

***Evaluation of  
the Juvenile Drug Court  
Diversion Program***

***March 1998***



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT

***Statistical Analysis Center  
60 The Plaza  
Dover, DE 19901  
(302) 739-4626***

172247

***Evaluation of  
the Juvenile Drug Court  
Diversion Program***

***March 1998***

***Prepared By:***

***Marsha L. Miller, Ph.D., Consultant***

***Evelyn A. Scocas, Research Analyst***

***John P. O'Connell, Director***

This report is supported in part by the City of Wilmington Comprehensive Communities Program from the United States Department of Justice.

The points of view expressed in this report do not necessarily represent the official position of the U.S. Department of Justice.

State of Delaware Document number #100703 980304.

PROPERTY OF

National Criminal Justice Reference Service (NCJRS)

Box 6000

Rockville, MD 20849-6000

## ***TABLES AND FIGURES***

<b><i>TABLES</i></b>	<b><i>PAGE</i></b>
Table One: Gender and Race/Ethnicity of the 144 Juveniles Served by the Diversion Program by Midsummer, 1997	2
Table Two: Address at the Time of Treatment	2
Table Three: Program Outcomes	3
Table Four: Juveniles who have been Re-arrested Following Treatment by Program Compliance	6
Table Five: Most Serious New Charges Incurred During or After Treatment	7
Table Six: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Race/Ethnicity	8
Table Seven: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Gender	8
Table Eight: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Residence	9
Table Nine: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Urinalysis Results	9

<b><i>FIGURES</i></b>	<b><i>PAGE</i></b>
Figure One: New Arrests during the Treatment Period	4
Figure Two: Cumulative Recidivism Rates Following Treatment Period	5
Figure Three: Cumulative Recidivism Rates Following Treatment Period	6

## Preface

### Evaluation of the Juvenile Drug Court Diversion Program

As a part of the City of Wilmington's Bureau of Justice Assistance Comprehensive Communities Program, the Family Court of Delaware, in cooperation with the City, the Attorney General's Office, the Public Defender's Office and SODAT (a private substance abuse treatment provider) established a pilot juvenile drug court diversion program. Individual and group counseling, family counseling and random urinalysis were provided targeting primarily juveniles with misdemeanor drug arrests and little criminal history. In addition extra measures were taken to keep youths in school and employed when appropriate. Routine progress reports and status hearings were maintained between the treatment staff and the Family Court. Success in the program allowed the youth to be diverted from further legal action. Failure resulted in the case moving forward as a delinquency case.

This evaluation compared three separate groups of juvenile offenders: (1) Youth that complied with and completed the Drug Court Diversion Program, (2) Youth that did not comply with the program, and (3) A matched comparison group of like offenders that had their cases handled in the same Family Court. In this study, juveniles were followed for up to one year after leaving the program.

During the program and in increasing increments of being "*at risk*" (that is; 3, 6, 9, and 12 months), the Drug Court compliance group had statistically significant results in terms of reduced frequency and severity of criminal activity. Recidivism, measured as rearrest, is at least 12 percentage points and as much as 20 percentage points lower than the comparison group. For example, after nine months the successful Drug Court youth had a recidivism rate of 23 percent compared to the non-Drug Court recidivism rate of 43 percent. Not only is the rate of rearrest lower for Drug Court youth, but those who do recidivate are arrested for less serious crimes than those in the comparison group.

This evaluation, following the initial study group review, has already had important policy impacts. The study shows that rearrest during treatment is a strong "red light" indication of future criminal involvement. This has initiated interest in studying this group of youths with the intention of developing enhanced programs for youth that otherwise would be labeled as program "failures." Also, the study identified that inner-city African-American youth are showing lower rates success in the program. Here, the goal is to design more culturally specific programs aimed at increasing their rate of success.

