

# **Wisconsin's Epidemiological Profile on Alcohol and Other Drug Use 2006**



**Division of Disability and Elder Services  
Bureau of Mental Health and Substance Abuse Services  
Wisconsin Department of Health and Family Services**

**Prepared by the Wisconsin State Epidemiological  
Outcomes Workgroup (SEOW)**

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# Executive Summary

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The Wisconsin Department of Health and Family Services is committed to moving toward need-based funding through improved data collection and analysis. One important aspect of prevention services is the ability to track the needs of communities through epidemiological factors. Based on the identified needs, resources can be allocated to address the problem using evidence-based programming. Wisconsin's 2006 "Epidemiological Profile Report" provides a foundation for further study of problems regarding use and abuse of substances and the resulting consequences.

## Key Findings

### Consequences of Alcohol, Tobacco and Other Drug Consumption

Many types of mortality, morbidity, and dangerous criminal behaviors have been linked to the use of alcohol, tobacco and other drugs. Given Wisconsin's high rate of alcohol consumption, it is not surprising that the rates at which Wisconsin experiences the consequences associated with alcohol use also tend to be higher than the national average. Rates of alcohol dependence, alcohol abuse, and alcohol-related motor vehicle fatalities are higher in Wisconsin than in the United States. Wisconsin has 1½ times the national rate of arrests for operating while intoxicated and more than three times the national rate of arrests for liquor law violations. One surprising finding is that Wisconsin has a lower rate of alcohol-related liver cirrhosis than the national average.

Lung cancer and chronic obstructive pulmonary disease are two catastrophic consequences of tobacco consumption. So far, the mortality rates for these two diseases in Wisconsin have been lower than the national average. However, in the past ten years, there has been no reduction in the mortality rates for these two diseases. Additionally, crime associated with illicit drug use also negatively affects the community. From 1996 to 2004, the rate of arrests for drug law violations was higher in Wisconsin compared to the national average.

### Alcohol Consumption

In 2005, Wisconsin had the highest prevalence of alcohol use in the country. The percent of high school students who initiated alcohol use before the age of 13 was similar to the national average and has been decreasing over the past five years. However, current use of alcohol among both youth and adults was among the highest in the country. In 2005, Wisconsin high school students reported the highest rate of current alcohol use among all reporting states and the fifth highest rate of binge drinking. Among adults, Wisconsin had the highest prevalence of binge drinking, current alcohol use, and chronic heavy drinking in the country. The rate of per capita alcohol consumption was also among the highest in the nation.

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### Tobacco Consumption

Tobacco consumption is decreasing in Wisconsin. Among high school students, the prevalence of smoking has dropped considerably, from 36% in 1997 to 23% in 2005. The prevalence of current smoking among adults dropped slightly between 2000 (23%) and 2005 (21%). One trend worth noting is the reduction in per capita tobacco consumption. Wisconsin's per capita consumption dropped almost 20% between 1996 and 2005, representing a reduction of 19 packs per person annually in the past 10 years. However, smoking prevalence remains high in certain demographic groups. American Indian and African American adults still smoke at rates far higher than the Wisconsin average (32% and 30%, respectively, in 2005).

### Other Drug Consumption

The use of drugs other than alcohol and tobacco remains a problem in Wisconsin. As a whole, consumption patterns of illicit drugs in Wisconsin mirrored national trends with few exceptions. One notable trend was in the use of marijuana. In 1997, the prevalence of both lifetime and current use of marijuana were lower than the national average. Over the next four years, however, these measures rose until they were nearly identical to the national averages. Since 2001, both lifetime and current use of marijuana in the United States and Wisconsin have decreased at similar rates. In the United States as a whole, illicit consumption of prescription drugs among youth has been rising. Data on state-specific rates were unavailable.

### Conclusion

Areas of need are easily identified through this report. Wisconsin data for 2005 reflect a higher prevalence of alcohol use and binge drinking in adults and college students compared to the country as a whole. Another problem area is the high rate of smoking among American Indian and African American adults. Regarding illicit drug use, in 2005 men were more than twice as likely to die due to drug use compared to women; blacks were more than three times more likely to die due to drug use than the Wisconsin average. From 1996 to 2004, Wisconsin's arrest rate for liquor law violations was more than three times the national rate. From 1996 to 2004, the rate of drug law arrests was higher in Wisconsin compared to the nation as a whole. The economic and health costs of substance abuse in Wisconsin are great, as are the related costs to the community of arrest and criminal offenses. Future studies will focus on these key areas and will guide the state's funding decisions regarding which problems to address and which interventions to use.

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# Introductory Guide for Reading this Report

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This report summarizes current data available on the consumption of alcohol, tobacco and other drugs and its consequences. The Executive Summary is followed by a narrative detailing key trends in the consumption and consequences of alcohol and other drug use in Wisconsin. Appendices provide information on data sample sizes as well as details on the indicator selection process for this report. This profile casts a wide net regarding inclusion of indicators, and the data reflect trends at a statewide level. Future profiles will reflect data at a more local level and indicators will be prioritized further, utilizing additional criteria.

## ROLE OF THE STATE EPIDEMIOLOGICAL WORKGROUP (SEOW)

The State Epidemiological Outcomes Workgroup (SEOW) provided data access, experience in the substance abuse field and analytical expertise to the development of Wisconsin's Epidemiological Profile. Members of the SEOW include professionals and advocates from diverse disciplines related to substance use/abuse and its consequences. The SEOW's work assists policy makers in identifying the needs of communities using epidemiological methods. Based on the identified needs, resources can be allocated to address the problems using evidence-based programming. Specifically, the SEOW was charged with:

- Collecting and analyzing data on the consumption and consequences of alcohol, tobacco and other drug use;
- Providing a comprehensive menu of data constructs and indicators reflecting possible problem areas in the state;
- Creating a National Outcomes Measures (NOMS) data collection plan;
- Creating an initial Epidemiological Profile which will inform further analysis and planning in the Strategic Prevention Framework State Incentive Grant project; and
- Determining the state's future data needs.

SEOW members were invited to participate in the project based on their access to and ability to work with substance-related data. Workgroup members consist of a wide range of experts from academia, government agencies and private organizations. Organizations represented in the SEOW include:

- University of Wisconsin, Population Health Institute
- WisDOT Division of Motor Vehicles Alcohol/Drug Review Unit
- Family Resource Center, Lac du Flambeau Tribe
- Center for Addiction Recovery—Racine, Wisconsin
- Mental Health and Substance Abuse Clinics, Lac Court Oreilles Tribe
- Wisconsin Office of Justice Assistance
- Crawford Abuse Resistance Effort (C.A.R.E.)

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- Wisconsin Department of Justice, Crime Information Bureau
- U.S. Department of Justice, Drug Enforcement Administration
- Alliance for Wisconsin Youth
- Wisconsin Clearinghouse for Prevention Resources
- Bureau of Mental Health and Substance Abuse Services, Wisconsin Department of Health and Family Services
- Wisconsin Department of Public Instruction
- Division of Health Care Financing, Wisconsin Department of Health and Family Services
- Division of Public Health, Wisconsin Department of Health and Family Services
- SAMHSA Center for Substance Abuse Prevention's Central CAPT

### WISCONSIN'S DEMOGRAPHIC PROFILE

Wisconsin is an above-average state, both in its population size and its consumption of illicit drugs and alcohol. Wisconsin is the 20<sup>th</sup> most populous state in the country, with approximately 5.5 million people in 2005. The racial/ethnic makeup of the state is 88.1 percent white, 5.7 percent black, 4.5 percent Hispanic or Latino, 2.0 percent Asian, 0.8 percent American Indian and Alaska Native, and 1.0 percent two or more races. Wisconsin's American Indian population numbers approximately 48,300, with 11 tribal nations and a reservation population of 15,300. The state is 49.4 percent male and 50.6 percent female. The age distribution for the state is 6.3 percent under 5 years, 76.0 percent 18 years and over, and 12.5 percent 65 years and over (Source: U.S. Census Bureau, 2005 American Community Survey).

A largely rural state, Wisconsin has 23 cities with populations exceeding 25,000. The city of Milwaukee, population 697,000, is the 19<sup>th</sup> largest city in the U.S.; the population of Milwaukee County is 940,200. Milwaukee also contains a large concentration of people of color: 25 percent Black or African American, 9 percent Hispanic origin, and 3 percent Asian American (Source: U.S. Census Bureau, 2000).

Additional characteristics of Wisconsin's population include a median household income (in 2005 inflation-adjusted dollars) of \$47,105, and labor force participation of 69.9 percent of the state's population 16 years and over. Approximately 89 percent of Wisconsin's population are high school graduates or higher, and 25 percent have a Bachelor's degree or higher (Source: U.S. Census Bureau, 2000).

The goal of this profile is to further describe Wisconsin's population in terms of substance consumption patterns and associated consequences. The report provides a large menu of indicators of substance use/abuse consumption and consequences for an initial analysis of possible linkages. Further analysis will be done during Wisconsin's Strategic Prevention Framework State Incentive Grant Project (also a SAMHSA funded project). The next stage in the Strategic Prevention Framework Process includes local needs assessments of intervening risk factors that lead to problematic consumption and consequences of alcohol and drug abuse.



### PROFILE INDICATOR SELECTION

#### General Methodology for Indicator Selection

The Epidemiological Workgroup included any indicator mentioned in the State Epidemiological Outcomes Workgroup (SEOW) grant application, Healthy People 2010, State Epidemiological Data System (SEDS), or National Outcome Measures (NOMS). Additional indicators were chosen by the Workgroup through an online voting process using the following criteria as a guide: 1. Whether or not there are identified data sources for the given construct; 2. If those data sources are available at a regional or county level; and 3. The attributable fraction estimate reported in the literature, if available. Workgroup members were additionally instructed to draw from their own expertise regarding an indicator's importance. The epidemiological consultant assisted the group in determining the validity of constructs and indicators.

#### Action Steps for Indicator Selection

The Epidemiological Workgroup took the following action steps to select constructs and indicators:

- Core constructs were those included in federal and state guides. Federal guides included: The State Epidemiological Data System (SEDS); the SEOW RFP; National Outcome Measures (NOMS); and Healthy People 2010. Wisconsin guides included: the State Health Plan; the State Incentive Grant (SIG); and the Wisconsin AODA Treatment Needs Assessment.
- Data sources for the constructs recommended by the guides were listed.
- Indicators from the above sources were included in the initial list of consumption and consequence constructs.
- The consulting epidemiologist created an initial list of data sources.
- The SEOW generated additional ideas for data sources and constructs and then proposed limitation criteria for datasets.
- Criteria were developed to select data sources. These criteria included: periodicity; years available; ages; whether gender and race/ethnicity were identified; sample size in Wisconsin; whether county-level data were available; and the constructs available from the source.
- Indicators were assessed for validity; i.e., whether it was an indicator of the underlying construct. Issues weighed included the following: 1) Whether the construct had a good data source but a poor indicator; and 2) Whether the construct was weak but the data source was good and had a strong indicator.
- Additional criteria considered in data source selection included:
  - Whether the source costs money and is hard to obtain.
  - Is it collected annually, monthly, biannually, or just once?
  - Geographic disaggregation--Is data available on a national, state or county level?
  - Subgroup disaggregation--Is there information on race/ethnicity, age and gender?

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- Additional criteria considered in indicators selection included:
  - Validity of the indicator: Does the indicator measure the construct well?
  - Sensitivity of the indicator: Will underlying changes in the construct appear in the indicator?
  - Is the indicator reliable?
  - Can state rates be compared to rates for other states or the national level?
- Constructs and indicators were ranked by the SEOW based on the above criteria. A Web-based survey was used by the workgroup for the voting process.

Additional criteria were considered for construct selection. However, the SEOW determined that these additional criteria would be better used in later epidemiological profiles as a part of the prioritization process. These additional criteria included:

- How many and which sources does the construct appear in?
- What is the latency? How long will it take for any program effects to change the construct?
- Are there prevention programs, policies or practices that have demonstrated change in the construct?
- Is there political support (or low political opposition) to address this construct at the state level?
- Magnitude of the construct.
- Severity of the construct.
- Trend of the construct: Is it rising or falling?
- Are there any particular disparities in the construct? Do any particular subgroups bear a disparate share of the burden for the construct?
- Is the construct a particularly persuasive one?
- Regarding consequences, is the consequence linked in the research to substance abuse and what is the attributable fraction?

## INDICATORS-SOURCES AND DEFINITIONS

### Measures of Consequences

*Mortality:* Measures of mortality were taken from the following sources.

- Numbers of deaths - The numbers of cause-specific deaths were calculated from Wisconsin and United States death certificate data. The ICD-10 codes used for these deaths were as follows:
  - Alcohol-related cirrhosis: K70
  - ◇ Lung cancer: C34
  - ◇ Chronic obstructive pulmonary disease: J40-J44, J47
  - ◇ Cardiovascular disease: I00-I09, I11, I13, I26- I51(exclude I32, I39, I41), I51.6
  - ◇ Cerebrovascular disease: I20-I25, I60-I69
  - ◇ Drug use deaths: F11.5-F11.9, F12.5-F12.9, F13.5-F13.9, F14.5-F14.9, F15.5-F15.9, F16.5-F16.9, F17.5-F17.9, F18.5-F18.9, F19.5-F19.9, F11.2-F11.4, F12.2-F12.4, F13.2-F13.4, F14.2-F14.4, F15.2-F15.4, F16.2-F16.4, F17.2-F17.4, F18.2-

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F18.4, F19.2-F19.4, F55, F11.0-F11.1, F12.0-F12.1, F13.0-F13.1, F14.0-F14.1, F15.0-F15.1, F16.0-F16.1, F17.0-F17.1, F18.0-F18.1, F19.0-F19.1, G62.0

- ◇ Suicide: X60-X84, Y87.0
- ◇ Homicide: X85-Y09, Y87.1

- Age-adjusted mortality rate - Age-adjusted rates were calculated using the direct method based on the year 2000 U.S. standard population.

**Motor vehicle related consequences:** *Wisconsin Alcohol Traffic Facts (an annual report)* provided numerous measures of consequences related to the use of motor vehicles, as outlined below.

- Alcohol-related motor vehicle injuries and fatalities - The *Alcohol Traffic Facts* report provides the total numbers of motor vehicle related injuries and fatalities as well as the percentage of these that are alcohol-related.
- Operating while intoxicated - This report also provides the number and rate of alcohol-related citations issued among ATV riders, boaters, and snowmobilers, as well as the number of people arrested for operating a vehicle while intoxicated and the rate per 100,000 population.

**Crimes and arrests:** Measures of crimes and arrests were taken from the following sources.

- Wisconsin crimes and arrests - *Crimes and Arrests in Wisconsin*, a report of the Wisconsin Department of Justice, provided the numbers of offenses and arrests in Wisconsin. Rates were calculated using Census population estimates.
- United States crimes and arrests - *Crime in the United States*, an annual publication of the Federal Bureau of Investigation, provided national estimates of reported offenses and arrests. Rates were calculated using Census population estimates.

**Dependence or abuse:** Measures of dependence and abuse were taken from the following source.

- Alcohol - Dependence or abuse of alcohol is defined as having experienced dependence or abuse (as defined by DSM-IV) in the past year by the National Survey on Drug Use and Health.
- Other drugs - Dependence or abuse of other drugs is defined as having experienced dependence or abuse (as defined by DSM-IV) in the past year by the National Survey on Drug Use and Health.

