

# Using Data to Set Prevention Priorities

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*A partnership between*

# Presentation Overview

- Introduction to CESAR
- Drugs in Maryland
- Strategic Prevention Framework and the role of the SEOW
- First year accomplishments
- Year 2 goals and reports
- Discuss how you may submit requests for additional data

# Center for Substance Abuse Research (CESAR)

- A 17 Year State/University Partnership Started to
  - Monitor substance abuse in Maryland,
  - Evaluate programs,
  - Estimate treatment needs,
  - Apply for external funds
  - Provide technical support to state and local agencies, and
  - Operate Clearinghouse
- Key Services
  - Disseminate information
  - Fax
- Primary funding from the UMD and GOCCP; Competitive external awards from federal government and foundations

# CESAR Research Projects

- DEWS (DEWS Investigates)
- SEWG, SEOW (with ADAA), CEWG
- CLS, MOTHER, Faith-based Treatment
- Treatment Needs Assessments, Treatment Outcomes Studies
- HIDTA Performance Management Process

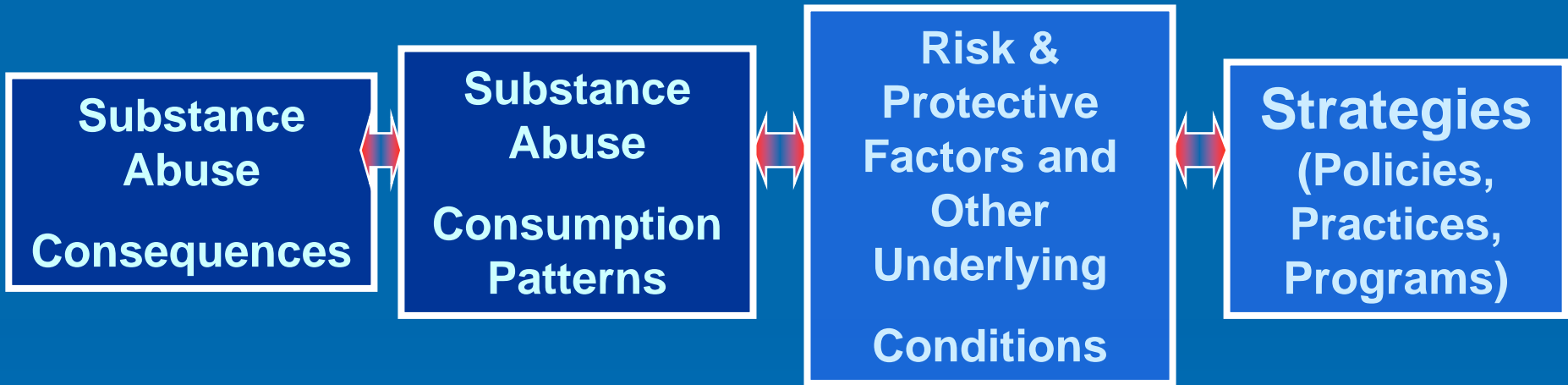
# MD SEOW: Background

- Funded by SAMHSA's Center for Substance Abuse Prevention in March 2006 for up to three years to focus on the first two components of the Strategic Prevention Framework
- Membership includes representatives from state and local public health, prevention, and law enforcement agencies
- Convened to define substance abuse problems in Maryland and build capacity for planning, implementing, and evaluating drug prevention programs

# Charter: SEOW Mission

The MD SEOW will monitor the use of alcohol, tobacco, and other drugs and the consequences of their use in Maryland and its localities in order to identify and prioritize the prevention needs of the state and its local jurisdictions. To achieve this end the MD SEOW will oversee the collection, interpretation, and dissemination of statewide and *local data* that quantifies substance use and its consequences for Maryland.

# CSAP Strategic Prevention Framework: Role of the SEOW



# SEOW Year 2 Goals

- Determine and monitor the scope of substance abuse and substance abuse-related problems in Maryland by utilizing SAMHSA's National Outcome Measures (NOMs) and additional jurisdictional data.
- Facilitate data driven decision-making across the state to assure the effective and efficient use of resources by providing useful information to inform prevention planning and guide prevention funding priorities.
- Support ongoing development of a state prevention plan as a part of the State Drug and Alcohol Abuse Council's drug strategy by producing an annual state epidemiological profile.
- *Support ongoing development of data-driven prevention priorities by the Local Drug and Alcohol Abuse Councils by providing local epidemiological data and guidance in the use of these data.*
- Provide a means for disseminating and sharing data and information collected.

# SEOW Year 1 Accomplishments

- Convened the SEOW
- Drafted a Mission and Created a Charter
- Prepared the State Epidemiological Profile
  - Available on the ADAA website  
(<http://www.maryland-adaa.org/>)
- Prioritized the Consequences of Substance Use
- Developed and Conducted Trainings on the Strategic Prevention Framework

# SEOW Year 1 State Epi Profile: Selection of Consequences

- 164 health, crime, child-well-being and other indicators of the consequences of substance use were identified
- Entered into a database and assessed on 5 criteria: availability, validity, consistency, sensitivity, availability of attributable fractions
- Narrowed set of indicators to 11 consequences of illicit drug use, alcohol use, and tobacco use for inclusion in the profile

# Year 1 State Epi Profile

	Consequences	Consumption
<b>Illicit Drugs</b>	<ol style="list-style-type: none"><li>1. Property Crime/Drug Arrests</li><li>2. HIV/AIDS</li><li>3. Abuse/Dependence</li><li>4. Drug-induced Deaths</li><li>5. Suspensions/Expulsions</li></ol>	<ol style="list-style-type: none"><li>1. Marijuana and Other Illicit Drug Use</li><li>2. Use among Public School Students</li></ol>
<b>Alcohol</b>	<ol style="list-style-type: none"><li>1. Violent Crime</li><li>2. Crashes</li><li>3. Abuse/Dependence</li><li>4. Alcohol-induced Deaths</li><li>5. Suspensions/Expulsions</li></ol>	<ol style="list-style-type: none"><li>1. Alcohol Use/Binge Use</li><li>2. Underage Alcohol Consumption</li><li>3. Heavy Drinking by Adults</li></ol>
<b>Tobacco</b>	<ol style="list-style-type: none"><li>1. Tobacco-related Deaths</li></ol>	<ol style="list-style-type: none"><li>1. Tobacco and Cigarette Use</li><li>2. Use among Public School Students</li></ol>

# MD Illicit Drug Prioritization Results

	Total Criteria Score (N=17)	Total Criteria Score Weighted by Importance of Criteria (N=17)	Overall Ranking (N=17)	Prevention Coordinator's Overall Ranking (N=21)
Consequence				
Drug Dependence or Abuse	1	1	1	1
Drug-Related Arrests	2	2	2.5	2
HIV/AIDS Cases	3	3	5	6
Property Crimes	4	4	2.5	4
Drug-Induced Deaths	5	5	4	5
School Suspensions	6	6	7	3
School Expulsions	7	7	6	7

