If you have issues viewing or accessing this file contact us at NCJRS.gov.

MF1

AIDS AND TEENAGERS: EMERGING ISSUES

HEARING

BEFORE THE

SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

FIRST SESSION

HEARING HELD IN WASHINGTON, DC, JUNE 18, 1987

Printed for the use of the
›mmittee on Children, Youth, and Families

109327

U.S. Department of Justice
National Institute of Justice

109327

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by

U.S. House of Representatives

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

76-448 WASHINGTON : 1988

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, DC 20402

SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES

GEORGE MILLER, California, *Chairman*

WILLIAM LEHMAN, Florida
PATRICIA SCHROEDER, Colorado
LINDY (MRS. HALE) BOGGS, Louisiana
MATTHEW F. McHUGH, New York
TED WEISS, New York
BERYL ANTHONY, JR., Arkanas
BARBARA BOXER, California
SANDER M. LEVIN, Michigan
BRUCE A. MORRISON, Connecticut
J. ROY ROWLAND, Georgia
GERRY SIKORSKI, Minnesota
ALAN WHEAT, Missouri
MATTHEW G. MARTINEZ, California
LANE EVANS, Illinois
RICHARD J. DURBIN, Illinois
THOMAS C. SAWYER, Ohio
DAVID E. SKAGGS, Colorado

DAN COATS, Indiana
THOMAS J. BLILEY, JR., Virginia
FRANK R. WOLF, Virginia
NANCY L. JOHNSON, Connecticut
BARBARA F. VUCANOVICH, Nevada
JACK F. KEMP, New York
GEORGE C. WORTLEY, New York
RON PACKARD, California
BEAU BOULTER, Texas
J. DENNIS HASTERT, Illinois
CLYDE C. HOLLOWAY, Louisiana
FRED GRANDY, Iowa

COMMITTEE STAFF

ANN ROSEWATER, *Staff Director*
MARK SOUDER, *Minority Staff Director*
CAROL M. STATUTO, *Minority Deputy Staff Director*

109327

CONTENTS

AIDS AND TEENAGERS: EMERGING ISSUES

THURSDAY, JUNE 18, 1987

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES,
Washington, DC.

The Select Committee met, pursuant to call, at 9:30 a.m., in Room 2261, Rayburn House Office Building, Hon. George Miller, Chairman of the Committee, presiding.

Members present: Representatives Miller, Coats, Weiss, Sikorski, Packard, Rowland, Martinez, Evans, Sawyer, Skaggs, Bliley, Holloway, Boxer, and Levin.

Staff present: Ann Rosewater, staff director; Karabelle Pizzigati, professional staff; Carol Statuto, professional staff; Spencer Hagen Kelly, research assistant; and Joan Godley, committee clerk.

Chairman MILLER. The Select Committee on Children, Youth, and Families will come to order.

The purpose of today's hearing is to examine the growing AIDS crisis and its impact on teenagers. The American public is learning the frightening dimensions of the AIDS threat. Millions of Americans are already infected, and over 35,000 have developed the disease; yet, despite daily front-page articles about AIDS, the risk to adolescents has largely been ignored.

As of June 8th, only 148 13- to 19-year-olds had AIDS, and yet, given the 2 to 10-year latency period of the virus, many of the 7,500 20- to 29-year-old AIDS victims almost certainly became infected as teenagers.

With AIDS spreading rapidly among the heterosexual population, and with more than 70 percent of America's youth sexually active by age 20, we face the serious likelihood of large-scale infection of adolescents.

The central question for today's hearing is how do we best protect America's adolescents from AIDS? This presents enormous challenges for public policymakers, public health specialists, educators, parents and teenagers.

We must not let the currently low number of teenagers with AIDS dissuade us from taking the threat to youth seriously. Adolescents traditionally receive fewer health services, and they face a high risk of sexually transmitted disease. A sixth of the sexually active high-school girls, for instance, have had at least four different partners. In a recent poll, only a third of sexually active teenagers said they always use contraceptives, and nearly a third said they never do. One study reports that a significant number of 16 to 19-year-olds still don't even know that they can get AIDS from heterosexual sex.

Clearly, education must be a part of the preventative plan for teenagers.

I would like at this time to recognize ranking minority member, Congressman Coats.

[Opening statement of Hon. George Miller follows:]

OPENING STATEMENT OF HON. GEORGE MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND CHAIRMAN, SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES

"AIDS AND TEENAGERS: EMERGING ISSUES"

The Select Committee on Children, Youth and Families meets today to examine the growing AIDS crisis and its impact on teenagers.

The American public is learning the frightening dimensions of the AIDS threat. Millions of Americans are already infected and over 35,000 have developed the disease. Yet despite daily front-page articles about AIDS, the risk to adolescents has been largely ignored.

As of June 8, only 148 13-to-19 year olds had AIDS. Yet given the 2-to-10 year latency period of the virus, many of the 7500 20-to-29 year old AIDS victims almost certainly became infected as teenagers. With AIDS spreading rapidly among the heterosexual population, and with more than 70% of America's youth sexually active by age 20, we face the serious likelihood of a large scale infection of adolescents.

The central question for today's hearing is, "How do we best protect America's adolescents from AIDS?" This presents enormous challenges for public policymakers, public health specialists, educators, parents, teens, and the average citizen.

We must not let the currently low number of teenagers with AIDS dissuade us from taking the threat to youth seriously. Adolescents traditionally receive few health services and they face a high risk of sexually transmitted diseases. A sixth of sexually active high-school girls, for instance, have had at least four different partners. In a recent poll, only a third of the sexually active teenagers said they always use contraceptives, and nearly a third said they never do. One study reports that a significant number of 16-to-19 year olds still don't even know that they can get AIDS from heterosexual sex.

Clearly, education must be a part of any preventive plan for teenagers. But education alone won't be enough.

We are particularly pleased to welcome Dr. C. Everett Koop, the Surgeon General of the United States, who has been a leading figure in the struggle for a responsible federal AIDS policy.

AIDS AND TEENAGERS (A FACT SHEET)

AIDS among teenagers and young adults and future risk

As of June 8, 1987, there were 148 cases of AIDS among 13–19 year olds (.4% of the total 36,514 reported AIDS cases). Of the total AIDS cases among teens, 41% are white, 37% are black, 20% are Hispanic, and 2% are all other races. There are 7687 cases among 20–29 year olds (21% of the reported AIDS cases), many of whom probably became infected as teenagers. (Centers for Disease Control [CDC], June, 1987)

Geographically, cases of AIDS among teenagers are clustered in New Jersey, New York, and Miami. (CDC, 1987)

Of the 148 cases of AIDS among teenagers, 41 cases involve teens with hemophilia. This represents 11% of all hemophilia-related AIDS cases. Of the cases among 20 to 29 year-olds, 88 have hemophilia, (24% of all hemophilia-associated AIDS cases). (CDC, June 1, 1987)

Teens at risk

Sexual activity is a significant risk factor for contracting AIDS. Over 11.6 million teens (70% of girls and 80% of boys) have engaged in sexual intercourse at least once by the time they reach age 20. More than one million teenagers become pregnant each year. It is estimated that 1 in 7 teens currently has a sexually transmitted disease. (National Research Council, *Risking The Future: Adolescent Sexuality, Pregnancy, and Childbearing.* 1987; Quackenbush, Testimony before the Select Committee on Children, Youth and Families, February 1987)

Sharing hypodermic syringes can also transmit the AIDS virus. Intravenous drug use is not that prevalent among adolescents, but it still remains a potential risk

factor. In 1985, 1.2% of 16,000 high school seniors reported having ever used heroin. (Alcohol, Drug Abuse, and Mental Health Administration, 1986)

More than half of the teenagers in a recent poll reported that they had had sexual intercourse by the age of 17. Only one-third of those who are sexually active said that they always use contraceptives; 27% say they never use contraceptives. (Louis Harris Associates, December 1986)

Attitudes about AIDS

Nearly half (48%) of those Americans over the age of 13 interviewed in a recent Gallup poll are worried that AIDS will spread widely among the nation's teenagers. As to whether the fear of AIDS has affected the social life and dating habits of teenagers, 13% replied greatly, 43% replied to some extent, and 29% said not at all. Nearly 55% of the respondents said that birth control devices should first be made available to 16–18 year olds; 31% said 12–15 years old. (Newsweek, February 16, 1987)

A 1986 Roper poll of 8 to 17 year olds found that about two-thirds (65%) were personally concerned about the spread of AIDS: among teenagers 72% were greatly concerned and among children 58% were greatly concerned. (The American Chicle Group, Warner-Lambert Company, March 1987)

Knowledge about AIDS transmission and prevention

A survey of more than 1,300 students enrolled in Family Life Education classes at 10 San Francisco public high schools found that students possess some knowledge of AIDS, although this knowledge is uneven. With respect to disease transmission, 92% correctly indicated that sexual intercourse was one mode of contracting AIDS. Sixty percent were aware that the use of a condom during sexual intercourse may lower the risk of getting the disease. (DiClemente, *American Journal of Public Health,* December 1986)

Nearly 55% of the 860 16–19 year olds recently surveyed in Massachusetts indicated that they are not worried about contacting AIDS; 34% of the adolescents responded this way in the San Francisco survey. (Strunin and Hingston, *Pediatrics,* May 1987; DiClemente, 1986)

In the Massachusetts survey, seventy percent of the teenagers said that they were sexually active but only 15% reported changing their sexual behavior because of concern about contracting AIDS, and only 20% of those who changed their behavior used effective methods to protect themselves. Eight percent did not know that AIDS may be transmitted by heterosexual intercourse. (Strunin and Hingson, 1987)

In the same study, 13% of those responding reported using psychoactive drugs other than alcohol and marijuana and 1% reported injecting drugs. Eight percent of those reporting psychoactive drugs use did not know that AIDS can be transmitted by injecting drugs. (Strunin and Hingson, 1987)

School policies on AIDS

A survey of 50 States conducted by the National Association of State Boards of Education [NASBE] shows that a majority of States (39) now have policies or a position statement on admitting students with AIDS to schools. However, fewer States (26) report that either curriculum materials or state standards on educating students about AIDS are already in place or are being developed. (NASBE, June 1987).

This same survey reported that action on AIDS education policy is pending in 12 States Legislatures, while only 7 States have an AIDS education policy already mandated. (NASBE, June 1987).

Centers for Disease Control guidelines [1]

Assessment of the type of education and care setting appropriate for an AIDS-infected child should be based on behavior, neurological development, and the physical condition of the child, and on expected type of interaction with others. This determination should be made by an interdisciplinary team.

The benefits of an unrestricted setting for AIDS-infected school-age children outweigh the risks of exposure to harmful infection. Specifically, CDC recommends that these children should be allowed to attend school and after school day-care, and to be placed in a foster home, in an unrestricted setting.

Mandatory screening as a condition for school entry is not warranted based on available data.

---

[1] (Excerpted from the Centers for Disease Control guidelines entitled "Education and Foster Care of Children Infected with Human T-Lymphotropic Virus Type III/Lymphadenophathy-Associated Virus", August 1985)

All education and public health departments, regardless of whether AIDS-infected children are involved, are strongly encouraged to inform parents, students and educators about AIDS transmission and prevention.

Persons involved in the care and education of HTLV-III/LAV infected children should respect the child's right to privacy including maintaining confidential records. The number of personnel who are aware of the child's condition should be kept at a minimum needed to assure proper care of the child.

Mr. COATS. Thank you, Mr. Chairman. I don't have a formal opening statement today, but I do want to thank you for calling this hearing on this subject. I think the prudent course of action for Congress is to obtain as much factual knowledge about AIDS as it possibly can before we rush into judgment as to what our policies should be. There are many misconceptions floating around as to causes of AIDS, transmissions, modes of AIDS, treatment of AIDS, ways in which we should pursue educating our young people and our population.

These ought to be discussed. They are being discussed. The important thing is that we obtain as much factual information as we possibly can as we discuss these particular issues.

I want to thank Dr. Koop for his willingness to carry a significant burden on this issue, appear before numerous hearings, and I'm sure a great deal of your time, Dr. Koop, has been spent discussing this subject in many, many forums. I appreciate your candor. I appreciate your outspokenness on this issue, your willingness to state the facts as you know them. So, thank you for coming before us today. I look forward to what additional information you have to present to this committee and to the other witnesses and, again, Mr. Chairman, I appreciate your calling this hearing.

Chairman MILLER. Congressman Weiss.

Mr. WEISS. Thank you very much, Mr. Chairman. I, too, want to add my words of appreciation to the Surgeon General for his very clear communications and forthright leadership in this matter.

At this time there is an explosive interest and coverage of the AID epidemic. Unhappily this has included misinformation, noninformation, and deliberate confusion coming from various sources, which unfortunately includes some quarters in the Administration. However, the Surgeon General's leadership has been just absolutely magnificent, and I thank him for his role.

Chairman MILLER. Congressman Packard.

Mr. PACKARD. I, too, would like to express my appreciation for your leadership. Certainly, we are faced with another plague that's going to require the concentrated efforts of every part of our society, and I'm very pleased that the Chairman has called this hearing and with Congress' particular interest in this very significant crisis. Thank you, Mr. Chairman.

Chairman MILLER. Congressman Rowland.

Mr. ROWLAND. Mr. Chairman, thank you for having this hearing. Dr. Koop, thank you for being here, and the other witnesses. I look forward to the testimony.

Chairman MILLER. Dr. Koop, we welcome you to the committee and, like my colleagues, I must tell you how much we appreciate the effort you have made to inform the public and also policymakers about what is necessary in dealing with the AIDS epidemic. We welcome you here this morning. Your written statement will be

placed in the record in its entirety. You may proceed in the manner in which you're most comfortable.

STATEMENT OF C. EVERETT KOOP, M.D., SC.D., SURGEON GENERAL, WASHINGTON, DC

Dr. KOOP. Thank you, sir. I do welcome the opportunity to appear before you on an issue of the utmost concern to me: teenagers and AIDS. As a practicing pediatric surgeon for over 40 years, the welfare of children and young adults has been foremost in my thoughts.

Adolescents and pre-adolescents are those with behavior we wish especially to influence because of their vulnerability when they are exploring their own sexuality and, perhaps, even experimenting with drugs. Teenagers often consider themselves immortal, and these young people may be putting themselves at great risk.

I will just hit the highlights, sir, if I may, on the extent of this risk.

About 2.5 million teenagers are affected by sexually transmitted diseases each year. The AIDS virus is transmitted through sexual contact. American teenage females experience about one million unplanned pregnancies each year. The extent to which teenagers are sexually active is also the extent to which they might transmit the virus of AIDS.

More than 80 percent of unmarried males and 70 percent of unmarried females self-report that they have experienced intercourse at least once by age 20. 23 percent of American high-school seniors self-report having used drugs that can be taken intravenously. Now, although teenagers generally do not inject drugs, those who do and share needles are at an increased risk for infection with the AIDS virus.

Only 1 percent, to date, of all AIDS cases has occurred among persons under age 20. About 21 percent of all cases have been diagnosed in the 20 to 29 age group, and since the time between infection with the virus and the onset of symptoms of AIDS may be several years, it seems likely that some of those aged 20 to 29 were infected as teenagers.

Most teenagers do not believe they are at risk. A random sample of 860 Massachusetts youth aged 16 to 19 revealed that, while 70 percent reported that they were sexually active, only 15 percent reported changing their sexual behavior because of concern about contracting AIDS, and only 20 percent of those who changed their behavior used methods that were effective.

Education about AIDS should begin at home so that children can grow up knowing the behavior to avoid to protect themselves from AIDS. Behavior should be reinforced at schools. I recommend that parents establish a biological and moral basis for sexual activity early so that when their children become teenagers, they will make decisions about their sexual behavior that can eliminate the risk of getting AIDS. Most teenagers want to know more about AIDS. 86 percent of parents agreed that sex education should be taught in schools and, of those, 95 percent agreed that such courses should teach 12-year-olds about the danger of AIDS. Public and private schools can play a vital role in assuring that all young people rap-

idly understand the nature of the epidemic and the specific actions they can take to protect themselves from becoming infected.

We believe that the scope and content of AIDS education should be determined locally and should be consistent with parental values; that information developed by the Federal government to educate young people about AIDS should encourage responsible sexual behavior based on fidelity, commitment, and maturity, placing sexuality within the context of marriage; and that any health information provided by the Federal government that might be used in schools should teach that children should not engage in sex before they are ready to marry.

These principles are approved by the President and cited by Secretary Bowen in the AIDS information plan and will be followed to the fullest extent in the development of any Federal educational material that might be used in schools.

As of the Winter of 1986, 40 of the nation's 73 largest school districts were providing education about AIDS; 24 more were planning such education. Of the districts that did provide it, 90 percent provided it during the 10th grade, 63 percent in the 7th grade, and 60 percent during the 9th grade.

Now, please note that what I'm about to say is different than what you find in your written copy of my testimony.

I agree with Mayor Koch of New York that, in addition to not using IV drugs, abstinence from sexual activity is the only way for adolescents to avoid getting AIDS.

Although 148 cases of AIDS have been reported to date among young people age 13 to 19, there is hope that AIDS is not common yet among adolescents. We do know a lot and can know a lot more about how to work effectively with this age group. For many of our teenagers, this would be a preventive intervention, especially for those in their very young teens. And, after all, it is easier to prevent some behavior than to change it.

It is a fact, I think, that AIDS may give us the impetus to deal knowledgeably and effectively with the whole range of health-related behavior in adolescents.

I'd like to conclude, Mr. Chairman, with a quote from the Surgeon General's report on AIDS. "Those of us who are parents, educators and community leaders, indeed all adults, cannot disregard this responsibility to educate our young. The need is critical and the price of neglect is high. The lives of our young people depend upon our fulfilling our responsibility."

I appreciate this opportunity to testify, sir, and would be pleased to answer your questions.

[Prepared statement of Everett Koop, M.D., follows:]

PREPARED STATEMENT OF C. EVERETT KOOP, M.D., SC.D., SURGEON GENERAL, U.S. PUBLIC HEALTH SERVICE AND DEPUTY ASSISTANT SECRETARY OF HEALTH DEPARTMENT OF HEALTH AND HUMAN SERVICES, WASHINGTON, DC

Mr. Chairman and members of the Committee:

I welcome the opportunity to appear before you on an issue of the utmost concern to me -- teenagers and AIDS. As a practicing pediatric surgeon for over forty years, the welfare of children and young adults has always been foremost in my thoughts.

Adolescents and pre-adolescents are those with behavior we wish to especially influence because of their vulnerability when they are exploring their own sexuality and perhaps experimenting with drugs. Teenagers often consider themselves immortal, and these young people may be putting themselves at great risk.

Extent of Risk

Some data provide information about the risk American teenagers have for becoming infected with the AIDS virus.

- o About 2.5 million teenagers are affected by sexually transmitted diseases each year. In the United States, the most frequent mode of transmission for the AIDS virus is through sexual contact.
- o American teenage females experience about one million unplanned pregnancies each year. These data indicate not only the extent to which teenagers are sexually active, but also the extent to which they might transmit the virus perinatally.

- More than 80 percent of unmarried males and 70 percent of unmarried females self-report that they have experienced intercourse at least once by age 20.
- About one percent of American high school seniors self-report having ever used heroin, 16.7 percent report having ever used cocaine, and 23.4 percent report having ever used stimulants; all of these drugs can be taken intravenously. Although teenagers generally do not inject drugs, those who do and share needles are at increased risk for infection with the AIDS virus.

Since the most frequent mode of transmission for the AIDS virus is through sexual contact, it is clear that teenagers are very much at risk. To date, only one percent of all AIDS cases has occurred among persons under age 20 (most of whom were infected by transfusion or perinatal transmission); about 21 percent of all cases have been diagnosed in the 20-29 age group. Since the time between infection with the AIDS virus and onset of symptoms may be several years, some proportion of those aged 20-29 who have been diagnosed with AIDS were most likely infected as teenagers.

Although these data demonstrate that many teenagers are at risk of becoming infected, most teenagers do not believe they are. Indeed, a random sample of 860 Massachusetts youth aged 16-19 revealed that while 70 percent reported they were sexually active

only 15 percent of them reported changing their sexual behavior because of concern about contracting AIDS; and only 20 percent of those who changed their behavior used effective methods.

I believe that education about AIDS should begin at home so that children can grow up knowing the behavior to avoid to protect themselves from exposure to the AIDS virus. This behavior should be reinforced in the schools. I recommended that parents establish the biological and moral bases for sexual activity early so that when their children become teenagers they will make decisions about their sexual behavior that can eliminate the risk of getting AIDS.

Most teenagers want to know more about AIDS. In a public poll conducted in the fall of 1986, 86 percent of parents questioned agreed that sex education courses should be taught in school; and, of those, 95 percent agreed that such courses should teach 12-year-olds about the danger of AIDS. The Nation's system of public and private schools can play a vital role in assuring that all young people rapidly understand the nature of the epidemic they face, and specific actions they can take to protect themselves from becoming infected, especially during their teenage years, as well as when they become adults. We believe that: (1) the scope and content of AIDS education should be determined locally and should be consistent with parental values; (2) that information developed by the Federal government

to educate young people about AIDS should encourage responsible sexual benavior -- based on fidelity, commitment, and maturity, placing sexuality within the context of marriage; (3) any health information provided by the Federal government that might be used in schools should teach that children should not engage in sex before they are ready to marry.

These principles, approved by the President and cited by Secretary Bowen in the AIDS information plan, will be followed to the fullest extent in the development of any Federal educational material that might be used in schools.

According to information gathered during the winter of 1986, 40 of the Nation's 73 largest school districts were providing education about AIDS, 24 more were planning such education. Of the districts that provided AIDS education, 90 percent provided it during 10th grade 63 percent provided it during 7th grade and 60 percent provided it during 9th grade. I agree with Mayor Koch of New York that, in addition to not using IV drugs, abstinence from promiscuous sexual activity or monogamy is the only way for adolescents to avoid getting AIDS.

School Health Education

Because AIDS is a fatal disease, and because educating young people becoming infected through sexual contact can be controversial, health education programs about AIDS should be

developed as quickly as possible by all school systems with parental participation. In each community, parents, representatives of the school board, school administrators and faculty, school health services, local medical societies, the local health department, students (at appropriate grades), religious organizations, and other relevant community organizations should be involved in planning and periodically assessing programs of school health education about AIDS.

It is most important that teenagers receive education that specifically would enable them to understand and avoid behaviors associated with transmission of the AIDS virus. A single pamphlet, a single filmstrip, a single lecture about AIDS will not be sufficient. Similarly, education about the biology of the virus, the symptoms of the disease, or the social and economic consequences of the epidemic will do little to influence its spread. Programs need to be designed specifically to help teenagers adopt the kind of behavior which will keep them from contracting this disease. It is especially important that school sex education programs emphasize to teenagers the need to refrain from sexual intercourse until they are ready to establish a mutually faithful, monogamous relationship. I believe that it is possible to focus on preadolescent youngsters and produce a generation of teenagers who will remain abstinent until they develop a mature,monogramcus relationship.

Outlined below are some of the efforts being undertaken by agencies of the Public Health Service that focus on the problem of AIDS among teenagers. All of these programs are meant to assist local organizations in establishing their own prevention programs.

CENTERS FOR DISEASE CONTROL (CDC)

In fiscal year 1987, CDC will work with national educational organizations and State and local departments of education to develop information that may help schools across the Nation implement effective education to prevent the spread of AIDS.

National Organizations

CDC will award cooperative agreements to about seven national organizations that represent parents, school boards, school administrators, teachers, medical professionals, church groups, and other important professional and voluntary health and education organizations. In addition, four awards will be made to national organizations that respectively can develop AIDS education programs for minorities, mainly Black and Hispanic; develop programs for college students and develop programs so that colleges of education deliver inservice and preservice training to teachers so that they may be able to provide effective education about AIDS. Finally, one cooperative agreement will be awarded to a national organization that can

help all 56 State and Territorial departments of education to assist schools in their respective jurisdictions provide effective education about AIDS.

State and Local Departments of Education

In 1987, CDC plans to award cooperative agreements to ten State departments of education and 12 local departments of education that serve jurisdictions with the highest cumulative incidence of AIDS. Nineteen States that had reported 200 or more diagnosed AIDS cases, and 18 cities that reported 150 or more cases, by the last day of 1986, will be eligible for these awards. The purpose of these agreements is to provide fiscal support and technical assistance to help State and local education departments implement intensive education about AIDS principally for school-age youth, in and out of school.

Training and Demonstration Projects

In the fall of 1987, CDC will provide additional support to each of three local and one State departments of education to also establish training and demonstration projects. Support consequently will be provided to at least 300 local and State department of education personnel from other jurisdictions to attend these projects and to receive assistance for implementing effective school health education about AIDS in their own areas.

Development and Dissemination of Educational Curricula and Materials

Technical and limited fiscal assistance will be provided to help relevant private sector organizations develop, evaluate, and disseminate a variety of scientifically accurate and effective educational materials for school-age populations. CDC has established a subfile on School Health Education about AIDS within its Combined Health Information Database system, an annotated computerized bibliography that can be easily accessed. The file describes age-appropriate AIDS education materials, curricula, programs, research, and resources that have already been developed and how to acquire them. A compendium of selected resources will be published and disseminated periodically.

Research and Evaluation

CDC will compile synthesize, apply, and disseminate the results of research that could improve the effectiveness of school health education to prevent the spread of AIDS; and will assist national, State, and local agencies to evaluate and consequently improve their program efforts.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION (ADAMHA)

An example of research on AIDS conducted by the National Institute on Drug Abuse that focuses on teenagers is an AIDS demonstration/training project entitled AIDS Prevention Among High Risk Adolescent Populations. This-one year project to be awarded in fiscal year 1987 is designed to identify specific subsets of adolescent populations at the highest risk for AIDS and develop strategies for reaching, communicating AIDS information to, and counseling them. After an initial data collection effort, experts will be brought together to review what has been learned regarding informing and counseling adolescents. A guide will be developed based upon clinical experience and research. A training program will be tested and developed, also.

In addition, a group of young people who appear to be at high risk for contracting AIDS are adolescents who are homeless and living on the streets or in shelters. The National Institute of Mental Health, in collaboration with other PHS components and the Administration on Children, Youth and Families, has organized a workshop on June 22-23 on AIDS and Adolescents in Crisis to discuss prevention, intervention and treatment for this high risk group.

HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)

Two of the four AIDS Service Demonstration Program grant projects administered by HRSA have components on adolescent prevention/ eduction:

- The New York State Department of Health has awarded a three year subcontract to the Institute for the Protection of Lesbian and Gay Youth. HRSA and Robert Wood Johnson Foundation grant funds are assisting them in developing AIDS/HIV infection materials and teaching strategies for adolescents, and provide direct counselling services at a "drop-in center" to high risk adolescents, some of whom are homeless, and many of whom are or have been involved with prostitution.

- The Los Angeles Department of Health, AIDS Program Office, has three subcontracts supported with HRSA service demonstration funds, that reach adolescents in Black and Hispanic communities in Central, South Central, and East Los Angeles. The Watts Health Foundation and the Minority AIDS Project are involved with risk reduction education programs, outreach and referral services targeted to minority youth. El

Centro Human Services organization is attempting to reach adolescents at risk, particularly IV drug abusers, in a predominantly Mexican American area of Los Angeles.

NATIONAL INSTITUTES OF HEALTH (NIH)

The National Institute of Child Health and Human Development (NICHD) plans to support several research initiatives that are expected to provide valuable information related to AIDS and teenagers. NICHD will request grant applications for projects that would describe and explain the behavior patterns that put teenagers at risk of exposure to HIV and for projects to study the processes by which individuals incorporate concerns about sexually transmitted diseases and AIDS into decisions to be sexually active and to use or not use contraceptives. The Institute also plans to support seminars concerning AIDS for obstetricians, gynecologists, and pediatricians. These seminars, planned for the fall of 1987, will provide information for further dissemination to other medical providers, patients, and educators.

CONCLUSION

Although 148 cases of AIDS have been reported to date among young people aged 13 to 19; there is hope that:

- AIDS is not common yet among adolescents.
- We know a lot and can know more about how to effectively work with this age group.
- For many of our teenagers, this would be a preventive intervention, especially in very young teens. And after all, it is easier to prevent some behavior than to change it.
- AIDS may give us the impetus to deal knowledgeably and effectively with a whole range of health-related behaviors in adolescents.

Let me conclude with a quote from the Surgeon General's Report on AIDS, "Those of us who are parents, educators, and community leaders, indeed all adults, cannot disregard this responsibility to educate our young. The need is critical and the price of neglect is high. The lives of our young people depend on our fulfilling our responsibility."

Thank you for the opportunity to testify. I would be pleased to answer any questions.

Chairman MILLER. Thank you very much, and I appreciate your testimony. Let me ask you, when you say that you agree with Mayor Koch that, in addition to not using intravenous drugs, abstinence from promiscuous sexual activity or monogamy is the only way for adolescents to avoid getting AIDS, how does that work into what we know about the sexual activity of teenagers? I mean, what are you telling us, that you're going to modify the behavior of teenagers who are already active?

Dr. KOOP. That is much more difficult to do than to work with those who are pre-adolescent. I think it's entirely possible, with sensitive, caring, considerate sexual education, in the context of family values, to raise a whole generation of adolescents who will be abstinent until monogamous.

I think the sexual revolution and many liberal attitudes toward sexual behavior have swung the pendulum very far one way, and I think we could go back to a system that, at least for our grandparents, was the mode of the land.

Chairman MILLER. I assume what you're saying is that you think that AIDS is, in fact, the catalyst to provide that to be done; that you're now going to get parents who, certainly in recent history—and I'm not even sure in the time of our grandparents—talk to their children about sexual activity but, in any case, certainly, in recent history there's not a large demonstration that parents are sitting down in the numbers that would be required to talk to their children about sexual activity, their sexual activity, sex education, whatever the terms are that you want to use. You obviously believe that AIDS can become the catalyst to do that?

Dr. KOOP. I do, sir. You know, when something as bad as AIDS is on the horizon, I think you look around for anything good that might come from it, and I think, indeed, what you suggested could happen.

I think that my experience of 40 years in working with children and with parents would lead me to believe that no parent ever disagreed with me that it was, indeed, his or her privilege and responsibility to teach their youngsters about sex. My difficulty was that they very seldom did what they thought was right.

And I think that the threat of AIDS could be the catalyst that says we've got to wake up and do this—and you very wisely said—whatever you want to call sex education. Unfortunately, it's a buzz word, and just to mention it polarizes any audience.

But if we call it something like human development studies and do it in the loving, caring context of family relationships, I do think we could do a lot to influence teens to become the proper kind of teens.

Chairman MILLER. In that context, in the kind of program—it's not a program. We're just discussing what you said here in the statement—but what you envision there—I've read other statements by you—you're really talking about starting at a very early age with very young children to start to lay the basis, the foundation for their greater understanding by the time they're teenagers.

Dr. KOOP. That's correct, sir. You know, children begin to ask questions about sex as soon as they are toddlers, but they only want to know two things: where do babies come from, and why do I look different from my brother or sister?

From the ages of about 6 until 9, they seem to care nothing at all about sex; and at 9, they've learned a great deal from what they see on television and what they'v heard from their friends, and their questions about sex at 9 are quite sophisticated.

If you wait until a child is an adolescent and is fighting all these new urges and feelings for himself, it's very hard for him to approach sexuality in an abstract way. And that's why I think most people who are concerned about the sexual activity of our teenagers believe that we have to build these foundations before the children themselves go through puberty.

Chairman MILLER. Is what you're proposing here, is this different from engaging in a discussion with adolescents about safe sex, about the use of condoms? Is this a change in attitude?

Dr. KOOP. No. I think you have to look at different target groups, as I do as the Surgeon General. And as I'm talking about AIDS, in my mind, at least, I have three target groups: first, those who have gone through adolescence, young career people, post-college age. I think that some statistics, and certainly anecdotal reports, would indicate that this group has indeed listened to some of our messages and are beginning to change their lifestyles.

Then you go down to the pre-pubertal, pre-adolescent group, and I think there is our greatest opportunity to plan for the future.

The remaining group, the adolescents themselves, are extraordinarily difficult to deal with. This is not only because of their psychological situation, the fact that they think you're always talking to someone else and that they somehow will escape, because of their perceived immortality, the things that you're talking about that have dire consequences.

It's also difficult because about 70 percent of them are sexually active. It's very difficult to get them to change that activity, and that is when, if they haven't listened to the message of abstinence or monogamous relationships on a long-term basis, you have to introduce such things as condoms, knowing that it offends the sensitivities of some people. But, on the other hand, as a health officer, and even knowing that condoms are not 100 percent safe, I can do little except to offer that to youngsters who are sexually active.

Chairman MILLER. Let me ask you if you believe that that's integrated into this entire program. My youngest son just graduated from high school this last week, and having gone through this with two sons, I have never found them or their friends to listen to 100 percent of what I say or to do 100 percent of the things I tell them that I think they should do.

I'm a little concerned that there's a notion here that if we do this, we sort of end up with 100 percent prevention. Clearly there is a percentage of adolescents whose parents have been very responsible—have spoken to them about their responsibilities, about the burdens of sexual activity, about the pleasures of sexual activity, have gone through the whole thing, where they've had good sex education in their classes—and they still become sexually active.

And it seems to me that at some point—at that point, they ought to also have the knowledge about safe sex. We shouldn't be coming around later after we determine that—if you're going to do this, it has to be a fully integrated education.

Dr. KOOP. I agree with you absolutely, and your experience as a parent is, unfortunately, not unique. This is the way teenagers are. I've been through it myself. I'm now going through it with grandchildren, so it goes on from generation to generation.

I have never suggested that this not be part of a plan. I have divided the target audiences into three groups, and I think you have to deal with them differently.

But, let me just tell you a little information from the National Survey of Family Growth conducted several years ago. They agreed that, while about half of teenagers use some method of contraception at first intercourse, those who did use a method tended to use the condom. The younger a person is who's trying to protect against pregnancy—and this survey was done before we were concerned about AIDS—the more likely a person is to use a condom. Older people use other forms of contraception.

So, I do think that it is a teachable technique, but it's important to know, sir, that most people in this country who have used condoms have used them for contraception. And if you use a condom for protection against AIDS the way you would use a condom for contraception, you will miss the boat and not protect yourself.

So, when we talk about condoms, the education that goes with that has to be extraordinarily explicit.

Chairman MILLER. Let me ask you one final question. We start a new school year in September. What kind of shape are we going to be in across the nation to start imparting this knowledge at least to high school students, if not younger students?

Dr. KOOP. Well, I gave you some information about how many school boards do this. I am flooded constantly with suggestions about sex education curricula. I get anecdotal reports. Fortunately, I also get very comprehensive reports from large school districts, such as the one in Fairfax, Virginia.

They have moved toward comprehensive sexual education of youngsters from early grades upward but, fortunately, with curricula that stress responsibility and morality. And I have been very gratified in working with a number of educational groups as I prepared the Surgeon General's report to see that the questions of morality and responsibility no longer make them stumble. They agree that this is the way that we have to go.

Chairman MILLER. Congressman Coats.

Mr. COATS. Thank you, Mr. Chairman. Dr. Koop, is it fair to say that if we are asking young people or any age population to modify their behavior, their sexual behavior, in a way that would cause them to accept a mode of living that involved abstinence or monogamous relationships, that we're only going to really be successful there if we can link the need to change that behavior to the consequences of not changing the behavior?

It seems to me as long as there is a belief that a person will not contract AIDS or that there are safe ways of preventing AIDS from happening through sexual transmission, that we're not going to see dramatic changes in behavior.

I think it's analogous to the drug situation. For a long time people thought that casual use of cocaine or even more than casual use of cocaine didn't really produce that great a risk. When some prominent people died from overdoses of cocaine, suddenly the mes-

sage of "Just say no" or "Don't do drugs," or whatever, became more meaningful, and I think it did start to influence people's behavior.

So, I guess that leads me to the question of: what is the risk to our teenagers? And what I'm concerned about is the fact that we may be sending messages about abstinence that won't really hit home because our young people, as you said, believe they're immortal. They are high-risk takers. They're experimental in their behavior. And as long as they are operating under a perception that the risk is very, very small, it may not really cause a change in behavior.

That's why I guess I would like you to elaborate a little bit on why it is that so few under the age of 20 actually have contracted AIDS. I think you said 1 percent under 20, yet you said they're highly vulnerable.

Now, are we going to see an explosion in these numbers? Are these the early results? What's the story here?

Dr. KOOP. The one thing we would like to be able to tell you, and we can't, is whether we are standing on the threshold of a heterosexual explosion of AIDS the way we stood on a homosexual explosion back in 1981 and 1982.

The risk to the heterosexual population now comes from several sources. There are bisexual men who pass the virus on to women; they coming out of the homosexual community. There are people in the drug-abusing cult who are also spreading the disease, not only through dirty needles, but also through sexual contact.

So, there is now crossover into the heterosexual community from two groups of people who primarily made up the universe of AIDS.

Then those people who are now contaminated with the virus are able to pass that on heterosexually. We don't have as many statistics in this country as we'd like to have now, unfortunately. We will be gathering them. But, we can look to other countries where homosexuality and drug abuse are not major factors, but where the prevalence rate of seropositivity with antibodies to the AIDS virus is extraordinarily high. In some African countries, AIDS affects 11 percent of the population.

And there—although there are some problems in interpreting the data because of cultural differences, and because of other types of ill health in those underdeveloped countries, that pertain to the epidemic—it does seem that this virus can be passed heterosexually.

We will know, I think, in 6 to 8 months as we see the curve of occurrence in the heterosexual population go up. About 4 percent of the AIDS patients in this country are now AIDS patients from the heterosexual community.

As we look back and see how we got there, it would seem that the curve of heterosexual prevalence is rising more rapidly than the curve of AIDS itself. We don't want to make predictions that seem hard and fast, but I think we'd give you a better answer in 6 to 8 months as we see what happens.

Mr. COATS. The New York Times on Monday had an editorial called "AIDS, Good News and Bad News," and in that they quoted Dr. Jaffe, who's the chief AIDS epidemiologist at the Center for

certain things; that parents have to be involved with schools in developing the curricula, and that what you expect to have as a plan for South Bronx is quite different from what you'd have for Des Moines.

Mr. COATS. Thank you, Mr. Chairman.

Chairman MILLER. Congressman Weiss.

Mr. WEISS. Thank you very much, Mr. Chairman.

Dr. Koop, you called to our attention the fact that a certain line in your testimony had been changed; that it's not as it appears in our text.

That line, as you read it, "I agree with Mayor Koch of New York," et cetera, is the same as it is in the text that I have before me. What had it been before?

Dr. KOOP. I'm quoting Mayor Koch, so I wanted to quote him directly and specifically. He did not say promiscuous, and he didn't add monogamy. So, the way the sentence should read is, "I agree with Mayor Koch of New York that, in addition to not using IV drugs, abstinence from sexual activity is the only way for adolescents to avoid getting AIDS."

Mr. WEISS. I see.

Dr. KOOP. I didn't want to misquote him.

Mr. WEISS. In the course of the past four years the subcommittee which I chair on Government Operations, Human Resources and Intergovernmental Relations has held a series of hearings on the AIDS epidemic. Although the technical, scientific, medical, and public health people who came before us really did a magnificent job, and presented their research results in a forthright way with a clear message, the problem we always had was with the so-called policymakers and budget number-crunchers, who made totally non-scientific and non-medical judgments, which they then imposed on the scientific and technical people.

And as we followed the public debate, and the discussion that you've been engaged in over the last months, I have had the same sense; that, in fact, you were attempting to put forth a clear and scientific position as the chief public health officer of this nation, while the people without technical knowledge or your responsibility were making policy judgments based on totally different premises.

The question I have, really, is: to what extent has this in-fighting that's gone on between the scientific technical people within the administration and the non-scientific and non-technical people impaired the fight against AIDS?

Dr. KOOP. It would be hard for me to say how it had impaired the fight on a national basis, but I can tell you that I have never said anything that I didn't believe, and I have stood by what I thought a responsible health officer should say. I have tried to be as apolitical as possible and to provide knowledge on which other people in this country can act. I see my role as a health officer to provide reliable information that then can be taken up by educators and passed on to teenagers in the context that we're discussing this problem this morning.

Mr. WEISS. Yes. I think you have, but as I listened to your statement and read your statement today, I could not help but be struck by the fact that, obviously, the tremendous public pressure and re-

Disease Control. And I'm quoting from the New York Times article.

He said, "We really have not seen much evidence for the risk of virus outside risk groups. For most people, the risk of AIDS is essentially zero. Why it isn't getting out beyond the immediate sexual partners of risk group members, I don't know."

I'd like you to comment on that because I think that relates to my earlier question; that is, if this type of information particularly is prevalent and particularly is prevalent in our teenage community, there's likely to be an attitude of, well, Dr. Koop and Secretary Bennett and others—Dan Coats and other people's messages about abstinence and about waiting until you can establish a faithful monogamous relationship is really just a bunch of old-fashioned morality, and it doesn't affect our group since we're not engaging in sex with a risk group, what would be your response to that?

Dr. KOOP. I would say that I would agree that when a youngster who doesn't want to change a lifestyle and wants to continue to feel as though you're talking to someone else reads statistics like that, it does give him some courage to go on the way he's been going.

But, I can tell you that there are other bits of evidence that aren't that good. For example, the military keeps very accurate statistics of what happens to the spouses of the people who tested seropositive, and they have made the flat-footed statement that the spouse of a person who is HIV positive is at very high risk to contract AIDS. This is also true in some of the things that Dr. Redfield has done at the Walter Reed Army Research Institute.

So, I think that the evidence is there that heterosexual transmission takes place.

We also know about in two studies that were done in Florida. One cohort, married couples, where one had HIV positivity, who would not use condoms, was compared with another cohort where they did use condoms. Transmission from the non-condom users was ever so much greater than in the group that did try to protect themselves.

So, I think that, as I stated a moment ago, we're on the verge of knowing more. We may be at the beginning of an explosion. I hope we're not, but we don't have enough solid statistics behind us to predict the future on teenage heterosexual transmission. But if we are to be competent and reliable health officers, we paint the facts as best we can, but we also point to the worst scenario.

Mr. COATS. One last question, Mr. Chairman.

Dr. Koop, Secretary Bennett has testified that if—as we develop programs, human development programs or sex education programs in our schools, that we would be wise to leave some flexibility in the system so that a program developed, say, for a small town in central Kansas might be different than a program developed for an inner city New York school system, given the fact that the behavior is different and that the degree of risk is different.

Do you agree with that approach?

Dr. KOOP. I've stated it publicly many times and also in my writings that that is absolutely the case. I've pointed to several things: the developmental age of the child is much more important than the chronological age when you're saying when he should learn

action and criticism that you have been under, both from inside and outside the Administration, has had an effect. Not that you've not told us the facts and the truth as you see it, and as you've always been saying, but that your focus is different.

This statement, as you read it to us, is exclusively on abstinence and monogamous relationships. It just seems to me that, perhaps without your even being aware, they've had an impact on you and I wonder whether you have any sense of that.

Dr. KOOP. I don't agree with you, Mr. Weiss. I'm quoting Mayor Koch here, but let me tell you what my public health message about AIDS has been from the very beginning, and I have not altered it.

I have said from the start that the only absolutely certain way to prevent AIDS is to be sexually abstinent. I go on from that and say that that is not, for most adults, a viable alternative and, therefore, it is fortunate that there is such a thing as mutually faithful, monogamous relationships.

And the way I put it is to find a partner that you love and respect and make a union with that individual and expect that he or she will be as faithful to you as you are to him or her.

Then I say if you do not heed these two very pertinent and truthful health messages, and you continue in a lifestyle, for example, with multiple sexual partners where the risk goes up, then the only thing that we have to offer you in the way of protection is the use of a condom. But please remember that while condoms may be somewhat safe—not reliable 100 percent—people are not reliable in the manner in which they use condoms. And, therefore, it is not an answer, even to those people who do persist in a lifestyle that exposes them to AIDS. It's better than nothing, however.

Mr. WEISS. Well, here are the figures that you've cited: 70 percent of teenagers have engaged in at least one sexual relationship, intercourse, by the age of 19; 50 percent by the age of 16. So, even assuming your argument is valid—that you can train and teach people for the future if you start them early enough—given the current crisis that we're going through, it just seems to me that primarily focusing on the abstinence is opening the way for spreading of this disease.

Dr. KOOP. I don't, sir. I have to go through abstinence and monogamy, but remember my three target groups. I'm quite aware of the fact that it's very difficult to reach teenagers, especially to ask them to change a lifestyle in which they have now become engaged. And that's why I have to, when I'm talking to teenagers, stress the use of condoms and their proper use more than abstinence and monogamy.

Mr. WEISS. And one final question, if you will, Mr. Chairman.

On March 16th my subcommittee held a hearing. We had the Center for Disease Control and a panel of your people from HHS before us. One of the big problems we've had is that money that the Congress appropriates often doesn't get spent.

In March—half way through the fiscal year—none of the 13 million dollars that has been set aside for the School Health Initiative by CDC had been spent. This is at a time when education is the only technique for controlling the spread of the AIDS virus.

A few months have passed since March. Do you have any information as to what is being done in the School Health Education Initiative? Is that money beginning to be spent finally?

Dr. KOOP. I talked with Dr. Mason at CDC yesterday and, if I understood him correctly, he is feeling much more comfortable about the progress they are making and will be able to deliver some things in usable form shortly.

Mr. WEISS. So, so far, none?

Dr. KOOP. I think not so far, sir.

Mr. WEISS. Thank you very much. Thank you, Mr. Chairman.

Chairman MILLER. Congressman Packard.

Mr. PACKARD. Thank you, Mr. Chairman.

I want to pursue just a little bit further the line of questioning and discussion by previous members of the committee.

In drug education our primary thrust has been to teach our young people to say simply "No" to drugs. In your statement and in your agreement with Mayor Koch's statement, are you recommending, that in sex education programs that that becomes our first line of defense, teaching young people to say "No"; in other words, abstinence?

Dr. KOOP. Yes, sir, and I would like to separate it into those who have not yet entered adolescence from those who have. The reason I stress the difference in teaching pre-pubertal youngsters, is that if parents do their part, they will inculcate in their children their own ethical, moral, and religious principles, which then can be bolstered by the curriculum which they have had a part in constructing. That's why I say it is possible to look forward to a new generation of teenagers, properly taught, who could remain abstinent until monogamous.

That's quite different when you approach that 70 percent of sexually active youngsters and say, "Just say no." They laugh. They don't want to say no, and if they try to say no, they find that's very difficult.

And for them, I think, without being overly judgmental, you've got to say, if you don't heed these other things we've said, then you've got to protect yourself.

I was talking to a group of teenagers recently, and I was talking about this problem of being monogamous, and I said, "And I mean long-term monogamy." And this girl said, "How long, a semester?"

Mr. PACKARD. Is that a different thrust, in your judgment, in our sex educational activities than what we've had in the past?

Dr. KOOP. No question about that. You know, I've used this phrase before: before some of my critics knew there was such a thing as sex, I was out on the stump talking against sex education that was the development of sex technique without responsibility or morality.

And I think that one of the most encouraging things that I've seen in the last six months is the number of responsibility-based, morally based sex curricula that are in the schools.

The one that is being used here in Fairfax County School District is a remarkable one which I have plugged because I think it's so good. It's called Sex Respect. And it teaches children respect for themselves and for others but, in addition to having a syllabus for the teacher and a text for the children, there is a guidebook that

goes home to the families. But, it's comprehensive enough to send a different one to Protestant families and to Catholic families, so that they can inculcate the teachings of their own religion at the same time as they bolster the education in school. I think that's perfect.

Mr. PACKARD. Thank you very much. I'd like to become a little more technical on the disease as it relates to the teenagers now.

Are the symptoms for a seropositive or an AIDS carrier, a teenager, the same as they are in adults? Do we see any differences in the way the disease or the seropositive carriers respond from adults?

Dr. KOOP. No, sir. We know that young children, those who pick up their virus either through the mother's blood or during birth itself, have quite a different course, but I think that for purposes of diagnosis, teenage symptoms and signs are those of adults.

Again, I remind you, we don't have that much experience yet, and there may be other things that turn up we're not yet aware of.

Mr. PACKARD. Do we have a better source of statistical data from Africa or other places rather than our own society?

Dr. KOOP. Yes, we do, but the difficulty in some of those underdeveloped countries rests in the lack of resources they have to gather such material.

But, for example, we do know that young men in this country who have been found to be seropositive when they applied for admission to the armed forces, indeed did have signs of dementia that are not common yet in our experience with AIDS. So it may be that people of that age group may have the virus go directly to their brains, as has been demonstrated, and they may turn out in days ahead to have more neurologic complications early than older people. We do not yet know that.

Mr. PACKARD. Is the spread of the disease or the virus possible by—like it is other diseases—by, say, a dentist or a hygienist or a physician in terms of instrumentation? Does sterilizing instruments remove the virus, and how sure are we of that process, or can the spread of it be from blood to blood through instrumentation or improper——

Dr. KOOP. Well, let me make it clear, sir, that the virus is found in many body fluids, but exists really in high enough concentration to be transmitted only in blood and in semen.

Now, when you're in public health, you make rather flat-footed statements knowing that there is always the remote possibility that there could be another mode of transmission.

It is possible, although improbable, that a person who had an open running lesion in the mouth could transmit AIDS to a dentist who had a similar thing on his finger if he didn't wear gloves.

The point of all this is that the guidelines that we have published for the protection of individuals from others, if followed, will indeed protect them.

When it comes to the virus itself, it's a very fragile virus, and it is easily killed by sterilization and, indeed, even by a bleaching solution.

Chairman MILLER. Your time has expired.

Mr. PACKARD. Thank you.

Chairman MILLER. Congressman Rowland.