**Secondhand smoke exposure:** Measures of secondhand smoke exposure were taken from the following source.

- Secondhand smoke exposure is defined as having been closely subjected to others' smoke for one or more hours per day in the past month by the Wisconsin Behavioral Risk Factor Survey.

**Teen births:** Measures of teen births were taken from the following sources.

- A teen birth is defined as a birth to a mother between the ages of 15 and 19. Wisconsin birth data are from the online system, Wisconsin Interactive Statistics on

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Health (WISH). Teen births in the United States were reported in *Births: Final Data for 2004*, a publication of the Centers for Disease Control and Prevention.

**Economic effects:** Measures of economic effects were taken from the following source.

- The number of alcohol and other drug abuse clients receiving any service with public funds and the total public funds expended for alcohol and other drug abuse treatment in Wisconsin were obtained from the State Division of Disability and Elder Services. No comparable United States data on public funds expenditure were available.

### Measures of Consumption

**Age of initiation:** Measures of age of initiation were taken from the following source.

- Alcohol - Age of initiation for alcohol is defined as follows:
  - Youth Risk Behavior Survey (YRBS): The percentage of students who tried alcohol before age 13.
- Tobacco - Age of initiation for tobacco is defined as follows:
  - Youth Risk Behavior Survey (YRBS): The percentage of students who smoked a whole cigarette for the first time before age 13.
- Other drugs - Age of initiation for marijuana is defined as follows:
  - Youth Risk Behavior Survey (YRBS): The percentage of students who tried marijuana for the first time before age 13.

**Binge use:** Measures of current use were taken from the following sources.

- Alcohol - Binge use of alcohol is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Five or more drinks of alcohol in a row on one or more of the past 30 days.
  - Behavioral Risk Factor Survey (BRFS): Five or more drinks on one occasion, one or more times in the past month.
  - National Survey on Drug Use and Health (NSDUH): 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 one day in the past 30 days.

**Current use:** Measures of current use were taken from the following sources.

- Alcohol - Current use of alcohol is defined as follows:
  - Youth Risk Behavior Survey (YRBS): At least one drink of alcohol on one or more of the past 30 days.
  - Behavioral Risk Factor Survey (BRFS): At least one drink of alcohol in the past 30 days.
  - National Survey on Drug Use and Health (NSDUH): At least one drink of alcohol in the past month.
- Tobacco - Current use of cigarettes is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Smoked 100 cigarettes in their lifetime.

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- Behavioral Risk Factor Survey (BRFS): Smoked 1 cigarette in the past 30 days.
- YRBS and Youth Tobacco Survey (YTS): Smoked cigarettes on one or more of the past 30 days.
- Tobacco - Current use of smokeless tobacco is defined as follows:
  - YTS: Chewed tobacco on at least one day in the past 30 days.
  - YRBS: Used chewing tobacco, snuff, or dip on one or more of the past 30 days.
- Other drugs - Current use of marijuana is defined as follows:
  - National Survey on Drug Use and Health (NSDUH): Smoked marijuana in the last month.
  - Youth Risk Behavior Survey (YRBS): Used marijuana one or more times during the past 30 days.
- Other drugs - Current use of cocaine is defined as follows:
  - National Survey on Drug Use and Health (NSDUH): Used cocaine in the last year.
  - Youth Risk Behavior Survey (YRBS): Used any form of cocaine one or more times during the past 30 days.
- Other drugs - Current use of illicit drugs other than marijuana is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Used illicit drugs other than marijuana in the past month.
- Other drugs - Current use of pain relievers for non-medical uses is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Used pain relievers for non-medical uses in the past month.

*Chronic, heavy use:* Measures of current use were taken from the following source.

- Alcohol - Chronic, heavy use of alcohol is defined as follows:
  - Behavior Risk Factor Survey (BRFS): Adult men as having more than two drinks per day and adult women as having more than one drink per day.

*Lifetime use:* Measures of current use were taken from the following sources.

- Tobacco - Lifetime use of tobacco is defined as follows:
  - Behavior Risk Factor Survey (BRFS): Adults having smoked 100 cigarettes in their lifetime.
  - Youth Risk Behavior Survey (YRBS) and Youth Tobacco Survey (YTS): Youth having ever tried cigarette smoking, even one or two puffs.
- Other drugs - Lifetime use of marijuana is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Used marijuana one or more times during their life.
- Other drugs - Lifetime use of cocaine is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Used any form of cocaine one or more times during their life.

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- Other drugs - Lifetime use of inhalants is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life.
- Other drugs - Lifetime use of heroin is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Used heroin one or more times during their life.
- Other drugs - Lifetime use of methamphetamines is defined as follows:
  - Youth Risk Behavior Survey (YRBS): Used methamphetamines one or more times during their life.

*Per capita consumption:* Measures of per capita consumption were taken from the following sources.

- Alcohol - Per capita consumption of alcohol is defined by the Institute on Alcohol Abuse and Alcoholism as the per capita gallons of ethanol sold in a state, based on population age 14 and older.
- Tobacco - Per capita consumption of tobacco is defined as the tax-paid per capita sales in number of packs (population from Wisconsin state Census estimates).

*Use during pregnancy:* Measures of use during pregnancy were as outlined below.

- Tobacco - Tobacco use during pregnancy is drawn for birth certificate data through the Wisconsin Interactive Statistics on Health (WISH) online system.

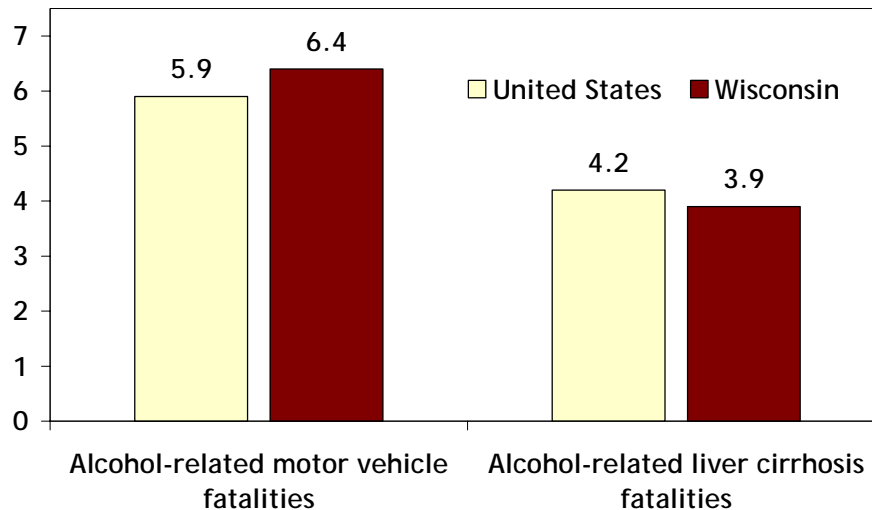
# Narrative and Results

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## Consequences of Alcohol Consumption

In Wisconsin in 2005, at least 590 people died, 5,992 were injured, and 80,000 arrested as a direct result of alcohol use and misuse. Given Wisconsin's high rate of alcohol consumption, it is not surprising that the consequences associated with alcohol use also tend to be higher than the national average. The rates of dependence, abuse, and alcohol-related motor vehicle fatalities are higher in Wisconsin than in the United States. Wisconsin has one and a half times the national rate of arrests for operating while intoxicated and more than three times the national rate of arrests for liquor law violations. One surprising finding is that Wisconsin has a lower rate of alcohol-related liver cirrhosis than the national average.

Figure 1. Age adjusted mortality rates per 100,000 population for alcohol-related motor vehicle and liver cirrhosis fatalities, Wisconsin and the United States, 2003



Data source: Wisconsin mortality data, Wisconsin Department of Health and Family Services

### State Intoxicated Driver Laws

During the mid-1980s, Wisconsin enacted tougher intoxicated driving laws and raised the minimum drinking age to 19 and then to 21. These laws, the corresponding social message they conveyed, and other factors, had a significant impact causing an overall decline in alcohol consumption, retail alcohol beverage sales and outlets, and alcohol-related traffic crashes. While these are generally positive results, Wisconsin still ranks among the top states in the country on at-risk alcohol consumption indicators, alcohol-related motor vehicle fatalities, and liquor law violations (Wisconsin Statewide Alcohol & Drug Abuse Indicator Trends, 2002, published January, 2004, State Department of Health and Family Services, Division of Disability and Elder Services, Bureau of Mental Health and Substance Abuse Services).



### Mortality

Mortality from alcohol-related liver cirrhosis is a direct consequence of chronic alcohol consumption.

- In 2005, 244 people in Wisconsin died due to alcohol-related liver cirrhosis, for an age-adjusted mortality rate of 4.1 deaths per 100,000 population (Table 1).
- Although the rate of mortality due to alcohol-related liver cirrhosis was generally lower in Wisconsin than nationally, between 2002 and 2005 the rate in Wisconsin rose from 3.4 to 4.1.

Table 1. Age-adjusted rate and total number of alcohol-related liver cirrhosis deaths, Wisconsin and the United States, 1999-2005

		1999	2000	2001	2002	2003	2004	2005
<i>United States</i>	Rate / 100K	4.4	4.3	4.3	4.2	4.2		
	Total Number	11,958	12,109	12,207	12,121	12,360		
<i>Wisconsin</i>	Rate / 100K	3.8	4.2	3.6	3.4	3.9	4.0	4.1
	Total Number	199	225	197	194	221	234	244

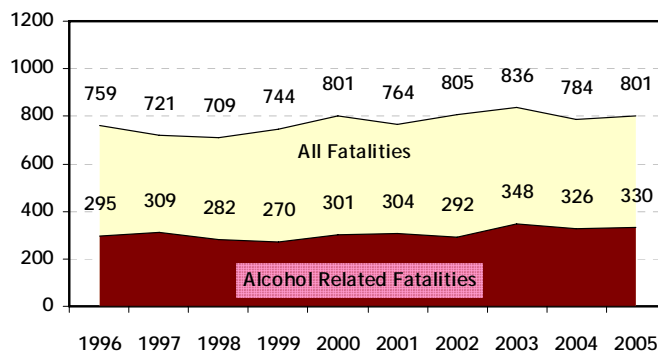
Data source: Wisconsin mortality data, Wisconsin Department of Health and Family Services

### Motor Vehicle Injuries and Fatalities

Numerous motor vehicle injuries and fatalities are a direct consequence of alcohol use and abuse.

- In 2005, 5,992 people in Wisconsin were injured and 330 died in alcohol-related motor vehicle crashes. Approximately 41% of all motor vehicle fatalities were alcohol-related (Figure 2).
- Between 1996 and 2005, the total number of alcohol-related motor vehicle injuries dropped from 7,496 to 5,992. During the same time period, the number of alcohol-related motor vehicle fatalities rose from 295 to 330.

Figure 2. Alcohol-related and total motor vehicle fatalities, Wisconsin, 1996-2005



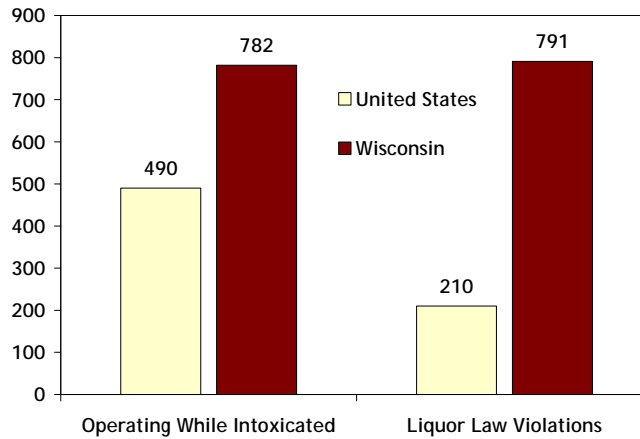
Data source: Alcohol Facts, Wisconsin DOT

### Operating While Intoxicated

During the mid-1980s, Wisconsin enacted tougher intoxicated driving laws and raised the minimum drinking age to 19 and then to 21. These laws, the corresponding social message they conveyed, and other factors, had a significant impact causing an overall decline in alcohol consumption, retail alcohol beverage sales and outlets, and alcohol-related traffic crashes.

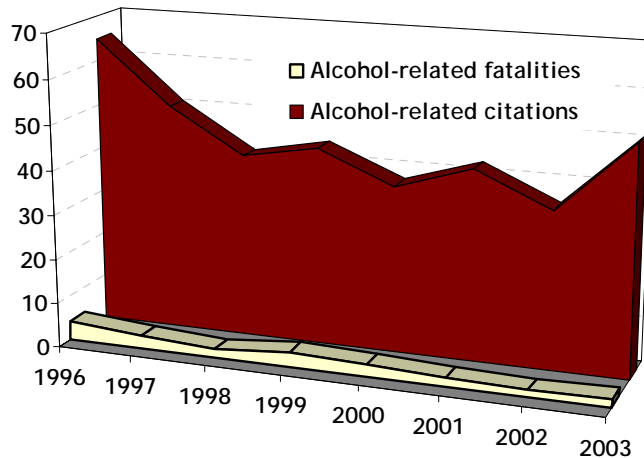
- Wisconsin's rate of arrests for operating while intoxicated remained relatively steady from 1996 to 2003 (range: 699-740 per 100,000 population). (Figure 3)
- The Wisconsin rate of reported alcohol-related citations per 100,000 registered recreational vehicles declined from 65 in 1996 to 51 in 2003, and the rate of alcohol-related fatalities among recreational vehicle users fell from 4.3 in 1996 to 2.0 in 2003 (Figure 4).

Figure 3. Arrest rates per 100,000 population for operating a motor vehicle while intoxicated and liquor law violations, Wisconsin and the United States, 2004



Data source: Alcohol Facts, Wisconsin DOT

Figure 4. Rates of alcohol-related citations issued and alcohol-related fatalities per 100,000 registered recreational vehicles (ATVs, boats and snowmobiles), Wisconsin, 1996-2003



Data source: Crimes and Arrests, Wisconsin DNR

## Crimes and Arrests

Liquor law violations are a direct consequence of alcohol misuse.

- From 1996 to 2004, Wisconsin's arrest rate for liquor law violations was more than three times the national rate. In 2004, for example, the Wisconsin rate was 791 arrests per 100,000 population compared to the national rate of 210 arrests per 100,000 population. (Figure 3)
- In terms of numbers, nearly three times as many adults as juveniles were arrested for liquor law violations in Wisconsin from 1996 to 2004. In 2004, 32,235 adults were arrested compared to 11,215 juveniles. The rate of liquor law arrests among youth has been falling. (Table 2)

Table 2. Total number of liquor law arrests by age, Wisconsin, 1996-2004

		1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Adults</b>	<i>Number</i>	28,731	29,111	32,168	34,710	35,322	33,750	32,507	32,211	32,235
	<i>Rate/100K</i>	750	760	840	906	922	881	849	841	842
<b>Juveniles</b>	<i>Number</i>	13,683	13,741	15,053	15,181	14,377	13,418	13,261	12,037	11,215
	<i>Rate/100K</i>	1,018	1,022	1,120	1,129	1,069	998	986	895	834

Data source: Crimes and Arrests, Wisconsin DOJ

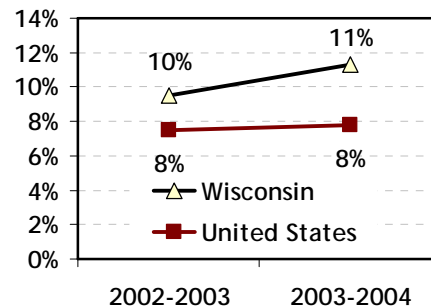
## Dependence or Abuse

Dependence and abuse are direct consequences of alcohol misuse.

