

Drug Early Warning System

Working Together to Identify Emerging Drug Trends in Maryland

Juvenile Offender Population Urine Screening Program (OPUS)

Detention Study

September-November 2000

**Report prepared
June 2001 - Revised**

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Juvenile OPUS is a component of the DEWS Program. Juvenile OPUS and other findings are disseminated in DEWS faxes. The DEWS Fax is published monthly. To receive DEWS Faxes, please contact CESAR: 301-403-8329, 1-877-234-DEWS (toll-free), 301-403-8342 (fax), dews@cesar.umd.edu, www.cesar.umd.edu/dews.htm.

Supported by the Cabinet Council on Criminal and Juvenile Justice, Lt. Governor Kathleen Kennedy Townsend, Chair, and the Governor's Office of Crime Control & Prevention.

ABSTRACT

Five hundred and fifty-five youths processed in one of four Department of Juvenile Justice (DJJ) detention facilities provided a urine specimen. Almost half (48%) of the youths tested positive for at least one drug, primarily marijuana (43%). Between two and four percent of the youths tested positive for cocaine, opiates, or amphetamines. In comparison to the prior Detention Study conducted in January-May 2000, the percentage of youths in Southern Maryland who tested positive for marijuana more than doubled, from 15% to 37%.

OPUS is designed to provide insight into emerging drug trends among the juvenile offender population. It should be noted that OPUS drug use patterns may not be typical of the general youth population. However, prior research has indicated that offender urinalysis results provide advance warning of drug epidemics in the general population.

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Juvenile Offender Population Urinalysis Screening (OPUS)

PROJECT OVERVIEW

Juvenile OPUS is one component of Maryland's Drug Early Warning System (DEWS), an initiative of the Cabinet Council on Criminal and Juvenile Justice, Lt. Governor Kathleen Kennedy Townsend, Chair. DEWS is supported by a grant from the Governor's Office of Crime Control & Prevention.

The Juvenile OPUS Study was implemented by the Center for Substance Abuse Research (CESAR) in June 1998 as a urinalysis monitoring program for juveniles processed by the Department of Juvenile Justice (DJJ). The project goals are to monitor changes in drug use and to identify emerging drugs of abuse among the juvenile offender population.

The Juvenile OPUS Project takes place in two venues: Detention and Intake. Twice a year the Detention Study obtains urine specimens only from youths newly admitted to DJJ's five detention facilities. The Intake Study obtains interviews and urine specimens from youths being assessed in DJJ county offices.

This report presents results from the Detention Study conducted between September and November 2000.¹ A final table compares the urine test results collected for the OPUS Detention Study in the last three data collection periods. A final figure compares the percentage of juveniles testing positive for marijuana by region of residence in the last three data collection periods.

OPUS is designed to provide insight into emerging drug trends among the juvenile offender population. It should be noted that OPUS drug use patterns may not be typical of the general youth population. However, prior research has indicated that offender urinalysis results provide advance warning of drug epidemics in the general population.

¹The Charles H. Hickey Jr. School was unable to conduct data collection during this period. Therefore, this report presents results from data collected in four facilities between September and November 2000.

METHODS

- Nurses obtained voluntary and anonymous urine specimens from youths detained in four of Maryland's five DJJ detention facilities (Carter, Cheltenham, Noyes, and Waxter).
- Only youths who had been admitted to the facility during the last 72 hours and who were not being transferred from another secure facility were included.
- After obtaining informed consent, the nurses obtained a voluntary and anonymous urine specimen. The specimen was sent to a laboratory and analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, phencyclidine (PCP), and propoxyphene.
- A candy bar was offered to respondents as an incentive for participation.

FINDINGS

Response Rates and Characteristics of Tested Juveniles

- 94% of the youths approached provided a urine specimen (Table 1).
- The majority of the tested juveniles were male (84%) and black (68%) (Table 2).
- 50% of the tested youths were 16 or older (Table 2).
- 36% of the tested youths were charged with violent offenses, 28% with property offenses, and 22% with drug-related offenses (Table 2).
- Almost one-third of the tested youths resided in Baltimore City (32%), followed by the D.C. metropolitan area (24%), and the area surrounding Baltimore (19%) (Table 2).

Table 1
Response Rates, by Detention Facility²

Facility	Number of youths approached	Percentage of youths who provided specimen
	<u>N</u>	<u>%</u>
Waxter	(82)	99
Carter	(68)	97
Cheltenham	(387)	94
Noyes	(55)	86
Total	(592)	94

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

²The Charles H. Hickey Jr. School was unable to conduct data collection during this period. Therefore, this report presents results from data collected in four facilities between September and November 2000.

