

Underage Drinking in Maryland

House Special Committee on Drug and
Alcohol Abuse
September 23, 2008

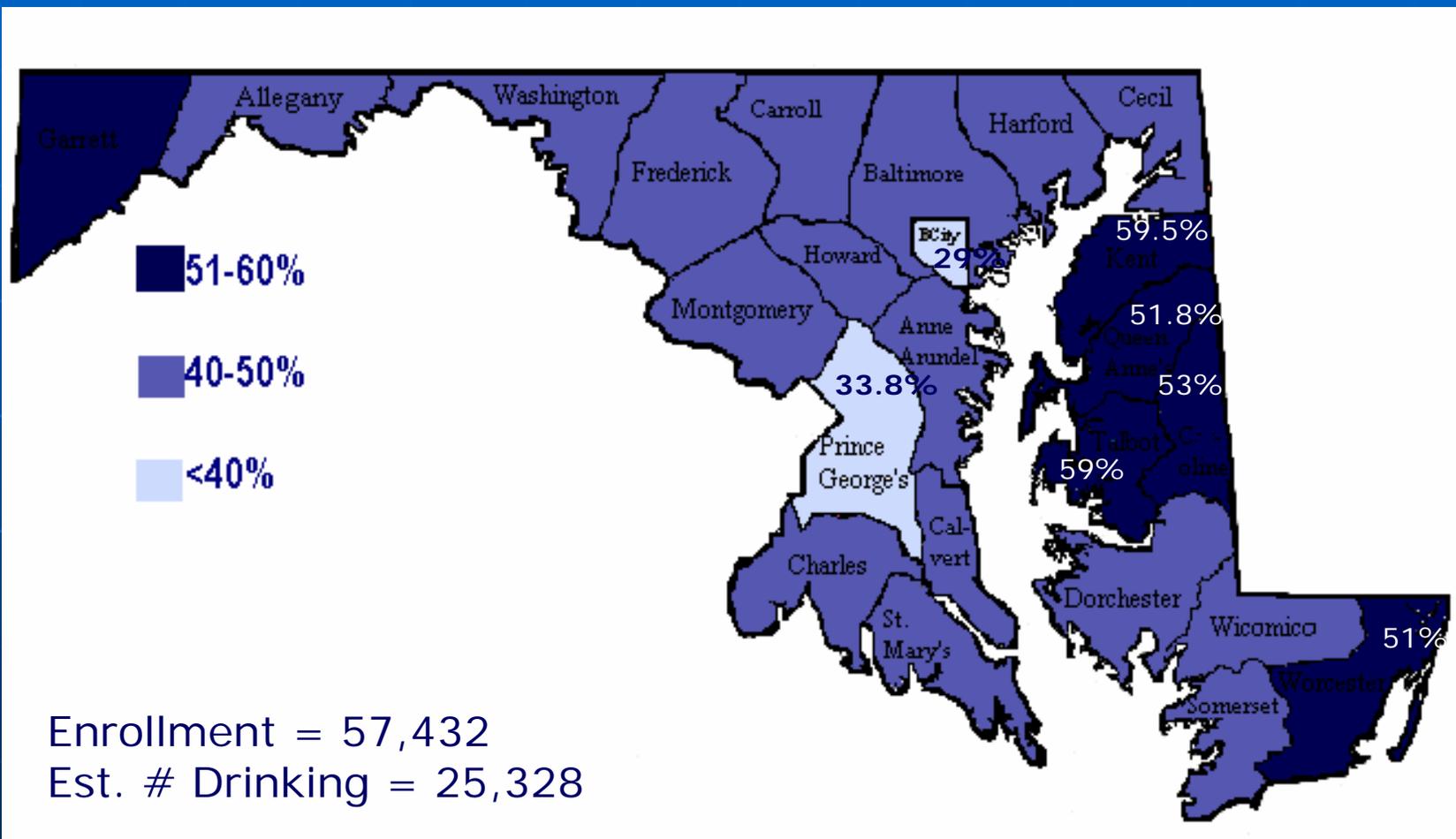
Presented by
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Maryland's State Epidemiology Outcomes Workgroup (SEOW) Identifies State Prevention Needs

- New Reports provide data necessary to target common problems
 - County Monitors
 - Cross County Compendium
- ADAA OETAS Summer Class
 - 15 of the 16 counties present identified underage drinking as a priority
- Future Plans
 - Cross County Compendium on Underage Drinking
 - Coordinators Focus Group

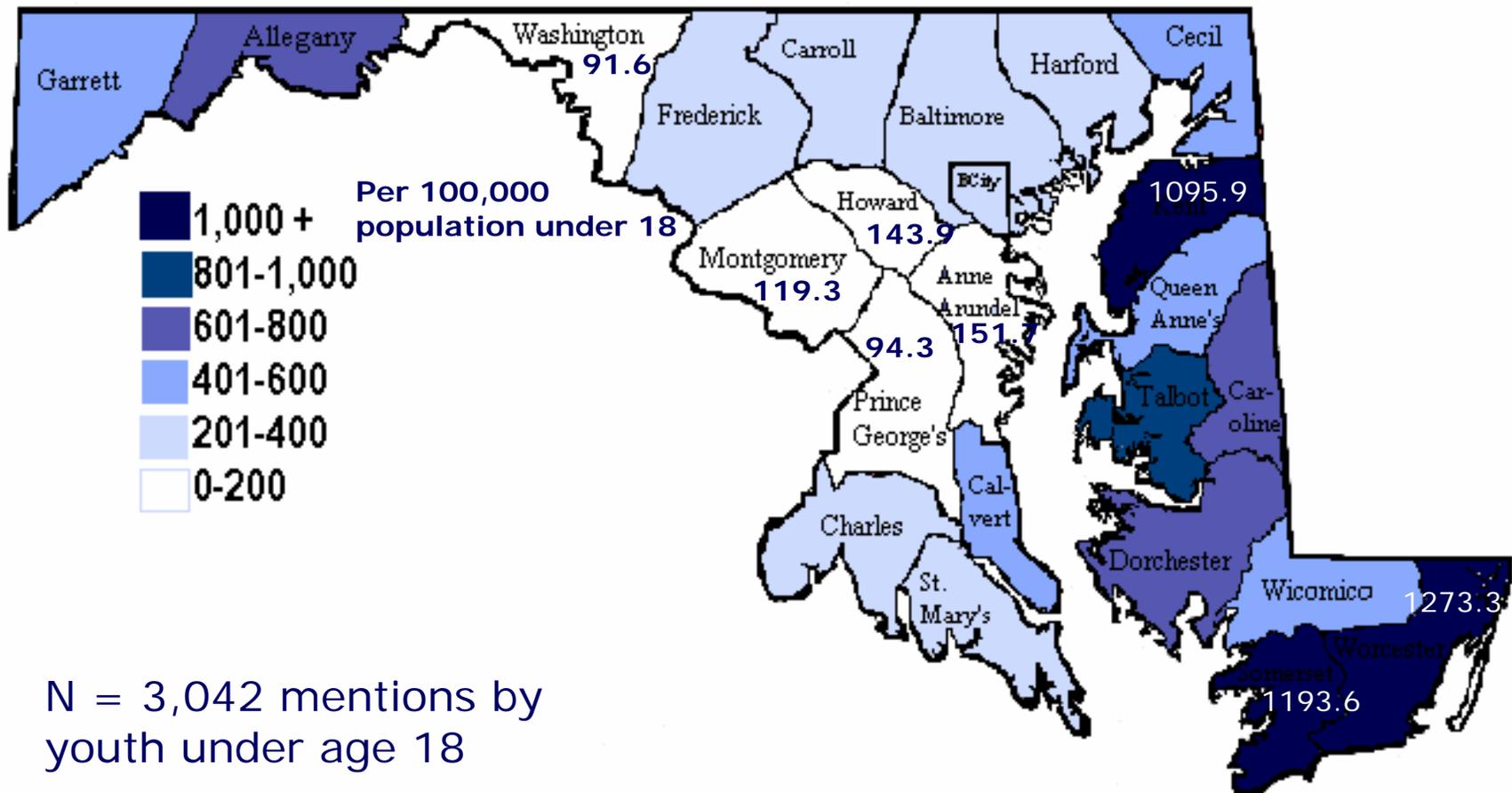
How Widespread
is
Underage Drinking?

Use of Any Alcohol in the Past Month by High School Seniors, School Year 2004-05



Source: Adapted by CESAR from the MSDE 2004 Maryland Adolescent Survey

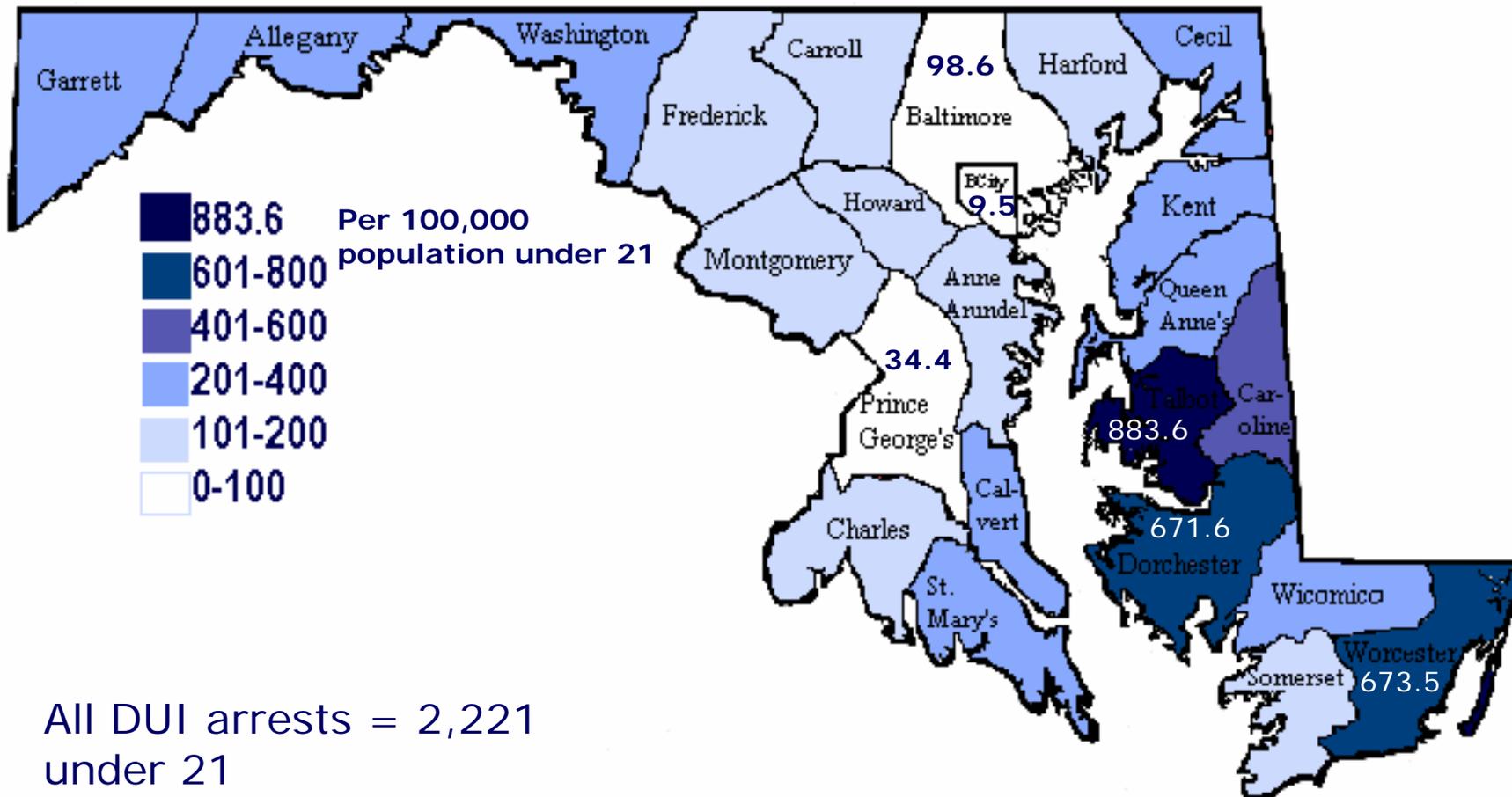
Rates of Juvenile Treatment Admissions Involving Alcohol 2006