Mr. ROWLAND. Thank you, Mr. Chairman.

Dr. Koop, over the past several months I've read a lot in the media about AIDS, listened to a lot in hearings. In fact, this past Sunday I was watching a news program where a member of the Cabinet and a member of the Senate were engaged in a discussion or a debate that was almost childish. It almost got into a shouting match.

It seems to me that we have been discussing AIDS and debating AIDS in an atmosphere of partisan politics and philosophical differences, and we don't have any unified effort coming from the Congress of the United States about how to address this problem.

The scientific community is working very hard to try to address this problem, and they're getting mixed signals, it seems to me, from the leaders of the country about how to deal with this problem.

I have a great deal of concern about that as a medical person. I feel that if we don't get some sort of unified policy and let our scientists know what to do and which way to go, even though they're working very hard, that we're going to wind up with some kind of policy that is really not going to address this problem, which is almost to the point, I believe, of being overwhelming.

You talked about the possibility of an explosion in the heterosexual community. I think people in general probably don't even realize the threat that AIDS poses, and I think the medical community probably doesn't really realize that.

And I just wonder if you have a feeling of uneasiness about the policies that we—the non-policies that we have in this country.

Dr KOOP. Well, I would say immediately that I am also gratified with the changes I've seen in the past six months. You mentioned physicians. Six months ago, a great many physicians were very concerned about modes of transmission other than sexual. I think most of that has been straightened out, and I think that the efforts that organized medicine, such as the American Medical Association, have made to educate their own have been commendable.

So that, although I do share your uneasiness, I think we are making progress, and I have to remind myself that we're confronted with something that we've never been confronted with before. And considering that, I guess I'm relatively satisfied that we're going in the right direction, and I guess we'd always like to go faster and deeper.

Mr. ROWLAND. Well, I think we're moving along very rapidly in the scientific community. The disease has only been around, to our knowledge—we've only been aware of it for some six years, and I think that, really, great strides have been made in the scientific community about testing, research for a vaccine or an antiviral agent.

I was talking with Dr. James Curran from the Center for Disease Control, and he's in charge of the AIDS project, as you know, and he was telling me that we're making projections about the number of AIDS cases that we've got, but we really don't know. We don't know how many people will test seropositive out there.

In reference to teenagers, we really don't know because we haven't been doing that much testing in that particular group, and in the population in general; is that right?

Dr. KOOP. That's correct.

Mr. ROWLAND. Do you agree with that?

Dr. KOOP. I think the projections that the Public Health Service has made have been made with scientific accuracy. Because this a disease with such a long incubation period, when we predict that in 1991 we will have already had 270,000 cases diagnosed as AIDS, these cases are already in the pipeline. It's not like saying next year the flu might be the Hong Kong type.

Mr. ROWLAND. So, they overlap?

Dr. KOOP. They overlap, and I think that the thing that we don't know with any accuracy is what number of people in our country are asymptomatic carriers of the virus.

And CDC, you know, is doing a study, very scientifically, based on a small number of people in this country, that should give us a pretty good idea of what the prevalence is in our 240 million people.

Mr. ROWLAND. Thank you, Mr. Chairman.

Chairman MILLER. Thank you. Dr. Koop, if you could stay with us because I know other members of the committee have questions, we're going to recess for about ten minutes to go make a vote, and then we'll return right away. Thank you.

[Recess.]

Chairman MILLER. Congressman Rowland, I think you have another question.

Mr. ROWLAND. Dr. Koop, I recall during World War II the 17- and 18-year-olds that were in the service at that time, there was a poster in most of the barracks that had a real nice-looking lady on it, and it said, "Beware," "Be Careful," and it suggested the use of prophylactics.

Would it be worthwhile, do you think, to put up something like that for the education of our teenagers because we were teenagers at that particular time?

Dr. KOOP. Well, I think it would be, sir, and I think posters are very important. While you were out voting, some of us have been discussing here the fact that we have been talking as though all teenagers belong to networking families and affluent societies and two parents. My greatest concern is trying to reach the people who, at the moment, seem to be most involved in the behaviors that produce the thing we're talking about. And they would be primarily urban, black and hispanic youngsters who already may be disadvantaged, may have been through a teenage pregnancy and/or an abortion, may have not enough education to be employable, and many times are functionally illiterate, this is the major thing I want to stress.

I think we have to try to reach them with some innovative and creative things but, in the meantime, there's nothing that strikes their attention like a poster or a billboard. It may be offensive to the sensibilities of other people who are not worried about these things, but I think the threat is so great that we have to sort of overlook that.

Mr. ROWLAND. Thank you, Doctor. Thank you, Mr. Chairman.

Chairman MILLER. I'd like to just, if I might, follow on to that question. I share the concern about the questions this morning suggesting that we were dealing with teenagers, all of whom were

going to be in homeroom class, all of whom were going to be awake during that class and interested and concerned, and who were going to receive all of this information.

But, it appears that you can get a set of circumstances where you start to increase dramatically the vulnerability of this population you just mentioned: urban, black, hispanic, poor, sexually active. You start to get a population that appears, historically, to have a higher rate of sexually transmitted diseases, maybe than the population as a whole. You then have a concentration of what would appear, in the event of any real movement of this disease into the heterosexual community, to be a very vulnerable population.

And I just wonder how the prescription differs with respect to those individuals and how we get to those individuals. We know in a number of our urban areas and in the minority community we're losing—let's just shorthand it—40 to 50 percent of our young people between the 9th and 12th grade are leaving that setting where we had an opportunity to talk to them about this. What do we then do?

Dr. KOOP. Well, I think it's an overwhelming problem, and I don't have solutions. I know that it's got to be a creative and innovative type of education that doesn't seem to be on the horizon.

I can also tell you that, as I have talked to clergymen who try to reach these youngsters, as I've talked to homosexual groups who are doing an educational program in places like South Bronx, New York, and Harlem, they find it overwhelming also; these are very difficult people to reach. They're not the kind of people you can ask to sit down and read the Surgeon General's report.

I've thought of comic books. I've thought of finding places where they are a captive audience and run a short, graphic videotape. It's a difficult group.

Chairman MILLER. The operative sentence in that answer is it's not yet on the horizon. I mean, we're really nowhere with that population at this point; is that correct?

Dr. KOOP. It's my belief that we are nowhere with them.

Chairman MILLER. I believe it's in your report that you ask that by 1990 every junior in high school have this kind of education. That's a fair lag time, isn't it? When you have something as serious as AIDS, to suggest that we may not get there for another two and a half, three years. Are we going to obtain that goal, and is that goal urgent enough in light of the problem?

Dr. KOOP. Well, as I said this morning, our goal should be to get this kind of information as rapidly as possible to the target groups we're trying to reach.

If we're going to talk to pre-adolescent youngsters, we're going to use the support of one parent telling his child and another parent telling his child and so that they can say, well, gee, that's what my mother said, too; I guess they must be right. This would be supported by the same message in school. That, I think, is going to take time.

That doesn't mean that while we're preparing the pre-adolescents to be responsible adolescents, we ignore the adolescents. We've just got to do both at the same time.

Chairman MILLER. Congressman Bliley.

Mr. BLILEY. Thank you, Mr. Chairman.

At a hearing up here last week Dr. Redfield said that the failure rate among condom use was 17 percent. Do you agree with that?

Dr. KOOP. I think you have to know how the study has done, how well educated the people were in general, and how well educated they were in reference to the study. Most people in this country who have any experience with condoms have used them for contraception, and the figure usually given is a 10 percent failure rate. But, the way that's calculated is to say, here is a group of people who relied on condoms, and this is what they did in reference to failure.

Now, some of those people practiced rhythm until they thought they were fertile and then they used condoms. Others did things that, if you were properly instructed, you would not do.

But when it comes to sexually transmitted disease, you will recall that in my report I say that if you are to use a condom, it must be used from start to finish. That means before any genital contact at all, a condom is in place.

More importantly, at the other end of sexual intercourse, there has to be disengagement of that couple before the condom slips off. And if you go over certain cohorts that have been studied in reference to contraception, they are properly taught the failure rate isn't 10 percent; it's only 2 or 3 percent.

And that's why I say you can't just say use condoms, but use them properly. And, again, as you get explicit about these things, you run into more and more sensitivities in some parts of the population that don't like you saying these things publicly, but we have to.

Mr. BLILEY. Well, as I understand it, the study was between husbands and wives, by the Army, and that the failure rate was 17 percent.

Dr. KOOP. Well, I'm surprised it isn't more than that, knowing how people are, and they're not using condoms for sexually transmitted disease but for contraception.

Mr. BLILEY. Well, having just said that, Dr. Koop, isn't the perception among teens that condom use will automatically make them safe from AIDS?

Dr. KOOP. There may be that perception, but nobody ever got it from me, because I never mention the word condom without in the same breath adding the clause, however, condoms are not 100 percent safe.

Mr. BLILEY. And then you would advocate that in the instructions given to these teenagers on the subject of AIDS and protection that it be emphasized that condoms are not 100 percent safe, and that abstinence is the best way?

Dr. KOOP. I would do that. And if I'm talking about condoms, I'd try to make the point with teenagers that to focus on the safety of the condom is improper. It's the safety of the people who use them that makes the difference.

Mr. BLILEY. Earlier, in response to one of my colleagues' questions, you thought that the incidence or the chance of contracting the virus is relatively remote outside of sexual contact.

Recently, there have been reports, for example, the CDC reported that three hospital workers became infected with HIV virus after the blood of AIDS patients was splashed on them. All three work-

ers experienced—only one exposure to AIDS infected blood. Two of the three workers were wearing protective garments—were not wearing protective garments because they didn't know that the patient was infected.

Don't you feel, as a public health officer, that we have an obligation to health workers in general to inform them that the patient that they are treating has AIDS or has the virus?

Dr. KOOP. Let me say that the Centers for Disease Control has on two occasions in the past two years published extensive guidelines on the protection of health workers. I would venture to say that had the health workers in question been doing what the guidelines called for, they would not have been exposed to the virus.

The difficulty in an emergency room, sir, is that you don't have a lot of time. You can't get an antibody test done. When the patients come in, they're bleeding. People are rushing around like mad trying to save a life, and the one thing they should always do is get gloves on.

Remember that in the three cases reported, there could be extenuating circumstances in each one of them. One of the people had an underlying disease which, in itself, reduces the immune response. So, that person, you might say, was a law unto herself. One of them was attempting to push blood into a bottle in which there was no vacuum. And, so, when the blood was being pushed in, the bottle exploded, and that blood hit with the same force that you would expect to shoot a vaccination into a child. And the third individual held her finger in contact with blood for, I think the period was something like 20 minutes, and she did have lesions on her hand.

So that all of those things give you reasons to understand why it happened, and as every study that I know that's been done—and I don't wish to in any way impune the honesty of the people in question—but, there was a study just recently where youngsters were turned down by the Army because they were seropositive, and they all denied any type of high-risk behavior; go back a year later and get those same people and talk to them, and now that the acute episode is over, more than half of them acknowledge that they did, indeed, indulge in high-risk behavior and had falsified their military affidavit to that effect.

Mr. BLILEY. Well, my prime reason in asking the question, Doctor, was don't you think that it is time that when patients are normally admitted to the hospital—I'm not talking about emergency cases, but normally admitted to the hospital—that in the course of that test, they be tested for AIDS?

Dr. KOOP. I think the question is much more pertinent, Mr. Bliley, in reference to surgical patients. You know, we are losing operating room nurses now because of their fear. We have doctors who are refusing to operate upon patients, and I think that the day is not far off when testing of surgical patients, at least, in hospitals, will become much more routine.

The question now is this. Let's say you have an incidence of one infected person per thousand. That means that the operating room team is all keyed up and upset over a thousand patients; whereas, if they knew that 999 were okay, they could spend all their caution on the one patient who was positive. And I think that there will be

a growing demand for the testing of surgical patients because it is the doctors and nurses in the operating room who are exposed to pin pricks, knife cuts and so forth where the virus could be readily transmitted.

Chairman MILLER. Congresswoman Boxer.

Mrs. BOXER. Thank you very much, Mr. Chairman, and thank you for these very important hearings.

Dr. Koop, a third of my district lies in San Francisco, so, unfortunately for this Member of Congress, I have been very involved in this fight against AIDS for far too long now, maybe six years.

When I first came to Congress in 1983, most of my colleagues had never heard of AIDS, and they have been very open to helping us, and now I think we have an atmosphere in which, certainly, everyone knows about it and, hopefully, will act responsibly.

I really wanted to personally thank you for the leadership that you have shown on this. I don't think it's been particularly easy for you, and I think it's important you know that there are those of us in the Congress who have looked up to you, who have felt that you have continued to make AIDS a health issue and not a political issue, and I just want to encourage you to please continue to do your duty in that regard because once we lose that, we are in big trouble in Congress because there are all too many who are ready to play on the politics of fear. And we see it, and it's very important if we're going to get a handle on this that we act out of the highest motives, which is this is a public health issue, and what can we do to help it. So, that's by way of introduction.

In San Francisco, had we waited for the Federal government to move forward with education, we would be in a far, far worse disaster than we already are in.

As I think you well know, locally there was tremendous leadership, and I think we were the forerunners of a lot of the things that are now happening nationwide.

Education was the key and, if the statistics are correct, we seem to have turned around in the homosexual community, at least, with the spread of venereal disease, which is an indication of the spread of AIDS.

I'm a little concerned about something in your testimony only because I worry that it will hold up education across this country, and it's on page 3. You say, "The scope and content of AIDS education should be determined locally . . . and consistent with parental values." Now, I think that's very laudible, Dr. Koop.

But, here we are in the midst of what some call the worst health epidemic ever. Are we going to wait until all the parents sit down in a room and get together and agree on how the pamphlet should look?

I am—following up on Congressman Weiss' testimony—I am a parent, and I am very concerned that nobody overturn my values, but I'll tell you this. If it's the life or death of my kid, I want my kid to have the information.

So, could you respond to this, and also in context with Congressman Weiss' point, the funds have not come down to the schools. When are they going to come down to the schools? I want to know when. What is your sure and firm date? And if there's a problem or a log jam, what can we do to unclog that pipeline of education?

Dr. KOOP. In reference to the latter question, you're asking the wrong person because I don't know and I can't control it. If I had the power that most people think the Surgeon General has, you'd have an entirely different country. Now——

Mrs. BOXER. Why don't you throw your hat in the ring for President? Everybody else has.

Dr. KOOP. Please don't construe what you read there as in any way subverting education. I'm not talking about a pamphlet. I'm talking about the fact that the reason that we've had such slowness in many parts of the country in getting any kind of human development studies into schools is because there was not a coalition between parents and school boards and faculty, and that has to take place.

And the reason why I say that it has to be in line with the morals of the family and has to be decided locally—we discussed that somewhat before you came in—is that you don't do the same kind of education in South Bronx that you do in rural Montana, and that's what it means.

But, I certainly don't think that the education of these youngsters has to be uniform. I don't think it should be dropped on them from the Federal level. I think our responsibility in health in the Federal government is to provide accurate information so that educators can use that in the best possible way for their own constituencies.

Mrs. BOXER. But, the point I'm making, Dr. Koop—and I agree with you. In the perfect world where we have a lot of time, I agree with you. I was on a local board of supervisors, and I really didn't like it when the Feds told me what to do. I like to have the ability to work out our own programs, be they community development, block grants, on our own.

What I'm suggesting is we are in a crisis.

You do not control getting the education funds. I assume, however, as the public health officer, you feel a sense of crisis, and could convey that—who is it, to Mr. Bennett, who is holding up these funds, or what agency is holding up these funds? Is it CDC that's holding up these funds for education? You don't know?

Well, I would say that I would like for the record perhaps if you could look into this and let me know because I certainly want to help unleash these funds.

If we are in a crisis, education is the only vaccine. If we know anything, we've got to teach it. I have no problem at all with saying abstinence is the way to go. If you don't choose that direction, this is what you have to do. That's no problem. I think everyone agrees on that. But, we've got to get this out.

Let me ask you if I can, Mr. Chairman, a couple of more questions.

Chairman MILLER. One more minute.

Mrs. BOXER. Thank you. One minute.

AZT, do you support the Federal Government making that drug available because, as I understand it, it could cost as much as $10,000—is it a month—for the drug, or a year for the drug, $10,000 a year for the drug, which is beyond many people's ability.

Dr. KOOP. Again, a difficult question. I don't set policy on that sort of matter. Obviously, if there is a drug available, I'd like to see it made available to everybody who needs it.

The happy thing about it is that the price will come down, and it is also being manufactured much more rapidly now that we're going to a synthetic Thymidine rather than using naturally occurring Thymidine. So, I think that picture will brighten.

Mrs. BOXER. So, you have no position on whether Congress ought to fund the drug immediately for those who need it and can't afford it?

Dr. KOOP. Well, the reason I'm hesitant is that AZT seems to be the brightest thing on the horizon right now, but it has a lot of side reactions, and I'm totally confident that daughter drugs of AZT will be much more effective and much less toxic.

Mrs. BOXER. Thank you, Mr. Chairman.

RESPONSE FROM DR. KOOP TO QUESTIONS POSED BY CONGRESSWOMAN BARBARA BOXER

Representative BOXER. You do not control getting the education funds. I assume, however, as the public health officer, you feel a sense of crisis, and could convey that—who is it, to Mr. Bennett, who is holding up these funds, or what agency is holding up these funds? Is it CDC that's holding up these funds for education? You don't know?

Dr. KOOP. Well, I would say that I would like for the record perhaps if you could look into this and let me know because I certainly want to unleash these funds.

Response. Funding for AIDS education in the schools is not being held up. The Centers for Disease Control developed a plan for providing State and local education agencies as well as national organizations with financial and technical assistance for developing and strengthening school-based education programs. This plan is proceeding on track.

The April 21, 1987, issue of the Federal Register Notice clearly delineated the application process for obtaining funding. In May 1987, agencies eligible for funding as outlined in the Notice participated in national workshops in which further guidance was provided on the application process and content of proposals. CDC received a large number of applications; review of these applications has now been completed. We anticipate funds will be awarded before October 1, 1987, to selected State and local education agencies and national organizations in accordance with prescribed guidelines and regulations.

In addition, we anticipate that funding for the development and incorporation of AIDS-related information into CDC's existing Growing Healthy and Teenage Health Teaching Modules curricula (for elementary and high school students, respectively) will be awarded before October 1, 1987.

Chairman MILLER. Congressman Holloway.

Mr. HOLLOWAY. Mine is a statement, but you might respond to it if you would.

I worry as much about the civil rights of non-AIDS patients as I do the ones that have it and, undoubtedly, we seem to be, as a Congress, more and more willing to protect the rights of the people who have AIDS. My interest, is in testing and testing—everyone in the country.

But, what I want to bring up, really, are the evils of homosexuality. I realize it did not originate there but, still, are we doing anything to educate our teenagers to the fact that it's not a natural way? It's not, in my opinion, the way that the Creator intended things, and, is there anything being done to try to show the children of our country the evils of homosexuality and all the other

unnatural sex that we have in this country which seems to be growing in leaps and bounds?

Let's turn this country around and go back the way that our founding fathers intended it to be. Is there anything being done with our teens to educate them along this line?

Dr. KOOP. That's one of the reasons, sir, that I have been proposing, ever since I've been concerned about AIDS, that the education of children not be left to school alone, but have tremendous parental input. And before you came in, we were discussing one type of curriculum that is used widely in the country now which has a very large input from the parents that permits them to introduce their own ethical, moral, and religious beliefs.

And I think that the combination of the two would answer your concerns.

Chairman MILLER. Congressman Levin.

Mr. LEVIN. Thank you very much. Dr. Koop, like others, I deeply admire your efforts. I think you let your conscience be your guide, and you're saving thousands of lives.

You say on page 5, "It is especially important that school sex education programs emphasize to teenagers the need to refrain from sexual intercourse," and I believe most of us would very much agree with that, "until they are ready to establish a mutually faithful, monogamous relationship. I believe that it is possible to focus on preadolescent youngsters and produce a generation of teenagers who will remain abstinent until they develop a mature, monogamous relationship."

I take it from your testimony, your oral testimony, that you have emphasized this, but you don't mean to say that we should not teach to teenagers that if they engage in intercourse, it's absolutely essential to protect themselves.

Dr. KOOP. To test themselves?

Mr. LEVIN. To protect themselves.

Dr. KOOP. To protect themselves. Everything that I've said, sir, ever since I've been involved in this, has talked about abstinence, and monogamy. If you're not smart enough to listen to those two messages, and you persist in a lifestyle that exposes you to danger, you must protect yourself. I go into that in many ways: To be absolutely certain about your partner; to have the resolve yourself, if you think or know you might be infected; and then get into the use of condoms. We had a lot of discussion I think, before you came in, about the fact that, although condoms are not 100 percent effective, most of the failure of condoms is not the condom itself but the people that use them, and the fact that it may not be 100 percent, but it's certainly better than anything else we have right now.

Mr. LEVIN. I was here for that, and the only reason I asked the question was because I think there's a danger that people not hear the whole message; that people pick out just the part of the message they want to hear.

And, frankly, as I read your testimony, I didn't quite get that entire message.

Dr. KOOP. I'm gratified to hear you say that, because I always get the other criticism: why don't you talk about abstinence and monogamy and shut up about condoms?

Mr. LEVIN. And you're determined not to shut up about any of this.

Dr. KOOP. I try to put everything in, right.

Mr. LEVIN. And I think most of us applaud you for it. Let me ask you then, it's not easy to answer as quickly, but you've been in the center of the storm, why the polarization?

You say you're going to be heard on all three aspects. We're talking about a matter of death, of life and death. Why don't—why doesn't everybody hear all parts of your message? What is the dynamic of the polarization?

Dr. KOOP. I think people hear what makes news to them. Many times I've made a public appearance, I've talked for 25 or 30 minutes, and I've said what you've heard me say here today; and the newspaper headlines say, "Koop Favors Condoms." Well, that's true, but he favors other things ahead of them.

And I think when you talk to certain people, they are so frightened about the fact that their children might be properly educated sexually, that as soon as they hear that word, they freeze up and don't hear anything else at all.

I think that if we were dealing with a disease that only bankers with bald heads got, we wouldn't have any problems at all.

Chairman MILLER. The emphasis is on bankers, isn't it, and not on bald heads?

Dr. KOOP. I come from a family that has both.

Mr. LEVIN. Dr. Koop, do you think it's a good idea that every household in America receive your report?

Dr. KOOP. That's a hard question to ask the author, sir. That's a very unique document and I love it, and I'd love to see it in every household, but if you want to get the most for your money, I'm not sure that it ought to be in every household in Wyoming. I'd like to see it in every household in those states where they have very high prevalence rates.

Mr. LEVIN. But, you indicate that there's uncertainty as to how this will spread.

Dr. KOOP. Which?

Mr. LEVIN. AIDS. So, if——

Dr. KOOP. Uncertainty as to whether the disease will explode in the heterosexual production as it once did in the homosexual population.

Mr. LEVIN. Right. So, in view of that uncertainty, isn't it important that it be distributed in Wyoming as well as New York?

Dr. KOOP. In the best of all worlds, yes. I was trying to save as much money as I could to do other types of education because I think that, although many people will read that report who are literate and appreciate that kind of education, I think we also have to get things on posters and billboards, comic books, and especially on television, which most people look to for education today.

Mr. LEVIN. Just one last question about this if I might.

Do you think that your report has the balance in it that you stated today? Looking back in it, are you satisfied that it has the correct emphasis?

Dr. KOOP. I don't want to change anything in there. I think it's a very good statement. If you read it through a couple of times with different points of view, I think it's a good health statement. There

are 14 moral statements in there. The nice things about AIDS is that the moralist and the scientist can walk hand in hand to the same containment of the epidemic.

Mr. LEVIN. Thank you, Mr. Chairman.

Chairman MILLER. Congressman Skaggs.

Mr. SKAGGS. Thank you, Mr. Chairman.

Dr. Koop, I also appreciate very much your ability to be tastefully explicit about this subject. Your statement made the point that most teens are not aware that they are at risk. Many last night heard Ted Koppel make the point that we have heard many times: that most people in this country, particularly teenagers, get most of their information from the television and, in response to Mr. Levin's question, you made the point that we really need to move to get this information on TV.

How do we do that? What's the role of the Federal government in getting tastefully explicit information onto the TV and onto the radio to really address the particular educational needs of this population?

Dr. KOOP. There are only two ways open to the Federal government, and we're not permitted to purchase time. We can rely on stations to put on 20, 30 or 60-second public service announcements, and they're doing that. I've made a number of them.

The private sector has cooperated with us in doing the same thing. Documentaries are good, but they're not looked at by as many people as watch entertainment.

If you would like a personal opinion, sir, I think the best way to get the story of AIDS across to teenagers is to have it appear in prime-time television as part of a plot of sit-coms and other things.

Chairman MILLER. What do you mean you're not allowed to purchase time?

Dr. KOOP. The Public Health Service can't purchase time.

Chairman MILLER. Why?

Dr. KOOP. It's the law.

Mr. SKAGGS. Should we change the law?

Chairman MILLER. You can't watch an NFL football game without the Army telling you or the Navy telling you to sign up.

Dr. KOOP. That's not the Public Health Service.

Chairman MILLER. I understand. So, it's not a generic law. This pertains just to you, so if you made a budgetary decision——

Dr. KOOP. I think that's correct. It may affect other people, but that's what I'm told. That's why we don't purchase time.

Mr. SKAGGS. For the record, Doctor, if you could provide the committee with the express statutory prohibition on that expenditure by the Public Health Service and any further citations you might have that constrain you on that area because I think this is one area that we ought to deal with very directly.

Do you have any reason, in those states in which there is a high incidence, any reason to suggest that we shouldn't make a full as possible distribution of your report? Are there some cautionary words that you would——

Dr. KOOP. No, sir.

RESPONSE FROM DR. KOOP TO QUESTIONS POSED BY CONGRESSMAN DAVID SKAGGS

On further consideration of statutory restrictions on the purchase of paid advertising, it has been determined that while 5 U.S.C. 3107 prohibits the use of appropriated funds to "pay a publicity expert unless specifically appropriated for that purpose," this is not viewed by the Comptroller General as a prohibition of an agency's "legitimate informational functions or legitimate promotional functions where authorized by law." (Principles of Federal Appropriations Law, GAO (1982 ed., p. 3-152))

The Secretary of HHS has authority, under Section 301 of the Public Health Service Act, to conduct informational activities and, under Title XVII, to support health information activities. We believe that activities under these authorities would not be prohibited by 5 U.S.C. 3107.

Mr. SKAGGS. Thank you, Mr. Chairman.

Chairman MILLER. Time out for the—do you want to ask the Surgeon General——

Mr. PACKARD. One quick question before he has to leave.

Chairman MILLER. He's going to give you a quick response, too.

Mr. PACKARD. I hope he will. On page 3 of your statement, I won't quote the whole paragraph. It's the first paragraph, but it starts by saying, "I believe that education about AIDS should begin at home," and it goes on and speaks about family, and "behavior should be reinforced in the schools. I recommend that parents establish a biological and a moral basis for sexual activity early," in their children's lives, and you've stressed it over and over today that the home is the best place for young children to get the basics of sex education as it relates to AIDS.

Yet, we've had no discussion about funding and about education of the parents. We will probably go to great lengths to educate our teaching institutions and those that will be involved in the school system.

Are you suggesting or would you suggest that we also go to also great lengths to educate the parents of America in terms of helping to teach and educate their own children?

Dr. KOOP. Absolutely, and I am working now very diligently with the private sector to come up with teaching coalitions who will teach teachers in schools and parents of children how to work together to feel comfortable about broaching these subjects that they feel are almost taboo.

Chairman MILLER. Congressman Weiss.

Mr. WEISS. Just for the record, Dr. Koop, we have testimony before my subcommittee from the CDC and HHS, and I think initially you're right; there may have been some question as to the legality of the issue. But, this has been resolved. They're now quite comfortable that they can buy time, and are making plans to do so for public education.

The problem is that it's costly, and there's been a fight within the Administration as to what to spend money on. But CDC currently is planning a massive—so they tell me—public outreach program including television, and the hope is that you can urge them to get off the dime and start moving forward with it.

Dr. KOOP. It's planned for October.

Chairman MILLER. Put that on number 3 on your agenda for the committee.

Doctor, thank you very, very much for your time and for your testimony and for your leadership position in this effort.

Mr. SKAGGS. Mr. Chairman, perhaps we could ask unanimous consent to keep the record open. There may be other questions the committee would want to submit to Dr. Koop.

Chairman MILLER. The committee will do that if there is no objection. Thank you.

The next panel will be made up of Dr. Mary-Ann Shafer from the University of California School of Medicine, San Francisco; Dr. Louis Aledort, who is from Mount Sinai School of Medicine; Dr. Vernon Mark from Harvard Medical School; and Dr. Karen Hein, who is from Albert Einstein College of Medicine, New York.

If you will come forward, please, we will recognize you in the order in which we called your name. And if there are empty seats and there are still people in the hall, we'll just take a minute to allow people to come into the hearing.

If you would just come in and take whatever empty seats you find in the audience as quickly as you can, please. You're also welcome to come up here and sit in these chairs here if you'd like. Don't be bashful. Go ahead, because we're not going to have members of Congress. Go ahead, you're welcome to come up here and sit in these chairs, as long as you don't go "Hi, Mom."

Welcome to the committee. As usual, we will place your written statement in the record in its entirety, and you may proceed in the manner in which you're most comfortable. To the extent to which you can summarize, it would be helpful. As you can see, members of the panel have a long list of questions. To the extent that you want to comment on something that was said previous to you, certainly feel free to do that also. Dr. Shafer, we'll start with you.

STATEMENT OF MARY-ANN SHAFER, M.D., UNIVERSITY OF CALIFORNIA AT SAN FRANCISCO

Dr. SHAFER. There are two other areas in which, just as an introduction, that I also am involved with. I am actually Section Chair of the American Academy of Pediatrics as well in adolescent health. Because we're dealing about educating parents and other physicians, it's important to know. And also, I'm a mother of two daughters, one of which is now literally budding into adolescence.

I'm going to give an overview. I'm also a very good friend of George Miller—George Miller is a very good friend of my neighbor, but that has nothing to do with why I'm here. That's pure accident.

Overview of the facts first. By the year 1991 the Acquired Immunodeficiency Syndrome is projected to become the worst disease epidemic in United States history.

Two: Unlike many previous epidemics, including polio in the 50s and typhus earlier this century, the acquisition of the AIDS virus is linked to volitional sexual behaviors.

Three: Because of this volitional component of sexual behavior, AIDS is potentially totally preventable.

Four: The biology of the AIDS virus is complex. The development of effective treatment of the disease or prevention of the disease through immunization is, at best, five to ten years away.

Five: While I agree that abstinence from sexual intercourse is the most effective measure to prevent acquisition of the AIDS

virus, over one-half of 15 to 19-year-olds are sexually active. By age 19 over 70 percent of them are sexually active.

Six: The use of condoms is an effective prevention strategy against the transmission of the AIDS virus, yet less than 20 percent of 15 to 19-year-old girls state they use them and, in general, the use is intermittant.

Seven: Sexually active teenagers have the highest rates of sexually transmitted diseases among heterosexuals of all age groups. If there are one million teen pregnancies per year, there are at least two million sexually transmitted disease infections; most go undetected.

Eight: Health education interventions regarding sexually transmitted diseases are either non-existent or woefully inadequate or inappropriate for the adolescent age group to effect behavior change which would prevent sexually transmitted diseases and their tragic sequellae of pelvic inflammatory disease, ectopic pregnancy, infertility and cancer of the cervix.

Nine: The extent of sexual activity and sexually transmitted disease among our youth is, for the most part, unrecognized or ignored by youth themselves, their parents, their communities, their doctors, as well as by their local, State and national policymakers.

Ten: Using the current prevalence data on sexually transmitted diseases to identify populations at risk for acquisition of the AIDS virus, sexually active adolescents become a most important population to target intensive preventions now.

To understand the possible impact of the AIDS epidemic on adolescents, it is necessary first to comprehend the characteristics of the youth population to be targeted for future projects and for the actual and projected scope of the problem of sexually transmitted diseases, including AIDS, among adolescents. There are currently over 35 million adolescents 10 to 19 years of age in the United States. By the 1990s, there will be an overall increase of 10 percent, with the greatest increases in population occurring in the West and Southwest, over 50 percent of whom will belong to ethnic minorities, more will live in poverty and urban centers and, therefore, will be poor. Many come from non-traditional families which, as we mentioned earlier, pose a lot of difficulties for utilizing the family as the primary vehicle for education regarding sexual activity, sexuality, sexually transmitted disease, AIDS and so forth.

These demographic changes will place more youth at risk for sexually transmitted disease infection, including AIDS, in the near future since the link between sexually transmitted diseases, poverty, minority and younger age status have been established.

Regarding sexually transmitted diseases among adolescents, (which is really my expertise area) it is estimated that more than one-half of the 20 million sexually transmitted disease cases reported yearly will occur in individuals under the age of 25 years, and that one-fourth will be affected before graduating from high school. Rates of sexually transmitted diseases among females are highest among adolescents and decline dramatically with increasing age. Premature sexual activity, in conjunction with ineffective methods of contraception, either none or non-barrier methods, may place the adolescents at risk for sexually transmitted diseases including AIDS.

For example, more adolescents are engaging in sexual intercourse and are initiating this activity at younger ages than years ago. Fifty percent of adolescents have initiated sexual intercourse by their 16th birthday, over 70 percent by their 19th. In San Francisco, 30 percent of middle-school students in San Francisco report intercourse. These are students aged 11 to 14 years of age. Almost two-thirds of the girls (these are high school students) use no or ineffective contraception and less than one-fifth reported using a barrier contraceptive method. The barrier methods afford some protection, as Dr. Koop mentioned, for AIDS and other sexually transmitted diseases.

Sexually transmitted diseases, including the sequellae of pelvic inflammatory disease (PID), are related to younger age. Ten to thirty percent or more of sexually active adolescent girls are infected with Chlamydia trachomatis, a bacteria which is the most common sexually transmitted disease agent in the world. Yet most are asymptomatic and have no idea they have the infection. Five to fifteen percent of this same population have gonorrhea.

The adolescent male, and I think we're very sexist in regard to sexually transmitted diseases of youth because we never talk about male, adolescent males.

Little information is available on adolescent boys. From our work, we have isolated Chlamydia and identified gonorrhea in almost 10 percent of heterosexually active boys, and all of these boys had no symptoms and had no idea they had an infection. They were screened during sports physicals.

Ethnicity and sexually transmitted diseases are linked. The age adjusted gonorrhea rate for black adolescent males and females is 10 to 15 times that of their white counterparts. Latino youth rates may fall in between. We have very little data.

For example, one study in San Francisco we isolated Chlamydia (using sexually transmitted diseases in the rates as indicators for the possible risk for the AIDS transmission since it is transmitted in the same way) from 25 percent of black girls, 15 percent of Latino girls and 10 percent of white girls. Young black females, in turn, have higher rates of the sequellae transmitted diseases, including such things as pelvic inflammatory disease and so forth.

Since AIDS and adolescents—will be reviewed by my colleague, Dr. Hein, I will provide an overview and to relate it to sexually transmitted diseases known. Adolescents currently represent less than one percent of all diagnosed cases of AIDS in the United States. However with the estimated delay period between infection with HIV and presentation of AIDS syndrome (3–5 years) it is difficult to estimate the actual AIDS problem in youth.

Nevertheless, current adolescent sexual behavior, the prevalence of sexually transmitted diseases among adolescents, as I have mentioned, and the strong link between IV drug use and HIV infection in adults suggests that the future rate of HIV transmission may far exceed its present rate in adolescents, especially among poor minority youth.

The Surgeon General's Report stresses—and I quote—"Adolescents who are at the age of exploring their sexuality and perhaps experimenting with drugs must be taught about the risk behaviors that expose them to the HIV virus." A recent study in a San Fran-

cisco high school—and we assume we're rather advanced in AIDS knowledge in San Francisco—showed that adolescents lacked sufficient knowledge about the cause, transmission and prevention of AIDS, particularly about the preventive measures to be taken during sexual intercourse, including abstinence, sexual practices and the use of condoms.

Significant ethnic differences were found with perceived knowledge of AIDS, perceived risk of acquiring AIDS and in the presence of misconceptions about the AIDS transmission through casual contact. Whites were found to be the most knowledgeable, Latinos the least knowledgeable, with black youth intermediate in their knowledge of the cause, transmission.

Adolescents, especially ethnic minority youth, are the most important group to target prevention programs. It must be emphasized that the single-most critical factor which may place the average adolescent at risk for acquisition of sexually transmitted diseases including AIDS is sexual intercourse. Most individuals initiate their sexual activity during adolescence. Accurate knowledge about the epidemiology of all sexually transmitted diseases, especially AIDS, sexual practices and so forth, and one's perceived susceptibility to sexually transmitted diseases and the AIDS virus is lacking among high school students.

All sexually transmitted diseases, including AIDS, are preventable. Since prevention is the key tool, it is imperative to design interventive programs that will effect change in knowledge, attitudes and beliefs and will prevent or modify behaviors which place the adolescent at risk for all STD's including AIDS.

This becomes important in the adolescent population in the process of establishing adult health and behavior patterns. This is a period when youth may be particularly amenable to change through intervention. I must also stress that education per se, traditional information giving, has never been shown to change behaviors in adolescents.

Conclusions. First sexually transmitted diseases are a major unrecognized health threat to our youth. Number two: Sexually transmitted diseases occur in epidemic proportions among adolescents, yet most infections go undetected.

Number three: Sexually transmitted diseases cause pelvic inflammatory disease, eptopic pregnancies, infertility, cancer and are also a cause of death. Although I agree with the Surgeon General about sex education beginning in the home, this may be an unrealistic approach. The trend is one where adolescents live in non-traditional families, families at risk, and poor families.

It becomes more difficult to use such families as the primary vehicle for a source of education about AIDS and other sexually transmitted diseases.

Number four: AIDS is a sexually transmitted disease. Using current prevalence data on other sexually transmitted diseases as indicated of risk for AIDS, adolescents become a high-risk population for AIDS, especially minority youth.

Recommendation. This is a crisis now. Prevention is still possible. Intervention programs, including education, must be supported, developed, implemented and—I emphasize—evaluated now. Differentiation between children and low-risk adolescents versus high-

risk adolescents must be made in the development and implementation and timing of the interventions.

Two: Target populations should include middle and high school students, youth in detention—another forgotten area. If you're trying to pinpoint an area where I would recommend immediate support financially, target incarcerated youth who are a "captured population". I would implement intense education programs for them. They are high-risk youth. They are sexually active. They are not using barrier methods. They may be involved with drugs, and prostitution. They are a very high-risk population I've never heard mentioned to date regarding AIDS.

Number three: Creative programs including media should be encouraged and supported. To reach high risk youth, I would use families, religious groups, youth groups, peers, television and also radio. Youth listen to the radio more than they watch television.

Number four: Condoms should come out of the closet. For example, school-based clinics in many states are not allowed even to—talk about condoms. They cannot hand them out. And, yet, in one school in San Francisco, for example, there is a—teacher who can distribute them as an "individual". In a sense, we're trying to give education about AIDS, but we are not giving youngsters vehicles in order to implement what we're telling them about.

Number five: National leadership is needed to assist communities to accept the crisis and the threat and to institute relevant programs for youth regarding STD's and AIDS.

I will close with an interaction that I had with my mother. She is the mother of 7 children. She has 5 sons and 2 daughters. She thinks of herself as rather liberal. She teaches 8th grade school. She said, "I'm rather offended by the thought of having condom ads and other AIDS kinds of ads on television all the time when I sit down and want to put my feet up." And I said, "Mother, I love you, but I'm offended by death."

Thank you, and I hope that you people can assist us in implementing and protecting our next generation of youth.

Chairman MILLER. Thank you. Dr. Aledort.

[Prepared statement of Mary-Ann Shafer, M.D., follows:]

PREPARED STATEMENT OF MARY-ANN SHAFER, M.D., ASSOCIATE PROFESSOR OF PEDIATRICS, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, DEPARTMENT OF PEDIATRICS, DIVISION OF ADOLESCENT MEDICINE

INTRODUCTION:

Overview of Facts:

1. By the year 1991, Acquired Immunodeficiency Syndrome (AIDS) is projected to become the worst disease epidemic in United States history.
2. Unlike many previous epidemics including polio in the 1950s and typhus earlier this century, the acquisition of the AIDS virus is linked to volitional sexual behaviors.
3. Because of this volitional component of sexual behavior, AIDS is potentially totally preventable.
4. The biology of the AIDS virus is complex. The development of effective treatment of the disease or prevention of the disease through immunization is, at best estimates, 5 to 10 years away.
5. While abstinence from sexual intercourse is the most effective measure to prevent acquisition of the AIDS virus, over one half of 15-19 year olds are sexually active. By age 19 years, over 70% of teenagers have become sexually active.
6. The use of condoms is an effective prevention strategy against the transmission of the AIDS virus. Yet only 20% of 15-19 year old girls state that they used condoms at last

intercourse. There are indications that even this low figure may overestimate the actual effectiveness of the condom as a protective barrier against AIDS virus and other sexually transmitted diseases, since most adolescents use them inconsistently.

7. Sexually active teenagers have the highest rates of sexually transmitted diseases among heterosexuals of all age groups.
8. Sexually transmitted diseases are the major health hazard of adolescents today. Yet health education interventions are either non-existent or woefully inadequate or inappropriate to effect behavior change to prevent sexually transmitted diseases and their tragic sequellae of pelvic inflammatory disease, ectopic pregnancy and probably cancer of the cervix in women.
9. The extent of sexual activity and sexually transmitted disease among our youth is, for the most part, unrecognized or ignored by youth themselves, their parents, their communities, and their doctors, as well as by their local, state and national policy makers.
10. Using the current prevalence data on sexually transmitted diseases to identify populations at risk for acquisition of the AIDS virus, sexually active adolescents become an important population to target intensive prevention programs now.

Discussion:

To understand the possible impact of the AIDS epidemic on adolescents, it is necessary to first comprehend the characteristics of the youth population to be targeted by future projects and the actual and projected scope of the problem of sexually transmitted diseases, including AIDS, among adolescents. There are currently over 35 million adolescents 10-19 years of age in the United States. By the 1990s, there will be an overall increase of 10%, with the greatest increases in population occuring in the West and Southwest. As many as half of our country's adolescents will belong to a minority group. Ethnic minorities, especially latino and asian youth, will account for the largest proportion of the increasing adolescent population.

A. Demographics:

There is an increasing trend towards poverty among urban youth as well. By the 1990s, 25% of all families with adolescents will be headed by a single parent with 90% of these households headed by females (1). In 1983, 38% of latino and 45% of black families lived below the poverty level. With the projected increases in single parent households, it is assumed that poverty will have a greater impact upon adolescents of the 1990s than the youth of today. These demographic changes will place more youth at risk for sexually transmitted disease (STD) infection in the near future since the links between STDS (including AIDS) and poverty, minority and younger age status, have been established (1-4).

B. Sexually Transmitted Diseases Among Adolescents:

It is estimated that more than half of the 20 million STD cases reported yearly will occur in individuals under the age of 25 years, and that one-fourth will be affected before graduating from high school (5,6). Recent research indicates that the rates of STDs among females are highest among adolescents and decline dramatically with increasing age (7-9). The evidence suggests that STDS are the most pervasive, destructive and costly communicable disease problem confronting adolescents today in the US. Premature sexual activity, in conjunction with ineffective methods of contraception (none or non-barrier), may place the adolescent at risk for STDS including AIDS. For example, more adolescents are engaging in sexual intercourse and are initiating this activity at younger ages than ten years ago. Fifty per cent of adolescents have initiated sexual intercourse by their sixteenth birthday and over 70% by their nineteenth birthday (10). Among sexually active adolescent girls aged 15-19 years, almost 2/3 of these girls use no or ineffective contraceptives, and less than 17% reported using a barrier contraceptive method at last intercourse (15% condoms, 3% diaphragms) (10). It is these latter forms of contraceptives, the barrier methods, that can afford some protection against STDS, including AIDS (11).

Sexually transmitted diseases including the sequellae of pelvic inflammatory disease are related to younger age (3,12). We have found that among sexually active adolescent girls

approximately 15% are infected with C.trachomatis and from 4% to more than 8% are infected with N.gonorrhoeae (4,13). Other studies of adolescent girls support our findings (14,15). Although few studies are available on adolescent boys, we have isolated C. trachomatis from 8% and N.gonorrhoeae from 1% of asymptomatic heterosexual boys screened in teen clinics in San Francisco (16). In a study of urethritis in young men, including teenaged boys, attending an STD clinic, younger age was found to be related to the presence of C.trachomatis.

We have also identified an association between ethnicity and the presence of STDS in adolescents: black females were found to have the highest prevalence rates for C.trachomatis (23.3%), followed by latino girls (14.3%), and, finally, white girls (10.3%). Black females were also more likely to have N. gonorrhoeae isolated from their endocervices as well (8%) compared to whites (2.1%) and latinos (1.4%) (13). Epidemiological data on the prevalence of STDS among black youth support our results. The average age-adjusted gonorrhea rate in black males aged 15-19 years is approximately 15 times that for their white peers. The average age-adjusted rate for gonorrhea for black females aged 15-19 years is ten times greater than that for their white counterparts (8,9). Black females also have higher rates of pelvic inflammatory disease (PID) (17), primary and secondary syphillis (18), and chlamydia (13,19), as well as an increased relative risk of death attributable to PID and syphilis as

compared to white females (18). Shafer et al has showed an increased prevalence of C.trachomatis among latino females compared to white females (13). Blacks and latinos are over-represented among diagnosed cases of AIDS, especially pediatric AIDS (23). Thus, minority youth appear to be at greatest risk for the acquisition of STDs and development of sequellae including PID.

C. AIDS and Adolescents:

Adolescents (aged 13-19) currently represent less than one percent of all diagnosed cases of AIDS (N=142) in the US (20). Nevertheless, current adolescent sexual behavior, the prevalence of STDS among adolescents and the strong link between IV drug use and HIV infection in adults suggest that the future rate of HIV transmission may far exceed its present rate in adolescents, especially among minority youth. The Surgeon General's Report stresses that adolescents, who are at the age of exploring their sexuality and perhaps experimenting with drugs, must be taught about the risk behaviors that expose them to HIV virus (21). A study was recently undertaken to assess the needs of San Francisco high school students in order to develop an appropriate and relevant AIDS curriculum in the Schools (22,23). The authors suggest that adolescents lack sufficient knowledge about the cause, transmission, and prevention of AIDS, particularly about the preventive measures to be taken during sexual intercourse (sexual practice and use of condoms). Of 628 students aged 14-18 years (mean age= 16 years), 141 were latino, 226 were black,

and 261 were white, 52% were males. All students were given the AIDS Information Survey, a self-report questionnaire which included 30 items assessing a student's knowledge, attitudes and beliefs regarding AIDS. The results supported the hypothesis that adolescents lack adequate knowledge about the epidemiology of AIDS especially in relation to disease transmission, populations at risk, and their own personal risk. Significant ethnic differences were identified in knowledge of AIDS, perceived risk of acquiring AIDS, and in the presence of misconceptions about the AIDS transmission through casual contact. Whites were found to be the most knowledgeable, and latinos the least knowledgeable, with black youth intermediate in their knowledge of the cause, transmission, and prevention of AIDS. Minority youth were approximately twice as likely as white youth to have misconceptions regarding acquisition of the virus through casual contact. Youth, especially minority youth, who had less knowledge and more misconceptions about casual transmission of the virus, were more likely to perceive themselves as more susceptibile to the virus than their more knowledgeable peers.

Such findings have important implications in the development of an intervention for adolescents regarding AIDS as well as other STDS: interventions must include content on knowledge, attitudes, and personal susceptibility to STDS and AIDS; all interventions must be sensitive to cultural needs as well; and such programs should provide immediate, sustained, and cost-effective intervention strategies. Adolescents are an important

group to target for such intervention programs. It must be emphasized that the single most critical factor which may place the typical adolescent at risk for acquisition of STDs including AIDS is sexual intercourse. Most individuals initiate their sexual activity during adolescence. Accurate knowledge about the epidemiology of all sexually transmitted diseases, especially AIDS (sexual practices, condom use, IV drug use, etc.), and one's perceived susceptibility to STDs and the AIDS virus is lacking among high school students. All sexually transmitted diseases including AIDS are preventable. Since prevention is the key "tool" regarding STDs in adolescents, it is imperative to design interventive programs which will affect change in knowledge/attitudes, beliefs and will prevent or modify behaviors which place the adolescent at risk for all STDs. This becomes important in the adolescent population who are in the process of establishing "adult" health and behavior patterns. This is a period when youth may be particularly menable to change through intervention.

D. Adolescent Risk-Taking Behavior:

Adolescence and young adulthood has been generally viewed as a time of optinal health. Yet, these 15-24 year olds are the only American whose high mortality rate (96/100,000) has not declined between 1960-1980 (24). Seventy-five percent of these deaths are due to accidents, homicide and suicide (25,26). The major causes of morbidity among adolescents include: substance use and abuse; motor/recreational vehicle accidents with the

resultant injury and disability; and premature sexual activity (27-33). The negative consequences of premature sexual activity are well documented by both the high prevalence of adolescent pregnancy (28) and the increase in sexually transmitted diseases (3,7-9,13). The consequences of sexual activity may be even higher in girls who begin to engage in sexual intercourse early in adolescence. We found an association between earlier sexual debut and the isolation of C.trachomatis from adolescent girls (13). From the high prevalences of both STDs and pregnancy, it is possible to deduce that teenagers are engaging in premature sexual intercourse and underutilizing effective contraceptives including barrier contraceptives which protect the adolescent from both pregnancy and sexually transmitted diseases, especially AIDS. Behaviors such as smoking cigarettes, drinking alcohol, and engaging in premature sexual intercourse have been shown to be interrelated (34-37) and share a common theme during adolescence: volitional risk-taking behavior. Such volitional risk-taking behaviors occur across all socioeconomic groups and have their onset in early adolescence (34). Because of the volitional component of these risk behaviors, it is potentially possible to prevent or modify such behaviors through well designed intervention strategies.

