# Highlights from the 2007 Maryland Epidemiological Profile: Consequences of Illicit Drug Abuse, Alcohol Abuse, and Smoking

Prepared by The Maryland Alcohol & Drug Abuse Administration (ADAA) and the Center for Substance Abuse Research (CESAR)

September 2007

The full profile is available online at www.maryland-adaa.org.

This report provides a brief description of the consequences of substance abuse and consumption patterns in Maryland. It was produced by the staff at the Alcohol and Drug Abuse Administration (ADAA) and the Center for Substance Abuse Research (CESAR) at the University of Maryland, College Park. Online copies of this report and the full profile are available at http://www.maryland-adaa.org. For more information, please contact Erin Artigiani at erin@cesar.umd.edu or 301-405-9794. This report was supported by the SEOW grant to ADAA from the Center for Substance Abuse Prevention (CSAP) at the Substance Abuse and Mental Health Services Administration. Points of view or opinions contained within this document are those of the authors and do not necessarily represent the official position or policies of CSAP. The mission of the Maryland State Epidemiology Outcomes Workgroup (MD SEOW) is to monitor the use of alcohol, tobacco, and other drugs and the consequences of their use in Maryland in order to identify and prioritize the prevention needs of the state. To achieve this end, the MD SEOW will oversee the collection, interpretation, and dissemination of statewide data that quantifies substance use and its consequences for Maryland.

### Introduction

This report highlights Maryland's first prevention-focused epidemiological profile. For the first time, substance abuse professionals and policymakers worked together to develop a method for identifying and prioritizing consequences of illicit drug, alcohol, and tobacco use for prevention in Maryland. As substance-related consequences provide tangible indicators of the impact of substance use on a community, focusing on substance-related consequences and the consumption patterns that lead to those consequences will better equip policymakers to plan, monitor, and evaluate outcome-based prevention strategies in Maryland. This report is the primary accomplishment of the first year of a three-year project funded by the Center for Substance Abuse Prevention (CSAP) at the Substance Abuse and Mental Health Services Administration (SAMHSA). Other accomplishments include establishing the State Epidemiological Outcomes Workgroup (SEOW) and designing an innovative process for prioritizing the consequences of drug, alcohol, and tobacco use in Maryland. The full profile provides detailed descriptions of state and county substance abuse data. It is available at www.maryland-adaa.org.

### **The Maryland SEOW**

The MD SEOW was originally formed in March 2006 under the oversight of the Maryland Alcohol and Drug Abuse Administration (ADAA). The original 34 core members represent criminal and juvenile justice, public health, prevention, and research. These members were interested in strengthening Maryland's data sources and gaining a more complete and accurate understanding of drug trends in the 24 jurisdictions. The MD SEOW provides State and Local Drug and Alcohol Abuse Councils (DAACs), which are charged with directing prevention planning for their jurisdictions, with the information necessary to develop prevention strategies that are data driven. In addition, the MD SEOW provides the DAACs with the data necessary to establish baselines and monitor the impact of these strategies on the communities they serve.

### The Epidemiological Profile

The profile compiled available data on consequences and consumption patterns related to illicit drug, alcohol, and tobacco use in Maryland. Tremendous effort was devoted to identifying and selecting the consequences included in the profile. The process began by identifying potential consequences of interest through quarterly meetings of the SEOW and lead to the development of a database of more than 150 possible indicators of the consequences of substance use and criteria by which to assess each indicator. Each indicator was then systematically assessed on availability, validity, consistency, sensitivity, and the availability of attributable fractions (an attributable fraction is an estimate of drug-related incidents in a consequence based on current research). As a result, eleven major consequences were identified using the selected indicators. Once data were compiled for all selected indicators, the SEOW members prioritized each of the eleven consequences using the following criteria: the number of individuals directly affected, changes in the number affected over time, national comparisons, number of individuals indirectly affected, potential costs to Maryland, and potential for change through intervention. This report collapses and summarizes data on the consequences provided in the profile by organizing them into seven consequences: crime, drug-related arrests, HIV/AIDS, motor vehicle crashes, mortality, abuse/dependence, and school suspensions/expulsions. In addition, a summary of illicit drug, alcohol, and tobacco consumption patterns is also included. The data presented in this report answers the following three key questions and enables the development of data-driven prevention priorities:

- What are the most significant consequences of substance use in Maryland for which data are currently available?
- Based on available data, which consequences are of highest priority for Maryland?
- What consumption patterns should be targeted to address these consequences?