Adapted by CESAR from SAMIS, MD ADA.

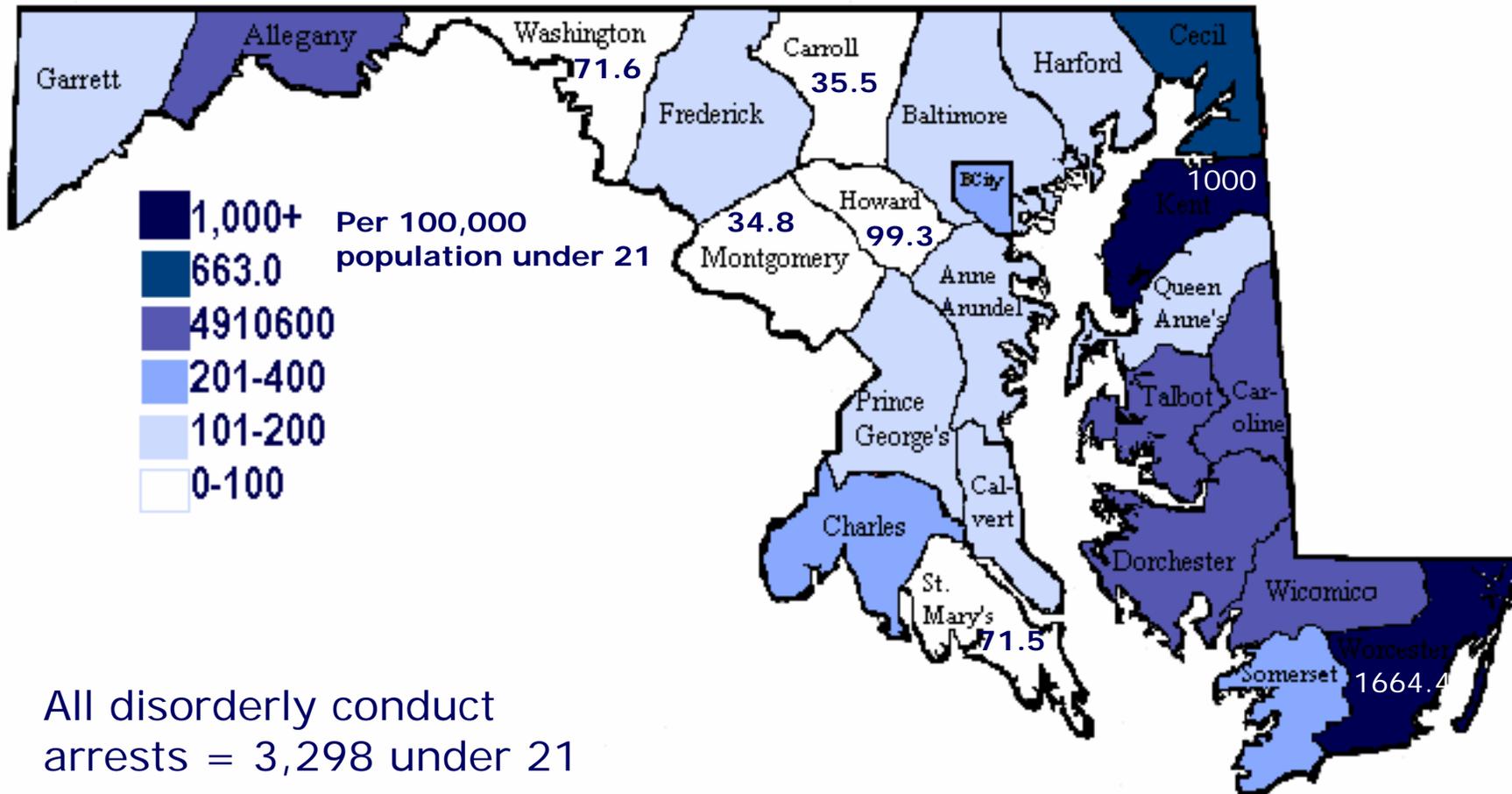
What are the Consequences
of this Use?

Rate of DUI Arrests 2006



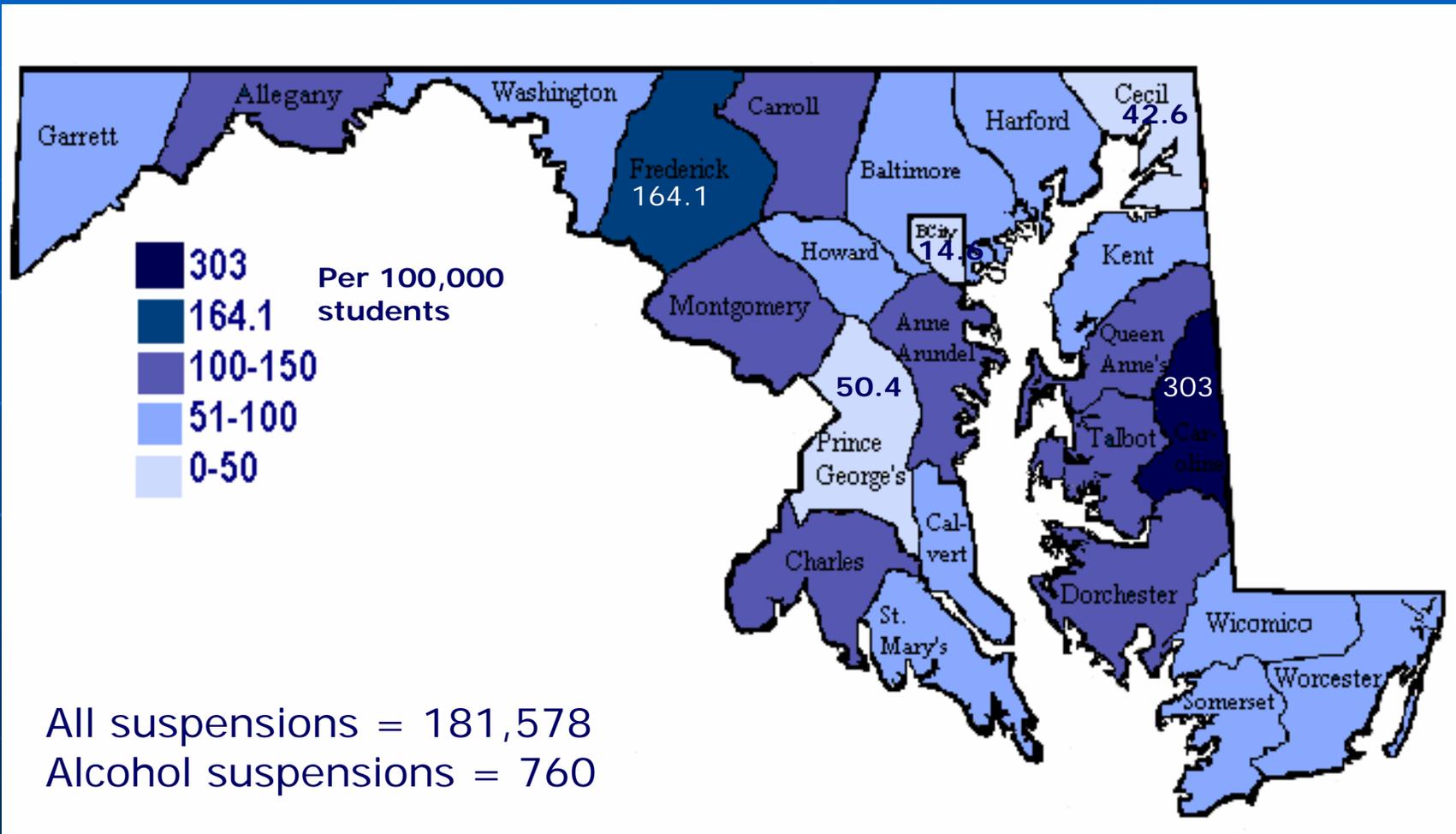
Source: Adapted by CESAR from the Crime in Maryland, 2006 Uniform Crime Report. UCR, MSP.