SUMMARY OF NEEDS ASSESSMENT

Sexually transmitted diseases are a major morbidity of youth. Educating youth about STDs had been stated as a national priority before AIDS was recognized as a threat to the health of

our nation. In 1980, the Public Health Service published the document, "Promoting Health/Preventing Disease: Objectives for the Nation." This landmark document had as one of its core objectives that: "By 1990, every junior and senior high school student in the US should receive accurate timely education about sexually transmitted diseases" (58). With the recognition of AIDS in the heterosexual population in the US, sexually active adolescents have once again become a priority as goals and objectives for the management of AIDS in the US are established. In the policy document from the Institute of Medicine and National Academy of Sciences, "Confronting AIDS-Directions for Public Health, Health Care, and Research," recognition of the importance of public education which focuses on behavior is highlighted. "Because HIV infection is transmitted by means of only a few specific types of behavior, a prime goal of education about AIDS is to modify or eliminate such behaviors". (59). With these momentous national mandates at hand to ensure the health of our youth, we propose to our policy makers the following:

1. That an effective intervention should be developed to effect prevention, or risk reduction, regarding health behaviors which place adolescents at risk for STDS including AIDS. Such an intervention should be:
   A. Developed with a recognition of the nature of risk-taking behaviors in adolescence and the interrelationships among these behaviors;
   B. Able to be applied to large populations of youth (schools, clinics, etc.) in a cost efficient manner;

C. Individualized to account for differences in sexual experience, ethnic and cultural backgrounds, gender and age of the adolescent;

D. Able to be readily transferable to other large groups of adolescents in other sections of the country; and

E. Include, when feasible, a measurable biological correlate to a sexual behavior.

2. That Congress take a leadership role in the recognition of the potential threat of AIDS to our youth and act to support programs which will decrease or eliminate this threat.

3. That Congress develope with the Executive Branch a National AIDS Committee and perhaps a separate AIDS Institute which would develop national goals and objectives for the prevention and treatment of AIDS. This Committee/Institute would be responsible for the coordination of all national AIDS actiivities including the development of service and research projects. It would oversee national monies budgeted for such AIDS projects.

4. That Congress support a massive media campaign which includes the promotion of condoms among sexually active youth.

5. That Congress assist in the development of ideal school and community curricula for AIDS prevention which could be adopted and changed to meet an individual community's needs.

6. That Congress recognize the need for financial support of school programs for AIDS especially in high HIV prevalence areas at a time when school budgets have decreased and perceived community disapproval of sex educational school programs has increased.

7. That Congress recognize that specific subpopulations of adolescents including minority youth and youth in detention may be at particularly high risk for AIDS and therefore should be targeted for immediate and intensive intervention.

8. That all policy makers recognize that AIDS is only one of many health problems of youth that share a common theme: adolescent risk-taking behavior. The trend in health care planning for acute "emergencies" as well as for chronic problems is to support and development ~~of~~ programs from a categorical approach (AIDS prevention alone, for example). In contrast, health problems in youth are broadly based in risky behaviors which potentially could be approached in programs addressing these behaviors in unison. Early sexual activity is linked to alcohol and drug use and sexually transmitted diseases. Such a comprehensive approach would be cost beneficial and most likely produce the desired effect - to decrease high risk health behaviors in youth including behaviors placing our adolescents at risk for acquisition of the AIDS virus.

REFERENCES

1. Metropolitan Insurance Company: Profile of American Youth. Statistical Bulletin 67:10-13, 1986.

2. San Francisco Projections. Department of Public Health Statistics.

3. Shafer MA, Irwin CE, Sweet R: Acute salpingitis in adolescent females. J Pediatrics 100:339-350, 1982.

4. Shafer MA, Sweet RL, Ohm-Smith MJ, Shalwitz J, Beck A, Schachter J: The microbiology of the lower genital tract of post-menarchal adolescent females: Differences by sexual activity, contraception, and presence of nonspecific vaginitis. J Pediatrics 107:974-981, 1985.

5. National Institute of Allergies and Infectious Disease Study Group. Sexually Transmitted Diseases - Summary and Recommendations 1980; U.S. Department HEW, National Institutes of Health.

6. Kroger F, Wiesner PJ: STD education: Challenge for the 89's. J Sch Health 51:242-246, 1981.

7. Shafer MA: Chlamydia trachomatis in adolescents. West J Med 145(2):229, 1986.

8. Bell TA, Holmes KK: Age-specific risks of syphilis, gonorrhea, and hospitalized pelvic inflammatory disease in sexually experienced US women. Sex Transmitted Dis 11:291-295, 1984.

9. Metropolitan Insurance Company: Sexually tarnsmitted diseases in the US. Statistical Bulletin 67:1-9, 1986.

10. Zelnik M, Kantner JF: Sexual activity, contraceptive use and preganancy among metropolitan teenagers 1971-1979. Fam Plan Perspect 12:230-237, 1980.

11. Conant M, Hardy D, Sernatinger J, Spices D, Levy: Condoms prevent transmission of AIDS - associated retrovirus. J Amer Med Assoc 255(13):1706, 1986.

12. Washington AE, Sweet RL, Shafer MA: Pelvic inflammatory disease in the adolescent female and its sequellae. J Adolesc Health Care 6:298-310, 1985.

13. Shafer MA, Blain B, Beck A, Dole P, Irwin CE, Sweet R, Schachter J: Chlamydia trachomatis: Important relationships to race, contraceptive use, lower genital tract infection and Papanicolaou smears. J Pediatrics 104:141-146, 1984.

14. Saltz GR, Tennemann CC, Brookman RR, Rauh GT: Chlamydia trachomatis cervical infections in female adolescents. J Pediatric 98:981-985, 1981.

15. Fraser GG. Rettig PG, Kaplan DW: Prevalence of cervical Chlamydia trachomatis and Neisseria gonorrhoeae in female adolescents. Pediatrics 71(3):333-336, 1983.

16. Shafer MA, Prager V, Shalwitz J, Vaughan E, Moscicki B, Brown R, Wibbelsman C, Schachter J: Prevalence of urethral Chlamydia trachomatis and Neisseria gonorrhoeae among asymptomatic sexually active adolescent males. J Infectious Dis, in press.

17. Lossick JG: Epidemiology of sexually transmitted diseases. Spagna BA, Prior RB (Eds.), Sexually Transmitted Diseases: A Clinical Syndrome Approach. New York: Marcel Decker, Inc. 1985.

18. Grimes DA: Death due to sexually transmitted diseases. J Amer Med Assoc 255:1727-1729, 1986.

19. Guinan M: Sexually transmitted diseases may reverse the "revolution." J Amer Med Assoc 255:1665-1667, 1986.

20. Centers for Disease Control: AIDS Weekly Surveillance Report, May 4, 1987.

21. US Department of Health and Human Services: Surgeon General's Report on AIDS, pp. 3-36, 1986.

22. DiClemente RG, Zorn J, Temoshok L: Adolescents and AIDS: A survey of knowledge, attitudes, and beliefs about AIDS in San Francisco. J Pub Health 76:1443-1445, 1986.

23. DiClemente RJ, Boyer CB, Morales ES: Minorities and AIDS: Knowledge, attitudes, and misconceptions among black and latino adolescents. Am J Pub Health, in press.

24. US Department of Health, Education and Welfare: Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention. DHEW Pub No. 79-55071, US Government Printing Office, 1979.

25. National Center for Health Statistics: Vital Statistics of the US, 1981, Vol II, Mortality, Part B. DHHS Pub. No. (PHS)86-1102. Public Health Service, Washington D.C., US Government Printing Office, 1986.

26. Kovar MG (Ed): Adolescent health status and health related behavior. In: Adolescent behavior and helath, Institute of Medicine, Pub No. 78-004. National Academy of Sciences, 1978.

27. Johnston LD, Bachman JG, O'Malley PM: Use of licit and illicit drugs by America's high school students, 1975-84. US Department of Health and Human Services, Pub No. 85-1394. Rockville, MD, National Institute of Drug Abuse, 1984.

28. Teenage Pregnancy: The problem that hasn't gone away. new York, the Alan Guttmacher Institute, 1981.

29. Shafer MA, Irwin CE: Sexually transmitted diseases in adolescents, in Green M and Haggerty RJ (eds): Ambulatory Pediatrics III, W.B. Saunders Co., Philadelphia pp. 214-223, 1983.

30. Centers for Disease Control: Accidental injury in US. MMWR 31:110-111, 1982.

31. National Safety Council: Accident facts. Chicago, pp. 333-34, 1982.

32. National Center for Health Statistics: Vital and health statistics: Current estimates from the national Health Interview Survey. US Department of Health and Human Services, Pub No. 82-1567, Hyattsville, MD,1981.

33. Guyer B, Gallagher SS: An approach to the epidemiology of childhood injuries. Pediatric Clin North Am 32:5-17, 1985.

34. Irwin CE, Millstein SG: Biopsychosocial correlates of risk-taking behaviors during adolescence. J Adol Health Care 7:82S-96S, 1986.

35. Jessor R, Jessor ST: Problems behavior and psychosocial development: A longitudinal study of youth. New York, Academic Press, 1977.

36. Zabin LS: The association between smoking and sexual behavior among teens in US contraceptive clinics. Am J Pub Health 74:261-263, 1984.

37. Donovan JE, Jessor R: Problem drinking and the dimensions of involvement with drugs: A Gutman scalogram analysis of adolescent drug use. Am J Pub Health 73:543-552, 1983.

38. Bartlett EE, Pugeus HV, Shaffer CR, Crump W: Health hazard appraisal in a family practice center: An exploratory study. Journal of Community Health 9(2):135-144, Winter 1983.

39. Cioffi JP: The effect of health status feedback on health beliefs: An inquiry into the prebehavioral outcomes of a health hazard appraisal. In: Into the Mainstream with Health Risk Reduction: Proceedings of the Fifteenth Annual Meeting on Prospective Medicine and Health Hazard Appraisal, St. Petersburg, Florida, October 1979.

40. Holland MG, McFarland AM: The Hite Project: A pilot study of risks, attitudes, and perceptions in a community health education program. In: Comprehensive and Continuing Care: Proceedings of the Fourteenth Annual Meeting on Prospective Medicine and Health Hazard Appraisal, St. Petersburg, Florida, October 1978.

41. Johns RE: Health Hazard Appraisal: A useful tool in health education? In: Proceedings of the Twelfth Annual Meeting of the Society of Prospective Medicine, San Diege, California, October 1976.

42. Irwin CE, Millstein SG, Adler NE: The utility of the Teen Health Risk Appraisal in early adolescence, Paper presented at the Society for Prospective Medicine Annual Meeting, San Francisco, November 1985.

43. Chambers CV, Shafer MA, Adger H, Ohm-Smith M, Millstein SG, Irwin CE, Schachter J, Sweet RL: Microflora of the urethra in adolescent males: Relationships to sexual activity and nongonococcal urethritis. J Pediatrics 110:314-321, 1987.

44. Shafer MA, Prager V, Shalwitz J, Vaughan E, Moscicki B, Brown R, Wibbelsman C, Schachter J: Prevalence of urethral Chlamydia Trachomatis and Neisseria gonorrhoeae among asymptomatic sexually active adolescent boys. J Infect Dis, in press.

45. Shafer MA, Vaugh E, Lipkin ES, Moscicki B, Schachter J: Evaluation of the Fluorescein-Conjugated Monoclonal Antibody Test (MicroTrak) to Detect Chlamydia trachomatis Endocervical Infections in Adolescent Females. J Pediatrics 108:779-783, 1986.

46. Lipkin E, Moncada J, Shafer MA, Schachter J: Comparison of monoclonal antibody staining and culture in diagnosing cervical shlamydial infection. J Clin Microbiology 23(1):114-117, 1986.

47. Shafer MA, Chew KL, Kromhout LK, Beck A, Sweet RL, Schachter J, King EB: Chlamydial infections and cytological findings in sexually active adolescent females. Am J Obs Genecol 151:765-771, 1985.

48. Irwin CE, Millstein SG, Shafer MA: Appointment-keeping behavior in adolescents. J Pediatrics 99:799-802, 1981.

49. Millstein SG, Irwin CE, Moscicki B: Developmental differences in adolescents' concepts of health and illness. J Adol Health Care 7:291, 1986.

50. Millstein SG, Adler NE, Irwin CE: Conceptions of illness in young adolescents. Pediatrics 68:834-839, 1981.

51. Millstein SG, Irwin CE: Concepts of health and illness: Different constructs or variations on a common theme. Health Psychology, in press.

52. Irwin CE, Millstein SG: Predictors of tampon use in adolescents following media coverage on toxic shock syndrome. Ann Int Med 96:666-668, 1982.

53. Irwin CE, Millstein SG, Adler NE: Health damaging and promoting behaviors in early adolescence. Ped Research 20:155A, 1986.

54. Bandura A: Self-efficacy: Toward a unifying theory of behavior change. Psychol Rev 84:191-215, 1972.

55. Bandura A: Symbolic control of behavioral changes. In, a. Bandura, Principals of Behavior Modification. New York: Holt, Rhinehart and Winston, Inc. 1969.

56. Irwin CE, Millstein SG: The meaning of alcohol use in early adolescents. Ped Research 21:175A, 1987.

57. Kegeles SM, Millstein SG, Adler NE, Irwin CE, Dolcini P, Pollack J, Stone G: The transition to sexual activity and its relationship to other risk behaviors. Society for Adolescent Medicine, Seattle, WA, 1987.

58. U.S. Public Health Service, 1980. Promoting health/preventing disease: Objectives for the nation. Washington, D.C.: U.S. Public Health Service.

59. Institute of Medicine, National Academy of Sciences: Directions for public health, health care and research. National Academy Press, Washington, D.C., 1986.

60. Campbell D: Quasi-experimentation: Design and analysis issues for field settings. Boston: Houghton, Mifflin. 1979.

61. Adger H, Shafer MA, Sweet RT, Schachter J: Screening for Chlamydia Trachomatis and Neisseria Gonorrhoeae in adolescents males: Value of the first catch urinalysis. Lancet 1:944-945, 1984.

62. Hays W: Statistics for the Social Sciences. New York: Holt, Rinehart and Winston, Inc., 1973.

63. Cohen J, Cohen P: Applied multiple regression/correlation analysis for the behavioral sciences. New Jersey: Lawrence Erlbaum, 1983.

64. Fielding JE: Appraising the health risk appraisal. Am J Pub Health 72:337-339, 1982.

76-448 0 - 88 - 3

STATEMENT OF LOUIS M. ALEDORT, M.D., MOUNT SINAI SCHOOL OF MEDICINE, NEW YORK, NY

Dr. ALEDORT. Yes, thank you, Mr. Chairman and members of the committee.

I'd like to focus my attention on a high-risk group, the hemophilia population. Hemophilia is a genetic, lifelong bleeding disorder in which major advances have been made because of technology and blood banking and human blood derivatives, and these have made possible the option for these patients to lead a normal life. And our goal was to make these people feel like everybody else.

And in the 1970s with comprehensive care programs, we were able to successfully integrate these people into society by decreasing their time lost from work and school, decreasing hospitalization, decreasing costs and increasing employment. Our goals were very successful.

However, in the 1980s the very blood product that positioned them into a normal life brought them HIV. Of the 15 to 18,000 hemophiliacs in the United States, 10,000 are adolescents. Two-thirds, 67 percent, are infected with the HIV virus. They become the most infected of all the high-risk groups. 15 to 17 percent of their sexual partners are now infected.

Of the 327 hemophiliacs with AIDS as of the end of April, 63 were under the age of 19. 20 percent of the AIDS group in the hemophilia population are adolescents, not the one percent we see for the total country, and 77 were between the ages of 20 and 29.

Hemophilia adolescents are different. They not only have a chronic disabling disease for which they need constant treatment, costly treatment, they are HIV positive. Every aspect of their sexuality is fraught with problems.

The kissing situation has not been resolved. HIV is positive in saliva. We have not yet resolved whether or not it can be transmitted that way. Oral sex and intercourse activities that are engaged in by these groups are very much at risk.

We are very concerned with the results of a recent survey of our patient population. Despite a very active educational campaign (98 percent of respondents knew the information quite well as to their risk for HIV infection and how it is sexually transmitted), 51 percent do not engage in safe sex practices.

Our region, which represents the New York, New Jersey, Puerto Rico and the Virgin Islands, HHS Region II, have changed our approach to the hemophilia patient. We have taken the position from "you are like everyone else" to "you are very different," and this has presented a serious problem.

In order to do that, we have to help them make a very difficult choice that they alone can make, and that is acknowledging HIV infection to their potential sexual partner.

We are, therefore, as the treaters, left with the responsibility of educating them. We agree with the Surgeon General that the only true safe sexual practice is abstinence, but as the treaters, we are very cognizant of the data that was just presented and know that sexual activity will not stop.

And, therefore, we are responsible for and must pursue the teaching of safe sex practices.

In order to help make these young people make the appropriate decision for themselves, we require skilled, professional personnel. We need to have adolescent specialists. We need to have sex educators, and what has been left out of most of the discussion is the need for psychosocial support systems.

We also have to be available to our patients partner's who may be at risk.

Our own New York downstate region have hired three such persons to aid us in the task of giving support to this group. We have hired an adolescent physician. We have hired a sex educator and a psychosocial team to work with the couple, spend time with the HIV at-risk person, as well as the sexual partner(s).

Appropriate personnel are hard to find, but it is much more difficult to pay for them once you've found them. Reimbursement in the medical setting for these services is almost nonexistent in either the public or private insurance sector and, as stated by one of the members of the committee, we have seen hardly any educational funds trickle down to centers. I don't know where it's held up, but I think some of the committee may know where it's held up since we don't.

If we can provide help for patients who are already at risk, protect the non-infected (which is very important) or those who already have HIV infection we will decrease the pool of HIV infected persons in society. The only way to truly decrease the incidence of HIV in this society is to educate the educators, and provide financial support for them.

Thank you very much.

Chairman MILLER. Thank you. Dr. Mark.

[Prepared statement of Louis M. Aledort, M.D., follows:]

PREPARED STATEMENT OF LOUIS M. ALEDORT, M.D., PROFESSOR AND VICE CHAIRMAN OF THE DEPARTMENT OF MEDICINE AT THE MOUNT SINAI SCHOOL OF MEDICINE OF THE CITY UNIVERSITY OF NEW YORK

I am Dr. Louis M. Aledort, Professor and Vice Chairman of the Department of Medicine at the Mount Sinai School of Medicine of the City University of New York. I am the past medical director of the National Hemophilia Foundation. I am currently the director of the Mount Sinai Hemophilia Center, caring for approximately 300 hemophiliacs, and I chair the HHS region II hemophilia diagnostic and treatment center program for New York, New Jersey, Puerto Rico, and the Virgin Islands.

Hemophilia is a genetic, lifelong chronic disease, occurring almost exclusively in males, requiring frequent human blood product replacement to prevent bleeding and to lead a productive life. Hemophiliacs now can have a normal lifespan, and the majority of the approximate 15 to 18,000 such patients are under the age of 30.

In 1982, the first hemophiliac developed AIDS. Two thirds (67%) are sero-positive for Human Immunodeficiency Virus (HIV). Those using Factor VIII concentrate are 75% positive; those using Factor IX concentrate are 55% positive; and those using single donc- plasma products are 22% positive.

As of April 6, 1987 there were 327 patients diagnosed with AIDS. 63 were under the age of 19, and 77 were between 20-29 years of age. Since 1985 the rate of newly reported cases have remained constant at about 30-37 cases per quarter. These data make the hemophilia population probably the most infected of all risk groups.

The problem of sero-positivity in the adolescent poses very specific and serious problems for these patients. Cognitive function evolves from the concrete thinking of a child to abstract operational thought of adulthood. An early adolescent (age 12-17) may not comprehend HIV transmission and "safer sex."

Adolescents are risk takers, and tend to be irresponsible, as demonstrated by non-compliance with medical advice. They need to be "one of the crowd." Sixty (60%) percent of adolescents have sexual intercourse by age 19. Teens have more sexual

partners than adults. Greater than 60% of adolescents experience tongue kissing and are poor users of contraception -- condoms are very unpopular. These figures are as true for hemophiliacs as for the general population. Therefore, these HIV positive youths have the potential to expose an infinite number of other adolescents.

A hemophiliac, continually facing his chronic disease with its attendant painful bleeding episodes and joint destruction, now has an additional burden. He must decide whether to inform his sexual partner of the risks involved in sexual activity and intimate kissing (as HIV is in saliva) with someone who is HIV positive. In order to make the appropriate choice, he requires professional assistance.

Health care providers are responsible for managing the hemophiliacs' health care, helping them to integrate in society, educate them about HIV infection, teach them about "safer sex" practices, and continue to be a support system for them. A recent survey at our center revealed that although 98% of our responding hemophiliacs have acquired the majority of facts about the transmission of HIV, 51% do not practice "safer sex."

Generally, the approach in counseling adolescents is to provide information, guidance, and support, but in a nondirective manner. The adolescent is encouraged to make his/her own decision as part of the maturing process and as it is more likely to result in compliance. Similarly, a counseling goal of the chronically ill is to help them to not feel different from other adolescents.

The consequences of HIV transmission are so profound that an entirely different approach should be taken. Adolescents with hemophilia are different, they are infected with HIV. A directive approach of counseling isolation is the safest one for the general public and least confusing to the adolescent. It is protective of them, both avoiding stigmatization and guilt. These young people can be offered the hope that, as they become older, a vaccine may be available which will enable them to form romantic relationships.

To accomplish this difficult and labor intensive task, there is a great need for financial support for appropriate personnel. Health educators knowledgeable about adolescents are needed to teach patients about safer sex techniques. In addition, adequate psychosocial support systems are needed. Currently, most public and private insurers do not reimburse for these services. CDC and MCH have made available resources for a limited number of personnel to provide these services. This need exceeds the current level of funded personnel. It is imperative that these services be provided on an ongoing basis and by appropriately trained professionals.

As only 10,000 adolescent hemophiliacs exist, it should be feasible to fund the necessary intensive counseling support these individuals will need to maintain their isolation and cope with the negative feelings engendered. Careful thought and planning should begin immediately to develop this approach and anticipate the consequences.

I thank you for the opportunity to testify.

STATEMENT OF VERNON H. MARK, M.D., F.A.C.S., HARVARD MEDICAL SCHOOL, CAMBRIDGE, MA

Dr. MARK. Mr. Chairman, members, I would like to again give an overview from a slightly different perspective. I might also talk about my background.

I was the pediatric neurosurgeon at the Massachusetts General Hospital for five years, and the head of neurosurgery at the Boston City Hospital for over 22 years. In that latter capacity, I had a great deal to do with the patients in the drug addict segment of the hospital because many of them were my patients in the pain clinic.

The ruling principle that we have to have in looking at this problem is one of compassion, and I think that has to be expressed in concrete terms.

First of all, I think we have to have compassion for the victims and, in the absence of a vaccine or a cure, we have to do something to help out with their medical expenses, particularly those aspects of their medical expenses that are not covered by their present insurance. We can't let people who are victims of this terrible malady go untreated or at least not getting the best possible treatment that they can have.

And I'm going to make a suggestion also with regard to the drug addict population which may seem rather radical, and that is, I think that the drug addict population who are infected with the virus—I'm not talking about those who are uninfected—I think those who are infected with the virus ought to be given whatever drugs they need as often as they are required under medical supervision, so that the injections are given by physicians and that there is enough surveillance to make certain that they don't go back out on the street or into the shooting galleries to further spread this disease because, at the present time, we've heard a lot about the spreading of the disease into the heterosexual population from the bisexual community, but I think a much greater risk at present is the spread of this disease into the heterosexual population from the drug addict community.

Now, we also, I think, have to have compassion for those people who are uninfected, those people who are in harm's way, and that certainly includes many young people in this country.

Now, the problem, however, is that the magnitude of this difficulty is still under some disagreement. Congressman Coats quoted Dr. Jaffe's statement, the lead editorial in the New York Times, indicating that he thought that the risk for the ordinary person of contracting AIDS was zero, and that if this—when asked as to what his thought was as far as the future was concerned about the spread of this disease into the general population, he did not think it was going to occur. I may not be quoting him word for word, but I think I've got the sense of his statement. And if that's true, why are we all sitting here this morning? It doesn't seem reasonable.

I think that what we need more than anything else is accurate data that indicates how far this disease has spread and to what demographic segments of the society has spread and what the potential for this spread is. Unfortunately, we can't do that as we do with other diseases because there are no overt signs to the initial infection.

So, we have to do testing, and the kind of testing that I'm suggesting for population sample statistics can be anonymous, and it has to be repeated.

The President has already initiated this as of about 12 or 14 days ago. It has to be done as rapidly as possible because, unless and until we get that information, we won't have a clear idea as to what we will have to do in order to respond to the epidemic.

On the one hand—I mean, there are two methods in the absence of a cure, a vaccine, that we have of responding—on the one hand, we can use the educational methods that we're talking about and, second, we can resort to testing.

But if we're going to resort to testing—and, incidentally, if we're going to do that, we have to require the same kind of confidentiality with appropriate penalties that lawyers and clients have—but if we do that, we have to have the statistical basis for carrying that out, and that can only come from epidemiological probes or population sample statistics.

Now, the rationale—and I think we ought to be very clear as to what we're saying if we're talking about widespread testing because the rationale for this approach is to determine and identify those people who are infectious and prevent them from transmitting the disease and have accountability, that is. Usually, this can be done by education and counseling.

It may not be necessary to do this, however. We don't know and we won't know until we get the results of population sample statistics.

Now, as far as the educational program is concerned, I must say that I've found Dr. Koop's presentation a very sympathetic one, and I agree with much of what he had to say.

I think that we have to learn to some extent from other public health problems that we've had and try to determine what has been effective in curtailing or changing habits.

And one of the campaigns that, in fact, Dr. Koop has been very much involved in is the change in smoking habits in the United States. There has been a reduction in smoking. And one of the chief forces which has produced that change in habit is the risk of getting lung cancer. It has been very clearly spelled out. People understand that if they continue to smoke, that they may get lung cancer.

The same thing has happened with a change in the American diet. We've changed our diet because of the risk of heart attacks.

And I think that a similar approach has to be used, particularly in the group that are now sexually active; that they have to understand what the consequences of their behavior are; what's going to happen to them if they do become infected and if, in fact, this is, as very many of us think, a very serious and eminent problem.

I agree completely with the positive aspects of what Dr. Koop suggested in terms of building a healthy, lasting, responsible relationship between two people and that the—I would like to conclude by just raising some questions about the terminology that we have about safe sex and safer sex.

We've heard a lot about safer sex. The question is: safer than what? The only safe sex is abstinence. The next safe sex is the sexual intercourse between a monogamous, honest, uninfected

couple or between two people who were uninfected and, if we look at people who are monogamous and have a long-term relationship that is faithful, they're relatively safe.

But when we talk about the use of condoms, we're not talking about safer sex. We're talking about less dangerous sex.

Now, the data about—just as Dr. Koop suggested, the data about using condoms, and whether this is going to be effective or not is not so much dependent upon the integrity of the latex or other materials used in the condoms, it is dependent upon how we can change human behavior. And the results of that are interesting.

In a study in 1984 of 5,000 gay and bisexual men, after four counseling sessions, about half of that group refrained from anal intercourse, but in the remainder there were over two-thirds, in fact, I think over 70 percent that continued to have unprotected anal sexual intercourse.

In a similar study in Pittsburgh in 1986 of over 500 gay and bisexual men, 91 percent knew that anal sex was the most dangerous thing they could do. Over 90 percent knew in a questionnaire beforehand that the use of condoms would prevent the transmission of AIDS. Of that group, 62 percent continued to have either all of the time or most of the time unprotected sexual intercourse, and 64 percent were the recipients of unprotected intercourse.

Now, another alarming statistic is that in that group, 35 percent were high on either alcohol or recreational drugs when and during the time they were having sexual intercourse. And I think, in looking at any kind of educational program in the use of condoms, we have to look at the use of drugs and alcohol during intercourse because I think that's going to have a major effect on compliance.

Now, if these epidemiological tests tell us that we don't have an immediate problem, as Dr. Jaffe suggests, and if we've got some time, then I think that we should put a tremendous stress on an educational program.

If the epidemiological probes show that, in fact, we have a terrible problem, then I think we're going to have to look very closely at the root of extensive testing. Thank you.

[Prepared statement of Vernon H. Mark, M.D., F.A.C.S., follows:]

PREPARED STATEMENT OF VERNON H. MARK, M.D., F.A.C.S., ASSOCIATE PROFESSOR OF SURGERY, HARVARD MEDICAL SCHOOL, DIRECTOR EMERITUS, NEUROSURGERY, CITY HOSPITAL, MEMBER NEUROLOGICAL STAFF, MASSACHUSETTS GENERAL HOSPITAL, CAMBRIDGE, MA

An Overview of the HIV Epidemic

This testimony regarding the HIV Epidemic is divided into two parts. Part A; "A Prescription for the HIV Epidemic", is a general assessment of the problems and solutions for the HIV Epidemic. Part B; "On Condoms and Aids is a summary statement about the utility of an Educational Program directed at children and adults to instruct them in the efficient use of condoms.

Part A

A Prescription for the HIV Epidemic

Any public policy formulated to limit the spread of the HIV epidemic in the United States must be based on compassion for the infected victims. This consideration is founded on practical as well as humanitarian grounds. At the present time, many victims of this disease refuse to be tested because they feel that a positive test will cost them their health insurance, their life insurance, their job and even their domicile. They are suspicious of promises of confidentiality that do not contain significant penalties when this is breached. Since the infected victims, particularly if untested and unwilling to change sexual or needle behavior, present a substantial risk to the uninfected population, some accomodation will have to be attempted. This might include federal health insurance or re-insurance for those health problems related to the HIV infection and workman's compensation insurance for those people who lose their jobs because of discrimination on the basis of the HIV infection.

A policy of compassion must also devise a plan whereby the infected drug addict population can be treated so that they will not disseminate the disease further. One approach might be to quarantine their drug habit by giving them methadone or other narcotics under medical supervision. Public health authorities would monitor their drug activities to be sure that they do not transmit the virus.

But if the care and treatment of the infectied patients requires a sense of compasion, so too must we have concern for the millions of presently uninfected Americans who are potential victims of HIV. Recent pronouncements by the Surgeon General regarding the improbability of an effective cure or even the development of a vaccine in the near future underscores the urgency of preventing the HIV infection from spreading into the general population.

An initial step in the program of prevention -- effective public education -- has provoked so much controversy that doctors and public officials seem confused and impotent. The debate surrounding public education has pitted Secretary of Education William Bennett (who advocates abstinence until marriage and fidelity ever after) against Surgeon General Everett Koop (who gives lip service to the abstinence and fidelity prescription, but who more vocally emphasizes the use of condoms for those people who wish to remian promiscuous). He has also favored the widespread education of adults and children in the efficient use of condoms.

While proper sex education may have some merit, an educational campaign alone -- no matter how well-intentioned -- is not going to stop the transmission and spread of HIV by teaching adults and children to use condoms. There are three sources of information that support this contention. A) The first is from Dr. Margaret Fishl and Dr. Gordon

Dickinson, published in the February 6 issue of the "Journal of the American Medical Association" in 1987, which indicates that condoms reduce but do not eliminate the transmission of HIV from an infected to an uninfected partner, even in a monogamous relationship. A further followup on Fischl's and Dickinson's patients indicates that the infection rate in the previously uninfected partner has increased, up to eighteen percent (Dr. Dickinson). B) The results in casual sexual intercourse are much less encouraging. In World War II, with sixteen million men under arms, condoms were widely distributed and available (Preventive Medicine in World War II, volume V, pages 196-204, ed. EC Hoff, 1960). There was a rise in the incidence of new cases of syphillis to a rate of over four hundred per hundred thousand of the population in 1945 (Pied Pipers of Sex, Mark and Mark, pages 27, 148, 1981). Compliance with the proper use of condoms was so poor that the armed forces introduced "pro kits" and eventually, oral sulfathiazole as a prophylaxis. C) Finally, although safe sex techniques in the San Francisco gay community succeeded in reducing the incidence of rectal gonorrhea by 73% between 1980 and 1984, seropositivity to HIV in the same group increased from 24% to 68% in the same time period. This was reported by Curran in "Science", September 27, 1985 on page 1356. These figures illustrate how difficult it is going to be to educate the general population in the proper use of condoms to

prevent a disease that initially has no symptoms and which renders its victims almost continuously infectious.

Secretary of Education William Bennett's solution to the problem of HIV transmission has a great deal of merit. However, during the last twenty-five years, the sexual revolution and the drug culture profoundly affected the sexual mores of the United States' population and it will be exceedingly difficult to change human behavior quickly enough to avoid a public health catastrophe. Recongnizing this, Secretary Bennett has also called for extensive testing.

There are some other steps that we can take to help contain this epidemic. First, we must initiate, as quickly as possible, a series of epidemiological probes or studies utilizing population sample statistics to determine the extent that the HIV infection has penetrated the various demographic segments of our society. This will require antibody testing and it can be done anonymously. Epidemiological probes should probably be repeated every three to four months to help gauge how rapidly the disease is spreading and to determine if public health measures are effective.

Secondly, we must increase the safety of our blood supply. Although some officials claim that our blood bank blood is 100% safe because of antibody testing, there is still a theoretical window of vulnerability, since a newly infected individual may be infectious for a period of two to

three months or more before antibody tests become positive. Fortunately, most elements of blood -- except for granulocytes - can be preserved by freezing techniques for at least a year and perhaps considerably longer. Donors could then be retested at periods of six months or more to be certain that their antibody tests remained negative. A concentrated effort must also be made to develop an accurate antigen test for HIV.

Finally, the centerpiece of any program to prevent the dissemination of an infectious disease has to first focus on the identification of the individuals who are infectious and then on a campaign to prevent the spread of the virus to the uninfected. The public policy debates on the most effective methods of carrying out widespread testing range all the way from voluntary testing - with anonymity of the infected individuals - to mandatory testing. All testing would require that confidentiality be maintained to protect those who test positive.

Depending upon the results of the repeated epidemiological probes, it may become apparent that mandatory testing will be necessary. Republican Congressman Dan Burton of Indiana has already introduced legislation to require such testing of all citizens on an annual basis to be carried out by each state that wishes to continue the federal subsidy to its Medicaid program (HR 1789). Even if this were accomplished, we are still confronted with the difficult problem of making certain that individuals who knew they were infected did not transmit this disease by

sexual intercourse or the sharing of needles. Congressman Burton has advocated voluntarism as an initial technique to limit transmission, with contact tracing of infected individuals to determine whether or not previously identified infectious individuals had violated their moral parole by engaging in dangerous behavior.

Congressman Burton's proposed legislation raises some questions that are difficult to answer. First, who is going to pay for the proposed testing program? The cost will be substantial because of the significant incidence of false positive tests that will require retesting with the Western Blot Test and possibly virus cultures to be certain of the diagnosis. Second, who is going to pay for the counseling of the patients with a confirmed infection? The answer in both cases is most likely going to be the federal government. But the cost to the infected individual, especially if asymptomatic, is going to exceed in psychological and social terms any financial consideration. Even if best efforts are expended to be certain that confidentiality is preserved, there is a great danger that the civil rights of such a patient will be violated. This raises the ultimate question - if a confirmed infection threatens to create such havoc in the life of the infected victim, with no immediate treatment for the carrier state on the horizon - why do testing at all? There are two answers to that question. First, infected asymptomatic women who become pregnant

are very likely to bear infected infants who will be symptomatic and will succumb to the disease within three years. Second, if the majority of sexually active asymptomatic but infected individuals are ignorant of their infection, how can they be expected to avoid behavior that will transmit the virus?

There are no effective public health strategies for containing the HIV epidemic that do not endanger some civil liberties. What we must do, to balance individual rights against the public's right to escape the epidemic, is to determine what the compelling national interest is. And that answer will come in part from properly organized epidemiological probes. If these show a rapidly spreading pandemic, then standard public health regulations must supersede other legal considerations. If we allow this infection to go unchecked, the cost in terms of human sufferring will be immense. And the financial cost of caring for the many victims of the disease will make the cost of a testing program or other public health remedies seem trivial.

1. Fischl M, Dickinson G, et. al: Evaluation of Hetersexual Partners, Children and Household Contacts of Adults with AIDS. JAMA, February 6, 1987; 257: 640-644.
2. Communicable Diseases Transmitted Through Contact or Unknown Means, vol. 5, in Hoff ED (ed): Preventive Medicine in WWII. Washington, D.C., Department of the Army, 1960: pp 196-204 Condoms were put on sale in all military post exchanges in 1939. All recruits were shown an educational film about preventing venereal diseases. The American expeditionary force in England had six condoms allocated per month per man. The lack of proper use of condoms led to the introduction of "pro kits" and, subsequently, the use of prophylatic sulfathiazole.
3. Mark A, Mark VH: Pied Pipers of Sex. Plainfield, NJ, Haven Books, a Division of Logos International, 1981, pp 27, 148 (reference 46).
4. Curran JW, Morgan WM, et. al: The Epidemiology of AIDS: Current Status and Future Prospects. Science, September 27, 1985; 229:1356.

Vernon H. Mark, M.D., F.A.C.S.

Alexandra Mark, Ph.D.

Part B

ON CONDOMS AND AIDS

The futility of educating the public to use condoms as the primary tool to contain the HIV epidemic was revealed at the recent Washington D.C. conference on AIDS. This was illustrated in two studies of gay men - a group supposedly most educable to changing their sexual behavior. In one, a national study conducted on 4,955 gay men in 1984 showed that the use of condoms doubled over the course of the first four visits to the study center. However, over 66% of the 2500 men who still engaged in anal sex did not use condoms and 44% used nitrite inhalants to enhance their sexual pleasure. A second study of 503 gay and bisexual men done in 1986 showed that 91% were aware that anal receptive sex was the most risky sexual practice and 90% knew that condoms could reduce the spread of AIDS. Yet, 62% stated that they never or hardly ever used a condom in insertive anal sex and 64% said that their partners were guilty of the same dangerous behavior. Thirty-five percent of them were high on alcohol or recreational drugs during sexual intercourse and this may have contributed to the lack of condom usage. Nor was the American gay community the only group to continue indulging in unsafe sex practices. The British have reported very little change in high risk sexual intercourse even after a massive national educational campaign to promote the use of condoms. And American researchers treating hemophiliacs infected with HIV agreed that a lack of

compliance in using condoms was their chief concern about otherwise pristine sexual practices in this largely monogamous cohort of patients. The wife of one infected patient was a nurse who took care of AIDS patients. Yet, the couple still wouldn't use condoms.

All this emphasizes the vulnerability of Dr. Everett Koop's plan to change American sexual habits by a massive public education campaign on the efficient use of condoms. Certainly, under the best conditions, condoms may reduce but not eliminate the possible transmission of the AIDS virus from an infected to an uninfected partner. But even in gay cohorts who used safe sex techniques to reduce their incidence of rectal gonorrhea by 73% between 1980 and 1984, there was still a 280% increase in HIV infection over the same time period. And in the heterosexual community, involved in casual sex during World War II there was an even more dismal record of condom utilization. Sixteen million men were under arms. Condoms were widely available in all post exchanges beginning in 1939 and were distributed to many service men free of charge. The Army was forced to use other methods for controlling venereal disease such as "pro kits" of externally applied medicine and prophylactic oral sulfathiazole. And, in 1945, there was the largest increase in new cases of syphilis (400 per 100,000 in the population) in the history of the United States.

Clearly, the issue is not how often condoms break or leak, but whether men will always wear them and use them correctly when having sexual intercourse. The answer is obvious - public education in the use of condoms is not going to increase their use to the extent that it will stop an HIV epidemic. To do this, in the absence of a cure or vaccine, we need three things:

1) repeated epidemiological HIV testing to see how far and into which groups of the population that the HIV epidemic is spreading;

2) confidential mandatory and repeated testing of the high risk groups - with contact tracing;

3) accountability of those people who are found to be infectious, to be certain that they don't pass the disease by sex or needle sharing to the uninfected.

Vernon H. Mark, M.D.,F.A.C.S.

VHM/mn

High School Sex Education in the ERA of AIDS

Some Public Health officials and legislators are concerned about the possibility of a serious outbreak of HIV among promiscuous teenagers in the United States. Liberal activists are united on a solution: expand sex education in the public schools. The curriculum would include classroom instruction in the efficient use of condoms and the concept of "safer sex." They have also embarked upon an ambitious plan to establish school-based health clinics which, in addition to providing students with medical services, will dispense advice on family planning matters that can involve anything from abortion services counseling to measuring young women for birth control devices. They can also hand out or prescribe the Pill. With AIDS becoming a problem, officials now want to advise students on the forms of transmission of the disease and ways to avoid contamination. This medical and sexual adjunct to traditional education is now seen as the best nonjudgmental approach whereby the fears of the young might be addressed. Advocates pride themselves on having produced a utilitarian, nonmoralistic - hence valueless - set of guidelines, with which no one should seriously quarrel. To their way of thinking, a frank discussion of HIV and its

end result, AIDS, should solve the problem for teenagers.

This 'solution' - if indeed it can be called that - will inevitably become part of the problem. It is a fact, for example, that not all of these physicians, scientists and educators feel that childhood sexual activity is wrong. Indeed, according to recognized sex therapists, "prepubertal heterosexual play need not be discouraged since it can be a useful learning prelude...to adult sexual life." For some, the same is also said to be true of homosexual activity. And herein lies the seeds for a serious conflict: as AIDS began as a predominantly homosexual problem, any discussion of the disease sooner or later must involve a discussion of homosexuality as a way of life. This cannot be done on value neutral territory. The question is, whose values will prevail?

Several recent studies of safe sex programs among homosexuals, presumably one of the most educable groups, has shown a substantial incidence of noncompliance in the use of condoms, and in one study in particular, there was a steep increase in HIV infections even though the incidence of rectal gonorrhea was lowered in the same group. The compliance in condom use has also been disappointing among infected hemophiliacs and high-risk groups in England. There is no reason to believe that a similar campaign of condom instruction among high school students would be any more successful and it cannot be relied upon to stop an HIV epidemic.

Is there another educational solution to this problem? The answer, of course, is yes, but only if it addresses root causes. Education, if it is to be effective beyond being a palliative, cannot simply stress the dangers of an HIV epidemic, nor talk vaguely about being "discriminating" in choosing sexual partners. It must actually strive to change behavior that spreads the disease. An effective educational program must boldly challenge recreational sex; it must condemn promiscuity, and it must address the role drugs play, not just in being a route for needle transmission of AIDS, but as a modifier of behavior by altering judgment and reason. One way of changing dangerous behavior is by instilling a healthy fear of its consequences in the minds of teenagers. This approach is not unique. Campaigns to stop cigarette smoking have used the fear of lung cancer; and the fear of heart attacks has been used to alter the American diet. An educational program that relies on fear alone, however, can only be partially effective. What teenagers need is positive reinforcement of a normal value system with regard to sexuality. We must re-introduce traditional moral values into our school sex programs, values that are consistent with good public health.

What do high school students need to know? There are two themes that must be stressed. First, that abstinence before

marriage is normal and second, that fidelity afterwards is expected. We must teach our children that the old openness about sex that is a kind of institutionalized exhibitionism, is a fraud. We must teach them the value of modesty and privacy.

Opponents of traditional morality will not give up their leadership easily; they will argue that this is a form of repression, a return to prudish Victorianism. They will claim that it is unreal in this day and age to expect the young to deny their sexual urges. The r program, however, has been a failure and it has led us to the brink of a public health catastrophe. We must now introduce to the young the concepts of romantic love and the stages of responsible courtship.

We have a clear choice: Do we want to waste our limited resources on a program of explicit and permissive sex education in the high schools that will inevitably prove ineffective? Or do we dare take the innovative tack and chart a new course? Have we the courage to teach youngsters that there are moral and public health strictures regarding their sexuality?

Finally, can this generation of adults, steeped in their own promiscuous culture, gain the coufidence of the

teenagers by setting their own example of responsible sexual conduct?

Vernon H. Mark, M.D., F.A.C.S.

Alexandra Mark, Ph.D.

Chairman MILLER. Dr. Hein.

STATEMENT OF KAREN HEIN, M.D., ALBERT EINSTEIN COLLEGE OF MEDICINE, BRONX, NY

Chairman MILLER. Welcome to the committee.

Dr. HEIN. Thank you. Mr. Chairman, Representatives, colleagues, my job today is to try to fill you in on some of those facts that have been referred to. What I'd like to do is to try to give you an overview of how adolescents differ from children and from adults vis-a-vis the AIDS epidemic.

AIDS is a paradigm for many of the problems that adolescents face. Adolescents, like the gay community, and the IV drug abusers, are also a group that are discriminated against in this country. It's important for us then to understand where the differences lie among adolescents and between younger and older populations in order to design those programs that will be most effective for this group that currently have a low rate of infection but, by the testimonies you've heard, are considered to be high risk. They're at high risk because of normal developmental behavioral changes, psychological development and social development.

What I'd like to do today is to divide the large group of adolescents into groups who may be at differential risk, at higher versus lower risk, and to emphasize again some of what we know about adolescents and some of what we think about adolescents.

In this epidemic, geography is destiny in that it's not just a risky behavior that's needed, but it's the presence of the virus. And, so, as I share with you some of the statistics about adolescent cases, you'll see that the geographical setting of some adolescents puts them at much higher risk right now than others.

What are the differences in cases of AIDS among children and adolescents? They are four in number.

Firstly, children tend to die more quickly. Secondly, they often have need for foster and day care. Thirdly, the majority of AIDS cases under age 13 years are very young children—80 percent are under the age of 3—and, fourthly, the time from diagnosis to death, the mean survival time, is much shorter than in adults.

What are the differences between adolescents and adults?

Firstly, there appear to be more cases of heterosexual transmission in adolescents, I'll review local New York data to support this assertion. There are more asymptomatic cases—teenagers who are HIV infected but who are not sick—as compared to adults. This is due to the long latency period or the time during which a person is infected but not sick.

Thirdly, there is a disproportionate percent of black and hispanic youth who are infected, higher than among the adults and, fourthly, the rates of sexually transmitted diseases are highest in adolescents as compared to adults. This is particularly striking when the rates of VD are calculated percent of sexually active people, not just numbers of people in different age groups.

There are special legal and ethical issues when dealing with minors. Minority status, those under the age of majority, implications for their ability to consent for testing; whether or not parents should be involved in the decision to be tested or in notification of results and in issues of; confidentiality of records.

There are four psychological differences between adolescents and adults. The first is the teenagers sense of invulnerability; that nothing can happen to me that will be life-threatening. Secondly is their tendency to think rather concretely or to focus on the present as opposed to having the ability to think abstractly or in the future.

Thirdly is the propensity to use denial as an important coping mechanism. When faced with an overwhelmingly unpleasant thought, they'd rather deny it. This accounts for some of the teenagers who are pregnant who present in labor, denying their pregnancy to the last moment.

And, fourthly, the importance of group or peer activities. We see this vis-a-vis the AIDS epidemic in a number of ways. First, the choice of sexual partner. Teenagers—females—tend to have partners who are two to three years older than they. About half of the sexual partners of teenage females are 20 years or older; They may form a potential bridge between the adults who are infected and adolescents.

There's a lack of a unified community among adolescents to respond to the AIDS epidemic threat. Unlike the gay community, there are neither resources, personal nor financial or economic, to help bring the issues of adolescents to the floor; hence, the importance of your group as an advocate for youth.

Among the implications for their sexual patterns, again, we've mentioned the difference between male and female ages in partners. Other differences include use of contraceptives among teenagers versus adults with much less use in adolescents. About half of adolescents use no contraceptives at first intercourse. Condom use is episodic and, even though now more condoms are being purchased, it's still questionable whether more are being used.

Barriers to access for care that have existed before the AIDS epidemic for teenagers continue to exist. They include payment and confidentiality. These are two of the major reasons why teenagers will not seek health care nor return for ongoing health care.

Pregnancy rates remain high among adolescents and what's of most concern vis-a-vis the AIDS epidemic is that teenagers tend to have less prenatal care than adults, particularly within the first trimester when options for continuation of pregnancy if exposed to HIV infection would be a consideration.

I'd now like to present a model, that I have developed to divide the 25 million adolescents between the ages of 13 and 19 into risk categories for acquisition of HIV infection, and then will end with some data about New York City.

In the material that was prepared for you prior to the hearing, there is a model that has many circles on it like this—and I'll be referring to it in my next remark.

If we now think of this differential risk among all adolescents, obviously not all of them are infected now, nor are all of them at risk in 1987. Starting with the innermost circle we have teens that are at no risk at the moment, either because they live in a place where the virus isn't present or because they're not engaging in any of those behaviors which could infect them with the virus.

In the next circle are the sexually active adolescents who may not be exposed to the virus at present. They are separated from

those at risk by the dotted line. They may move into the group at risk for infection at any time.

And the outer circle, the largest in this model, but not necessarily largest in numbers of adolescents in the country, represents those teenagers who, right now, are at risk for acquisition and spread of HIV infection.

The potential bridging groups between infected individuals and teenagers are eight in number. Four are shown by the large cicles. They include the adult IV drug abuser, the adult homosexual and bisexual individuals who are infected and the partners of both these groups.

