

Drug Early Warning System



Working Together to Identify Emerging Drug Trends in Maryland

Juvenile Offender Population Urinalysis Screening Program (OPUS)

Detention Study

March-June 2002

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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.

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ABSTRACT

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.

For the March-June 2002 Detention Study, 427 youths who were processed in one of five of the Department of Juvenile Justice (DJJ) detention facilities provided a urine specimen. Forty-seven percent of the youths tested positive for at least one drug, primarily marijuana (45%). Cocaine was detected in 5% of all juveniles, while opiates were detected in 2% of all juveniles, and amphetamines were detected in 1% of all juveniles (Table 3).

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 those 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)

I. PROJECT OVERVIEW

Juvenile OPUS is one component of Maryland's Drug Early Warning System (DEWS), and 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. Once a year the Detention Study obtains urine specimens only from youths newly admitted to the DJJ's five detention facilities. The Intake Study obtains interviews and urine specimens from youths being assessed in the DJJ county offices.

This report presents results from the Detention Study conducted between March and June 2002. A final table compares the urinalysis test results collected for the OPUS Detention Study in the last six data collection periods.

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II. METHODS

- Nurses obtained voluntary and anonymous urine specimens from youths detained in Maryland's five DJJ detention facilities (Carter, Cheltenham, Hickey, Noyes, and Waxter).
- The only youths included were those who had been admitted to the facility within the last 72 hours and who had not been transferred from another secure facility.
- 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. The amphetamine-positive tests were confirmed for amphetamines, methamphetamines, and MDMA.
- A candy bar was offered to respondents as an incentive for participation.

III. FINDINGS

Response Rates and Characteristics of Tested Juveniles

- 95% of the 448 youths approached provided a urine specimen (Table 1).
- The majority of the tested juveniles were male (88%) (Table 2).
- 78% of the tested youths were 15 years or older; 30% were 17 or older (Table 2).
- The most common charge was a property offense (30%), followed by personal (29%) and drug-related offenses (24%) (Table 2).
- About one half (51%) of the total youths reside in Central Maryland (Table 2).

Table 1. Response Rates, by Detention Facility

Facility	Number of youths approached	Percentage of youths who provided a specimen
	<u>n</u>	<u>%</u>
Carter	64	95
Cheltenham	256	98
Hickey	30	83
Noyes	61	89
Waxter	37	97
Total	448	95

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.

Table 2. Demographic Characteristics of Tested Respondents¹
(n=426)

Characteristic	%
<u>Gender</u>	
Male	88
<u>Race/Ethnicity</u>	
Black	70
White	25
Hispanic	3
Other	2
<u>Age</u>	
13 or younger	9
14	13
15	25
16	23
17 or older	30
	} 78%
<u>Charge</u>	
Property	30
Personal	29
Drug-related	24
Miscellaneous	14
Status	3
<u>Region of Residence</u>	
Central Maryland	51
Southern Maryland	29
Eastern Maryland	12
Western Maryland	4
D.C. and out of state	4

Note: Personal offenses include murder, assault, robbery, domestic assault, sexual assault/rape, sex offenses, kidnapping, threat to person, and reckless endangerment. Property offenses include arson, burglary, breaking and entering, larceny/theft, stolen property, stolen vehicle, fraud, and threat to property. Drug-related offenses include drug, tobacco, and alcohol possession and sale, DUI/DWI, under the influence, drug manufacturing, and drug paraphernalia. Status offenses include truancy, CINS, home detention, run away, possession of alcohol (citation), curfew, tobacco violation, failed placement, and school suspension. Miscellaneous offenses include weapons, probation/parole, warrant, resisting arrest, public peace/disorderly, trespassing, prostitution, manufacturing explosives, telephone/computer misuse, and traffic violations.

Note: Western Maryland includes Allegany, Garrett, Frederick, and Washington counties. Central Maryland includes Baltimore City, Baltimore, Carroll, Cecil, Harford, Howard, and Montgomery counties. Southern Maryland includes Anne Arundel, Calvert, Charles, Prince George's, and St. Mary's counties. Eastern Maryland includes Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.

¹ Gender and race information was missing for four juveniles, age information was missing for ten juveniles, charge information was missing for two juveniles, and region of residence information was missing for 91 juveniles.

