

Drug **E**arly **W**arning **S**ystem

Working Together to Identify Emerging Drug Trends in Maryland

Juvenile Offender Population Urinalysis Screening Program (OPUS)

Detention Study

March-June 2001

**Report prepared
July 2001**

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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

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.

Four hundred and eighty-five youths processed in one of five Department of Juvenile Justice (DJJ) detention facilities provided a urine specimen. Forty-six percent of the youths tested positive for at least one drug, primarily marijuana (41%). Five percent of the tested youths were positive for amphetamines, three percent were positive for cocaine, and two percent were positive for opiates (Table 7).

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)

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 March and June 2001. A final table compares urinalysis test results collected for the OPUS Detention Study in the last four data collection periods. A final figure compares the percentage of juveniles testing positive for marijuana by region of residence in the last four 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 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.

METHODS

- Nurses obtained voluntary and anonymous urine specimens from youths detained in Maryland's five DJJ detention facilities (Carter, Cheltenham, Hickey, Noyes, and Waxter).
- Only youths who had been admitted to the facility during the past 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, opiates, phencyclidine (PCP), propoxyphene, and MDMA. MDMA has been substituted for methaqualone in the any drug (of 10) category, as no positives for methaqualone were ever detected.
- A candy bar was offered to respondents as an incentive for participation.

FINDINGS

Response Rates and Characteristics of Tested Juveniles

- 96% of the 508 youths approached provided a voluntary and anonymous urine specimen (Table 1).
- The majority of the tested juveniles were male (94%) (Table 2).
- 80% of the tested youths were 15 or older and 26% were 17 or older (Table 2).
- 35% of the tested youths were charged with a violent offense, 34% were charged with a property offense, and 17% were charged with a drug-related offense (Table 2).
- 68% of the tested youths resided in a metropolitan area: Baltimore City (25%), the D.C. metro area (23%), or the Baltimore metro area (20%) (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	82	95
Cheltenham	269	95
Hickey	29	83
Noyes	60	98
Waxter	68	100
Total	508	96

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

Table 2
Demographic Characteristics of Tested Respondents
(N=409)¹

Characteristic	%
<u>Gender</u>	
Male	94
<u>Race/Ethnicity</u>	
Black	63
White	34
Hispanic	3
<u>Age</u>	
13 or younger	8
14	12
15	25
16	29
17 or older	26
<u>Offense*</u>	
Violent	35
Property	34
Drug-related	17
Other	14
<u>Region of Residence**</u>	
Baltimore City	25
D.C. Metro Area	23
Baltimore Metro Area	20
Eastern Shore	18
Southern Maryland	6
Western Maryland	4
D.C. and out of state	4

} 80%

*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 metro 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, July 2001.

¹ Urine test results were missing for 70 respondents due to laboratory error. Six urine specimens were not tested because of insufficient quantity. Gender information was missing for six respondents; race, age, and region information were missing for one respondent; offense information was missing for seven respondents.

FINDINGS

Urinalysis Test Results

- 46% of the youths (47% of males, 35% of females) tested positive for at least one drug, primarily marijuana (Table 3).
- 42% of males and 31% of females tested positive for marijuana (Table 3).
- Amphetamines were detected in 5% of all juveniles (Table 3). Of the 18 juveniles who tested positive for amphetamines, all were male and eight were 16 or older. Five were charged with drug-related offenses, five with property offenses, seven with violent offenses, and one with an 'other' offense. Eight were from Baltimore City or its surrounding area, one from the Eastern Shore, three from the D.C. metropolitan area, four from Southern Maryland and two from out of state. Six were positive for more than one drug.
- Cocaine was detected in 3% of all juveniles (Table 3). Of the 11 juveniles who tested positive for cocaine, nine were male and seven were 17 or older. Four were charged with drug-related offenses, two with property offenses, one with a violent offense, and four with 'other' offenses. Six were from Baltimore City or its surrounding area, four from the Eastern Shore, and one from out of state. Ten were positive for more than one drug.
- Opiates were detected in 2% of all juveniles (Table 3). Of the eight juveniles who tested positive for opiates, seven were male and seven were 17 or older. Three were charged with drug-related offenses, three with property offenses, and two with other offenses. All were from Baltimore City or its surrounding area, and all were positive for more than one drug.