In addition, you can see that these circles dip down into the adolescent population. So, another four groups exist, including the teenage IV drug abuser and the teen homosexual or bisexual and their partners. So, we see that there are eight potential bridging groups right now for extension of infection into the adolescent population. Once the virus is introduced, we know from patterns of spread of sexually transmitted diseases the sexual adventurer the teenager with multiple parents can be the reservoir of many other sexually transmitted diseases and that they, whether homosexual, bisexual or heterosexual, whether male or female, are likely to be the ones to spread the HIV virus most quickly to others.

I'd like to now end with some facts that have been recently gathered by the Commissioner of Health in New York, Stephen Joseph, and myself, to highlight that this is a clear and present danger, not a theoretical or potential danger for the future.

And to back what I'm about to say, we've just handed out to you two pieces of information that have not been shared publicly prior to today.

The first is a table summarizing the cases of AIDS in adolescents aged 12–21 years. These are not HIV infected individuals but, rather, cases of AIDS in New York City. There are only 79 in total through January 1987.

What's fascinating about these 79 people, however, are the following facts. First of all, the male-to-female ratio of AIDS cases in the country as a whole, is 13 males for every 1 female infected. In the military, 3 males to every 1 female. In New York City teenagers between the ages of 4 and 21, the male-to-female ratio is 2.8 to 1, very close to Africa where it's 1 to 1.

The only non military prevalence study that's been done including adolescents was conducted in Kinshasa, Zaire, and reported by Quinn and colleagues. By dividing various age groups into 5 year cohorts among women, the highest rate of HIV seropositivity, that is people with positive blood tests, was, the 15- to 19-year-old teenage girls. If one looks at the corresponding distribution for males, the group with the highest prevalence was much older; again, pointing out that in Africa, as in America, females tend to have older male partners.

Coming back to New York, though we have a low ratio of 2.8 males to every female, the ethnic grouping, 55 percent black, 25 percent Hispanic, 20 percent white, this compared to the nation is just the reverse. In the nation as a whole, roughly 60 percent of cases are white. So, we see this heavy over-representation of minority groups.

If we look at adults in New York as compared to teenagers in New York, the black population, again, is represented disproportionately compared to adults.

In New York City, 10 percent of the babies who are born with AIDS have mothers who are teenagers ages 21 or less. Nationally, we don't have similar statistics because the CDC currently is not collecting information on age of mothers who bear infected babies. But, this does give us a hint that there are a substantial number of infected adolescents who are well but are now bearing ill and dying children.

Last, the pie graph that was distributed summarizes the risk categories for the adolescents cases of AIDS (ages 12 through 21) in New York City, 39 percent of the cases were in male homosexuals or bisexuals; 23 percent in IV drug abusers. Let's stop there and compare them to the nation.

The percent of male homosexual and bisexual is only a little more than half of the nation as a whole (66%). Therefore AIDS cases in adolescents are less commonly associated with homosexuality or bisexuality in New York City than in adults. Rather, the percent of IV drug abusers, 23 percent is higher than the Nation as a whole at 17 percent.

The next category is of special note and concern to me and to you, and that is that the female partners of high-risk people account for 13 percent among adolescents AIDS cases in New York compared to 2 percent among adults in New York and 4 percent in the Nation as a whole. This is further evidence of the importance of heterosexual transmission in adolescents.

In addition you may remember that the IV drug abuser is often also sexually active and may be transmitting the virus through sexual intercourse, although they may be coded as IV drug abusers.

The 13 percent who are blood-product recipients includes the teenaged hemophiliacs who developed AIDS. Once again, it is important to remember that not all hemophiliacs are being tested. In our medical center, they are not being tested at all.

In summary, there are important differences between adolescent AIDS cases in New York City and the adult cases in the Nation and between teenagers and adults: a higher percent of IV drug abusers, a smaller percent of homosexual and bisexual youths. The model however shows eight potential contact points where the virus may be entering the adolescent population.

For each of the adolescent risk groups from those at no immediate risk to those at imminent risk I will outline some of the issues.

Referring to the conceptual concentric circle model, for the inner circle (those teenagers not at risk at the moment) they still are living in a society where there is a great deal of concern about AIDS. They need to know how to function in such a society; how to avoid becoming the "worried well" how to have normal developmental experiences, those that we now categorize as "casual contact" which don't put them at risk.

For the next circle, those who may not be exposed but are sexually active, there are issues regarding knowing partners, about reconsidering patterns of sexuality and the use of contraceptives in general and condoms in particular.

And most urgently, for that third circle of potentially exposed or infected teenagers, geography can be destiny. Living in an inner-city in some of the mid-Atlantic states are areas of high viral prevalence. For these teenagers, testing becomes an immediate concern. Appropriate testing means the need for age appropriate counseling, follow up and care in a health service geared to the special needs of teenagers.

And here I'd like to make an editorial remark that the only mandatory screening program in America that includes adolescents are the military, the Job Corps and the Peace Corps. The rates overall for the military were 1.5 per thousand. In the Bronx they were 1.6 per hundred.

What happens to those young military recruits when they are determined to be HIV positive and excluded from the military? Where do they go and what happens to them? Currently there is no organized system for helping these young people. They are told to seek health care through their local health department or their local doctor. Most of these youth have no local doctor nor affiliation with an appropriate health service within their local community. There is a pressing immediate need for linking those rejected from the military, Job Corps, and or Peace Corps, with experts trained in counseling youth and crisis management such as the network of Adolescent Medicine Clinics.

Other problems for the highest risk groups of teenagers include knowing the sero status of their partners. As testing becomes more widely available, this will become a possibility. They will need to be counseled about the appropriate use of barrier methods for those who remain sexually active and counseled about reconsidering patterns of sexual behavior.

Decisions about continuing pregnancy, are urgent in those populations of high viral prevalence such as New York and Newark and, lastly, there is the need for services that include counseling for crisis intervention for teenagers because being told that you're HIV positive is indeed a crisis for any age group but, particularly, for the adolescent whos psychological development alters the processing and implications of this potentially devastating information.

In conclusion, there are ethical and legal issues that would differ for adolescents.

Do adolescents have the right as a minor—to participate in screening if it were available? Do they have the right to refuse, such as the mandatory screening for the military, Job Corps or Peace Corps? If they are screened, do they have the right not to know the results, that is not to be told the results? Should they have access to anonymous testing? Currently, in New York City, there is no policy about minors.

Should parents be involved in the decision to be tested? If the results are positive, should parents be notified? If so, this would be quite different from policies in effect regarding other sexually transmitted diseases in most states or where parental knowledge, or notification are specifically excluded. In most States, treatment as well as diagnosis, for minors with sexually transmitted diseases can be done without parental consent or knowledge.

How can we inform immature minors about the issues involved in testing and in being positive? What about the cases in which

their partners are, themselves, minors? Should case contacting of minors be pursued with or without parental movement?

Do teenagers who experiment sexually as part of their normal growth and development provide undue risk to their partners? How will we separate the issues of what's normal from what's deviant?

What about the emancipated minor or the mature minor—two legal concepts, that are invoked for teenagers who are under the age of majority that sovern the right to consent to their own medical care?

Those are some of the ethical and legal issues to be addressed. I would hope that this hearing will be an impetus for more public debate of these issues and the importance of separating out adolescents from adults and children.

In summary, the number of cases of AIDS in adolescence is small. The number of HIV infected adolescents is unknown. We need to disaggregate information from adults and from children in order to characterize the nature of the epidemic among adolescents. We need to look first at those epicenters where the virus is most prevalent, the mid-Atlantic states, Florida and the West Coast.

Geography is destiny, at the moment. The location in which you live in this epidemic in 1987 is going to make a lot of difference. The long and variable latency of this virus from the time of infection to illness, means that adolescents probably will generally appear well. They aren't going to fill our hospital beds. So, in talking about the economic consequences of AIDS in adolescents, we're talking about the need for ambulatory service, for counseling, for outreach to community-based agencies and to schools.

And, lastly, let's talk about the years of potential life loss: what could this epidemic mean, not to our young people today, but to our society in a decade or two. By not taking this opportunity to prevent the spread of the virus into the adolescent population, we take the risk of eliminating a very productive group of adults of our future. If we wait for proof of the spread to adolescents by massive numbers of AIDS cases, we will repeat the tragic experience in the gay community. We truly will then be treating a disaster rather than heading one off. Thank you.

[Prepared statement of Karen Hein, M.D., follows:]

PREPARED STATEMENT OF KAREN HEIN, M.D., ASSOCIATE PROFESSOR OF PEDIATRICS, DEPARTMENT OF PEDIATRICS, ALBERT EINSTEIN COLLEGE OF MEDICINE, BRONX, NEW YORK

INTRODUCTION

The spread of the AIDS virus is receiving increasingly widespread attention in the medical and lay press. Attention, however, has been focused on affected adults and young children. There is currently a low incidence of AIDS cases in the adolescen population under the age of 21. While adolescent sexual behavior is a common and controversial concern, we are only beginning to recognize the AIDS risk associated with this behavior. In fact, exploring AIDS risk in adolescents forces us to focus on the special characteristics of this age group and the need for an interdisciplinary perspective.

The premise of this report is that certain subgroups of adolescents form bridges from those adults currently infected to a larger group of adolescents. As the virus spreads from the group initially infected (homosexuals, blood product recipients, and IV drug abusers) to their partners and beyond, the risk-related behaviors of adolescents puts some teenagers directly in the path of the epidemic. In this epidemic, geography can be destiny.

The major differences between children, adolescents and adults are highlighted. Specific biological, behavioral and social attributes of adolescents point to the need for a differen approach to organizing educational interventions and health services for teenagers.

This approach should be based on a conceptual framework which establishes the relative risk among various adolescent subgroups. Even though the exact dimensions of each risk groups are unknown, there are specific issues for each subgroup of teenagers. The model proposed on page 5 provides a systematic way of separating groups of teenagers for different types of interventions.

AIDS EPIDEMIC UPDATE

By reviewing the most recent data on the AIDS epidemic, the relationship between the actual and the potential situation emerges. Although only 35,000 people have been diagnosed as having AIDS, 1.5 million are probably infected with HIV (Human Immunodeficiency Virus). In four years the number of AIDS cases is projected to increase by 900 percent. While AIDS has been confined mainly to large coastal cities, there is evidence of geographical spread in that all states have now reported cases. AIDS cases are 93% male, but women, particularly young minority women, are increasingly expected to be carriers of the virus.

Although the percentage of cases currently attributed to heterosexual transmission is small (4%), this group is increasing at a greater rate than other categories. Evidence of more widespread heterosexual transmission is the male to female ratio. The overall ratio in the US is 13:1, but in the military it is 3:1 and among New York City adolescent cases, 2.8:1. In one central African city where the male:female AIDS ratio is 1:1, teenage girls, 15-19 have the highest rates of seropositivity (positive

blood tests indicating presence of the virus). Their most likely route of infection is heterosexual contact with older men. This age difference is a pattern of behavior commonly reported by American adolescent females who tend to have male partners several years older.

AIDS incidence in correctional faciiities, and in the military point to a high and increasing presence of the virus among young adults, particularly blacks and Hispanics. Only two analyses of adolescent AIDS cases have been conducted. The Centers for Disease Control (CDC) analyzed 1159 cases between 11-24 years. The majority of cases were in the older age group, 17-24, so that extracting an accurate view of AIDS cases during the teenage years is difficult.

A very recent analysis in January 1987 of 79 cases 12-21 years old in New York City is more instructive. The majority were black and Hispanic males. A much lower percent were homo/bisexual (39%) as compared to adults (66%) while a higher percent were IV drug abusers (23%) or female partners of these two groups (13%). Only 10% of the New York City adolescent cases were transfusion recipients or hemophiliacs as compared to 80% of younger adolescent males in the rest of the nation. Another indication of viral spread to adolescents is the fact that 10% of the mothers of babies born with AIDS in New York City are young women under 21 years of age.

Although the total number of adolescent cases is small, nonetheless, the means of acquisition points to a very different

pattern than is present in adults or the nation as a whole. This emerging pattern is particularly alarming because much of the publicity in the printed and electronic media has been geared to and has attracted the attention of middle and upper class white adults rather than inner-city minority youths.

Two factors must make us particularly concerned about the incidence of "hidden" AIDS risk among adolescents: 1) the low percent of AIDS cases in adolescents reflects the cumulative, not the current pattern of infection. Analysis of the most recent data from New York City underscores the fact that heterosexual transmission among inner city minority youth is a clear and present danger. It is difficult to get an accurate sense of HIV prevalence in the adolescent population since few have been tested as yet; 2) asymptomatic HIV infection in adolescents is likely to present as illness (AIDS or ARC) in young adults. It is critical to focus on adolescents because the risk of an HIV infected teenager developing AIDS does not decrease over time, and the virus can be transmitted while the adolescent remains asymptomatic.

A MULTIDISCIPLINARY PERSPECTIVE

There are many facets to the relationship of AIDS and adolescents. Therefore, a multidisciplinary perspective is necessary. The closest parallel we have in the adolescent population is the incidence and prevalence of sexually transmitted disease, which, if examined, sends out a clear warning. National

data on sexually transmitted diseases can be misleading if rates are calculated based upon overall population at a given age. For example, it appears that adolescents, particularly young adolescents females 10-14 years of age, have lower rates of gonorrhea than young adults. If, however, the rates are recalculated based only on the percentage of sexually active adolescents and adults in each age group, teenagers have the highest rates of all, twice as high as young adults in their 20's.

These high rates may be related to physiological risk factors. Differences in adolescent reproductive organ function and immunologic status due to changing levels of sex hormones may play a role in the increased acquisition and more rapid spread of some venereal diseases.

Behavioral issues include patterns of sexual behavior and drug-related behavior. Intravenous drug use or blood product transfusions are obvious risk factors. HIV is assumed to be spread by needles in the drug abusers or blood products in the people with hemophilia, but infected drug users are mainly young adult minority men who are also sexually active, some with multiple partners. Similarly, many adolescent hemophiliacs are sexually active and can transmit virus to their sexual partners.

Sexual behavior has direct relevance for AIDS transmission. Important factors include the age at first intercourse, and patterns of intercourse, whether serially monogamous or sexually adventurous. Finally the use of contraceptives and the rate of teenage pregnancies are important factors. Adolescent females

tend to have intercourse with somewhat older males. Pregnant teenagers can transmit HIV infection to their children.

Psychological development varies greatly during the adolescent years, but certain characteristics appear to be common to the adolescent population. Teenagers tend to feel invulnerable making a future risk of AIDS appear remote. This is compounded by the tendency toward "concrete" rather than "abstract" thinking still prevalent among adolescents. Decisions are thus based on very tangible factors rather than on long term probabilities. Peer pressure as an immediate and important factor that can override abstract and distant risks. The tendency toward denial, shared by all age groups, may be exaggerated in adolescence.

Ethical and legal considerations related to testing, screening, informing partners and counselling are complex when dealing with adults. The principles and guidelines need modification when applied to minors. Some specific questions are raised in this report to highlight the unique circumstances for adolescents who are under the age of majority.

Economic issues have been analyzed for adults with AIDS. However, the cost of identifying and caring for adolescents calls for a different type of analysis that goes beyond the direct costs of testing and patient care. Out-patient and in-patient insurance coverage for adolescents, particularly those who are not in school who are from "working poor" families is problematic. The greatest demand will probably be for ambulatory care. The usual barriers keeping adolescents from obtaining care (payment, consent and

confidentiality) are particularly relevant in relation to HIV infection. In addition, the indirect costs to society related to services developed and to loss in productivity must be considered

Adolescents spend most of their day time in institutions organized for them by adults. Political debates are currently raging about the appropriate role of youth serving institutions i altering behavior, offering health services or expanding sex education curricula. Adolescent views, beliefs and specific concerns about AIDS have not been adequately polled or considered Institutions that have been involved in adolescent AIDS controversies include schools, federal programs including the Job Corps and the military, the media and court involvement in parental notification cases.

OPTIONS FOR ACTION

Any action plan should be based on three assumptions: 1) adolescents are a heterogeneous population socioeconomically, culturally, and developmentally; 2) to be effective, prevention must take place before widespread HIV infection in the adolescent population is detected by the presence of numerous cases of AIDS; and 3) interventions must both include and go beyond traditional institutions.

The basic message in this report is recognition of the special needs and opportunities related to AIDS in adolescence. Thoughtful but quick action is the goal. If we cannot determine and deter the AIDS risk for our adolescents now, we are likely t face massive morbidity and mortality among our young adults in t near future.

Figure 1: The rapid spread of AIDS[4].

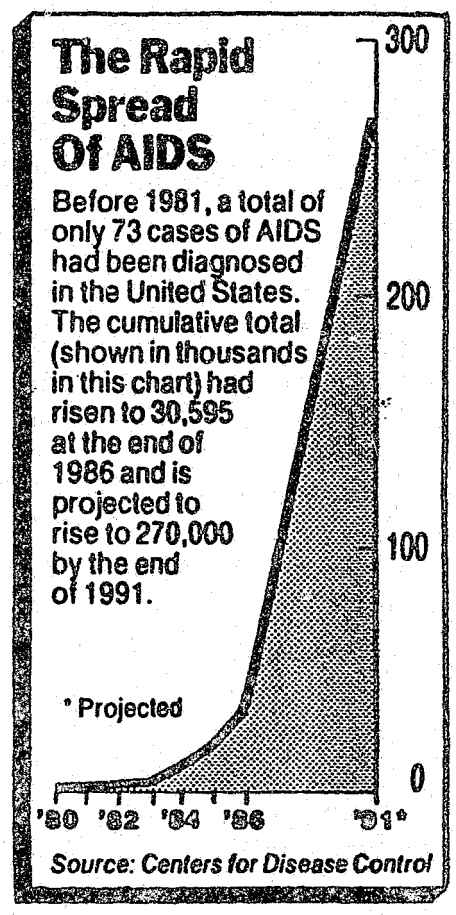


Figure 2: AIDS cases are concentrated in high-risk group.[6]

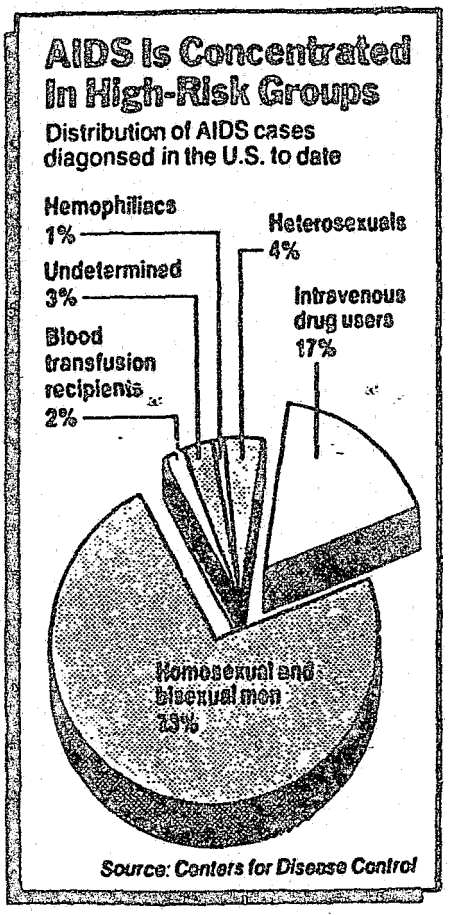


Figure 3: Apparent increase in the incidence of gonorrhea in adolescents and young adult females (from Bell and Hein).[20] Courtesy of McGraw-Hill Book Company.

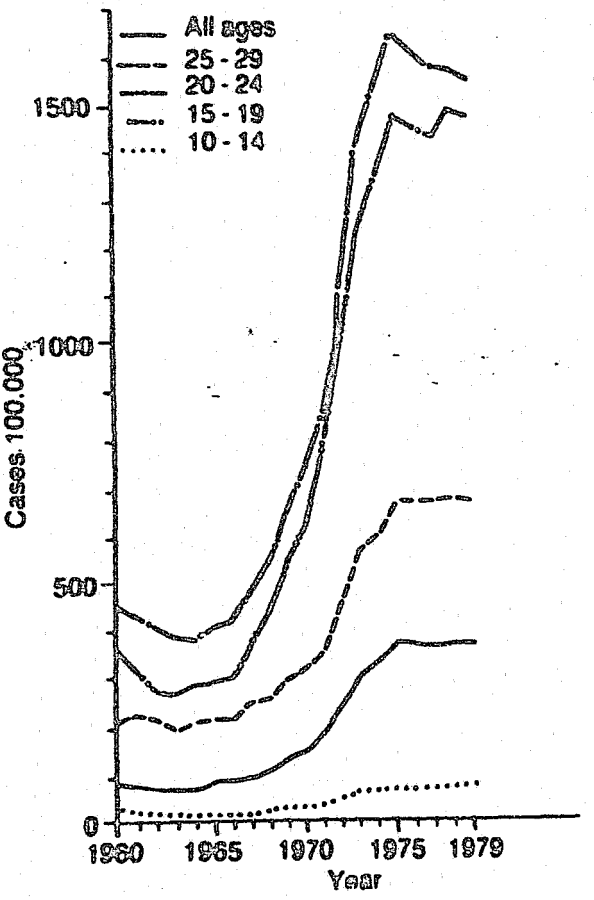


Figure 4: Rates of gonorrhea expressed as number of cases per 100,000 of sexually experienced females (from Bell and Hein).[20] Courtesy of McGraw-Hill Book Company.

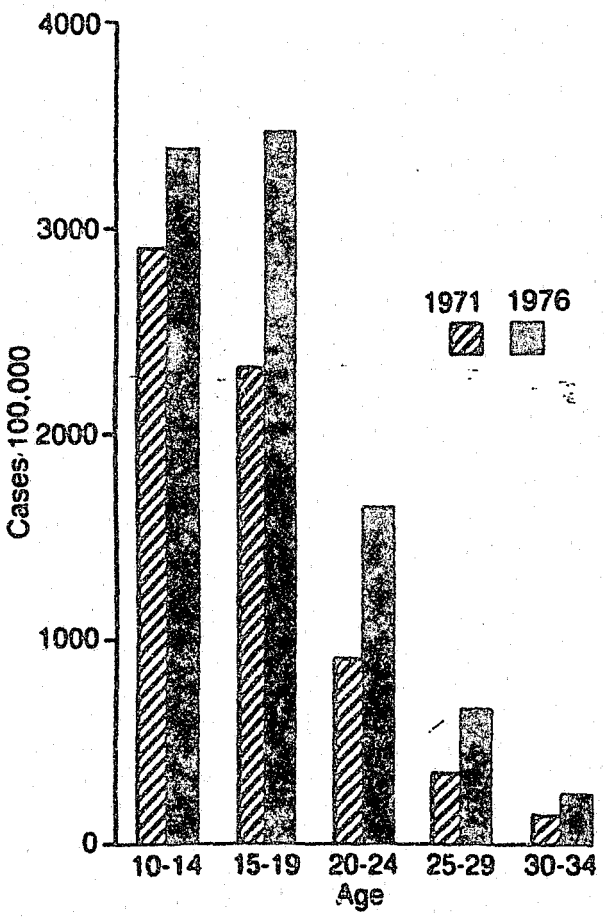


Figure 5: HIV seroprevalence rates among 5099 healthy persons by age in Kinshasa, Zaire. In age groups 15-19 years and 20-29 year seroprevalence rates were significantly higher in women than men. Adapted from Quinn [11].

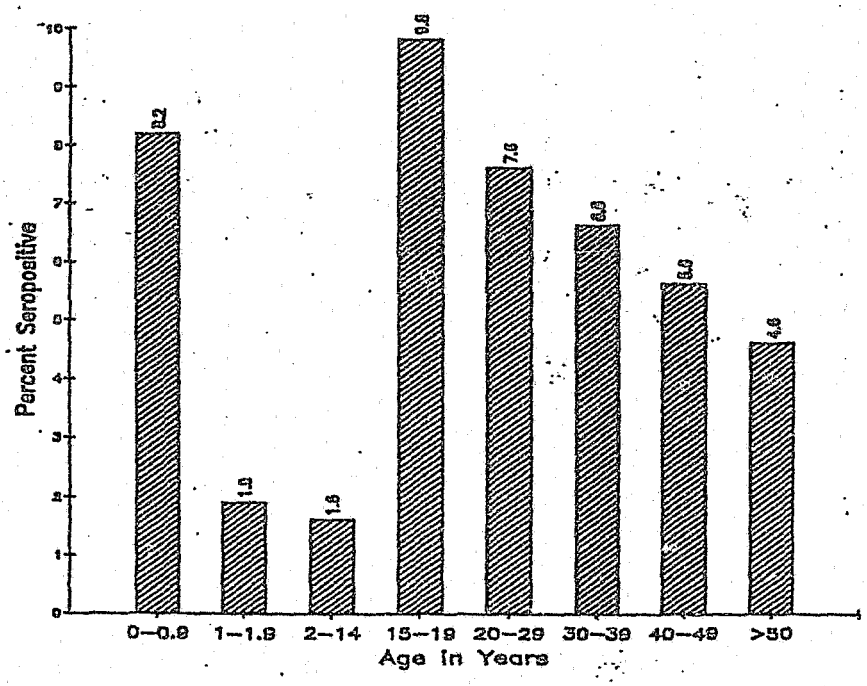


Figure 6: Proportion of Black and White urban U.S. females aged 15 to 19 who were sexually experienced in 1971, 1976 and 1979 from Bell and Hein[20] adapted from Zelnick and Kantner.[25] Courtesy of Alan Guttmacher Institute.

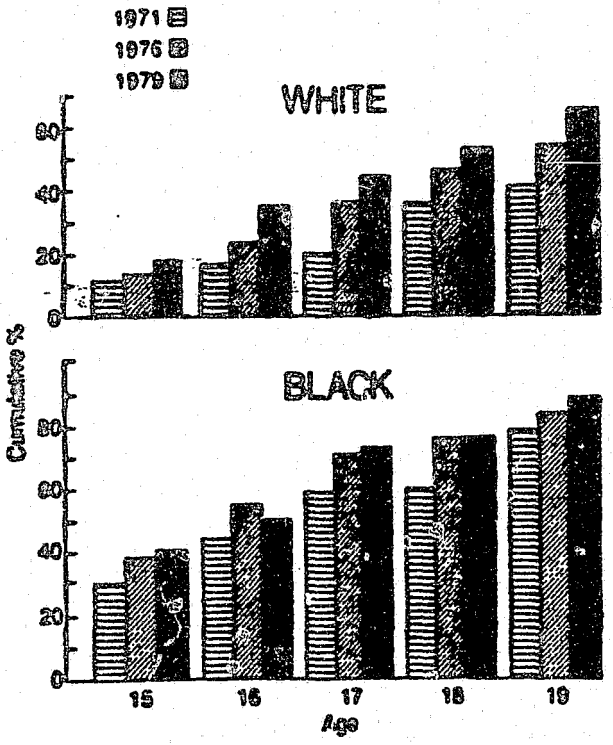


Figure 7: Percentage of sexually experienced adolescents aged 7 to 19 years for three populations of teenaged females (from Hein et. al).[26] Courtesy of C.V. Mosby Company.

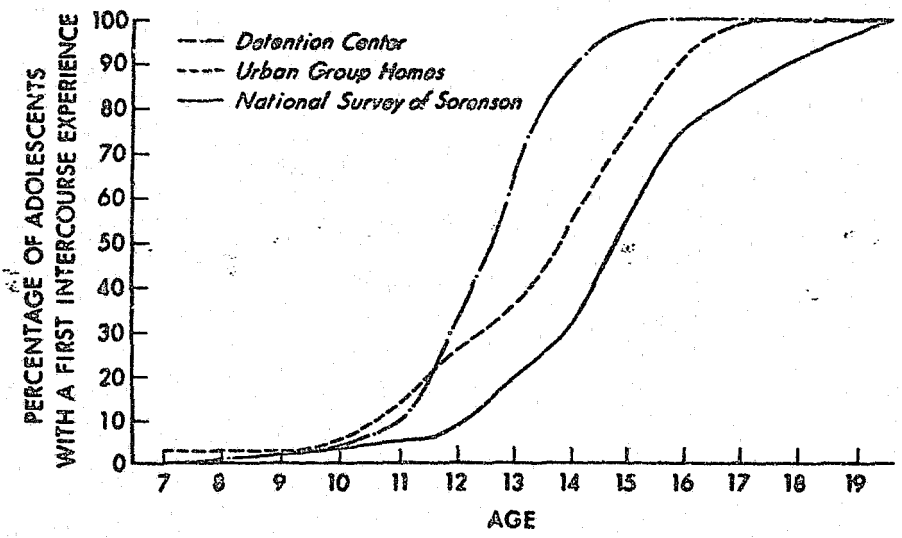
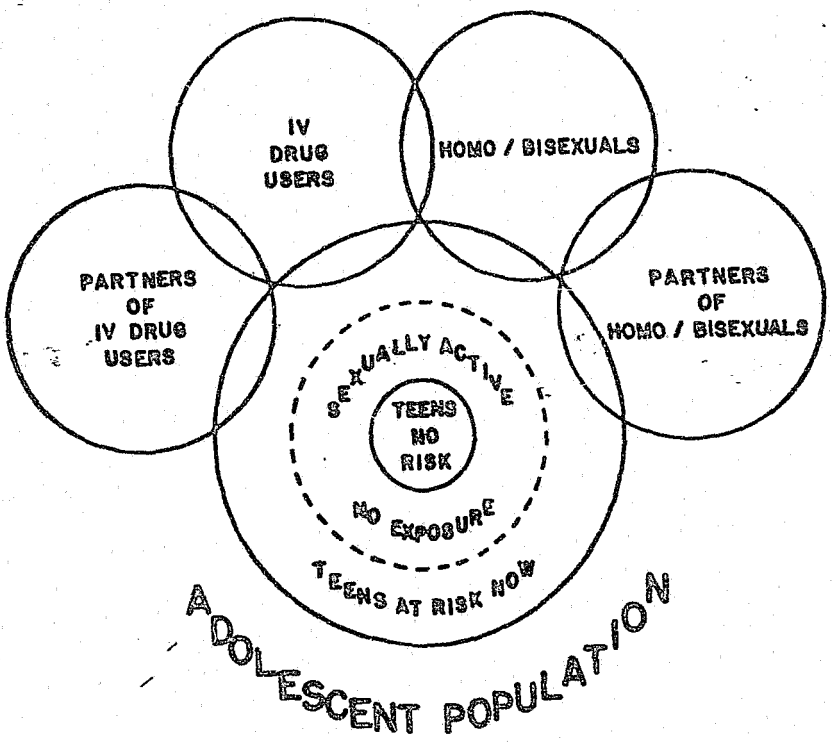


Figure 8: Conceptual framework for understanding the potential expansion of HIV infection into the adolescent population.



-TABLE-

Reported cases of AIDS in
Adolescents, NYC, January 1987

Age group

under 18:	10
18 - 21:	69

Male: Female = 2.8: 1.0

Racial/Ethnic group:

	N	(%)
Black	43	(55)
Hispanic	20	(25)
White	16	(20)
	79	(100)

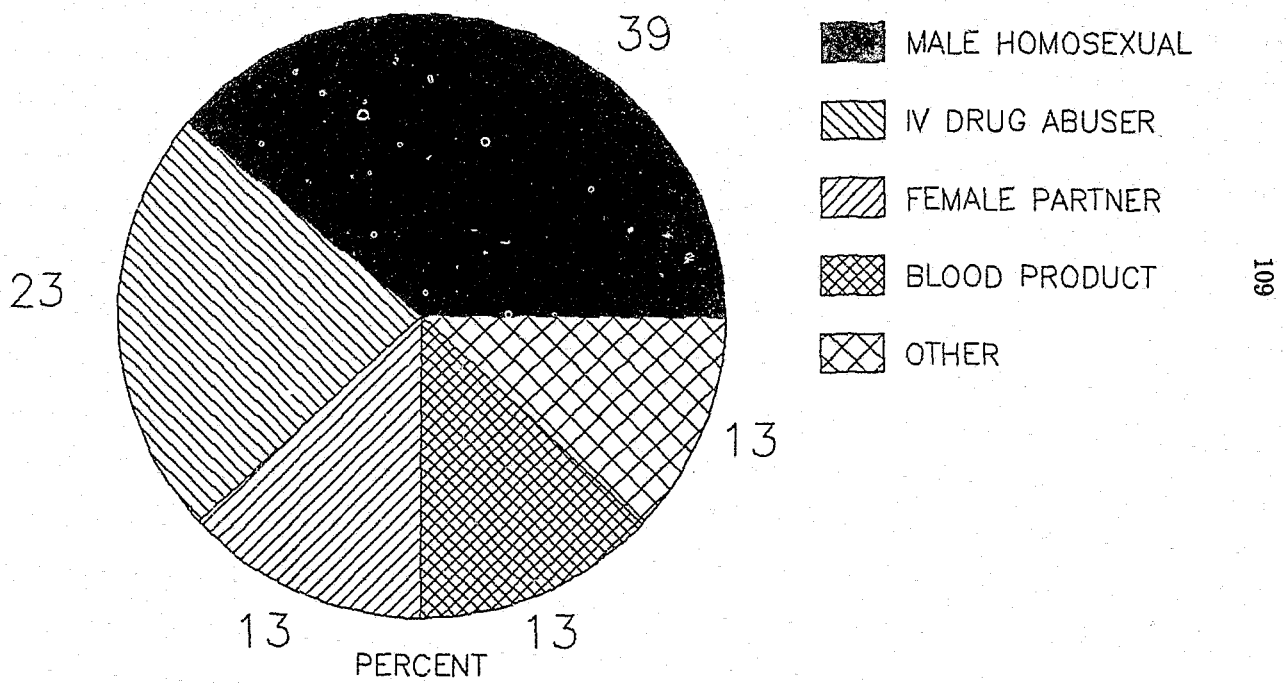
Risk behavior:

	N	(%)
Male homosexual	31	(39)
IV drug user	18	(23)
Female sex partner of male in risk group	10	(13)
Blood product exposure	10	(13)
Other	10	(13)
	79	

Location:

Brooklyn: 33%; Manhattan: 24%; Bronx: 23%.

ADOLESCENT
RISK BEHAVIOR CATEGORIES



Chairman MILLER. Thank you. That was pretty powerful testimony.

Dr. Hein, if I take your testimony, and I combine it with a portion of Dr. Shafer's testimony on the demographics of this population in terms of the trends toward poverty among urban youth, the makeup of their families and their ethnic backgrounds; and you take your 8 contact points—all of which exist in and around the adolescent community—and then to make things more interesting, I think of Dr. Shafer's or even Dr. Koop's, testimony that we have roughly 60 percent of the teens who are now sexually active, they we're talking about a real growth industry here or, certainly, the potential for real growth in this population.

You used the term "bridges" to this population and the notion, I think a few months ago or a few years ago, you thought by age they would have been isolated from the prospects of the disease. In fact, what you now find is that age makes them more vulnerable to this disease.

And according to the testimony here—we're watching the clock moving. As Congresswoman Boxer said, it's kind of like being in San Francisco in 1982–1983, when you started picking up bits and pieces about what was going on and what the medical community was thinking or not thinking; you appear to have that very same potential in the teenage population. And it's not that they have to engage—and this word may be controversial—in deviant behavior. They have to engage in being normal adolescent children who experiment with their sexuality or with their total environment, whatever that is, whether it's alcohol, drugs, what have you. There's always been a certain percentage. We like to think it didn't happen in our generation. Clearly, it did. We only have to think for two minutes, or our grandparents. It's always been there.

So, just the normal behavior and changes and experimentation that teenagers go through starts to increase their vulnerability to the AIDS disease dramatically. Is that a fair statement?

Dr. HEIN. It is indeed, and I think that we have much to learn from the past. We do not have to repeat not only the past experience with the AIDS epidemic but, let's go back to the 1960's and 1970's to see what we can learn from the heroin epidemic.

Chairman MILLER. I hope we learned something from them. Come on, that's my generation; help us.

Dr. HEIN. In the materials that were sent to you there is a graph that traces substance abuse patterns among youngsters who were in a detention center from the late 1960's all the way through the 1970's you can see that. There's one kind of drug responsible for the peak in the early 1970's and that rise in total drug use. That was the use of opiates, largely heroin.

In the late 1960's and early 1970's, the newspapers and the magazines of the time, focused all the attention on young adults. The extension downward into adolesence was missed.

And yet, during that same time period, you can see there was a dramatic rise in cases of hepatitis, in deaths from overdose, in coma, in need for detoxification and in overdose reaction. All of these medical sequelae of the heroin epidemic were happening but had to be documented, first in the medical literature and then in

hearings just like these before the general population appreciated the effects of heroin on teenagers not just adults.

The only other time that I was part of a hearing was to prepare testimony on this phenomenon 15 years ago. And it seems that that's the way it goes in our society: problems are only addressed when they reach extremes, among adults and among children, and then only later do we address the special needs of adolescents.

Chairman MILLER. Well, I think, combining that with the fact that, certainly, in this committee we've listened to enough testimony over the last four or five years with regard to simply how adolescents mirror the rest of the society—I mean, we've sat here for hours and hours and heard about adolescent pregnancy, drug use, alcoholism, mental health. It's not an isolated group of people. They take on those characteristics almost in the same disproportionate fashion that you say the potential is here in terms of what you've monitored in adolescent AIDS patients in New York.

But, two things, if I might, and I ask this generally of the panel. It seems to me that the biggest enemy here of teenagers is ignorance.

Dr. HEIN. I'll answer very quickly, and then turn the microphone. It's a combination. The transmission of facts actually turns out to not be so difficult, and we can see that teenagers are beginning to get the gist; that it's a virus, and it's transmitted this way or that. That's not the issue as much as the linking the advocacy for them to provide and open up for them avenues of dialogue with not just their parents, but with their communities, with their teachers, with their physicians and with those agencies that are there to help them.

So, it's breaking down not just the taboos about talking about sex because teenagers don't have so much trouble about that. It's the adults around them who are responsible for transmitting this information and teaching them. It's reducing the barriers, bringing their level of knowledge out, and then working with them and getting ideas from them about how they would like to learn about this epidemic and change their behavior.

Chairman MILLER. The other one was, it seemed in Dr. Koop's testimony, to suggest that this sexually active group of adolescents was the target group after you dealt with preadolescents.

If it's 60 percent of the adolescent population, it sounds to me like a very, very large number, and it sounds to me like that's a bit of a luxury to suggest that this is going to be an afterthought.

It seems to me that we really don't get to afford the picking and choosing of whether we're going to deal with 9, 10, 11-year-olds or 12, 13, 14 and 15-year-olds; that they're going to have to be dealt with simultaneously.

Dr. HEIN. Actually, the average age of first intercourse in New York City among the population in the juvenile detention center was 12 years. In the group home residents we interviewed 14 was the average age of first intercourse at a time when the rest of the nation was around 16, 17 years of age for sexual initiation among females.

Your 60 percent for the nation, again, if you look at urban females, black urban females, 1982 data, 82 percent had intercourse by 19.

So, I think you're right, but I believe that the Surgeon General's remarks were really geared to the education. You don't want to wait too long to talk about it. But in terms of where the virus is going to be first, it's in that older age group, not in, obviously, the 8 to 10-year-olds.

Dr. ALEDORT. I think what's important in your comments about education is that we really have a dichotomy here. The education can be made available. It can be absorbed. It can't be integrated because it's in direct conflict with normal growth and development. That's what's been happening to these people and what they're experiencing.

But I think it's important to underscore the fact that people can alter behavior if they're given an opportunity to discuss and be open about it, but I think it's folly to think that we should spend our energies now on the pre-adolescent as the major thrust of education, and that we have this large group out there, either in one or many of these circles, that need to be dealt with now.

But, I don't think that money alone is the issue. We really have to have expertise. I don't think there's enough expertise out there right now to deal with all the sex education and counseling——

Chairman MILLER. Well, I'm concerned too that it's easier politically to deal with the notion that you're talking to an insulated group that hasn't thought about sex or hasn't engaged in sexual activity and, so, you can kind of, you know, keep everything up here instead of going into a school. But if you look at the population, and you quickly calculate that 60 or 50 or 40 percent of them are already sexually active, you have to deal with that on a realistic basis. And then you start to get a little tongue-tied. You start to stammer. I mean, adults have a hell of a problem with all of these words.

And it seems to me that I'm just worried that we're moving this thing in one direction because it's easier to do when, if we looked at your testimony, and if it's accurate, the suggestion is quite correctly that these are the people—we keep talking about targeting and testing and targeting. Dr. Koop said, well, he'd rather the literature be sent to New York than to Wyoming. You start to suggest a target population here, but I've watched this in school-based health clinics. Before, we thought that maybe they could help us in AIDS and all of the issues you raise about consent and whether a teenager—do you want to go home and try a message on your parents? Tell them you're going to get an AIDS test. That will help out at the dinner table. You know, we're worried about them just saying whether they can go to a school-based clinic or in the vicinity of the school.

I think that with these issues, we're still into a little bit of avoidance as policymakers about this population. I mean, adolescents scare the hell out of most policymakers because they don't adapt too well to our model for what they should be doing, God bless them.

Dr. ALEDORT. They don't vote.

Chairman MILLER. Well, whatever they don't—but, I'm worried that that's taking place. I don't know that that's it, but I just sense that it's almost easier—in one of Dr. Koop's interviews it talked about—and I agree with him—the kindergarten, 3rd and 4th

grader, and how we're going to present this and how we're going to work this all out; and then by the time they're teenagers, they'll have a basis, and I agree with that.

But if this population is as you suggest it is and as Dr. Shafer suggests it is, you have a great potential here to have ignorance infect a great number of the population. We've seen what went on in the gay community with education and how it's changed behavior and how we think we're seeing a diminution of high risk activities. But in this group, you have people whose ordinary patterns of life start to expose them. And if they're ignorant about the consequences of that, they have a great potential to expose the rest of their peers.

Dr. SHAFER. I'd just like to comment on that from several fronts.

One thing is I think we have the data, and I also think that, potentially, we have the expertise. The data, I think, was what, basically, I tried to summarize; that we know that sexually transmitted diseases are out there; they're essentially epidemic in adolescents, and it's just a disaster waiting to happen as far as AIDS is concerned.

We know that as far as behavioral change, traditional education has never been shown—information giving has never been shown to change behavior. Using death as an example of how to change your behavior, again, developmentally doesn't make sense for kids. Watching a cowboy running around on a horse with a lung machine doesn't necessarily relate to a teenage girl who's trying to look sophisticated at a party with a cigarette in her hand. And of all the populations, among teenage girls, smoking has increased. That's exactly where the media has pressed to make it happen, and it has happened.

So, I think that if we looked at how the media changes behaviors, we could learn a few things. And one of the issues that we have to address is the fact that there are two populations we're dealing with. There is the at-risk population, and there is the population currently not at risk—they are the children, the younger children. And as I mentioned, 30 percent of middle school students in San Francisco have already had sex at least once. So, we're dealing with 11 to 14 year-olds.

We have the potential and the time to develop a program for first grade that's integrated. First we start talking about how you get colds, infections, things like that. We don't have to start talking about anal intercourse in first grade. I don't think that's necessary except in areas where molestation and sexual abuse is high. For the average young childhood population, then, you would explain how you get a cold, how do you take care of it, and how do you avoid it. You gradually work up then toward adolescence where risk behaviors become more relevant. Adolescents have more of a mental capacity and experience to understand more complex relationships between disease cause and effect.

I also think it's naive to think that a one-shot education program of any sort is going to work. The only thing that seems to work is you have to use intense indepth programs and the main messages must be repeated. We should have the educational program that would be developmentally oriented from the first grade onward.

We have the expertise, actually, in that area. It can be done. There are many barriers that I don't even want to begin to talk about at this moment.

The second group are the adolescents that are potentially or currently sexually active, and I think that group, we can play around with for another few years. We can watch the statistics go up and so forth. Adolescents are not gay men. Adolescents are not sophisticated. They do not have future oriented thinking. They do not have a highly visible support group. They do not receive peer support for responsible behavior. They don't have newspapers that say, "this is how you get AIDS and we had better close down the bath houses". Adolescents are different. To think that you can use the educational model of the very sophisticated, wealthy group of educated men to try to deal with adolescents in an urban setting, I think, is very, naive.

So, education for adolescents then, if I had all the money in the world to do it now, I think we have to hit hard and heavy on every front. I don't think we can sit and wait and depend on testing to control the AIDS spread. I think we should do anonymous testing as we go along, but I don't think we can wait the 5 to 10 years to develop an ideal intervention education plan for adolescents. There will be HIV infections by then. I think we should develop within the schools some kind of an integrated program involved with parents when possible. I think that we should do media blitze on AIDS and preventive measures. I think that in every way and creative way that we have, there are minds across the country. We could get together 10 people right now, and within a week, if you locked them in a room, could probably come up with a pretty good program, including media, education and so forth. No one is willing to do this yet. No one wants to really commit themselves to such program development because some people are upset and are offended by certain things, such as talking about anal intercourse, talking about a health issue—there are so many emotional issues involved—around sexuality and teenagers. People don't like teenagers. I'm sorry, but they don't. Perhaps, this is because these adults have never resolved a lot of adolescent issues themselves. Maybe it is because most of the policymakers and physicians currently have teenagers in their homes that they're dealing with on a day-to-day basis (who just cracked the car up and so forth).

Chairman MILLER. We could tell them all to go to their rooms.

Dr. SHAFER. Yes, maybe your kids have a room to go to and have a parent to tell them to go to their rooms. Many don't.

So, I think, basically, we're dealing with not only two different populations of teenagers, we have a real dichotomy for risk in our own population of people in need versus people that can sit down and have the time and the expertise to deal on a one to one and care and love their children.

One of my teachers, during my medical training, told me probably that one of the best ways to eliminate sexually transmitted diseases and adolescent pregnancy and so forth is to reinstitute the yearbook. You may think that's a little facetious, but we no longer value our youth. We don't give them any reason to continue to live and be productive. If you look at why kids are having sex, they are sexually active because some or many parts of their lives are not

fulfilling or goal oriented. They're looking for friendship. They're looking for intimacy. They're looking for recognition that "I'm important as a person and I make a difference and that you care for me the way I am, no matter how I am". They're "checking out" things, too. There's that number, but it's actually a smaller number than you think, and actually checking out bodies, as we call it. Many kids have sex once because it's such a big deal in the media, and they go, boy, was that a bore, and then they don't have sex for a number of years. We shouldn't all assume that sexual activity one time necessarily means a variety of things.

The other thing I just wanted to mention about condom use, and there was someone that brought up condom use for kids, is that it is true that condoms are the primary thing that kids use, if they're going to use anything.

However, they tend to have no instruction about their use. Most adults don't even know how to use condoms correctly, as a matter of fact. Adolescents are rarely given instruction on how to use them. Adolescents use them inconsistently.

Adolescents are different. I think that there is expertise in the country to address adolescents and AIDS. If people are willing—they may not be AIDS—or STD experts, but there are many willing educators. There are many interested families. There are many physicians who are willing and able to assist in the development of AIDS prevention and intervention for adolescents.

Mr. COATS. I want to thank all the panel for their contribution. I think it's been a very worthwhile experience for all of us.

Dr. Shafer, you and I are both parents of what you described as "budding adolescents." What advice do we give to our daughters right now?

Dr. SHAFER. I think of us as parents that can do this. I think now what I'd do with my own daughter is that she already has asked about sexuality, and we talked about intimacy, normal relationships, loving people, what sex means, when people have it——

Mr. COATS. Okay, but when we get to the subject of AIDS, what do we tell them?

Dr. SHAFER. Okay. I think that—I've talked a little bit about AIDS with her, and what I tell her is that it is an infection, and I tell her how you get it, and I told her basically how you don't get it.

I have not at her age—I must say, she is now 10—gone in so much around the gay piece of the disease because, for her, that's not in her personal realm right now. So, I've dealt more with—that's the message I give to my daughter at age 10.

The message I'm basically telling kids that I deal with, hundreds of kids every week in clinics, may be different than when I'm dealing with a 10-year-old. I do tell her about AIDS.

Mr. COATS. Okay. What are we telling the 13-year-olds, those that are——

Dr. SHAFER. Okay. What I tell 13-year-olds depends upon their previous medical history. It would be nice to deal with prevention of AIDS all along but, say, someone who has not dealt at all with this, is we talk about how you get it; again, much more factually.

In other words, now we talk about anal intercourse when appropriate. I would talk about that with a 13-year-old.

Mr. COATS. But, don't we have an obligation to tell not only our children, but those we counsel with and those that we have the opportunity to give the message to that AIDS is a deadly disease and, if contracted, the odds are pretty good that you're going to die at some point, and that the very best way to avoid that is to be abstinent, number one? Don't we have an obligation to tell them that?

Dr. SHAFER. Right. I do think we do. As a matter of fact, the one message I give whenever I'm counseling adolescents, no matter what age they are, is the best form of contraception is not having sex, and then go from there.

But, the problem with the business of talking about fear of death is that you're assuming that the 13-year-old has an adult concept of death; that if I engage in an action now at age 13 that at age 20 or age 25 I'm going to be dead from a disease. We know that adolescents do not have that future concept. You can tell them about AIDS linked to death and they can verbalize it back to you, but it is not incorporated into a meaningful change in behavior at that age.

Mr. COATS. Well, I understand that, but don't we run a tremendous risk if we—because we don't think that they're going to grasp that—avoid talking about that?

Dr. SHAFER. No. I think we should talk about it and I do, but I'm not sure that that is necessarily the vehicle that's going to be most effective.

Mr. COATS. One of the problems I have with the school involvement in terms of dispensing of contraceptives—and you discussed this, about the school wasn't allowed to do it out of the front office, but everybody knew there was a teacher down the hall that was—doesn't that send our children a conflicting message because don't we then run the risk of not being able to deliver them that message which tells our children how they can ensure that they will not come down with the AIDS virus?

Dr. SHAFER. It would depend on how you do it. The most effective way, again, would be to incorporate into a program, as Dr. Koop was talking about, community, family and schools together, so the adolescents are getting constant reinforcement from different angles.