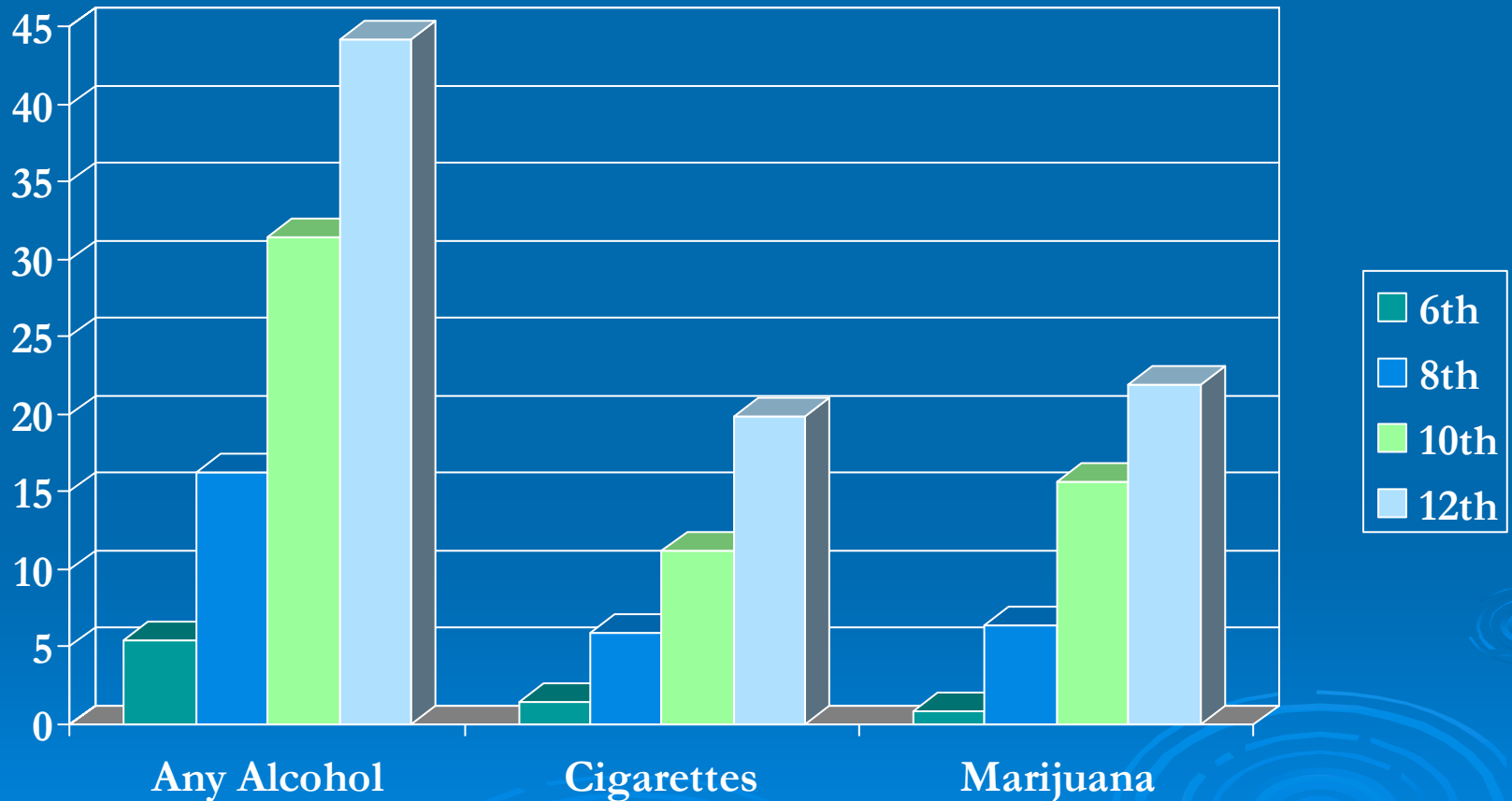
# MD Alcohol Prioritization Results

Consequence	Total Criteria Score (N=13)	Total Criteria Score Weighted by Importance of Criteria (N=13)	Overall Ranking (N=13)	Prevention Coordinator's Overall Ranking (N=21)
Dependence or Abuse	1	1	1	1
Violent Crimes	2	2	3	3
Alcohol-Related Crashes	3	3	2	2
School Suspensions	4	4	5	5
Alcohol-Induced Deaths	5	5	4	4
School Expulsions	6	6	6	6

# What Have We Learned So Far about Drugs in Maryland?

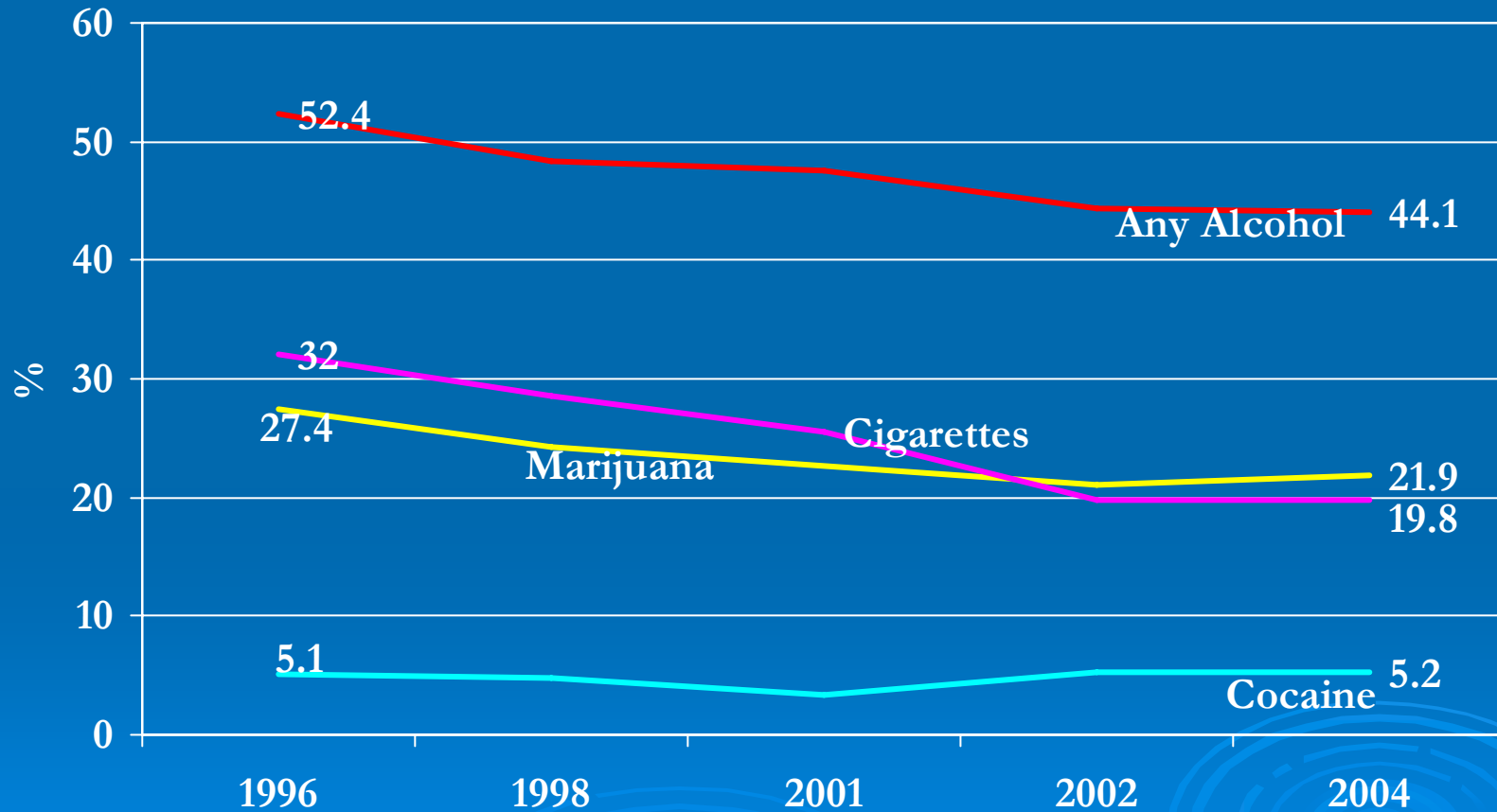


# Past Month Alcohol, Cigarette, and Marijuana Use by Grade 2004



Source: Adapted by CESAR from Maryland State Department of Education Maryland Adolescent Survey 2004.

# Past Month Alcohol & Drug Use Reported by High School Seniors 1996-2004



Source: Adapted by CESAR from Maryland State Department of Education Maryland Adolescent Surveys 1996, 1998, 2001, 2002, 2004.

# Underage Drinking by High School Seniors

- 68% of users had ever binge; one in four (28.8%) binge in the past month.
- Compared with nonusers, alcohol users were more likely to use other drugs, to have poorer grades, and to have reported that friends and/or parents approved of their drinking.
- 16% had been drunk at school; and 14% had been absent from school because of alcohol.

# Underage Drinking by High School Seniors

- 42% of all bingers (an estimated 10,000 students) drank and drove in the past year and many thought that their friends (91%) and/or parents (40%) approve of their drinking.
- Seniors who first drank at the youngest ages were most likely to report that their parents and/or friends approve of their drinking.
- The earlier students began using alcohol, cigarettes, and/or marijuana, the more likely they were to use other illegal drugs and to develop related problems