Table 3
Urinalysis Test Results, by Gender

	Males (N=377)		Females (N=26)		Total (N=403)	
	<u>f</u>	<u>%</u>	<u>f</u>	<u>%</u>	<u>f</u>	<u>%</u>
<u>Positive For:</u>						
Marijuana	160	42	8	31	168	42
Cocaine	9	2	2	8	11	3
Opiates	7	2	1	4	8	2
Amphetamines	18	5	0	0	18	5
Any Drug (of 10)	178	47	9	35	187	46

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

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

FINDINGS

Correlates of Testing Positive for Drugs

- Fifty-five percent of youths residing in Baltimore City were positive for any drug, with 52% of youths testing positive for marijuana. Fifty-six percent of youths residing in the Baltimore metro area tested positive for any drug; 51% were positive for marijuana (Table 4).
- The percentage of youths who tested positive for any drug increased with age. More than half (62%) of the youths 17 and older tested positive for any drug; 13% of these youths tested positive for amphetamines, cocaine, or opiates (Figure 1).
- Youths charged with drug-related offenses were most likely to test positive for any drug; 64% tested positive for any drug (of 10), while 58% were positive for marijuana (Table 5).

Table 4
Urinalysis Test Results, by Region of Residence*
(N=391 Juvenile Detainees)

	Baltimore City (N=101)	Baltimore Metro Area (N=79)	D.C. Metro Area (N=94)	Eastern Shore (N=75)	Western Maryland (N=17)	Southern Maryland (N=25)	Total (N=391)
<u>Positive for:</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Marijuana	52	51	36	31	12	28	40
Cocaine	4	3	0	5	0	0	3
Opiates	2	8	0	0	0	0	2
Amphetamines	5	4	3	1	12	16	5
Any Drug (of 10)	55	56	39	33	24	40	45

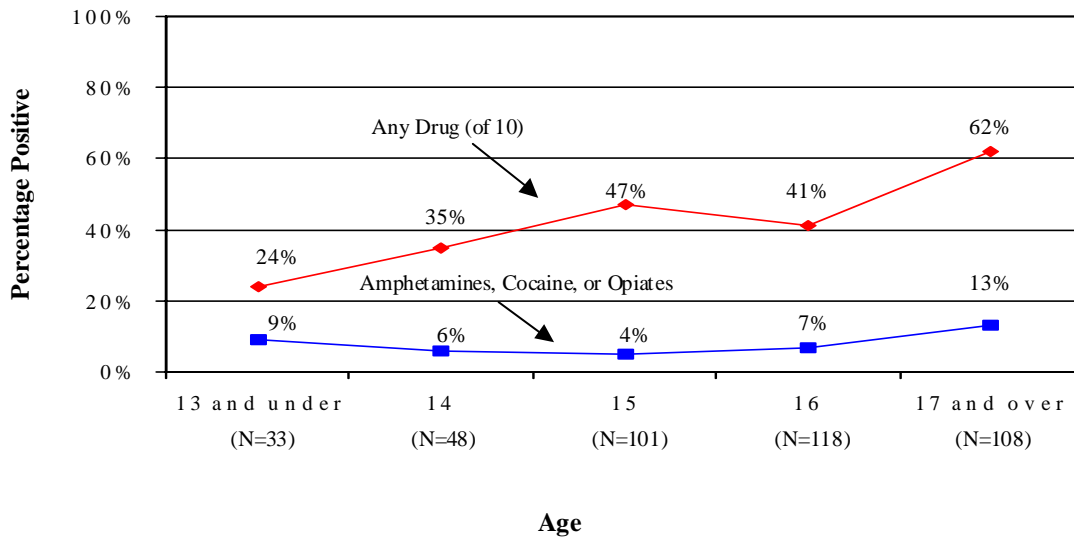
Note: Urine specimens were analyzed for 10 drugs: amphetamines, barbiturates, benzodiazepines, cocaine, marijuana, methadone, opiates, PCP, propoxyphene, and MDMA.

*Baltimore metro area includes Anne Arundel, Baltimore County, 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, July 2001.

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

(N=408 Juvenile Detainees)



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

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

Table 5
Percentage Positive for Marijuana and Any Drug, by Offense*

	Drug-related (N=67)	Property (N=137)	Violent (N=142)	Other (N=56)	Total (N=402)
<u>Positive For:</u>					
Marijuana	58%	37%	40%	36%	41%
Any Drug (of 10)	64%	42%	44%	39%	46%

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

*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.