# **CRIME:** Drug- and Alcohol-Related Crime, 2001–2005

# **Property Crime<sup>1</sup>**

- In 2005, 198,483 property crimes were reported in Maryland, of which an estimated 51,709 were drug related. Larcenies accounted for approximately 65% of Maryland's property crimes, while burglary and motor vehicle thefts accounted for approximately 18% and 17% of property crimes.
- As shown in Figure 1, burglaries and larcenies have decreased steadily from 2001 to 2005.
- In total, the number of property crimes decreased steadily from 2001 to 2005; decreasing 9.6% from 219,512 in 2001 to 198,483 in 2005.

# Violent Crime<sup>2</sup>

- In 2005, 39,369 violent crimes were reported in Maryland, an estimated 7,840 of which were alcohol related.
- As shown in Figure 2, the number of homicides and robberies increased from 2001 to 2005, by 24% and 6% respectively, while forcible rape decreased by 13%.
- The total estimated number of violent crimes decreased 8% from 42,088 in 2001 to 38,778 in 2003, but increased by 2% from 2003 to 2005.
- In 2005, nearly nine in ten alcohol-related violent crime offenses in Maryland were for aggravated assault (n=6,952).

# Substance-Related Crime in Maryland's 24 Jurisdictions

- More than one-quarter of the property crimes reported in 2005 occurred in Prince George's County.
- Wicomico County and Baltimore City reported the highest rates of burglaries. Prince George's, Worcester, and Wicomico Counties reported the highest rates of larcenies. Prince George's County reported by far the highest number of drug-related motor vehicle thefts, accounting for half of all motor vehicle thefts in the state (1,207 of 2,385 drug-related motor vehicle thefts).
- Nearly two-thirds (63%) of the estimated alcohol-related violent crimes reported in 2005 occurred in Baltimore City, Baltimore County, and Prince George's County.
- Baltimore City and Prince George's County reported the highest rates of violent crimes (1,764.0 and 1,118.1 per 100,000 population respectively). Wicomico County also reported more than 1,000 violent crimes per 100,000 population (1,031.8).

Overall, Maryland experienced a decrease in the number of reported violent and property crimes from 2001 to 2005.





SOURCE: Adapted by CESAR from the Maryland Uniform Crime Report, 2001–2005.



# DRUG-RELATED ARRESTS: Arrests for Drug Possession/Sales, 2001–2005

# **Drug-Related** Arrests<sup>3</sup>

- Seventeen percent of total arrests in the state were drug related in 2005, a percentage that remained unchanged for the previous four years.
- As shown in Figure 3, a greater proportion of juveniles (aged 17 and under) were arrested for sales and/or manufacturing of drugs than adults.
- Drug-related arrest rates for juveniles decreased from 2001 to 2005. Juveniles were most likely to be arrested for possession of marijuana or the sale of opium/cocaine.
- Adults were most likely to be arrested for possession of opium/cocaine or marijuana. Adult arrest rates increased from 2001 to 2005.
- Overall, from 2001 to 2005, the percentage of drug arrests involving opium/cocaine decreased slightly while the percentage involving marijuana increased slightly.

Figure 3: Percentage of Total Drug-Related Arrests for Possession or Sales/Manufacturing (S/M) of a Controlled Substance for Juveniles and Adults in Maryland, 2001-2005



SOURCE: Adapted by CESAR from the Maryland Uniform Crime Report, 2001–2005.

# HIV/AIDS: Intravenous Drug Use-Related HIV and AIDS, 2000–2004

	Incident HIV Cases		Incident AIDS Cases	
	Total (#)	IDU-Related Exposure Categories (%)	Total (#)	IDU-Related Exposure Categories (%)
2000	2,385	25.5	1,352	48.7
2001	2,355	23.2	1,512	49.3
2002	2,192	18.2	1,470	45.0
2003	1,941	16.1	1,524	41.6
2004	2,143	9.6	1,293	36.0

 Table 1: HIV and AIDS Incident Cases and Proportion of Cases with Intravenous Drug

 Use-Related (IDU-Related) Exposure Categories, by Year of Diagnosis, 2000-2004

SOURCE: Maryland 2005 HIV/AIDS Annual Report, AIDS Administration, MD Department of Health and Mental Hygiene.

# HIV/AIDS Cases<sup>4</sup>

- In 2004, Maryland had the fourth highest rate of annual AIDS case reports in the nation. The rate of case reports is nearly twice as high as nationwide.
- As shown in Table 1, in 2004, approximately 1 in 10 HIV incident cases and 1 in 3 AIDS incident cases in Maryland were intravenous drug use-related (IDU related).
- In 2004, nearly 40% (2,049) of HIV prevalent cases with a reported mode of exposure were IDU related.
- In 2004, HIV and AIDS cases were most likely to be African American, male, and aged 20–59. Nearly twothirds of the HIV incident and HIV/AIDS prevalent cases were male and more than three-quarters were African American.
- Baltimore City reported a significantly higher rate of HIV incidence than any other jurisdiction. The Baltimore City rate (166.8 per 100,000 population) is four times higher than Prince George's County (47.4) and Somerset County (44.4), the jurisdictions with the second and third highest rates.