# DEWS: Warning Signs of Early Marijuana Use

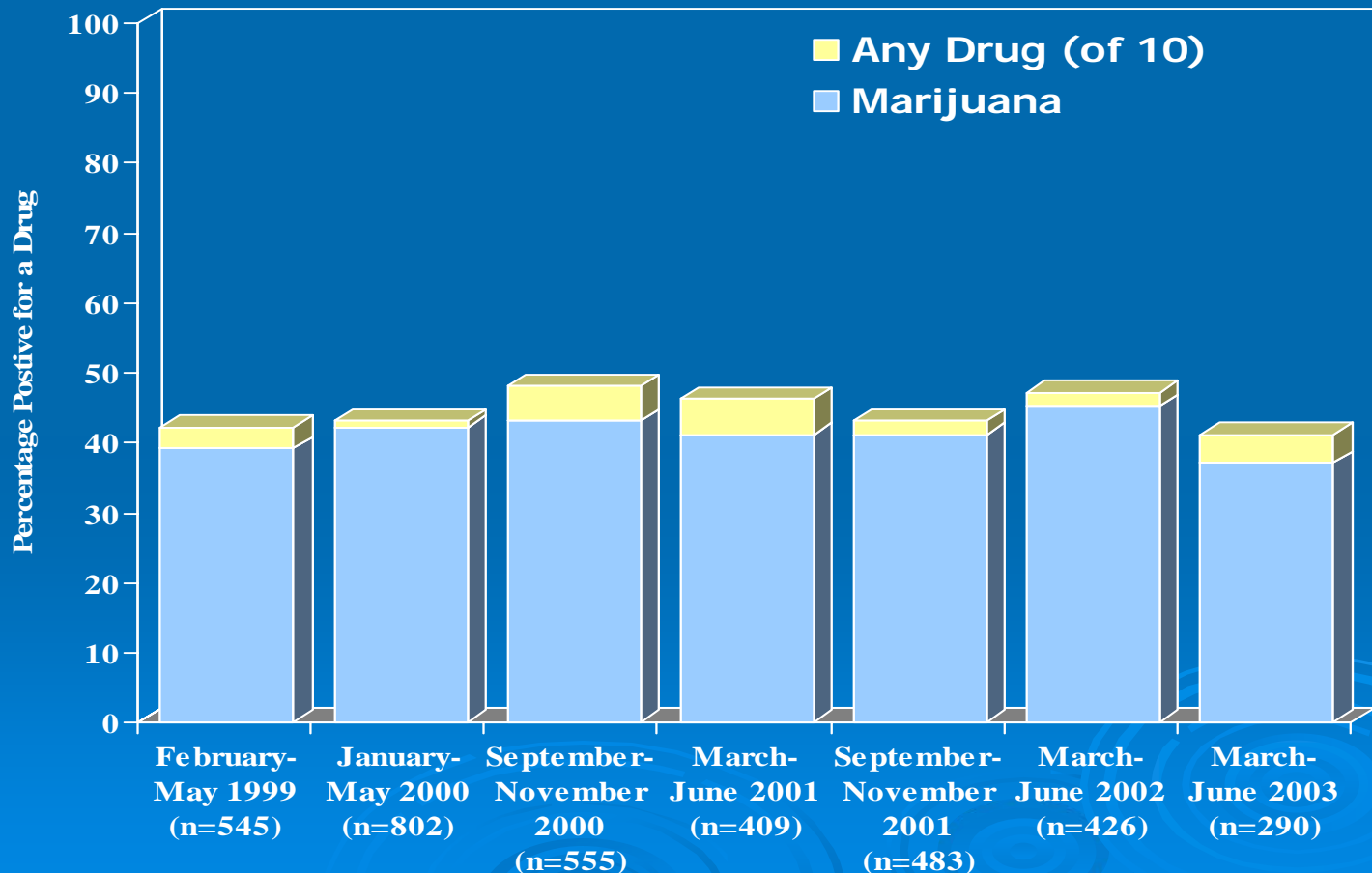
## ➤ Behaviors

- Cigarette use before age 15
- Alcohol use before age 15
- 20 or more unexcused absences
- Drug arrest
- Alcohol arrest

## ➤ Attitudes

- Smoking marijuana is safe
- Smoking cigarettes is safe
- My parents think it's O.K. to smoke marijuana
- My parents think it's O.K. to smoke cigarettes

# OPUS Project: Recent Juvenile Detainees with Positive Urines, by Drug and Date



Source: Center for Substance Abuse Research, OPUS, September 2003

# Young Adults

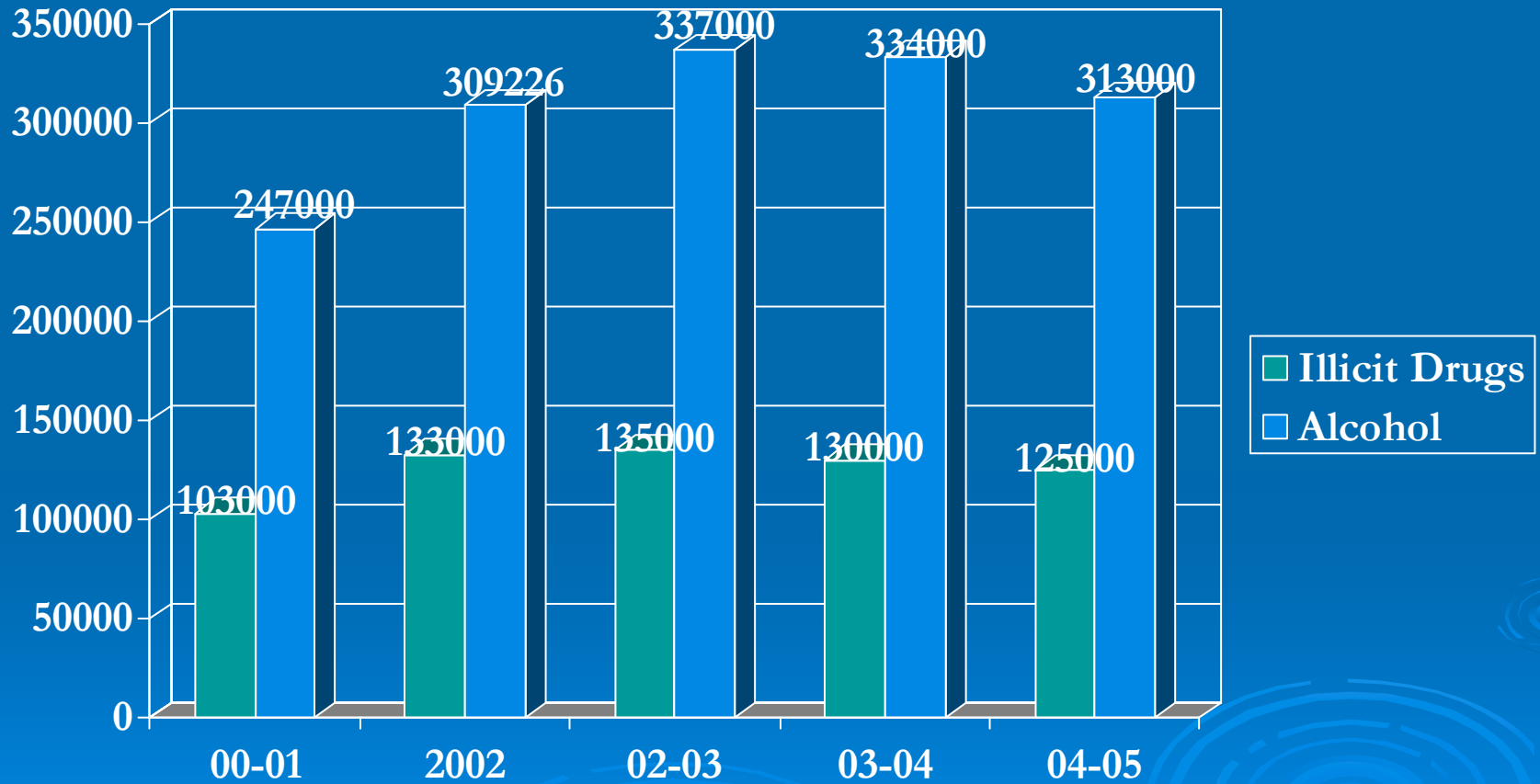
- 1 in 5 Maryland household residents aged 18 to 25 reported past month use of marijuana or other illicit drugs (88,000) in '03-04; 1 in 3 reported past month binge alcohol use (210,000)
- Past month illicit drug users and binge drinkers tend to be male
- The estimated number of users increased 6% in '04-05 (93,000)

# DEWS: Student Drug Research Panel

- Drugs reported as easy or very easy to obtain by half or more of student panelists include alcohol, marijuana, Adderall, Ritalin, and Percocet
- Prescription stimulant use is “increasingly acceptable. Even some people’s parents know they use it to study and don’t even care as long as they’re getting good grades.”
- “I feel like using stimulants non-medically is becoming more socially acceptable. It’s no longer a surprise to hear about, and people don’t seem to be concerned or feel there is any medical risk in misusing them.”
- “I don’t feel like students taking pills in order to help them hit the books and obtain good grades in our competitive university system is such a bad thing.”
- “Everyone has a friend that is prescribed Adderall at this point..”

Source: *DEWS Investigates New Student Drug Research Survey Examines Prescription Stimulant Misuse Among College Students*. CESAR. July 2005.

# Maryland Household Residents Aged 12 and Older Reporting Alcohol and/or Illicit Drug Abuse/Dependence



Source: Adapted by CESAR from SAMHSA, OAS, National Survey on Drug Use and Health Surveys.

