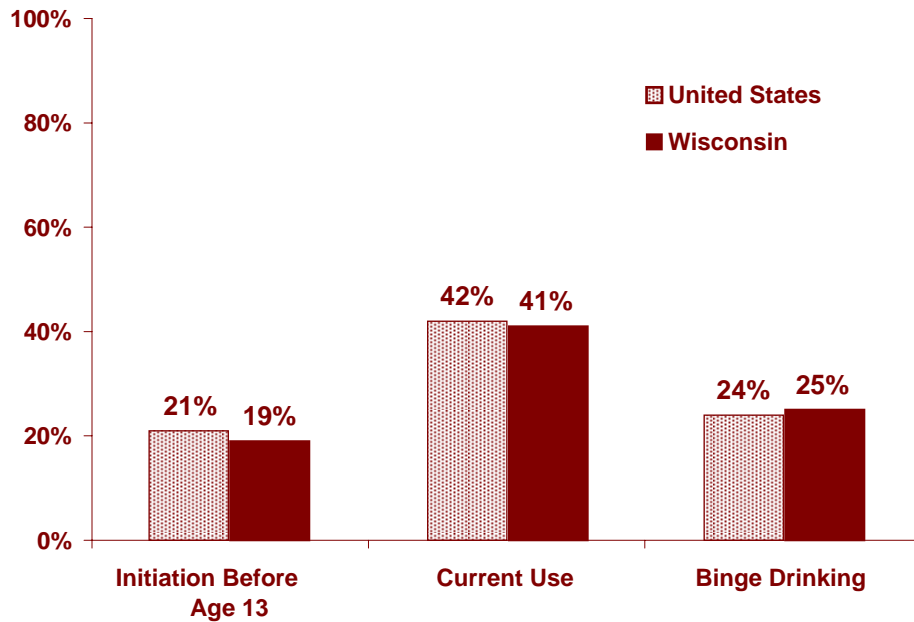


Alcohol Consumption

For many years, Wisconsin has arguably had the highest prevalence of alcohol use and over-consumption in the U.S., across all age groups and both sexes.³ In recent years, the state has had some success in reducing alcohol consumption among youth. For example, the percent of high school students who started using alcohol before age 13 has been similar to the national average and decreasing, and Wisconsin no longer has the highest rate of binge drinking among high school students. However, Wisconsin's rates of current use, heavy use and binge use of alcohol among adults remain the highest in the country.

In 2009, Wisconsin high school students reported the 11th highest rate of current alcohol use (41%) among all reporting states. This was an improvement over 2007, when Wisconsin ranked the highest in the U.S. for this measure (49%). Wisconsin high school students had the eighth highest rate of binge drinking in 2008 (25%), also an improvement from 2007, when they ranked third (32%).

Figure 24. Alcohol use among high school students, Wisconsin and the United States, 2009

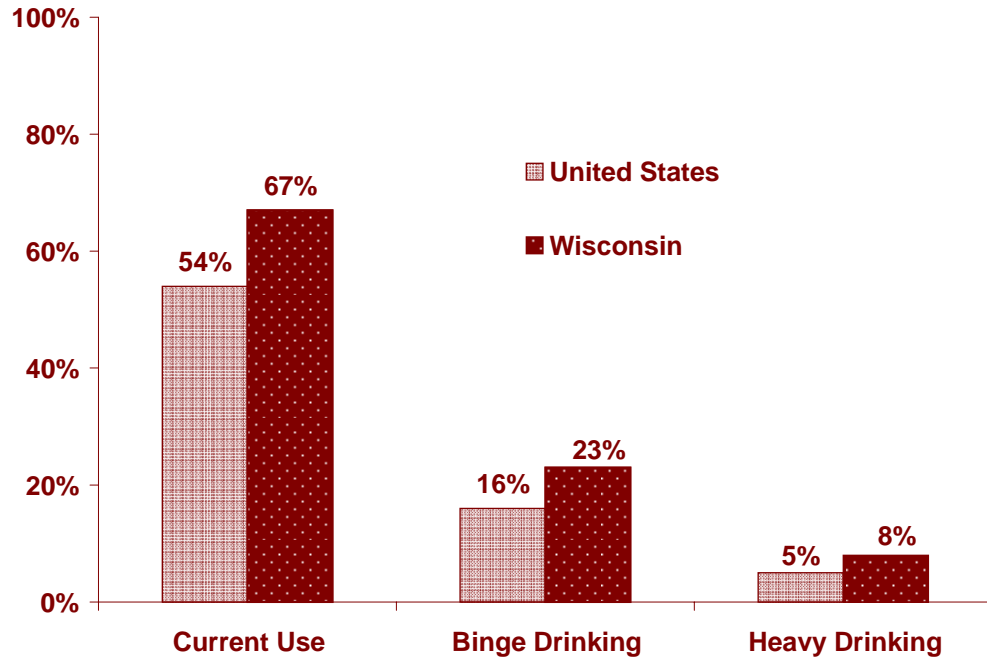


Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

³ Behavioral Risk Factor Surveillance System, Prevalence and Trends Data, Centers for Disease Control and Prevention. <http://apps.nccd.cdc.gov/brfss/>

Among adults in 2008, Wisconsin reported the highest rates of binge drinking (23%), current alcohol use (67%), and heavy drinking (8%) in the country. Per capita consumption was also among the highest in the nation (3.0 gallons per person in 2007). Compared to the United States as a whole, Wisconsin continues to have higher rates of underage drinking (ages 12-20), underage binge drinking, and drinking among women of childbearing age.

