7%	2.0 – 3.0	5%	5%
3.0 – 4.0	2%	1%	3.0 – 4.0	2%	2%
Over 4.0	1%	1%	Over 4.0	1%	1%

Weighting Procedures—The following five pages contain a walk-through of the procedures followed in weighting the school samples in this study. The example is the Baseline wave of the teen data for the Baltimore market. At the bottom of each table is a description of the data presented in that table as well as its derivation. Table 5 contains the actual final weights applied to this data.

Following the five tables is a brief description of the universe estimates for these data.

Table 1
Baltimore Market

	City				Suburbs			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other
<u>Males</u>								
Grades 7, 8	4	37	3	0	14	2	2	4
Grades 9, 10	10	36	0	4	16	6	0	3
Grades 11, 12	2	44	0	1	17	9	4	0
<u>Females</u>								
Grades 7, 8	3	39	0	2	20	5	0	1
Grades 9, 10	2	48	1	1	18	4	1	2
Grades 11, 12	6	55	0	1	22	4	0	4
<u>Undesignated Sex</u>								
Grades 7, 8	1	0	0	5	0	0	0	0
Grades 9, 10	1	0	0	3	0	0	0	2
Grades 11, 12	0	1	0	2	0	0	0	0

The above table shows the actual unweighted number of interviews conducted for the teen sample in the Baltimore market, separately by subsite (city vs. suburbs) for sex by grade by ethnicity.

Table 2

Baltimore Market

	City				Suburbs			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other
<u>Males</u>								
Grades 7, 8	4.5	37	3	2.5	14	2	2	4
Grades 9, 10	10.5	36	0	5.5	16	6	0	4
Grades 11, 12	2	44.5	0	2	17	9	4	0
<u>Females</u>								
Grades 7, 8	3.5	39	0	4.5	20	5	0	1
Grades 9, 10	2.5	48	1	2.5	18	4	1	3
Grades 11, 12	6	55.5	0	2	22	4	0	4
<u>Undesignated Sex</u>								
Grades 7, 8								
Grades 9, 10								
Grades 11, 12								

In Table 2, the counts for the "Undesignated Sex" cells have been evenly split between male and female for the given grade, ethnicity and subsite. This is done in order to be able to assign an average weight (i.e., the average of the male and female weights for the given grade, ethnicity and subsite category) to those interviews for which sex is undesignated. Since the target table (as will be seen) does not include "Undesignated Sex", the next effect will be to slightly reduce the weighted total for the interviews for which sex was designated, such that if the average weight is applied to the undesignated sex interviews, the total weighted count across all three sex categories (for the given grade, ethnicity and subsite) will come back to the true target values.

Table 3

Baltimore Market

	City				Suburbs			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other
Males								
Grades 7, 8	54.097	337.090	1.226	17.601	941.120	219.869	41.798	109.296
Grades 9, 10	56.017	349.057	1.270	18.226	974.531	227.675	43.282	113.177
Grades 11, 12	50.820	316.670	1.152	16.535	884.108	206.550	39.266	102.675
Females								
Grades 7, 8	51.497	320.889	1.167	16.755	895.889	209.302	39.790	104.044
Grades 9, 10	53.325	332.282	1.209	17.350	927.695	216.733	41.202	107.737
Grades 11, 12	48.377	301.450	1.097	15.740	841.618	196.623	37.379	97.741

Table 3 contains the universe counts by cell for the Baltimore market, which were calculated by taking the total desired universe count (set at 10000 for each market), then multiplying by the proportion of the universe falling into each sex, grade, and ethnicity category, separately by subsite. For the Baltimore market, these percentages were as follows:

	Subsite		Sex		Grade
	%		%		%
City	23.81	Males	51.23	7th-8th	33.61
Suburbs	76.19	Females	48.77	9th-10th	34.81
				11th-12th	31.58
	Ethnicity		No Answer	Ethnicity	
	City	Suburbs	on Ethnicity	City	Suburbs
	%	%	%	%	%
White	13.72	74.57	3.8136	13.19	71.73
Black	85.47	17.42		82.21	16.76
Hispanic	0.31	3.31		0.30	3.19
All Others	0.50	4.70		4.29	8.33

(Before adjusting for no answer.)

(After adjusting for no answer.)