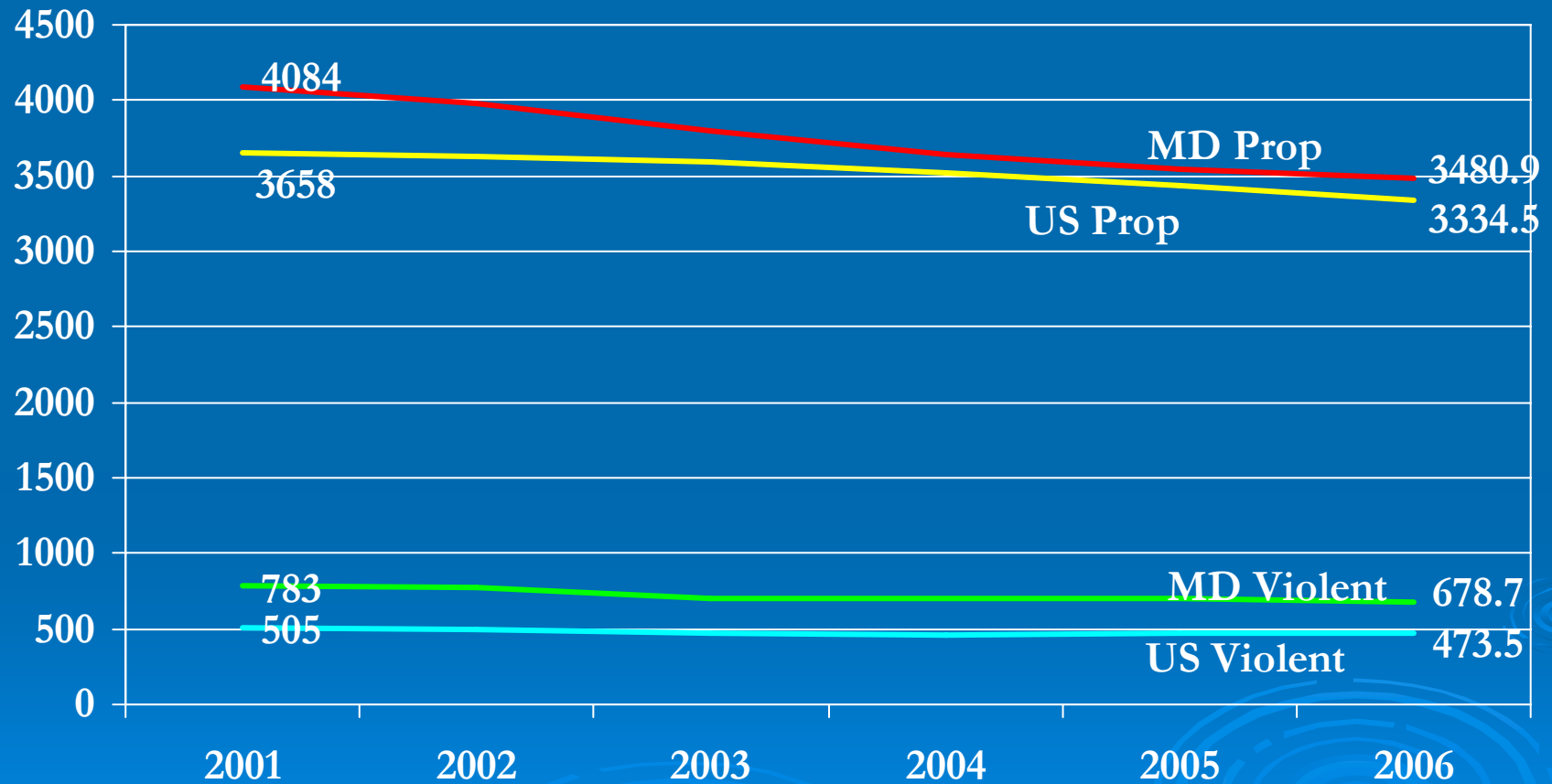
# DEWS: Adult Offenders Study

- Study conducted with Division of Parole and Probation March/April 2005
- Most frequently found drugs - marijuana, cocaine, morphine, and methadone
  - Next – oxycodone, buprenorphine, benzodiazepines, PCP
- Sixteen specimens contained oxycodone and 15 specimens contained buprenorphine. However, only one specimen tested positive for amphetamine and confirmatory testing did not detect methamphetamine. Methamphetamine does not appear to be used by this population in Maryland.

# Drug Use and Crime

- 7,470 violent crimes reported to police in 2006 were alcohol related
  - Nearly 1 in 3 murders/non-negligent manslaughters are alcohol-related.
  - The estimated number of alcohol-related murders and robberies increased from 2001 to 2005; murders increased 29% from 2001 to 2005, but decreased in 2006; robberies increased sharply in 2005 (13%) and remained about the same in 2006.
- 51,624 property crimes reported to police in 2005 were drug-related
  - Numbers of burglaries increased in 2006, but the numbers of larcenies and MVTs continued to decrease

# Rates of Violent and Property Crime in Maryland 2001-2006

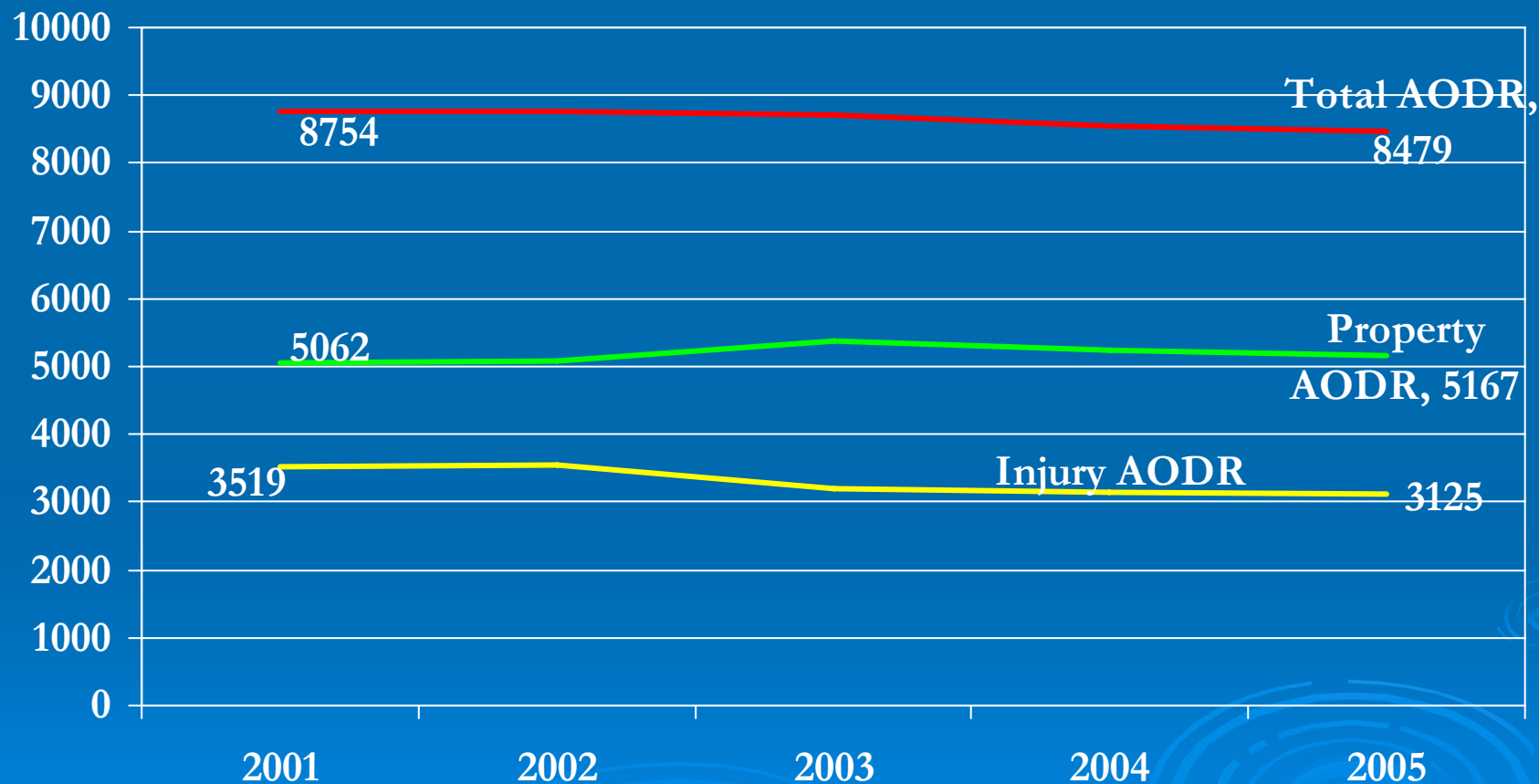


Source: Adapted by CESAR from Crime in the United States 2005 and FBI Uniform Crime Reports. Uniform Crime Reports Program, FBI, DOJ and National Archive of Criminal Justice.