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

Table 6
Percentage Positive for Marijuana or Any Drug, by Facility

	Carter (N=77)	Cheltenham (N=251)	Hickey (N=10)	Noyes (N=59)	Waxter (N=12)	Total (N=409)
<u>Positive For:</u>						
Marijuana	33%	51%	60%	12%	33%	41%
Any Drug (of 10)	35%	56%	60%	15%	42%	46%

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

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

OPUS DETENTION STUDY RESULTS OVER FOUR TIME PERIODS

This section presents comparisons of the urinalysis results across four data collection periods 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 four data collection periods showed few differences (Table 7).
- In all time periods, youths were most likely to test positive for marijuana (Table 7).
- Marijuana-positive urinalysis results ranged from 39% to 43% over the four data collection periods (Table 7).
- The percentage of youths testing positive for marijuana remained stable over the four data collection periods in Baltimore City and its surrounding area, the D.C. metropolitan area, and on the Eastern Shore. Since the first data collection period, the percentage of youths in Western Maryland testing positive for marijuana decreased (from 37% to 12%), and among youths in Southern Maryland, the percentage testing positive for marijuana increased (from 0% to 28%) (Figure 2).

Table 7
Urinalysis Test Results Over Four Data Collection Periods

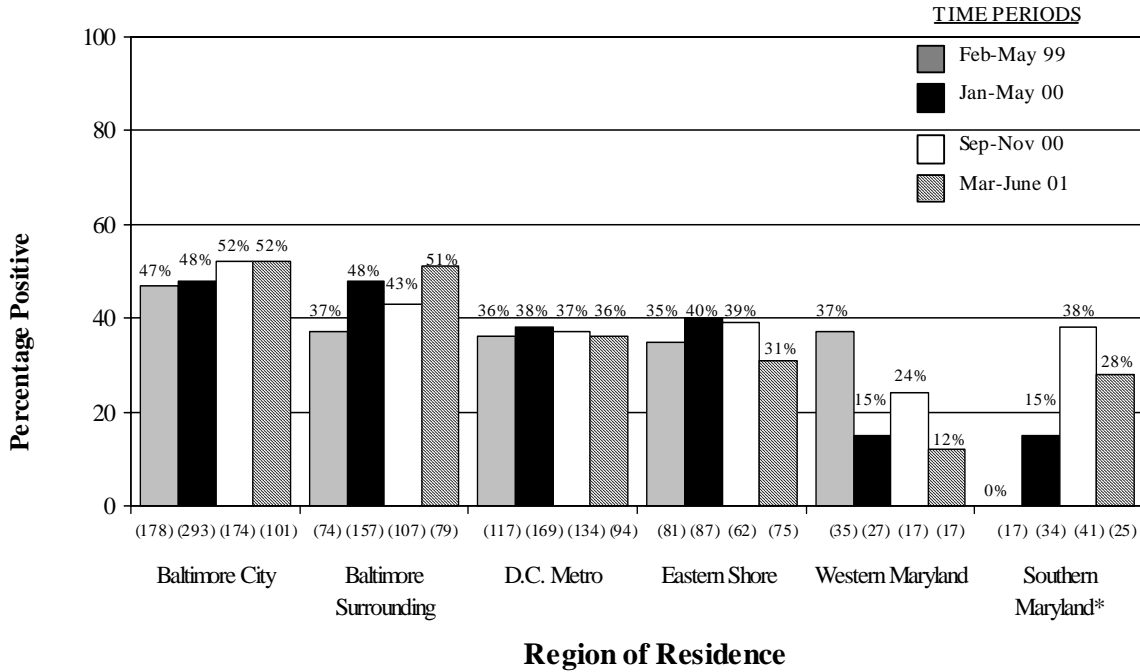
	February-May 1999 (N=545)	January-May 2000 (N=802)	September- November 2000 (N=555)	March-June 2001 (N=409)
<u>Positive For:</u>				
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Marijuana	39	42	43	41
Cocaine	2	1	3	3
Opiates	2	1	2	2
Amphetamines	1	1	4	4
PCP	*	*	2	2
Benzodiazepines	1	*	1	1
Propoxyphene	0	0	*	1
MDMA	0	0	*	2
Any Drug (of 10)	42%	43%	48%	46%

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

**Occurred in zero percent or less than one percent. Barbiturate and methadone positives occurred in zero or less than one percent across all data collection periods.

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

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



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

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

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