From 2002 to 2004, the reported rate of alcohol dependence or abuse has risen from 10% to 11% of the Wisconsin population age 12 and older, compared to a steady 8% nationally. (Figure 5)

- In Wisconsin, young adults ages 18 to 25 had a notably higher rate of dependence or abuse than other ages during 2002 to 2004. (Table 3)

Figure 5. Prevalence of dependence or abuse of alcohol among residents ages 12 and older, Wisconsin and the United States, 2002-2004



Data source: NSDUH

Table 3. Prevalence of dependence or abuse of alcohol among residents ages 12 and older, by age, Wisconsin, 2002-2004

	2002-2003	2003-2004
12-17	7%	9%
18-25	23%	25%
26+	7%	9%

Data source: NSDUH

## Consequences of Tobacco Consumption

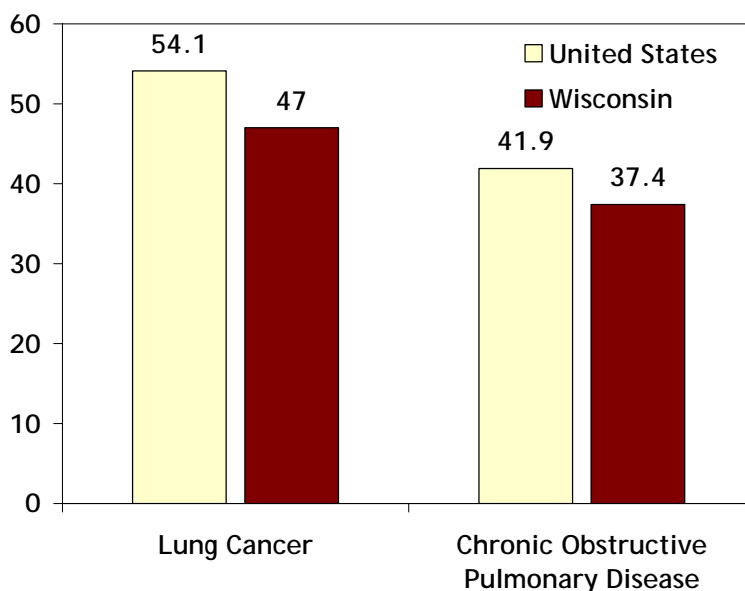
Lung cancer and chronic obstructive pulmonary disease are two catastrophic consequences of tobacco consumption. Wisconsin mortality rates for these two diseases remain lower than the national average. However, in the past 10 years, there has been no reduction in the mortality rates for these diseases. Secondhand smoke exposure is a consequence of tobacco use that is receiving greater attention in recent years. Over one-fifth of all Wisconsin adults reported being exposed to someone else's tobacco smoke for at least one hour a day.

### Mortality

The links between tobacco use and mortality from lung cancer and chronic obstructive pulmonary disease (COPD) have been well established. Over three-fourths of the mortality from these two diseases can be attributed to tobacco use.

- During 1999 through 2003, the national age-adjusted rate of deaths due to lung cancer was notably higher than Wisconsin's rate. For example, in 2003, the national rate was 54.1 deaths per 100,000 population compared to Wisconsin's rate of 47.0 per 100,000. (Figure 6)
- Although national rates of mortality from COPD have been inching down, Wisconsin has seen no similar reduction in the past 10 years. The age-adjusted mortality rate in 1996 was nearly identical to the rate in 2005 (38.9 per 100,000 in 1996 versus 38.6 in 2005).

Figure 6. Age-adjusted mortality rates per 100,000 for lung cancer and COPD, Wisconsin and the United States, 2003



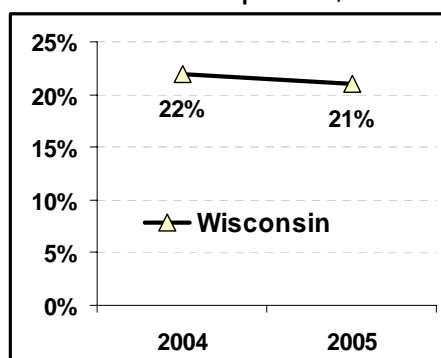
Data source: Mortality data, Wisconsin DHFS

## Secondhand Smoke

Exposure to secondhand smoke is a direct consequence of tobacco use. Secondhand smoke exposure has been shown to cause chronic, lifelong illnesses similar to those caused by smoking.

- Over 20% of all adults in Wisconsin reported being closely exposed to another person's smoke for more than an hour a day. (Figure 7)
- Some groups have even higher levels of exposure. Over 30% of all young adults, African Americans, and Hispanics were closely exposed to another person's smoke for more than an hour a day. (Tables 4 & 5)

Figure 7. Prevalence of secondhand smoke exposure, Wisconsin, 2004-2005



Data source: BRFSS

Table 4. Prevalence of secondhand smoke exposure by age, Wisconsin, 2004-2005

	2004	2005
18-24	30%	35%
25-44	23%	22%
45-64	21%	19%
65+	12%	12%

Data source: BRFSS

Table 5. Prevalence of secondhand smoke exposure by race/ethnicity, Wisconsin, 2004-2005

	2004-2005
Wisconsin	21%
African American	34%
Hispanic	33%
White	20%

Data source: BRFSS

## Wisconsin's Smokefree Air Policies

Thirty-two Wisconsin communities have local smoke-free air ordinances. A study by the University of Wisconsin's Tobacco Monitoring and Evaluation Program found that Wisconsin employees are divided into two distinct smoking groups: blue-collar employees, especially those working in the recreation and tavern industry, who are regularly subjected to second-hand smoke, and white-collar employees, who have clean air in their workplace ("Employment at Smoke-Free Workplaces in Milwaukee-Racine and Wisconsin, 1995-2002; Kuo, Palmersheim and Ullsvik, March, 2006). A recent proposal to ban smoking in all of Wisconsin's workplaces would further reduce second-hand smoke exposure in the state.

## Consequences of Illicit Drug Consumption

Illicit drug consumption leads to numerous health and societal effects including arrests, dependence, abuse and even death. The rate of arrests for drug law violations is higher in Wisconsin than nationally. However, rates of dependence, abuse and deaths due to drug use are similar to, or lower than, the national averages.

### Mortality

Deaths due to drug use are a direct consequence of illicit drug misuse.

- Forty-six Wisconsin residents died as a direct consequence of illicit drug use in 2005 (Table 6).
- Men were more than twice as likely to die due to illicit drug use compared to women; blacks were more than three times more likely to die due to illicit drug use than Wisconsin's average (Table 7).

Table 7. Age-adjusted mortality rate for drug-related deaths by gender and by race/ethnicity, Wisconsin, 1999 and 2005

		1999	2005
<i>Gender</i>	<i>Female</i>	0.4	0.3
	<i>Male</i>	0.6	1.2
<i>Race/Ethnicity</i>	<i>White</i>	0.3	0.7
	<i>Black</i>	4.5	2.4
	<i>Hispanic*</i>		1.3

\*Sample sizes were too small to report a Hispanic rate in 1999

Table 6. Age-adjusted mortality rate and total number of drug-related deaths, Wisconsin and the United States, 1999-2005

		1999	2000	2001	2002	2003	2004	2005
<i>US</i>	<i>Rate/100K</i>	0.9	0.9	0.9	0.9	1.1		
	<i>Total deaths</i>	2,465	2,466	2,476	2,690	3,089		
<i>Wisconsin</i>	<i>Rate/100K</i>	0.5	0.6	0.6	0.5	0.9	0.9	0.8
	<i>Total deaths</i>	27	35	31	27	52	51	46

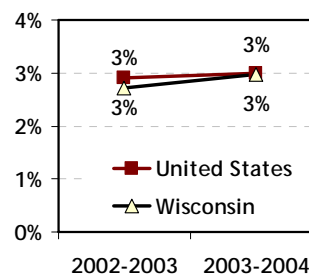
Data source: Mortality data, Wisconsin DHFS

### Dependence or Abuse

Dependence and abuse are direct consequences of illicit drug use.

- During 2002 through 2004, the rate of dependence on or abuse of illicit drugs was the same (3%) for Wisconsin and the United States. (Figure 8)

Figure 8. Prevalence of dependence or abuse of illicit drugs among residents ages 12 and older, Wisconsin and the United States, 2002-2004



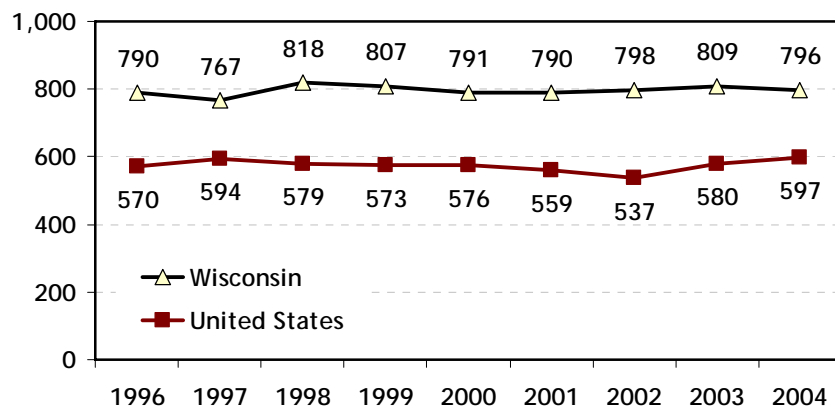
Data source: NSDUH

## Crimes and Arrests

Narcotic drug law violations are a direct consequence of illicit drug use.

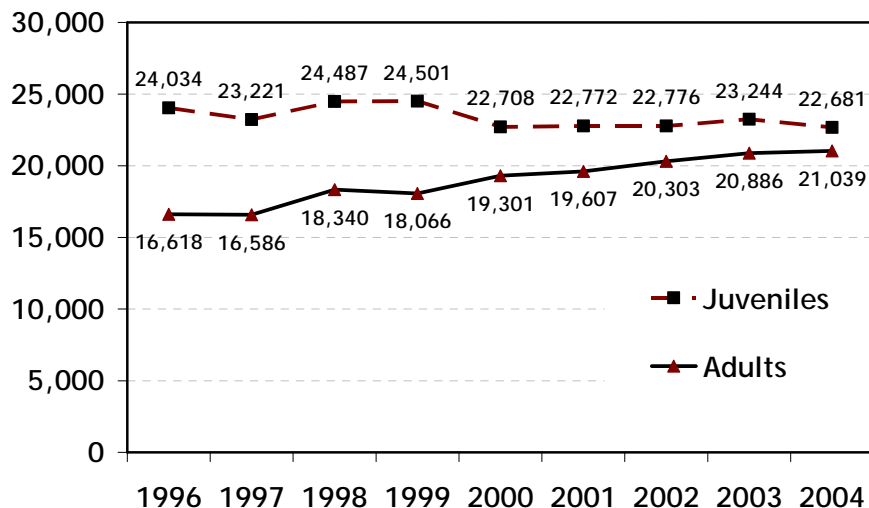
- From 1996 to 2005, the rate of drug law arrests was higher in Wisconsin than the national average. Wisconsin's rate of drug law arrests has been approximately steady at around 800 arrests per 100,000 Wisconsin residents. The rate in the United States has hovered near 580 arrests per 100,000 population during the same time period. (Figure 9)
- In Wisconsin, the number of drug law arrests was consistently higher among juveniles than among adults, although these arrests have been slightly decreasing among juveniles and rising among adults. (Figure 10)

Figure 9. Drug law arrests per 100,000 population, Wisconsin and the United States, 1996-2004



Data source: Crimes and Arrests, Wisconsin DOJ

Figure 10. Number of arrests for drug law infractions among juveniles and adults, Wisconsin, 1996-2004



Data source: Crimes and Arrests, Wisconsin DOJ

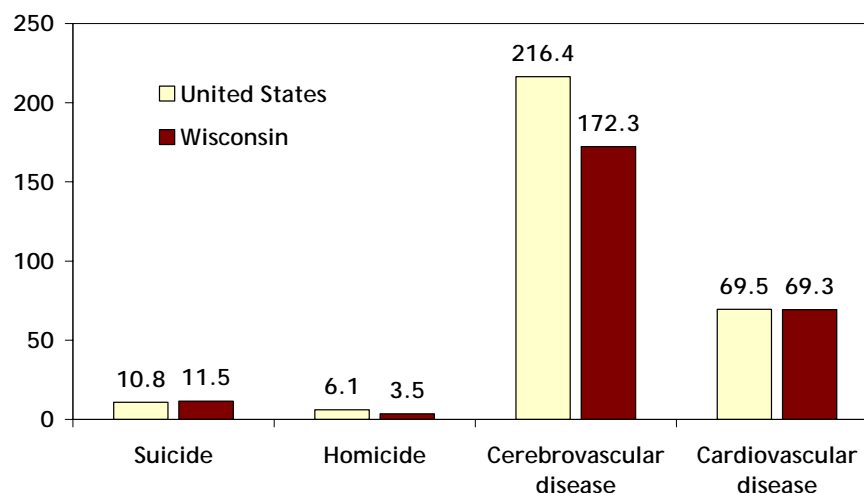
## Consequences Associated with More Than One Substance (Alcohol, Tobacco or Other Drugs)

### Mortality

It is estimated that over half of all homicides are attributable to drug or alcohol use. Suicidal individuals are at higher risk of alcohol use and abuse, and alcohol abusers have higher rates of suicidal behavior. It is estimated that 20% of suicides are alcohol-related. Approximately 14% of all cerebrovascular mortality and 7% of cardiovascular mortality can be associated with alcohol or tobacco use.

- From 1999 to 2003, the age-adjusted rate of suicide was slightly higher in Wisconsin than nationally. In 2003, Wisconsin's rate was 11.5 suicides per 100,000 population compared to a national rate of 10.8 per 100,000. (Figure 11)
- From 1999 to 2003, the national age-adjusted rate of deaths due to homicide was nearly twice the Wisconsin rate. For example, in 2003 the national rate was 6.1 homicides per 100,000 compared to Wisconsin's rate of 3.5 per 100,000.
- From 1999 to 2003, the Wisconsin associated age-adjusted rate of deaths due to cerebrovascular disease was notably lower than the national rate. For example, in 2003, Wisconsin's rate was 172.3 deaths per 100,000 population compared to a national rate of 216.4 per 100,000.
- From 1999 to 2003, the age-adjusted rate of deaths due to cardiovascular disease was similar for Wisconsin and the nation as a whole. For example, in 2003, Wisconsin's rate was 69.3 deaths per 100,000 population, compared to a national rate of 69.5 per 100,000.