# Driving While Impaired

- In Maryland, nearly 1 in 10 crashes are alcohol-related; 1 in 3 fatal crashes are alcohol-related.
- The number of fatal AOD-related crashes involving an impaired driver increased 34% from 2002 to 2005; the number of fatalities increased from 156 in 2003 to 204 in 2005.
- In 14 jurisdictions, 10 percent or more of crashes were alcohol-related.

# Alcohol- and Drug-Related Crashes 2001-2005



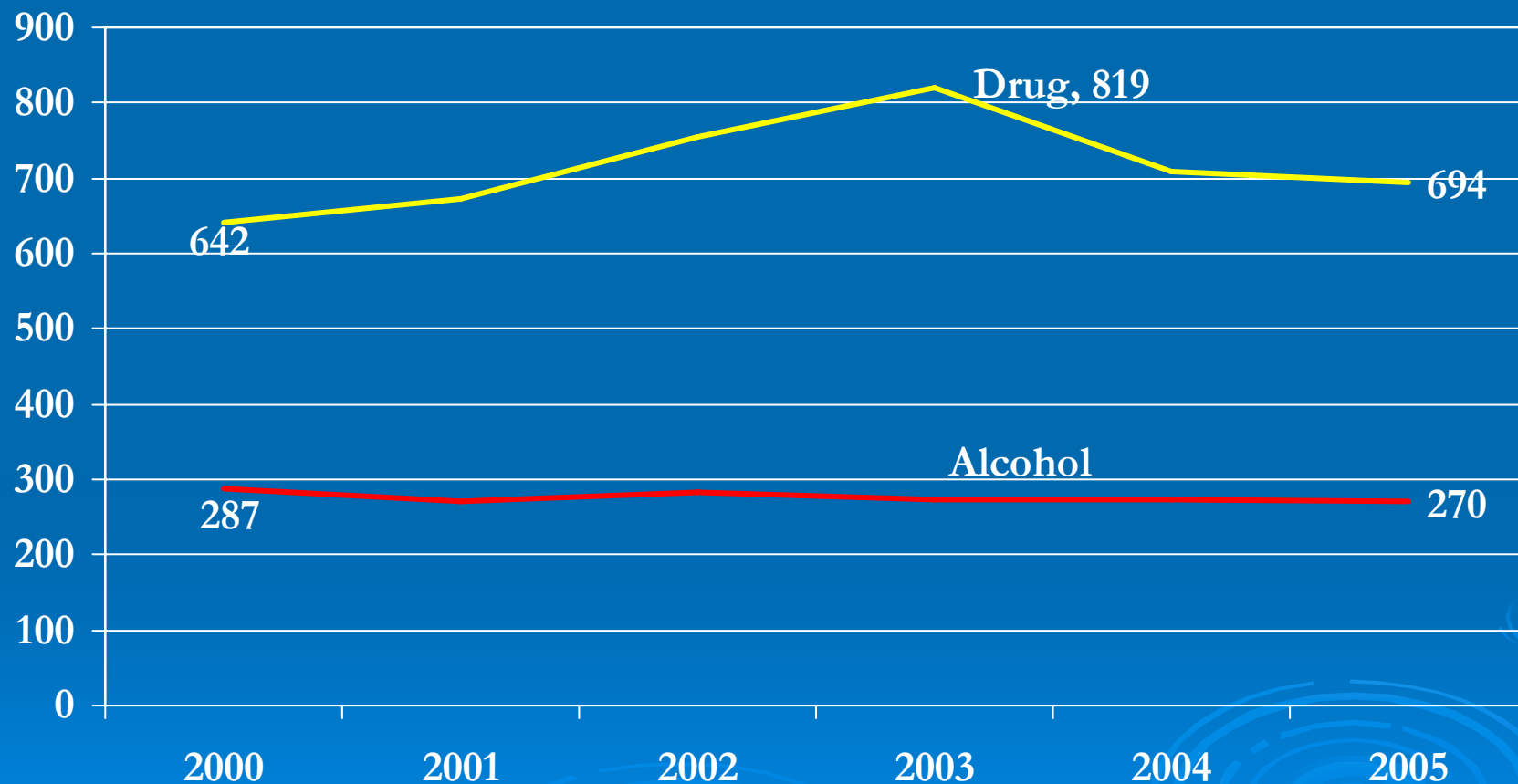
Source: Adapted by CESAR from the Maryland Automated Accident Reporting System (MAARS), Traffic Safety Analysis Division, Office of Traffic and Safety, Maryland State Highway Administration.

# Admissions to Substance Abuse Treatment Programs, by Primary Substance of Abuse, 2001-2005

	2001 (n=64,757)	2002 (n=68,857)	2003 (n=71,283)	2004 (n=72,768)	2005 (n=71,196)	2006 (n=65,557)
Primary Substance of Abuse	%	%	%	%	%	%
Heroin	29.9%	31.1%	31.7%	30.8%	30.0%	25.9%
Other Opiates <sup>1</sup>	2.5%	2.6%	3.0%	3.7%	4.5%	5.5%
Marijuana	14.2%	14.3%	14.5%	14.4%	14.2%	15.1%
Cocaine (smoked)	9.6%	9.9%	9.3%	10.8%	11.1%	11.6%
Cocaine (not smoked)	2.8%	3.1%	3.8%	2.8%	3.2%	3.2%
PCP	0.3%	0.5%	0.5%	0.4%	0.4%	0.5%
Hallucinogens <sup>2</sup>	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%
Amphetamines <sup>3</sup>	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%
Other Stimulants <sup>4</sup>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tranquilizers <sup>5</sup>	0.3%	0.2%	0.2%	0.3%	0.4%	0.6%
Sedatives/Hypnotics <sup>6</sup>	0.1%	0.2%	0.2%	0.2%	0.2%	0.1%
Inhalants	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Other/Unknown	1.3%	1.0%	1.1%	0.9%	0.6%	0.2%

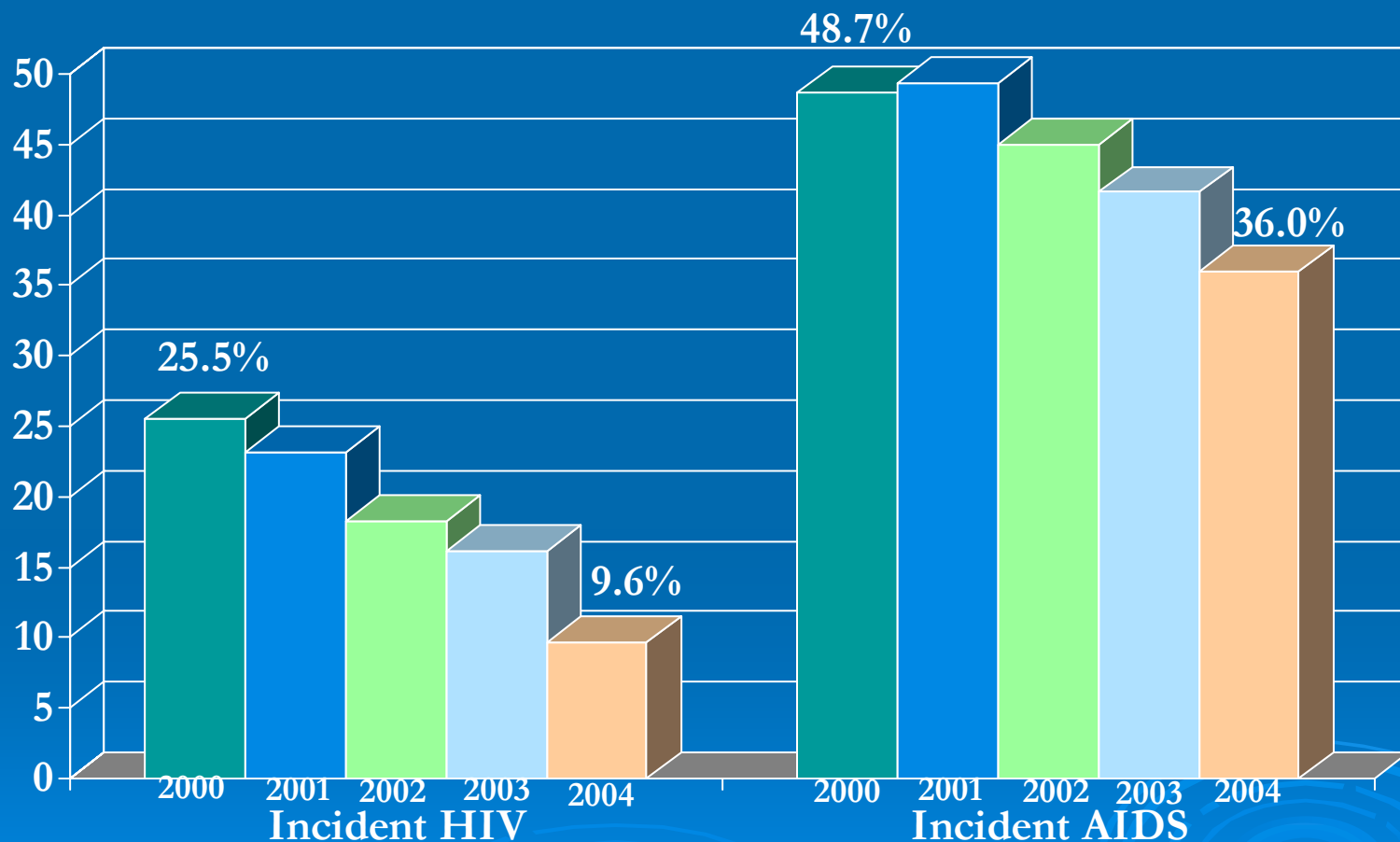
Source: Adapted by CESAR from the SAMHSA, OAS, Treatment Episode Data Set. Administrative data reported by MD to TEDS through January 8, 2007.