Rate of Disorderly Conduct Arrests 2006



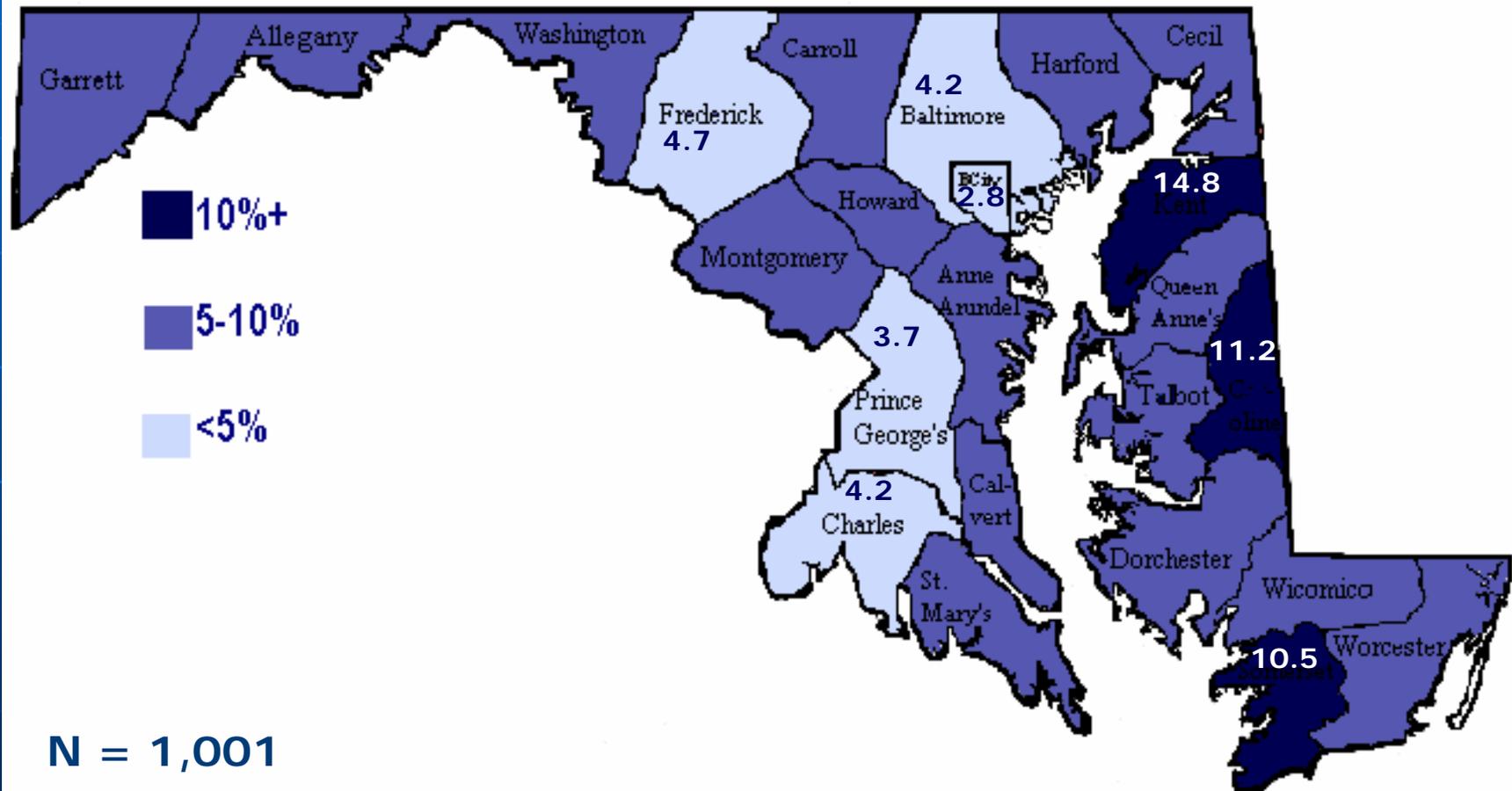
Source: Adapted by CESAR from the Crime in Maryland, 2006 Uniform Crime Report. UCR, MSP.

Rate of Alcohol-Related Suspensions, School Year 2006-07



Source: Suspensions, Expulsions, and Health-Related Exclusions Maryland Public Schools, 2006-07, Division of Accountability and Assessment, Maryland State Department of Education

Percentage of County Crashes Among Drivers that were Alcohol-Related 16-20, 2006



Source: Adapted by CESAR from the MAARS, Traffic Safety Analysis Division, Office of Traffic and Safety, State Highway Administration

Drinking and Driving

- Roughly one third of public high school seniors who reported drinking or binge drinking reported driving under the influence in the past year.
- Nearly half of all public high school seniors who reported ever using alcohol in 2004 had been a passenger in the past year in a vehicle driven by a person under the influence.
- In 2006, 13% of AOD-related crashes involved drivers aged 16 to 20.
- Nearly one in three AOD-impaired drivers and 55% of passengers killed in a AOD-related crash were aged 24 or younger.

Source: Adapted by CESAR from the MSDE 2004 Maryland Adolescent Survey and the SHA MAARS System.

Cost of Underage Drinking in MD

- PIRE estimated in that underage drinking cost Maryland \$1.2 billion in 2005 in medical costs, work lost costs, and pain and suffering.
- The \$2,292 per youth cost puts MD 17th among the 50 states between IL and KS; VA and PA are in the bottom 10.
- Underage drinkers consumed 12.5% of all alcohol sold – \$269 million in sales – and netted profits of \$130 million for the alcohol industry.

Summary

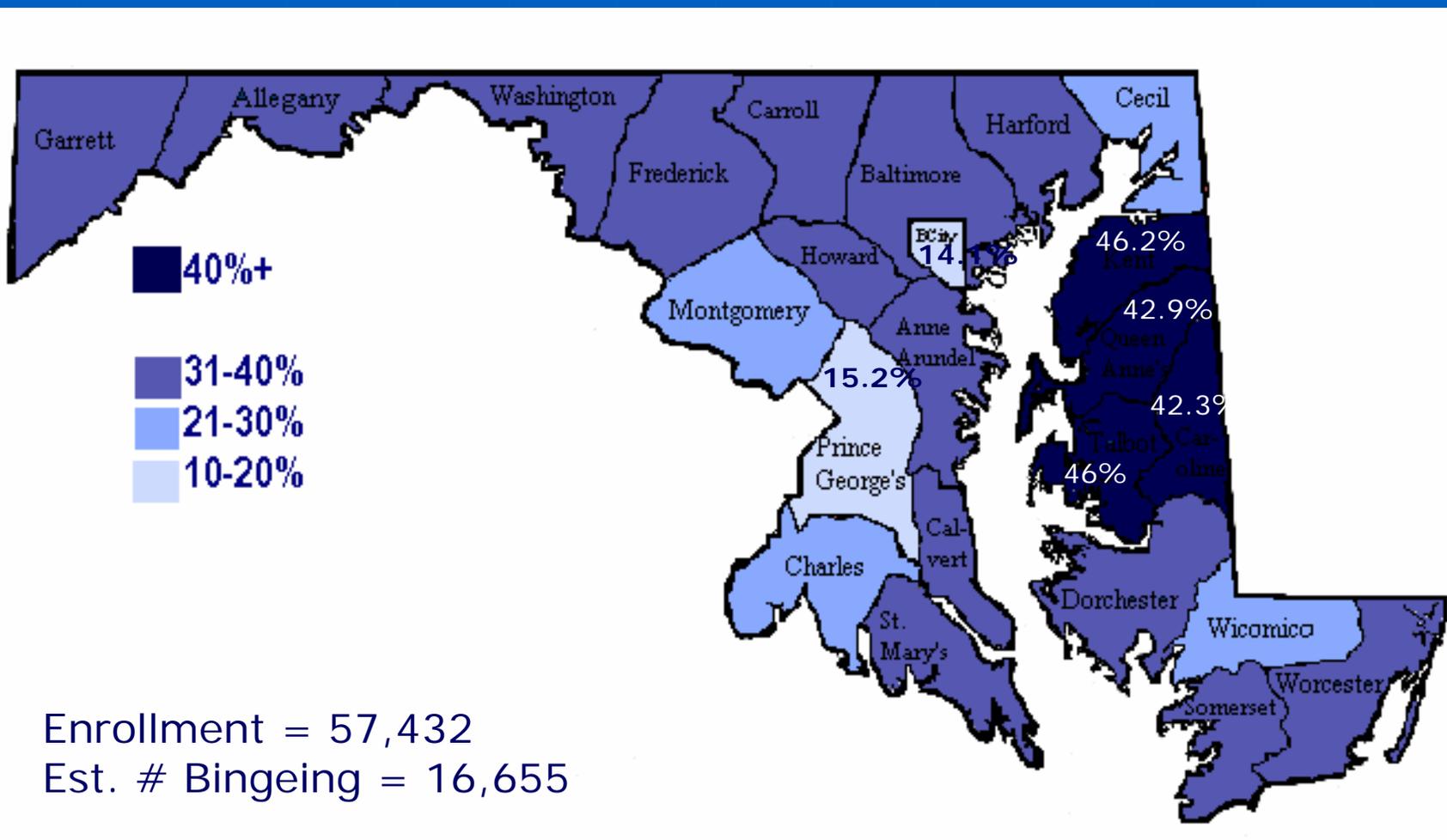
- Underage drinking is an enduring and costly problem in Maryland
- Impacts nearly all jurisdictions to some degree
- The SEOW is a vital tool for understanding and addressing underage drinking

Costs of Underage Drinking, by Problem, MD 2005

Problem	Total Costs (in millions)
Youth Violence	\$774.0
Youth Traffic Crashes	\$204.7
Youth Alcohol Treatment	\$79.5
High-Risk Sex, Ages 14-20	\$75.6
Youth Property Crime	\$58.8
Youth Injury	\$32.8
FAS Among Mothers Age 15-20	\$13.6
Poisonings & Psychoses	\$8.0
Total	\$1,246.9

Source: PIRE, October 2006. Underage Drinking in Maryland: The Facts

Past Month Binge Drinking by High School Seniors, School Year 2004-05



Source: Adapted by CESAR from the MSDE 2004 Maryland Adolescent Survey

Treating Underage Drinkers

- An estimated 25,000 youth aged 12 to 17 reported abuse or dependence on alcohol (NSDUH 2005-06)
- In FY 2007, 4,507 youth age 10-17 were admitted to ADAA-funded programs:
 - 48% were referred to treatment by juvenile justice or criminal justice agencies.
 - 60% had at least one arrest in the 12 months prior to admission.
 - Approximately 2,569 mentioned alcohol.
- Nearly half of those reporting a problem with alcohol indicated that their first alcohol intoxication occurred by age thirteen