# **MOTOR VEHICLE CRASHES:** Alcohol-Related Crashes, 2001–2005



Figure 4: Percentage of Crashes that were Alcohol- or Drug-Related (AOD-Related) Involving an AOD Impaired Driver, by

SOURCE: Maryland Automated Accident Reporting System (MAARS), Traffic Safety Analysis Division, Office of Traffic and Safety, Maryland State Highway Administration (SHA), 2001-2005.

Six hundred and fourteen people were killed in motor vehicle crashes in 2005. Alcohol or drugs were involved in one-third of these crashes (204).

### Motor Vehicle Crashes<sup>5</sup>

- In Maryland, in 2005, nearly 1 in 10 crashes and 1 in 3 fatal crashes were alcohol related. •
- The number of fatal alcohol- or drug-related (AOD-related) crashes involving an impaired driver increased • 34% from 2003 to 2005.
- The percentage of AOD-related injury crashes and AOD-related property damage only crashes involving an • impaired driver remained about the same from 2001 to 2005. (See Figure 4)
- In 2005, 577 fatal crashes occurred in Maryland in which 614 people died; alcohol was involved in 187 of • the fatal crashes that resulted in 204 fatalities.
- Of the 204 fatalities that occurred in 2005 from AOD-related motor vehicle crashes, 122 were drivers, 41 were passengers, and 15 were pedestrians.
- In 2005, drivers and pedestrians injured or killed in crashes involving an alcohol- or drug-impaired driver • were most likely to be male and 30 years old or older. Passengers injured or killed in crashes involving an alcohol- or drug-impaired driver were most likely to be male and 20 years or older.
- Juveniles, young adults, and females were more likely to be injured or killed as passengers than as drivers or • pedestrians.
- In 2005, Caroline County had the highest percentage of alcohol-related crashes (16%) followed by Somerset, • Worcester, Kent, Queen Anne's, and Allegany counties.
- In 6 jurisdictions, in 2005, 50% or more of fatal crashes were alcohol related (Carroll, Howard, Kent, Saint • Mary's, Somerset, and Worcester counties).

# MORTALITY: Alcohol-, Tobacco-, and Drug-Related Mortality, 1999–2005

### **Alcohol-Related Mortality<sup>6</sup>**

- During the five-year period from 1999 to 2003, the rate of chronic liver disease deaths in Maryland has been consistently lower than the national rate (only a portion of chronic liver disease deaths were alcohol related). (See Figure 5)
- Alcohol-induced deaths decreased from 287 in 2000 to 270 in 2005.
- Alcohol-induced deaths were most likely to occur in Marylanders that were male, white, and 45 to 64 years of age. Alcohol-induced deaths were more than twice as likely to be male than female.



Figure 5: Death Rate (per 100,000 residents) from

SOURCE: Adapted by CESAR from data from U.S. Department of Health and Human Services (DHHS), National Center for Health Statistics' National Vital Statistics System as reported in the Mortality Detail Files. Multiple Causes of Death, 1999-2001 [CD-ROM]. Hyattsville, MD, Author, (Special data file), 2003.

## **Drug-Related Mortality**<sup>7</sup>

- Nearly 700 (1.6% of all deaths) deaths in Maryland in 2005 were drug induced.
- The rate of drug-related deaths in Maryland mirrors that for the United States as a whole. The rate of druginduced deaths remained steady from 1999 to 2003 ranging from 12.2 to 14.9 per 100,000 residents.
- The number of drug-induced deaths in Maryland increased 28% from 642 in 2000 to 819 in 2003 then decreased 15% to 694 in 2005. Although the number of drug-induced deaths fluctuated, the percentage of all deaths that were drug induced remained about the same from 2000 through 2005.
- Drug-induced deaths in Maryland were most likely to occur in whites, males, and adults aged 25–64.

SOURCE: Maryland Vital Statistics Annual Reports 2000–2005, Vital Statistics Administration, Department of Health and Mental Hygiene (DHMH).

# **Tobacco-Related Mortality<sup>8</sup>**

- From 1999 to 2003, the death rate from lung cancer, chronic obstructive pulmonary disease (COPD), and emphysema remained stable across the nation and in Maryland. (See Figure 6)
- There were 3,015 lung cancer deaths and a combined total of 1,899 COPD and emphysema deaths in Maryland in 2003, all together accounting for 11% of all deaths in Maryland that year.
- In 2003, lung cancer deaths in Maryland were slightly more likely to occur in males, while COPD and emphysema deaths were slightly more likely to occur in females.
- It is estimated that 90% of female deaths and 80% of male deaths from lung cancer are attributed to tobacco. It is estimated that 80% of COPD and emphysema deaths are attributed to tobacco.