John P. O'Connell Jr.  
Director

## **Evaluation of the Juvenile Drug Court Diversion Program**

**March 1998**

In 1995, the Delaware Family Court, in cooperation with the city of Wilmington, instituted a diversion and treatment program for juveniles with no prior criminal records who are arrested for misdemeanor drug charges. The city of Wilmington, using funds from the Comprehensive Communities Program, contracted with SODAT to provide substance abuse treatment for the juveniles. SODAT is a nonprofit agency specializing in outpatient treatment for substance abuse for adults and juveniles. In the treatment and diversion program, eligible juveniles are offered an opportunity for avoiding adjudication by successfully completing a treatment program.

Under the agreement with the Comprehensive City grant, Delaware's Statistical Analysis Center evaluated the program. A database was created of all 144 juveniles who had been admitted into the diversion program by midsummer 1997. Demographic and program information from case files was recorded. Criminal history information on all arrests statewide for each juvenile was collected from Delaware's Criminal Justice Information System.

In addition, a comparison group was constructed by finding all arrests of juveniles for misdemeanor drug possession in New Castle County during the first half of 1995. Some of these 142 juveniles had longer and more serious criminal histories than the SODAT group. Using a stratified technique, 90 juveniles were randomly chosen to create a comparison group with equivalent criminal histories.

The goal of the evaluation is to assess the effectiveness of the Family Court SODAT program by comparing youth receiving SODAT's services with a comparable group that did not.

### **Program Activities**

SODAT provides case management services and treatment. The treatment program includes a physical exam, random monthly urinalysis, group sessions, individual counseling, and family counseling.

Of the 144 individuals involved with the SODAT treatment program, 121, or 84 percent, received or are receiving both case management and treatment services. Twenty-three individuals, 16 percent, received or are receiving only case management from SODAT with treatment provided elsewhere through other agencies such as Brandywine Counseling and Crossroads. Generally, these juveniles had already started treatment before being placed in the diversion program.

### **Description of the Population**

The mean age of the 144 juveniles served by the program is 16 years, with a range of 11 to 19. Table One shows the breakdown of gender and race/ethnicity. 80.4 percent are male; 19.6

percent female. 59.7 percent of the juveniles are white, 37.4 percent are African-American, and 2.8 percent Hispanic.

**Table One: Gender and Race/Ethnicity of the 144 Juveniles Served by the Diversion Program by Midsummer, 1997**

	White		African-American		Hispanic		TOTAL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Male</b>	64	44.4	49	34.0	3	2.1	116	80.6
<b>Female</b>	22	15.3	5	3.5	1	0.7	28	19.4
<b>Total</b>	86	59.7	54	37.5	4	2.8	144	100.0

Table Two shows the location of the addresses at which the juveniles were living during the time that they were in treatment.

**Table Two: Address at the Time of Treatment**

	Number	Percent
City of Wilmington	44	30.6
Wilmington Suburbs*	29	20.1
Elsewhere in New Castle Co.**	65	45.1
Maryland	6	4.2

• A Wilmington zip code, but the address falls outside of the city limits.

\*\* Outside of Wilmington and the Wilmington suburbs.

The drug of choice for 92.4 percent is marijuana. 5.6 percent told treatment staff that alcohol was their drug of choice, although they had also used marijuana. 2.1 percent stated that heroin was their drug of choice.

### **Program Compliance and Juvenile Justice Outcomes**

Of the 144 juveniles admitted into treatment, 81 have completed or were terminated from the diversion program at the time the data base was created. *From this point on, the analysis will address only those 81 juveniles.*

Neither a new arrest nor a urinalysis positive for drugs is automatic grounds for termination of the program. Early relapse is not uncommon in substance abuse treatment. A clinical judgment is made as to whether a juvenile is making genuine efforts to overcome his or her substance abuse problem. If however, a juvenile misses three appointments or fails to take a scheduled urinalysis, he or she is put on probation. Both the juvenile and the court are notified.

If noncompliance persists, SODAT will make a recommendation to the judge that the juvenile be terminated from the treatment program. The final decision rests with the judge.