Mr. COATS. And delivering the message in the order that Dr. Koop suggested?

Dr. SHAFER. Yes. I think abstinence is not a bad thing to talk about. If you have a way—and I would like to know—if you have a way of ensuring abstinence, I would certainly like to know about it because I know of no way of successfully teaching it.

Mr. COATS. None of us have a way of ensuring it. I just think we all ought to be searching for a way to deliver the message. I think we have an obligation. I'm not talking about from a moral standpoint here. I'm talking about from a public health standpoint, to make sure that our young people get the message that abstinence is, from a public health standpoint, the only sure way they can avoid AIDS.

Dr. SHAFER. I agree with you. I do. It's part of our repertoire.

Mr. COATS. Dr. Hein, you stated twice in your testimony that it's where you live that's going to determine—and maybe I misunderstood this—it's really not where you live; it's your form of behav-

ior. It so happens that in certain areas of the country, certain forms of behavior are more prevalent than in others, and that form of behavior subjects people to higher risk categories or higher incidence of AIDS. I'm sure that's what you meant to say, but I didn't want to leave the message that just because you happen to live in San Francisco, you have a higher chance of—higher risk of getting AIDS. You don't unless you practice certain forms of behavior; isn't that correct?

Dr. HEIN. What I meant to say is what I said. Let me make sure it was understood. It does matter where you live because if there isn't virus around, anal intercourse or vaginal intercourse or IV drug abuse isn't going to give you AIDS. So, it does very much matter that these practices occur in the presence of the virus.

And there is no question that the prevalence of the virus differs enormously from one location to another within the USA. In Brooklyn and the Bronx and Newark and Jersey City and Florida and parts of California, there's no question that the virus has a higher prevalence than in other parts of the country judging from the number of AIDS cases reported from these areas.

Mr. COATS. But, we don't want to leave the message that anal intercourse is okay in Bismarck, North Dakota, but it's not in New York, do we?

Dr. HEIN. No. That's——

Mr. COATS. But, isn't that the result of what you're saying?

Dr. HEIN. No.

Mr. COATS. I apologize if I misunderstood you. I just thought that the message of where you live really wasn't the message that we want to give people.

Dr. HEIN. The message is think of it as little bombs that have been dropped, and the effects of those bombs——

Mr. COATS. What we don't know is where those hidden land mines are and, since they may as well be in Bismarck—I don't mean to pick on North Dakota—or some day be in Bismarck as in New York City, we really don't want to be leaving the thought with people that anal intercourse outside of San Francisco, New York and a couple of other large population centers is going to insulate you from the risk of AIDS.

Dr. HEIN. No. It's your phrase, "At this time," and that's the point that—you see, what we're trying to do, what all of us are trying to do today is to not deal with the country as a whole or all of adolescents. What we're trying to do is differentiate: Where is there a greater risk? Where do we need to concentrate our initial effort?

And what I'm saying is that if we want to go—not to teach kids about what's risky and what's not, but go after where the virus is most likely to reach adolescents, first it is in those areas where the virus is most prevalent.

Mr. COATS. On the question when the Chairman asked about what did we learn, I think you raised the question of what did we learn from the heroine epidemic in the 60s. I would think the answer that we learned is that heroine causes death; that it can cause immediate death through overdose. It can cause prolonged death through addiction, and aren't we faced with somewhat the

same situation here? Isn't part of the lesson that's transferred from that to this AIDS epidemic that AIDS can cause death?

Dr. HEIN. That is certainly the message that many adults picked up and, as Mary-Ann pointed out, the threat of death turns out to not be the one that often will get the adolescent's attention.

Rather, if you look at those drug statistics, when the tough Rockefeller drug laws came in to effect in New York City, the heroin use rate had already fallen way off among adolescents. It wasn't the threat of death so much as the fact that young people saw their friends getting sick, becoming isolated and withdrawn and being nonfunctional in ways that really affected them.

It's my belief that some of the teenagers sense of invulnerability, a normal part of adolescent development, may be altered as young people actually know other people who have become ill with AIDS. Dying is only one part of the horror of any fatal illness for teenagers. For an adolescent, the isolation of being sick often is a more powerful force than the threat of death.

Mr. COATS. One thing I'm concerned about is leaving the implication that if once an adolescent, pre-teen or adolescent, has engaged in sexual activity, that we institute a different form of education process for those people than those that haven't. I don't think Dr. Koop meant to leave that message, and I'm not sure any of you meant to leave that.

We're not saying, are we, that just because young people have engaged in sexual activity one or more times that, therefore, the message, abstain from sex, begin to live an abstinent lifestyle, is a worthless message. But, I'm not sure I heard that. But I thought that maybe I picked some of that sort of message up, and I'm just wondering what your reaction to that is.

Dr. ALEDORT. I think what you really heard was that you have to do it differently. The same messages have to be given differently to different groups, and that is—that's very important; that you can say the same thing, get the same message, but you can't say it exactly the same way.

For instance, it is true that in adolescents the death issue becomes much less of an issue than, say, teaching adults, but the responsibility to your sexual partner and peer might become more important in non-monogamous relationships than they are in monogamous relationships.

One of the things we're always fascinated with is the high number of people who are married who are HIV positive whose sexual partners agree and consent to continue sexual activity without safe sex practices. These are monogamous relationships where one partner has the virus. It's because of the commitment to one another that they're willing to go through anything for each other; whereas, an adolescent might very well respond differently when you talk about responsibility to that sexual partner. It's a very different way of presenting the data, yet you might come up with the same position.

Mr. COATS. But, we wouldn't want to forego the educational process of informing young people, even though they were engaged in sexual activity, that abstinence is the best means of preventing the spread of the disease?

Dr. ALEDORT. Oh, I don't think that—that would be then eliminating the facts. I think the most important thing with adolescents is be honest. They do respond to the information in an honest fashion rather than a non-honest fashion.

Mr. COATS. I've learned that when the Chairman leans forward, it's time for me to stop asking questions.

Chairman MILLER. Congressman Rowland.

Mr. ROWLAND. Thank you, Mr. Chairman.

I believe you stated the number of AIDS cases in adolescents are relatively low at this period of time, but we don't know how many may be seropositive at this time.

We have no reason to suspect now that anyone who is seropositive doesn't have a 100 percent chance of getting AIDS. We don't know that that's not true; that it's going to go in that direction.

So, I get a feeling in listening to all of you that you're very uneasy about what's going to be happening to the adolescents and teenagers in the coming years. People are usually influenced and affected by what immediately is before them, and if a person is walking around that's healthy and feels good and has no symptoms of any disease, it's awfully hard to get them to understand what the problem is.

And in that respect, I think that the population in general is also in a situation of very great danger because there are many people who are out there who are seropositive who are feeling perfectly all right, and you feel uneasy from that standpoint also.

Let me ask you this. Do you feel comfortable as a medical community about the policies that we have in our country right now in addressing this? Are you uneasy about what we are doing? Do you feel very satisfied, somewhat satisfied, somewhat unsatisfied or very dissatisfied with what the policies are in our Federal government and in our State government at this time in addressing this problem?

Dr. HEIN. If you are referring to policies that specifically touch upon the lives of youth that's the basis of this hearing. I think I could comment on that.

It does appear that the rates of HIV positive personnel in the military, have declined slightly. This trend could be good interpreted as news because it means that something is happening, education, perhaps. Alternatively it could mean that people at greatest risk are not going into the military to avoid being tested. And it is my belief that it's the latter.

Now, I think we can learn from this policy, to do mandatory screening of a relatively healthy population in order to pick up the HIV positive people, and look at the result. The results have been twofold.

One, mandatory screening may well deter a lot of young people from going into the military who might otherwise. Secondly, the outcasts from the process are not being handled in a way that as a country we can feel proud that our first mandatory testing procedure for teenagers has gone well because it just hasn't. These young people are just cast out with no link to follow-up counseling or care.

So, I would say that the policy as applied at this moment leaves me very dissatisfied.

Dr. ALEDORT. I think I would concur with the problem of being dissatisfied with policy, but I think many of you questioned very seriously the education policy, and I think we are relying too strongly on abstinence, rather than recognizing that the youth are participating in sexual activity. We have to have a bi-pronged approach in education, and we cannot only take one approach.

And I would think that the lack of support and available sources is a very serious policy problem.

In terms of mandatory testing, the real issues are that studies are not yet in as to whether or not knowing your HIV status will change behavior. There are a few published papers that show it won't. In fact, there are some published papers that show that once people know their status, they take more risks. Some, in fact, have increased their number of sexual encounters.

In our own population, we have taken the attitude that they are all at risk and are probably carrying virus. We educate them all to behave as if they could infect somebody else. That's a very important piece that has to be underscored.

Dr. SHAFER. I was going to make a comment also to your question regarding education just briefly.

In San Francisco, again, where we think we have a rather liberal community, it is very difficult, actually, to access the school system to provide adequate appropriate education because we're not allowed to individually ask an adolescent, for example, are you sexually active. And unless we can talk about sexual activity and what it is on a personal basis, there's probably little chance that we can effect any change in sexual behavior.

So, the barriers found within the schools and the community, frequently only a few individuals within schools and community make it difficult or impossible to implement meaningful AIDS prevention.

Chairman MILLER. I'm going to have to just interrupt you here. We're going to go vote, and we'll come right back, and if you can stay with us, we'd appreciate it.

Mr. ROWLAND. Let me just ask this one question as we are leaving.

Would you almost say that, nationally, we have a non-policy at this point?

Dr. SHAFER. Yes, absolutely. As a matter of fact, a negative policy.

[Recess.]

Chairman MILLER. The committee will come to order, and we will continue with the questioning of Congressman Packard and then Congresswoman Boxer.

Mr. PACKARD. Thank you. Thank you very much, Mr. Chairman.

I, too, have been very interested in your testimony. It has been very well presented and very thought-provoking. It's obvious that we're faced with some very complex decisions. One which we've danced around today in your testimony but not really been either willing or able to address, is the question of reportability, testing, identifying, et cetera.

After all that we can do in education and in prevention, we still have an epidemic on our hands or certainly a potential epidemic, and it seems to me unconscionable that we limit our efforts to re-

search for a cure or for prevention measures or educational measures without addressing seriously a policy relative to testing, identifying and reportability. That's going to be a major problem for those of us. I don't have a position at this point, and I need some help. I'm sure all of us are going to be looking for all kinds of help from the professionals, as well as a variety of groups, as to what kind of a policy this country ought to have in this area of testing and identifying and reportability.

I'd like to ask you, Dr. Mark, and others that may wish: to respond, what is the current policy in hospitals and agencies that deal with health problems regarding testing, reportability and identification of sexually transmitted diseases others than AIDS?

Dr. MARK. Well, I'd like, if I could, to go directly to HIV because this—in Massachusetts we have a policy in which testing cannot be done unless the patient's consent is first given.

And we faced a problem about three weeks ago of a young man who came in to our service in a coma with obvious encephalitis. Now, we didn't know whether he had a virus called CMV or whether he had the HIV infection. It was important to differentiate that because this treatment with AZT, as you probably know, is quite effective, at least initially, for this kind of pneumonia, the PCP pneumonia.

However, it is also very effective for the brain disease associated with HIV infection. It has produced some dramatic changes for us in some of these patients.

So, there was a real question as to whether we could get this diagnosis, and we couldn't because the patient was unconscious, and there was no way that we could get consent to take a test to find out whether the patient had this disease or not.

So, in comparison to the situation of the practice of medicine in the 1940s, things are quite different today. But, I think that there is a real importance to the test that President Reagan has ordered; namely, the epidemiological probe, to find out precisely what the urgency of the various methods are.

If, in fact, we are facing a catastrophic situation—and I'm not suggesting that that has occurred. I'm just saying that this is the pessimistic possibility of this epidemiological probe—if that's the case, then I don't think that any kind of educational method is going to work rapidly enough to make any real difference in terms of the spread of this disease. And we're going to have to go to the rigorous testing, identification and reporting and contact tracing to make certain that our educational efforts are directed to the individual who is infectious to make sure that they do not engage in activity which is going to spread this disease, and if they will not conform, then other measures will have to be taken to safeguard those people who are potentially—are now uninfected but can be potentially infected by such an individual.

Dr. ALEXPORT. I think it's important to remember that there is a large window during which someone who is infected with the HIV virus tests negative. When you open the box of testing people and then programming education purely on test results, you have to recognize that a certain percent that tested negative are truly positive and will not convert to positive until six months from the time you see them; that when you're negative, it doesn't mean that to-

morrow you might not be exposed to something that will make you positive in six months. This presents a tremendous logistical problem.

In terms of looking at a cohort of people to find out how much HIV is in the patient population, we have been doing that now since April of '85 in the blood banking industry by constantly testing blood donors, and we have good numbers and statistics.

So, we know that it's there. It's there in healthy people who consider themselves not at risk.

Mr. PACKARD. There's no debate, I believe, about the fact that the testing, what limited testing has been done, is not as reliable as it perhaps ought to be.

Dr. MARK. Could I speak to that specific point?

Mr. PACKARD. Certainly, but let me complete my comment first.

But, that doesn't mean that we can't improve as we get deeper into the testing process to where it can become much more reliable and where there are also follow-up measures to those tests that are questionable.

I think we're talking now more about an ethical, legal question more than we are about the physical process of doing so.

But, now let me refer to you, and then I'll come back to you.

Dr. MARK. Certainly, there may be a 2 to 3-month period between the time of infection and seroconversion, and in some cases it's gone as long as 23 months; however, in Bavaria where they did widespread antigen testing—we are talking about the other test, the antibody test, which takes 2 to 3 months before the body produces these signals which allow us to know that the body has been infected.

By the antigen, we're talking about something which is related to the virus itself. And using antigen tests, they are able to get evidence of infection as early as two weeks after the individual has been infected.

And in Bavaria, doing 30,000 tests, they found that not one person who had a positive antibody test—excuse me—not one person who had a positive antigen test did not also have a positive antibody test.

So, in other words, the positive antibody test was a very good indication of those people who were infected.

And the mavens there in Bavaria settled down and tried to figure this out, and they found that in order to do enough antigen testing to make it worthwhile to pick out those people that would have not been detected by the antibody test, that they would have had to test the entire population of Germany, and that for each positive test, they would have been charged something like 30 million dollars.

Mr. PACKARD. Dr. Hein.

Dr. HEIN. Yes. I'd like to return to the point of these hearings, which is really to discuss the adolescent.

Mr. PACKARD. I'm aware of that.

Dr. HEIN. So, perhaps what we need to do is put the question of testing or screening in the context of the adolescent. We have some guidelines for how health care in general or sexually transmitted diseases specifically have been handled in the past. We might use as guidelines.

Firstly, once a teenager has reached the age of majority, 18 years, they can consent for their own medical care. And it's generally thought that with that consent goes along with any other kind of consent: their ability to consent for testing, to agree to testing and so forth. So, the main problem is policy for minors, those under the age of 18 years.

It differs state by state, as to the kinds of medical care minors can get without parental consent. There are large categories of teenagers who are excluded from parental consent requirements. These usually include emancipated minors, those who are in the military, have borne a child, including a minor who has been pregnant, whatever age. Emancipation is legally defined and usually also means that the individual is living independently and contributing economically to his or her own upkeep.

The more recent legal doctrine is that of the "mature minor". In deciding issues of consent, the physician assesses whether or not the person has the ability to understand the nature and consequences of the treatment. If so, the "mature minor" can give informed consent for care.

Regarding sexually transmitted diseases, not only New York State, but I believe in all States, a young person can be diagnosed and treated for a venereal disease without parental consent or knowledge.

In what way is the AIDS virus different? I think that all of us would agree that, because of its deadly potential that informing minors of positive test results has immediate consequences for the person, such as they might need more support than they could give themselves or their friends could give them.

Mr. PACKARD. What are your responsibilities, medical people, in either learning hospitals or in your own offices, what is your responsibility in terms of reporting venereal diseases?

Dr. HEIN. It again depends state to state, but there is a differentiation made between a sexually transmitted disease and a communicable disease, and there are different reporting requirements.

As an example, for a communicable disease—you have to report in New York State, the person's name and their address. For a sexually transmitted disease, there are other reporting requirements for statistical and case contacting purposes. Also, the access to the medical record by outside agencies may differ if it's a sexually transmitted or communicable disease.

In two States, which I believe are Colorado and California, there are specific laws that address the issues of confidentiality of the medical records for HIV infected person but in most others it's now being debated whether AIDS will be designated as a sexually transmitted, communicable disease or neither. New York State has so far refrained from either designation.

Mr. PACKARD. Dr. Shafer, did you have a comment?

Dr. SHAFER. Yes. What I wanted to comment on is the policy is irregular. It's not consistent, and it's often not logical. Basically, gonorrhea is reportable. A reportable disease means we have to report it to your local agency. Part of the problem that someone mentioned earlier about the followup and contact tracing along with reportable diseases is that the most common sexually transmitted disease, which is Chlamydia, isn't even reportable. This is

mainly because of the lack of money to support the contact tracing. So, it's a legal and political issue, not a health issue.

So, our responsibility currently, taken on not because of the law, is whenever we identify a sexually transmitted disease, no matter what it is, we take on the responsibility to then go out and contact trace.

Could I address one thing about the testing issue? Is that possible now?

Regarding mandatory testing, especially with adolescents, I am concerned about adolescents, especially with high-risk groups within adolescents, such as IV drug abusers and street youth. There is current evidence that among risk groups like this, if you require and mandate testing, that may backfire in that these groups that you want to reach with the counseling which, as a long-range goal, is to essentially change behaviors, and if you identify and mandate and identify them as positive and say that if you come to this clinic to get any kind of care, you're going to have to get a blood test, or on entry to this hospital, you have to have a test, it may backfire and they won't enter the system and get that really in-depth counseling that's required. So, that has to be taken into account.

Dr. ALEDORT. In New York—to answer the question about reportability—we report AIDS both to the CDC and to the New York State Health Department.

Mr. PACKARD. By choice or by requirement?

Dr. ALEDORT. Actually, it's by choice to the CDC, and to New York City it's required, but I don't think there's anything that would happen to you if you didn't legally. I don't think it's a legal constraint, but they have made a strong mandate for us to do it.

But, our big issue is that we have no legal support to inform the sexual partners or contacts of those who are HIV positive, or who have AIDS. And our own region has taken a position to set own legal standards. If the patient refuses to let us disclose their being at risk for HIV or HIV positively, we will tell sexual partners that we know about that they are having sex with somebody who is at risk for HIV. But, legally, we can be sued either way.

Mr. PACKARD. With your permission, let me make just one short comment and then conclude with this item.

We may—and I won't ask the question that I was going to ask—but, we may be required as policymakers to look at AIDS even a little bit differently than we do other sexually transmitted diseases because we're not talking in the same category: one being a very life-and-death question, the other we have treatments and we have abilities to control.

We've got some really difficult, tough decisions to make in terms of policy relative to this whole question of reportability and testing and, obviously, we'll be looking to the medical community for some very important things. You have some personal decisions to make in your own procedures as to what you're going to ask on your health forms and on disclosure statements that you ask from patients before you ever accept them as patients.

We do have rights, each of us have rights, protective rights for confidentiality, for privacy, et cetera, but also my children and I have rights, and all of us have rights not to get a disease that is

death-threatening either. And how to balance those variety of rights out and establish a policy that is workable, that will control the epidemic and, at the same time, respect people and their personal privacies and rights, is going to be a very difficult process.

Thank you, Mr. Chairman.

Chairman MILLER. Mrs. Boxer.

Mrs. BOXER. Thanks, Mr. Chairman.

I feel the same sense of discomfort as my colleague does. We're sitting here, we're hearing testimony from experts who are telling us that we are going to see an explosion of this in the teenage population. You're hinting at it. Your charts frighten me.

You know, you think back to the typhoid Mary sort of situation where people are walking around infecting other people but, yet, if you test those people, can you change their behavior even after they know.

I am at a loss in my own mind. On the one hand, it seems to me irresponsible for members of Congress not to know that this is indeed going to be an explosion. I sat through the San Francisco example, and it was a very long time in coming before we realized what we were into. Oh, a few people had it there, isolated and so on.

And here we are, as Congressman Miller has pointed out, it is a deja vu, and adolescents that we're focusing on seem to be the next high-risk group.

And, yet, we're walking into it kind of with blinders on because we're afraid to go into the testing arena. It has some horrible implications, and we're not sure if we do go into the testing arena, it might not backfire, as Dr. Shafer has pointed out.

And I am just wondering, and I'd like to ask you this. Assuming confidentiality and anti-discrimination laws—that's a big assumption, by the way. I'm not saying it's possible—but assuming that, do you think it might be valuable to take random samplings around the country, not just in high-risk areas, but around the country so we get a better feeling? I do not feel comfortable as a policymaker here as to what we're about to experience, and that bothers me.

Dr. SHAFER. I'd like to address that. I don't think any of us, I would assume—and I don't want to talk for people who can speak for themselves—have any problem with doing anonymous random testing. It should have been done five years ago. It should have been done three years ago. I don't really know what we're waiting for.

Anonymous testing is very different from the emotional-laden testing we're talking about where people are known, where it's mandated and so forth. There's no reason not to go and do a series. You could do it through blood testing in large areas when they're doing premarital testing; take a little extra blood. You could do it in a teen clinic. It's very easy to do, and I see absolutely no problem with that at all.

I think that anonymous testing must be separated, however, from the mandated. Sometimes I feel there is a vindictive quality of the testing of very specific risk populations as poor people, gays and IV drug abusers.

With your financial support, Congressmen, we'd be more than happy to get together and give you whole populations to test anonymously—you can do it right off blood banking. You can do it lots of different ways.

Dr. HEIN. Anonymous unlinked testing where you can sample a family planning clinic for example, by using remainder blood that is being drawn anyway, and test for rate of HIV positivity without being able to line the results with a given individual. All you know are the number of people, and the general characteristics the clinic such as the number of females and their general age range, that kind of general demographic information. Then you would know the prevalence in that clinic at that time and can decide to gear up AIDS related services at that point in time.

The CHAIRMAN. Is any of that underway?

Dr. HEIN. Yes. It has been done. The CDC, in collaboration with investigations in our medical center, has started to do anonymous unlimited testing in family planning clinics when—I think it's okay to say this because it was reported at the International AIDS meetings—but, basically, in one family planning clinic, 4 percent of the women were found to be positive, and they were actually all ages 24 and older. There were not very many teenagers included in that sample of 250 females, not enough to give a reasonable estimate of HIV prevalence.

But, I was going to say that if we look now, for instance, at our clinic experience. We have 6 HIV positive teenagers under 19 years of age. None of them have been reported to the CDC, and none has been reported to New York City. They're not among the statistics because they didn't meet the existing CDC criteria for AIDS. Let's look at those 6 teenagers. Who are they?

In toto, these 6 teenagers have had 50 sexual partners. There's no reason to believe that they're not sharing their virus with their partners. So, it's that kind of problem that we're talking about addressing, the needs for pooled anonymous testing, not to go out and label individuals at a time when there's clearly discrimination in terms of jobs and insurance and medical records and housing if we can create a more supportive society.

In the future, if we can bring society along, fine. In the meantime, we have a job to do in the nature of finding out what the prevalence is now in some of these high-risk areas.

Mrs. BOXER. Mr. Chairman, I don't have any other questions. I'd like to make some brief comments on what I've gotten out of this hearing before I do have to leave.

First of all, I want to thank you again. You have been so vigilant on this issue. You had a hearing in California on children with AIDS which opened up a lot of our minds, and now adolescents. And I think what you're doing by your interest is getting a lot of information out to members of Congress who, prior to this, I don't think have really thought much about it.

We are sitting on a potential explosion. We're not sure. We could be in this next group. And it seems to me we just better act quickly.

I think the random testing is very important as you've described it.

And talk about morality, Mr. Chairman, what about the immorality of the CDC sitting on all that money for education that we have voted year after year after year, and it's been testified to here by people in the field, they have yet to see a trickle of that money, and people are getting sick.

So, if we learn nothing else out of this hearing, Mr. Chairman, than gaining your strong support, and I know when you get behind something, we move it through here, we have got to consider it a challenge—the gauntlet has been thrown—we've got to move that money into the field, and we've got to make it relevant to the community.

Maybe we'd do it in sort of the community block grant, so that the people who are getting the money are designing the programs. I don't have any problem with that. I think that makes sense.

The last point I wanted to make is that the media has to get more involved, and some of you have stated that. Last night Ted Koppel was here, and he gave a speech to the members of the Democratic Caucus about morality and said that it's up to us to bring a new sense of morality to the country. That's fine. What about his network? What about the networks?

If you watch television, you'll see, sex is just absolutely all over the place, either directly or indirectly stated, from the jeans commercials to the beer commercials to the soap operas to some of the leading shows, Dallas or whatever, and then all of a sudden we're supposed to bring morality to bear here.

It seems to me, without getting into First Amendment rights because I don't want to do that, people are going to write what they want to write. They have an obligation to help us in this epidemic. They have an obligation to give us time, prime time, with commercials, talking about AIDS in a way that stresses both abstinence and if you're not, what you have to do.

And I would say, Mr. Chairman, that I leave this hearing more dedicated. It's been pretty lonely, as you know. There's have been 6 or 7 members, and you've been one of them, who've been really living with this thing in the Congress for the last 5 or 6 years, and I think now we're going to see more people getting involved, and we're going to have to involve the private sector.

I want to thank the panel. I think you're all just doing a fantastic job, and you've given us a lot of information we really need. Thank you.

Chairman MILLER. Mr. Holloway.

Mr. HOLLOWAY. Thank you, Mr. Chairman.

Dr. Mark, from listening to other members on the panel, I feel that you feel a little different. I'd like your comments on youth being able to associate AIDS with death. You know, does the teenager really concede death when we're talking to them on the problems of AIDS and other diseases?

What is your feeling, basically, on what we've been talking about all morning?

Dr. MARK. Well, I don't think that we have—that we can generalize on all teenagers. We have—this is one of the problems we have in terms of even talking about the various data on HIV infection because we've got various sources, blood donors, military re-

cruits, each biased to a certain extent. Obviously, there are some teenagers that may have a feeling of immortality.

But, I've been working in the field of human behavior now for 40 years with children, teenagers and adults, and I find that there's a great variability, particularly among human beings, and it's very difficult to categorize them.

I think we have to look at people individually, and I think we have to do what is necessary to change their attitudes, whatever that takes, and that has to be part of our educational program.

I think the educational program has to be focused primarily on changing the behavior which transmits this disease. I don't think that we have enough time—and I'm doing what I really shouldn't and am predicting what this epidemiological study is going to show in 4 or 5 months—but, I don't think we've got enough time to prevent a very unpleasant and rapid spread of this disease by educational techniques alone, whatever they are.

I think that the time factor here is ticking away while people are being affected while we're sitting here with a disease which may very well be fatal for them. I think we've got to come up with a strategy. We've got to do it quickly. There has to be a sense of urgency here.

It's difficult with this disease because, of course, it's silent; it's slow. It's not like an atomic bomb or the attack on Pearl Harbor which presents itself as a national emergency, everyone knows about that and our attitudes are all restructured very quickly.

This is a new challenge for our human intellect because it is something which occurs so slowly, is so surreptitious; it's so unannounced, and I don't see really how people who do not know that they're infected with the disease are going to be able to change their behavior enough with any kind of general educational program to make any difference in terms of the spread of this epidemic.

Mr. HOLLOWAY. Thank you. Dr. Shafer, I know you quoted this on two different occasions, and I do not remember the exact figure of teenage girls that participate in sex in the ages of 11 to 14 age range. What was the percentage?

Dr. SHAFER. It isn't just girls. This is girls and boys. 30 percent, 30 percent at least once.

Mr. HOLLOWAY. My question to the entire panel, and I would like to hear briefly what you feel, is that the breakdown of the family in this country, in my opinion, has a great deal to do with all our problems with teenagers. Since we're a committee on children, youth and family, what do we do to turn this thing around.

And even bringing it to the AIDS situation, I blame a lot of these tendencies on permissiveness in sex to the breakdown of the family.

I think we even owe it to mothers and families to give some kind of tax break if we have to do that to keep those mothers at home if that's what the problem is.

I find it's a tremendous problem in our society today. I know there's a lot of mothers who don't want to stay home but, still, there's a lot of mothers that would stay home if it was possible for them to stay home.

I think, you know, this is a total breakdown in our environment today, and I blame it on the fact that we have no family life any more in this country.

I'd like your feelings on it.

Dr. SHAFER. I'd like to say that maybe fathers should get a tax break also to stay home with the children.

Mr. HOLLOWAY. Well, if the father wants to be at home, I think he should be. I think that there should be a parent at home. I think there needs to be a parent, even if it is a father.

Dr. SHAFER. I think, I have to say, I have yet to see a teenager who, across the board, has had major problems where there's been an intact family and where there's a loving mother, a loving father and a basic economic support that they can lead an average kind of life. It's rare. Here and there we'll see problems but, in general, these individuals with strong families do function in general fairly well.

However, I can't say what makes a family "work". It's a very complex thing when families don't work well and how can we make them work better, and I don't think it's a panacea. We don't have a magic pill for that. But, I think we are dealing with two issues here: one is long-term, broad-based social problems in the United States which, certainly, this committee and we, as four members, could not even begin to address, but should start at least to address that and looking at what makes families healthy; what makes families ill.

But, we also have an acute problem at the same time. In other words, the individuals where the families aren't functioning well, where the youngster does not have the support either at home or at school in order to function well and create a life for himself outside of sex and drugs, the educational approaches for settings where there is an intact family and where a family is nonexistent do differ. It would be nice to say that, gee, we can leave it all up to the family and isn't that great. But if you look at the statistics, they don't bear it out.

And I think, therefore, now when I think about the approach currently, I would utilize the strong family systems, the religious backgrounds, community health programs, while at the same time, targeting intense programs directly at the youngster most at risk to assist him in a variety of ways to try to increase his healthy behaviors emphasizing safe, preventive, or abstinent behavior when possible.

Dr. ALEDORT. I'd like to comment. I think that you stated the difference between the broader social issue and the immediate one, but I think there are data in places that are looking specifically at families: The Mannucin Group and the Ackerman Institute in New York have concluded that the family constellation is critical in terms of compliance. There is very little done in terms of sexual behavior, much more in compliance with carrying out medical management.

What has made it break down is a much broader issue, and I think we can't really address it here today.

Dr. SHAFER. I just wanted to add one more thing when we're talking about the—oh, excuse me. Go ahead.

Dr. HEIN. My comment is brief. It would be nice if there were stronger families, and it would be nice if there weren't AIDS.

Mr. HOLLOWAY. I agree with you, but what do we do? Somewhere we have to encourage it. I mean, we keep saying we have a problem, which we do have with AIDS, and it is urgent. But, then we keep this on a back burner, and we forget about family life in this country. I think we, as Congressmen, should be the examples for the country to look at, and I don't think we're doing that at this point.

I personally feel that my family is that way. I hope that we can be an example for this country, my family, and I think it's a problem we have to look at and our country will follow. I think it's been proven in history that we need to bring some common sense back to our country in some religious beliefs and strong beliefs to get our family life going again.

Dr. SHAFER. I remembered what I wanted to say. The one issue that concerns me a lot, which Mr. Holloway, I think, may help to address what you're talking about, is that when we're dealing with AIDS specifically, there is very, very little money earmarked for taking a look at behaviors and AIDS in families. There's essentially none.

So, if you look at the budget for where research money currently goes it is earmarked for bench research. We have the crisis issue which is need for service money. With adolescents, we are going to be dealing with a long-term problem: what do we do in 3 years; what do we do in 5 years; what do we do in 10 years. And, essentially no money is being targeted to attract the real cream of the crop of behavioral researchers in the United States, to work on AIDS prevention in adolescents.

All the money currently is being now given into biological bench research. The next group that was forgotten for a long time that is now being addressed is individuals who have AIDS, for service. In other words, the compassion we have for these individuals.

But, the one area that's been essentially totally forgotten and has not been supported was the behaviors, and that's what we're talking about is prevention here and elimination of the behaviors or making them safe.

Mr. HOLLOWAY. That concludes mine. Thank you.

Chairman MILLER. I'd just like to say that I think, historically, the American family is off limits to the Federal government. And I think for many members of Congress, that's still true. They don't believe that we have a role to play. And even in those areas where we are very clear and the evidence is very clear, almost unanimous, on what causes breakup of families and stress in families we've never stepped forth to remedy it. Even where we have isolated causes such as unemployment or alcoholism or monetary, financial problems within families that we know clearly leads to some dysfunction in that family.

We can go right back through child abuse and we can determine the factors that are bringing about violent behavior. We're not doing anything about it. We talk about it.

So then to talk about us in terms of a policy that's going to restore that family, even when we have an opportunity to save an

existing family, we've pretty well failed in that. I mean, that road is littered with a lot of speeches and no action and broken families.

And even the history of this committee is written where there is a consensus on dealing with just simply violence in the family. There's really no federal effort. There's a child abuse bill, but we all know that that's just to keep everybody off of our back, and it doesn't really deal with treatment.

So, I think you're right. We've got to—this committee looks at and has continued to look at the function of families, but we've got to do that at the same time that we're dealing with an epidemic here and a real threat to an entire generation of young people.

And I want to thank you very much for your testimony and for your help that you've given the committee. I'm sure that we'll be back to you because this looks like a long, slow struggle, unfortunately, in the Congress because we rarely initiate. Unfortunately, we usually wait for body counts, and then we start to react to that.

And in this case, there's not a lot to lead me to believe that we'll break away from that history, and it's going to be a very tragic story for—as we heard in a previous hearing—for infants in this country. Now, as we're hearing, it will also be a tragic story for teenagers in this country. Our inaction could cost them their lives.

So, thank you very, very much for your time and all your effort that you put in on this issue.

Our next panel will be made up of Becky Adler, who is from Rockville, Maryland, from the Teen AIDS Hotline; Jonathan Howe, who is the President of the National School Boards Association; Johnnie Hamilton, who is the Science Coordinator from Annandale, Virginia; Richard Gordon, who is the Director of Youth Development for the Sequoia YMCA from Redwood City, California; and Dr. Wayne Lutton, who is the Research Director of the Coalition for Public Health, and Research Director of The Summit in Manitou Springs, Colorado.

Welcome to the committee, and thank you for staying with us through this lengthy hearing. I think it's evident that members of Congress are seeking a great deal of information on this issue and have an awful lot of questions and concerns about how we approach a very difficult problem for us.

So, Becky, we'll start with you.

STATEMENT OF BECKY ADLER, TEEN AIDS HOTLINE, MONTGOMERY COUNTY, MD

Ms. ADLER. Good afternoon. My name is Becky Adler, and I'm 17 years old and a graduating senior from Sandy Spring Friends School in Montgomery County, Maryland. I'm also a "Teen AIDS Hotliner."

Working on the Teen AIDS Hotline has been a really unique experience. Saving lives gives a feeling of complete satisfaction and is something each of us do with each phone call.

Why is it important for a high school kid to work on an AIDS hotline? Much has been made of high-risk groups: gays, IV drug abusers, immigrants from certain parts of the world, but we don't emphasize high-risk groups. We believe there are only high-risk activities because it's not who you are or what you are or where

you're from or how old you are, but what you do and how you do it that determines whether you're going to stay healthy or become infected by the AIDS virus.

The teen years are times of experimentation and new options. Americans are becoming sexually active younger and younger, and those who do abuse drugs usually start as teenagers. So, if there is such a thing as a high-risk group, it is teen America, and we at the Teen AIDS Hotline are working to save our generation.

What motivated me to volunteer as a hotliner? The founder and director of our community's AIDS foundation, David Brumbach, produced an AIDS assembly at my school. He showed us this film, "The AIDS Movie," and answered our questions. He finished that morning by challenging us: come on. Make some history with us and save some lives. I'm sure glad I did.

Ours is the first AIDS hotline run by teens for teens in the nation. It's open 7 days a week, 8 a.m. to midnight, in English and in Spanish. Our high school and college age hotliners are reaching out to 300,000 plus teenagers in the greater Washington area, and they're calling. Last month we received over 4,100 calls.

Our Teen AIDS Hotline is just part of our family-oriented response to the AIDS crisis in our community. Other programs include teen and family conferences on AIDS sponsored by coalitions of neighborhood churches and synagogues every weekend. "The AIDS Movie" is the first AIDS prevention film for teens. PTSA AIDS night is a Parent-Teacher Association sponsored AIDS night for the entire school family. "The Top 40 Questions on AIDS," a video-discussion guide for moms and dads, teachers and clergy. "The Teen AIDS Show," an MTV-styled teen show produced by teens for teens giving the facts on AIDS which will premiere next month, and the Teen Internship Project, teens teaching teens about AIDS and how they can protect themselves.

Through our public presentations, we've talked with over 60,000 neighbors just in the last 8 months. Today here on Capitol Hill, we'll be showing "The AIDS Movie," and David will be answering questions at the Russell Building, Room 253, at 2:00. Please come. It's a little late.

What's my shift on the Hotline like? Well, listen in: A 17-year-old girl, worried that she could have been infected by her college boyfriend, asking for help. A 30-year-old man who's scared his fast-lane behavior from years past may have resulted in infecting his pregnant wife, or neighbors freaking out over public toilets, swimming pools or killer-AIDS mosquitos.

I'm confident that the same questions are being asked in other parts of our country, but are their questions being answered? I believe that lives, indeed the future of my generation, depend on loving and thoughtful answers to these questions.

Wondering how we support our teen programs? We're financing them ourselves through the sale of M&M's and contributions from our neighbors. In a way, it's scandalous we don't receive government support, but it's also beautiful because it shows that we teens believe in these programs that are saving our friends' lives.

In closing, what we suggest to you, our leaders, teach your children well, teach your own children the facts on AIDS and how they can protect themselves. Then, help us show the other teens

throughout the country how they can stop the AIDS epidemic in their communities because we are confident that we can win this war on AIDS. It will only be through a volunteer army, an army of moms and dads, teens, teachers, clergy, the marketplace, academia and our neighbors in science and medicine working together to save lives and help our friends with AIDS in their families.

Thank you.

Chairman MILLER. Thank you very much. Becky, do you have to be over there at 2:00 because, if we have questions, we can ask them now, and then you'd certainly be free to go.

Ms. ADLER. They did not tell me whether I was expected, so I suppose I can stay.

Chairman MILLER. All right. If you don't mind, then we'll just go ahead with testimony from the rest of the panel. Thank you.

[Prepared statement of Becky Adler follows:]

Prepared Statement of Becky Adler, of the "Teen AIDS Hotline," Montgomery County, MD

Good morning. My name is Becky Adler. I'm 17-years-old and a graduating senior from Sandy Spring Friends School in Montgomery County, Maryland. I'm also a "Teen AIDS Hotliner."

Working on the "Teen AIDS Hotline" has been a unique experience. Saving lives gives a feeling of complete satisfaction, and is something each of us do with each phone call.

Why is it important for a high school kid to work on an AIDS hotline? Much has been made of "high-risk" groups: gays, I.V. drug abusers, immigrants from certain parts of the world. But we don't emphasize "high-risk" groups. We believe that there are only "high-risk" activities.

Because -- it's not who you are, or what you are,
or where you're from, or how old you are,
but what you do and how you do it
that determines whether you're going to stay healthy,
or become infected by the AIDS virus.

The Teen Years are times of experimentation and new options. Americans are becoming sexually active younger and younger, and those who do abuse drugs usually start as teenagers. So, if there is such a thing as a "high-risk" group -- it is Teen America. And we at the "Teen AIDS Hotline" are working to save our generation.

What motivated me to volunteer as a hotliner? The founder and director of our community's AIDS foundation, David Brumbach, produced an AIDS Assembly at my school; showed his film, "The AIDS Movie," and answered our questions. He finished that morning by challenging us: "Come on. Make some history with us, and save some lives!" I'm sure glad I did.

Our's is the first AIDS hotline run by-teens/for-teens in the nation; 7-days-a-week, 8AM to Midnight, in English & Spanish. Our high school and college-aged hotliners are reaching out to 300,000+ teenagers in the Greater D. C. area. And they are calling! Last month, we received over 4,100 calls.

Our "Teen AIDS Hotline" is just one part of our "family-oriented" response to the AIDS Crisis in our community. Other programs include:

o "Teen & Family Conferences on AIDS" -- Sponsored by coalitions of neighborhood churches and synagogues, every weekend.

o "The AIDS Movie" -- The first AIDS-prevention film for teens.

o "PTSA AIDS Nights" -- Parent/Teacher/Student Associations sponsor AIDS Nights for the entire school family.

o "The Top 40 Questions on AIDS" -- A video-discussion guide for moms and dads, teachers, and clergy.

o "The Teen AIDS Show" -- An MTV-styled teen show produced by-teens/for-teens giving the Facts on AIDS, which will premiere next month.

o "Teen Internship Project" -- Teens-teaching-teens about AIDS and how they can protect themselves.

Through our public presentations, we've talked with over 60,000 neighbors just in the last eight months. Today here on Capitol Hill, we'll be showing "The AIDS Movie" and David will be answering questions at the Russell Building, Room #253, at 2:00. Please come.

What is my shift on the hotline like? Well, listen in:

o A 17-year old girl; worried that she could have been infected by her college boyfriend . . . asking for help.

o A 30-year old man who's scared his "fast-lane" behavior from years past may have resulted in infecting his pregnant wife.

o Or neighbors freaking out over public toilets, swimming pools, or "killer-AIDS" mosquitos.

And I'm confident that the same questions are being asked in other parts of our country -- but are their questions being answered? I believe that lives -- indeed, the future of my generation -- depend upon loving and thoughtful answers to these questions.

Wondering how we support our Teen Programs? We're financing them ourselves through the sale of M&M's and contributions from our neighbors. In a way it's scandalous we don't receive government support, but it's also beautiful because it shows that we teens believe in these programs that are saving our friends' lives.

In closing, what would we suggest to you, our leaders:

"Teach your children well . . ."

Teach your own children the Facts on AIDS and how they can protect themselves.

Then help us show other teens throughout the country how they can stop the AIDS Epidemic in their communities.

Because we are confident that we can win this War on AIDS, but it will only be through a volunteer-army -- an army of moms and dads, teens, teachers, clergy, the marketplace, academia, and our neighbors in science and medicine -- working together to save lives and help our Friends-with-AIDS and their families.

STATEMENT OF JONATHAN HOWE, PRESIDENT, NATIONAL SCHOOL BOARDS ASSOCIATION, NORTHBROOK, IL

Mr. HOWE. Mr. Chairman, members of the panel, I'm Jonathan Howe, President of the National School Boards Association, which is headquartered here in the Washington area. I'm a member of the Northbrook, Illinois, Board of Education.

We appreciate the opportunity to appear before the panel today and the committee and to represent the National School Boards Association which, in turn, represents some 97,000 local school board members across this country and govern the nation through some 15,000 public school districts.

On April 4 of this year Surgeon General Koop appeared before our national convention, and there he gave us a challenge: to exercise leadership in AIDS education and prevention.

On behalf of educators and on behalf of school board members throughout this country, we accepted that challenge. In fact, we're proud of the fact that we have been an early leader encouraging education about AIDS.

We've been convinced for some time that the statistical data on adolescent substance abuse and sexually transmitted diseases means that the contagion rate among youth is greater than current AIDS case statistics reveal.

Given the fact that AIDS often does not occur until several years after exposure, we fear that many of the AIDS victims in the 20 to 29-year-old age group may well have been infected as teenagers or even as pre-teens. We must move boldly to prevent the further spread of AIDS, and the way we do that, in no small part, is through education.

Among the initiatives already undertaken by the National School Boards Association has been a national conference on public forum in February of last year on AIDS in the public schools. That resulted in the publication of this monograph which, I believe, we have distributed to each member of the committee.

Just recently, the National School Boards Association endorsed the publication of a very excellent pamphlet, which I believe you also have, for young people produced by the American Council of Life Insurance and the Health Insurance Association of America entitled, "Teens and AIDS, Playing it Safe," and that is this pamphlet right here.

I am proud that in April the National School Boards Association passed unanimously the resolution urging local school boards to adopt curricula to educate students about AIDS. Teaching students about AIDS touches some very sensitive issues. Sex education itself is a controversial topic in many communities. Sensitive issues of sexuality often, perhaps usually, have not been included in curriculum. Very few programs have included discussions of homosexuality, a topic that teachers will suddenly have to be prepared to address, even if only in response to students' questions. Nevertheless, the clear health threat presented by AIDS means we must attempt to provide responsible, comprehensive AIDS education; just not a cursory, superficial review.

In each local school district it means the development of a curriculum that provides accurate factual information in a context ac-

ceptable to its community. Can this challenge be met, given the sensitive nature of the subject matter? The answer to this question is clearly yes, and it has to be yes.

Some districts, in fact, are already meeting the challenge. According to a study conducted by the National Association of State Boards of Education this month, 24 states have or are developing AIDS curriculum materials. In December the United States Conference of Mayors surveyed 73 of the nation's largest public school districts and found that 40 were providing some form of AIDS education, and the majority of the rest were planning to do so.

NSBA has already provided a number of materials and will continue to do so to enable school districts to enact responsible policies in regard to students and staff members with AIDS. In addition, we think it is extremely important that all teachers be well informed with the latest information on AIDS so that they can answer factually in an age-appropriate manner the questions students may have.

In March of 1986 NSBA distributed to all of our state associations a staff development videotape prepared by the New York City Public Schools in conjunction with the City Health Department in New York.

Most significantly, the details of each district's AIDS curriculum: what should be taught in what courses, by whom and at what levels, are issues appropriately addressed at the local school district level.

As school districts undertake the development and implementation of AIDS education, we believe they will want to assure that they have considered the following 7 areas.

First, any AIDS education program should have a strong emphasis on abstinence from sexual activity, not only to avoid contracting the disease, but also as the responsible choice for young people, regardless of the dangers of AIDS.

Second, AIDS education should be as factual and complete as appropriate for each grade level. It must be part of a course that all students are required to take.

Third, school districts should consider providing opportunities for the participation of parents, students, citizens, clergy and others in the development of a proposed curriculum. School districts might also want to consider requiring parental consent for AIDS education.

Fourth, consideration should be given to assuring that the staff members who provide AIDS instruction for children receive adequate training to deal in depth with this very sensitive subject.

Fifth, the school district should consider whether to adapt the curriculum for limited English proficient students and handicapped students.

Sixth, schools will want to consider how parents may be made aware of the curriculum materials and whether the curriculum should include materials to be sent home with the student.

Seventh, AIDS education may be included in health education or sex education courses or it may be a part of a science curriculum or even a social studies curriculum. Often, it is included in more than one subject area. Where it is included in more than one sub-

ject area, schools should and will want to consider how the curriculum might be coordinated to assure that the message is consistent.

In developing AIDS education programs, local school districts might use the following nine guidelines.

Number 1, does the curriculum give simple, clear and direct information in terms that students can understand.

Second, is the curriculum factually accurate based on the most current information available, and is it susceptible to regular updating as new information becomes available.

Third, is the curriculum a sequential program tailored to students' level of development, both emotionally and intellectually.

Fourth, does the curriculum focus on teaching healthy behavior with the scientific terminology and medical aspects of the disease kept in a proper perspective.

Fifth, does the curriculum stress positive personal values, sexual abstinence, for example, and give a clear message that multiple sexual partners and intravenous drug use increase the risk of contracting AIDS, and are these issues handled in a way acceptable to the community.

Sixth, if discussion on the risks of AIDS is included, is emphasis on high-risk behavior, rather than high-risk groups. Is the message given that anyone who engages in such behaviors is at risk, regardless of race, sex or sexual orientation.

Seventh, is discussion of student concerns and fears specifically included in the curriculum. Has consideration been given to the possibility that some students may already have experienced the loss of a friend or a relative with AIDS.

Eight, does the high school portion of the curriculum address sexuality and homosexuality in a responsible way that is consistent with community values.

Nine, what—while continuing to encourage students to choose abstinence, is there a way to point out to older students that for individuals who are sexually active, condoms greatly reduce the risk of AIDS, and that certain sexual practices increase the risk of AIDS.

The best curriculum in the world is not going to help prevent AIDS if it's not used. I assure you that local school board members are aware of the AIDS crisis, and that they want to provide the right kind of information to those students. They are aware that AIDS is a threat of tremendous proportion, and not simply in certain urban areas.

I cannot emphasize strongly enough to you our concern about AIDS education. We believe that this national; in fact, this worldwide health risk, requires an aggressive educational campaign. We recognize that it may mean that in many localities subjects not previously discussed will become part of the curriculum.

For this to be done in a sensitive and sensible way and for it to have any chance of success, the decisionmaking must occur in the local community. Education is now the best protection against AIDS. Each of the 97,000 individual local school board members across this nation and the National School Boards Association as an organization accepts the challenge to educate our children about this major health menace.

Thank you.

Chairman MILLER. Thank you. We're going to take a short recess and go vote, and we'll be right back.

[Recess.]

Chairman MILLER. And we will pick up the testimony where it was left off, and I'm not exactly sure where that was, but you inform me.

[Prepared statement of Jonathan T. Howe follows:]

Prepared Statement of Jonathan T. Howe, President, National School Boards Association, Alexandria, VA

I. Introduction

I am Jonathan Howe, President of the National School Boards Association, and I appreciate the opportunity to appear before the House Select Committee on Children, Youth and Families. The National School Boards Association is the only major education organization representing the local school board members who govern the nation's 15,000 public school districts. Throughout the nation, approximately 95,000 of these individuals are Association members. These people, in turn, are responsible for the education of more than 95 percent of the nation's public school children. NSBA's primary mission is the advancement of education through the unique American tradition of local citizen control of -- and accountability for -- the nation's public schools.