Figure 11. Age-adjusted mortality rates for suicide, homicide, cerebrovascular disease and cardiovascular disease per 100,000 population, Wisconsin and the United States, 2003



Data source: Mortality data, Wisconsin DHFS

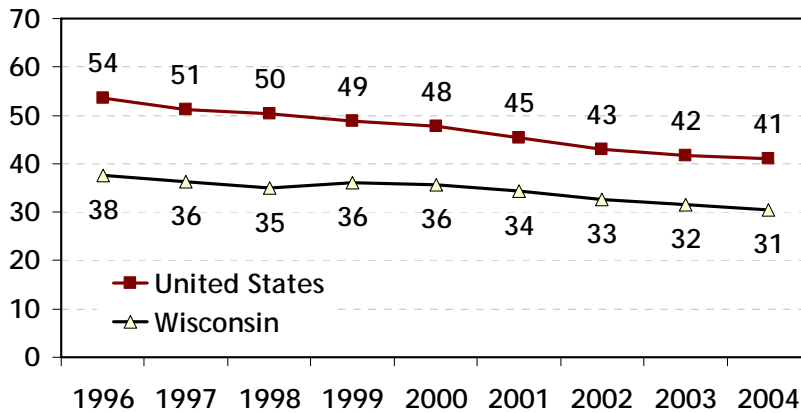


### Teen Births

Teenagers who use drugs or alcohol are more likely to engage in risky sexual behavior of all types, including unplanned, unprotected sex that can lead to unintended pregnancies.

- Although the teen birth rate in Wisconsin is generally much lower than the national average, teen birth rates in the southeastern region of Wisconsin approach or even exceed the nation's average. (Figure 12)

Figure 12. Teen birth rate, Wisconsin and the United States, 1996-2004

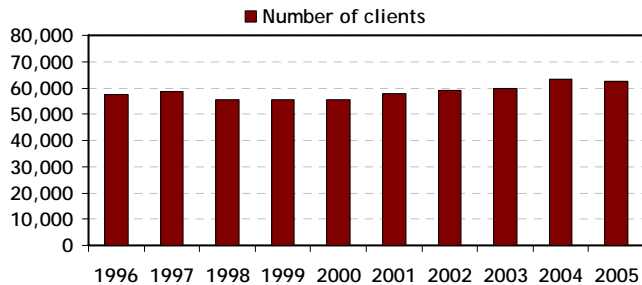


Teen birth rate: Number of births per 1,000 females aged 15-19. Data source: Birth data, Wisconsin DHFS

### Economic Effects

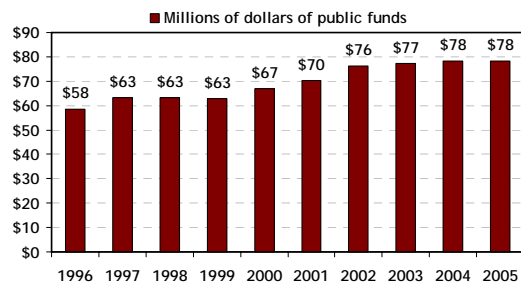
- The reported number of alcohol and other drug abuse clients receiving services with public funds increased in Wisconsin from 57,349 in 1996 to 62,619 in 2005. (Figure 13)
- The reported public funds expended for alcohol and other drug abuse treatment rose in Wisconsin from \$58.47 million in 1996 to \$78.44 million in 2005. (Figure 14)

Figure 13. Alcohol and other drug abuse clients receiving any service with public funds\*, Wisconsin, 1996-2004



\*Dollar amounts are not adjusted for inflation.

Figure 14. Public funds\* expended for alcohol and other drug abuse treatment, Wisconsin, 1996-2003



Data source: Wisconsin Department of Health and Family Services

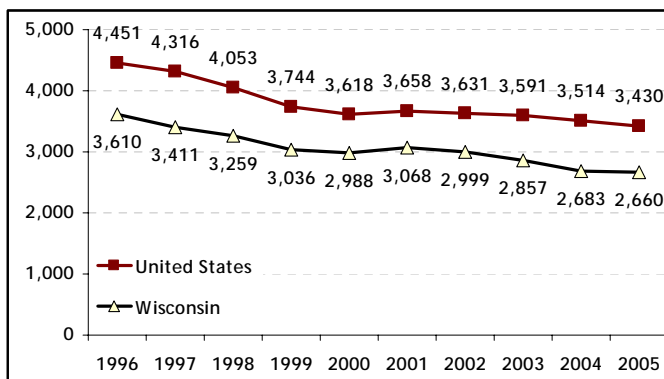
## Crimes and Arrests

Drug-related property crimes involve burglary, larceny, and motor vehicle theft. These crimes are frequently committed in order to obtain money to purchase drugs. Drug-attribution rates for property crime range from approximately 7% for motor vehicle theft to 30% for burglary and larceny. Violence is associated with alcohol use, although the causal pathway is not completely understood. Drinking on the part of the victim or a perpetrator has been shown to increase the risk of assaults and assault-related injuries. Approximately 23% of sexual assaults, 30% of physical assaults, and 3% of robberies are attributable to alcohol use.

This report includes data on both arrests and reported offenses. Both have advantages and disadvantages. Offenses reported are not influenced by the laws and enforcement practices of a particular state or locality. However, arrests provide a measure of the social and economic toll placed by the crimes. In addition, data on offenses reported is only available for index crimes: burglary, theft, arson, motor vehicle theft, homicide, rape, robbery and aggravated assault. Arrest data is available for a wider range of crimes.

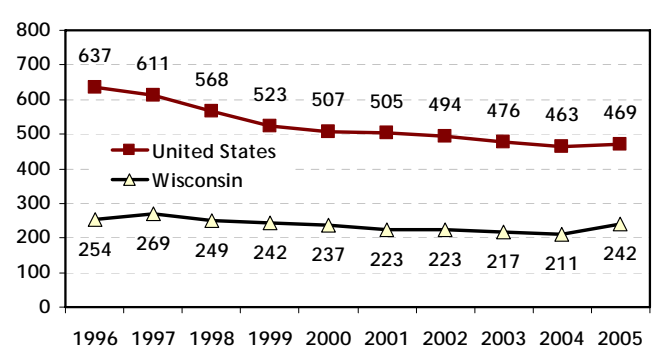
- Wisconsin's rates of reported property and violent crimes were far lower than in the United States and dropped steadily between 1996 and 2005. (Figures 15 & 16)
- In 1996, 3,610 property crimes and 254 violent crimes were reported per 100,000 Wisconsin residents; in 2005, those rates fell to 2,660 and 242, respectively. This shows that while reports of property crimes have decreased by almost one-third, reports of violent crimes have fallen far less dramatically. In fact, the total annual number of reported forcible rapes, one of the four violent crimes, increased from 1,098 in 1996 to 1,134 in 2005 (although the rate fell slightly).

Figure 15. Rate of reported property crime offenses per 100,000 population, Wisconsin and the United States, 1996-2005



Data source: Crimes and Arrests, Wisconsin DOJ

Figure 16. Rate of reported violent crime offenses per 100,000 population, Wisconsin and the United States, 1996-2005

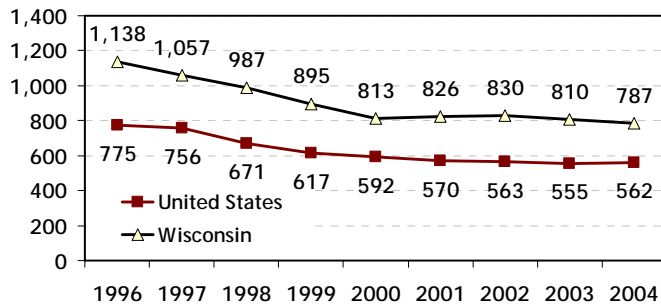


Data source: Crimes and Arrests, Wisconsin DOJ

## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

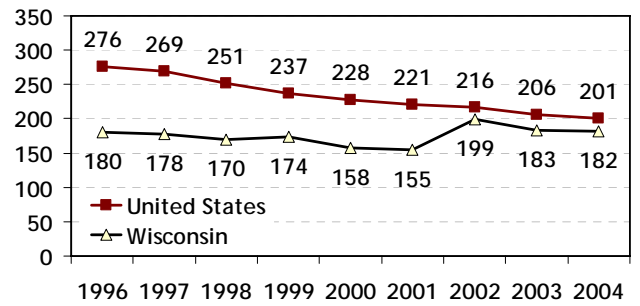
- Interestingly, the rates of arrests for property crimes were far higher in Wisconsin than in the United States, considering that the rates of reported offenses are far lower. However, arrest rates in Wisconsin decreased significantly between 1996 and 2000 and have hovered around 800 arrests per 100,000 Wisconsin residents. The number of arrests of juveniles for property crimes decreased markedly, from 29,335 arrests in 1996 to 17,784 arrests in 2005 (Figure 17).
- Wisconsin arrest data for violent crimes has been skewed by a change in reporting in Milwaukee County data in 2002. This accounts for most of the increase in arrests from 2001 to 2002. However, prior to that year and since then, Wisconsin's arrest rate for violent crimes has been falling and is similar to the rate in the United States (Figure 18).

**Figure 17. Rate of reported property crime arrests per 100,000 population, Wisconsin and the United States, 1996-2005**



Data source: Crimes and Arrests, Wisconsin DOJ

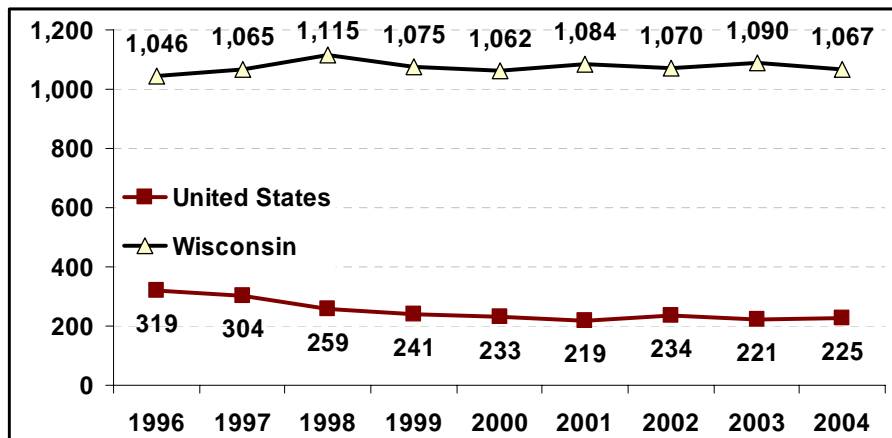
**Figure 18. Rate of reported violent crime arrests per 100,000 population, Wisconsin and the United States, 1996-2005**



Data source: Crimes and Arrests, Wisconsin DOJ

- Wisconsin's rate of disorderly conduct arrests was nearly five times the national rate and increased between 1996 and 2004. These arrests have increased for both juveniles and adults. (Figure 19)

**Figure 19. Rate of disorderly conduct arrests per 100,000 population, Wisconsin and the United States, 1996-2005**

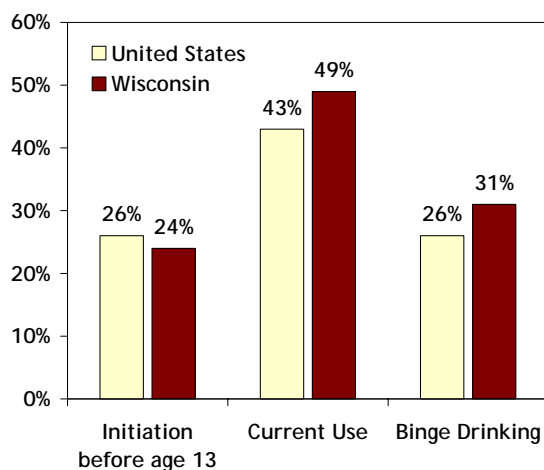


Data source: Crimes and Arrests, Wisconsin DOJ

## Alcohol Consumption

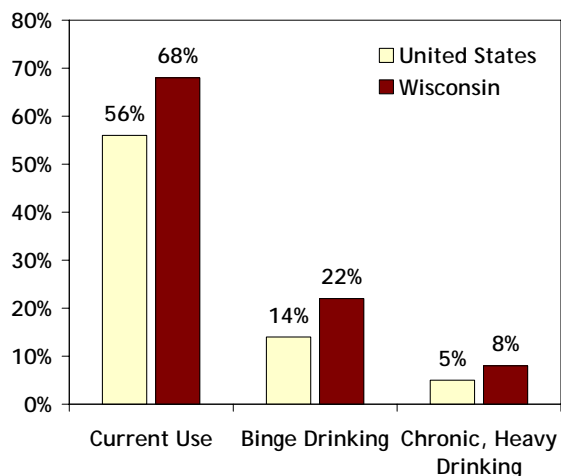
In 2005, Wisconsin had, arguably, the highest prevalence of alcohol use in the country. The percent of high school students who initiated alcohol use before the age of 13 was similar to the national average and has been decreasing over the past five years. However, current use of alcohol among both youth and adults was among the highest in the country. In 2005, Wisconsin high school students reported the highest rate of current alcohol use (49%) among all reporting states, and the fifth highest rate of binge drinking (31%). Among adults, Wisconsin reported the highest rates of binge drinking (22%), current alcohol use (68%), and chronic, heavy drinking (8%) in the country. Per capita consumption was also among the highest in the nation (2.81 gallons per person).