Table Three shows four categories of compliance. The first category is juveniles who completed treatment or case management at SODAT and were not arrested during the period during which they were in the program. The second category is of juveniles who were re-arrested while in treatment but completed the treatment program. The third category is of individuals who were re-arrested and did not complete treatment. The fourth category is of individuals who did not complete the treatment program but were not re-arrested during the period in which they were under treatment.

**Table Three: Program Outcomes**

	Number	Percent
Completed without a new arrest*	47	58.0
Arrested* but completed treatment	9	11.1
Arrested* and did not complete treatment	8	9.9
Failed to complete but not arrested*	17	21.0

\* while in the treatment program

All of the juveniles who completed the treatment program without an arrest were diverted from the Family Court adjudication process. Four of the juveniles who were rearrested and failed to complete treatment were also diverted. Nine juveniles who were rearrested but nevertheless completed treatment were diverted. Seven of the juveniles who did not complete the treatment program but were not rearrested during the time in treatment were also diverted. These decisions were made for a variety of reasons. In one case, the juvenile had been accepted into the Job Corps; in another the juvenile went off to college. In some others, the juveniles had spent a long time in treatment, had made some improvement but plateaued in the treatment process. In several others, the family of the juvenile moved out of state. Although there were discussions about the need for more treatment in the new location, the juveniles and their families were not required to document this and no subsequent information is available in the files.

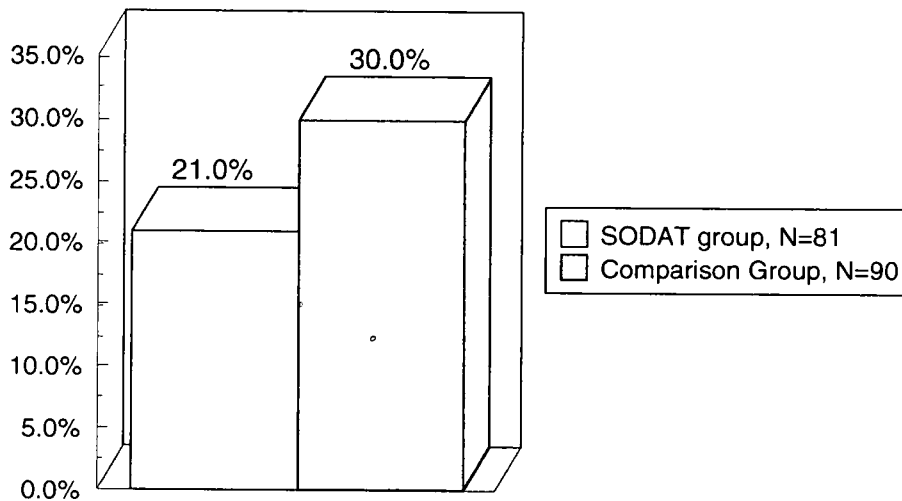
In summary, of the 81 juveniles who are no longer in treatment, 67 juveniles, 82.7 percent, have been diverted. The rest have either been convicted of their original charges, are awaiting adjudication or (in one case) have had the charge that lead to the referral to the treatment program dropped in return for a guilty plea to a subsequent charge.

### **New Offenses During Treatment**

Figure One shows the percentages of juveniles in the SODAT treatment group who were rearrested during the treatment program. The comparison group figure was constructed by treating the first four months following their drug possession arrests as a 'treatment period.' The

four month figure was used because it was the average time spent in treatment for the SODAT group.

**FIGURE ONE: New Arrests during the Treatment Period**  
Percentage of Juveniles in each category



NOTE: The figure for the SODAT group represents the percent of arrests during the actual treatment periods for each individual. The 'treatment period' for the juveniles in the comparison group is considered to be 4 months, average for the SODAT group.

### Recidivism

Recidivism data is preliminary because the diversion program has been in operation for such a short time. Recidivism results are generally followed and reported for a minimum period of one year after individuals complete or are terminated from programs. Only eighteen individuals completed or were terminated from the program twelve months before data collection.