Figure 6: Death Rate (per 100,000 residents) from



SOURCE: Adapted by CESAR from data from U.S. DHHS, National Center for Health Statistics' National Vital Statistics System as reported in the Mortality Detail Files. Multiple Causes of Death, 1999-2001 [CD-ROM]. Hyattsville, MD, Author, (Special data file), 2003.

# ABUSE/DEPENDENCE: Past Year Illicit Drug or Alcohol Abuse/Dependence, 2002–2004

## **Illicit Drug Abuse or Dependence**<sup>9</sup>

- An estimated 130,000 Maryland residents aged 12 and older reported past year illicit drug abuse or dependence between 2003 and 2004 reports. From 2002 to 2004, the estimated number of residents reporting illicit drug abuse or dependence peaked at an average of 135,000 based on 2002 and 2003 reports.
- Between 2003 and 2004, a larger percentage of 18 to 25 year olds (9%) reported past year drug abuse or dependence than 12 to 17 year olds (5%) or those 26 and older (2%).
- The percentage of Maryland residents reporting abuse or dependence of an illicit drug in the past year has remained stable at between 2.88% and 3.02% between 2002 and 2004.
- Between 2002 and 2004, Baltimore City had the highest percentage (3.08%) of residents reporting illicit drug abuse or dependence while Prince George's County had the highest estimated number of residents (18,648) reporting illicit drug abuse or dependence.

	Maryland Residents Aged 12+ Reporting Illicit Drug Abuse/Dependence (%)	Maryland Residents Aged 12+ Reporting Alcohol Abuse Dependence (%)
Statewide	2.88	7.40
Sub-state Region		
Anne Arundel	2.91	7.09
<b>Baltimore City</b>	3.08	8.24
Central	2.74	7.17
Montgomery	2.29	6.44
Prince George's	2.85	6.73
Rural	3.04	7.21
Western	2.79	6.81

# Table 2: Percent of Maryland Residents Aged 12 and Older who Reported Illicit Drug or Alcohol Abuse or Dependence in the Past Year, by Sub-state Region, 2002–2004

SOURCE: Adapted by CESAR from the Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies (OAS), National Survey on Drug Use and Health (NSDUH) 2002–2004 surveys.

# Alcohol Abuse or Dependence<sup>10</sup>

- An estimated 334,000 Maryland residents aged 12 and older reported past year alcohol abuse or dependence between 2003 and 2004. From 2002 to 2004, the estimated number of residents reporting alcohol abuse or dependence peaked at 337,000 based on 2002 and 2003 reports.
- Between 2003 and 2004, 17% of 18 to 25 year olds in Maryland reported dependence or abuse of alcohol in the past year.
- Between 2002 and 2004, Baltimore City had the highest percentage (8.24%) of residents reporting alcohol abuse or dependence while Montgomery County had the highest estimated number of residents (46,601) reporting alcohol abuse or dependence.

# SUSPENSIONS/EXPULSIONS: Alcohol- and Drug-Related Suspensions/Expulsions from Public Schools, 2000–2005

There were more than 2,100 drug-related suspensions and 791 alcohol-related suspensions from Maryland public schools during the 2004–2005 school year.

# **Drug-Related Suspensions/Expulsions**<sup>11</sup>

- From 2000 to 2005, the rate of drug-related suspensions peaked during the 2003–2004 school year at 264.9 per 100,000 students, but decreased in 2004–2005 to 245.5. Approximately one in 58 suspensions was drug related in 2004–2005 (2,125 total suspensions).
- From school years 2000–2001 to 2004–2005, drug-related suspensions have consistently accounted for 1.6 to 1.7% of all suspensions.
- The rate of drug-related expulsions fell from 53.4 expulsions per 100,000 students in 2001–2002 to 36.3 in 2004–2005. Approximately one in ten expulsions during the 2004–2005 school year was drug related (314 expulsions).
- Nearly half of all drug-related suspensions in 2004–2005 occurred in Baltimore County, Montgomery County, and Prince George's County public schools.
- The counties with the highest rates of drug-related suspensions were Allegany, Calvert, Dorchester, Washington, Baltimore, Talbot, Garrett, and Cecil counties. All reported more than 300 drug-related suspensions per 100,000 students.

SOURCE: Suspensions, Expulsions, and Health-Related Exclusions Maryland Public Schools, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004–2005, Division of Planning, Results, and Information Management (PRIM), Maryland State Department of Education (MSDE).