IV. FINDINGS

Urinalysis Test Results (Table 3)

- 47% of the youths (46% of males, 56% of females) tested positive for at least one drug, primarily marijuana.
- 44% of males and 52% of females tested positive for marijuana.
- Amphetamines were detected in 1% of all juveniles. Of the four juveniles who tested positive for amphetamines, all were male. Three were under the age of 16. Three were charged with a property offense and one was charged with a personal offense. All were positive for amphetamines only. One juvenile who tested positive for amphetamines was taking the prescription medications Paxil and Clonidine. Another juvenile was taking the prescription medications Adderall, Depakote, and Prozac, while two juveniles were only taking the prescription medication Adderall.
- Cocaine was detected in 5% of all juveniles. Of the twenty juveniles who tested positive for cocaine, sixteen were male and over the age of 16. Nine were charged with a drug-related offense, five were charged with a property offense, four were charged with a miscellaneous offense, and two were charged with a status offense. Eighteen tested positive for more than one drug.
- Opiates were detected in 2% of all juveniles. Of the seven juveniles who tested positive for opiates, four were male. Four were over the age of 16. Two were charged with a drug-related offense, two were charged with a property offense, one with a status offense, one with a personal offense, and one with a miscellaneous offense. Six of the seven tested positive for more than one drug.
- One youth tested positive for MDMA. The youth was a 15-year-old male charged with rape. He was also positive for marijuana and was not taking any prescription medications.

Table 3. Urinalysis Test Results, by Gender²

	Males (n=372)		Females (n=50)		Total (n=422)	
	<u>f</u>	<u>%</u>	<u>f</u>	<u>%</u>	<u>f</u>	<u>%</u>
<u>Positive For:</u>						
Marijuana	163	44	26	52	189	45
Cocaine	16	4	4	8	20	5
Opiates	4	1	3	6	7	2
Amphetamines	4	1	0	0	4	1
MDMA	1	<1	0	0	1	<1
Any Drug (of 10)	171	46	28	56	199	47

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

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.

² Gender information was missing for four juveniles, therefore the results are based on 422 juveniles instead of 426.

V. FINDINGS

Correlates of Testing Positive for Drugs

- There were minor differences among region of residences for juveniles testing positive for marijuana and for any drug (of 10), but juveniles in Eastern Maryland had the highest rate of cocaine positives (10%) (Table 4).
- The percentage of youths who tested positive for any drug increased with age up to age 16. Almost half (44%) of the youths 17 and older tested positive for any drug (of 10); 9% tested positive for amphetamines, cocaine, or opiates (Figure 1).
- Sixty percent or more of the juveniles charged with a drug-related offense or warrant offense tested positive for any drug (Table 5).
- Approximately 50% of the juveniles tested at the Detention facilities Carter, Cheltenham, and Waxter tested positive for any drug. At another detention facility, Noyes, positive rates were comparatively much lower (24%) for any drug (Table 6).

**Table 4. Urinalysis Test Results, by Region of Residence
(n=322 juvenile detainees)**

	Western Maryland (n=13)	Central Maryland (n=171)	Southern Maryland (n=97)	Eastern Maryland (n=41)	Total (n=335)⁴
<u>Positive for:</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Marijuana	54	47	52	39	47
Cocaine	0	5	3	10	5
Opiates	0	1	2	0	1
Amphetamines ³	0	2	1	0	1
MDMA	0	<1	0	0	0
Any Drug (of 10)	54	50	55	44	50

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

Note: Western Maryland includes Allegany, Garrett, Frederick, and Washington counties. Central Maryland includes Baltimore City, Baltimore, Carroll, Cecil, Harford, Howard, and Montgomery counties. Southern Maryland includes Anne Arundel, Calvert, Charles, Prince George's, and St. Mary's counties. Eastern Maryland includes Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester counties.

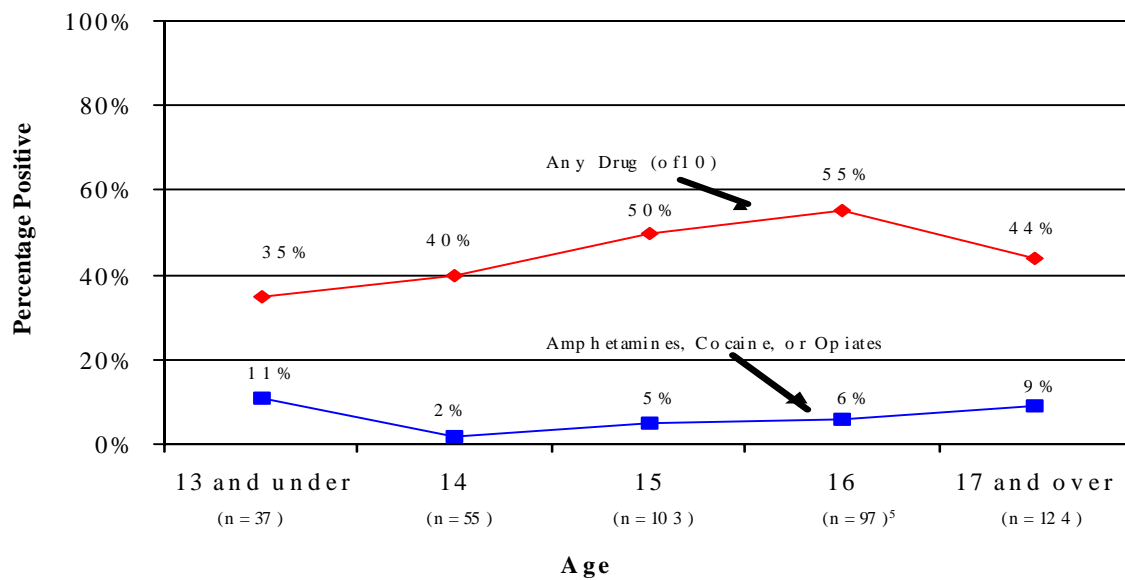
Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.