Underage Drinking by Maryland Public School Students

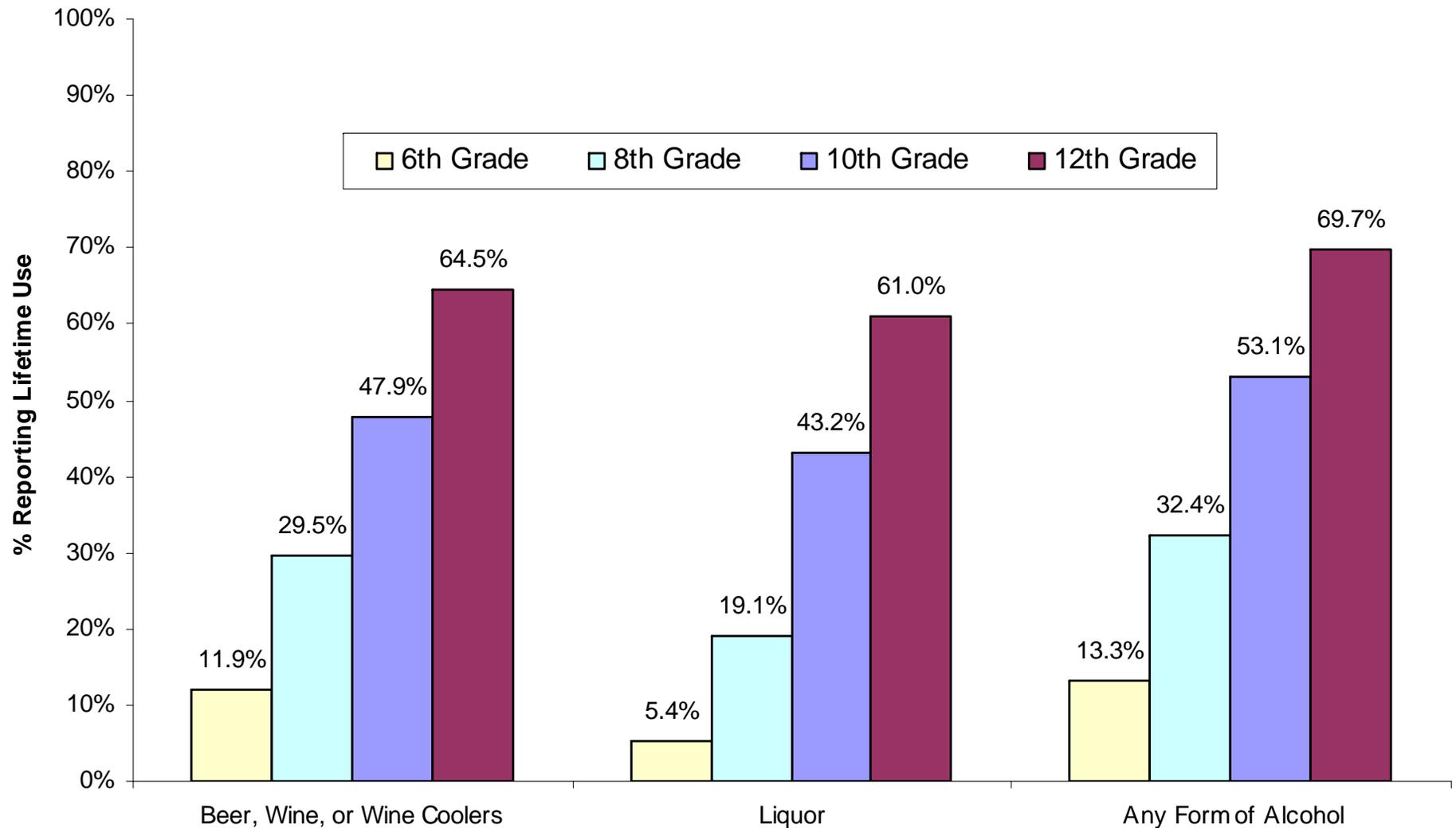
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Presented by
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2004 Maryland Adolescent Survey (MAS)

- Conducted every other year by the Maryland State Department of Education (MSDE).
- Includes data on Maryland public school students enrolled in the 6th, 8th, 10th, and 12th grades from every school system in Maryland.
- Survey was administered in December, 2004.
- A total of 34,529 surveys were completed.
- Unweighted sample size, by grade:
 - 6th Grade n = 8,654
 - 8th Grade n = 8,805
 - 10th Grade n = 8,441
 - 12th Grade n = 8,629
- The latest MAS was administered in late 2007. Results from this survey should be available October 2008.

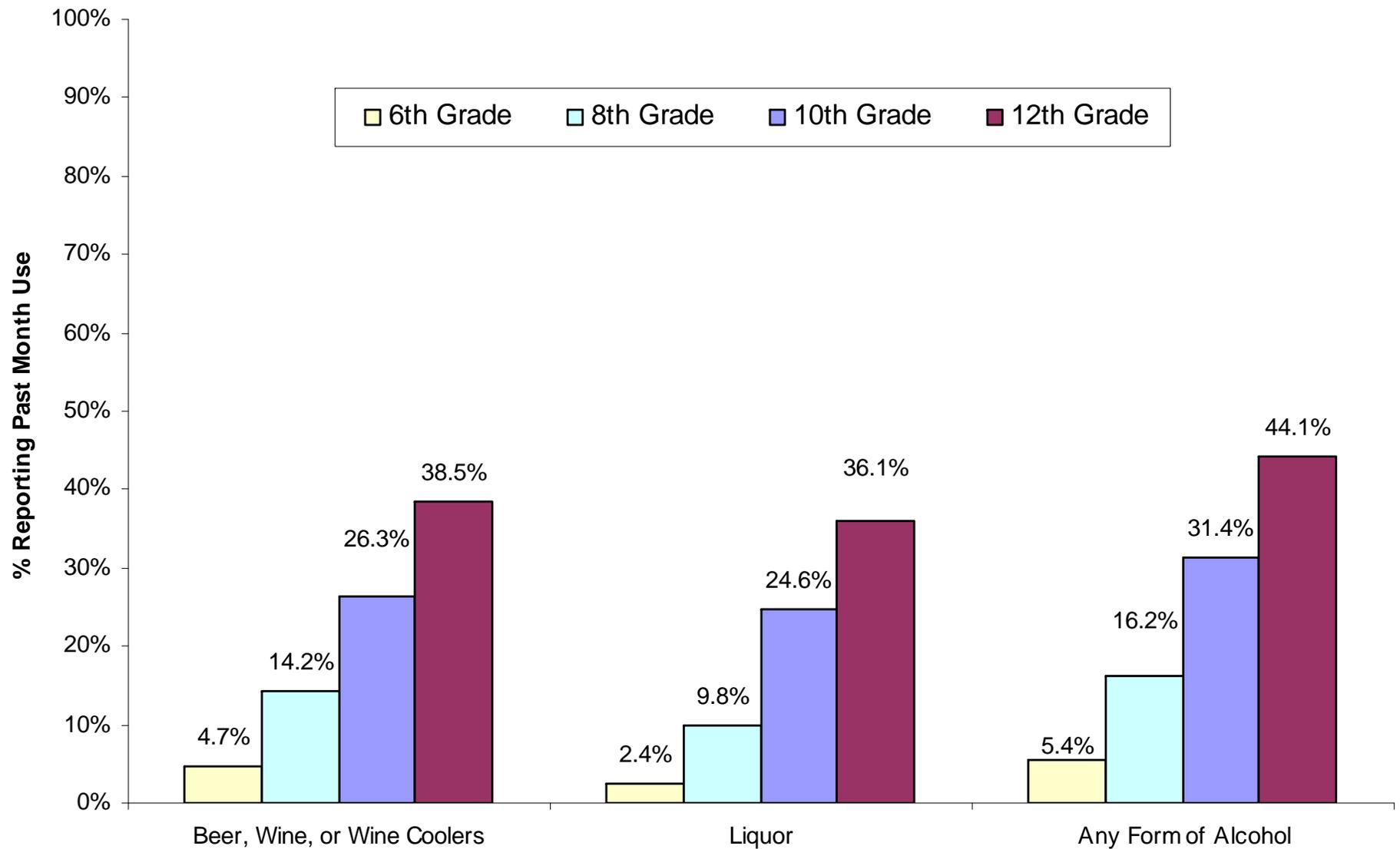
Figure 1: Lifetime Use* of Alcohol, by Grade and Type of Alcohol, 2004



* Excludes religious use of alcohol or situations in which respondent took a sip from an adult's drink.

Source: Adapted by CESAR from the 2004 MAS, MSDE.

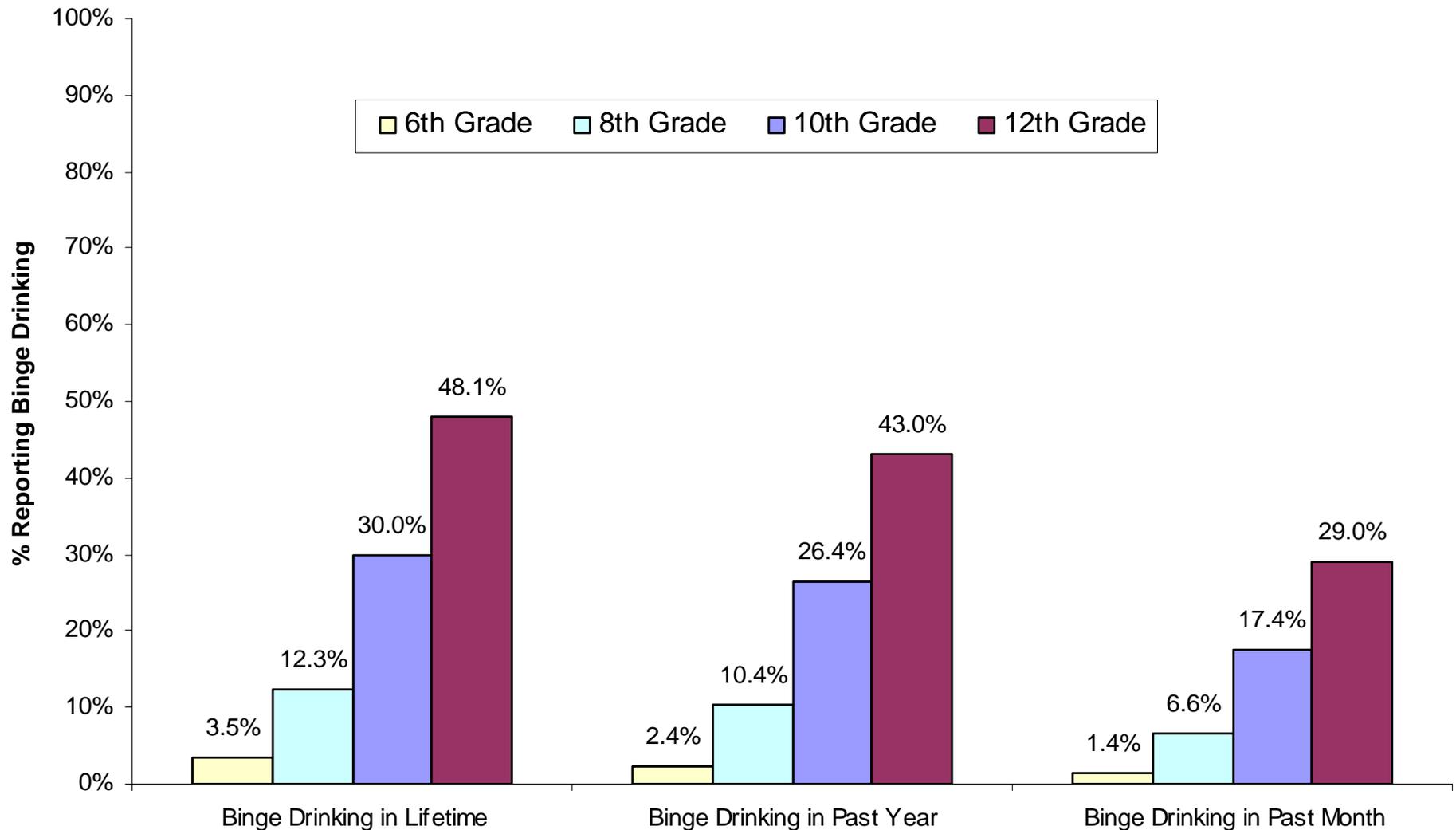
Figure 2: Past Month Use of Alcohol, by Grade and Type of Alcohol, 2004