# Health Consequences: Drug- and Alcohol-Induced Deaths



Source: Adapted by CESAR from the Maryland Vital Statistics Annual Reports 200-2005, Vital Statistics Administration, MD Department of Health and Mental Hygiene.

# IDU-Related Incident HIV and AIDS Cases 2000-2004



Source: Adapted by CESAR from the Maryland 2005 HIV/AIDS Annual Report, AIDS Administration, MD Department of Health and Mental Hygiene.


# Overview of Consequences

	State Trend
Youth Drug Use	➡
Abuse/Dependence	➡
Violent Crime	➡
Property Crime	⬇
Alcohol-related Crashes	⬇
Treatment Admissions	⬇
Drug-related Deaths	⬇
Alcohol-related Deaths	➡
HIV/AIDS Cases	⬇

What's Next?



# SEOW Year 2: Primary Tasks

- I. Identify & create plan to address a local data gap
  - II. Creation of the Local Epidemiological Profile
  - III. Update of the State Epidemiological Profile
- 

# Local Data Gap Selected

## ➤ Inpatient Hospital Discharge Data

- Local Partners expressed need
- Lack of access to hospital-based data widened after the loss of DAWN Live!
- Potential indicator of a consequence of great cost
- Data exist, but would required extra time and effort to acquire, analyze, and define admissions related to substance use

# II. Local Epidemiological Profile

- First Step in Development
  - Focus group with select local partners (i.e., prevention coordinators from each jurisdiction) to discuss data needs and possible formats for the county level profile
  
- Second Step in Development
  - Creation of three methods for providing data to counties
    1. Cross County Compendium
    2. SEOW Monitor
    3. County Data Graphics Portfolio

# Cross County Compendium

- Compiled as resource to facilitate state and cross county comparisons on the consequences and consumption of substance use.
- Includes tables that provide recent data on:
  - Alcohol and Illicit drug dependence
  - Alcohol-related crashes
  - Violent crime attributed to alcohol
  - Property crime attributed to illicit drugs
  - Alcohol and illicit drug deaths
  - Alcohol- and drug-related suspensions
  - HIV/AIDS cases
  - Adult and youth alcohol and illicit drug consumption
  - Alcohol and illicit drug treatment admissions

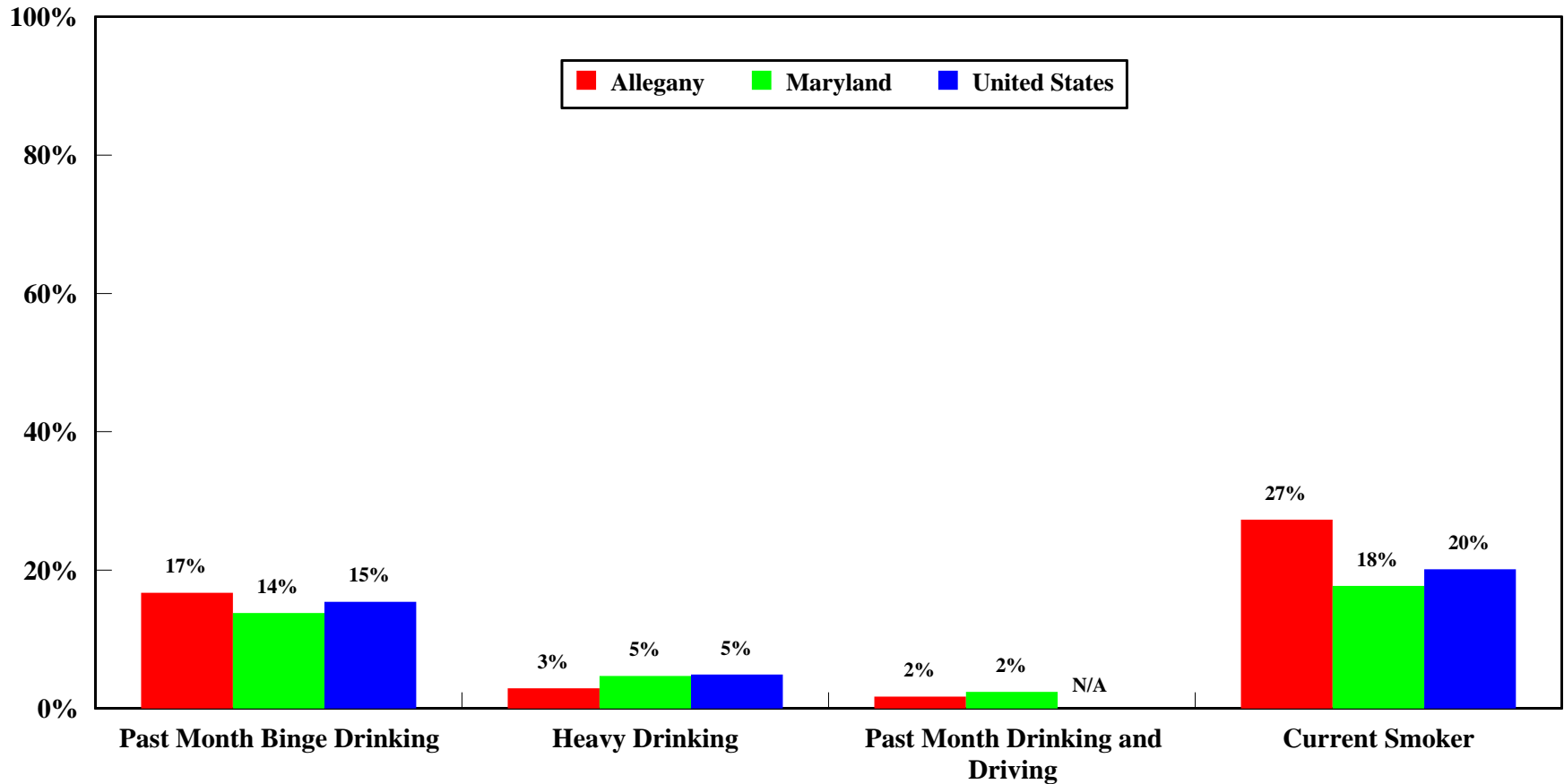
# County Data Graphics Portfolio

- A collection of 15 PowerPoint graphics is being produced for each county.
  - Same graphics produced for each county
  - To be supplied with bullets describing each graphic.
- Graphics will be suitable for use in presentations and will be distributed on CD/DVD.

# County Data Graphics Portfolio

- Graphics created for:
  - Consumption Indicators
  - Consequences: Dependence, Crime, & Crashes
- Types of graphics:
  - County, State and National comparison
  - Five-year County Trends

# Percentage of Residents Aged 18 or Older Reporting Selected Alcohol and Tobacco Use Behaviors; County, State, and National Estimates; 2006



**NOTES:**

N/A: Data not available.

**Past Month Binge Drinking:** Consuming five or more drinks on one occasion in the past month.

**Heavy Drinking:** Consuming an average of more than 2 drinks per day for men and more than 1 drink per day for women.

**Past Month Drinking and Driving:** Driving after "having too much to drink" in the past month.

**Current Smoker:** Smoked at least 100 cigarettes in lifetime and currently smokes.

**SOURCE:** Adapted by the Center for Substance Abuse Research (CESAR) from the 2006 Maryland Behavioral Risk Factor Surveillance System (BRFSS), Maryland Department of Health and Mental Hygiene (DHMH) and Centers for Disease Control and Prevention (CDC) and the 2006 National BRFSS, CDC.