# Alcohol-Related Suspensions/Expulsions<sup>12</sup>

- There were 791 alcohol-related suspensions from Maryland public schools during the 2004–2005 school year, slightly more than any of the four previous academic years.
- The rates of alcohol-related suspensions over the five school years since 2000–2001 show no clear trends. During that time, the lowest rate of alcohol-related suspensions of 76.9 per 100,000 students occurred in 2003–2004. This was followed in 2004–2005 by the highest rate of 91.4.
- There were 41 alcohol-related expulsions in the 2004–2005 school year, markedly lower than the highest number of alcohol-related expulsions from the proceeding four years. The 2004–2005 school year also posted the lowest rate of alcohol-related expulsions—4.7 down from 11.9 in 2001–2002.
- More than half of all alcohol-related suspensions in 2004-2005 occurred in Anne Arundel, Baltimore, Frederick, Howard, Montgomery, and Prince George's county public schools.
- The counties with the highest rates of alcohol-related suspensions were Cecil, Carroll, Kent, Frederick, and Talbot counties. All reported more than 150 alcohol-related suspensions per 100,000 students.

SOURCE: Suspensions, Expulsions, and Health-Related Exclusions Maryland Public Schools, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004–2005, Division of PRIM, MSDE.

# **CONSUMPTION: Illicit Drugs, Alcohol, and Tobacco Consumption**

Figure 7: Estimated Number of Maryland Residents Aged 12 and Older who Reported Past Month Use of Alcohol, Tobacco, Marijuana, and/or Other Illicit Drugs, 2002–2004 Survey Averages



SOURCE: Adapted by CESAR from the Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies (OAS), National Survey on Drug Use and Health (NSDUH) 2002–2004 surveys.

# **Illicit Drugs**<sup>13</sup>

- An estimated annual average of 315,000 Maryland residents aged 12 and older reported past month use of any illicit drug between 2002 and 2004. An estimated 223,000 residents aged 12 and older reported past month use of marijuana, and an estimated annual average of 148,000 residents reported past month use of any illicit drug other than marijuana between 2002 and 2004.
- Beyond marijuana, the most widely used drugs were the non-medical use of psychotherapeutics, with an estimated annual average of 112,000 residents aged 12 and older reported past month non-medical use of psychotherapeutics, with 75,000 of those having reported past month use of pain relievers.
- An estimated annual average of 38,000 residents reported past month use of cocaine with an estimated average of 12,000 of those having reported past month use of crack cocaine between 2002 and 2004. In contrast, fewer than half as many or an estimated 15,000 residents reported past month hallucinogen use and under a fifth as many or an estimated average of 6,000 residents aged 12 or older reported past month heroin use between 2002 and 2004.

SOURCE: SAMHSA, OAS, NSDUH, 2002, 2003, 2004 and 2005.

- The most widely used illicit drug among 6<sup>th</sup> graders in Maryland during the 2004–2005 school year was inhalants.
- The most widely used illicit drug among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders during the 2004–2005 school year was marijuana.
- In 2004, 22% of surveyed seniors reported using marijuana in the past month; 35% reported past year use of marijuana; and 43% reported using marijuana at least once in their lifetime.

SOURCE: MSDE, 2004 Maryland Adolescent Survey (MAS).

- Among all Maryland treatment admissions from 2001 to 2005, heroin was the most frequently mentioned primary drug of abuse (in 30% to 32% of admissions). In contrast, during the same period approximately half as many (14%) admissions mentioned marijuana, an average 10% of all admissions mentioned cocaine (smoked), and an average 3% of all admissions mentioned other opiates as the primary substance of abuse. All other drugs were mentioned as the primary reason for admission in fewer than 2% of admissions.
- Two-thirds of treatment admissions for illicit drugs were males and over half were Caucasian.
- In 2005, nearly 75% of all treatment admissions where marijuana was the primary substance of abuse were residents aged 12 to 25. In contrast, the majority of all treatment admissions where cocaine (smoked) or heroin was the primary substance of abuse were residents aged 36 or older. Interestingly, 75% of all treatment admissions where PCP was the primary substance of abuse were residents aged 21 to 35.

SOURCE: SAMHSA, OAS, Treatment Episode Data Set (TEDS). Based on administrative data reported by States to TEDS through January 8, 2007.

# Alcohol<sup>14</sup>

• Between 2002 and 2005, an estimated annual average of 2,344,000 Maryland residents aged 12 and older reported past month alcohol use. An estimated 891,000 residents aged 12 and older reported past month binge alcohol use. Binge alcohol use is defined as drinking five or more drinks on the same occasion on at least one day in the past 30 days.