* Excludes religious use of alcohol or situations in which respondent took a sip from an adult's drink.

Source: Adapted by CESAR from the 2004 MAS, MSDE.

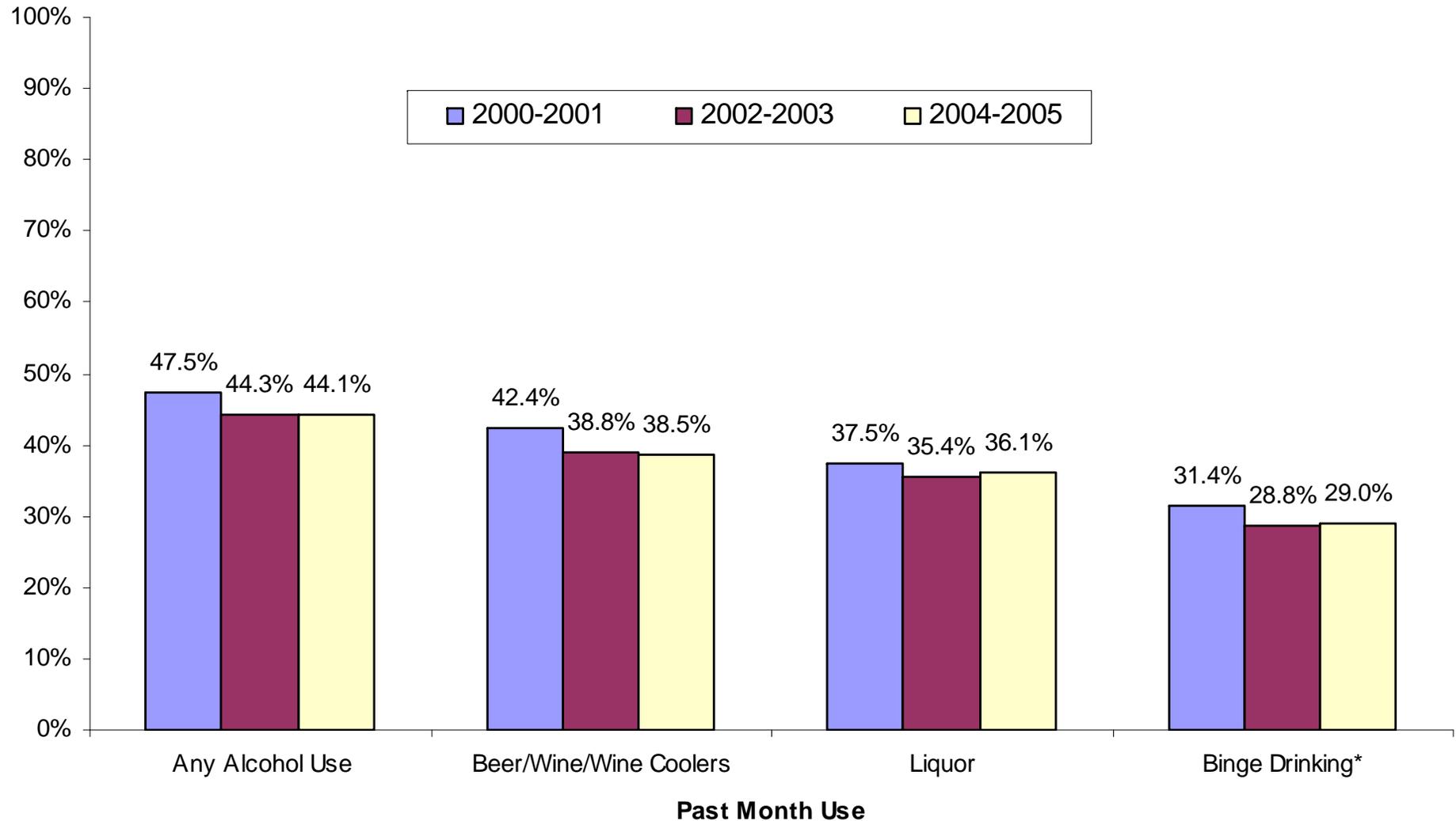
Figure 3: Binge Drinking* in Lifetime, Past Year, and Past Month, by Grade, 2004



*Binge Drinking is defined as consuming five or more servings of alcohol on the same occasion (a serving is one bottle of beer, one glass of wine, one wine cooler, one shot glass of liquor, or one mixed drink).

Source: Adapted by CESAR from the 2004 MAS, MSDE.

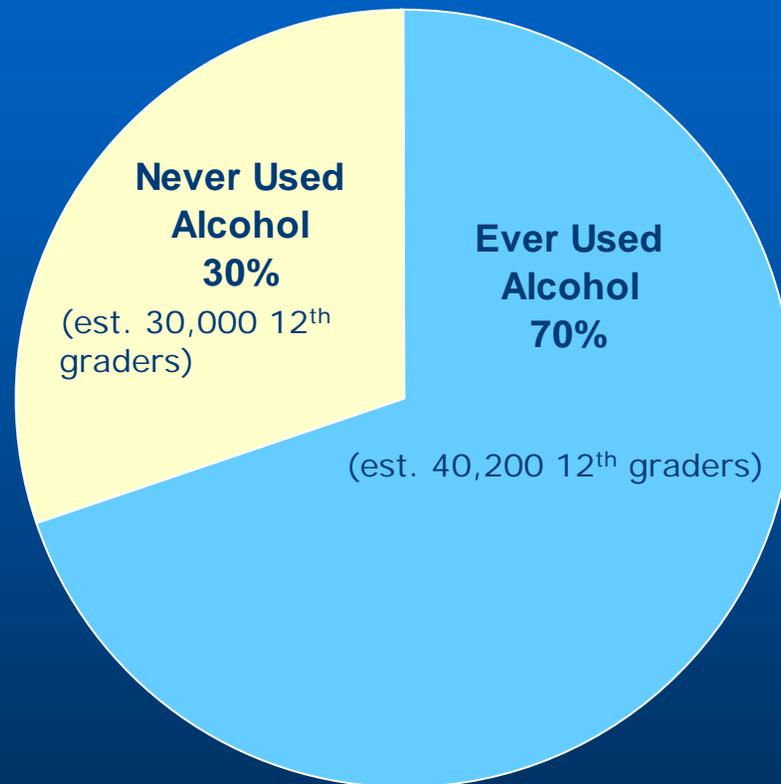
Figure 4: Trends in Past Month Alcohol Use Among 12th Graders has Remained Stable Since 2000-01



*Binge Drinking is defined as consuming five or more servings of alcohol on the same occasion (a serving is one bottle of beer, one glass of wine, one wine cooler, one shot glass of liquor, or one mixed drink).

Source: Adapted by CESAR from the 2001, 2002, and 2004 MAS, MSDE.