Figure 20. Alcohol use among high school students, Wisconsin and the United States, 2005



Data source: YRBS

Figure 21. Alcohol use among adults, Wisconsin and the United States, 2005



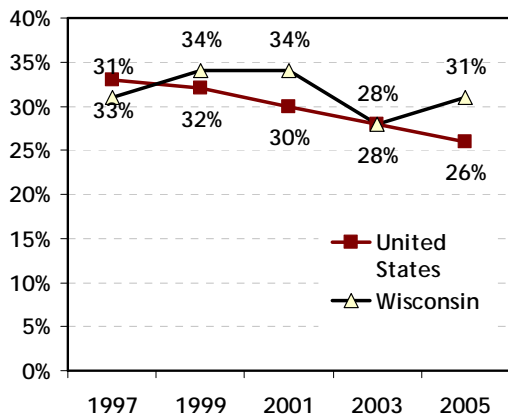
Data source: BRFSS

## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

### Binge Drinking

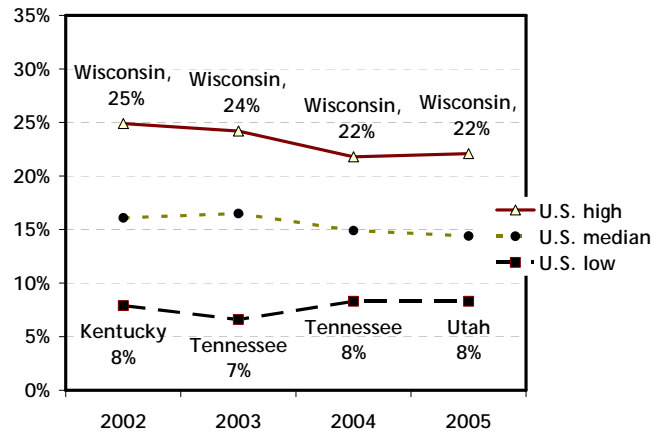
- In 2005, 31% of Wisconsin high school students reported binge use of alcohol. While the prevalence of binge drinking declined among high school students nationally from 1997 to 2005 (33% vs. 26%), there was no parallel decline in Wisconsin. (Figure 22)
- The prevalence of binge drinking among Wisconsin adults in 2005 was 22%. Binge drinking was highest among men, young adults ages 18 to 24, American Indians and Hispanics. (Figure 23 and Tables 8 & 9)

**Figure 22. Binge drinking prevalence among high school students, Wisconsin and the United States, 1997-2005**



Data source: YRBS

**Figure 23. Adult binge drinking prevalence: states with the lowest and highest estimates, 2002-2005**



Data source: BRFSS

**Table 8. Binge drinking among adults by gender and age, Wisconsin, 2000-2005**

		2000	2001	2002	2003	2004	2005
Gender	Male	36%	37%	36%	33%	31%	32%
	Female	16%	15%	14%	15%	14%	12%
	Female 18-44	24%	24%	22%	25%	21%	18%
Age	18-24	49%	47%	41%	43%	37%	33%
	25-44	32%	34%	33%	31%	29%	28%
	45-64	19%	18%	19%	18%	17%	21%
	65+	4%	5%	5%	6%	5%	4%

Data source: BRFSS

**Table 9. Binge drinking among adults by race, Wisconsin, 2000-2005**

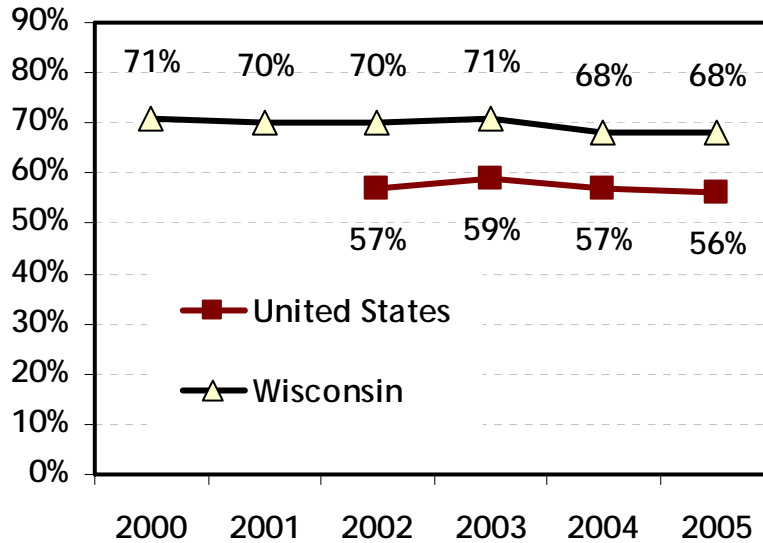
	2000-2002	2001-2003	2002-2004	2003-2005
African American	16%	16%	15%	15%
American Indian	37%	34%	35%	31%
Asian	12%	11%	15%	16%
Hispanic	28%	28%	28%	28%
White	25%	25%	24%	23%

Data source: BRFSS

### Current Alcohol Use

- The prevalence of current alcohol use among adults and high school students in Wisconsin was consistently high between 1999 and 2005. In 2005, 68% of adults and 49% of high school students reported current alcohol use. (Figure 24)
- Wisconsin adults ages 25 to 44 reported the highest prevalence of current alcohol use among the age groups measured (Table 11).
- Among Wisconsin racial/ethnic groups, African American adults (69%) reported the highest prevalence of current alcohol use in 2005, followed by whites (66%), Asians (65%), Hispanics (52%) and American Indians (49%).

Figure 24. Current alcohol use among adults, Wisconsin and the United States, 2000-2005



Data source: BRFSS

Table 11. Current alcohol use among adults by age and race, Wisconsin, 2000-2005

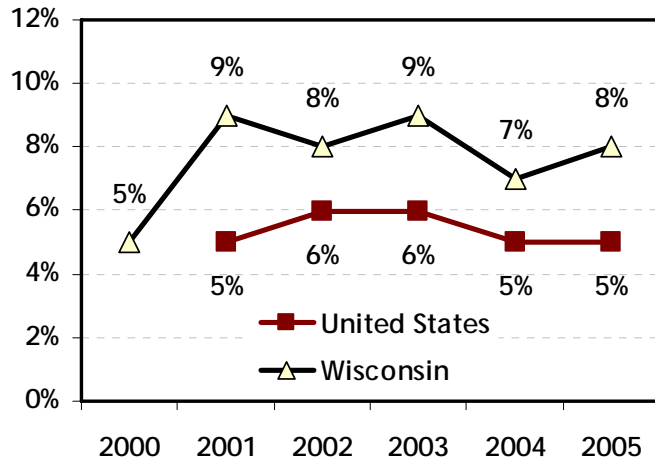
	2000	2005		2000-2002	2003-2005
18-24	77%	62%	African American	71%	69%
25-44	76%	74%	American Indian	45%	49%
45-64	71%	71%	Asian	69%	65%
65+	59%	56%	Hispanic	52%	52%
			White	61%	66%

Data source: BRFSS

### Chronic, Heavy Use

- Figure 25 demonstrates that in Wisconsin, the prevalence of chronic, heavy use of alcohol among adults has remained approximately 8% since 2000. This was higher than the national average every year (5% in 2005).
- Chronic, heavy use is highest among whites and adults ages 18 to 24 (Table 12).

Figure 25. Prevalence of chronic heavy alcohol use among adults, Wisconsin and the United States, 2000-2005



Data source: BRFSS

Table 12. Chronic, heavy alcohol use among adults by age and race, Wisconsin, 2000-2005

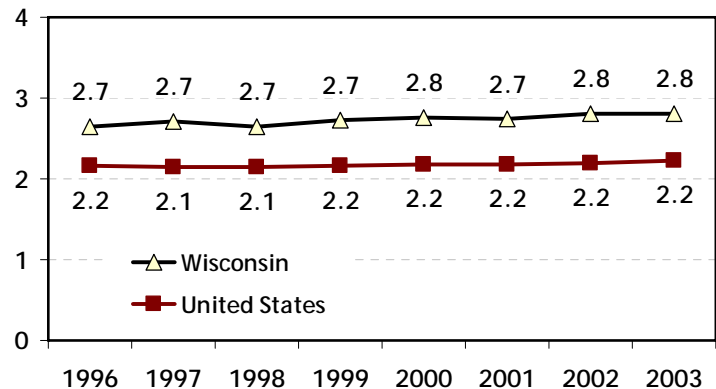
	2000	2005		2000-2002	2003-2005
18-24	8%	11%	African American	5%	8%
25-44	8%	8%	American Indian	6%	5%
45-64	7%	8%	Asian	1%	9%
65+	3%	3%	Hispanic	10%	2%
			White	9%	12%

Data source: BRFSS

### Per Capita Consumption

- Between 1996 and 2003, per capita consumption of alcohol in Wisconsin rose from 2.65 to 2.81 gallons per person. Wisconsin's per capita consumption was notably higher than the national average every year (Figure 26).

Figure 26. Per capita consumption of alcohol, Wisconsin and the United States, 1996-2003

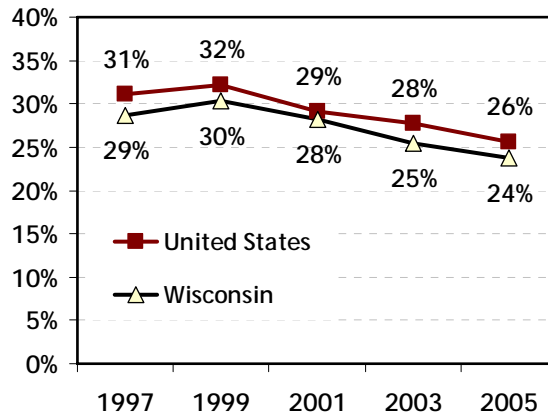


Data source: NIAAA

## Age of Initiation

- The prevalence of early initiation of alcohol use (prior to age 13) among high school students declined between 1999 and 2005, from 30% to 24% (Figure 27). Early-initiation prevalence among boys exceeded that among girls in all years (1999-2005), shown in Table 13.
- During 2003-2005, Native American or Alaskan Native students were the racial/ethnic group most likely to report early initiation (47%), followed by multiracial (34%) students. White students were the only racial/ethnic group whose prevalence of early initiation decreased between 1999 and 2005 (Table 14).

Figure 27. Prevalence of early initiation of alcohol use among high school Students, Wisconsin and the United States, 1997-2005



Data source: YRBS

Table 13. Prevalence of early initiation of alcohol use among high school students by gender, Wisconsin, 1999-2005

	1997	1999	2001	2003	2005
Female	23%	24%	27%	22%	19%
Male	34%	37%	30%	29%	28%

Data source: YRBS

Table 14. Prevalence of early initiation of alcohol use among high school students by race, Wisconsin, 1999-2005

	1999-2001	2001-2003	2003-2005
White-not Hispanic	30%	26%	23%
Black-not Hispanic	25%	31%	27%
Hispanic	29%	27%	30%
Asian or Pacific Islander	21%	30%	30%
Native American or Alaskan Native*		51%	47%
Multiracial	30%	30%	34%

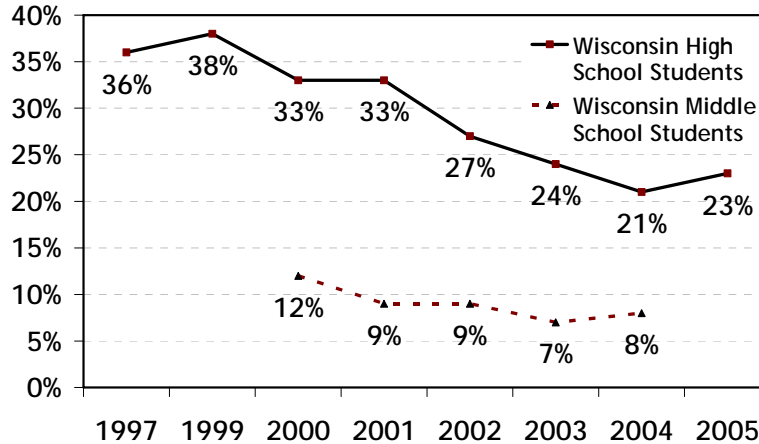
\*Fewer than 100 Native American or Alaskan Native students were sampled to create these estimates: 86 students for the 2001-2003 estimates and 97 students for the 2003-2005 estimates.



## Tobacco Consumption

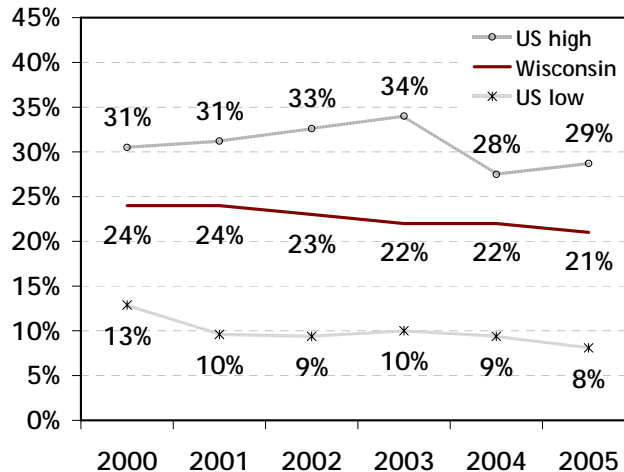
Tobacco consumption is decreasing in Wisconsin. Among high school students, the prevalence of smoking has dropped considerably, from 36% in 1997 to 23% in 2005. The prevalence of current smoking among adults dropped slightly between 2000 (24%) and 2005 (21%). One particular trend worth noting is the reduction in per capita consumption. Wisconsin's per capita consumption has dropped almost 20% between 1996 and 2005, representing a reduction of 19 packs per person annually in the past 10 years. However, smoking prevalence remains high in certain demographic groups. American Indian and African American adults still smoke at rates higher than Wisconsin's average (32% and 30%, respectively, in 2005).

Figure 28. Current smoking among middle and high school students, Wisconsin, 1997-2005



Data source: YRBS and YTS

Figure 29. Current smoking among adults, Wisconsin and national ranges (low/high), 2000-2005



Data source: BRFSS

## Current Smoking

Current smoking is associated with increased risks of lung and oral cavity cancers, chronic obstructive pulmonary disease, cardiovascular disease, and cerebrovascular disease, not to mention deaths and injuries from fires. In addition, current smokers often put others at risk by exposing them to secondhand smoke.

- Smoking has notably decreased among Wisconsin youth. In 1997, 36% of high school students reported smoking in the past 30 days; by 2005, that proportion dropped to 23% (Figure 28).
- The prevalence of current smoking among middle school youth in Wisconsin was slightly higher than the national average in 2000 (12% versus 11%), but dropped with the national prevalence by 2004 (both 8%).
- From 2000 to 2005, young adults ages 18 to 24 had a much higher prevalence of smoking than older adults in Wisconsin. However, during the same time period, the prevalence of smoking among young adults decreased from 40% in 2000 to 25% in 2005 (Table 15).
- Current smoking was highest among American Indians compared with other racial/ethnic groups in Wisconsin despite significant improvements. During 2000-2002, their prevalence of smoking was 46%; it had dropped to 30% by 2003-2005. The prevalence of current smoking was consistently lowest among Asians (16% in 2003-2005) (Table 16).

## Smoking and Women

The 2001 Surgeon General's Report on Women and Smoking demonstrated that smoking-related diseases have truly become a women's health issue. Women who smoke are subject to all the same risks as men, including cancer, cardiovascular disease and chronic obstructive pulmonary disease. In addition, women are also at risk of infertility, adverse reproductive outcomes, altered menstrual function, lower bone density and increased fracture risk. Lung cancer surpassed breast cancer as the leading cancer death among women in 1987.

- In 2005 in Wisconsin, women of childbearing age had a higher prevalence of smoking than women in general (26% vs. 19%) (Table 15).

## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

**Table 15. Current smoking prevalence among adults by gender and age, Wisconsin, 2000-2005**

		2000	2001	2002	2003	2004	2005
Gender	Male	24%	25%	25%	24%	25%	22%
	Female	24%	22%	21%	20%	19%	19%
	Female 18-44	31%	29%	27%	27%	22%	26%
Age	18-24	40%	33%	35%	32%	28%	25%
	25-44	27%	29%	28%	27%	26%	26%
	45-64	22%	22%	21%	20%	22%	19%
	65+	10%	6%	8%	9%	8%	9%

Data source: BRFSS

**Table 16. Current smoking prevalence among adults by race, Wisconsin, 2000-2005**

	2000-2002	2001-2003	2002-2004	2003-2005
African American	27%	28%	29%	30%
American Indian	46%	39%	31%	32%
Asian	13%	10%	13%	16%
Hispanic	27%	26%	24%	23%
White	23%	22%	22%	21%

Data source: BRFSS

**Table 17. Current smoking prevalence among high school students by race, Wisconsin, 1999-2005**

	1999-2001	2001-2003	2003-2005
White-not Hispanic	36%	29%	24%
Black-not Hispanic	18%	16%	14%
Hispanic	43%	27%	25%
Asian or Pacific Islander	27%	27%	21%
Native American or Alaskan Native*		50%	41%
Multiracial	40%	28%	26%

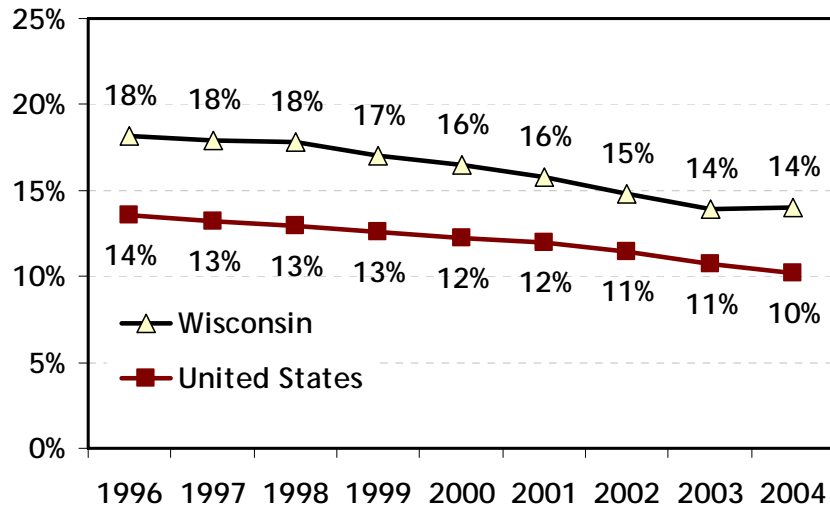
\*Fewer than 100 Native American or Alaskan Native students were sampled to create these estimates: 86 students for the 2001-2003 estimates and 97 students for the 2003-2005 estimates. Data source: YRBS

### Smoking During Pregnancy

Pregnant women who smoke put themselves and their babies at risk for premature rupture of membranes, placenta previa, stillbirth, preterm delivery, low birth weight, and sudden infant death syndrome.

- Smoking during pregnancy decreased in Wisconsin from 18% of births in 1996 to 14% of births in 2004. However, the prevalence of smoking during pregnancy in Wisconsin has remained higher than the national average for all of the past ten years. The national average in 2004 was 10% (Figure 30).
- Table 18 shows that American Indian women (37%) and young women ages 18 to 24 (24%) were far more likely to smoke during pregnancy than the Wisconsin average (14%).

Figure 30. Smoking during pregnancy, Wisconsin and the United States, 1996-2004



Data source: Birth data, Wisconsin DHFS

Table 18. Smoking during pregnancy by age and race, Wisconsin, 1990-2004

	1990-1992	2002-2004		1990-1992	2002-2004
Under 18	25.4%	17.6%	American Indian	48.0%	36.6%
18-19	32.9%	25.9%	Non-Hispanic Black	28.7%	17.1%
20-24	30.0%	23.2%	Non-Hispanic White	22.0%	14.9%
25-29	19.9%	12.2%	Hispanic	15.7%	5.6%
30-34	17.2%	8.1%	Laotian/Hmong		3.4%
35-39	15.4%	8.7%			
40-44	13.7%	9.9%			

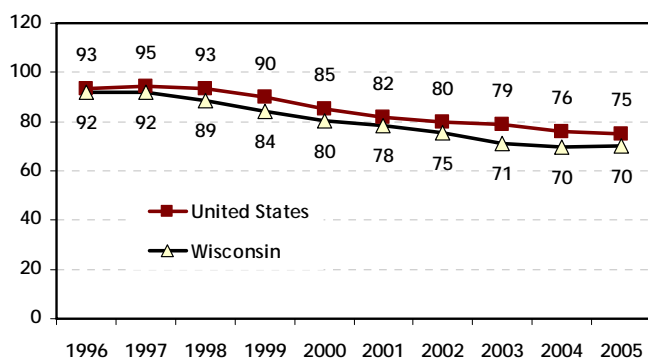
Data source: Birth data, Wisconsin DHFS

### Per Capita Consumption

Per capita consumption is an alternate indicator of current smoking in a population. Its advantages include more exact estimates, as it does not rely on survey data, and its capacity to show reductions in the number of cigarettes consumed even if the total number of current smokers remains unchanged.

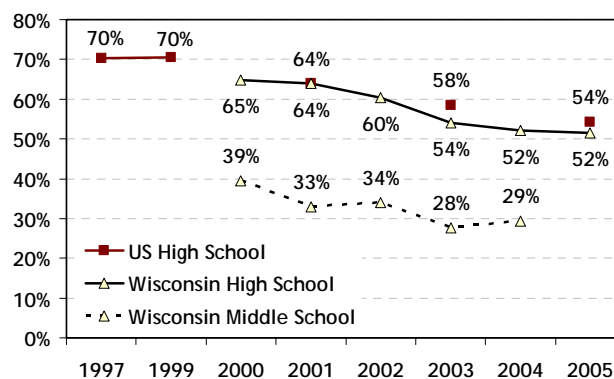
- Between 1996 and 2005, per capita cigarette consumption declined almost 20% percent (or 19 packs per person annually) in Wisconsin. Wisconsin's per capita cigarette consumption remained slightly lower than the national average for all of the past 10 years (Figure 31).

Figure 31. Per capita tobacco consumption, Wisconsin and the United States, 1996-2005



Data source: Burden of Taxes on Tobacco

Figure 32. Lifetime tobacco use among high school students, Wisconsin and the United States, 1997-2005



Data source: YRBS and YTS

### Lifetime Experimentation/Use

- Lifetime experimentation with cigarette smoking has been decreasing among Wisconsin youth. The proportion of Wisconsin high school students who reported ever having tried cigarette smoking declined from 65% in 2000 to 52% in 2005; among middle school students the proportion dropped from 39% in 2000 to 29% in 2004 (Figure 32).
- Among high school students in Wisconsin, the racial/ethnic group with the highest lifetime smoking prevalence was American Indian students (65% in 2003-2005, Table 19).

Table 19. Lifetime tobacco use among high school students by race, Wisconsin, 1999-2005

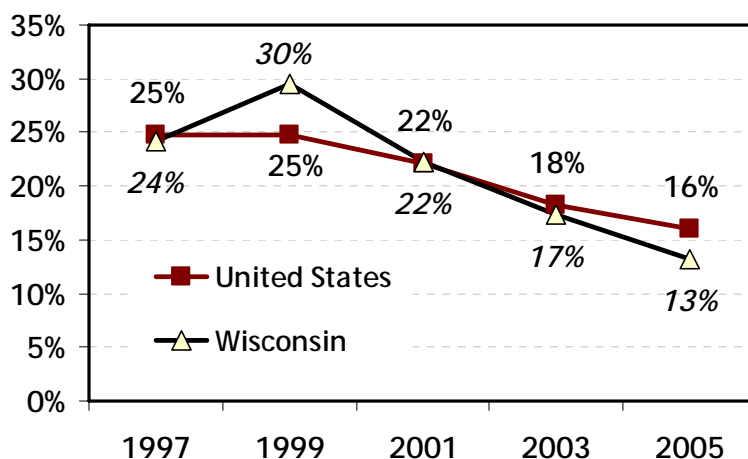
	1999-2001	2003-2005
White-not Hispanic	25%	14%
Black-not Hispanic	21%	15%
Hispanic	40%	17%
Asian or Pacific Islander	22%	22%
Native American or Alaskan Native*		35%
Multiracial	31%	23%

\*Fewer than 100 Native American or Alaskan Native students were sampled to create these estimates: 86 students for the 2001-2003 estimates and 97 students for the 2003-2005 estimates.

## Age of Initiation

- From 1999 to 2005, the prevalence of early tobacco use (cigarette use before age 13) among Wisconsin high school students declined from 30% to 13% (Figure 33). This drop paralleled a national decline during the same time period (25% to 16%).
- Table 20 shows that the prevalence of early tobacco use was generally higher among male than female students in Wisconsin from 1997 to 2005 (16% vs. 11% in 2005). The percent reporting early use was similar in Wisconsin among African American and white students in 2005 (15% vs. 14%), and highest among Native American or Alaskan Native students (35%).

Figure 33. Early tobacco use among high school students, Wisconsin and the United States, 1997-2005



Data source: YRBS

Table 20. Early tobacco use among high school students by race, Wisconsin, 1999-2005

	1999-2001	2003-2005
White-not Hispanic	25%	14%
Black-not Hispanic	21%	15%
Hispanic	40%	17%
Asian or Pacific Islander	22%	22%
Native American or Alaskan Native*		35%
Multiracial	31%	23%

Data source: YRBS

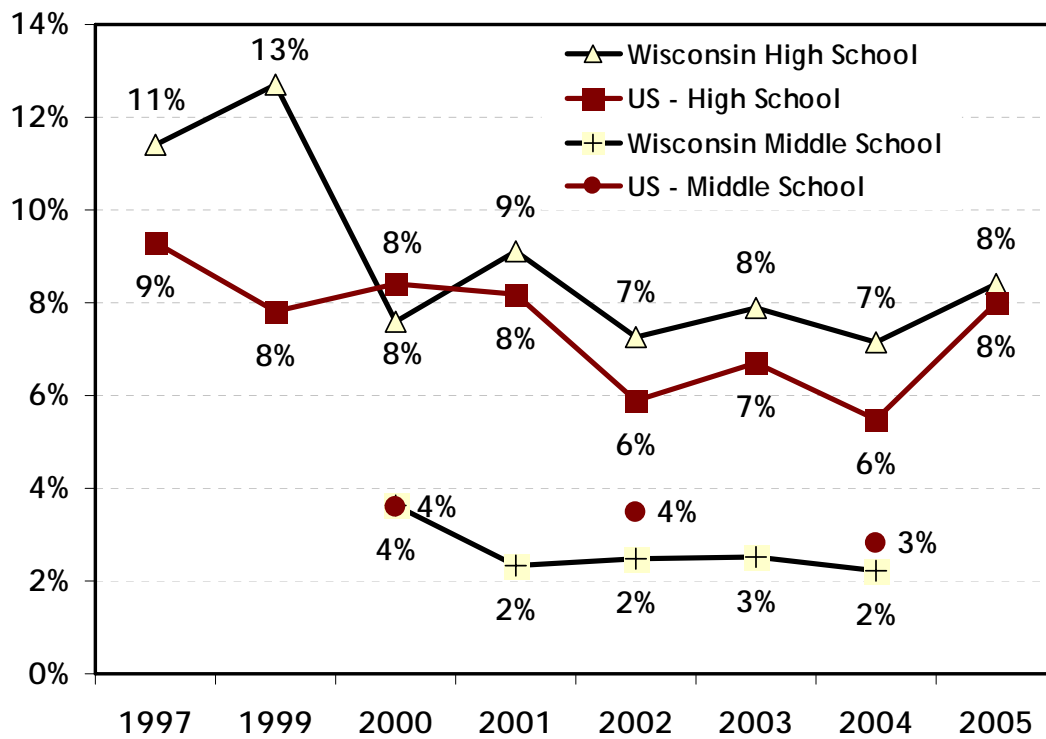
\*Fewer than 100 Native American or Alaskan Native students were sampled to create these estimates: 86 students for the 2001-2003 estimates and 97 students for the 2003-2005 estimates.

### Smokeless Tobacco Use

Smokeless tobacco use is associated with an increased risk of oral cavity cancers.

- Although down from a high of 13% in 1999, the prevalence of smokeless tobacco use among high school students has remained at 7% or 8% since 2000, similar to the national prevalence (Figure 34).
- Male high school students have a much higher prevalence of current smokeless tobacco use compared with female students (14% versus 2% in 2005). (Table 21)

Figure 34. Current smokeless tobacco use among middle and high school students, Wisconsin and the United States, 1997-2005



Data source: YRBS and YTS

Table 21. Smokeless tobacco use among high school students by gender, Wisconsin, 1997-2005

	1997	1999	2000	2001	2002	2003	2004	2005
Female	3%	4%	1%	4%	1%	2%	3%	2%
Male	19%	21%	14%	14%	13%	13%	11%	14%

Data source: YRBS and YTS

### Other Drug Consumption

The use of illicit drugs other than alcohol and tobacco remains a problem in Wisconsin. As a whole, consumption patterns of illicit drugs in Wisconsin mirrored national trends with few exceptions. One notable trend was in the use of marijuana. In 1997, the prevalence of both lifetime and current use of marijuana was lower than the national average. Over the next four years, however, these measures rose until they were nearly identical to the national averages. Since 2001, lifetime and current use of marijuana in the United States and Wisconsin have both decreased at similar rates. In the United States as a whole, illicit consumption of prescription drugs among youth has been rising; data on state-specific rates were unavailable.

Table 22. The prevalence and state rank of illicit drug use among Wisconsin residents ages 12 and older, 2002-2004

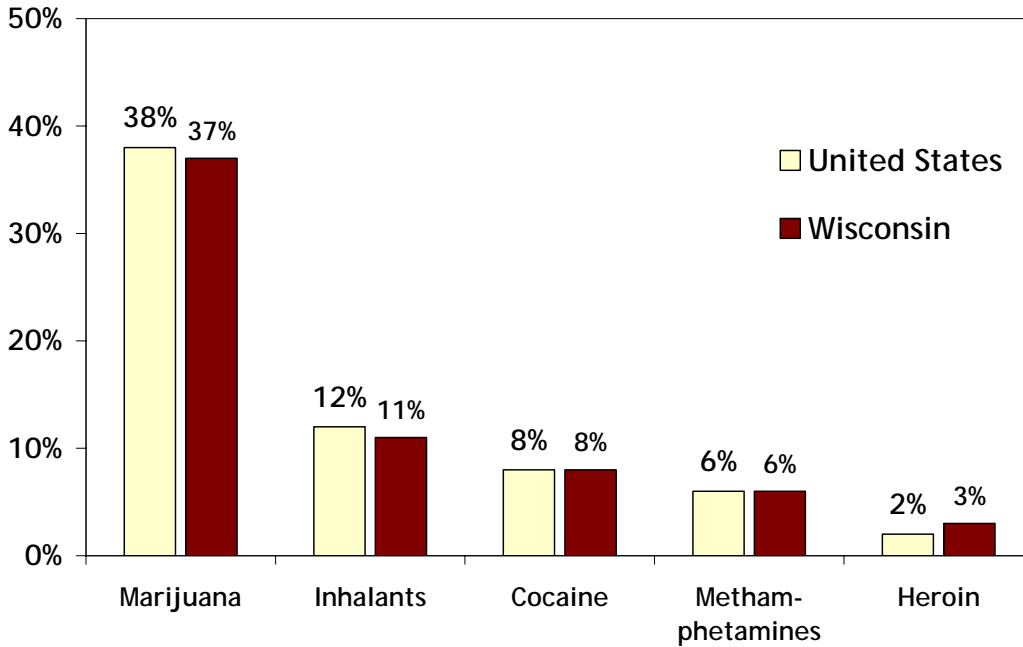
	<i>Lifetime</i>		<i>Past Year</i>		<i>Past Month</i>	
	Prevalence	Rank	Prevalence	Rank	Prevalence	Rank
Any Illicit Drugs	49%	20	14%	25	8%	27
Marijuana and Hashish	43%	21	10%	26	6%	30
Illicit Drugs other than Marijuana	29%	28	8%	30	4%	18
Non-medical Use of Psychotropics	18%	40	6%	37	2%	37
Non-medical Use of Pain Relievers	12%	34	4%	33	2%	32
Cocaine	14%	29	3%	9	1%	8
Hallucinogens	14%	26	2%	21	1%	10
Tranquilizers	6%	44	2%	31	1%	38
OxyContin	2%	12	1%	2	1%	1
Stimulants	8%	31	1%	42	0%	47
Crack	3%	31	1%	11	0%	8
Ecstasy	3%	39	1%	29	0%	6
Inhalants	10%	27	1%	32	0%	25
LSD	10%	25	0%	21	0%	22
Methamphetamine	4%	34	0%	35	0%	40
Heroin	1%	47	0%	22		*
Sedatives	3%	45	0%	46	0%	42
PCP	2%	42	0%	40	0%	6