On April 4 of this year, the Surgeon General of the United States spoke to the National School Boards Association. He issued the following challenge:

> In order to end the chain of transmission of [AIDS] ... we need to teach young people the facts about AIDS and about their own sexuality ... to make them a lot more responsible in their relationships than their elders have been. ... And let me assure you that we in public health and in the federal government look to you -- not to ourselves -- for the answer.

As you will learn from my comments, NSBA acknowledges our responsibility to exercise leadership in AIDS education and prevention.

II. The Dimensions of the AIDS Problem

The latest research continues to estimate that a vaccine to protect against AIDS is still years away. I cannot argue with Surgeon General Koop's assertion that adolescents and pre-adolescents are especially vulnerable to AIDS infection because they are at a developmental stage when they are exploring their own

sexuality and perhaps experimenting with drugs. We do know from statistical data that substance abuse and sexually transmitted diseases are two of the most serious health problems for adolescents.

Because there can be a delay of several years between exposure to the virus and development of AIDS, we can reasonably conclude from what we know about young people's lifestyles that the contagion rate among youth is greater than current AIDS case statistics reveal. We cannot take solace in the fact that only one percent of the currently diagnosed AIDS cases are among persons under 20. Twenty-one percent of all AIDS cases currently occur among people between the ages of 20 and 29, many of whom may well have been infected as adolescents. In 1977, in a study among young people, 50 percent of males and 33 percent of females had engaged in intercourse by the time they were 17 years old. Putting these statistics together paints an alarming picture. During 1986, about 16,000 AIDS cases were diagnosed, and about 9,000 people died from AIDS. During 1991, the estimated diagnoses will be 74,000, with 54,000 deaths. Many of the new cases will be young people. Even when a preventive vaccine is developed, it will not protect those already exposed. This leaves us with only one way to prevent the further spread of AIDS — and that is through education.

III. NSBA's Leadership in AIDS Education

NSBA is proud to have been an early leader in encouraging education about AIDS.

- For more than three years, NSBA has been meeting with medical experts about the virus and how to deal with the disease.
- For more than two years, we have been featuring discussion of AIDS-related issues in our publications.

- NSBA conducted a national conference and public forum in February, 1986, on "AIDS and the Public Schools." The conference defined the medical and legal issues and gave school board members from throughout the United States an opportunity to question a panel of experts.
- In March of 1986, NSBA distributed free of charge to all our state associations a staff development videotape prepared by the New York City Public Schools in conjunction with the city health department.
- Last September, NSBA issued a leadership report entitled AIDS and the Public Schools.
- In April, NSBA passed — unanimously — a resolution urging local school boards to adopt curricula to educate students on the causes of AIDS and the means to prevent contracting the disease.

We believe NSBA can continue our leadership role in AIDS education. Before reviewing the way this can be accomplished, I would like to draw your attention to several important points.

IV. Development of AIDS Education

First, AIDS is a national health problem and should be addressed as such. It is not regional, it is not a health problem only among certain populations, and it is certainly not a problem that is soluble by the schools community alone. We recognize, however, that AIDS education cannot be an optional activity for schools — it is something we must do, because school-age students are a primary AIDS risk group, and AIDS is a life-and-death issue.

Let me emphasize that NSBA believes -- and I know I speak for my fellow board members in school districts throughout the country, whether urban, rural, or suburban -- accurate information about AIDS should be provided to students. Educational material should be developed by education professionals and health experts working together to assure that curricular materials are factually correct and age-appropriate -- and adaptable to the needs of the local community if possible. In developing educational materials in this sensitive area, for example, it is particularly important to utilize the knowledge of such developmental scholars as Erikson and Piaget to assure that the scope and sequence of materials are appropriate for students' age and grade level.

One example of health and education professionals working together on curriculum development is Eugene, Oregon, where the curriculum was written by a classroom teacher, a health teacher, and a registered nurse. Technical review was provided by two state health officials with AIDS expertise.

NSBA is very much aware that teaching students about AIDS touches some very sensitive issues. Sex education itself is a controversial topic in many communities. Sensitive issues of sexuality have often -- perhaps usually -- not been included in the curriculum. Very few programs have included discussion of homosexuality, a topic that teachers will suddenly have to be prepared to address, even if only in response to student questions. There may be local restrictions on instruction about contraceptives or homosexuality. Nevertheless, the clear health threat presented by AIDS means we must attempt to provide responsible, comprehensive AIDS education that is not just a cursory, superficial review. In each local school district, it means development of a curriculum that provides accurate factual information in a context acceptable to its community.

V. The Current Status of AIDS Education

Can this challenge be met, given the sensitive nature of the subject matter? The answer to this question is clearly "yes". Some districts, in fact, are already meeting the challenge. According to a study conducted by the National Association of State Boards of Education this month, 24 states have or are developing AIDS curriculum materials. In December, the U.S. Conference of Mayors surveyed 73 of the nation's largest local school districts and found that 40 were providing some form of AIDS education and a majority of the rest were planning to do so.

The states of Rhode Island and Kansas have mandated AIDS education, even specifying grade levels for introduction of various topics. For example, Rhode Island's curriculum starts with kindergarten instruction on infectious diseases and how to avoid them. The word "AIDS" is not mentioned until 7th grade. In 9th grade, students are taught methods of avoiding AIDS, including the use of condoms.

In Kansas, the Kansas Association of School Boards supported the statewide mandate and helped develop the curriculum. Both Kansas and Rhode Island provided for community input in curriculum development.

In Eugene, Oregon, the middle school program has as its goal that "Students know the basic characteristics of human growth and development from conception to death." Within this context, seventh grade students learn what AIDS means, the nature of the AIDS virus, and the effect of the virus on the body's immune system. They learn how the virus is transmitted and preventive measures. Sexuality, homosexuality, substance abuse, and safe sexual practices, including use of condoms, are part of the curriculum. The goal of the high school program in Eugene is that "Students possess updated information relative to behaviors needed to develop and maintain a lifestyle of high level wellness." This ninth grade course focuses on assuring that students have up-to-date factual information about AIDS

and reinforcing the information they received in the middle school course. In addition, ethical and civil rights issues are addressed.

Memphis, Detroit, and Kansas City are developing AIDS education curricula for elementary age children. Pittsburgh's AIDS education program begins in first grade with a generalized discussion of good personal hygiene. Issues such as emotional and psychological aspects of the diseases, as well as civil rights questions, are part of the curriculum in Washington and Kansas City, for example. Many AIDS education programs include a focus on dispelling myths about AIDS.

So there are hopeful signs. Considering the relatively short time in which AIDS has become a national health concern, excellent progress has been made. But there is much to be done, and time is of the essence.

VI. The Role of NSBA

I believe NSBA has an important leadership role to play in helping local school board members address this national health threat. School board members appreciate the urgent necessity of instituting AIDS education -- and they understand their role in decision-making and in educating their communities to accept AIDS education. NSBA intends to continue our campaign to help local school boards make the right decisions about education, policy development, and staff development opportunities.

What is our plan?

First, NSBA has already provided a number of materials -- and will continue to do so -- to enable school districts to enact responsible policies in regard to students and staff members with AIDS.

Second, we think it is extremely important that all teachers be given staff development activities so they are well-informed about the latest information on

AIDS and can answer factually and in an age-appropriate manner the questions students may have about AIDS. The New York City tape I mentioned earlier is one example of quality staff development.

Third and most significantly, NSBA can assist local school boards in implementation of AIDS curricula at the local level. Even where states have adopted AIDS education proposals and are developing AIDS curricular materials, they have not specified what should be taught, in what courses, by whom, and at what levels. This leaves to the local school district -- and appropriately so -- the major responsibility for programming on AIDS education and prevention. We believe NSBA can help districts ask the right questions to develop and evaluate AIDS instruction in their communities.

VII. Development of a Responsible AIDS Education Program

As school districts undertake the development and implementation of AIDS education, we believe they will want to assure that they have considered the following:

1. Any AIDS education program should have a strong emphasis on abstinence from sexual activity not only to avoid contracting the disease but also as responsible choice for young people regardless of the danger of AIDS.

2. AIDS education should be as factual and complete as appropriate for each grade level. It must be part of a course that all students are required to take.

3. School districts should consider providing opportunties for participation of parents, students, and citizens in the development of a proposed curriculum. School districts might also want to consider requiring parental consent for AIDS education.

4. Consideration should be given to assuring that staff members who provide AIDS instruction for children receive adequate training to deal in depth with this sensitive topic.

5. The school district should consider whether to adapt the curriculum for limited English proficient students and handicapped students.

6. Schools will want to consider how parents may be made aware of the curriculum materials, and whether the curriculum should include materials to be sent home with students.

7. AIDS education may be included in health education or sex education courses, or it may be part of a science curriculum, or even a social studies curriculum. Often, it is included in more than one subject area. Where it is included in more than one subject area, schools will want to consider how the curricula might be coordinated to assure that the message is consistent.

VIII. A Model Program

There may be value in the development of model AIDS education programs that local school districts could consider adapting to their communities. The following standards might be used in developing such a curriculum:

1. Does the curriculum should give simple, clear, and direct information, in terms the students can understand?

2. Is the curriculum factually accurate, based on the most current information available -- and is it susceptible to regular updating as new information becomes available?

3. Is the curriculum should be a sequential program tailored to students' level of development, both emotionally and intellectually?

4. Does the curriculum focus on teaching healthy behavior, with the scientific terminology and medical aspects of the disease kept in proper perspective?

5. Does the curriculum stress positive personal values -- sexual abstinence, for example, and give a clear message that multiple sexual partners and intravenous drug use increase the risk of contracting AIDS, in a way acceptable to our community?

6. If discussion of the risks of AIDS is included, is emphasis on high-risk behaviors, rather than high-risk groups? Is giving the message that anyone who engages in such behaviors is at risk, regardless of race, sex, age, or sexual orientation?

7. Is discussion of student concerns and fears specifically included in the curriculum? Has consideratain been given to the possibility that some students may already have experienced the loss of a friend or relative with AIDS?

8. Does the high school portion of the curriculum address sexuality and homosexuality in a responsible way that is consistent with community values?

9. While continuing to encourage students to choose abstinence, is there a way to point out to older students that for individuals who are sexually active, condoms greatly reduce the risk of AIDS, and that certain sexual practices increase the risk of AIDS?

IX. The Role of the Local School Board

The best curriculum in the world is not going to help prevent AIDS if it is not used. I assure you that local school board members are aware of the AIDS crisis and that they want to provide the right kind of information to their students. They are aware that AIDS is a threat of tremendous proportion -- and not simply in certain urban areas.

Local school boards have the expertise to evaluate curricular materials in this area, as they do in other curriculum areas. In your own Congressional districts, you know that school boards are making responsible decisions about the next generation's education in many fields. When it comes to AIDS education, what they need is high quality information and support in their efforts to address this particularly pressing national health problem quickly.

Local school board members are not only the appropriate decision-makers in selecting curricular materials. They are also in the best position to serve as local advocates for AIDS education, and they are in the best position to evaluate their communities' needs. Whether AIDS instruction begins at kindergarten or a couple of years later; whether it is part of health education, or science, or sex education classes; whether the term AIDS is raised in fifth grade, or seventh, or even ninth grade — these are local decisions. When these decisions are made locally, successful education will follow. There is a local dimension to education about sexuality and contraception — a mandate from outside may well fall on deaf ears. Each community's school board is in the best position to assess the type of teaching that will best convey the universal message. I want to make clear that I don't believe local school boards see AIDS education as an optional activity — but the "how" and the "when" may differ from one community to another.

X. Conclusion

I cannot emphasize too strongly NSBA's concern about AIDS education. We believe that this national — this worldwide — health risk requires an aggressive educational campaign. We recognize that it may mean that in many localities subjects not previously discussed will become part of the curriculum. For this to be done in a sensitive and sensible way — and for it to have any chance of success

-- the decision-making must occur in the local community. NSBA believes we have a role to play in helping local school boards make their decisions, through training programs and written materials.

Education is for now the best protection against AIDS. Each of the 95,000 local school board members across this nation individually and NSBA as an organization accepts the challenge to educate our children about this major health menace.

["AIDS and the Public Schools," article entitled, from the Leadership Reports, a quarterly publication for NSBA Direct Affiliates, Volume 1, is retained in committee files.]

STATEMENT OF JOHNNIE HAMILTON, FAIRFAX COUNTY PUBLIC SCHOOLS, ANNANDALE, VA

Ms. HAMILTON. I'm Johnnie Hamilton, Science Coordinator, Fairfax County Public Schools. I welcome the opportunity to share with you this afternoon now how AIDS instruction is being implemented in Fairfax County Public Schools and to seek your cooperation in addressing this most important health problem of our time.

There is ample documentation of the need for concerted action by all responsible individuals and agencies to educate the community on this topic. Fairfax County is a suburban community, approximately the 11th largest school district in the nation, of 124,000 plus students, 23 high schools, 22 intermediate schools. So, the Fairfax County Public School Board moved judiciously to ensure that the instruction provided about AIDS be accurate, developmentally appropriate, acceptable to parents and consistent with the emphasis in our health, human life and home economic courses on the traditional values which undergird responsible behavior.

The goals of these programs are to develop positive self-concepts in students, to help them cope with the changes of puberty and adolescence, and to relate sexual activity to long-term commitment and the responsibilities of marriage and parenthood.

Our health and human life programs are designed to help adolescents postpone sexual initiation through training and assertiveness and responsible decisionmaking. We believe and teach that abstinence for teenagers is desirable for many reasons and, certainly, the first and best line of defense against contracting the AIDS virus.

Our students are encouraged to just say no to many types of exploitation and negative peer pressure, both sex and drug related; however, we know that some students are sexually active and are drug users, and our AIDS instruction also addresses their need for life-saving information.

In the 1985-86 school year staff began reviewing instructional material on the topic of AIDS for use in the 10th grade biology human life education program. The human life education program was identified as the place to begin because it had been successful in addressing controversial topics such as abortion and contraception. We attribute this success to the involvement of the community in program development and to the special training of our biology teachers to deal with value-laden issues.

As our staff screened print and visual aids, one of the criteria was that material must address all risk groups rather than focusing on one or two, such as homosexual males and intravenous drug users.

The teenager must be made to know that they, too, can contract AIDS.

Some material with good production quality were rejected because they did not meet these criteria or because they assumed sexual activity by the audience.

In November 1986 the Human Life Education Review Committee was convened to review a variety of instructional media that most nearly met our guidelines. The committee, composed of parents,

teachers, administrators, health professionals, clergy and representatives of community organizations, approved the film "AIDS, What Everyone Needs to Know," by Churchill Films, and the printed material, "Facts about AIDS" and "Understanding the Immune System," both published by the U.S. Department of Health and Human Services. None of the media materials used alone imparts the message which we rely on our teachers, and we hope parents, to get across: that sex for adolescents is never safe, physically, psychologically, emotionally or socially.

On February 12th the school board approved the AIDS instructional materials recommended by the Human Life Review Committee for use in the 10th grade biology program. The school board also supported the committee's proposal that age-appropriate AIDS instruction be included in the 7th and 8th grade health programs, and that high school students, other than those currently in the human life program, be provided with instruction about AIDS.

Note that this is coming from the community and the school board and not from within the school system itself; although, we certainly concurred.

High school administrators, working with their school communities and staffs, implemented this last recommendation this spring. How this occurred varied slightly from school to school but, in all cases, there was notification to parents, use of approved material and a trained biology teacher presenting the lesson or available to answer questions.

Health department nurses served as resources for teachers and were available for consultation with students and referral for health services.

The most important delivery mechanism for AIDS instruction in the classroom is the teacher. Since the last school year, AIDS information has been included in the human life education seminar, a required course for all biology teachers new to Fairfax County. Dr. John Bunker, Director for the Center for Health Promotion at George Mason University, and Carol Welcher, Epidemiologist with the Fairfax County Public Health Department, provided sessions during the seminar.

More emphasis was given to STDs within the teacher training seminar this year than any other year in the past; although, Carol Welcher, from the Health Department, had consistently been with us.

Therefore, our teachers were aware of AIDS since its introduction into the media and into the population.

Our veteran teachers already certified to teach the human life program participated in school-based training sessions where they reviewed the newly approved materials and were provided with lesson plans and instructional strategies for teaching about AIDS. A packet of such resource materials was sent to each biology teacher. Other ongoing staff development opportunities were made available to teachers on the topic of AIDS.

For example, in October a graduate level course, "Introduction to the Immune System," was offered at George Mason University by Dr. Karen Oates, a research immunologist, who worked very closely with our science staff to make sure that the most current AIDS information was included. It was there, too, that we noticed that

the textbooks, the biology textbooks included very little information about immune systems.

On March 11th, 1987, biology, health and social studies teachers and public health nurses were invited to an authoritative presentation on AIDS by Drs. Samuel Thier and Roy Widdus of the National Academy of Sciences. The presentation was videotaped, placed in our media inventory and made available to schools for future training.

Just recently, Carol Welcher was also taped to carry out the same process and, just today, as I've been sitting here, we have been taping other academicians and participants in our program to make sure that we have documented the expertise that is available to us.

As a followup to the school board's recommendation, summer curriculum development will incorporate AIDS instruction in the 7th, 8th and 9th grade health curricula. The curricula that I basically coordinate is the science curricula. This instruction in health will begin in the Fall of 1987 after appropriate teacher training.

In response to community inquiries, our staff is also looking for AIDS education material suitable for 5th and 6th grade students. We will again move judiciously with community support as to how this will be handled and what materials will be included but, in all cases, you can rest assured that it will be age appropriate.

We believe that by providing our high school students with AIDS information this year and incorporating AIDS instruction into the health program at 7th, 8th and 9th grades next year, we will be reaching students at a pivotal time in their lives; when they are beginning to make independent decisions about lifestyles and values, and when they are prone to experiment.

We also realize that the effectiveness of the schools' educational campaign is compounded if it complements the instruction and guidance being provided in the home. Parent education is an important part of our effort, and the students are encouraged to discuss the AIDS issues with their parents or other trusted adults.

In cooperation with state officials, the Red Cross brochure, Information About AIDS for Parents of School-Aged Children, has been mailed to parents of all students in grades 7 through 12, along with a letter co-signed by the superintendent and the Director of Public Health.

In this letter parents were encouraged to view a state-sponsored program on AIDS which was rebroadcast on our local educational television station.

Fairfax County Public Schools, with the assistance of the Public Health Department and other agencies and the community, will stay abreast of AIDS research and implications of this research for the instructional program.

Our instructional staff will continue to review and update material for our health and human life education programs. Our commitment is to provide students with the information and support they need to make informed and responsible decisions about their lives and the welfare of others.

School systems, like ours, need your support for training and instructional materials development, for video and media. When we work with our curriculum teams in the summer, we most often

have had to forego some other needs in order to take care of emergency, critical situations, such as this.

So, any kind of support that can be given to not just the school system, but all agencies supporting school systems, would certainly aid in AIDS prevention.

Finally, too, some kind of conduit would be most welcome whereas we could very quickly receive information as soon as there is an update, so that we can pass this on to the needed population.

Thank you again for this opportunity.

Chairman MILLER. Thank you.

Mr. Gordon.

[Prepared statement of Johnnie Hamilton follows:]

PREPARED STATEMENT OF JOHNNIE HAMILTON, FAIRFAX COUNTY PUBLIC SCHOOLS, ANNANDALE, VA

I welcome the opportunity to share with you this morning how AIDS instruction is being implemented in Fairfax County Public Schools, and to seek your cooperation in addressing this most important health problem of our time. There is ample documentation of the need for concerted action by all responsible individuals and agencies to educate the community on this topic.

Thus, the FCPS School Board moved judiciously to ensure that the instruction provided about AIDS be accurate, developmentally appropriate, acceptable to parents, and consistent with the emphases in our health, human life, and home economics courses on the traditional values which undergird responsible behavior. The goals of these programs are to develop positive self-concepts in students, to help them cope with the changes of puberty and adolescence, and to relate sexual activity to long-term commitment and the responsibilities of marriage and parenthood. Our Health and Human Life Programs are designed to help adolescents postpone sexual initiation through training in assertiveness and responsible decision-making. We believe and teach that abstinence for teenagers is desirable for many reasons and certainly the first and best line of defense against contracting the AIDS virus. Our students are encouraged to "just say no" to many types of exploritation and negative peer pressure, both sex and drug-related. However, we know that some students

are sexually active and/or drug users, and our AIDS instruction also addresses their need for life-saving information.

In the 1985-86 school year, staff began reviewing instructional materials on the topic of AIDS for use in the 10th grade biology Human Life Education Program. The Human Life Education Program was identified as the place to begin because it has been successful in addressing controversial topics such as abortion and contraception. We attribute this success to the involvement of the community in program development and to the special training of our biology teachers to deal with value-laden issues. Secondly, the topic of sexually transmitted diseases as a maternal health factor already is included in the content of the program. It is in this context that AIDS has been discussed.

As our staff screened print and visual media about AIDS, they used the following criteria:

- o The material must be factual and up-to-date in describing
  - the nature of the disease,
  - how it is spread,
  - the high risk populations,
  - how to avoid contracting the virus, and
  - how to avoid spreading it.

- o the material must address <u>all</u> risk groups rather than focusing on one or two, such as homosexual males and intraveneous drug users.

- The material must be sensitive to the developmental and emotional needs of adolescents.

Some materials with good production quality were rejected because they did not meet these criteria or because they assumed sexual activity by the audience.

In November 1986, the Human Life Education Review Committee was convened to review a variety of instructional media that most nearly met these guidelines. The committee--composed of parents, teachers, administrators, health professionals, clergy, and representatives of community organizations, approved the film "AIDS - What Everyone Needs to Know," by Churchill Films, and the print material: Facts About Aids and Understanding the Immune System, both published by the U. S. Department of Health and Human Services. None of the media materials used alone imparts the message which we rely on our teachers - and we hope parents - to get across: That sex for adolescents is never "safe" - physically, psychologically, emotionally, or socially.

On February 12, the School Board approved the AIDS instructional materials recommended by the Human Life Review Committee for use in the 10th grade biology program. The School Board also supported the committee's proposals that age-appropriate AIDS education be included in the 7th and 8th grade health programs, and that high school students other than those currently in the Human Life Education Program be provided with instruction about AIDS.

High school administrators working with their school communities and staffs implemented this last recommendation this spring. How this occurred varied slightly from school to school, but in all cases there was notification to parents, use of approved materials, and a trained biology teacher presenting the lesson or available to answer questions. Health department nurses served as resources for teachers and were available for consultation with students and referrals for health services.

The most important delivery mechanism for AIDS instruction in the classroom is the teacher. Since the last school year, AIDS information has been included in the Human Life Education Seminar, a required course for all biology teachers new to the county. Dr. John Bunker, Director of the Center for Health Promotion at George Mason University, and Carol Welcher, Epidemiologist with the Health Department, provided sessions during the seminar. We are fortunate to have in our community experts so willing to give this type of support to our instructional program. Our veteran teachers, already certified to teach the Human Life Program, participated in school-based training sessions where they reviewed the newly approved materials and were provided with lesson plans and instructional strategies for teaching about AIDS. A packet of such resource materials was sent to each biology teacher.

Other on-going staff development opportunities were made available to teachers on the topic of AIDS. In October, a graduate level course, "Introduction to the Immune System" was offered at George Mason University. Dr. Karen Oates,

Research Immunologist, worked closely with our science staff to include AIDS information.

On March 11, 1987, biology, health, and social studies teachers and public health nurses were invited to an authoritative presentation on AIDS by Drs. Samuel Thier and Roy Widdus of the National Academy of Science. The presentation was video-taped and made available to schools for training. Just recently, Carol Welcher, Epidemiologist, FCPS Health Department, was taped while doing a presentation for biology students. This also will be a resource for teachers. Our staff will continue to seek out and provide access to experts on this topic for our teachers.

As a follow up to the School Board's recommendation, summer curriculum development will incorporate AIDS instruction in the 7th, 8th, and 9th grade health curricula, with instruction beginning in the fall of 1987 after appropriate teacher training. In response to community inquiries, our staff also is looking for AIDS education materials suitable for 5th and 6th grade students. The questions, of course, are: What information is critical for younger students, and how can it best be presented?

We believe that by providing our high school students with AIDS information this year, and incorporating AIDS instruction into the health program at 7th, 8th, and 9th grades next year, we will be reaching students at a pivotal time in their lives - when they are beginning to make independent decisions

about life-style and values, and when they are prone to experiment. We also realize that the effectiveness of the schools' educational campaign is compounded if it complements the instruction and guidance being provided in the home. Parent education is an important part of our effort, and students are encouraged to discuss the AIDS issues with their parents or other trusted adults.

In cooperation with state officials, the Red Cross brochure, Information About AIDS for Parents of School-Aged Children, has been mailed to parents of all students in grades 7-12, along with a letter co-signed by the Superintendent and the Director of Public Health. In this letter, parents were encouraged to view a state-sponsored program on AIDS which was rebroadcast on our local educational television station.

Fairfax County Public Schools, with the assistance of the Public Health Department, other agencies, and the community, will stay abreast of AIDS research and implications of this research for the instructional program. Our instructional staff will continue to review and update materials for our Health and Human Life Education Programs. Our commitment is to provide students with the information and support they need to make informed and responsible decisions about their lives and the welfare of others.

STATEMENT OF RICHARD GORDON, EXECUTIVE DIRECTOR, YOUTH DEVELOPMENT BRANCH, SEQUOIA YMCA, REDWOOD CITY, CA

Mr. GORDON. Good afternoon. My name is Rich Gordon, and I am the Executive Director of the Youth Development Branch of the Sequoia YMCA in Redwood City, California.

Ten years ago the community leaders on our Board of Directors decided that our YMCA needed to take a very different approach in our work with young people and, to that end, we established a branch which works specifically with teenagers who experience problems. We serve runaway and homeless teenagers through two shelters. We have a long-term residential facility for emotionally disturbed adolescents. We do outreach work. We do crisis counseling. We work with teenagers who are experiencing drug problems. 1,500 teenagers per year come through our facility.

We're located in a suburban county, half way between San Francisco and San Jose, and in this suburban community we do experience problems with our teenagers. We have our share of runaways. We have our share of teenagers with drug problems, and when we learned from our local health department that we had at least 7 teenagers who had tested positive to exposure to HIV, we felt we also had a problem when it came to AIDS.

We knew from some of the general information about adolescents that their behaviors put them at risk for AIDS, but we knew even more so that the specific population of young people that we dealt with in our programs were even more at risk to exposure to the virus. We were aware that these are young people who are more likely to be involved in sexual experimentation and drug use. Our runaway and homeless youth may be involved in juvenile prostitution, drug sales. Youth who have been sexually molested and are placed with us may be sexualized and more apt, therefore, to become involved in forms of sexual experimentation.

We also knew that when these young people were sheltered or incarcerated in runaway facilities, juvenile halls, and detention centers; that they were often placed in same-sex facilities where there may be increased homosexual activity or even homosexual rape.

One further issue concerned us tremendously about this population, and that is the fact that this group of young people are least likely to be in school. In the State of California we have a 31 percent drop-out rate in the general school population. Among our runaway and homeless youth, 50 percent of those who come into shelters in California are not in school. Most of the AIDS education programs that were being devised by the State of California were earmarked and being developed for school-based education. We felt that, unless there were some alternatives to reach those youngsters who were runaways, who were homeless, and who were in detention facilities—that most at-risk part of our adolescent population—that we would be at tremendous danger in terms of the spread of the disease among young people.

And to that end, our community board of directors approved submission to the State of California of a grant proposal to develop a curriculum for AIDS prevention education for young people in these kinds of facilities.

We began the project last fall. We have done pre and post-tests with a pilot group of 150 young people and discovered that there's a 28 percent increase in knowledge over the time they are first exposed to the education. We are now in the process of completing a 3-month follow up with these young people to determine how much of the knowledge and information they have retained. We have modified our curriculum based on our initial experience with the first 150 young people and have, for the balance of this fiscal year, been implementing a revised curriculum in all of the juvenile facilities in our county. We are now making that revised curriculum available to over 300 youth-serving agencies in the State of California.

This curriculum has been designed to meet the specific needs of the institutional setting. In school settings young people have longitudinal contact with teachers. When questions emerge for them over a period of time, there is someone they can go back to and raise that question and get an answer.

In the institutional setting, with these young people, we may have only one chance at getting the message across.

We know from health education in general, and from the specific experience of AIDS education in San Francisco, that it may take 3 or more times of hearing a message about AIDS before it begins to sink in. Since we only have a one-shot chance, we at least try to present our information in three different modalities. So, we do use lecture. We do use a videotape and, finally, we distribute to each of the youngsters a little wallet card that they can take with them that has information about AIDS and how to prevent exposure to the virus. The card also has the advantage of including an "800" phone number where they can call for additional information should questions occur later.

We do build into our curriculum time for question and answer. In the institutional setting, youngsters are often afraid to ask questions about sex and drugs because those questions may lead to sanctions in the institution. So, we've structured the question and answer in a way that they can raise their questions anonymously.

Because we are a YMCA, we come from a value oriented place in the work that we do with young people. We value family and in our programs the emphasis is put on trying to reunite parents and children who are runaways. We try to do everything possible to strengthen, support, and encourage the family. But, we're aware that this approach doesn't always work.

We do talk about abstinence in our program. That's from our value base; but because we know that it doesn't always work with young people, we are also very frank and very candid about risk reduction to exposure from AIDS. We use a condom demonstration in our curriculum and actually demonstrate to youngsters by placing a condom over the finger of the instructor's hands how condoms are to be used.

We also talk about drug use. We know that in our community we don't have, according to local officials, a high rate of IV drug use among our youth. I personally am more concerned about some of our high school athletes and football players who are sharing needles for steroid injection than I am about young people in our com-

munity injecting heroine. However, we do talk frankly about how to clean IV drug works or needles and make them safer.

We also talk about the fact that you could just say no to drugs. We point out that any kind of "recreational" drug or alcohol use is more likely to make you forget to use safe sex, if you are engaging in sex. So, we do talk very candidly, even though we do stress the just-say-no approach, both in terms of sex and in terms of drugs.

I've been involved in youth work for 15 years, and for 15 years I've been saying, "Just say no," to teenagers, and it doesn't always get through. It's important, therefore, that we have both messages together the accurate information and the value base.

We don't have information to date on behavior change as a result of our educational efforts. We do however, have anecdotal information which tells us that our message is getting across to young people.

We've also worked very hard to train the institutional staff, and we see this as critical. The staff of the institutions are there after our presentation is over. They need to have factual information.

Staff in youth institutions and runaway shelters can do an awful lot to reduce fear. They can make sure that in the institutional setting that those behaviors that might expose youngsters to risk is controlled. Such controls would include enforcing the standard, usual practices of institutions, such as not allowing youngsters to engage in sex or use drugs. Staff can make sure that some common institutional practices, such as sharing razors for shaving or needles for tatooing, are curtailed or eliminated.

We provide the institutional staff with resource lists of local AIDS agencies. We have found these people to be incredibly willing to work with youth service providers to make sure that current, accurate information is available.

I would suggest in conclusion that there are some things that the Federal government can do in terms of adolescents and AIDS. One of them is, and probably most important, to keep in mind that we do have to deal with runaway and homeless youth as part of our at risk youth population. The Federal government does fund a network of runaway and homeless youth shelters. Those shelters could be encouraged, in fact, could be mandated to provide AIDS education in cooperation with local AIDS organizations in their communities.

Secondly, standards for non-discrimination could be promulgated, so that young people and staff in institutions do not experience discrimination on the basis of their antibody status or diagnosis.

And, finally, educational funding, should it be developed at the Federal level, needs guarantees that it does not only go to school settings, but that it is targeted to a most vulnerable group of our young people—those young people who are not in school, who have run away, who are homeless, who survive on our streets through prostitution and drug use, who are in and out of our various youth-serving facilities and institutions, and who are most at risk. We will need special efforts to reach them.

Thank you for this opportunity to appear.

Chairman MILLER. Thank you, Mr. Gordon.

[Prepared statement of Richard Gordon follows:]

PREPARED STATEMENT OF RICHARD GORDON, EXECUTIVE DIRECTOR, YOUTH DEVELOPMENT BRANCH, SEQUOIA YOUNG MEN'S CHRISTIAN ASSOCIATION, REDWOOD CITY, CA

Mr. Chairman and Members of the Committee,

My name is Richard Gordon and I am the Executive Director of the Youth Development Branch of the Sequoia YMCA in Redwood City, California.

Ten years ago the local community leaders on our Board of Directors decided that the traditional YMCA approach to youth work needed to be revised to more adequately serve the changing population of young people and families. The Youth Development Branch was established and today we serve 1,500 teenagers and their families annually. We operate a juvenile court diversion program for delinquent offenders, two shelters for runaway youth, a drop-in center for homeless youth, and a long-term residential treatment center for youth who are victims of child abuse or have emotional problems. This Fall we will open a therapeutic day school for high school students with emotional disturbances which make it impossible for them to be served in a regular educational setting.

Our staff includes licensed counselors, psychologists, social workers and trained volunteers. These individuals provide outreach services, crisis intervention, group and individual counseling, family counseling, drug abuse counseling, preventive education, and residential services. In our work we emphasize the importance of family involvement. The goal of our runaway shelters is to reunite children and parents. We use a family counseling approach in all of our programs. Only when the parents are completely incapable of involvement with their children do we serve the youngster alone. When necessary we are willing to become the parent of last resort.

Our YMCA serves San Mateo County which is a suburban community on the peninsula between San Francisco and San Jose. We have a population of 600,000 persons with ten percent of those being teenagers between the ages of 12 and 17. Demographic data from the anonymous HIV testing program in our County reveals that there are seven teenagers with a positive AIDS antibody status.

As an agency involved with the well-being of young people, we became concerned at an early point about the impact of AIDS on adolescents. We felt that the disease was hitting in waves with gay and bisexual men being the first wave and intravenous drug users being the second wave. We felt that adolescents were at risk for becoming the third wave. This belief stemmed from the fact that adolescents are noted for being engaged in a heightened degree of experimental behavior. Such behavior may be expected for individuals whose current developmental task includes the establishment of values and identity which is increasingly autonomous with regard to their parents. This task involves exposure to and experience with a number of value, ideological, and behavioral "styles" which are "tried on" and then ultimately retained or discarded. In addition to such psychological developments, physiological developments including accelerated growth and hormonal changes create a circumstance in which experimental behavior is the norm. Consequently, adolescents have a propensity for experimentation in the areas of sexual behavior, drug use, and alternative life styles. Adolescents also believe that they are invulnerable and cannot experience death or debilitating illnesses.

While we were concerned about the adolescent population in general, we were even more concerned about the population that we served in our programs. The juvenile delinquent, the runaway, the homeless youth, and the victim of child abuse are even more at risk to exposure to the AIDS virus. These youth are more likely to be involved in sexual experimentation and drug use. Runaway and homeless youth may be involved in juvenile prostitution and drug sales. Youth who have been sexually molested become "sexualized" and are more likely to be involved in sexual activity. When these young people are sheltered or incarcerated in runaway facilities, juvenile detention centers, or protective group homes they are often in same sex facilities where there may be increased homosexual activity or homosexual rape.

One further issue concerned us about the population we serve and that was the fact that they are not often in school. In San Mateo County we have a school drop out rate of 18%. The drop-out rate in the State of California is 31% and in a study of youth in California runaway shelters it was determined that 50% are not in school. Aware that the plans for AIDS prevention education in the State of California were focusing on school based strategies, we became concerned that the youth population most at risk would not be participating in the educational programs.

The Sequoia YMCA Board of Directors authorized the submission of a request for funding to the State of California for an AIDS Education Project for Sheltered and Incarcerated Youth. The goal of the project was to develop a prevention curriculum specifically designed for youth in institutional settings and to provide training for the staff of those institutions in San Mateo County.

An initial curriculum was developed based on input from an advisory panel of medical, health education, and public education experts. The curriculum was tested with 150 youth in a pilot phase and then revised. During the pilot phase of the project a pre- and post-training test was distributed to assess competency in AIDS information. The youth in the pilot phase scored an average of 67% correct on the pre-test. Youth trained at the end of the pilot phase scored better than youth at the beginning which we attribute to heightened awareness about AIDS in the general population brought about by escalating media attention and the positive impact of the Surgeon General's report. On the post-test, 89% of the youth demonstrated a 75% minimum competency rate. One problem with the pre- and post-test was the fact that a portion of the youth in the pilot phase were functionally illiterate and could not fully complete the written test. There was no mechanism for a non-written test. We are now in the process of completing a three-month follow-up with the pilot phase youth to assess retention of the information.

The revised curriculum has now been presented to an additional 400 young people in San Mateo County's juvenile facilities including the juvenile hall and boy's reform camp run by the Probation Department, the Children's Shelter and foster homes run by the Department of Social Services, and the runaway shelters operated by the YMCA. In every setting we have found the young people very anxious about the disease and very interested in getting factual information. The most common misperceptions about AIDS which were held by these young people were that the virus can be casually transmitted and that it only affects gay or bisexual men.

Our curriculum was designed to meet the specific needs of the institutional setting. In school settings, youth may be educated longitudinally over a period of time and they have relationships with teachers should additional questions occur after an initial training. In the institutional setting, youth are transient and there may be only one opportunity to provide information and no opportunity to provide for follow-up discussion. AIDS educators in San Francisco believe that educational messages about AIDS need to be heard three or more times before they are understood. Our curriculum presents the basic information during one session in three modalities: lecture, video, and a hand-out wallet card. The wallet card includes an "800" telephone number so that a source for response to later emerging questions is made available.

Time is built into the curriculum for question and answer. The youth are given an opportunity to submit written questions so that some of their concerns might remain anonymous. Institutional youth are more afraid to reveal themselves due to peer group proscriptions against appearing vulnerable as well as negative sanctions by the institution for admitting sexual activity and drug use.

The curriculum includes a discussion of abstinence as it relates to sexual activity and drug use. Recognizing that this message is not likely to be well received by a population which has already been heavily involved in experimentation and activity, we also talk very frankly about risk reduction. We discuss the impact of multiple sexual partners. We discuss condoms and we demonstrate how to apply a condom by having our instructor place a condom over three fingers on his/her hand.

Local drug abuse service providers tell us that the number of youths using IV drugs in our suburban county is relatively low. Probably the group of youth most at risk for infection via shared needles are high school football players and other athletes who share needles for steroid injection. We discuss the need to reduce drug and alcohol use because these substances impair judgement potentially leading to additional risk taking behavior. Given the institutional population we do describe methods to clean intravenous needles.

We do not at this point have statistical data on the effect of this curriculum on behavior change. We do have anecdotal information from facility staff, who report that following the presentations there are fewer misinformed comments about AIDS. There are also increased questions about the availability of condoms, especially from females.

One other important aspect of our work has been the education of the institutional staff. To date we have certified 46 staff in San Mateo County juvenile facilities to provide this AIDS prevention education. Trained staff can play an important role in reducing AIDS related hysteria and fear in an institution and can serve to provide additional information when follow-up questions occur among the youth. An educated staff can also guarantee that the institution affirms risk reduction. Staff can reinforce institutional rules prohibiting sexual activity and substance use to guarantee that high risk behaviors which spread AIDS are not occurring in these facilities. General precautions regarding sanitation are effective given that AIDS is not

transmitted casually. Staff can make sure that common institutional practices of sharing razors for shaving or needles for tattooing are curtailed to reduce the risk of blood to blood transmission of the virus.

When we have trained staff we have also provided them with a list of local AIDS resource agencies. We have found these agencies very willing to cooperate by sharing the latest available information and expertise. This provides staff with a back-up for issues and questions which they may not be able to handle after their training.

We are now completing an AIDS Non-Discrimination Policy which will assure that in our own facilities there is no discrimination based on HIV antibody status or AIDS diagnosis. We believe that isolation and separation of those infected is poor treatment and unwarranted. The precautions that need to exist to eliminate the spread of the infection can be taught and are the responsibility of all individuals in an institution.

In conclusion, I would respectfully suggest to this Committee that there are a number of things that could be done at the federal level to assist in AIDS prevention work with adolescents. First, federally funded youth programs such as the network of Runaway and Homeless Youth Shelters should be encouraged to work cooperatively with local AIDS organizations to develop prevention education for youth in such programs. Standards for non-discrimination should be promulgated. Educational funding should be offered for efforts specifically aimed at high risk adolescents. Most importantly, in planning and preparing for AIDS education it must always be remembered that a high percentage of our young people will not be reached through traditional educational venues. Young people who are not in school, who have runaway, who are homeless, who survive on the streets through prostitution and drug use, who are in and out of our various youth shelters and institutions are most at risk and we will need unique and special prevention efforts to reach them.

I thank you for this opportunity to appear before you.

STATEMENT OF WAYNE C. LUTTON, PH.D., RESEARCH DIRECTOR, COALITION FOR PUBLIC HEALTH, MANITOU SPRINGS, CO

Mr. LUTTON. Mr. Chairman and members of the committee, since you already have a copy of my testimony, I won't re-read what you have before you. I gave a corrected copy to a member of the staff this morning. I would just like to highlight a couple of points, however.

It needs to be remembered at all times that AIDS is still, essentially, a disease of adults, we know that some children do have AIDS. I have an attachment to my corrected or updated testimony from the latest CDC Weekly Surveillance Report, giving figures on the number of AIDS cases among children.

Less than 1 percent of AIDS cases among children are babies. Of course, these are infants who have been infected by adults who have the disease. From the age of 1 through 19, zero percent, and of those teens who do have AIDS, 96 percent of them have been infected by adults. Four percent of the cases among teens are of undetermined origin according to the June 8th weekly CDC Surveillance Report. It has been reported in the press that many of the "undetermined" cases are teens who have had sex with drug pushers. So, I don't think that we should lose perspective on this, although the hearing deals with teens and AIDS.

What needs to be done? Well, I agree that AIDS education is needed, but if the wrong information is given, then the education effort is bound to fail.

With this in mind, I think the committee would be advised to invite the Department of Education to prepare a what-works study in the area of AIDS and sex education. The Department of Education has already prepared what-works information in the areas of drugs and disadvantaged students.

What they have done is surveyed programs and given case studies on the topics of drug education and disadvantaged students and shown the sort of programs and information that works; that does address these problems.

And what I'd like the committee to do is request that the Department of Education do a study in the area of AIDS and sex education. This would be a positive measure, providing useful information to educators and the public, and one of the aspects of it, too, is that the staff is already available and, basically, the only cost is that involved in printing the findings. So, that's a positive thing the administration—the Education Department—has done in other areas which should be done in the area of AIDS.

Let me address another point that I think needs to be discussed—the issue of the use of condoms as equating with safe sex.

As was mentioned by Dr. Robert Redfield in hearings here in Washington within the last couple of weeks, during vaginal intercourse, condoms fail 17 percent of the time. Now, I don't think any of us who use airplanes would feel it was safe transportation, or even safer transportation, if there's a 17 percent chance that our plane would go down. And in the case of AIDS, what you're talking about is almost a 1 in 5 chance of failure during vaginal intercourse.

Now, during rectal intercourse, according to a study published in The Lancet, the leading British medical journal, condoms fail in rectal intercourse up to 50 percent of the time. This was a study done among prostitutes who, presumably, are expert in various techniques and who should know how to practice safer sex. But in rectal intercourse among prostitutes, this Lancet study showed that they break up to half the time.

So, while I welcome efforts to reach young people, I think that we need to dispatch with this notion that condoms are safe. Safer than what? You have a 1 in 5 chance during vaginal intercourse of failure and, of course, the AIDS retrovirus is 500 times smaller than sperm. So, it doesn't take much of a tear or slippage or whatever to risk infection.

What are some things that could be done in a positive way in terms of education? Well, as has already been discussed by a number of people today, it should be pointed out to young people that anyone who engages in sexual activity, in or out of marriage, is at risk from any partner who has had other sexual experiences, and the public schools—I think everyone is in agreement—public schools should teach children that the only truly healthy sexual behavior is abstinence until marriage.

But beyond that, I think an efficient and inexpensive means of reaching school children with information about AIDS would be for teachers to give responsible information directly to parents. There is always the question about clinics and controversy about materials used in sex education classes, and I think a very efficient and direct way of getting this information to parents is for teachers in a parent-teacher meeting setting to provide information to parents, and then the parents or parent, or guardian, can give that information to their teenagers in whatever fashion and setting is most in keeping with their own family situation and their own values. And I think this would eliminate the risk of offending the sensibilities of parents, children, et cetera. A copy of all public school materials dealing with AIDS and sexuality should be placed in local public libraries so citizens can have easy access to them.

And I would like to commend Dr. Koop for his testimony early this morning which I would hope that future material generating from the Surgeon General's Office would reflect the kind of information and values that Dr. Koop presented today.

And, lastly, as I said just a few moments ago, I think as we talk about education for teens on AIDS, the fact is that the disease is raging on, and what we need to really be focusing on is the challenge faced by our society today of how to protect the as-yet uninfected from the already infected in order to stop the spread of this deadly disease.

Now, I have some experience in the area of the history of diseases, which I have lectured on at the college level and, frankly, no disease—prior infectious disease in history—has ever been completely stopped by a program of education. With previous serious infections what society has done to cope with these diseases has been to find out who has the disease and then take whatever measures are necessary to prevent the infected from contaminating, risking the health of the as-yet uninfected, and I think this needs to be kept in mind whenever we discuss AIDS. Thank you.

[Prepared statement of Wayne C. Lutton follows:]

PREPARED STATEMENT OF WAYNE C. LUTTON, PH.D., RESEARCH DIRECTOR FOR THE SUMMIT, MANITOU SPRINGS, CO

As was clear from the Third International AIDS Conference, which convened here the first week of this month, there is no good news on the AIDS front.

The CDC estimates that at least 1½ million Americans are currently infected with AIDS, although the actual number may be much, much higher. At first it was estimated that some 20% of these would eventually develop full-blown AIDS. That forecast has steadily increased. Dr Roy Schwarz, chairman of the American Medical Association Task Force on AIDS, points out that, "There is no reason to believe it will be less than 100%."

All persons with AIDS are infected and infectious for the rest of their lives. AIDS may develop anytime after the original infection--perhaps 15 years or more after the initial time of infection. Most of those infected with AIDS do not know they are infected.

There is no cure or vaccine for AIDS or for any of the strains of the virus already identified. Because of the genetic "intelligence" coded into the virus, plus its ability to mutate and change into something different, depending in part upon the cell it attacks, the possibility of an antidote becomes daily more remote and may have to be excluded altogether (cf. Stefi Weisburd, "Will There Be an

AIDS Vaccine?" Science News, May 9, 1987, pp. 297-299).

According to the Centers for Disease Control, of the persons who have AIDS: 74% are male homosexuals and bi-sexuals, 17% are intravenous drugusers, 3% got AIDS from transfusions of infected blood (including hemophiliacs), and 4% got AIDS from heterosexual contact. Of the 36,514 reported cases (cf. the CDC AIDS Weekly Surveillance Report of June 8, 1987) some 511 are among children. 78% of the AIDS-infected children were born of at least one parent with or at risk of having AIDS. 18% are hemophiliacs or have acquired AIDS from transfusions or tainted blood components. 4% of the child cases are listed as "undetermined," but are believed to be largely Black and Hispanic teens who have had sex with IV drugusers.

Clearly, then, AIDS is essentially an adult disease. It is most prevalent among identifiable groups of adults, namely homo-and-bi-sexual males, and IV drugusers. It is not a disease that originated among children, nor is it a disease that is being spread by children to any noticeable extent. As New York City's health commissioner, Dr Stephen C. Joseph, recently warned, "there are 500,000 people in the city who are infected with the virus," which approximates one in every ten adults.

AIDS education is needed for both adults and children. But if the wrong information is given, the education effort is bound to fail. With this in mind, there are proposals that education efforts center on the information and recommendations contained within U.S. Surgeon General C. Everett Koop's Report, issued last October. I feel that this would prove to be a

very serious mistake. As I have outlined in my review of The Surgeon General's Report on Acquired Immune Deficiency Syndrome ("Hazardous To Your Health," National Review, January 30, 1987, pp. 54-56) Dr Koop's Report contains a number of serious factual errors. And his solution to the AIDS epidemic, a program of education and the widespread use of condoms, will to little to halt the spread of the disease. [Members of this Committee will receive a copy of my review of Dr Koop's Report.]

What, then, needs to be done?

First, Dr Koop's Report should be withdrawn from circulation and a new Report be commissioned which is based on the latest medical research and which does not make the preposterous claim that the use of condoms equates with "safe sex." Where AIDS is present, there simply is not such thing as "safe sex." [Condoms have been found to "fail" in heterosexual intercourse up to 10% of the time, although a recent study by Dr Robert Redfield of the U.S. Army reports a failure rate of 17%. During anal intercourse, condoms are reported to fail up to 50% of the time (cf. "HTLV-III Antibody in Prostitutes," The Lancet, Dec. 21/28, 1985, p. 1424)] Wrong information about AIDS will cause further deaths, rather than prevent them. And the responsibility will be a grave one.

Second, with regard to teenagers, they should be informed that:

**Everyone who engages in sexual activity, in or out of marriage, is at risk from any partner who hashad other sexual experiences.

**Public schools should teach children that the only truly healthy sexual behavior is abstinence until marriage. They should be taught to say 'No' to promiscuity, just as they should be taught to say 'No' to drugs and alcohol.

**In the face of what we know about AIDS, about how it is spread, and by what sort of activity, schools should not teach or facilitate "value-free" sexual acts, just as they should not teach "safe" methods of self-administering intravenous drugs.

**Schools should not be a party to approving behavior that is unhealthy, possibly illegal, or may incur financial liability because of damages from disease. With this in mind, public schools would not be advised to install "medical facilities" that could distribute,prescribe, or recommend "safe sex" devices, or refer minors to "clinics" that distribute this sort of information or devices.