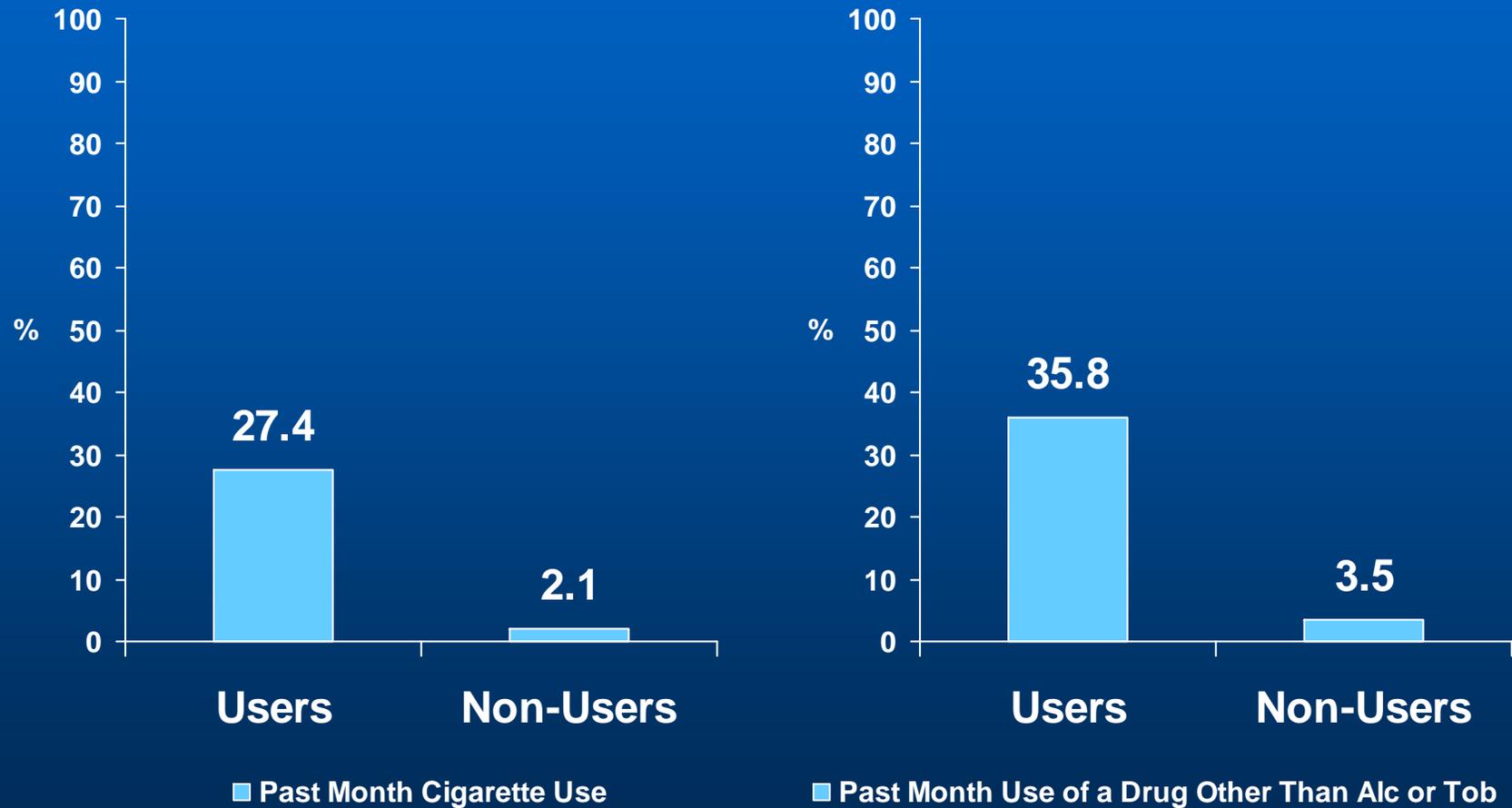
Figure 5: Percentage of Maryland 12th Graders Who Used Alcohol at Least Once in Their Lifetime, 2004



* Excludes religious use of alcohol or situations in which respondent took a sip from an adult's drink

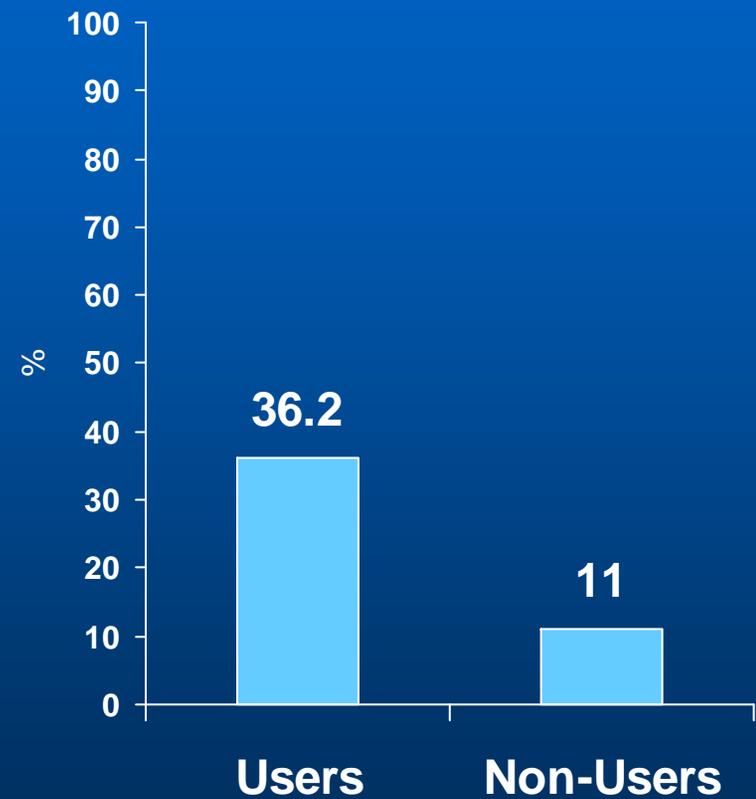
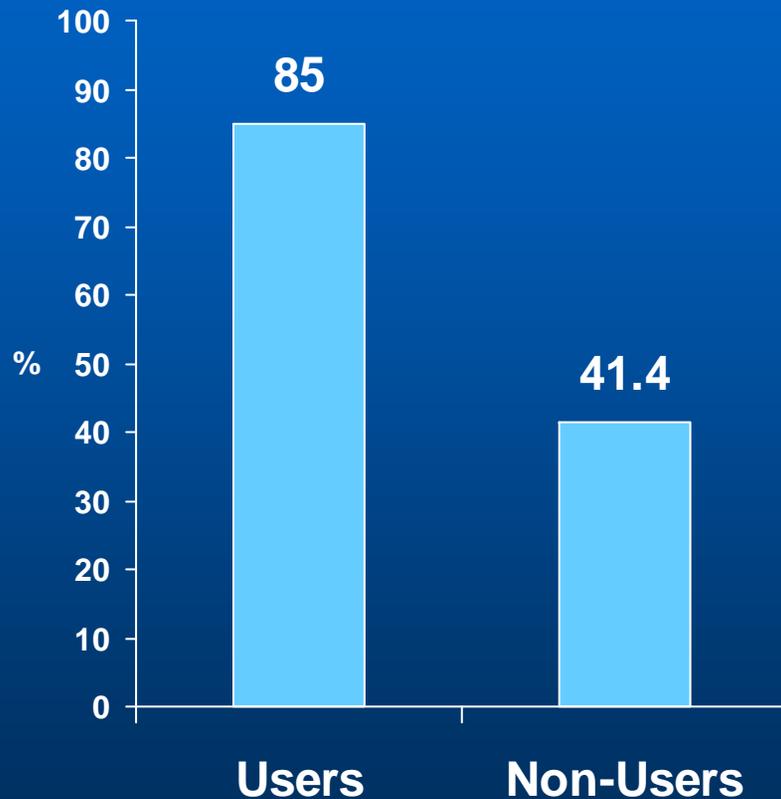
Source: Adapted by CESAR from the 2004 MAS, MSDE.

Figure 6: Compared with Non-Users, 12th Graders Who Used Alcohol were 10 Times More Likely to Smoke Cigarettes or Use a Drug Other Than Alcohol or Tobacco in the Past Month



Source: Adapted by CESAR from the 2004 MAS, MSDE.

Figure 7: Compared with Non-Users, 12th Graders Who Used Alcohol Were 2 to 3 Times More Likely to Think Their Friends/Parents Believe It's OK for Respondent to Drink