Data source: NSDUH



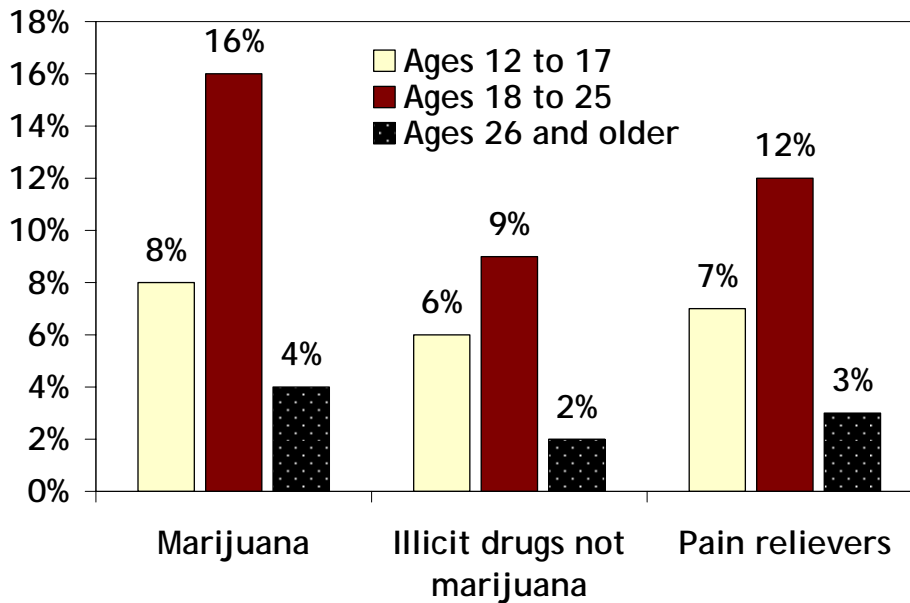
## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

Figure 35. Lifetime use of illicit drugs among high school students, Wisconsin and the United States, 2005



Data source: YRBS

Figure 36. Current use of marijuana, illicit drugs other than marijuana and pain relievers by age group, Wisconsin, 2003-2004



Data source: NSDUH

## Marijuana

Marijuana arrests accounted for 62.9 percent of all drug arrests in Wisconsin in 2004. Marijuana use can lead to decreased lung function, and impaired memory among youth.

Students who smoke marijuana heavily may be limiting their ability to learn. A 1996 National Institute on Drug Abuse (NIDA)-funded study found that college students who used marijuana regularly had impaired skills related to attention, memory, and learning 24 hours after they had last used the drug. The finding supports the results of previous NIDA-funded research that reported that adults who were chronic heavy marijuana users showed residual impairment in cognitive abilities a day after they had last used marijuana.

- Between 1997 and 2005 the prevalence of current marijuana use among Wisconsin high school students decreased from 21% to 16% (Figure 37).
- Experimentation with marijuana among high school students rose between 1997 (36%) and 2001 (43%), but has been decreasing since then. In 2005, 37% of students had tried marijuana at least once (Figure 38).
- Marijuana use among students in the Milwaukee Public Schools is notably higher than the Wisconsin average. In 2005 the prevalence of current use among these students was 24% and the prevalence of lifetime experimentation was 52%.

Figure 37. Current marijuana use among high school students, Wisconsin and the United States, 1997-2005

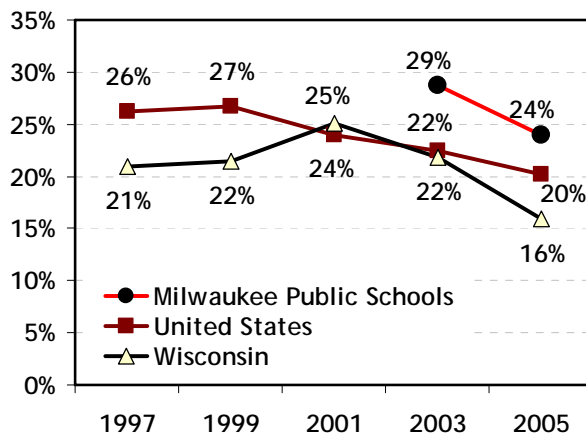
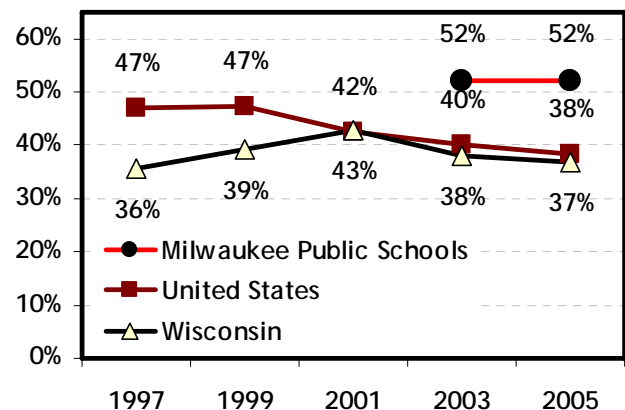


Figure 38. Lifetime marijuana use among high school students, Wisconsin and the United States, 1997-2005



Data source: YRBS

## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

- Among Wisconsin high school students, reported marijuana use was highest for African American students (Table 23). During 2003-2005, 31% of African American high school students reported current marijuana use. In addition, a higher proportion (20%) reported having tried marijuana before age 13 than the Wisconsin average (7% in 2005).
- Young adults ages 18 to 25 in Wisconsin reported a prevalence of current marijuana use (16% in 2003-2004) similar to high school students (16% in 2005). The prevalence for adults ages 26 and older was 4% during 2003-2004 (Figure 36).

Table 23. Current marijuana use and early initiation among high school students by race, Wisconsin, 1999-2005

	<i>Current Use</i>		<i>Early Initiation</i>	
	<i>1999-2001</i>	<i>2003-2005</i>	<i>1999-2001</i>	<i>2003-2005</i>
White-not Hispanic	22%	18%	8%	6%
Black-not Hispanic	30%	31%	19%	20%
Hispanic	29%	22%	21%	13%
Asian or Pacific Islander	11%	16%	8%	10%
Native American or Alaskan Native*		27%		19%
Multiracial	31%	20%	17%	13%

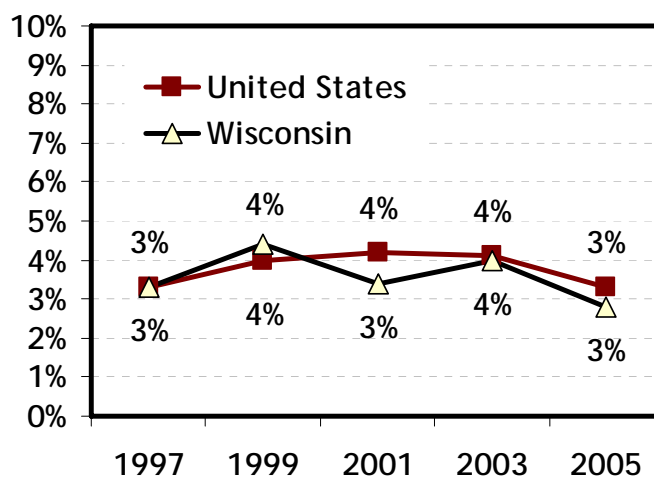
\*Slightly fewer than 100 Native American or Alaskan Native students were sampled to create these estimates. Eighty-six students were included in the 2001-2003 estimates and 97 students in the 2003-2005 estimates.

## Cocaine

Cocaine users face the possibilities of arrest, dependence, injury and even death. Cocaine users are found to be more likely to experience a hemorrhagic stroke (sudden bleeding in the brain), at a significantly earlier age and experience poorer outcome after treatment, than non-users. Cocaine continues to be the most frequently mentioned illicit substance reported to the Drug Abuse Warning Network (DAWN) by hospital emergency departments (ED) nationwide.

- The prevalence of current cocaine use among Wisconsin adults and high school students has remained relatively consistent at approximately 3% since 1997 (Figure 39).
- However, pockets of higher use are still evident. Multiracial high school students reported a higher prevalence of current cocaine use than the Wisconsin average as did young adults ages 18 to 25 (7%). (Figure 36 and Table 24)

Figure 39. Current use of cocaine among high school students, Wisconsin, 1997-2005



Data source: YRBS

Table 24. Current cocaine use among high school students by race, Wisconsin, 1999-2005

	1999-2001	2003-2005
White-not Hispanic	3%	3%
Black-not Hispanic	2%	6%
Hispanic	6%	6%
Asian or Pacific Islander	9%	3%
Native American or Alaskan Native*		9%
Multiracial	7%	7%

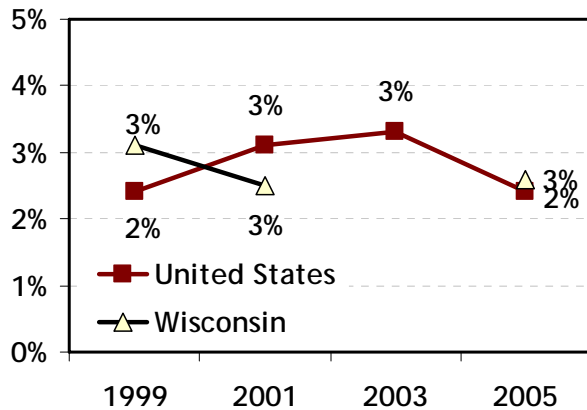
\*Slightly fewer than 100 Native American or Alaskan Native students were sampled to create these estimates. Eighty-six students were included in the 2001-2003 estimates and 97 students in the 2003-2005 estimates.

## Heroin

One of the most significant risks a heroin user faces is dependence on the drug. However, users who inject heroin also put themselves at risk for contracting HIV, hepatitis C (HCV), and other infectious diseases. Approximately 70–80% of the new HCV infections in the U.S. each year are among injection drug users.

- The prevalence of lifetime heroin use among high school students in Wisconsin remained steady at 3% between 1999 and 2005. This is higher than the estimate of lifetime use provided by the 2002-2004 NSDUH, which reported that 1% of Wisconsin residents ages 12 and older had used heroin during their lifetime (Figure 40).
- During 2001-2005, the prevalences of lifetime heroin use among Asian and multicultural high school students in Wisconsin were more than three times the prevalence among white students (2%, Table 25).

Figure 40. Lifetime use of heroin among high school students, Wisconsin and the United States, 1999-2005



Data source: YRBS, data not available in Wisconsin in 2003

Table 25. Lifetime heroin use among high school students by race, Wisconsin, 2001-2005

	2001-2005
White-not Hispanic	2%
Black-not Hispanic	4%
Hispanic	5%
Asian or Pacific Islander	10%
Native American or Alaskan	
Native*	
Multiracial	9%

\*There were not enough Native American students sampled in 2001 and 2005 to create estimates for these years.

## Availability of Heroin

Prices for heroin have decreased, making it more affordable. When drug prices are affordable to youth, they use drugs more often. Lower prices for alcohol and tobacco also are linked to increases in underage use. Today's youth, as a generation, have more disposable income than ever before, enabling them to afford the lower prices (Mary Huser, May 1997 Extension News Newsletter, University of Wisconsin-Extension, 1997).

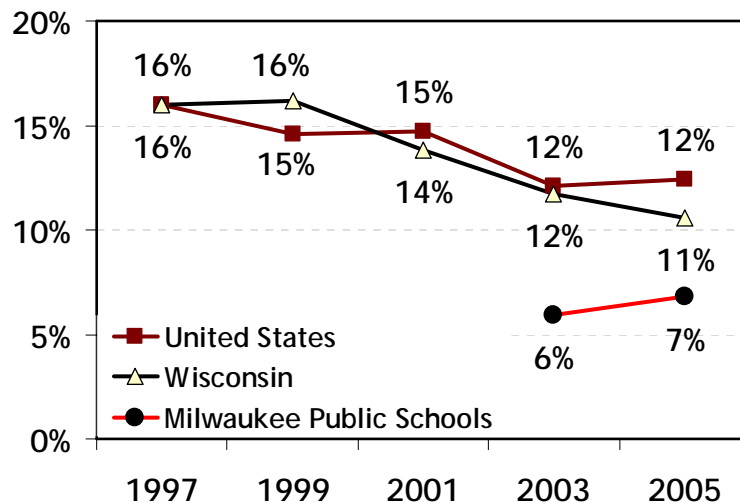
## Inhalants

Prolonged sniffing of the highly concentrated chemicals in solvents or aerosol sprays can induce irregular and rapid heart rhythms and lead to heart failure and death within minutes of a session of prolonged sniffing. This syndrome, known as "sudden sniffing death," can result from a single session of inhalant use. Chronic exposure to inhalants can produce significant, sometimes irreversible, damage to the heart, lungs, liver, and kidneys.

In addition to the toxic dangers of inhalants, recent research has shown that toluene, a solvent in many inhalants, promotes euphoria in the brain in the same way that cocaine, amphetamine/methamphetamine, PCP, and nicotine promote euphoria. This emphasizes the addictive nature of inhalants (SAMHSA's National Clearing house for Alcohol and Drug Information (NCADI), 2005).

- The prevalence of lifetime inhalant use among high school students has been dropping since 1997. In 2005, 11% of Wisconsin high school students reported having used inhalants to get high at some point in their lifetime (Figure 41).
- During 2002-2004, 10% of Wisconsin residents ages 12 and older reported having used inhalants to get high at some point in their lifetime (Table 22).
- The prevalence of inhalant use was lower among students in the Milwaukee Public Schools (7% in 2005).

Figure 41. Lifetime use of inhalants among high school students, Wisconsin, the United States and the Milwaukee Public Schools, 1997-2005



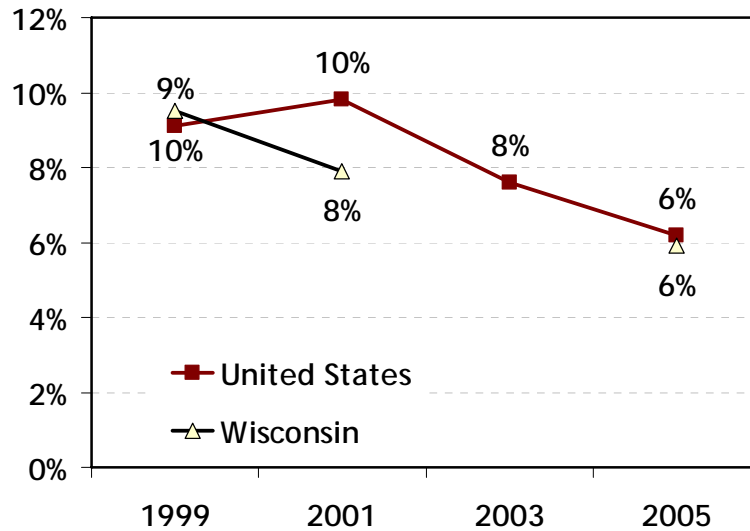
Data source: YRBS

## Methamphetamines

As well as being highly addictive, methamphetamine use can lead to neurological damage and psychotic behaviors.