# Percentage of Residents Aged 18 or Older Reporting Selected Alcohol and Tobacco Use Behaviors; County, State, and National Estimates; 2006

## Key Findings:

- In 2006, Allegany County's adult population reported patterns of alcohol use similar to both the state and nation (no significant differences at  $p < .05$ ); with nearly 1 in 5 (17%) reporting past month binge drinking, 3% reporting heavy drinking, and 2% reporting past month drinking and driving.
- However, cigarette use in Allegany County was significantly ( $p < .05$ ) higher than the state in 2006. Approximately 1 in 4 (27%) adult Allegany County residents were estimated to be current smokers compared to nearly 1 in 5 for the state (18%).

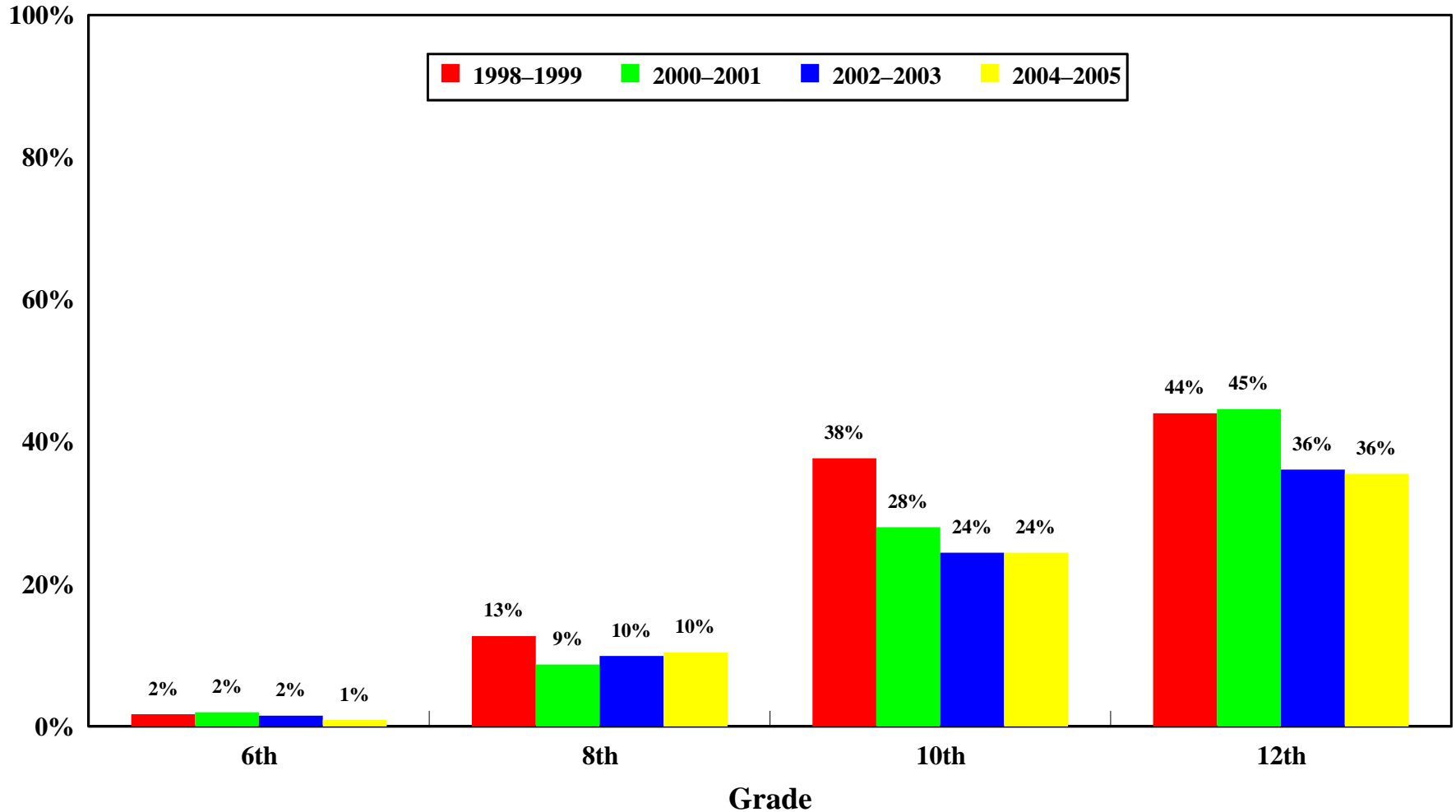
## Other Comparisons (*Data not shown*):

- *To prior year:* Patterns of past month binge alcohol use, heavy drinking and current smoking in Allegany County showed no change between 2005 and 2006 BRFSS administrations.
- *To neighboring counties:* Patterns of past month binge alcohol use, heavy drinking and current smoking in Allegany County were similar to nearby Western Counties (Garrett, Washington, and Frederick) according to the 2005 BRFSS.
- *To similar data sources:* Similar patterns of alcohol and cigarette use were found for the population of Western Maryland (Allegany, Garrett, Washington, and Frederick Counties) 12 years and older through the NSDUH survey for 2002-2004.

## Notes on Source Data:

- The BRFSS is a telephone survey of a random, representative sample of the state. County level estimates are based on responses from county residents, but may not be representative of the county's general population. County level analyses, therefore, must be interpreted with caution, especially when the number sampled was smaller than 50.
- The BRFSS and NSDUH surveys capture some similar data and their findings may be useful to compare. However, the methods employed and the population sampled differ between the two. The BRFSS survey is administered by telephone and is designed to produce statewide estimates for the adult population 18 years of age and older. The NSDUH survey is administered through in-person, self-administered audio computer-assisted household interview and is designed to produce statewide and select regional/county estimates for the population 12 years of age and older.

# Percentage of Allegany County Public School Students Reporting Past Month Binge Alcohol Use, by Grade Level; School Years 1998–1999 to 2004–2005



**NOTES:**

**Binge Alcohol Use:** Consuming five or more servings of alcohol on the same occasion in the past 30 days.

**SOURCE:** Adapted by the Center for Substance Abuse Research (CESAR) from data from the 1998, 2001, 2002, and 2004 Maryland Adolescent Surveys (MAS), Maryland State Department of Education (MSDE).

# Percentage of Allegany County Public School Students Reporting Past Month Binge Alcohol Use, by Grade Level; School Years 1998–1999 to 2004–2005

## Key Findings:

- In each school year from 1998-1999 to 2004-2005, the percent of Allegany public school students reporting past month binge alcohol use increased sizably by grade.
- Estimates are that in 2004-2005 1% of sixth graders, 1 in 10 eighth graders, approximately 1 in 4 tenth graders, and approximately 1 in 3 twelfth graders drank 5 or more servings of alcohol on one occasion in the 30 days.
- From the 1998-1999 school year to the 2004-2005 school year, past month binge alcohol use remained stable for 6<sup>th</sup> and 8<sup>th</sup> graders, but appeared to decrease for 10<sup>th</sup> and 12<sup>th</sup> graders (from 38% to 24% for tenth graders and from 44% to 36% for twelfth graders).

## Other Comparisons (*Data not shown*):

- To state: Past month binge alcohol use among students in Allegany County from 2000-2001 to 2004-2005 was similar to the state for most grades and years. Although it appears a greater proportion of twelfth graders in Allegany in 2001-2002 reported past month binge alcohol use compared to the state (45% versus 31%). Starting in the 2002-2003 school year Allegany's twelfth grade percentages were more in line with the states at approximately one third reporting past month binge alcohol use.
- *To neighboring counties:* COMPARE TO Garrett and Washington
- *To similar data sources:* N/A only the 2005 YRBSS available for state level comparisons.

## Notes on Source Data:

- The Maryland Adolescent Survey (MAS) is a bi-annual group administered questionnaire conducted by the Maryland State Department of Education (MSDE) to assess the nature and extent of substance use and factors related to substance use among Maryland public school students. The survey is administered to a sample of 6th, 8th, 10th, and 12th graders in Maryland public schools.
- The school year 2000-2001 MAS survey was administered in the Spring, whereas traditionally the survey is administered in the Fall.
- The MAS Report does not provide sampling error estimates; therefore, we are unable to determine whether changes in drug use are statistically significant.