**Public schools should not use materials, services, or personnel of organizations that are currently involved in so-called "safe sex" education, such as a number of the groups Dr Koop urges members of the general public to consult for additional information about AIDS.

**An efficient and inexpensive means of reaching school children with information about AIDS would be for teachers to give responsible information directly to parents, as in a Parent-Teacher meeting sort of setting. Parents can then transmit the information to their children in ways they find most satisfactory. This should satisfy the need both for education and not run the risk of offending the rights and sensibilities of parents and their children.

**A copy of all public school materials dealing with AIDS and sexuality should be placed in local public libraries so citizens can have easy access to them. This should be done voluntarily by the schools, ordered by the school boards, or mandated by state law.

Unfortunately, much of the discussion, and many of the proposals about how to approach AIDS have been made by people who are currently among the most infected and most likely to become infected in the future.

Our society faces the challenge of how to protect the as-yet uninfected from the already infected in order to stop the further spread of the deadly disease. We have already witnessed instances of where the rights of someone who is infected has caused others to risk infection with AIDS (I am thinking of the recent case in Baltimore, Maryland, where medical rescue personnel were not informed that a woman who had been wounded by an arrow was infected with AIDS). In this context, then, the rights and interests of the uninfected must be given first consideration.

* * * *

WAYNE C. LUTTON, Ph.D., is currently research director for The Summit, (P.O. Box 207/935 Osage, Manitou Springs, Colorado 80829, ph. 303-685-9103) and was recently appointed research director of The Coalition for Public Health (P.O. Box 16224, Alexandria, Virginia 22302, ph. 703-931-9099). He has written on public policy aspects of disease control, has lectured on the history of science at the college level, and is co-author, with David Noebel and Paul Cameron, of the book, AIDS: Acquired Immune Deficiency Syndrome (2nd,revised edition, 1987).

APPENDIX I

AIDS WEEKLY SURVEILLANCE REPORT[1] – UNITED STATES
AIDS PROGRAM, CENTER FOR INFECTIOUS DISEASES
CENTERS FOR DISEASE CONTROL
JUNE 8, 1987

UNITED STATES CASES REPORTED TO CDC

A. TRANSMISSION CATEGORIES[2]

	MALES				FEMALES				TOTAL			
	Since Jan 1		Cumulative		Since Jan 1		Cumulative		Since Jan 1		Cumulative	
ADULTS/ADOLESCENTS	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Homosexual/Bisexual Male	4922	(72)	23688	(71)					4922	(66)	23688	(66)
Intravenous (IV) Drug Abuser	865	(13)	4779	(14)	245	(45)	1258	(50)	1110	(15)	6037	(17)
Homosexual Male and IV Drug Abuser	491	(7)	2733	(8)					491	(7)	2733	(8)
Hemophilia/Coagulation Disorder	83	(1)	323	(1)	1	(0)	8	(0)	84	(1)	331	(1)
Heterosexual Cases[3]	114	(2)	677	(2)	162	(30)	725	(29)	276	(4)	1402	(4)
Transfusion, Blood/Components	129	(2)	466	(1)	74	(14)	263	(11)	203	(3)	729	(2)
Undetermined[4]	258	(4)	836	(2)	62	(11)	247	(10)	320	(4)	1083	(3)
SUBTOTAL [% of all cases]	6862	[93]	33502	[93]	544	[7]	2501	[7]	7406	[100]	36003	[100]
CHILDREN[5]												
Hemophilia/Coagulation Disorder	6	(11)	27	(10)			2	(1)	6	(6)	29	(6)
Parent with/at risk of AIDS[6]	38	(69)	201	(72)	40	(85)	199	(86)	78	(76)	400	(78)
Transfusion, Blood/Components	6	(11)	39	(14)	3	(6)	22	(9)	9	(9)	61	(12)
Undetermined[4]	5	(9)	12	(4)	4	(9)	9	(4)	9	(9)	21	(4)
SUBTOTAL [% of all cases]	55	[54]	279	[55]	47	[46]	232	[45]	102	[100]	511	[100]
TOTAL [% of all cases]	6917	[92]	33781	[93]	591	[8]	2733	[7]	7508	[100]	36514	[100]

96% child cases adult infected

I. AGE AT DIAGNOSIS BY RACIAL/ETHNIC GROUP

AGE GROUP	WHITE, NOT HISPANIC Cumulative Number	(%)	BLACK, NOT HISPANIC Cumulative Number	(%)	HISPANIC Cumulative Number	(%)	OTHER[5]/ UNKNOWN Cumulative Number	(%)	TOTAL Cumulative Number	(%)
Under 5	77	(0)	254	(3)	114	(2)	2	(1)	447	(1)
5 – 12	27	(0)	23	(0)	13	(0)	1	(0)	64	(0)
13 – 19	61	(0)	55	(1)	29	(1)	3	(1)	148	(0)
20 – 29	4191	(19)	2269	(25)	1160	(23)	67	(19)	7687	(21)
30 – 39	10142	(46)	4296	(48)	2436	(47)	163	(45)	17037	(47)
40 – 49	4970	(23)	1506	(17)	985	(19)	87	(25)	7548	(21)
Over 49	2606	(11)	640	(7)	406	(8)	31	(9)	3583	(10)
TOTAL [% OF ALL CASES]	21974	[60]	9043	[25]	5143	[14]	354	[1]	36514	[100]

1% 1-19 ages

1 Reporting of deaths is incomplete.
2 Table totals include 74 cases diagnosed prior to 1981. Of these 74 cases, 63 are known to have died.
3 Disease categories are ordered hierarchically. Cases with more than one disease are tabulated only in the disease category listed first. Kaposi's sarcoma has been reported in 1152 cases since January 1 and in 7446 cases cumulatively.
4 Deaths are only in cases reported to CDC since January 1 of current year.
5 Includes patients whose race/ethnicity is Asian/Pacific Islander (216 persons) and American Indian/Alaskan Native (36 persons).

APPENDIX II

BOOKS ARTS & MANNERS

HAZARDOUS TO YOUR HEALTH

Wayne Lutton

The Surgeon General's Report on Acquired Immune Deficiency Syndrome, by C. Everett Koop, MD, ScD (U.S. Department of Health and Human Services, 36 pp., free to the public)

RECENT DEVELOPMENTS on the AIDS front are not encouraging. In late October, *The New England Journal of Medicine* reported that the AIDS virus can cause new types of fatal diseases by infecting patients already carrying a related virus. In November, the discovery of two new AIDS-causing viruses was revealed, both of which can escape detection by the existing AIDS blood test (*New York Times*, Nov. 7 and Nov. 20, 1986). And the *Journal of the American Medical Association* reported that, despite explicit notification that they should not donate blood, some "high-risk" AIDS carriers are still doing so.

Strictly speaking, it is no longer accurate to refer to AIDS as simply an "immune-deficiency" disease, since the viruses can attack not only immune-system (T) cells, but also neural cells in the brain. As the AIDS virus mutates, it will be able to infect *any* cell in the body where a specific surface receptor protein is present (*Cell*, Nov. 7, 1986).

And while the public is being assured that an AIDS vaccine may be only five years away, medical researchers believe that if therapeutic drugs are developed, drug-resistant strains of the AIDS viruses will emerge. Dr. David Cohn of Denver Disease Control advises that "it's basically unrealistic" to talk about a cure for AIDS: "Because of the unusual way the AIDS virus multiplies within the lymph cells, every case can potentially be a different strain."

The Surgeon General's Report on AIDS was released on October 22, 1986, and immediately elicited warm praise from the *New York Times*, *Time*, and *Newsweek*. It was met by a chorus of approval from *The Advocate* and other leaders of the homosexual "community." Jeff Levi, executive director of the National Gay and Lesbian Task Force, gushed, "I thought it was very good. It takes a responsible and important position in favor of education . . . It is not homophobic." And Gil Gerald, director of the National Coalition of Black Lesbians and Gays, admitted that he was "very, very pleasantly surprised."

Conservatives who have applauded Dr. Koop's previous public stands on abortion, Baby Doe, and cigarette smoking are likely to experience a deep sense of dismay—indeed of betrayal—once they become familiar with his work on AIDS. The *Report* contains a number of serious factual errors and omissions. Koop's so-called strategy for containing AIDS—a combination of sex education for children and the use of condoms—has the potential for causing incalculable harm. Limitations of space permit the citation of only a few instances:

"Although the AIDS virus has been found in tears and saliva, no instance of transmission from these body fluids has been reported" (p. 25).

Dr. Jerome Groopman of Harvard and Dr. Robert Gallo of the National Cancer Institute (and the co-discoverer of the original AIDS virus) reported in a leading British medical journal, *The Lancet* (Dec. 22/29, 1984 [I]) that saliva was the mode of transmission from a man with transfusion-acquired AIDS to his wife. Dr. William Haseltine of Harvard Medical School remarked: "Anyone who tells you categorically that AIDS is not contracted by saliva is not telling you the truth" (*New York Times*, March 18, 1986).

"There is no danger of AIDS-virus infection from visiting a doctor, dentist, hospital, hairdresser, or beautician. . . . You may have wondered why your dentist wears gloves and perhaps a mask when treating you. This does not mean that he has AIDS or that he thinks you do. He is protecting you and himself from hepatitis, common colds, or flu" (pp. 22-23).

A definite danger exists of AIDS infection from any health-care provider engaging in invasive procedures. On November 15, 1985, and again on April 11, 1986, the federal Centers for

Wayne Lutton is on the staff of The Summit, Manitou Springs, Colorado, and is the co-author, with David Noebel and Paul Cameron, of AIDS: Acquired Immune Deficiency Syndrome *(2nd, revised edition, The Summit, 1987).*

Disease Control (CDC) issued recommendations for preventing transmission of AIDS between dentists and their patients, including the wearing of gloves and masks. These recommendations have been widely adopted.

"Everyday living does not present any risk of infection. You cannot *get AIDS from casual social contact"* (p. 21).
"We know that family members living with individuals who have the AIDS virus do not become infected except through sexual contact" (p. 13).

Dr. Koop issued the above statement more than a month after the second documented case of non-sexual within-family transmission of AIDS was reported in *The Lancet* (Sept. 20, 1986).

"The first cases of AIDS were reported in this country in 1981. We would know by now if AIDS were passed by casual, non-sexual contact" (p. 5).
"Couples who maintain mutually faithful monogamous relationships are protected from AIDS through sexual transmission. If you have been faithful for at least five years and your partner has been faithful, too, neither of you is at risk. . . . This is true for both heterosexual and homosexual couples" (p. 16).

Elsewhere in his own *Report*, Koop concedes that "It is difficult to predict the number who will develop ARC [AIDS-related complex] or AIDS because *symptoms sometimes take as long as nine years to show up*" (p. 12; emphasis added). Medical researchers agree that the AIDS virus appeared in the U.S. about 11 years ago, which is why the CDC in 1985 asked all males who had had even one homosexual encounter within the previous ten years not to donate blood. Researchers also believe that the AIDS virus may incubate 15 years, or longer, before the onset of clinical manifestations of disease. As Washington, D.C., neurologist Richard Restak cautioned, "The incubation period is sufficiently lengthy to cast doubt on any proclamations, no matter how seemingly authoritative, in regard to the transmissibility of the illness."

"Some personal measures are adequate to safely protect yourself and others from infection by the AIDS virus. . . . If you test positive or if you engage in high-risk activities . . . you must protect your partner by always using a rubber (condom) during (start to finish) sexual intercourse (vagina or rectum)" (p. 17).

For anyone taking his advice, the consequences may be fatal. Condoms can break. They fail approximately 10 per cent of the time in vaginal intercourse. During rectal intercourse, condoms may rupture up to half the time. Such devices are not even guaranteed to prevent pregnancy. By advising people that sex is safe where AIDS is present—if only they use condoms—Dr. Koop may be guilty of inducing people to engage in dangerous—perhaps lethal—behavior. Whether or not Koop's utterances constitute criminal negligence, or even implicate him as an accessory to murder, is an intriguing legal question.

"Education of those who risk infecting themselves or infecting others is the only way we can stop the spread of AIDS" (p. 14).
"Education about AIDS should start in early elementary school. There is now no doubt that we need sex education in schools and that it include information on heterosexual and homosexual relationships" (p. 31).
"We are fighting a disease, not people . . . The country must face the epidemic as a unified society. We must fight the spread of AIDS while at the same time preserving our humanity and intimacy" (p. 6).

It is lunacy to suggest that the AIDS epidemic will be stopped by educating little children in the exotica of homosexual practices. That's on a par with combatting the drug scourge by acquainting children with all the "safe" tactics for administering narcotics to oneself.

Homosexuals, the major source of the AIDS infection, are still engaging in "unsafe" sexual practices and still attempting to make blood donations (*JAMA*, Sept. 12, 1986). The McKusick Study of homosexual males in San Francisco reported that of the 24 per cent engaged in the *least promiscuity*, 33 per cent admitted to oral/anal contact, 41 per cent to accepting semen in their rectum, and 52 per cent to ingesting semen in the last thirty days. A report on the sexual activities of homosexuals in London revealed that 38 per cent are ingesting feces, 24 per cent are engaging in sadomasochism, and 53 per cent are engaging in rectal intercourse with an average of about three partners a

month (*The Lancet*, Nov. 1, 1986) —and this despite thousands of deaths and intensive education efforts.

Psychologist Paul Cameron, who chairs the Institute for the Scientific Investigation of Sexuality, wonders, "Why would anyone believe that 'education only' will accomplish the task? Every study has shown homosexuals exceptionally well informed about how not to get AIDS. . . . If we pursue the 'education only' option, then we have to bank on the social responsibility and self-control of the very ones who have shown no social responsibility or self-control."

A British expert on venereal diseases, Dr. John Seale, has called AIDS "the molecular biological equivalent of the nuclear bomb" and warns that "the genetic information contained in its tiny strip of RNA has all that is needed to render the human race extinct within fifty years." In the face of such a threat, the Reagan Administration's medical specialist has issued a report that obscures the true dimensions of this disease and offers no real program for effectively dealing with it. AIDS has thus become the first politically protected disease in history. Koop's study should have emblazoned across its cover: "WARNING! THE SURGEON GENERAL'S REPORT ON AIDS MAY BE HAZARDOUS TO YOUR HEALTH." □

Omaha World-Herald / Thurs., 4 June 1987 -

It's Not a Democratic Disease'

'Squeamishness on AIDS Can Blur the Truth'

George Will
Washington Post Service

Washington.

Earnestly, and with applause from journalists, politicians are saying about AIDS: candor, regardless of the cost. But truths are being blurred because they inconvenience a political agenda and shock sensibilities. The agenda is to avoid giving offense to certain factions and to avoid something more terrifying than AIDS — the accusation of "discrimination."

In spite of much talk about the "breakout" into the general heterosexual population, AIDS still is and probably will remain predominantly a disease of homosexuals and intravenous drug users. It will decreasingly afflict educated, information-receptive homosexuals. It already is disproportionately, and will increasingly be, a disease of inner-city blacks and Hispanics.

Blacks and Hispanics, who constitute 11 and 8 percent of the population, respectively, are 25 and 14 percent of AIDS patients. Those percentages probably will rise because AIDS is a behaviorally based disease and will disproportionately afflict those inner-city classes least efficient at acquiring and acting on information.

After all, many people are caught in the culture of urban poverty precisely because they lack basic skills of social competence: They do not regulate their behavior well, least of all in conformity with public health bulletins.

Americans have a technology fixation generally. Regarding health, their thinking is shaped by the polio paradigm, the conquest of disease by Dr. Salk's silver bullet. But America's principal public health problems flow from foolish behavior regarding eating, drinking, smoking, driving — and, with AIDS, abuse of the body, especially the rectum.

Most journalism about AIDS reflects social and political squeamishness. In addition to an understandable reluctance to discuss certain sexual matters, journalism is infused with liberal values, including abhorrence of "discrimination." That is understood indiscriminately to include all invidious distinctions among social groups, particularly those, such as homosexuals, that have a history of being badly treated.

Journalism seems reluctant to clarify that the primary reason for the AIDS epidemic is that the rectum, with its delicate and absorptive lining, is not suited to homosexual uses. The nation needs unwearing journalism of the sort found in the Chicago Tribune Magazine of April 26:

"...81.5 percent of the second cluster of AIDS patients had engaged in the practice called 'fisting,' which causes rectal trauma, in the years before they fell ill. The researchers defined fisting as the insertion of a portion of the hand — or even the entire fist — into the anus of another person. The 27 men studied had a median of 120 sexual partners during the year before the onset of symptoms, with one man reporting up to 250 sexual partners in each of the three years before symptoms."

Without here adding details about dildos and enemas, suffice it to say that the data suggest that receptive anal intercourse is the major, if not the only, important exposure by which homosexuals acquire the infection. Of course, not all homosexuals are promiscuous or given to high-risk behavior. However, even some who are not are dismayed by dissemination of information about those who are. And insufficient information about homosexual practices has impeded understanding of the epidemic.

Time and energy is being wasted on the political project of spreading the false message that the AIDS epidemic is not assignable to particular minorities.

British billboards proclaim: "AIDS Doesn't Discriminate," a message designed to absolve homosexuals and addicts of disproportionate responsibility for the epidemic.

In New York City, print ads portray a heterosexual couple tangled in sheets, with these words: "Bang. You're Dead!" Such ads are a disservice to the extent that they distract attention from the fact that fewer than 4 percent of AIDS cases have resulted from heterosexual contact.

The rate of heterosexual transmission is increasing primarily among black and Hispanic teen-agers whose sex partners are intravenous drug users. New York City has one-third of all AIDS cases; 36 percent of the city's cases are IV drug users. Half the city's 200,000 addicts are thought to be infected with the AIDS virus.

Of course anyone with AIDS deserves care and compassion. Of course testing is acceptable, if only marginally important, for applicants for marriage licenses and citizenship, and for prisoners. (Many rapes are homosexual rapes in prison.) But while it is politically safe and socially soothing to pretend that AIDS is now a democratic disease threatening us all equally, that is false.

So is the notion that the most urgent task is to fund research for a vaccine. Of course research should be funded generously, but dollars spent getting addicts off needles and onto methadone will do more good, as will journalism that does not trim the truth to spare our feelings.

Chairman MILLER. Thank you very much. Mr. Howe, what's the realistic assessment of the ability of the schools to provide a first-class AIDS education program?

Mr. HOWE. I wish I could give you a hard number, but I can't.

Chairman MILLER. Well, let me just put it into context. In my hometown and in my home county and in my home state, there are classrooms without textbooks. They're laying off 300 or 400 or 500 teachers a district, and it's going on throughout the entire state. We're probably reasonable in terms of our efforts at school, although it's certainly diminished recently.

But, I find it hard to believe, when you outline what you say the school boards think is a good program, that the resources are going to be there to carry that out. I mean, can this simply be incorporated in the instructional time that somebody is going to already have (and I'd like you, Ms. Hamilton, to join in on this). Or is this, in fact, a curriculum that is separate from teaching history or health classes, or is this something that's readily incorporated?

Mr. HOWE. I think it's something that has to be readily incorporated into the appropriate class material. It is something that we do address at many levels of education throughout the elementary and secondary schools as to health education, sex education, call it family living, give it whatever title you want to, but it is something that needs to be, and necessarily has to be, made a part of that base curriculum as a board——

Chairman MILLER. Can it be?

Mr. HOWE. It certainly can be. There's no reason why it cannot be.

Chairman MILLER. Then let me ask you something. There was a lot of concern by other Members of the Congress here this morning in talking to Dr. Koop and, I think, to the previous panel about whether or not Federal money had been released for this purpose.

Are you telling me that that's not a major problem at this point? The schools can readily incorporate this currently and provide first-class education materials?

Mr. HOWE. One of the problems we have, and one of the problems we all have in facing the AIDS epidemic, is the lack of good information, the lack of really an understanding, the lack of some basic curriculum materials that can, in fact, be incorporated. We're just starting. Some of our districts were facing this three years ago. I think, as was demonstrated by Mrs. Hamilton, that in Fairfax County they have implemented a program which only goes to the 10th grade. They're now incorporating this into other grades as we go along.

We need help. We need financial resources, and you're absolutely correct, we must have some financial resources for research and the development of a model curriculum. We are seeking from the National School Boards Association a grant to help us in developing a model curriculum that we can make available. We're hoping that that grant will be given to us. Whether it will or will not be, we don't know, but we hope it will be to help school boards do this.

Chairman MILLER. So, we're not in a position, as members of Congress, to assume that this educational program is going to be carried out in the manner in which the National School Boards Association suggest is adequate?

Mr. HOWE. You are absolutely correct. I don't think we can snap our fingers and say, yes, that's happening. It isn't. That's why we're here. That's why we're concerned about this. That's why we're trying to get the attention of our local board members and the communities to give support to programs like this.

One of the major problems we have at the local level is that we are sensitive to what goes in our communities. We are sensitive to the outspoken people in our communities. Sometimes, the outspoken ones are going to be directing us in an improper way, or at least what I perceive and what I suggest is an improper way or an inadequate way to address the problem.

Chairman MILLER. Ms. Hamilton, to provide the kind of curriculum that your testimony addresses, what kind of additional burdens does that place on——

Ms. HAMILTON. Remembering, too, the county that I am representing, I just don't see that school districts across the nation could do that alone. In fact, it has had an impact on our budget within the science department in order to do it, but we thought it was top priority and, therefore, went ahead.

When it comes to producing media pieces, how many school districts actually have media services. And even our media services were under certain constraints, and it impacted on them.

In that vein, too, I would say I can't sit here at this particular point and say that there is a one best way. I don't think that this is the kind of topic that you can say, okay, now, we've had this course in AIDS. Let's move on. It's the kind of issue that pervaded our entire society.

So, there is a place for AIDS in social studies. There's a place for it in health.

Chairman MILLER. I agree. I guess what I'm trying to determine—I'm not trying to put words in your mouth. I'm just trying to determine whether or not—you represent Fairfax—that's a district with some means to do this and other programs.

But, this is, in fact, an additional burden on that existing system?

Ms. HAMILTON. Yes, absolutely.

Chairman MILLER. doesn't just incorporate into the teaching time that you have available or the materials that are readily available. I assume there are no current health textbooks that are dealing with AIDS.

Ms. HAMILTON. That's correct.

Chairman MILLER. Unless you bought them in the last six months or something, and they were looking forward because——

Ms. HAMILTON. And if you bought them in the last six months, they may be outdated.

Chairman MILLER. OK. There is a great deal of concern here about whether or not, you know, come September when the classrooms fill up, we're going to be able to start to respond. I don't expect to have a full-blown response, but whether we're going to start to be able to respond on the education program that the people think is necessary.

Mr. HOWE. If I might, to develop a curriculum requires the input of many of the professionals on our teaching staff but, in this par-

ticular curriculum, it's going to require the input of other people, doctors, people who are in social counseling and the like.

Chairman MILLER. Has the School Boards Association been contacted by people at the Federal level that are talking about education curriculums; the Center for Disease Control, Dr. Koop's office?

Mr. HOWE. Yes.

Chairman MILLER. You are actively working with them?

Mr. HOWE. We are actively working with them.

The one comment that was made about the Department of Education as to seeing what works and what doesn't work, I don't want to wait that long, and I'm afraid we have a direction there that is not going to address the particular issue that we're talking about here.

Chairman MILLER. Congressman Coats.

Mr. COATS. Ms. Hamilton, currently in Fairfax County, you have a program now that is being taught in 10th grade.

Ms. HAMILTON. Yes, and let me say that that program was for the time of the 86-87 school year. Beginning on Monday, we're beginning to update that program by using teachers during summer after school is out to do the writing and, there again, funding is required.

What we'll do now is go back and review the material, send for whatever is out there media-wise, screen and prepare for another review committee in September because that's the process in our county.

Mr. COATS. Now, you also are instituting beginning this school year another program or a similar program for 7th and 8th grade?

Ms. HAMILTON. Right. That's through our health curriculum, 7th, 8th and 9th, as a matter of fact.

Mr. COATS. All right, 7th, 8th and 9th. Given some of the testimony we had this morning and Dr. Koop's testimony and others about reaching earlier and earlier ages, have you in the Fairfax County School System considered starting a program earlier than the 7th grade? Is that under discussion? Are there any proposals for that?

Ms. HAMILTON. That's under discussion as a mandate from our board to begin reviewing the materials and looking at what would be appropriate if anything is out there that is appropriate for that particular group.

Mr. COATS. And your current program is called "The Sex Respect Program"?

Ms. HAMILTON. No. That's a different agency outside of the school system. Our program is called "Human Life Education," and it was developed during the 81-82 school year to take care of the controversial topic—I hate to say it at this point—of sex education.

So, we already had the tenets of what has been described here as what would make a good program for AIDS in order to take care of parenting with responsibility.

And within that, sexually transmitted diseases was taught as a maternal health factor. So, it was very convenient to move right on in and handle this topic there.

Mr. COATS. I don't know much about the Sex Respect program. I've heard a little bit about it. Did you review that? Was that an option? Was that rejected for a specific reason?

Ms. HAMILTON. We have reviewed the Sex Respect material, and if you recall how he described it, it had certain religious ramifications that really would not be appropriate for the public school setting.

Mr. COATS. Dr. Lutton, did your organization review that program, and are you familiar with the program that Ms. Hamilton currently described?

Mr. LUTTON. I'm not familiar with Ms. Hamilton's program in Fairfax, but I'm somewhat familiar with the Sex Respect program and its use in private schools, and what it tries to do is emphasize traditional Western values, such as families, monogamy, et cetera, the kind of values that have held our civilization together for the past several hundred years and which addresses some of the questions that Mr. Holloway was troubled by.

Mr. COATS. You suggested, Dr. Lutton, one of the ways of involving parents would be to work some of this discussion and planning through the PTA. I'd just like to get the reaction of other members on the panel as to the viability of that, and whether that would be a means that we ought to pursue.

Mr. HOWE. Well, let me respond to that. I think that's a good suggestion, but I sure would not want to have that as my only alternative available to me. I think that's just one other step that, logically, you would take.

One of the problems we have, and I think it was addressed earlier, is the number of at-risk students that we have, and part of the reason that they are at risk is that they don't necessarily have a loving, caring family to go home to at the end of the day who is going to take the time necessary to do this type of program that's been suggested.

So, this is only one other aspect that might be included, but I would not want to rely on that as being my attack on this problem.

Mr. COATS. Ms. Hamilton, does the Fairfax County School System have health clinics? Are they part of——

Ms. HAMILTON. Health clinics are not a part of the school facility itself, no. What we have in place are public health nurses who serve as the school nurse. They are trained by the Fairfax County Public Health Department.

Mr. COATS. But, your current sex education program does not involve that public health nurse?

Ms. HAMILTON. No, it does not, but the public health nurse has been available as part of the information conduit for—and resource for the teacher within the classroom because the school nurse is actually employed by the county and is actually housed right in the school itself.

Mr. COATS. One last question. Was the health clinic discussed as an option for providing either education or counseling and/or appropriate contraceptive devices as a part of the AIDS program?

Ms. HAMILTON. The health clinic is not permitted to dispense any kind of prescription, including aspirin. It is a place where a child can go when he has a headache, a stomachache, or what have you, and that person could determine what the situation is and give advice as to whether to call the parents or send them home. That's the role of our school clinic. It is not the kind of school clinic that you might have discussed in this kind of hearing.

Mr. COATS. I regret that our time is limited by the vote on the floor, and I think I'd better turn it back to the Chairman to finish.

Chairman MILLER. Thank you very much for your time, and we have a succession of votes here, so I'm not going to hold you any longer. You've been very generous with your time and with your work with the committee.

And, Becky, I'm sorry I didn't get a chance to ask you a couple of questions, but thank you for your presentation.

We will stand adjourned.

[Whereupon, at 2:40 p.m., the Select Committee was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF THOMAS J. BLILEY, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

Thank you, Mr. Chairman. The incidence of AIDS among teens and the risk of exposure is something about which I have many more questions than answers. Several facts seem clear to me, however. The first and foremost of which is that there is a difference between the cause of AIDS and the behavior that spreads the virus. Teens are clearly not a high risk group. However, it's also clear that many teens engage in the same dangerous behavior which threatens adults: sexual promiscuity and intravenous drug use. it seems to me our chief concerns in this hearing are to discover the number of children with AIDS; the manner in which they contracted it; and the type of education parents, schools, and governments should use to prevent any further spread of this deadly disease to children.

In reviewing some of the testimony for today, it's easy to see that we are far from one approach, one united effort to prevent teens from contracting the AIDS virus. I think all would agree, though, that abstinence before marriage and fidelity in marriage is by far the most certain AIDS prevention method. The question is, how much and what type of information should we give our children beyond that simple message, and will certain lessons undermine the fundamental one of "Say no to sex."

Another matter which concerns me, and I hope this is addressed by some of the witnesses, is the threat to children who have AIDS of exposure to disease in school. Schools are notorious for being havens of coughs, colds, and minor infections, and it concerns me that children with AIDS may be exposed to what in their situation would be a life-threatening disease.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF LEWELLYS F. BARKER, M.D., SENIOR VICE PRESIDENT, DEVELOPMENT, AMERICAN RED CROSS, WASHINGTON, DC

Mr. Chairman and members of the Committee, as senior vice president for development of the American Red Cross, I am pleased to submit testimony about some of our efforts to help prevent the spread of AIDS among our nation's young people, and to respectfully urge that much more be done by both the public and private sectors.

The Red Cross, in conjunction with the U.S. Public Health Service (PHS), has produced a series of nine brochures, four of which are specifically geared to youth, their parents, and teachers. Since last fall, 32 million of these brochures have been distributed free through the Red Cross network of almost 3,000 chapters across the country. Six hundred and fifty-two of these chapters are not only actively disseminating materials, but have designated an "AIDS Coordinator" and conduct AIDS education programs in their communities.

Public response to these brochures has been tremendous. For example, between the fall of 1986 and June 17, 1987, we have distributed 4,176,750 copies of "AIDS and Children/ Information for Parents;" 3,241,050 copies of "AIDS and Children/Information for Teachers and School Officials;" 3,794,858 copies of "Facts about AIDS and Drug Abuse;" and 4,957,400 copies of "AIDS, Sex and You." Also in partnership with the PHS, the Red Cross produced, and through its chapter network distributed, 198,825 four-color posters. These feature singer Patti LaBelle urging youth to "Get the facts about AIDS."

In addition to print materials, the Red Cross has

produced, with major funding provided by the American Council of Life Insurance and the Health Insurance Association of America, produced "Beyond Fear," a 60-minute award-winning documentary on AIDS. This has been viewed, according to free-loan and television network data, by more than 7 million people. Many of them are of high school and college age.

We have also developed and distributed AIDS public service announcements to hundreds of television and thousands of radio stations. We participated in a network television call-in program in which Red Cross chapters across the country responded to more than 17,000 inquiries in a single evening. We have developed hundreds of community-based AIDS coalitions and task forces, in conjunction with local schools, health departments, employers, agencies, and civic organizations. Furthermore, the Red Cross has entered into, or is pursuing, collaborative relationships with organizations like the Urban League, Girls Club of America, Southern Christian Leadership Conference, League of United Latin American Citizens, the Labor Council on Latin America, and COSSMHO.

Examples of what some Red Cross chapters are doing in their communities to help prevent the spread of AIDS among our country's young people include the following:

- The Seattle-King County (Wash.) Chapter conducts seminars for high schoool newspaper editors about AIDS. In turn, these editors educate fellow students and staff through

articles in school newspapers.

- The District of Columbia Chapter, in February 1987, conducted a two-day national conference on AIDS and drug abuse. This was the first conference of its kind in the U.S.
- The Indianapolis Area Chapter and the local Public Health Department train public nurses to teach AIDS education in the schools.
- The Memphis Area Chapter has presented its AIDS education course to more than 6,000 minority students.
- The Columbus Area (Ohio) Chapter is coordinating AIDS education for the entire state of Ohio.
- The Golden Gate Chapter (San Francisco) focuses on intercultural AIDS programs, with an emphasis on creating materials appropriate to Hispanics.
- The Hawkeye Chapter (Waterloo, Iowa) was an early provider of AIDS education in the schools, developing curriculum materials for teachers to use with students and school personnel.
- The Yakima Valley (Wash.) Chapter provided AIDS education programs to high school students and farm workers. A local video store has distributed 20,000 copies of the Red Cross documentary "Beyond Fear."
- The Mid-America Chapter (Chicago) teaches young blacks and Hispanics about AIDS.
- The Santa Clara Valley (Cal.) Chapter operates three cost-recovery mobile testing units. They offer several blood tests, but most requests are from young heterosexuals for the HIV-antibody test. Results are anonymous and confidential.

- The Lancaster (Penn.) Chapter is training school teachers about AIDS. With the County Youth and Family Services Agency, the AIDS Coordinator is developing a training program for foster care parents. "Beyond Fear" is being used in 23 school districts, and speakers from the chapter are making presentations on AIDS to juvenile detention centers and prisons.
- The Stamford (Conn.) Area Chapter has distributed Red Cross/PHS AIDS informational brochures to every student in grades 7 through 12. Red Cross instructors gave 150 hours of training, approved by the Board of Education, to a Red Cross-initiated, community-based AIDS task force.
- The Southeast Fairfield County (Conn.) Chapter has created an AIDS hotline and is "training trainers" (i.e., principals and school administrators).
- The Pittsburg-Allegheny County (Penn.) Chapter will provide in-service seminars to high school teachers and administrators to help prepare them to teach mandatory AIDS education courses.
- The Berkshire County (Mass.) Chapter has made, to date, 65 presentations on AIDS, including every high school in Berkshire County. At the State of Connecticut's conference for elementary school educators, the Red Cross/PHS AIDS brochures were used.
- The Cleveland Area Chapter has distributed 7,000 "AIDS and Children/Information for Teachers and School Officials" to community schools. Local black Baptist and Methodist churches are distributing the Red Cross/PHS

brochures to their congregations.

- The Snake River Region (Idaho) Chapter loans "Beyond Fear" to local high schools.
- The Hawaii State Chapter's AIDS education program includes a speakers bureau for presentations to high school assemblies, plus Red Cross-produced print materials are provided to high schools and health fairs.
- The Pulaski County (Ark.) Chapter provides speakers and AIDS educational materials to the University of Arkansas, local vocational and technical colleges, and a half-way house for recovering drug abusers.
- The Raritan Valley (NJ) Chapter worked with its Public Health Department to develop a policy on AIDS for the YMCA. The AIDS Coordinator reports that among the brochures the chapter provides, the most often requested for school use are "Facts about AIDS and Drug Abuse" and the two on "AIDS and Children." The chapter also loans "Beyond Fear" to schools for use in health classes.
- The Prince George's County (MD) Chapter is developing a training course for health care providers on how to care for people with AIDS, including children.
- The Philadelphia Chapter, in addition to outreach activities aimed at Hispanics, has trained 150 nurses to answer hotline inquiries. With the Public Health Department, the chapter is making special efforts to reach prisons, schools, and minority community groups.
- The Mid-Rio Grande Chapter (Albuquerque, NM) provides

AIDS educational materials to local high schools for mandatory health courses. The chapter has developed a speakers bureau of nine trained volunteers that includes nurses, physicians, and retired teachers. Brochures and "Beyond Fear" have been supplied to the State Health Department, University of New Mexico Mental Health Outpatient Service, Indian Health Service, Job Corps, and the Corrections Department, among others.

I want to stress that these activities represent just a small sample of educational efforts undertaken by 652 Red Cross chapters to help stop the spread of AIDS among our nation's young people. But it is my hope that this sampling, however incomplete, will be useful to Committee members to demonstrate what is being done by a private nonprofit organization in concert with private and public sector organizations at national, state, and local levels.

Of special interest to Committee members might be that the Red Cross is launching an AIDS Prevention Program for Youth. A comprehensive educational program for junior high school and high school students, their teachers, and parents will be available by the end of the summer through Red Cross' nationwide chapter network.

This program, developed for the Red Cross by its Orange County (Cal.) Chapter, is designed for classroom and home use. It consists of a 25-minute video, a student workbook, a teachers'/leaders' guide, a glossary of terms, and a parents' brochure. The video, "A Letter from Brian," is a dramatic story that demonstrates to youth that there are

various decisions they need to make to avoid high-risk exposure to AIDS. The video's dramatic sequences are intercut with narration provided by Michael Warren (Officer Bobby Hill on "Hill Street Blues"), a classroom scene featuring Surgeon General C. Everett Koop, and an interview with a young IV drug abuser with AIDS who says he never thought it could happen to him.

The two main educational objectives of the Red Cross' AIDS Prevention Program for Youth are: (1) to increase awareness among teenagers about AIDS and instruct them in "risk avoidance," according to recommendations in the Surgeon General's Report on AIDS and (2) to promote and encourage a personal commitment to risk avoidance among teenagers, showing that a responsible, precautionary attitude toward sex is a positive and achievable goal.

In his October 1986 report on AIDS, the Surgeon General urged that youth of America be educated on how to protect themselves from exposure to the AIDS virus. His report also states that this education be conducted both at home and in the classroom. He urged that an organization or group come forward to help parents learn to discuss AIDS with their children. The National Academy of Science's Report on AIDS, Confronting AIDS: Directions for Public Health, Health Care, and Research, identified the Red Cross as an organization uniquely qualified to provide education in a school setting. The Red Cross is working to meet these challenges.

Though research scientists are working around the

clock, there is still no cure or vaccine for AIDS. For the foreseeable future, the most effective way to control the spread of AIDS is through education. Junior and senior high school youth are at an age when experimentation with sex and drugs, activities that place them at risk for contracting the AIDS virus, often begins. To help prevent the spread of this disease, it is imperative that a comprehensive AIDS education program be developed to provide youth with the facts about AIDS, how it is transmitted, and how they can avoid putting themselves and others at risk.

While we hope it will be a significant contribution to educating young people about AIDS prevention, the Red Cross classroom and home instruction package cannot fully meet the needs of all segments of America's youth. Programs which will specifically address the cultural needs of black and Hispanic youth, with emphasis on those who live in inner cities, must be developed. Much, much more needs to be done.

Since 1985, when the Red Cross began its AIDS Public Education Program, we have spent more than $8 million of our own funds to provide materials and outreach activities that communicate factual, reliable information about AIDS. During our fiscal year 1988, we hope to target youth, minorities, and the workplace. We anticipate that these efforts will cost more than $10.5 million. Our resources, however, will cover only $6 million of these costs. In order to respond to the public's overwhelming requests for materials and services related to our efforts to help prevent the

spread of AIDS, the Red Cross must take the unprecedented step of seeking financial support in the amount of $4.5 million from Congress.

The Red Cross has long been active in public health emergencies: the post-World War I flu epidemic, the need for blood and plasma during World War II, and the 1950's polio outbreak. Our current involvement in today's AIDS epidemic is a continuation of our public health role.

Red Cross strength lies in the public trust we have earned over the years, and in our vast nationwide network of chapters and volunteers. We hope, Mr Chairman and members of the Committee, that you will be able to help us fulfill our commitment to your communities. Thank you for the opportunity to testify.

PREPARED STATEMENT OF THERESA L. CRENSHAW, M.D.,

The Statement of the Problem

Our society becomes conscious of new risk groups only after they are widely infected with the AIDS virus. At the present, attention is on heterosexuals, a focus long overdue and predictable from many years ago. This is a reactive pattern. The true high risk group and a target population of this disease from the beginning is our children and teenagers, in particular our sexually active adolescents. AIDS is a disease that kills two generations at once--mothers and their unborn children.

An unpublished report from CDC indicates that 14,000 adolescents in New York City alone are already infected and 34,000 nationwide. I think this is a conservative estimate. Looking at the numbers reported to have AIDS in the 20 to 29 year range, there are approximately 8,000. The majority of these who are now manifesting the clinical syndrome of AIDS were infected five years or more earlier, meaning that they contracted the disease as teenagers. The CDC estimates that for every case of AIDS there are 10 cases of ARC and for every case of ARC there are 10 individuals infected but asymptomatic. If we apply these figures and assume conservatively that only 4,000 in this group (age 20 to 29) were infected as teenagers, that would mean that 40,000 had ARC and 400,000 could be carrying this virus asymptomatically. These are individuals who were infected five years ago and does not include those infected since.

These figures are staggeringly unacceptable and hopefully do not represent reality. However, the alarming issue is that they could be real but we don't know because we haven't been tracking the children we are charged to protect. Instead, the extreme left and the extreme right cloud the issue by debating whether condoms should be distributed in school or whether our children should be exposed to the perils of sex education. The adults and the authorities are too preoccupied fighting among themselves to have a meaningful, valuable, preventative impact on behalf of our children.

Analysis Of The Risk To Our Children And Adolescents

The incidence of sexually transmitted diseases among preadolescents is high. It is surprising to many that it even exists, whether

through precocious sexual activity or child molest by an adult. Neither is considered in the best interest psychologically or physically of the prepubertal child. The point I am making is that children we wouldn't expect to be active sexually demonstrate that they are to some extent by the sexually transmitted diseases they carry at a young age. Consider that these children reflect only a small percentage of those who are actually sexually active, because every sexually active child does not get a disease and every child who gets a sexually transmitted disease in that age group is not detected medically. It would be safe to say that the majority do not come to the attention of the clinician, for most of them don't consider that aspect of a preadolescent's health. This means that any reported figures are merely the tip of the iceberg. In acknowledging these facts we have the opportunity to make a change. In disregarding them, this group cannot be affected one way or the other.

Teenagers, we know, are often experiencing intercourse and other forms of sexual activity at a variable age. It is estimated that 40-60% of 14 year olds have had sexual intercourse, depending on which particular survey or study one references. In addition, drug abuse is epidemic among our youth. They are one of the major risk groups experimenting with these substances and at risk of becoming more seriously addicted. The net effect is an unknown number of teenagers already infected, almost all of them unknowingly infected. Those who are infected, whether through shared needles or sexual activity, are, by definition, the most likely to continue to be sexually active and place other children not yet initiated to sexual intercourse in danger of becoming infected. And yet, we are not addressing this problem effectively.

As I mentioned above, there are heated debates among the adults about how to educate our children and there is great interest in doing so, but we are very far from implementing effective educational programs that have potential to impact these young people. Even more serious, is that there is no substantial testing occurring in these age groups. In the tradition of our approach to AIDS, we only begin testing a group once it becomes known that they are already infected. It would be so important to change this pattern, learn from our past mistakes, and do it differently with our children. We could test children before they are widely infected, monitor them closely, and prevent spread by being alert to the earliest signs.

Children need to be tested because adults need to know the extent of the problem that already exists which, if the figures mentioned above are even partly true, is already a very serious problem. However,

until testing is done adults can continue to argue over the seriousness of the problem or whether it is cost effective to test or whether one is being overly concerned. All of these debates are mere intellectualization until hard data is available.

Most adolescents, perhaps even children, have heard of condoms. As a matter of fact, the majority probably believe that if they use a condom they have nothing to worry about--and this worries me. If adolescents oversimplify and overestimate the value of condoms they will take needless risks with their health unknowingly.

On June 19, 1987 I gave a lecture on AIDS to 800 sexologists at the World Congress of Sexologie in Heidelberg. Most of them recommended condoms to their clients and students. I asked them if they had available the partner of their dreams, and knew that person carried the virus, would they have sex, depending on a condom for protection? No one raised their hand. After a long delay, one timid hand surfaced from the back of the room. I told them that it was irresponsible to give advice to others that they would not follow themselves. The point is, putting a mere balloon between a healthy body and a deadly disease is not safe. I do encourage the use of condoms. I think that everyone--young, old, married, or single--would be wise to employ this additional protection in conjunction with a spermicide. However, I am deeply concerned that condoms not be misused as the only protection instead of additional protection.

Consider the following hazards of condoms (in context of the fact that condoms are better than nothing at all): A teenager carrying a condom in his wallet is more likely to place himself in sexual situations that could be hazardous to his health with the false sense of security that a condom is all he needs. The condom breaks and he risks paying with his life. Consider this same young man or woman who has made commitments to use the condom or to not do certain things sexually who then becomes aroused and in the heat of passion disregards his or her good intentions. The first thing to go when someone is sexually aroused is judgment. Arousal is similar to alcohol intoxication and complicated by the fact that alcohol is often a traditional part of foreplay, so judgment is impaired on two fronts--due to sexual arousal and due to alcohol intoxication. Under these circumstances, how frequently do you think that a condom finds its way to the right part at the right time? How often do good intentions go astray? This is one of the failure rates of condoms that will never be measurable.

This same teenager without the false security of a condom would be forced to depend on common sense and good judgment. Since often they don't exercise good judgment, in spite of what I'm saying, I'd like to see them always armed with a condom. However, I think we must improve their knowledge and their understanding of the limitations of condoms so that they don't feel overconfident.

Other important considerations about condoms are that, although they're being recommended for teenagers, most 13 and 14 year olds can't fill an adult condom. It is not true that one size fits all when you're talking about younger adolescents. These young men are not going to tell their counselor or their friends or their parents that the condom falls off. They're going to feel they're the only one that happens to and develop an inferiority complex about the size of their organ as a result of the thoughtless recommendations of adults. Condoms do not yet come sized. Condoms are well documented to have a 10% failure rate per woman year for pregnancy. That means that a couple who depends upon condoms for five years has a 50% chance of experiencing a pregnancy. When a condom fails and pregnancy results you gain a life. There are women today talking to condom failures in their own homes. When a condom fails for AIDS protection you lose your own. The risks are not equivalent. Not only that, but when you compare the known failure rate for condoms with pregnancy with the unknown possible failure rate for AIDS protection, the following facts lead me to believe that the failure rate will be exceedingly high for AIDS:

1. The AIDS virus is 500 times smaller than a sperm.

2. A woman is susceptible to infection 365 days a year, not just a few days per month.

3. The two most common lubricants used for sexual activity in America today among teenagers and adults are saliva and Vaseline. Saliva can contain the virus in an infected person and petroleum products dissolve latex. Teenagers are more likely to buy unlubricated condoms and supply their own lubrication because unlubricated condoms are cheaper.

4. How many teenagers have the pocket money to purchase condoms? They are not cheap.

5. Condoms labeled "for his pleasure" are generally too thin. Condoms labeled "for her pleasure" have small ridges that irritate and are more likely to tear tissue and cause blood-to-blood

contact during sexual friction. (For more information about condoms, please refer to my condom testimony before the Waxman House Subcommittee on Health and the Environment, February 10, 1987.

6. Fischl's study on condoms has a published 10% failure rate (two out of twelve failures within eighteen months). After approximately two years the failure rate increased to 30% (unpublished telephone communication).

Recommendations for Teenagers

The following recommendations are ideal in the respect that if all teenagers followed them we would not have to worry about them getting AIDS. Unfortunately, many will follow only partial recommendations or none at all. Nonetheless, it is psychodynamically important, in order to change sexual behavior, that we ask for more than we expect to get. If we ask for condoms, they'll carry them in their pockets; if we ask for monogamy, they'll use condoms; if we ask for celibacy, they'll become exclusive or limit their number of partners. So progress is made even though the recommendations may not be followed to the letter. In this context it is also important to understand that it is psychodynamically illogical to calm people down saying "Don't panic and, by the way, do change your sexual behavior". If people are unconcerned they will not go to the inconvenience and the trouble to alter their sexual patterns. Instead, one must alarm and concern people with the facts and calm them down with the solution or the antidote which requires a change in their behavior with the message that "You are in control if you do the following...":

1. Since most teenagers cannot afford the testing or would be too embarrassed to ask for it, the best insurance is abstinence or, as one teenager put it, "I am an inactive heterosexual". There is a premium on virginity today as a result of health issues rather than moral issues.

2. Be abstinent with the supplement of self-stimulation, as appropriate within the teenager's value system, until ready to establish an exclusive sexual relationship. Do not have more than one partner. Do not have sex without condoms and spermicide. Do try to be sufficiently resourceful to get tested before starting a sexual liaison. Do not use drugs or alcohol, these impair judgment, and do not share needles, this transmits

the virus. If you have questions or find some of these suggestions impossible, do talk with your school counselor, your neighbor, your friend, or some responsible adult.

3. There is no safe sex with an infected partner, only degrees of risk. Do not have sex with someone who is infected and do everything reasonable within your power to ensure before having sex with anyone that your prospective partner is uninfected.

4. The only way to tell if someone is infected is through a series of blood tests. While they aren't 100% reliable they are quite close and quite good tests, if interpreted correctly. Infected carriers look healthy, feel healthy, and usually don't even know that they are infected themselves.

As you listen to this stringent advice you may think "Kids won't follow that, we have to be realistic and face reality. They will have sex, no matter what we say." It's true that we must face reality but it's untrue that they will do whatever they're going to do no matter what we say. Some will be unreachable but the majority are accessible if they get the right information repeated often enough to capture their attention. Think about the way we deal with smoking and drugs among teenagers. You would get nowhere saying, "Well, have some cigarettes, but just a few" or "It's okay to do drugs but just don't do too much", or "Put a filter on your cigarette so then you won't get so sick". No one is irrational enough to use this kind of advice with our teenagers. They say "Don't smoke" in hopes that the majority will listen, realizing that many won't. They say "Say no to drugs", not "Well, since a lot of kids are going to use drugs anyway we can't be too strong in our recommendation". It's essential to be clear and to be repetitive and to be strong. Eventually the message filters through but it will never reach everyone and this, unfortunately, is reality.

With our children we must realize that it's much easier to change sexual behavior in the direction of more freedom than the reverse, so more energy must be expended to bring this about. It is by no means impossible and several generations ago men and women lived by many of the guidelines we are now trying to promote. It's just difficult to go backwards, but as long as we are under siege from this AIDS virus we must adapt and accelerate the process.