SOURCE: SAMHSA, OAS, NSDUH, 2002, 2003, 2004 and 2005.

• In the 2004–2005 school year, of surveyed seniors, 44% reported using any alcohol in the past month. Nearly one in four 10<sup>th</sup> graders and one in three 12<sup>th</sup> graders reported past month binge alcohol use. Binge drinking has remained stable across all grades since 2001.

SOURCE: MSDE, 2004 MAS.

- Roughly 20% of all statewide treatment admissions between 2001 and 2005 were for alcohol only (13,714 in 2005).
- An average 16% of all statewide treatment admissions between 2001 and 2005 were for alcohol and a secondary drug (11,239 in 2005).
- For every year from 2001 to 2005, admissions for alcohol only were most likely to be male and Caucasian. When alcohol is mentioned in combination with another drug however, the percentage of African-Americans increases sharply.

SOURCE: SAMHSA, OAS, TEDS. Based on administrative data reported by States to TEDS through January 8, 2007.

# Tobacco<sup>15</sup>

- Between 2002 and 2005, an annual average of 1,213,000 Maryland residents aged 12 and older reported past month tobacco use, while an estimated 1,044,000 residents specifically reported use of cigarettes.
- Tobacco and cigarette use were highest among residents aged 18 to 34.

SOURCE: SAMHSA, OAS, NSDUH, 2002, 2003, 2004, and 2005.

- Overall, the use of cigarettes by Maryland students has remained stable since 2001.
- In 2004, roughly one in five seniors reported cigarette use in the past month. In addition, one in ten 10<sup>th</sup> graders reported past month cigarette use.

SOURCE: MSDE, 2004 MAS.

Since 2001, the percentage of Maryland public school students reporting past 30day use of marijuana, alcohol, or cigarettes has stayed relatively stable. More seniors reported past 30-day use of alcohol compared to marijuana or cigarettes.

# PRIORITIZING AND NEXT STEPS: Prioritization of Consequences and Planning for Year Two

### **Prioritization of Consequences**

To facilitate the development of data driven prevention priorities, the Maryland SEOW developed and piloted a method to assess and prioritize the consequences of illicit drug and alcohol use (tobacco consequences were not prioritized because only one consequence was included in the profile). Using a consistent set of criteria, Maryland county prevention coordinators and SEOW members used the epidemiological profile to scientifically rank the consequences on six dimensions: numbers directly affected, changes in size/magnitude over time, Maryland compared to the United States, numbers indirectly affected, potential economic and social costs, and potential for change through intervention. Seven consequences of illicit drug use and six consequences of alcohol use were scored. After scoring, those consequences were ranked either a high or a low priority for the state of Maryland. More detailed information about the scoring process and prioritization of consequences is available in the full profile. (See Table 3 and Table 4)

	Prioritization	
Consequence	Higher	Lower
Violent Crimes	~	
Motor Vehicle Crashes	V	
Alcohol-Related Mortality		<b>v</b>
Alcohol Abuse or Dependence	~	
School Suspensions		V
School Expulsions		V

Fable 3: Prioritization of Consequences of Alcohol U
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	Prioritization	
Consequence	Higher	Lower
Property Crimes	<b>v</b>	
Drug-Related Arrests	~	
HIV/AIDS	~	
Drug-Related Mortality		V
Drug Abuse or Dependence	~	
School Suspensions		V
School Expulsions		~

**Table 4: Prioritization of Consequences of Illicit Drug Use** 

## **Planning for Year Two**

In year 2, we will build on our accomplishments to expand the efforts of the SEOW. We will continue to monitor the current consequences and complete the following three new tasks:

- Create a more detailed county level analysis of the consequences.
- Present our data and recommendations to the State Drug and Alcohol Abuse Council for their consideration and inclusion in the state substance abuse strategy.
- Revise and update the state epidemiological profile.

### 1. Property Crime

National estimates of the percent of drug-related property crimes were taken from the State Epidemiological Data System (SEDS)—30% of burglaries, 30% of larceny/thefts, and 7% of motor vehicle thefts. The percentage actually attributable to drug use may vary across geographic units or subpopulations.

No attributable fraction is available for total number of property crimes that are drug related. The total estimated number of property crimes that are drug related by summing the estimated numbers for each type of crime.

State totals for 2004 and 2005 were taken from the 2005 Crime in the United States publication. Data for 2001 to 2003 were taken from the *Crime in the United States* publication for each respective year.

### 2. Violent Crime

Estimates of the percent of alcohol-related violent crimes taken from the State Epidemiological Data System (SEDS)—30% of homicides, 23% of forcible rapes, 30% of aggravated assaults, and 3% of robberies. The percentage actually attributable to alcohol use may vary across geographic units or subpopulations.