# SEOW Monitor

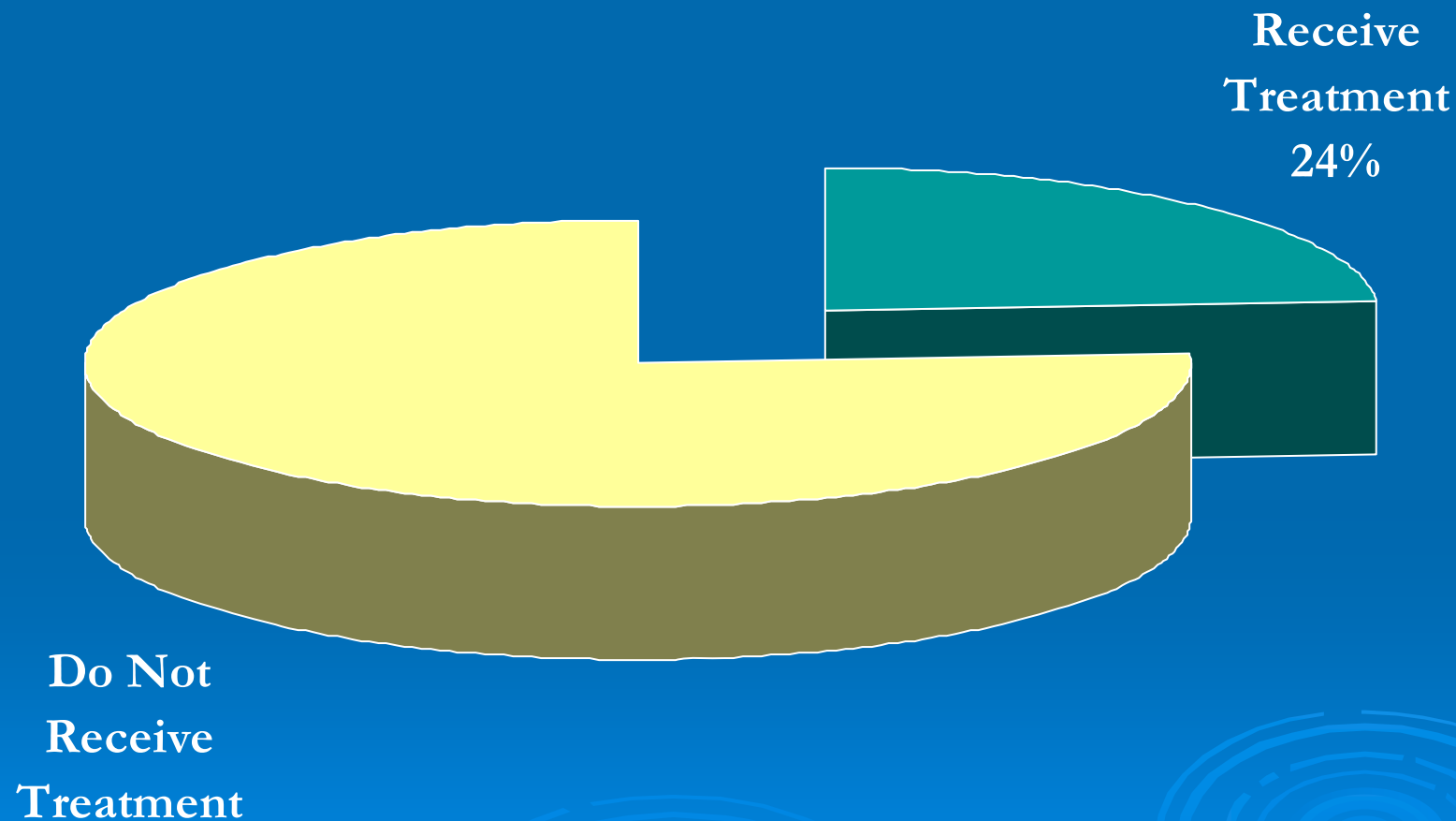
- A concise, easy to read and distribute two page fact sheet containing text and graphics drawn from the County Data Graphics Portfolio
- One SEOW Monitor is being created for each county.

# III. State Epidemiological Profile

- Where possible data will be updated
- Format to stay the same
- Exploring additional data sources for inclusion, including data on alcohol and tobacco sales

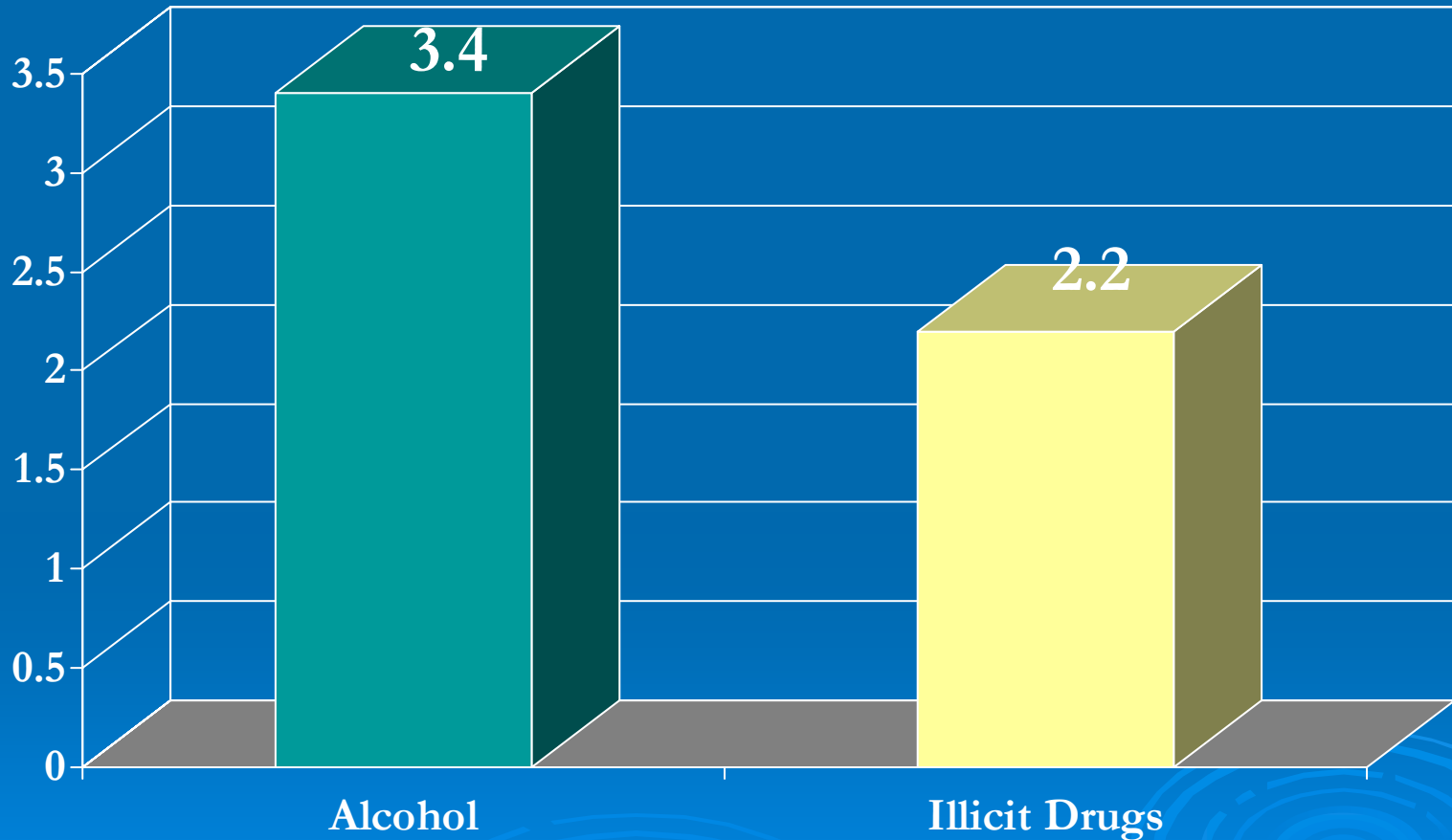


# Only 1 in 4 Drug Abusers in MD Receive Treatment



Source: Yacoubian, G.S., Hsu, M., & Wish, E.D. (2002). Estimating the need for substance abuse treatment in Maryland. CESAR. Drugs in Maryland 2003 Update.

# Alcohol Abuse is Estimated to Cost MD \$3.4 Billion; Illicit Drug Abuse \$2.2 Billion



Source: CESAR. Drugs in Maryland: 2003 Update

# Case for Continued Funding

- According to several conservative estimates, every \$1 invested in addiction treatment programs yields a return of between \$4 and \$7 in reduced drug-related crime, criminal justice costs, and theft alone. When savings related to health care are included, total savings can exceed costs by a ratio of 12 to 1.

National Institute on Drug Abuse. principles of drug addiction treatment.