Table 2
Demographic Characteristics of Tested Respondents
(N=555)

Characteristic	<u>%</u>
<u>Gender</u>	
Male	84
<u>Race/Ethnicity</u>	
Black	68
White	28
Hispanic	3
Other	1
<u>Age</u>	
13 or younger	9
14	17
15	24
16	24
17 or older	26
	} 50%
<u>Offense Charge</u> ^{3*}	
Violent	36
Property	28
Drug-related	22
Other	14
<u>Region of Residence</u> **	
Baltimore City	32
D.C. Metro Area	24
Baltimore Surrounding Area	19
Eastern Shore	11
Southern Maryland	7
Western Maryland	3
Washington D.C.	2
Out of state	1

*Property offenses include arson, breaking and entering, burglary, destruction of property, larceny/theft, stolen property, stolen vehicle, and trespassing. Violent offenses include assault, attempted murder, carjacking, homicide, manslaughter, robbery, sexual assault/rape, sex offense, and weapons. Drug-related crimes include drug, tobacco, and alcohol possession and sale, and DUI/DWI. Other offenses include unauthorized use of vehicles, truancy, and public peace.

**Baltimore Surrounding Area includes Anne Arundel, Baltimore, Carroll, Harford, and Howard counties. D.C. Metro area includes Frederick, Montgomery, and Prince George's counties. Eastern Shore includes Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties. Western Maryland includes Allegany, Garrett, and Washington counties. Southern Maryland includes Calvert, Charles, and St. Mary's counties.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

³Offense charge data were missing for 20 juveniles tested. Region of residence data were missing for two juveniles tested.

FINDINGS

Urine Test Results

- 48% of the youths (49% of males, 45% of females) tested positive for at least one drug, primarily marijuana (Table 3).
- 44% of males and 36% of females tested positive for marijuana (Table 3).
- Besides marijuana, other drugs were rarely detected—amphetamines (4%), cocaine (3%), and opiates (2%) (Table 3).
- Of the 19 juveniles who tested positive for cocaine, 15 were male. Eighteen were 16 or older. Ten were black and eight were white. Eight were charged with a drug-related offense, four with property offenses, and three with violent offenses. Twelve were from Baltimore City or its surrounding area, three from the Eastern Shore, two from the D.C. metropolitan area, and two from Southern Maryland. Sixteen were positive for more than one drug.
- Of the 13 juveniles who tested positive for opiates, eight were male; nine were white, three were black, and one was Hispanic. Eleven were 17 or older. Ten were from Baltimore City or its surrounding area, two were from the Eastern Shore, and one was from the D.C. metropolitan area. Four were charged with a drug-related offense. Eight were positive for more than one drug.
- Of the 22 youths who tested positive for amphetamines, nine stated that they were taking medication prescribed by a doctor. Medications such as Adderall, Depakote, Zoloft, and Risperdal, which are prescribed for attention deficit disorders and other mood disorders, were reported. The majority of the youths who tested positive for amphetamines were charged with either violent or property offenses.

Table 3
Urine Test Results, by Gender

	Males (N=466)	Females (N=89)	Total (N=555)
	<u>%</u>	<u>%</u>	<u>%</u>
<u>Positive For:</u>			
Marijuana	44	36	43
Cocaine	3	5	3
Opiates	2	6	2
Amphetamines*	4	3	4
Any Drug (of 10)	49%	45%	48%

Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, PCP, and propoxyphene. The amphetamine-positive tests are confirmed for amphetamines, methamphetamines, phenylpropanolamine, and MDMA.

*Amphetamine urinalysis results were missing for one male.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

Correlates of Testing Positive for Drugs

- Youths residing in Baltimore City were most likely to test positive for marijuana (52%); 56% were positive for any drug (Table 4).
- The percentage of youths who tested positive for a drug increased steadily with age. More than half (56%) of the youths 17 and older tested positive for any drug; 15% of them tested positive for amphetamines, cocaine, or opiates (Figure 1).
- Youths charged with drug-related offenses were most likely to test positive; 64% were positive for marijuana and 71% tested positive for any drug (Table 5).
- Youths tested at the Alfred D. Noyes Children's Center were least likely to test positive for any drug (17%) (Table 6). Gender, ethnicity, age, and charge were analyzed and were not found to account for this difference.

Table 4
Urine Test Results, by Region of Residence

	Baltimore City (N=174)	Baltimore Surrounding (N=107)	D.C. Metro (N=134)	Eastern Shore (N=62)	Western Maryland (N=17)	Southern Maryland (N=41)	Total (N=535)*
<u>Positive for:</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Marijuana	52	43	37	39	24	37	43
Cocaine	3	7	2	5	0	5	4
Opiates	2	6	1	3	0	0	2
Amphetamines	1	6	4	10	6	5	4
Any Drug (of 10)	56%	55%	40%	44%	29%	42%	48%

Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, PCP, and propoxyphene. The amphetamine-positive tests are confirmed for amphetamines, methamphetamines, phenylpropanolamine, and MDMA.