No attributable fraction is available for total number of violent crimes that are alcohol related. The total estimated number of violent crimes that are alcohol related by summing the estimated numbers for each type of crime.

State totals for 2004 and 2005 were taken from the 2005 Crime in the United States publication. Data for 2001 to 2003 were taken from the *Crime in the United States* publication for each respective year.

### 3. Drug-Related Arrests

Arrests provide a measure of law enforcement and may not reflect the true magnitude of the underlying problem.

Sales = Sales/Manufacturing. Opium/Cocaine = Opium or cocaine and derivatives. The UCR does not collect information on heroin and cocaine separately.

#### 4. HIV/AIDS Cases

IDU-related exposure categories include injection drug users and men who have sex with men and are injection drug users. Percentages are based on those cases with a reported mode of exposure. Sizable numbers are missing information on mode of exposure.

Incident HIV Cases = number of newly diagnosed cases in 2004.

Prevalent HIV and/or AIDS Cases = number of people living with HIV and/or AIDS on December 31, 2004.

### 5. Motor Vehicle Crashes

Crash: An event that produces injury and/or property damage, involves a motor vehicle in transport, and occurs on a traffic way or while the vehicle is still in motion after running off the traffic way.

AOD-Related Crash: A crash that involves an alcohol- and/or drug-impaired driver.

All Crashes: This category includes fatal crashes, injury crashes, and property damage only crashes.

Fatal Crash: A police-reported crash involving a motor vehicle in transport on a traffic way in which at least one person dies within 30 days of the crash.

Injury Crash: A police-reported crash that involves a motor vehicle in transport on a traffic way in which no one died but at least one person was reported to have: (1) an

incapacitating injury; (2) a visible but not incapacitating injury; (3) a possible, not visible injury; or (4) an injury of unknown severity.

Property Damage Only Crash: A police-reported crash involving a motor vehicle in transport on a traffic way in which no one involved in the crash suffered any injuries.

#### 6. Alcohol-Related Mortality

Chronic liver disease deaths include the following International Classification of Disease, Tenth Revision (ICD-10) Category Codes: K70 and K73-K74 as underlying cause of death. Chronic liver disease deaths provide an imperfect indicator of alcohol-related deaths, as only a portion are alcohol related. Alcohol-related cirrhosis may have a long latency: there may be a lag of several years between changes in behavior and population mortality. The stability of this indicator is directly related to the size of the population in which these deaths occur. There also is variability in the procedures used within and across each state to determine cause of death. Alcohol-Induced Deaths include the following International Classification of Disease, Tenth Revision (ICD-10) Category Codes: F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, Y15.

In chart, rates are based on populations estimated as of July 1 for all years, prepared by the National Center for Health Statistics (NCHS) in collaboration with the U.S. Census Bureau.

In text, rate of chronic liver disease based on July 1, 2005, population estimates. SOURCE: Maryland Vital Statistics Annual Report 2005, Vital Statistics Administration, Department of Health and Mental Hygiene (DHMH).

### 7. Drug-Related Mortality

In text, rates are based on July 1, 2005, population estimates that were prepared by the National Center for Health Statistics (NCHS) in collaboration with the U.S. Census Bureau.

Drug-Induced Deaths include the following International Classification of Disease, Tenth Revision (ICD-10) Category Codes: F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, X40-X44, X60-X64, X85, Y10-Y14.

### 8. Tobacco-Related Mortality

Lung Cancer/COPD/Emphysema Disease Deaths include the following International Classification of Disease, Tenth Revision (ICD-10) Category Codes: C34, J40-J42, J43, J44, and J47 as the underlying cause of death.

In chart, rates are based on populations estimated as of July 1 for all years, prepared by the National Center for Health Statistics (NCHS) in collaboration with the U.S. Census Bureau.

In text, rates are based on July 1, 2005, population estimates. SOURCE: Maryland Vital Statistics Annual Report 2005, Vital Statistics Administration, Department of Health and Mental Hygiene (DHMH).

### 9. Illicit Drug Abuse or Dependence

Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutic medications used non-medically. Abuse or dependence is based on the definitions found in the 4<sup>th</sup> Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

The state estimates are based on a survey-weighted hierarchical Bayes estimation approach. Although statewide estimates were produced prior to 2002, the data are not comparable to data collected in and after 2002 because of a change in survey methods.

The U.S. estimates are the weighted average of the hierarchical Bayes estimates across all States and the District of Columbia and typically are not equal to the direct sample-weighted estimate for the Nation.