The sources of these universe estimates are described in detail at the end of this appendix (i.e., from a combination of U.S. Census data and enrollment data on a specific school by school basis from Market Data Retrieval. Sex and grade estimates were applied uniformly across markets and subsites; ethnicity estimates were made separately for each subsite within each market. The above ethnicity distributions show the percents before and after the adjustment for non-response on the ethnicity question has been made (as is elsewhere described).

Table 4

Baltimore Market

	City				Suburbs			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other
<u>Males</u>								
Grades 7, 8	12.02	9.11	0.41	7.04	67.22	109.93	20.90	27.32
Grades 9, 10	5.33	9.70	#DIV/0!	3.31	60.91	37.95	#DIV/0!	28.29
Grades 11, 12	25.41	7.12	#DIV/0!	8.27	52.01	22.95	9.82	#DIV/0!
<u>Females</u>								
Grades 7, 8	14.71	8.23	#DIV/0!	3.72	44.79	41.86	#DIV/0!	104.04
Grades 9, 10	21.33	6.92	1.21	6.94	51.54	54.18	41.20	35.91
Grades 11, 12	8.06	5.43	#DIV/0!	7.87	38.26	49.16	#DIV/0!	24.44
<u>Undesignated Sex</u>								
Grades 7, 8	13.20			4.91				
Grades 9, 10	8.41			4.45				31.56
Grades 11, 12		6.18		8.07				

Table 4 shows the first stage in calculating the weights for each cell in the diagram. For the "designated sex categories (i.e., "Males" and "Females"), the weights is calculated by dividing the target number for that cell in Table 3 by the unweighted count for that cell in Table 1. For the "Undesignated Sex" cells, the weight is calculated by taking the aggregate target for "Males" and "Females" in the corresponding position (by ethnicity, grade, and subsite) in this table, then dividing by the aggregate number of interviews. Cells in which "#DIV/0!" appears are empty cells (i.e., no interviews were conducted with students who would fall into this cell). Since empty "Undesignated Sex" cells do not need to be taken into account in the weighting, these cells have been left empty in the above diagram.

Table 5
Baltimore Market

	City				Suburbs			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other
Males								
Grades 7, 8	12.02	9.11	0.41	7.04	67.22	109.93	20.90	27.32
Grades 9, 10	5.35	9.73		3.32	62.91	39.19		29.23
Grades 11, 12	25.49	7.14		8.29	56.73	25.04	10.71	
Females								
Grades 7, 8	14.76	8.25		3.73	46.27	43.24		107.47
Grades 9, 10	21.33	6.92	1.21	6.94	51.54	54.18	41.20	35.91
Grades 11, 12	8.09	5.45		7.89	39.51	50.77		25.24
Undesignated Sex								
Grades 7, 8	13.20			4.91				
Grades 9, 10	8.41			4.45				31.56
Grades 11, 12		6.18		8.07				

Table 5 indicates the instances of adjusting or "pooling" that were necessary because of empty cells in the table of completed interviews (Table 1). Each set of four shaded cells within one subsite (i.e., either City or Suburbs) in the table above illustrates one instance of "pooling." This pooling was accomplished as follows (taking the instance of the 9th-10th grade males in the city):

Each of the three weights for non-empty cells for 9th-10th grade males in the city (i.e., those for white, black, and other 9th-10th grade males in the city) were adjusted upward by a constant factor such that the total for these four cells will once again equal the total for these four cells in the target table (Table 3). A similar adjustment was made for 9th-10th grade males in the suburbs; 11th-12th grade males in the city; etc. (for each of the shaded areas in the chart above).

Note that (as expected) empty cells are most likely to occur for combinations that are low in incidence. The empty projection cells in the above diagram represent only about 2.3 percent of the total population.

WEIGHTING FOR PARENTS DATA

Universe Counts—The universe for the parent study was all parents of children 18 years of age or younger in the market areas included in Phase I. A probability sample was drawn, using the principles of random digit dialing, enhanced to increase the incidence of working residential telephone households. This methodology makes it possible to project the sample results to the relevant test universe. RDD gives unlisted telephone households the same chance of falling into the sample as listed ones. At least 175 parents were interviewed in each of the 24 sites.

Design Weighting—Data for parents was weighted separately by market. Since the sample was simple random-digit-dialing (RDD), the projections were in each case for the whole market (i.e., there was no distinction between central and non-central city).

The respondent selection frequency weight was applied to account for the fact that only one interview was obtained per household. The weight consisted of the number of parents in the household (i.e., an interview with a parent from a 1-parent household is given a weight of 1; an interview with a parent from a 2-parent household is given a weight of 2). This balances for inequality in the probability of selection of individual parents in the household.