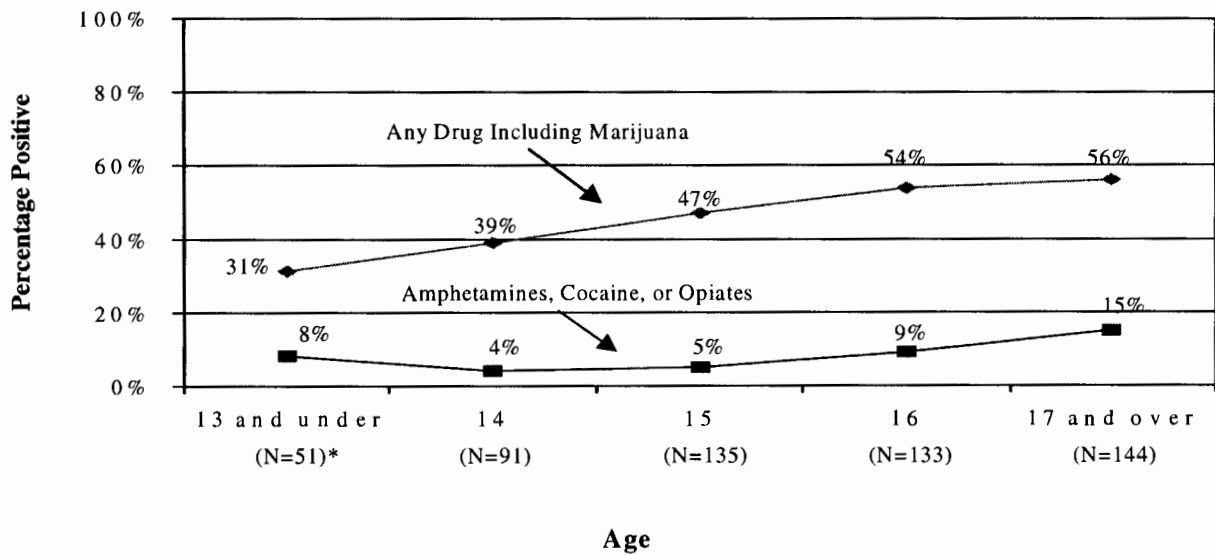
Baltimore Surrounding Area includes Anne Arundel, Baltimore, Carroll, Harford, and Howard counties. D.C. Metro area includes Frederick, Montgomery, and Prince George's counties. Eastern Shore includes Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties. Western Maryland includes Allegany, Garrett, and Washington counties. Southern Maryland includes Calvert, Charles, and St. Mary's counties.

*Data for 18 juvenile detainees were omitted because they lived outside of Maryland, residence data was missing for another one detainee, and an amphetamine result was missing from one Baltimore City detainee.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

Figure 1
Percentage Positive for Any Drug including Marijuana, or Positive For
Amphetamines, Cocaine, or Opiates, by Age

(N=554 Juvenile Detainees)



Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, PCP, and propoxyphene. The amphetamine-positive tests are confirmed for amphetamines, methamphetamine, phenylpropanolamine, and MDMA.

*An amphetamine result was missing from one youth in the 13 and under category.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park. Juvenile OPUS Detention Study Report, June 2001-Revised.

Table 5
Urine Test Results for Marijuana and Any Drug, by Offense*

	Drug-Related	Property**	Violent	Other	Total
	(N=120)	(N=147)	(N=194)	(N=74)	(N=535)
Positive For:					
Marijuana	64%	46%	34%	31%	44%
Any Drug (of 10)	71%	50%	38%	38%	49%

Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, PCP, and propoxyphene. The amphetamine-positive tests are confirmed for amphetamines, methamphetamines, phenylpropanolamine, MDMA.

*Offense charge data were missing for 20 juveniles tested.

**Amphetamine results were missing for one juvenile tested and two urine specimens were classified as quantity not sufficient enough to test.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

Table 6
Urine Test Results for Marijuana and Any Drug, by Facility

	Waxter	Carter	Cheltenham	Noyes	Total
	(N=80)	(N=66)	(N=362)	(N=47)	(N=555)
Positive For:					
Marijuana	38%	39%	49%	11%	43%
Any Drug (of 10)	45%	44%	54%	17%	48%

Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, PCP, and propoxyphene. The amphetamine-positive tests are confirmed for amphetamines, methamphetamines, phenylpropanolamine, and MDMA.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

OPUS DETENTION STUDY RESULTS OVER THREE TIME PERIODS

This section presents comparisons of the urinalysis results across three data collection periods (February-May 1999, January-May 2000, and September-November 2000) of the Detention Study. Prior OPUS reports may be accessed at www.cesar.umd.edu, or by contacting CESAR directly (301-403-8329).