Recidivism is defined as a new arrest. Figure Two shows the cumulative recidivism rate beginning with the time juveniles completed or were terminated from treatment and continuing through twelve months following treatment. Only those individuals who had completed or been terminated from the program for the specified follow-up period are included in each figure. Thus, the number of juveniles in each category progressively declines for the SODAT group. Although 81 juveniles are represented in the three months category, only 62 are represented in the six months category, 42 in the nine months category, and eighteen in the 12 months category.



Figure Two consistently shows a lower recidivism rate for the SODAT group than for the comparison group. At this point, none of the differences between the SODAT group and the comparison group which are shown in Figures One and Two are statistically significant, using the Independent Samples T-test. For the incidence of new arrests during treatment as shown in

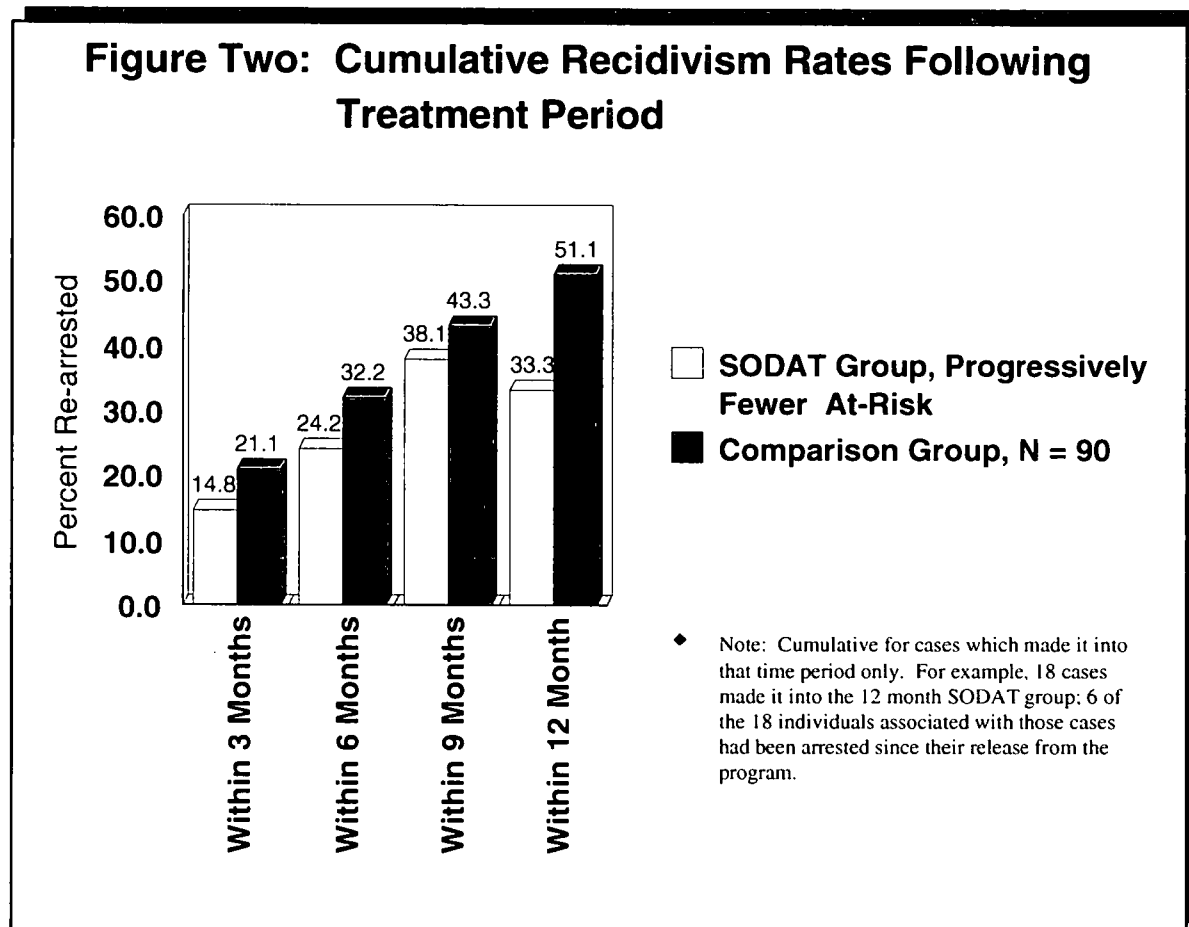


Figure One,  $p = .180$ . For the cumulative periods following treatment in Figure Two,  $p = .289$ ,  $.289$ ,  $.573$ , and  $.171$ , respectively. Keep in mind that the program is still relatively new and the number of juveniles who have gone through SODAT treatment are small; if the program results were maintained for another year the difference between treatment and non-treatment would be statistically significant.