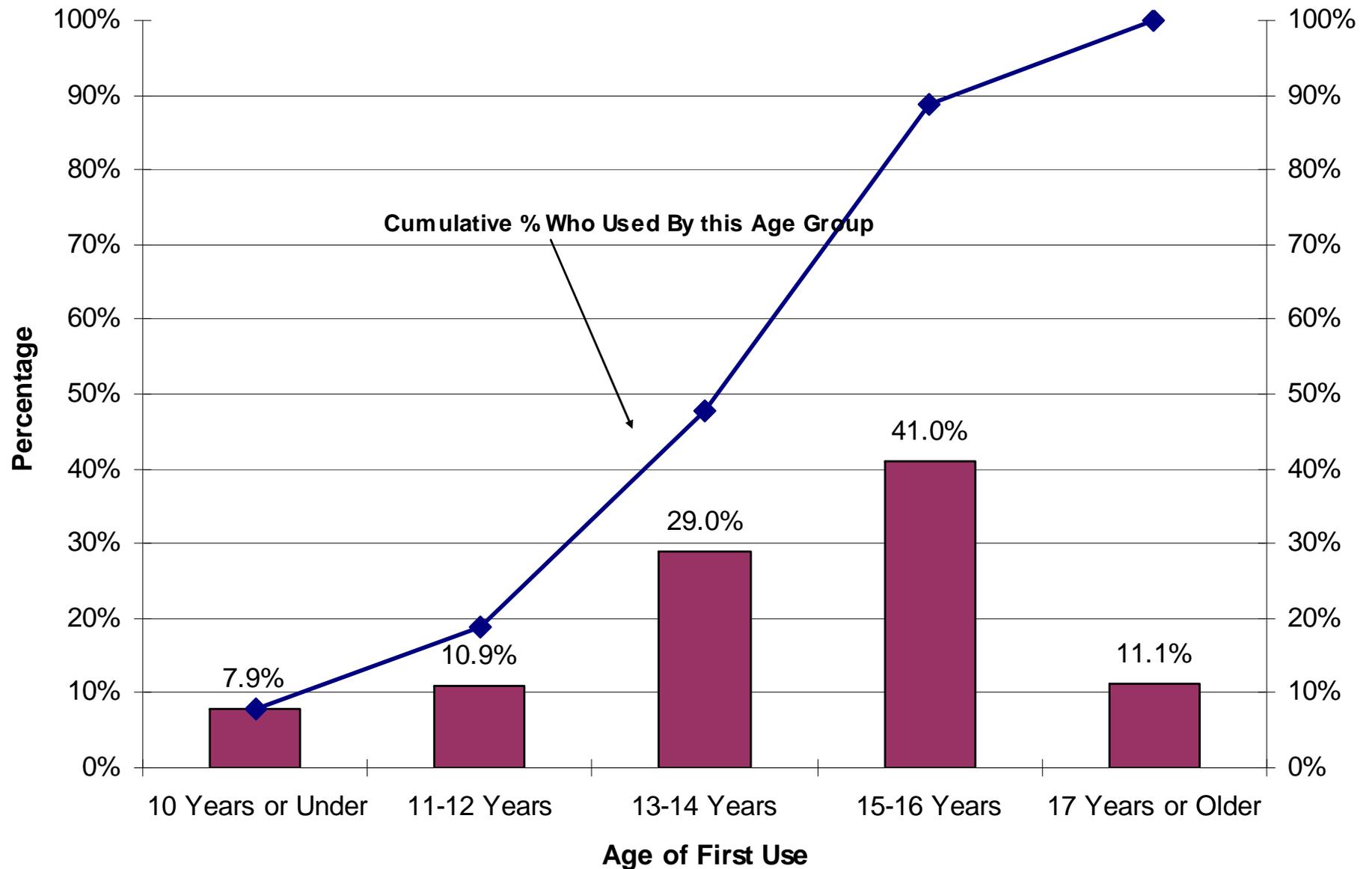


■ % Who Think Their Friends Believe It's OK to Drink

■ % Who Think Their Parents Believe It's OK to Drink

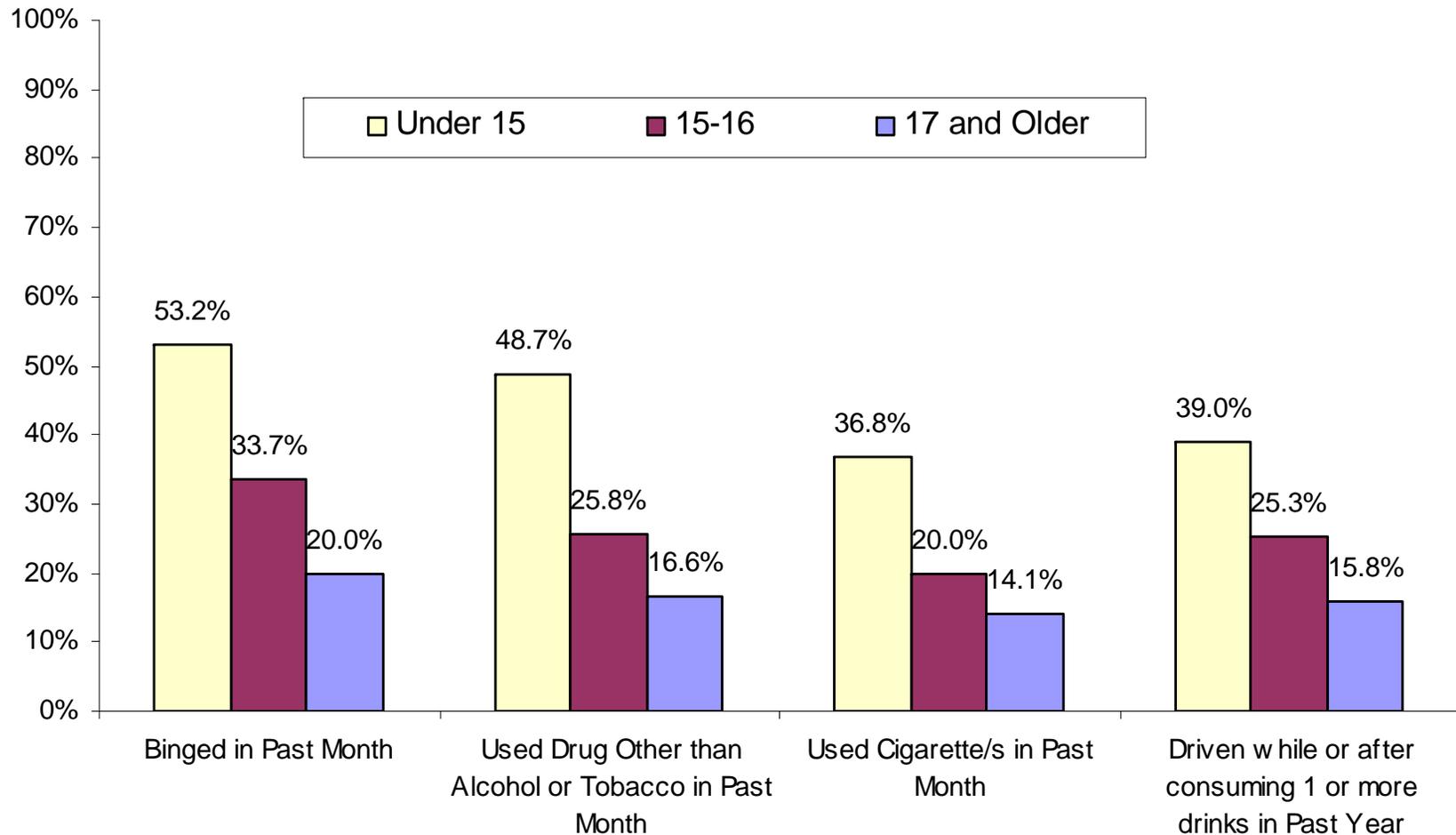
Source: Adapted by CESAR from the 2004 MAS, MSDE.

Figure 8: About One Half of 12th Grade Alcohol Users Began Drinking By Age 15



Source: Adapted by CESAR from the 2004 MAS, MSDE.

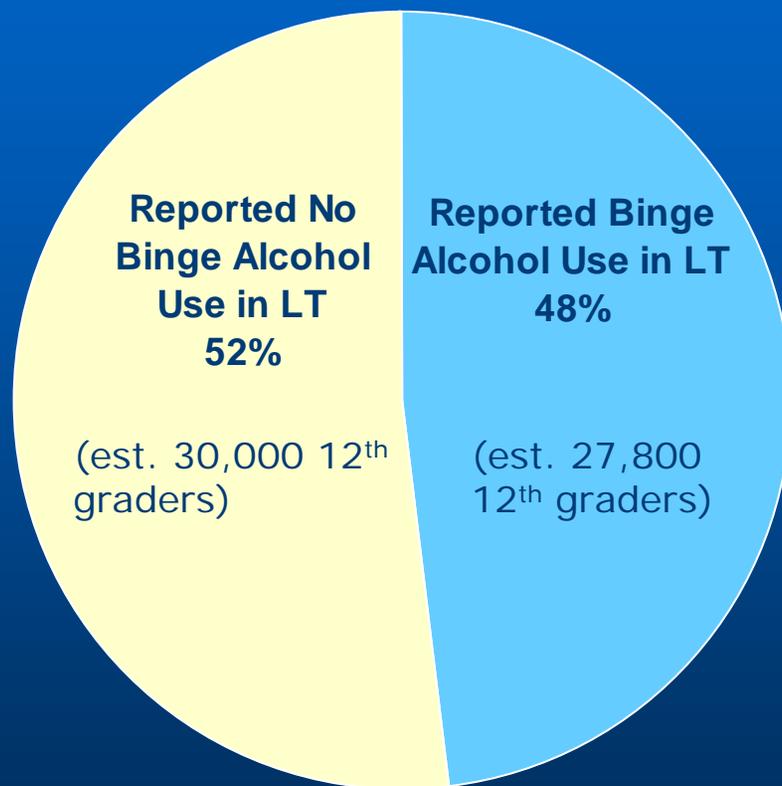
Figure 9: The Earlier Students Began Drinking, the More Likely They Were to have Engaged in Problem Alcohol and Other Drug Behaviors



* Binge Alcohol Use refers to consuming five or more servings of alcohol on the same occasion (a serving is one bottle of beer, one glass of wine, one wine cooler, one shot glass of liquor, or one mixed drink).

Source: Adapted by CESAR from the 2004 MAS, MSDE.

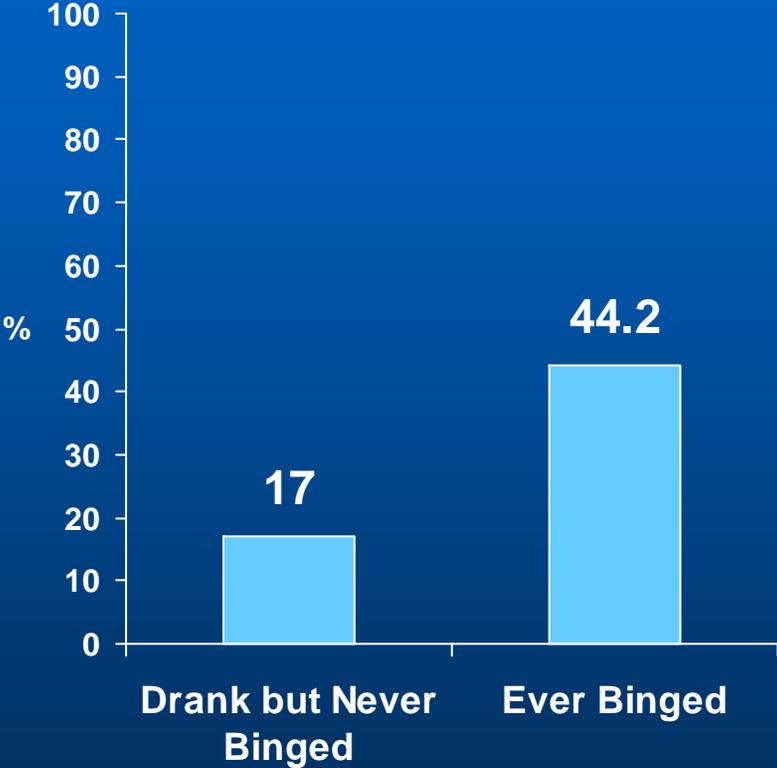
Figure 10: Percentage of Maryland 12th Graders Who Reported Binge Drinking* at Least Once in Their Lifetime, 2004



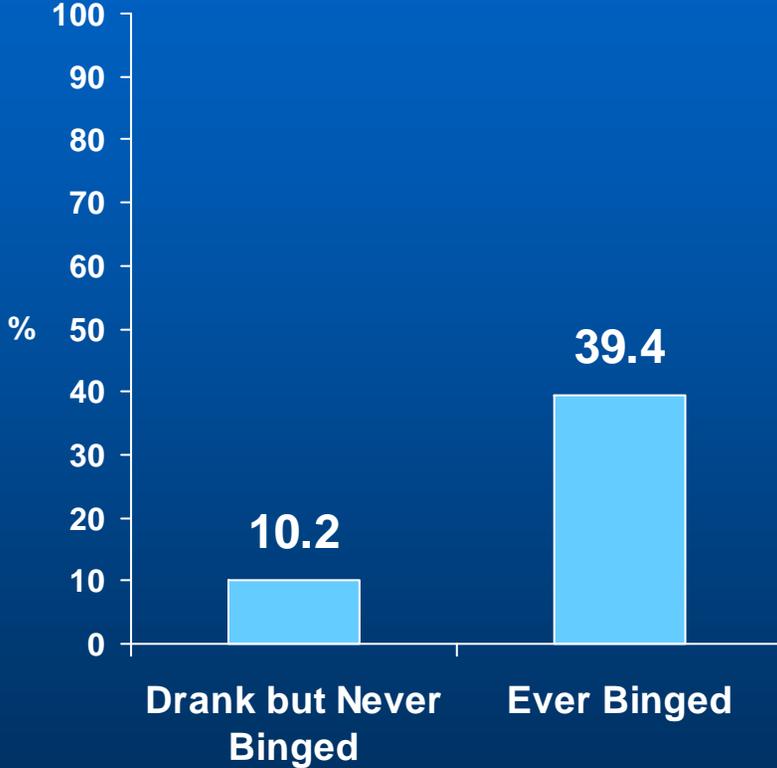
* Binge Alcohol Use refers to consuming five or more servings of alcohol on the same occasion (a serving is one bottle of beer, one glass of wine, one wine cooler, one shot glass of liquor, or one mixed drink).