There must be special consideration for young people who are confirmed positives. Hemophiliacs and homosexuals have been the first to surface but that is just a preview. There will be and most

certainly are heterosexual adolescents already infected. The question is, do we encourage them to continue to be sexually active as long as they use a condom and make an effort to protect their partner, or do we institute "tough love" measures in hopes that they will not risk infecting another single person? We have not had the heart as a society even to tell adults who are infected that they should no longer have sex and that they should love enough not to love too much. In this way they don't infect the person that they love the most. Half measures have been encouraged such as, "Well, have sex but use protection"; before we even know how much protection it is and when we know without a doubt that there is a failure rate to contend with. Do you counsel an infected hemophiliac not to put another adolescent at risk? I think we must. Is this a harsh, unfeeling approach? That depends on whether the prevailing issue is concern for the infected adolescent's emotional well-being or for the emotional and physical well-being of the next adolescent who would warrant our sympathy if the first is allowed to remain sexually active. It is not an easy issue but we must have the courage and the good judgment as adults to set the guidelines and attempt to implement them. As of yet we are simply not dealing with that issue.

Is it possible to stop all infected teenagers from having sex? To make them celibate for the rest of their lives before they've had a taste of the physical promise they've talked about and joked about since childhood? I think it's essential. We won't know if it's impossible until we try, nor what percentage of those who are infected will abide by our recommendations, but the effort must be made. At the same time, tremendous resources must be directed to the counseling, support, and nurturing of those so burdened, both by what they can no longer do and by the weight of dealing with the physical, social, and health consequences of their infection. Because this burden is so great, so overwhelming financially to society and emotionally for the therapists, it is my opinion that we must target low risk groups as well as high risk groups with aggressive AIDS prevention efforts, or low risk groups will become high risk groups, just as history has demonstrated these last six years.

Conclusions

Teenagers are already a high risk group. They have always been potentially a high risk group from the moment that we understood that this disease could be heterosexually transmitted. It is necessary to implement marked cultural and sexual changes in our adolescent populations beginning long before they reach puberty with the dual

message that quantity sex is no longer an option. Casual sex, multiple partners, and no-fault sexual experimentation will not be available to their generation. Quality sex and all the benefits of the sexual revolution as they apply to committed relationships are theirs to keep to enjoy but they can anticipate a delay in their first sexual experiences and the wider, hopefully universal, use of condoms and spermicides until a relationship is established that is of such depth and trustworthiness that they would risk their life and their health on their partner's sexual integrity.

Positive aspects of these changes must be emphasized so that we can help preserve their psychological health while modifying and taking away certain sexual options. The value of extended courtships, the improvement in intimacy and in communications, the importance again of "getting to know someone" before becoming physically involved, and improved self-esteem and self-respect required in order to maintain sexual integrity can be encouraged. There are many more ways in which the positive dividends of this dreadful disease can be marketed to young people, and it is my opinion that it is essential that we make the best of a bad situation.

This health crisis ushers in an era of sexual integrity and trustworthiness, of committed relationships where an intimate emotional relationship and quality sexual relationships will become the general rule rather than the exception, and consequently a new quality monogamy will emerge as a standard for relationships.

Latex sex has its limits but also its value. Alone it is not sufficient. In conjunction with good judgment, monogamy, and common sense, condoms make sense.

PREPARED STATEMENT OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, WASHINGTON, DC

On behalf of its 87,000 members, the American Psychological Association (APA) is pleased to present its views on preventing the transmission of the Acquired Immune Deficiency Syndrome (AIDS) among adolescents. This statement is based on a more extensive document prepared by the Chair of APA's Committee for the Protection of Human Participants in Research (CPHPR), Gary Melton, PhD. A copy of that more detailed statement is attached for the record.

Politically, ethically and legally AIDS has become a most sensitive issue touching on complex issues surrounding sex and death. As the epidemic expands to confront more Americans, the sensitivities increase particularly as the issues affect America's young people. Indeed, with the exponential increase in the incidence of AIDS, increasing numbers of scientists have begun to postulate that adolescent AIDS may be the third major vector for HIV transmission.

As of June 15, 1987, 149 cases of adolescent AIDS (ages 13-19) have been reported to the Centers for Disease Control (CDC). Although this number is small in comparison with the number of AIDS cases in other age brackets, a potential exists for a significant increase in the percentage of teenage AIDS cases as a function of adolescent experimentation with sex and drugs. Most importantly, we must recognize that the real issue around adolescents and AIDS is not the issue of teenagers contracting AIDS but of adolescent infection with the AIDS virus during their teenage years. Epidemiologists

have established that vaginal and anal intercourse without condoms and the sharing of intravenous (IV) drug use equipment are two of the major causes of transmission of the AIDS virus (also known as the human immunodeficiency virus or HIV). Data indicate that teens are particularly prone to such behaviors.

According to the Alan Guttmacher Institute, seven out of every ten females and eight out of every ten males have had sexual intercourse by the age of 20. Nearly half of the 5 to 10 million sexually transmitted disease patients are under 25. Equally disturbing is the fact that 1.1% of all high school seniors in the United States report that they have used heroin, a drug which is most often injected intravenously. This substance abuse data does not reflect the young people at highest risk for IV drug use, those young adults who have dropped out of school.

In 1986 the Institute of Medicine and the National Academy of Science (IOM/NAS) identified adolescents as a group for whom prevention of HIV infection is an "urgent necessity" given the fact that "experimentation with sex and drugs" commonly begins in the teenage years (p.111). The NAS also noted the potential of social science to "develop effective education programs to encourage changes in behavior that will break the chain of HIV transmission." In an effort to address the issues of adolescent AIDS, this statement identifies factors that are likely to affect the success of prevention among adolescents, to suggest corollary actions by government to

reduce the threat of HIV infection, and to outline a program of behavioral research necessary for a well-designed prevention program.

Factors Affecting Prevention

Before we can get adolescents to avoid the unnecessary risks associated with transmission of the AIDS virus, they must perceive that the risk is present and they must possess skills necessary to reduce the risk. One of the most effective techniques for addressing perception and decision making involves the concept of "availability" -- using recent emotion-laden personal experiences to help the individual respond to risks. Significant behavior change, for example, has been recorded among gay men in San Francisco who have seen someone with frank AIDS.

While the relationship between risk perception and the stages of human development are unclear, research indicates that teenagers have the ability to perceive risks as well as adults. Young junior high school-aged adolescents, however, often do not adequately weigh risks when making decisions. This may be due to immaturity in awareness and judgement, a self-constructed myth of personal immunity, or difficulties in abstract thinking common in young adolescence.

Another strong possibility is that without having immediate exposure to the negative effects of certain actions, the risk of adverse results may seem remote. Thus, while cancer and heart disease seem remote possibilities

to most fifteen-year olds because they lack living models, adolescents are clearly aware of the adverse consequences of certain behaviors that have an immediate role in their lives or the lives of their peers. The adolescent's awareness of the stigma and ostracism sometimes related to psychotherapy is a good example of this kind of behavioral risk assessment. The problem with HIV infection is that the consequences of exposure seem relatively remote. The absence of large numbers of teenage AIDS patients renders the perception of the risk of contracting AIDS minimal. Even when HIV infection occurs in an adolescent, current case load suggests that it is contracted by events outside the individual's control (i.e., transfusions) thereby increasing the sense of distance between risk and result.

Existing adolescent behavior patterns exacerbate the lack of awareness of risk. The infrequency of adolescent condom use, for example, is central to the issue of risk reduction among adolescents. Sixty-six percent of unmarried sexually active women report inconsistant or non-existent use of birth control. Moreover, half of sexually active teenagers who reported that they used contraceptives, used condoms at first intercourse, but only one-fourth used condoms at their last intercourse. While teenagers are not protecting themselves from the risk of HIV infection, they are nevertheless engaging in high risk behavior. Strong inducements exist, encouraging sexual activity. Not only does such behavior often directly result in pleasure, but it is also a marker of independence - "growing up." Thus, in order to reduce HIV transmission, the risk of infection must appear real and applicable to the teenage population. In addition, negative

consequences of infection must be understood and outweigh the benefits of engaging in high risk activity. It is, of course, useful to note that individual differences exist between the youth who is prone to high risk behavior and his or her peers, who experiment with risky behavior, but do so on an irregular basis.

Condom Use and Intravenous Drug Abuse Among Adolescents

The lack of condom use by adolescents reflects a number of obstacles including lack of knowledge and a widespread belief that condoms interfere with pleasure. Gaps in knowledge and a misunderstanding of biological facts are common, including the beliefs that young teenagers cannot become pregnant and that girls who do not want to become pregnant, will not. The lack of AIDS-specific knowledge among adolescents is even more acute. One survey of San Francisco teens, for instance, revealed that 40% of students did not know that condom use reduces the risk of AIDS and few understood that the disease is not easily cured through early treatment.

Despite an urgent need for facts, general information about reproductive processes is not helpful unless it also increases the skills necessary to use the information. Thus, education about sex and AIDS should provide detailed and specific information about sexual practices, the proper use of condoms and the means to obtain them. Decision-making exercises that provide an opportunity to practice responses to high risk situations should be a part of any curricula. "Just say no" campaigns will not provide

youngsters with the kinds of skills necessary to handle high risk situations. In addition, educators must appear credible. Because peers tend to be the predominant source of influence about sexual behavior, sex education in non-traditional, peer-oriented settings may be appropriate.

Use of contraceptives requires mastery of a variety of psychological challenges: identification of oneself as sexually active, acceptance of erotic feelings and sexuality itself, overcoming expectations of negative reactions in purchasing contraceptives, overcoming fears that one will be perceived as "easy" or "experienced" because of preparation for intercourse, and interruption of the "spontaneity" of romantic love-making. In addition to considering these factors responding to teenage high risk sexual behavior must also take into account environmental considerations. Moving the condom display out from behind the pharmacist's counter to a place where the condom can be selected and purchased relatively unobtrusively is just such an environmental issue. Distributing condoms at alternative sites and widespread use of romantic condom advertising may help to reduce barriers.

A 1987 report of the National Research Council of NAS on adolescent pregnancy may offer additional insights into teenage condom use. The high rate of unplanned pregnancy among adolescents from disadvantaged groups may reflect a belief that the youngsters have little control over their futures. Perceived personal control and positive future orientation are correlated with delay in sexual activity. Thus, significant social change may be a requisite for altering disadvantaged youth high risk sexual and

substance abuse behavior, both of which may be correlated to low self esteem and limited prospects for the future.

Changing IV drug use behavior among adolescents necessarily involves attention to a small subpopulation of adolescents. By the time that individuals have become users of hard drugs, they typically have a history of significant delinquent activity, frequent abuse of other substances, well entrenched deviant values, and a preference for sensation seeking and risk taking. Therefore, IV drug users are unlikely subjects for conventional educational channels and, if reached, unlikely to be persuaded. Moreover, historically the track record of programs designed to prevent drug use itself has been poor.

Some indications are emerging from San Francisco of successful interventions in reducing high risk behaviors among IV drug users, including reductions in sharing needles and increased rates of cleaning equipment. Although this research does not focus on adolescents, it does indicate possible new avenues of approach. Unquestionably, the federal government must make an increased commitment to providing more treatment slots to allow addicts to break their habit, rather than waiting in month-long waiting lines, discouraging the impulses to "come clean."

Market-based regulatory actions which have proven to be so successful with adolescents (i.e., reductions in smoking) because of income limitations should be tried. Distribution of condoms, sterile needles and bleach to

clean needles should be explored, as should stepped up attempts to reduce the local supply of IV drugs thereby increasing the cost of heroin and other injectable drugs.

Future Research Directions

Even as we attempt to address the immediate and pressing need for stemming HIV transmission among adolescents, we must also remain aware of the need to continue to develop our research base. Although the psychological and behavioral literature suggests many ideas for successful interventions, large gaps remain in our understanding. The knowledge needed for an effective prevention program can be conceptualized in two areas. On the one hand, we need to know more about discouraging risky behavior. In that regard, the problem is to increase the perceived immediacy of the risk and decrease the attractiveness of the short-term benefits stemming from high risk behavior. On the other hand, more knowledge is needed about ways of promoting healthy behavior. We need to know more about the best ways of increasing access to the resources needed for safe behavior (e.g., information, condoms, sterile needles, bleach), teaching the skills necessary to use such resources, and increasing the sense of personal control so that adolescents will be motivated to use such resources and skills.

Support should be provided for basic descriptive studies about sexual practices, IV drug use, and other risk-taking behaviors, along the lines of

the now famous "Kinsey Report" of the 1950's. Research on basic developmental processes should fill in the gaps in knowledge covering the cognitive and social factors affecting the development of risk perception, sexual development, and the role of social influences on youth. Field experiments should be undertaken to examine the efficacy of targeted prevention strategies. Longitudinal studies are necessary for any kind of research because only through an examination of behavior over time can we properly address the causes of behavior change and the maintenance of low risk behaviors as the individual ages.

Conduct of the sort of research advocated here may require the resolution of some community-based value conflicts. Clearly, the need for information is so compelling and urgent that social inhibitions must be set aside. In doing so, however, we must assure that, in the process of conducting research, adolescents are not subjected to social or legal risk or undue invasion of their privacy.

PREPARED STATEMENT OF GARY B. MELTON, PH.D., PROFESSOR OF PSYCHOLOGY AND LAW AND DIRECTOR OF THE LAW/PSYCHOLOGY PROGRAM, UNIVERSITY OF NEBRASKA-LINCOLN

Prevention of HIV Infection Among Adolescents

As past president of the American Psychological Association (APA) Division of Child, Youth, and Family Services, a member of the APA Planning Group on AIDS, and a researcher on adolescent decision making and psychosocial aspects of AIDS (acquired immune deficiency syndrome), I am pleased to offer this statement on prevention of HIV (human immunodeficiency virus) infection among adolescents.

In their landmark report on the AIDS epidemic, the Institute of Medicine and the National Academy of Sciences (IoM/NAS, 1986) noted the potential of social science to "develop effective education programs to encourage changes in behavior that will break the chain of HIV transmission" (p. 27; also, p. 231). Although the IoM/NAS report was critical of inadequate government support for psychosocial research on AIDS, the committee did recognize that existing basic knowledge of risk perception, persuasion, and behavior change offers a base for predicting the means of prevention that are most likely to be effective among various groups. The committee further identified adolescents as a group for whom prevention of HIV infection is an "urgent necessity," given the fact that "experimentation with sex and drugs" commonly begins in the teenage years (p. 111). Starting from such premises, this statement is intended to identify factors that are likely to affect the success of prevention among adolescents, to suggest corollary actions by government to reduce

76-448 0 - 88 - 8

the threat of HIV infection, and to outline a program of behavioral research necessary for a well-designed prevention program.

Risk-taking Behavior in Adolescence

Before individuals can act to avoid unnecessary risk, they must perceive that risk is present, and they must possess skills necessary to reduce the risk. Cognitive and social psychologists have contributed a large body of research and theory on risk perception.[1] In brief, such research shows that judgments of risk are often strongly affected by the common tendency to underuse and misinterpret base rates, to place greater emphasis on individual-case information than group data, to interpret linguistic expressions of probability (e.g., "substantial") in idiosyncratic ways, and to draw different inferences from identical probabilities, depending on whether they are framed in terms of gains or losses. One of the strongest "heuristics" for risk perception and decision making (see generally Tversky & Kahneman, 1974) is "availability," the cognitive salience of an event. People commonly rely on recent emotion-laden personal experiences in determining risk and responding accordingly (Tversky & Kahneman, 1973). Thus, having seen someone in advanced stages of AIDS has been found to be related to behavior changes in gay men in San Francisco (McKusick, Horstman, & Coates, 1985).

---

[1]For an excellent application of such basic research to health-related decisions, see Thompson (1983).

Little research is available on developmental trends in risk perception. However, research suggests that adolescents generally have the capacity to perceive risk as accurately as adults (see generally Melton, Koocher, & Saks, 1983), but that early adolescents (roughly, junior high age) often do not spontaneously weigh relevant risks when making decisions (Lewis, 1981). This failure to consider material risks may reflect early adolescents' cognitive-social immaturity. With their new capacity for introspection, early adolescents sometimes construct a "personal fable" in which they imagine themselves to be immune from untoward consequences (Elkind, 1967). Moreover, when the capacity for abstract thought is just beginning to solidify, early adolescents may have difficulty imagining possible risks.

However, the operation of the availability heuristic may be an even more powerful explanation. That is, adolescents' inattention to risks may reflect the same sorts of cognitive biases as observed in adults, but such biases may be intensified by adolescents' social situation. Adolescents are unlikely to have personally experienced negative effects from risky behavior or to have observed such effects in other adolescents, when the adverse outcomes are temporally remote. For example, it is a long way from teenage smoking to middle-age cancer and heart disease. By contrast, when the risks are more clearly proximate, adolescents not only can but do perceive probable negative effects. For example, even early adolescents are exquisitely aware of the stigma and embarrassment that sometimes accompany

psychotherapy (Kaser-Boyd, Adelman, & Taylor, 1985; Kaser-Boyd, Adelman, Taylor, & Nelson, 1986; Taylor, Adelman, & Kaser-Boyd, 1985); ostracism by peers and invasion of privacy are social phenomena that adolescents have observed among their peers and probably have experienced themselves.

Regardless whether early adolescents' deficiencies in risk perception reflect cognitive-social immaturity or adult-like cognitive biases (or both), the implications for prevention of HIV infection are clear. The risks that are present are largely invisible. Given the lengthy incubation period for HIV, adolescents almost always will not know any age-peers with AIDS, even in communities where AIDS is highly prevalent. If they do know an adolescent with AIDS, that individual will almost always have contracted the illness through events outside his or her control (e.g., transfusions). When the risk of HIV infection is so remote in time and seemingly unconnected to the everyday life of adolescents, the belief that "it can't happen to me" is understandable even if mistaken. If we wish to increase adolescents' avoidance of behavior that increases the risk of HIV infection, a first step is to make the risk cognitively available--concrete and salient in terms of adolescents' everyday experience.

To appreciate the potential difficulty of this task, consider the salience of the short-term rewards of risky behavior. Not only does such behavior often directly result in pleasure, but it is a marker of independence--"growing up"--in

our culture, that is often maintained by social norms among peers. As a result, if adolescents are to be motivated to avoid behavior increasing the risk of HIV infection, not only must they be convinced that such risks are real and applicable to themselves. The potential negative consequences of risky behavior must be so cognitively available as to overcome the rewards--whether personal pleasure or social approval--that are perceived to be the probable immediate results of such behavior.

This problem is developmental; the issues that I have raised apply to adolescents generally, particularly in early adolescence. However, it is important not to lose sight of individual differences. Although the notion that one risky act necessarily begets another is mythical, it is true that individuals who frequently engage in one form of risk-taking behavior often have a lifestyle filled with potentially unsafe behavior. Youth who frequently abuse illicit substances often engage in other forms of delinquent behavior and frequent sexual activity with multiple partners (see, e.g., Jessor & Jessor, 1977; Rutter & Giller, 1984). Indeed, sensation seeking has been argued to be the essence of antisocial personality (Quay, 1965). Although it is not true that such individuals are necessarily oblivious to long-term risks,[2] the youth who are most likely to engage in risky behavior are sufficiently outside the usual

[2]The IoM/NAS (1986, pp. 107-108) committee reported evidence that many intravenous drug users in New York City have altered their use of syringes and indications that more would do so if sterile syringes or methadone maintenance were more readily available.

avenues of communication and persuasion that they present a special challenge.

Plans for prevention thus should reflect the differing lifestyles of "normal" youth who may experiment with risky behavior and "antisocial" youth who are prone to repeated risk taking. Both groups should be targets for prevention, but they are likely to differ in the specific methods that will change their behavior and maintain such changes.

Sexual Behavior in Adolescence

Prevalence

The frequency with which adolescents (both generally and special populations) engage in high-risk sexual behavior[3] is unknown. We do know that occasional sexual intercourse is common among teenagers, especially older adolescents.[4] In 1982, about 45% of 15- to 19-year-old adolescent females in metropolitan areas reported ever having had sexual intercourse, in contrast to

---

[3]Behavioral-epidemiological studies have consistently identified multiplicity of partners and receptive anal intercourse as risk factors for HIV infection and AIDS, at least among gay men (IoM/NAS, 1986, p. 51; see, e.g., Darrow et al., 1987).

[4]Although the surveys from which the data reported hereafter have been drawn all have been conducted confidentially, the resulting statistics probably are underestimates of actual levels of sexual and drug-taking activity among adolescents. Those adolescents who are most likely to have frequent intercourse or to be IV drug users probably are least likely to be available for surveys. (Some studies have attempted to correct for this skew in the sample by surveying dropouts and truant youth as well as high school students.) Among those youth who are contacted, it is probable that there is significant underreporting because of the sensitivity of the information and fear that the study is not truly confidential and because of psychological denial that one is sexually active.

only 31.7% in 1971 (Hofferth, Kahn, & Baldwin, 1987). By age 15, 15.4% of white females and 41.7% of black females report having been sexually active. By age 18, 57.8% of all females (55.4% of whites; 73.7% of blacks) are sexually experienced. Males tend to initiate sexual activity earlier than females. By age 15, 12.1% of white males and 42.4% of black males report ever having had intercourse (Hayes, 1987).

Although some involvement in sexual activity is common among teenagers, it is important also to recognize that many sexually active adolescents engage in intercourse infrequently. Indeed, the modal reported frequency of intercourse within the last month among sexually active teenage girls is zero (Hayes, 1987). Intercourse is especially sporadic among adolescents who have recently initiated sexual activity.

A relatively small proportion (about 15%) of sexually active youth are "sexual adventurers" who have multiple partners without strong emotional relationships (Sorensen, 1973). The frequency of heterosexual anal intercourse among youth is unknown.

The frequency of risky homosexual behavior among adolescents also is unknown. Surveys of teenagers that have included questions about homosexuality typically have asked broad, vague questions about homosexual experiences without identification of the practices involved. For example, Sorensen (1973) asked simply whether "you yourself [have] ever done anything with another boy or with a grown man that resulted in sexual stimulation or satisfaction for either or both of you?" Five per

cent of boys aged 13-15 and 17% of boys aged 16-19 answered affirmatively. It is probable that most of these experiences involved simply mutual masturbation or observation of masturbation (Bell, Weinberg, & Hammersmith, 1981). Research about the frequency and circumstances of adolescents' initiation of anal sex is unavailable.

The prevalence data most directly relevant to prevention of HIV infection are those pertaining to adolescents' use of contraception. The proportion of sexually active 15- to 19-year-olds who ever use contraception rose from 66% in 1976 to 85% in 1982 (Hayes, 1987). About half of the sexually active teenagers who reported use of a contraceptive used condoms at first intercourse, but only about one-fourth used that method at their last intercourse. Obstacles to adolescents' use of condoms include lack of knowledge (demonstrated by a high contraceptive failure rate among teen users of condoms) and a common belief that condoms interfere with pleasure, but the few demonstration projects that have made condoms and information about them easily accessible have reported success in increasing their use.

Obstacles to Use of Condoms

Lack of information. Research on adolescents' contraceptive decisions indicates several problems that must be addressed in efforts to promote use of condoms specifically. The most obvious of these is lack of information. Gaps in knowledge or appreciation of the personal significance of biological facts are common, including the beliefs that early adolescents cannot

become pregnant and that girls who do not want to become pregnant will not (see, for reviews, E. R. Allgeier, 1983; Hayes, 1987, pp. 108-109).

Lack of accurate knowledge about AIDS is a particular problem. A survey of high school students in San Francisco (DiClemente, Zorn, & Temoshok, 1986), where public awareness of AIDS is probably at its highest point, showed remarkable levels of ignorance and misinformation. Only 60% of the students were aware that use of condoms reduces the risk of AIDS, and the majority thought that AIDS could be transmitted through kissing. Few were aware that no vaccine is available for AIDS and that it cannot be cured through early treatment.

A somewhat earlier survey among high school juniors and seniors in Toledo (Price, Desmond, & Kukula, 1985) showed even more pronounced ignorance about AIDS (see DiClemente, Zorn, & Temoshok, 1987). Only three of 19 questions were answered correctly by at least three-fourths of the sample. Females were much more likely to be concerned about getting AIDS, even though most AIDS patients are male, and male contraception (i.e., use of condoms) is one of the most effective means of preventing the spread of AIDS.

When such gaps in knowledge about both sexuality and AIDS are present, obvious problems arise in promoting use of condoms among adolescents. However, information alone is not enough. For example, knowledge about sex and contraception is largely unrelated to reproductive decisions, although such knowledge does

have some relationship with use of contraceptives (see, for reviews, A. R. Allgeier, 1983; Hayes, 1987, p. 108).[5] Motivation and skills to apply the knowledge also must be present.

In that regard, two problems limit the usefulness of conventional sex education, even when AIDS is included as a topic. First, general information about reproductive processes is not helpful unless it is accompanied by education that increases skills in using the information. Thus, education about sex and AIDS should be substantially more graphic and detailed than is common.[6] It should include specific information about sexual practices that increase risk of AIDS and about the proper use of condoms and the means of obtaining them. To maximize its application, sex education also should include decision-making exercises that provide for cognitive rehearsal of safe behavioral responses to situations that tend to elicit risk-taking behavior.[7] Careful analysis should be made of the nature of such situations, problem-solving materials developed, and resulting curricula evaluated. Simple injunctions "just [to] say no" are

---

[5]Analogous findings have been reported in research on sexual behavior among gay men (McKusick et al., 1985). In that instance, most adult gay males understand ways to reduce risk of HIV infection. Although dramatic changes toward "safer sex" have occurred among gay men, substantial proportions have persisted in unsafe practices (see, e.g., Martin, 1987).

[6]This view is echoed in the IoM/NAS (1986) report.

[7]The National Research Council's report on adolescent sexuality and pregnancy (Hayes, 1987) has made similar recommendations in regard to promising avenues for experimentation in sex education programs.

unlikely to counteract personal and situational forces that push youth toward behavior that increases risk of HIV infection.

Second, even a well-designed sex education program is unlikely to be effective if the source is not perceived as credible. With the dramatic changes in sexual norms that occurred in the 1960s and 1970s, peers are more likely than adults to be adolescents' referent group for sexual norms, even though adolescents generally believe that they share their parents' values (Conger & Petersen, 1984). Apparently as a result of mutual discomfort between adults and teenagers in discussing sexuality, peers are the predominant source of information and influence about sexual behavior (see, e.g., Fox & Inazu, 1980; Furstenberg, 1971; Rothenberg, 1980). As a result, it may be useful to experiment with sex education programs in non-traditional, peer-oriented settings (e.g., neighborhood teen centers). Although programs in such settings still might not reach those adolescents who are at highest risk and are unlikely to belong to organized youth groups, they might be more effective with adolescents generally than traditional sex education programs in the schools. Not only might they be more credible with their audience, but they probably would have fewer political constraints on the nature of the information presented.

Social norms and attributions. Additional psychological obstacles to effective use of contraception may stand in the way, even when an adolescent is knowledgeable about contraception and motivated to use it (E. R. Allgeier, 1983; Byrne, 1983; Fisher,

Byrne, & White, 1983). Use of contraception requires mastery of a variety of psychological challenges: identification of oneself as sexually active (a fact that, when based on very infrequent intercourse, may be easy to deny), acceptance of erotic feelings and sexuality itself (an attitude that is particularly relevant to use of condoms because of the necessity of genital manipulation), overcoming expectations of negative reactions of the druggist to purchase contraceptives, overcoming fear that one will be perceived as "easy" or "experienced" because of preparation for intercourse, reversal of usual gender roles in regard to responsibility for contraception, and interruption of the "spontaneity" of romantic love-making. Such factors must be taken into account in teaching decision-making skills or altering public attitudes if education about use of condoms is to be effective.

Environmental manipulations to decrease psychological barriers to effective use of condoms also should be undertaken (see IoM/NAS, 1986). Condoms might be distributed in recreational centers and other unforbidding settings. At a minimum, they should be moved from behind the pharmacist's counter and placed in a section of the drug store in which they can be selected and purchased relatively unobtrusively. Condoms also can be advertised in a way that their use is associated with romance and responsible behavior.

Perceptions of lack of control. Several of the factors identified as inhibiting use of contraception involve widely held

cultural beliefs (e.g., that intercourse should be unplanned and that females should be inexperienced and naive in sexual matters). A still broader barrier to effective contraception was recognized by the National Research Council's panel on adolescent pregnancy (Hayes, 1987); to be motivated to use contraception, one must believe that it will make a difference. The high rate of unplanned pregnancy among adolescents from disadvantaged groups may reflect a belief that they have little control over the future. Both within and across groups, perceived personal control and positive future orientation are correlated with delay in sexual activity and use of contraception when one initiates intercourse. Although research has not yet focused on effects of perceived control on use of condoms to prevent HIV infection as well as pregnancy, it is probable that such planful efforts to guard the health of oneself and others also are facilitated by a belief in personal control. If so, as the National Research Council panel concluded, substantial changes in sexual behavior among adolescents may require significant social change in order to "enhance life options" of disadvantaged youth (Hayes, 1987, p. 266).

Intravenous Drug Use in Adolescence

Prevention of risky sexual behavior among adolescents involves complex social-psychological issues and elicits political and moral controversy. Nonetheless, public health measures related to adolescent sexuality commonly address "normal" developmental issues that are within the experience of

most adults. By contrast, as recognized in the IoM/NAS (1986) report, prevention of HIV infection among intravenous (IV) drug users is an especially difficult challenge that focuses on a small subpopulation of adolescents. Although very few adolescents use "hard" drugs, IV drug use is nonetheless largely a phenomenon of late adolescence and young adulthood. For example, only about .2% of high school students report having used heroin 10 or more times, but the peak frequency of use is in the early 20s (see, for reviews, Kandel, 1980; Richards, 1980; Stephens, 1980).[8]

By the time that they have become users of hard drugs, individuals typically have a history of significant delinquent activity, frequent abuse of other substances, well-entrenched deviant values, and a preference for sensation seeking and risk taking (Kandel, 1980). Therefore, IV drug users are unlikely to be reached through conventional educational channels and, if reached, unlikely to be persuaded. Moreover, the track record of programs designed to prevent drug use itself has been poor (see, for review, Hanson, 1980), and individuals most likely to be on the brink of using IV drugs are apt already to be inaccessible to prevention programs.

Lessons from Other Contexts

[8]It is noteworthy that national surveys of high school youth have included questions about use of specific drugs but not the method of administration. The prevalence of IV drug use can only be inferred. In view of the current concern about transmission of the HIV virus through contaminated needles, future research should examine method of administration and the frequency of needle-sharing specifically.

Given the intrinsic difficulty of achieving and maintaining behavior change among IV drug users and sexual adventurers, change of the situation may be more effective than change of the person. In that regard, evaluations of efforts to regulate unhealthy behavior in other contexts (see, for review, Bonnie, 1985) may provide clues to methods of reducing risk of HIV infection among adolescents.

Notably, adolescents are the age group that is most easily influenced by market-based regulatory strategies, probably because their income typically is limited. For example, teenagers' demand for cigarettes is substantially more price-elastic than adults'; therefore, increases in the cigarette tax have the effect of decreasing smoking among adolescents (Lewitt, Coate, & Grossman, 1981). Conversely, if the desire to increase adolescents' use of condoms is serious, then distribution of condoms should be subsidized in order to reduce or eliminate the cost.

Similarly, as the IoM/NAS (1986) panel recognized, experiments should be undertaken to determine the effects of free and legal access to sterile needles. At the same time, efforts should be undertaken to reduce the local supply and, therefore, increase the price of heroin and other injectable drugs, especially to new users (Moore, 1977). Access to treatment programs, including methadone maintenance, that increase control over drug use also should be expanded (Hannan, 1975).

Conclusions: Needs for Research

Although existing knowledge provides some directions for policy initiatives to decrease the risk of HIV infection among adolescents, little directly relevant research is available. The time has come for a major investment in behavioral research on AIDS and adolescents. The need for such work is truly a life-and-death matter. The best hope for curbing the AIDS epidemic in the next few years is decreasing the frequency with which individuals initiate behavior that may result HIV infection. Because such behavior typically begins in adolescence, teenagers should be a primary target group for prevention and research related to prevention. As the IoM/NAS (1986) committee noted, "Sexually active youth (both homosexual and heterosexual, male and female), being less likely to have been infected with HIV, have the most protection to gain from the use of condoms" (p. 98).

The knowledge needed for an effective prevention program can be conceptualized as fitting into two areas. On the one hand, we need to know more about ways to discourage risky behavior. In that regard, the problem is to increase the cognitive availability of risks and decrease the attractiveness of short-term benefits of risk-taking behavior. On the other hand, more knowledge is needed about promotion of healthy behavior. We need to know more about the best ways of increasing access to the resources needed for safe behavior (e.g., information, condoms, sterile needles), teaching the skills necessary to use such resources, and increasing sense of personal control so that

adolescents will be motivated to use such resources and skills. In both contexts, attention should be given to the significance of the diverse expectations and experiences that accompany differences in lifestyle (e.g., proneness to risk-taking behavior), ethnicity, gender, sexual orientation, and so forth.

At a minimum, research should proceed in four broad areas:

(1) Support should be provided for basic descriptive studies about sexual practices, IV drug use, and other risk-taking behavior by adolescents. Design of prevention programs requires, at a minimum, information about the populations involved and the situations that seem to elicit risk-taking behavior. As the IoM/NAS (1986) committee recognized, we need the equivalent of a new "Kinsey Report" that examines the demography of sexual and drug-taking behavior among adolescents as well as adults. Such work should include not only information about frequency of risk-taking behavior but also ethnographic descriptions of "the social dynamics, rituals, and practices of various risk populations" (IoM/NAS, 1986, p. 234). We also need normative data from both representative and cross-sectional samples about adolescents' knowledge and attitudes about sexual behavior, drug-taking behavior, and AIDS itself.

(2) Research on relevant basic developmental processes should be expanded. A particular gap in the literature concerns the cognitive and social factors that affect development of risk perception. Attention also should be given to the process of development of sexual identity and its relationship to the

initiation of specific sexual behaviors. Research on social influence among youth of various ages should be expanded and applied to suggest means of communication about the risks of HIV infection and persuasion about avoidance of risky behavior.

(3) Field experiments should be undertaken to examine effects of various prevention strategies among particular groups of adolescents. Such experiments should involve systematic tests of interventions that have been designed to reflect specific theories of behavior change. For example, evaluations are needed of sex education programs that are designed to alter attributions that inhibit use of condoms (e.g., that initiation of condom use marks one as having sexual experience; that condom use is unromantic) and that are based on knowledge about sources of adolescents' beliefs about sexuality.

(4) For each of the three types of research already mentioned, longitudinal studies are desirable. Longitudinal research is most likely to identify the developmental and situational precipitants of initiation of risky behavior, changes in AIDS-related behavior and beliefs across cohorts, and problems in maintenance of behavior change.

Conduct of the sorts of research advocated here may require assumption of some political risk among school and public health authorities and researchers themselves. Clearly, though, the need for information is so compelling and urgent that social inhibitions about studying "adult" behavior among adolescents should be overcome. At the same time, care should be exercised

to ensure that, in the process of conducting research intended ultimately to reduce the risk of HIV infection, adolescents are not subjected to social or legal risk or undue invasion of privacy by virtue of their participation. In that regard, special review procedures may be required, and legal provisions for protection of confidentiality should be strengthened to ensure that data are immune from involuntary release to third parties (see Gray & Melton, 1985).

References

Allgeier, A. R. (1983). Informational barriers to contraception. In D. Byrne & W. A. Fisher (Eds.), Adolescents, sex, and contraception (pp. 143-169). Hillsdale, NJ: Erlbaum.

Allgeier, E. R. (1983). Ideological barriers to contraception. In D. Byrne & W. A. Fisher (Eds.), Adolescents, sex, and contraception (pp. 171-205). Hillsdale, NJ: Erlbaum.

Bell, A. P., Weinberg, M. S., & Hammersmith, S. K. (1981). Sexual preference: Its development in men and women. Bloomington: Indiana University Press.

Bonnie, R. J. (1985). The efficacy of law as a paternalistic instrument. In G. B. Melton (Ed.), Nebraska Symposium on Motivation: Vol. 33. The law as a behavioral instrument (pp. 131-211). Lincoln: University of Nebraska Press.

Byrne, D. (1983). Sex without contraception. In D. Byrne & W. A. Fisher (Eds.), Adolescents, sex, and contraception (pp. 3-31). Hillsdale, NJ: Erlbaum.

Conger, J. J., & Petersen, A. C. (1984). Adolescence and youth: Psychological development in a changing world (3rd ed.). New York: Harper & Row.

Darrow, W. W., Echenberg, D. F., Jaffe, H. W., O'Malley, P. M., Byers, R. H., Getchell, J. P., & Curran, J. W. (1987). Risk factors for human immunodeficiency virus, (HIV)

infections in homosexual men. American Journal of Public Health, 77, 479-483.

DiClemente, R. J., Zorn, J., & Temoshok, L. (1986). Adolescents and AIDS: A survey of knowledge, attitudes and beliefs about AIDS in San Francisco. American Journal of Public Health, 76, 1443-1448.

DiClemente, R. J., Zorn, J., & Temoshok, L. (1987). Response by DiClemente et al. [Letter to the editor]. American Journal of Public Health, 77, 876-877.

Elkind, D. (1967). Egocentrism in adolescence. Child Development, 38, 1025-1034.

Fisher, W. A., Byrne, D., & White, L. A. (1983). Emotional barriers to contraception. In D. Byrne & W. A. Fisher (Eds.), Adolescents, sex, and contraception (pp. 207-239). Hillsdale, NJ: Erlbaum.

Fox, G. L., & Inazu, J. K. (1980). Mother-daughter communication about sex. Family Relations, 29, 347-352.

Furstenberg, F. F., Jr. (1971). Birth control experience among pregnant adolescents: The process of unplanned parenthood. Social Problems, 19, 192-203.

Gray, J. N., & Melton, G. B. (1985). The law and ethics of psychosocial research on AIDS. Nebraska Law Review, 64, 637-688.

Hannan, T. H. (1975). The economics of methadone maintenance. Lexington, MA: Lexington Books.

Hanson, D. J. (1980). Drug education: Does it work? In F. R. Scarpitti & S. K. Datesman (Eds.), Drugs and the youth culture (pp. 251-282). Beverly Hills, CA: Sage.

Hayes, C. D. (1987). Risking the future: Adolescent sexuality, pregnancy, and childbearing. Washington, DC: National Academy Press.

Hofferth, S. L., Kahn, J. R., & Baldwin, W. (1987). Premarital sexual activity among U.S. teenage women over the past three decades. Family Planning Perspectives, 19, 46-53.

Institute of Medicine & National Academy of Sciences. (1986). Confronting AIDS: Directions for public health, health care, and research. Washington, DC: National Academy Press.

Jessor, R., & Jessor, S. L. (1977). Problem behavior and psychosocial development: A longitudinal study of youth. New York: Academic Press.

Kaser-Boyd, N., Adelman, H. S., & Taylor, L. (1985). Minors' ability to identify risks and benefits of therapy. Professional Psychology: Research and Practice, 16, 411-417.

Kaser-Boyd, N., Adelman, H. S., Taylor, L., & Nelson, P. (1986). Children's understanding of risks and benefits of psychotherapy. Journal of Clinical Child Psychology, 15, 165-171.

Lewis, C. C. (1981). How adolescents approach decisions:

Changes over grade seven to twelve and policy implications. Child Development, 52, 538-544.

Lewitt, E. M., Coate, D., & Grossman, M. (1981). The effects of government regulation on teenage smoking. Journal of Law and Economics, 24, 545-569.

Martin, J. L. (1987). The impact of AIDS on gay male sexual behavior patterns in New York City. American Journal of Public Health, 77, 578-581.

McKusick, L., Horstman, W., & Coates, T. J. (1985). AIDS and sexual behavior reported by gay men in San Francisco. American Journal of Public Health, 75, 493-496.

Melton, G. B., Koocher, G. P., & Saks, M. J. (Eds.). (1983). Children's competence to consent. New York: Plenum.

Moore, M. H. (1977). Buy and bust. Lexington, MA: Lexington Books.

Price, J. H., Desmond, S., & Kubulka, G. (1985). High school students' perceptions and misperceptions of AIDS. Journal of School Health, 55, 107-109.

Quay, H. C. (1965). Psychopathic personality as pathological stimulation-seeking. American Journal of Psychiatry, 122, 180-183.

Richards, L. G. (1980). The epidemiology of youthful drug use. In F. R. Scarpitti & S. K. Datesman (Eds.), Drugs and the youth culture (pp. 33-57). Beverly Hills, CA: Sage.

Rothenberg, P. B. (1980). Communication about sex and birth

control between mothers and their adolescent children. Population and Environment, 3, 35-50.

Rutter, M., & Giller, H. (1984). Juvenile delinquency: Trends and perspectives. New York: Guilford.

Sorensen, R. C. (1973). Adolescent sexuality in contemporary America: Personal values and sexual behavior. New York: Abrams.

Stephens, R. C. (1980). The hard drug scene. In F. R. Scarpitti & S. K. Datesman (Eds.), Drugs and the youth culture (pp. 59-79). Beverly Hills, CA: Sage.

Taylor, L., Adelman, H. S., & Kaser-Boyd, N. (1985). Exploring minors' reluctance and dissatisfaction with psychotherapy. Professional Psychology: Research and Practice, 16, 418-425.

Thompson, W. C. (1983). Psychological issues in informed consent. In President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (Eds.), Making health care decisions: The ethical and legal implications of informed consent in the patient-practitioner relationship (Vol. 3, App. H). Washington, DC: Government Printing Office.

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. Cognitive Psychology, 5, 207-232.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185, 1124-1131.

ONE HUNDREDTH CONGRESS

GEORGE MILLER, CALIFORNIA
CHAIRMAN

WILLIAM LEHMAN, FLORIDA
PATRICIA SCHROEDER, COLORADO
LINDY (MRS. HALE) BOGGS, LOUISIANA
MATTHEW F. MCHUGH, NEW YORK
TED WEISS, NEW YORK
BERYL ANTHONY, JR., ARKANSAS
BARBARA BOXER, CALIFORNIA
SANDER M. LEVIN, MICHIGAN
BRUCE A. MORRISON, CONNECTICUT
J. ROY ROWLAND, GEORGIA
GERRY SIKORSKI, MINNESOTA
ALAN WHEAT, MISSOURI
MATTHEW G. MARTINEZ, CALIFORNIA
LANE EVANS, ILLINOIS
RICHARD J. DURBIN, ILLINOIS
THOMAS C. SAWYER, OHIO
DAVID E. SKAGGS, COLORADO

ANN ROSEWATER
STAFF DIRECTOR

TELEPHONE: 226-7660

U.S. House of Representatives

SELECT COMMITTEE ON
CHILDREN, YOUTH, AND FAMILIES
385 HOUSE OFFICE BUILDING ANNEX 2
WASHINGTON, DC 20515

July 21, 1987

DAN COATS, INDIANA
RANKING MINORITY MEMBER

THOMAS J. BLILEY, JR., VIRGINIA
FRANK R. WOLF, VIRGINIA
NANCY L. JOHNSON, CONNECTICUT
BARBARA F. VUCANOVICH, NEVADA
JACK F. KEMP, NEW YORK
GEORGE C. WORTLEY, NEW YORK
RON PACKARD, CALIFORNIA
BEAU BOULTER, TEXAS
J. DENNIS HASTERT, ILLINOIS
CLYDE C. HOLLOWAY, LOUISIANA
FRED GRANDY, IOWA

MARK SOUDER
MINORITY STAFF DIRECTOR

CAROL M. STATUTO
MINORITY DEPUTY STAFF DIRECTOR

TELEPHONE: 226-7692

Vernon Mark, M.D., F.A.C.S.
Associate Professor of Surgery
Harvard Medical School
25 Shattuck
Boston, Massachusetts 02115

Dear Dr. Mark:

I want to express my appreciation to you for appearing before the Select Committee on Children, Youth, and Families at our hearing, "AIDS and Teenagers: Emerging Issues," held June 18, 1987, here in Washington. Your testimony was, indeed, important to our work.

The Committee is now in the process of editing the transcript of the hearing for publication. It would be helpful if you would go over the enclosed copy of your remarks to assure that it is accurate, and return it to us within three days with any necessary corrections.

In addition, we request that the following questions be answered for the record:

Questions from Congressman George Miller

1. In your written testimony you state that a series of epidemiologic probes should be initiated to contain the spread of the AIDS epidemic. How would such a program be carried out, who would be responsible for its implementation and what would you estimate the cost of repeated probes to be?

2. What do you mean when you recommend "accountability" from those persons who are found to be infectious through these epidemiologic probes and how would you propose to insure confidentiality while also insuring accountability?

3. Do you believe that epidemiologic probes, mandatory testing and accountability measures are adequate to address the immediate protective needs of adolescents who are already sexually active?

4. Surgeon General Koop advocates abstinence from both sexual activity and drug use as the only sure way to avoid infection from the AIDS virus. Dr. Koop also states that condom use, while not 100% effective in preventing the spread of the disease, should be

recommended as a protective measure for older teens who are already sexually active. Do you agree with the Surgeon General's approach for teenagers who are already sexually active or when abstinence or monogamous relat ons are unlikely?

Questions from Congressman Thomas J. Bliley, Jr.

1. The Surgeon General in his report, "Surgeon General's Report on Acquired Immune Deficiency Syndrome," states, "The majority of infected antibody positive individuals who carry the AIDS virus show no disease symptoms and may not come down with the disease for many years, if ever." Do you agree with this statement or do you believe that the majority of those infected with the AIDS virus will develop ARC or AIDS?

2. The Surgeon General stated, "There is no danger of AIDS virus infection from visiting a doctor, dentist, hospital, hairdresser or beautician. AIDS cannot be transmitted non-sexually from an infected person through a health or service provider to another person." Do you agree with this statement?

3. The Surgeon General's report says, "Although the AIDS virus has been found in tears and saliva, no instance of transmission from these body fluids has been reported. There is no danger of infection with AIDS by casual social contact." Do you agree with this statement?

4. The Surgeon General's report says, "In the future AIDS will probably increase and spread among people who are not homosexual or intravenous drug abusers in the same manner as other sexually transmitted diseases like syphilis and gonorrhea." Do you agree, Dr. Mark, that AIDS will be transmitted in this manner, or will there be other methods of transmission?

5. Do we currently know all methods of transmission, is it possible or is it likely that there are others

Let me again express my thanks, and that of the other members of the Select Committee. Your participation contributed greatly toward making the hearing a success.

Sincerely,

GEORGE MILLER
Chairman
Select Committee on Children,
Youth, and Families

GM/j
Enclosure

[No response was received at time of printing.]

ONE HUNDREDTH CONGRESS
GEORGE MILLER, CALIFORNIA
CHAIRMAN
WILLIAM LEHMAN, FLORIDA
PATRICIA SCHROEDER, COLORADO
LINDY (MRS. HALE) BOGGS, LOUISIANA
MATTHEW F. MCHUGH, NEW YORK
TED WEISS, NEW YORK
BERYL ANTHONY, JR., ARKANSAS
BARBARA BOXER, CALIFORNIA
SANDER M. LEVIN, MICHIGAN
BRUCE A. MORRISON, CONNECTICUT
J. ROY ROWLAND, GEORGIA
GERRY SIKORSKI, MINNESOTA
ALAN WHEAT, MISSOURI
MATTHEW G. MARTINEZ, CALIFORNIA
LANE EVANS, ILLINOIS
RICHARD J. DURBIN, ILLINOIS
THOMAS C. SAWYER, OHIO
DAVID E. SKAGGS, COLORADO

ANN ROSEWATER
STAFF DIRECTOR

TELEPHONE: 226-7660

U.S. House of Representatives

SELECT COMMITTEE ON
CHILDREN, YOUTH, AND FAMILIES
385 HOUSE OFFICE BUILDING ANNEX 2
WASHINGTON, DC 20515

BAM COATS, INDIANA
RANKING MINORITY MEMBER
THOMAS J. BLILEY, JR., VIRGINIA
FRANK R. WOLF, VIRGINIA
NANCY L. JOHNSON, CONNECTICUT
BARBARA F. VUCANOVICH, NEVADA
JACK F. KEMP, NEW YORK
GEORGE C. WORTLEY, NEW YORK
RON PACKARD, CALIFORNIA
BEAU BOULTER, TEXAS
J. DENNIS HASTERT, ILLINOIS
CLYDE C. HOLLOWAY, LOUISIANA
FRED GRANDY, IOWA

MARK SOUDER
MINORITY STAFF DIRECTOR

CAROL M. STATUTO
MINORITY SENIOR STAFF DIRECTOR

TELEPHONE: 226-7692

July 21, 1987

C. Everett Koop, M.D., Sc.D.
Surgeon General, U.S. Public Health Service, and
Deputy Assistant Secretary of Health
Department of Health and Human Services
200 Independence Avenue, S.W., 416-G
Washington, D.C. 20201

Dear Dr. Koop:

I want to express my personal appreciation to you for appearing before the Select Committee on Children, Youth, and Families at our hearing, "AIDS and Teenagers: Emerging Issues," held June 18, 1987, here in Washington. Your testimony was, indeed, important to our work.

The Committee is now in the process of editing the transcript of the hearing for publication. It would be helpful if you would go over the enclosed copy of your remarks to assure that it is accurate, and return it to us within three days with any necessary corrections.

In addition, we would appreciate your furnishing for the record the additional information requested by Representative Boxer concerning education funds (page 51 of the transcript), and by Representative Skaggs concerning the statutory prohibition on the expenditure by the Public Health Service to purchase time on television, as well as any further citations that may constrain the Public Health Service in that area (page 60 of the transcript).

Let me again express my thanks, and that of the other members of the Select Committee. Your participation contributed greatly toward making the hearing a success.

Sincerely,

George Miller

GEORGE MILLER
Chairman
Select Committee on Children,
Youth, and Families

GM/j

Enclosure