- Results from the three data collection periods showed few changes (Table 7).
- In all three time periods, youths were positive almost exclusively for marijuana. Marijuana-positive urinalysis results ranged from 39% to 43% (Table 7).
- The percentage of youths in Southern Maryland who tested positive for marijuana increased significantly over the three data collection periods (Figure 2); these differences hold for both youths under 16 and youths over 16 (Data not shown).

Table 7
Urine Test Results Over Three Data Collection Periods⁴

	February-May 1999	January-May 2000	September-November 2000
<u>Positive For:</u>	(N=545)	(N=802)	(N=555)
Marijuana	39	42	43
Cocaine	2	1	3
Opiates	2	1	2
Amphetamines*	1	1	4
Any Drug (of 10)	42%	43%	48%

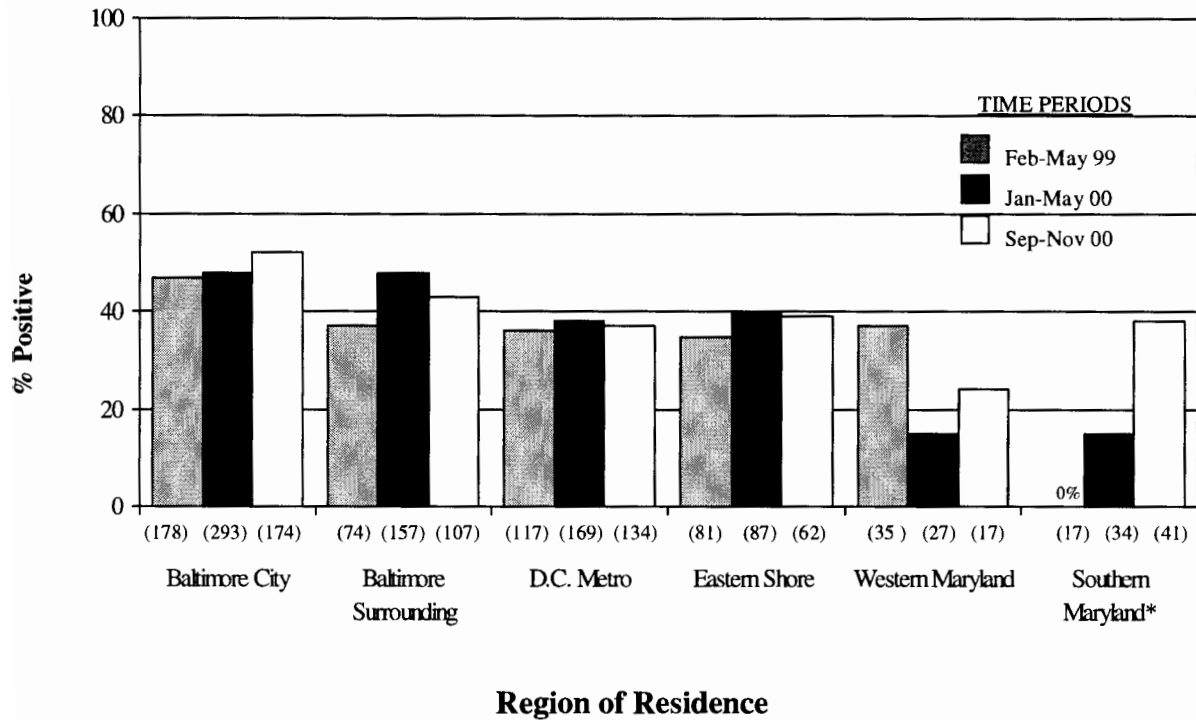
Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, methaqualone, opiates, PCP, and propoxyphene. The amphetamine-positive tests are confirmed for amphetamines, methamphetamines, phenylpropanolamine, and MDMA.

*In the most recent collection period, September-November 2000, amphetamine urinalysis results were missing for one juvenile tested.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.

⁴In the September-November 2000 data collection period, four facilities participated. To ensure that the loss of one facility did not affect results, we computed estimates for the same four facilities across three time periods and found no differences in the pattern of results.

Figure 2
Percentage Testing Positive for Marijuana,
by Region of Residence and Three Data Collection Periods



*In Southern Maryland, 0% of the respondents tested positive for marijuana in the first time period, February-May 1999.

Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, marijuana, cocaine, methadone, methaqualone, opiates, PCP, and propoxyphene.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, June 2001 - Revised.