Source: Adapted by CESAR from the 2004 MAS, MSDE.

Figure 11: Binge Drinkers Were 2 to 4 Times More Likely Than Non-Binge Drinkers to Use a Drug Other Than Alcohol or Tobacco or to Drive After Drinking



■ Past Month Use of a Drug Other Than Alcohol or Tobacco



■ Drove While or After Consuming 1 or More Drinks in the Past Year

Source: Adapted by CESAR from the 2004 MAS, MSDE.

Summary/Implications

- Almost 70% of 12th graders ever drank alcohol and users were more likely to believe that their friends and parents approved of their drinking.
- Almost one half of 12th grade alcohol users began drinking prior to age 15, and these early users were most likely to have alcohol and other drug-related problems
- Almost one-half of 12th grade users had binged and about 40% of the bingers had driven after drinking.
- Colleges and universities inherit a population of students who arrive with established patterns of alcohol use and related problems.

**Characteristics of 12th Grade Students in
Maryland Public Schools, by Lifetime Alcohol Use, 2004**

	12th	
	Alcohol Users	Alcohol Non-Users
	(n= 40,214)	(n=16,948)
Male	48.4%	51.8%
Race/Ethnicity		
White	59.1%	43.2%
African-American	29.9%	42.9%
Asian/Pacific-Islander	4.6%	8.5%
Hispanic	5.2%	4.8%
American Indian	1.2%	0.7%
Reported GPA: A -- Excellent	19.3%	27.2%
Past Month Use of:		
Cigarettes	27.4%	2.1%
Any Drug other than Alcohol or Tobacco	35.8%	3.5%
Think friends believe it's OK for respondent to drink beer/wine/wine coolers	85.0%	41.4%
Think parents believe it's OK for respondent to drink beer/wine/wine coolers	36.2%	11.0%

Source: Adapted by CESAR from the 2004 MAS, MSDE.

Characteristics of Students, Alcohol Behaviors, and Consequences of Alcohol Use, by Age of First Use of Any Alcohol, 12th Grade Students in Maryland Public Schools, 2004

	Age of First Use of Any Alcohol in Lifetime			
	Under 15 (n=19,138)	15-16 (n=16,458)	17 and Older (n=4,440)	Total Users (n=57,737)
Past Month Use of:				
Used Cigarette/s in Past Month	36.8%	20.0%	14.1%	19.8%
Used Drug Other than Alcohol or Tobacco in Past Month	48.7%	25.8%	16.6%	26.0%
Binged in Past Month	53.2%	33.7%	20.0%	29.0%
Past Year Drinking and Driving Behaviors				
Driven while or after consuming 1 or more drinks in Past Year	39.0%	25.3%	15.8%	22.1%
Been a passenger in a vehicle driven by a person who consumed one or more drinks	59.1%	40.8%	30.6%	38.4%
Consequences of Alcohol Use				
Ever been a passenger in a vehicle in which the driver was under the influence of alcohol	57.0%	37.1%	26.8%	35.2%
Ever driven under the influence of alcohol	32.0%	19.1%	10.1%	17.3%
Ever been drunk at school	26.6%	10.6%	5.8%	12.8%
Ever been absent from school because drank alcohol	24.6%	9.8%	3.9%	11.8%
Ever had family problems because drank alcohol	15.6%	7.7%	4.0%	8.2%
Ever had health problems because drank alcohol	11.2%	5.7%	2.3%	5.9%
Ever done poorly in school because drank alcohol	11.9%	4.3%	1.5%	5.6%
Ever tried to stop but found couldn't stop drinking alcohol	10.2%	3.9%	3.8%	5.2%
Ever been arrested because drank alcohol	8.1%	2.0%	2.4%	3.8%
Mean Number of Consequences (out of 9)	1.8	1.0	0.6	1.0

Source: Adapted by CESAR from the 2004 MAS, MSDE.

Lifetime Alcohol Use by Maryland 12th Graders, MAS 2004

Age of 1 st Use	12 th Grade Users (n=40,214)
<=10	7.9%
11-12	10.9
13-14	29
15-16	41
17+	11.1

Any Binge Drinking	68.7%
Age of 1 st Binge	
<=10	1.8
11-12	4
13-14	14.7
15-16	35.8
17+	12.5

Consequences of Alcohol Use Among 12th Graders Reporting Lifetime Use, MAS 2004

Ever been a passenger in a vehicle in which the driver was under the influence of alcohol	45.3%
Ever driven under the influence of alcohol	24.1%
Ever been drunk at school	17.7%
Ever been absent from school because drank alcohol	16.1%
Ever had family problems because drank alcohol	11.0%
Ever had health problems because drank alcohol	7.9%
Ever done poorly in school because drank alcohol	7.6%
Ever tried to stop but found couldn't stop drinking alcohol	6.9%
Ever been arrested because drank alcohol	5.0%
Mean Number (out of 9)	1.33

Source: Adapted by CESAR from the 2004 MAS, MSDE.

**Percentage of Maryland Students Reporting Lifetime, Past Year, and Past Month Alcohol Use, by Grade and Year,
School Years 2001-2002, 2002-2003, and 2004-2005**

	6th Grade			8th Grade			10th Grade			12th Grade		
	2001	2002	2004	2001	2002	2004	2001	2002	2004	2001	2002	2004
	(n=7,676)	(n=8,986)	(n=8,654)	(n=7,336)	(n=8,679)	(n=8,805)	(n=6,614)	(n=8,250)	(n=8,441)	(n=6,078)	(n=8,064)	(n=8,629)
Lifetime Use												
Any Alcohol Use	16.9%	11.4%	13.3%	41.3%	31.5%	32.4%	58.9%	56.0%	53.1%	72.5%	70.0%	69.7%
Beer/Wine/Wine Coolers	15.6%	10.2%	11.9%	38.7%	29.3%	29.5%	55.7%	52.2%	47.9%	69.8%	66.2%	64.5%
Liquor	6.2%	4.4%	5.4%	25.7%	18.9%	19.1%	47.0%	44.0%	43.2%	62.6%	59.8%	61.0%
Binge Drinking*	5.2%	3.2%	3.5%	17.0%	13.1%	12.3%	35.4%	32.4%	30.0%	52.3%	48.1%	48.1%
Past Year												
Any Alcohol Use	11.4%	8.0%	9.0%	34.9%	27.1%	27.0%	53.1%	51.2%	47.7%	65.5%	63.3%	63.0%
Beer/Wine/Wine Coolers	10.5%	7.2%	7.9%	31.7%	24.5%	24.2%	49.2%	46.4%	41.6%	61.2%	58.3%	56.4%
Liquor	4.3%	3.0%	3.8%	22.2%	16.5%	16.1%	42.3%	40.3%	39.0%	55.4%	52.6%	54.0%
Binge Drinking*	3.8%	2.3%	2.4%	14.1%	11.2%	10.4%	32.0%	29.2%	26.4%	45.2%	42.7%	43.0%
Past Month												
Any Alcohol Use	6.3%	5.0%	5.4%	22.8%	16.4%	16.2%	35.9%	35.0%	31.4%	47.5%	44.3%	44.1%
Beer/Wine/Wine Coolers	5.7%	4.4%	4.7%	20.0%	14.3%	14.2%	32.2%	31.1%	26.3%	42.4%	38.8%	38.5%
Liquor	2.7%	1.8%	2.4%	14.3%	10.1%	9.8%	27.6%	26.3%	24.6%	37.5%	35.4%	36.1%
Binge Drinking*	2.3%	1.3%	1.4%	9.3%	7.2%	6.6%	21.1%	19.6%	17.4%	31.4%	28.8%	29.0%

Source: Adapted by CESAR from the 2001, 2002, and 2004 MAS, MSDE.

Alcohol Use Among Students in Maryland Public Schools, by Grade Level, 2004

Alcohol Use Questions	Grade Level			
	6th (n=69,206)	8th (n=68,462)	10th (n=64,429)	12th (n=57,737)
Any Form of Alcohol				
Lifetime Use of Any Alcohol	13.3%	32.4%	53.1%	69.7%
Past Year Use of Any Alcohol	9.0%	27.0%	47.7%	63.0%
Past Month Use of Any Alcohol	5.4%	16.2%	31.4%	44.1%
Beer, Wine, or Wine Coolers				
Lifetime Use of Beer, Wine, or Wine Coolers	11.9%	29.5%	47.9%	64.5%
Past Year Use of Beer, Wine, or Wine Coolers	7.9%	24.2%	41.6%	56.4%
Past Month Use of Beer, Wine, or Wine Coolers	4.7%	14.2%	26.3%	38.5%
Liquor				
Lifetime Use of Liquor	5.4%	19.1%	43.2%	61.0%
Past Year Use of Liquor	3.8%	16.1%	39.0%	54.0%
Past Month Use of Liquor	2.4%	9.8%	24.6%	36.1%
Binge Drinking				
Binge Drinking in Lifetime	3.5%	12.3%	30.0%	48.1%
Binge Drinking in Past Year	2.4%	10.4%	26.4%	43.0%
Binge Drinking in Past Month	1.4%	6.6%	17.4%	29.0%

Source: Adapted by CESAR from the 2004 MAS, MSDE.

Characteristics of Students, Alcohol Behaviors, and Consequences of Alcohol Use, by Alcohol Use Categories, 12th Grade Students in Maryland Public Schools, 2004

	Consumed Alcohol but Never Binged	Ever Binged
	(n=12,601)	(n=27,782)
Past Month Use of:		
Cigarettes	10.3%	35.2%
Any Drug Other than Alcohol or Tobacco	17.0%	44.2%
Mean Number of Consequences of Alcohol Use (out of 9)	0.49	1.71
Think friends believe it's OK for him/her to drink beer/wine/wine coolers	74.4%	89.5%
Think parents believe it's OK for him/her to drink beer/wine/wine coolers	26.7%	40.3%
Drove while or after consuming 1+ drinks in Past Year	10.2%	39.4%

Source: Adapted by CESAR from the 2004 MAS, MSDE.