- The prevalence of lifetime methamphetamine use among high school students in Wisconsin decreased between 1997 and 2005, following a national trend. The prevalence of lifetime methamphetamine use was 10% in 1997 and 6% in 2005 among in Wisconsin high school students (Figure 42).
- Table 22 shows that 4% of Wisconsin residents ages 12 and older reported lifetime methamphetamine use in the 2002-2004 NSDUH.
- Among high school students, African American students reported the lowest prevalence of lifetime methamphetamine (3% in 2005, Table 26), while multiracial reported the highest levels (15% in 2001-2005).

Figure 42. Lifetime use of methamphetamines among high school students, Wisconsin, the United States and the Milwaukee Public Schools, 1999-2005



Data source: YRBS, data not available in Wisconsin in 2003

Table 26. Lifetime methamphetamine use among high school students by race, Wisconsin, 2001-2005

	2001-2005
White-not Hispanic	6%
Black-not Hispanic	3%
Hispanic	7%
Asian or Pacific Islander	13%
Native American or Alaskan	
Native*	
Multiracial	15%

\*There were not enough Native American students sampled in 2001 and 2005 to create estimates for these years.

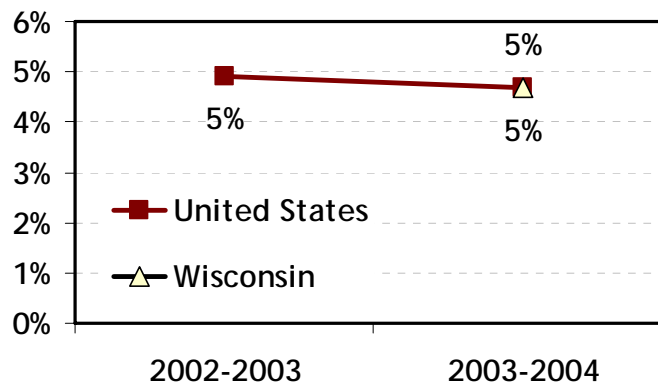
## Prescription Drugs

A recent study by the National Institute on Drug Abuse (NIDA) estimates that four million people age 12 or over used sedatives, stimulants, tranquilizers or opioids for non-medical reasons. In a January, 2005 article of the *Addiction* journal, an estimated 7 percent of college students nationally have used prescription stimulants for non-medical purposes over their lifetimes and 4 percent have used in the past year.

While the reasons for the increasing abuse of prescription drugs is not completely understood, it is likely that accessibility is a contributing factor from online pharmacies or through purchasing from individuals who may have been prescribed medications or sell for profit.

- During 2003-2004, 5% of Wisconsin residents ages 12 and older reported using pain relievers for non-medicinal purposes. The prevalence of use was highest among young adults ages 18 to 25 (12%). No earlier data are available to assess trends in Wisconsin (Figure 43).
- Other than marijuana, pain relievers and psychotropics for non-medical reasons were the most commonly reported drugs consumed. During 2002-2004, 18% of Wisconsin residents 12 and older reported non-medical use of psychotropics and 12% reported non-medical use of pain relievers at some point in their lifetime. During the same time period, 6% of respondents reported using psychotropics in past year, and 4% reported using pain relievers (Table 22).

Figure 43. Current use of pain relievers among residents ages 12 and older, Wisconsin and the United States, 2002-2004



Data source: NSDUH



## Profile Limitations

This report was the initial effort of the Wisconsin State Epidemiological Outcomes Workgroup to quantify the problems of alcohol, tobacco and other drug use and abuse in Wisconsin. Indicator selection criteria were very inclusive and the large number of indicators provides a comprehensive menu for further study through the Strategic Prevention Framework State Incentive Grant (SPF-SIG). Future profiles will utilize a sifting process to allow the Epidemiological Workgroup to further prioritize problem areas to be addressed by evidence-based interventions.

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## Data Gaps

During the data gathering process, it became evident that an alternative data source needs to be utilized for alcohol use and binge drinking among pregnant women (and women of childbearing age). It appears that the rate for alcohol use during pregnancy is under-reported in the Wisconsin birth certificate data. The Center for Disease Control and Prevention (CDCP) reports that Wisconsin is among the states that report the highest rates of drinking for pregnant women and high risk drinking for women of child-bearing age (Centers for Disease Control and Prevention, 2004; "Alcohol Consumption Among Women Who Are pregnant or Who Might Become Pregnant - United States, 2002. *MMWR Morbidity and Mortality Weekly Report*, 53(50), 1178-1181). Annual Behavioral Risk Factor Surveillance Survey (BRFSS) data will be utilized for these indicators in future studies.

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## Data Sources for Future Profiles

Data to possibly be included in future profiles include:

- Hospital emergency room data including prescription drug overdoses.
- Hepatitis B data through the State Division of Public Health surveillance system.
- Fetal alcohol syndrome data through a new statewide surveillance system.
- Specific data for disability populations.
- Disability data through the Social Security and the Veteran's Administration Hospital.
- Medicaid data on misuse of prescription drugs.

# Conclusion

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The social, economic and health costs of substance abuse in Wisconsin are high. Wisconsin has one and a half times the national rate of arrests for operating while intoxicated and more than three times the national rate of arrests for liquor law violations. The rate of deaths due to alcohol-related motor vehicle crashes is higher than the national average as well.

Given Wisconsin's high rate of alcohol consumption, it is not surprising that the rates at which Wisconsin experiences the consequences associated with alcohol use also tend to be higher than the national average. The rate of per capita alcohol consumption in Wisconsin is among the highest in the nation. Data for 2005 show that Wisconsin has higher prevalences of alcohol use and binge drinking among adults and college students compared to other states.

Regarding illicit drug use, in 2005, men were more than twice as likely to die due to drug use compared to women; blacks were more than three times more likely to die due to drug use than the Wisconsin average. From 1996 to 2004, the rate of drug law arrests was higher in Wisconsin compared to the nation as a whole.

An important aspect of prevention services is the ability to track the needs of communities through epidemiological factors. Based on the problem areas identified above, resources can be allocated to address the problem using evidence-based programming. Wisconsin's 2006 "Epidemiological Profile on Alcohol and Other Drug Use" provides a foundation for further study of problems regarding use and abuse of substances and the resulting consequences.

The next step in Wisconsin's data driven approach to prevention funding is to prioritize key consequences of alcohol and other drug abuse and assist local organizations /governments to address those consequences specifically. The Strategic Prevention Framework State Incentive Grant (another SAMHSA funded project) will provide additional funding for local communities to do in-depth need assessments on the risk and protective factors associated with those consequences. Future studies will focus on key problem areas serving to guide Wisconsin's funding decisions towards the greatest potential impact.

# APPENDIX I

## Surveys and Other Data Sources

## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

### Survey Sample Sizes and Error

Much of the data in this report comes from surveys conducted on the Wisconsin population. Estimates derived from surveys differ in their level of precision. Although sample size is not the only factor in determining the amount of potential error in a point estimate, it can provide a loose guide. Estimates that come from surveys with smaller sample sizes will tend to have wider confidence intervals than estimates from surveys with larger samples. Readers should also note that sample sizes provided in the table below are for all of Wisconsin. Sample sizes will be much smaller for subgroups of the population, particularly racial subgroups. Although we have included very few estimates for groups with a sample size smaller than 100, all subgroup estimates should be interpreted with confidence intervals ranging from plus or minus 4 to plus or minus 10.

**Table A1. Survey data included in this report**

	Sample Sizes in Wisconsin									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Behavioral Risk Factor Survey (BRFS)</b> <a href="http://www.cdc.gov/brfss">www.cdc.gov/brfss</a> The Behavioral Risk Factor Survey (BRFS) is a representative, statewide telephone survey of adults age 18 and older. The survey is part of a nationwide surveillance system established by the Centers for Disease Control and Prevention and is administered in Wisconsin by the Wisconsin Department of Health and Family Services. Survey results are weighted to account for both non-response and sample design and to adjust for the age-sex distribution of Wisconsin's population.	2,231	2,245	2,205	2,177	2,721	3,605	4,356	4,054	4,503	4,900
<b>Youth Risk Behavior Survey (YRBS)</b> <a href="http://www.dpi.state.wi.us/sspw/yrebsindx.html">www.dpi.state.wi.us/sspw/yrebsindx.html</a> The Youth Risk Behavior Survey is a school-based written survey conducted among students in grades 9-12 in randomly selected public high schools and classes in Wisconsin. The Department of Public Instruction (DPI) has overseen the administration of the YRBS every two years beginning with 1991. Survey results were weighted to account for non-response and to be representative of all 9th through 12th grade public school students in Wisconsin.		1,326		1,336		2,120		2,121		2,389
<b>Wisconsin Youth Tobacco Survey (YTS)</b> <a href="http://www.dhfs.wisconsin.gov/tobacco/YTS.htm">www.dhfs.wisconsin.gov/tobacco/YTS.htm</a> The Youth Tobacco Survey (YTS) is a school-based written survey conducted among students in grades 6-12 in randomly selected schools and classes. Responses are weighted to account for non-responses and to reflect the overall Wisconsin public secondary school population. The survey was developed, modified and administered by the Wisconsin Department of Health and Family Services.	Middle school				1,440	1,591	1,298	1,864	1,682	
	High School				1,307		1,362		1,443	
<b>National Survey on Drug Use and Health (NSDUH)</b> <a href="http://nsduhweb.rti.org/">nsduhweb.rti.org/</a> The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA). Prior to 2002, this survey was called the National Household Survey on Drug Abuse (NHSDA). The survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence. The interviews represent 98 percent of the population ages 12 and older. *Reported sample sizes each combine two years of data, 2002-2003 and 2003-2004.							1,774*	1,804*		

## Wisconsin's Epidemiological Profile On Alcohol and Other Drug Use 2006

### Other Data Sources Included in this Report

#### Crimes and Arrests in Wisconsin

<http://oja.wi.gov/docview.asp?docid=5231&locid=97>

These reports, prepared by the Wisconsin Office of Justice Assistance Statistical Analysis Center (SAC), present data on crimes and arrests in Wisconsin for the years of 1984 to 2004.

#### Crime in the United States (CIUS)

<http://www.fbi.gov/ucr/ucr.htm>

This is an annual publication in which the Federal Bureau of Investigation compiles the volume and rate of crime offenses for the nation, the states, and individual agencies. This report also includes arrest, clearance, and law enforcement employee data.

#### The Tax Burden on Tobacco

This annual publication tracks historical trends in federal, state and county taxes on tobacco as well as tobacco sales.

Orzechowski & Walker. *The Tax Burden on Tobacco*. Historical Compilation, Vol. 40, 2005. Arlington, VA: Orzechowski and Walker, 2006.

#### Wisconsin Alcohol Traffic Facts

<http://www.dot.wisconsin.gov/safety/motorist/crashfacts/docs/alcoholfacts.pdf>

This report provides statewide traffic-related alcohol information. The emphasis on traffic crashes, arrests, convictions and driver safety plans present a variety of alcohol-related data that serves as a resource for safety, health and social service professionals.

#### Wisconsin Interactive Statistics on Health (WISH)

<http://dhfs.wisconsin.gov/wish/>

This data system is a tool provided by the Wisconsin Department of Health and Family Services as a resource to allow access to various types of data collected by the Department. For this report, analysts accessed birth and mortality data related to tobacco, alcohol and other drug use.

# **APPENDIX II**

## **Construct and Indicator Selection Scoring**

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### Construct and Indicator Rankings\*

	<i>Average score</i>		<i>Average score</i>
Use during pregnancy - Alcohol	4.2	Alcohol or Other Drugs- Fetal alcohol/drug spectrum disorders	4.2
Use during pregnancy - Tobacco	3.8	Alcohol or Other Drugs- Overdose/extreme intoxication	4.6
Use during pregnancy - Other drugs	4.2	Alcohol or Other Drugs- Elderly Falls	3.4
Lifetime Use - Tobacco	3.0	Alcohol or Other Drugs- Spinal Cord injuries	4.0
Abuse/Chronic Heavy Use - Other Drugs	4.3	Alcohol or Other Drugs- Traumatic brain injuries	4.0
Per Capita Consumption - Other Drugs	3.6	Alcohol or Other Drugs- Disability Determinations	4.2
Binge Use/Single Use Over-consumption - Other Drugs	4.0	Alcohol- Chronic liver disease	4.0
Alcohol - Admissions	4.2	Other Drugs- HIV	4.2
Tobacco - Admissions	2.5	Other Drugs- Hepatitis B & C	4.2
Other Drugs - Admissions	4.2	Other Drugs- Other STIs	3.8
		Other Drugs- Emergency Room mentions of prescription drugs	4.0
Tobacco - Underage use, Sales	3.0	Alcohol or Other Drugs- Adults with no high school diploma	3.0
Alcohol or Other Drugs- Domestic Violence	3.8	Alcohol or Other Drugs- Extracurricular participation	2.3
Alcohol or Other Drugs- Child Abuse	4.0	Alcohol or Other Drugs- Habitual truancy rate	3.4
Alcohol or Other Drugs- Motor Vehicle Theft	2.8	Alcohol or Other Drugs- Dropout rate	3.6
Alcohol or Other Drugs- ATV, Boat or snowmobile UI	3.8	Alcohol or Other Drugs- Suspensions	3.4
Alcohol or Other Drugs- Driving without a license	3.5	Alcohol or Other Drugs- Physical fights at school	3.4
Alcohol or Other Drugs- Overall arrests	4.5	Alcohol or Other Drugs- Carrying a weapon to school	3.0
Alcohol or Other Drugs- Sexual assault	3.5	Alcohol or Other Drugs- Workplace accidents	4.0
Alcohol or Other Drugs- Juvenile justice recidivism	4.0	Alcohol or Other Drugs- Academic Achievement	3.0
Alcohol or Other Drugs- Disorderly Conduct	4.0	Alcohol- Traffic Safety School	4.4
Alcohol or Other Drugs- Victim Compensation	3.0	Alcohol- Group Dynamics	4.4
Alcohol - Pedestrian deaths	3.8	Alcohol- Open Containers	4.4
Tobacco - Mouth cancer deaths	2.5	Other Drugs**	4.2
		Alcohol - per capita consumption	4.0
		Tobacco - Per capita consumption	3.0
		Alcohol or Other Drugs- Teen birth rate	3.0
		Alcohol or Other Drugs- Child Welfare	3.3
		Alcohol or Other Drugs- Risky Sexual Behavior	3.2
		Alcohol or Other Drugs- Out-of-home placements of children	3.4

\*SEOW members ranked constructs and indicators through a Web-based survey. A five-point scale was used to prioritize constructs and indicators; one being low priority and five being high priority.