### Arrests During Program Treatment - A Red Light Warning

A failure to comply with the requirements of the diversion program is strongly associated with later recidivism. Table Four shows that program participants who complied with the requirements of the diversion program by completing treatment and avoiding rearrest are significantly less likely to reoffend following the treatment period than non-compliant participants. Failure to complete the program increases the likelihood of recidivism. A new arrest is a red light warning showing that recidivism following the completion or termination of treatment is a likely outcome.

**Table Four: Juveniles who have been Re-arrested Following Treatment by Program Compliance**

	Re-arrested **		Not Re-arrested	
	Number	Percent	Number	Percent
Completed without a new arrest*	7	14.9	40	85.1
Arrested but completed treatment	8	88.9	1	11.1
Arrested and did not complete	5	62.5	3	37.5
Failed to complete but not arrested*	5	29.4	12	70.6

\* while in the treatment program

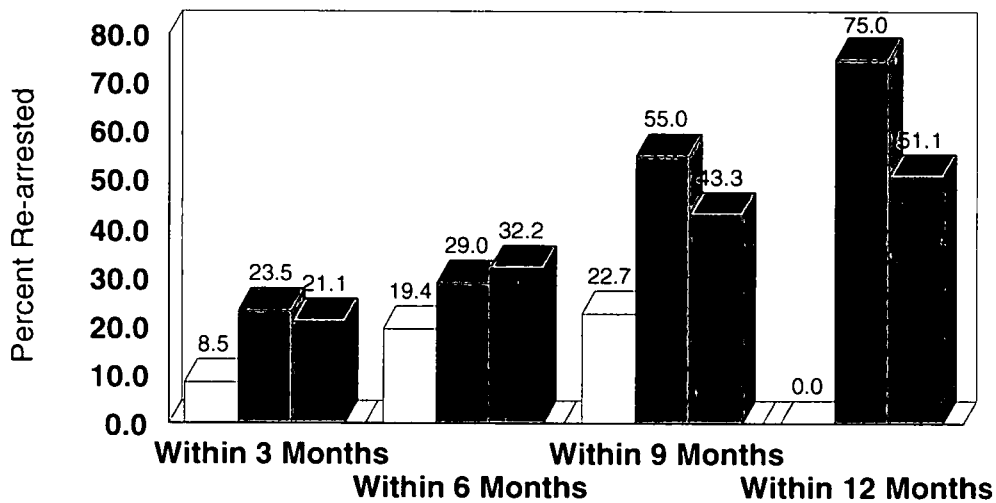
\*\* Out of state criminal records not checked.

Using Independent Sample T-test for 'Completed without a new arrest',  $p = .000$

May not use T-test on other categories due to small population sizes.

**Figure Three: Cumulative Recidivism Rates Following Treatment Period**

SODAT Compliance Group, Progressively Fewer At-Risk  
 SODAT Non-Compliance Group, Progressively Fewer At-Risk  
 Comparison Group



◆ Note: Cumulative for cases which made it into that time period only. For example, 10 cases made it into the 12 month SODAT Compliance group; none of the 10 individuals associated with those cases had been arrested since their release from the program.