In table, model-based estimates of dependence or abuse of illicit drugs were produced for sub-state regions by SAMHSA. The regions were defined as follows: Anne Arundel = Anne Arundel County; Baltimore City = Baltimore City; Central = Baltimore, Harford, and Howard Counties; Montgomery = Montgomery County; Prince George's = Prince George's County; Rural = Calvert, Caroline, Cecil, Charles, Dorchester, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Wicomico, and Worcester Counties; Western = Allegany, Carroll, Frederick, Garrett, and Washington Counties. The sub-state percentages produced by SAMHSA were applied to each county within the defined sub-state regions to derive estimates at the county level.

County estimates of number of residents dependent or abusing drug(s) are based on 2000 Census data on population 12 years and older. The state estimate is produced by SAMHSA OAS.

#### 10. Alcohol Abuse or Dependence

Abuse or dependence is based on the definitions found in the 4th Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

The state estimates are based on a survey-weighted hierarchical Bayes estimation approach. Although statewide estimates were produced prior to 2002, the data are not comparable to data collected in and after 2002 because of a change in survey methods.

The U.S. estimates are the weighted average of the hierarchical Bayes estimates across all States and the District of Columbia and typically are not equal to the direct sample-weighted estimate for the Nation.

In table, model-based estimates of dependence or abuse of alcohol were produced for sub-state regions by SAMHSA. The regions were defined as follows: Anne Arundel = Anne Arundel County; Baltimore City = Baltimore City; Central = Baltimore, Harford, and Howard Counties; Montgomery = Montgomery County; Prince George's = Prince George's County; Rural = Calvert, Caroline, Cecil, Charles, Dorchester, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Wicomico, and Worcester Counties; Western = Allegany, Carroll, Frederick, Garrett, and Washington Counties. The sub-state percentages produced by SAMHSA were applied to each county within the defined sub-state regions to derive estimates at the county level.

County estimates of number of residents dependent or abusing alcohol are based on 2000 Census data on population 12 years and older. The state estimate is produced by SAMHSA OAS.

#### 11. Drug-Related Suspensions/Expulsions

Rates are based on Maryland State Department of Education (MSDE) public school enrollment figures as of September 30th of each school year.

#### 12. Alcohol-Related Suspensions/Expulsions

Rates are based on Maryland State Department of Education (MSDE) public school enrollment figures as of September 30th of each school year.

#### 13. Consumption Illicit Drugs

National Survey on Drug Use and Health (NSDUH)—Illicit drugs other than marijuana include cocaine, crack, heroin, hallucinogens, inhalants, and prescription-type psychotherapeutics used non-medically. Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically.

Non-medical Use of Psychotherapeutics includes non-medical use of prescription-type pain relievers, tranquilizers, stimulants, or sedatives. Psychotherapeutics does not include over-the-counter drugs.

State figures are based on pooled data from two years worth of data (i.e., 2003 and 2004 surveys) and demographic figures are based on pooled data from 4 years worth of data (i.e., 2002, 2003, 2004, 2005 surveys).

Maryland Adolescent Survey (MAS)—The 2001 Survey was administered in April 2001 of the 2000–2001 school year. In 2002–2003 and 2004–2005, the survey was administered in December.

The MAS Report does not provide the standard errors around observations; therefore, caution should be exercised in interpreting any changes in drug use over time.

Treatment Episode Data Set (TEDS)—Other Opiates included admissions for non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects.

#### 14. Consumption Alcohol

National Survey on Drug Use and Health (NSDUH)—Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.

State figures are based on pooled data from two years worth of data (i.e., 2003 and 2004 surveys) and demographic figures are based on pooled data from 4 years worth of data (i.e., 2002, 2003, 2004, 2005 surveys).

Maryland Adolescent Survey (MAS)—The 2001 Survey was administered in April 2001 of the 2000–2001 school year. In 2002–2003 and 2004–2005, the survey was administered in December.

The MAS Report does not provide the standard errors around observations; therefore, caution should be exercised in interpreting any changes in drug use over time.

Treatment Episode Data Set (TEDS)—Alcohol (alone or with a secondary drug) includes admissions for abuse of alcohol alone and admissions for primary abuse of alcohol with secondary abuse of drugs.

#### 15. Consumption Tobacco

National Survey on Drug Use and Health (NSDUH)—Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco. State figures are based on pooled data from two years worth of data (i.e., 2003 and 2004 surveys) and demographic figures are based on pooled data from 4 years worth of data (i.e., 2002, 2003, 2004, 2005 surveys).

Maryland Adolescent Survey (MAS)—The 2001 Survey was administered in April 2001 of the 2000–2001 school year. In 2002–2003 and 2004–2005, the survey was administered in December.

The MAS Report does not provide the standard errors around observations; therefore, caution should be exercised in interpreting any changes in drug use over time.