Balance Weighting—Data were weighted by sex and ethnicity. Target values for each market were obtained from the 1990 census data per market. In order to estimate the sex and ethnicity ratios, the following procedure was followed by market:

- Sex

Total female parents = sum of two-parent families plus one-parent (female) subfamilies.

Total male parents = sum of two-parent families plus one-parent (male) families plus two-parent subfamilies plus one-parent (male) subfamilies.

The ratio of parents by sex for each market is the ratio of the above two numbers.

- Ethnicity

The above data are available in the 1990 census by ethnic group. The above calculation was thus made for male, female, and total parents within each ethnic group. Since Hispanics are included in the other ethnic categories, adjustment was made (using the racial breakdown of Hispanics from the census) to remove the Hispanics from the other ethnic categories as appropriate to bring the total to 100%.

Data from Market Statistics for 1990 and 1997 were used to estimate the shifts in population by ethnic group for each market. These shifts were then applied to each of the numbers obtained above by ethnic group. The final set of data was used to estimate the sex/ethnic ratios for the market.

The following exhibit provides a detailed example of how the parents' weights were calculated for the market study.

Exhibit 1

EXAMPLE: Austin, Texas, Wave 2

Table 1 Estimates of Parents in Austin, TX MSA (from Census, as Described in Previous Correspondence)

	White	Black	Hispanic	Other	Total
Male	79,483	7,065	26,164	4,255	116,966
Female	92,051	12,481	31,487	4,683	140,702
Total	171,534	19,545	57,650	8,938	257,667

Table 2 Percentages

	White	Black	Hispanic	Other	Total
Male	30.8%	2.7%	10.2%	1.7%	45.4%
Female	35.7%	4.8%	12.2%	1.8%	54.6%
Total	66.6%	7.6%	22.4%	3.5%	100.0%

Table 3 Target Values: (i.e., Projecting to a Constant 1000)

	White	Black	Hispanic	Other	Total
Male	308.5	27.4	101.5	16.5	453.9
Female	357.2	48.4	122.2	18.2	546.1
Total	665.7	75.9	223.7	34.7	1000.0

Table 4 Wave I: Data, Weighted by Individual Selection Probability Within Household

	White	Black	Hispanic	Other	Total
Male	70	11	34	6	121
Female	103	24	39	9	175
Total	173	35	73	15	296

Table 5 Weights (Percent "Other" Maintained as Per Sample; Others Proportionate Within Gender)

	White	Black	Hispanic	Other
Male	4.35	2.46	2.95	3.75
Female	3.40	1.98	3.07	3.12

Table 1 provides estimates of parents in the Austin, TX MSA to which the data were weighted.

Table 2 expresses the data from Table 1 in terms of percent of total.

Table 3 shows how the data were projected up to a constant total of 1000. Each market was weighted up to a constant total of 1000 in order to allow the total of all markets to represent an average across all markets.

Table 4 includes data from the parent interviews, tabulated by sex and race, and weighted to adjust for respondent selection probability in multi-parent versus single-parent households. Only a single level of adjustment was made (i.e., if the number of parent in the household was 1, the weight was 1; if the number of parents in the household was greater than 1 (normally 2), the weight was 2.

Table 5 presents the weights assigned to each cell. Note that these weights are cumulative with the above-described respondent selection probability weights (i.e., for any particular respondent, the two weights are multiplied together to yield the final weight for that respondent).

In calculating the weight, it would be presumed that the weight should simply be the value for a cell in Table 3 (the target value) divided by the value for the same cell in Table 4 (the sample value). However, an additional consideration that needs to be taken into account is that the "other" category in the ethnicity variable includes responses of "Don't Know" and "Refused" as well as legitimate "Others." For this reason, it would be inappropriate to weight this cell to the actual census number for "Other Ethnicity" in the market (which represents Asians, Pacific Islanders, and Native Americans). In fact, what was done was maintain this category in the same proportion at which it occurred (within gender). Then the other three gender categories were weighted in proportion up to the total for that gender (exclusive of the weighted "other" category).

The following tables represent the distribution of weights for the parents sample for the two waves of interviewing. Weights are presented relative to the average (i.e., "1.0" would be a weight that happened to be exactly the average for the particular sample and wave, "2.0" would be a weight that was twice the average, etc.). The bimodal distribution is a result of the selection process of no more than one interview per household and the resultant difference in the weights of 1-parents vs. 2-parent households.