³ Data was missing for one amphetamine test.

⁴ Thirteen juveniles were classified as 'out of state.'

Figure 1. Percentage Positive for Any Drug (of 10), or Positive For Amphetamines, Cocaine, or Opiates, by Age

(n=416 Juvenile Detainees)



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

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park. Juvenile OPUS Detention Study Report, September 2002.

⁵ Percentages for 16-year-olds are based on 96 cases due to a missing test result for amphetamines.

Table 5. Percentage Positive for Marijuana and Any Drug, by Charge⁶

Charge	Percentage Positive for Marijuana	Percentage Positive for Any Drug (of 10)
Warrant (14)	86%	86%
Drug-related (101)	60%	62%
Property (126)	41%	44%
Probation (22)	41%	46%
Status (15)	33%	40%
Personal (124)	31%	32%
Miscellaneous (22)	59%	59%
Total (426)	45%	47%

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

Note: Personal offenses include murder, assault, robbery, domestic assault, sexual assault/rape, sex offenses, kidnapping, threat to person, and reckless endangerment. Property offenses include arson, burglary, breaking and entering, larceny/theft, stolen property, stolen vehicle, fraud, and threat to property. Drug-related offenses include drug, tobacco, and alcohol possession and sale, DUI/DWI, under the influence, drug manufacturing, and drug paraphernalia. Status offenses include truancy, CINS, home detention, run away, possession of alcohol (citation), curfew, tobacco violation, failed placement, and school suspension. Miscellaneous offenses include weapons, resisting arrest, public peace/disorderly, trespassing, prostitution, manufacturing explosives, telephone/computer misuse, and traffic violations.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.

⁶ Includes two persons with missing charge information.

Table 6. Percentage Positive for Marijuana and Any Drug, by Facility

	Carter (n=61)	Cheltenham (n=250)	Hickey (n=25)	Noyes (n=54)	Waxter (n=36)	Total (n=426)
<u>Positive For:</u>						
Marijuana	48%	50%	32%	20%	50%	45%
Any Drug (of 10)	51%	52%	32%	24%	56%	47%

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

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.

VI. OPUS DETENTION STUDY RESULTS OVER SIX TIME PERIODS (Table 7)

This section presents comparisons of the urinalysis results of Detention Studies across six data collection periods. Prior OPUS reports may be accessed at www.cesar.umd.edu, or by contacting CESAR directly (301-403-8329).

- Results from the six data collection periods were consistently stable.
- In all time periods, youths were most likely to test positive for marijuana.
- Marijuana positive urinalysis results ranged from 39% to 45% over the six data collection periods.

Table 7. Urinalysis Test Results Over Six Data Collection Periods

	February- May 1999 (n=545)	January- May 2000 (n=802)	September- November 2000 (n=555)	March- June 2001 (n=409)	September- November 2001 (n=483)	March- June 2002 (n=426)
<u>Positive For:</u>						
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Marijuana	39	42	43	41	41	45
Cocaine	2	1	3	3	3	5
Opiates	2	1	2	2	1	2
Amphetamines	1	1	4	4	1	1
PCP	**	**	2	2	1	2
Benzodiazepines	1	**	1	1	**	**
Propoxyphene	**	**	**	1	**	**
MDMA	**	**	**	2	**	**
Any Drug (of 10)	42%	43%	48%	46%	43%	47%

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

**Occurred in zero or less than one percent. Barbiturate and methadone positives occurred in zero percent or less than one percent across all data collection periods and have been omitted from the table.

Source: Center for Substance Abuse Research (CESAR), University of Maryland, College Park, Juvenile OPUS Detention Study Report, September 2002.