Population Numbers for Figure Three				
	At Risk 3 Months	At Risk 6 Months	At Risk 9 Months	At Risk 12 Months
<b>SODAT Compliance Group</b>	47	31	22	10
<b>SODAT Non-Compliance Group</b>	34	31	20	8
<b>Comparison Group</b>	90	90	90	90

Figure Three shows the striking differences in recidivism for the SODAT Compliance group, those who do not comply and the non-treated Comparison group. The recidivism rate for the SODAT Compliance group is as high as 23 percent after twelve months. In Comparison the recidivism rate for the non-treated Comparison group is 51 percent and the Non-Compliance group is 75 percent. These differences between the SODAT Compliance group and the other groups are not only substantial in terms of rehabilitation and public safety concerns; they are also statistically significantly different. For example, at nine months T-test of proportions for Compliance versus Comparison yields  $p = .077$ , while Compliance versus Non-Compliance yields  $p = .032$ . At twelve months T-Test of proportions for Compliance versus Comparison yields  $p = .002$ ; Compliance versus Non-Compliance yields  $p = .000$ .

Once again combining all SODAT participants, Table Five shows the most serious new charges incurred by juveniles after treatment up until 12 months following treatment. The SODAT program participants are less likely to be arrested in any category of offense, most notably for felonies, than are juveniles in the comparison group.

**Table Five: Most serious new charges incurred during or after treatment**

	SODAT Percent	Comparison Group Percent
No new charges	69.1	48.9
Violent Felony	14.8	20.0
Nonviolent Felony	2.5	10.0
Drug Misdemeanor	3.7	6.7
Other Misdemeanor	9.9	14.4

**Risk factors associated with recidivism in the SODAT treatment group**

The relationships between demographic and other factors and recidivism were also examined. For the purposes of this part of the analysis, demographic and other variables were related to rearrest at any time -- during or up to 12 months after treatment in Tables Six through Nine. All 81 individuals who have completed or been terminated from treatment are included, regardless of how long they have been out of the treatment program.

**Table Six: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Race/Ethnicity**

	Re-arrested		Not Re-arrested	
	Number	Percent	Number	Percent
African-American	17	54.8	14	45.2
Hispanic	2	50.0	2	50.0
White	10	21.7	36	78.3

Note: Using Pearson's Chi-Square,  $p = .01$

Table Six shows that minority juveniles are significantly more likely to be re-arrested as compared to white juveniles. Table Seven shows that boys are more likely than girls to be re-arrested although this difference is not statistically significant.

**Table Seven: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Gender**

	Re-arrested		Not Re-arrested	
	Number	Percent	Number	Percent
Male	26	38.8	41	61.2
Female	3	21.4	11	78.6

Note: Using Pearson's Chi-Square,  $p = .217$

**Table Eight: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Residence**

	Re-arrested		Not Re-arrested	
	Number	Percent	Number	Percent
City of Wilmington	17	60.7	11	39.3
Other	12	22.6	41	77.4

Note: Using Pearson's Chi-Square,  $p = .001$

Table Eight shows that juveniles who reside in the city of Wilmington are significantly more likely to be re-arrested than juveniles who reside outside the city. Table Nine shows that juveniles who tested positive for drug use after treatment had begun were more likely to be re-arrested than those who did not although this difference was not statistically significant. A slight majority of the those testing positive had nevertheless not been re-arrested.

**Table Nine: Juveniles Completing or Terminated from Treatment who have been Re-arrested by Urinalysis Results**

	Re-arrested		Not Re-arrested	
	Number	Percent	Number	Percent
Positive Drug Results	14	48.3	15	51.7
Negative Drug Results	14	27.5	37	72.5

Notes: A positive result means that drug use was detected after treatment was begun. One juvenile who was terminated for refusing to submit to a urinalysis has been re-arrested on a misdemeanor drug charge. He is excluded from the chart. Using Pearson's Chi Square,  $p = .114$

PROPERTY OF  
National Criminal Justice Reference Service (NCJRS)  
Box 6000  
Rockville, MD 20849-6000