Parents Sample		
Range of Weights	Wave 1	Wave 2
0.0 – 0.2	0%	1%
0.2 – 0.4	2%	4%
0.4 – 0.6	18%	16%
0.6 – 0.8	11%	15%
0.8 – 1.0	14%	8%
1.0 – 1.2	26%	26%
1.2 – 1.4	16%	17%
1.4 – 1.6	10%	10%
1.6 – 1.8	2%	4%
1.8 – 2.0	0%	0%
2.0 – 3.0	0%	0%
3.0 – 4.0	0%	0%
Over 4.0	0%	0%

APPENDIX D
ANALYTIC APPROACH AND STATISTICAL TESTING

APPENDIX D: ANALYTIC APPROACH AND STATISTICAL TESTING

Survey data were analyzed to examine change from baseline to followup. Change was examined within target groups, within comparison groups, and then differences between the groups were explored. Two-tailed tests were conducted, which is a conservative approach to analyzing the data, requiring no further adjustments. The Significant Net Difference Test was conducted on parent data using the automated tabulation program included in the Quantum software. For youth and teen data, the Significant Net Difference Test was modified to take into account the design effects for the youth and teen samples. A detailed description of the calculation of standard errors and the statistical testing performed is included in this section.

1.1 ESTIMATION OF PROPORTIONS IN RANDOM SAMPLING

Consider the proportion of respondents falling in a response category of interest (e.g., to a question on awareness). There were four proportions, P_i ($i = 1, 2, 3, 4$) involved in the test of the net change between baseline and followup for target site vs. comparison site, as follows:

P_1 , the proportion at comparison site for baseline;

P_2 , the proportion at target site for baseline;

P_3 , the proportion at comparison site for followup; and

P_4 , the proportion at target site for followup.

There are a number of questions we might like the experimental results to answer:

- a. Is the proportion at comparison site for baseline the same as at followup?
- b. Is the proportion at target site for baseline the same as at followup?
- c. Is the difference between baseline and followup different for target vs. comparison?

The questions can be answered by comparing proportions under the following hypotheses.

a. $H_0: P_3 = P_1$

b. $H_0: P_4 = P_2$

c. $H_0: P_4 - P_3 = P_2 - P_1$

A systematic way of forming and testing hypotheses such as these is provided by the concept of contrasts among proportions. A linear function

$$L = \sum k_i P_i$$

is said to be a contrast of proportions if $\sum k_i = 0$ provided that at least one $k_i \neq 0$.

We used contrasts in hypothesis testing by framing the null hypothesis as a contrast and then testing the hypothesis that the contrast is zero against the alternative that it is not. That is, we tested

$$H_0: L = 0 \text{ against}$$

$$H_a: L \neq 0$$

To test the hypothesis, we need a sample estimate of L and the sample variance of the estimate. The sample estimate, l , is obtained by substituting the sample proportion, p , for the population proportion in the contrast under test. We have

$$\bar{L} \equiv l = \sum k_i p_i$$

Under the condition that the sample groups are independent, the variance of l is given by

$$V(l) = \sum k_i^2 V(p_i)$$

and its estimate

$$v(l) = \sum k_i^2 v(p_i)$$

Under the usual assumption that the experimental error (in general and large sample theory) is normally distributed, a test statistic for testing $H_0: L = 0$ against $H_a: L \neq 0$ is

$$t \text{ (Student's } t, 1908) = l / \sqrt{v(l)}$$

which has degrees of freedom approximately equal to the total number of units in the comparison. For large sample sizes, t values can be compared with normal percentage points (probabilities or areas). Generally 2.576, 1.96, and 1.645 are used for tail probabilities $\alpha = 1\%$, 5% , and 10% , respectively.

1.2 ESTIMATION OF PROPORTIONS IN CLUSTER SAMPLING

- Schools were considered as cluster units
- Students were considered as the elements

N = the number of clusters (schools) in the universe

n = the number of clusters selected in a random fashion

m_{ij} = the (weighted) number of respondents (sample students) in study i , ($i = 1, 2, 3, 4$) and j^{th} school, $j = 1, 2, \dots, N$

a_{ij} = the (weighted) number of respondents falling in the response category of interest.

Estimate of the proportion P_i (study i) in a response category is

$$p_i = \frac{\sum a_{ij}}{\sum m_{ij}}$$

Thus P_i takes the form of a ratio estimator. m_{ij} is not a constant. In calculating the standard errors for this study, the clustering due to selection of schools was taken into account in the formula (see Cochran, 1963; Scheaffer et al., 1990). The following formula was used to calculate the variance estimate $v(p_i)$ of P_i :

$$v(p_i) \cong \frac{\sum (a_{ij} - m_{ij} p_i)^2}{(\sum m_{ij})^2}$$

$$= \frac{\sum a_{ij}^2 - 2 p_i \sum a_{ij} m_{ij} + p_i^2 \sum m_{ij}^2}{(\sum m_{ij})^2}$$

For the Significant Net Difference Test, set the hypotheses as

$$H_o : L = P_4 - P_3 - (P_2 - P_1) = 0$$

$$H_a : L \neq 0$$

Estimate of L is

$$l = p_4 - p_3 - (p_2 - p_1)$$

and its estimated variance is

$$v(l) = \sum v(p_i)$$

for nonoverlapping samples (covariance of p_i and p_j are assumed to be zero or negligible). Then the test statistic Student's t can be applied.

1.3 REFERENCES

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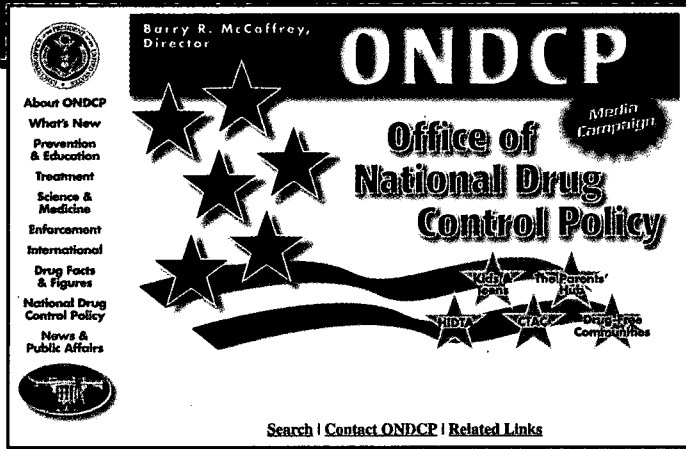
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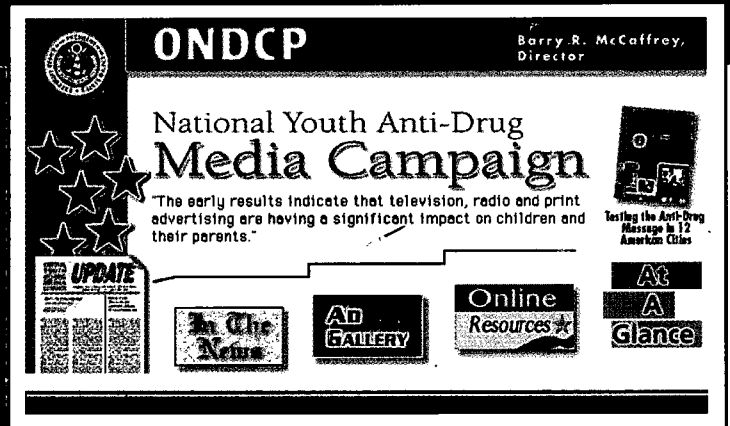
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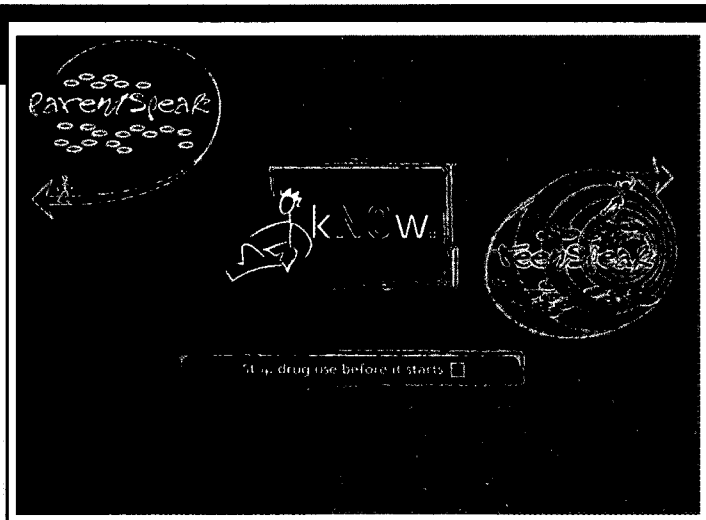
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