Figure 25. Alcohol use among adults, Wisconsin and the United States, 2008

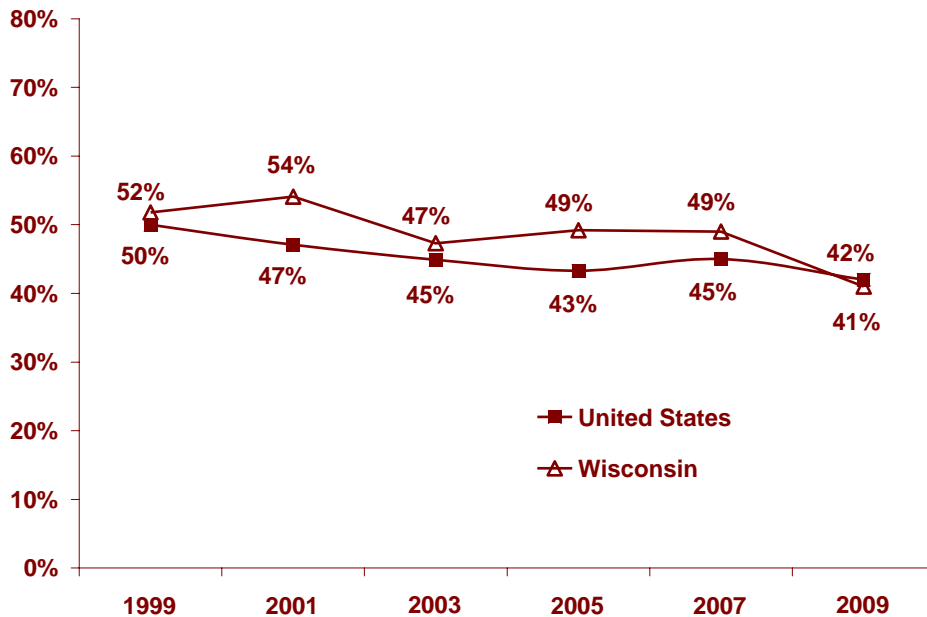


Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services; Behavioral Risk Factor Surveillance System, U.S. Centers for Disease Control and Prevention.

Current Alcohol Use

- The prevalence of current alcohol use among high school students and adults in Wisconsin has been consistently high. Current alcohol use (at least one drink in the past 30 days) was reported by 41% of Wisconsin high school students in 2009 and 67% of Wisconsin adults (age 18 and older) in 2008 (Figures 26 and 27).
- Although still high, rates of current alcohol use have declined among both high school students and adults in Wisconsin since 2000. Among students, current alcohol use declined from 52% in 1999 to 41% in 2009.
- The 2009 prevalence of current alcohol use among Wisconsin high school students (41%) was down from 49% in 2007, and about the same as the U.S. rate (42%).
- In 2007-2009, African American and Asian/Pacific Islander students were least likely to report current drinking (Table 16).

Figure 26. Current alcohol use among high school students, Wisconsin and the United States, 1999-2009



Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

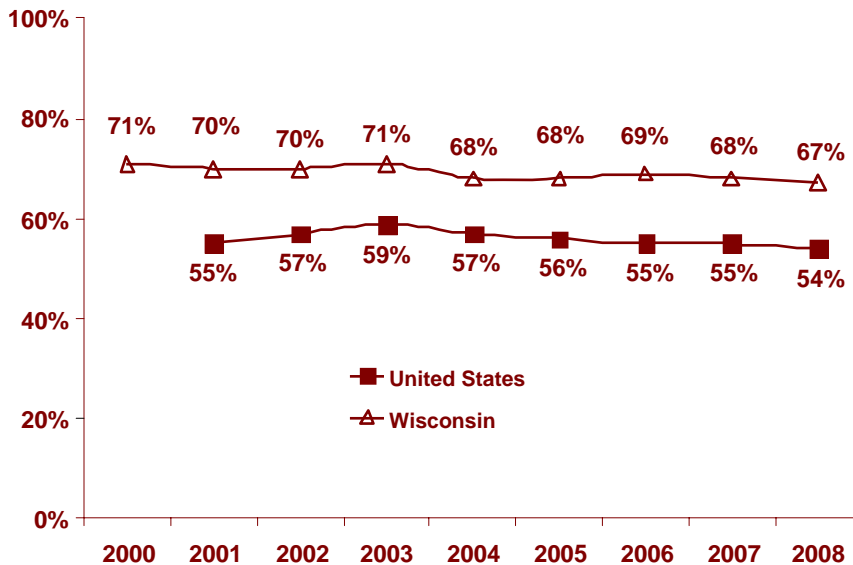
Table 16. Current alcohol use, high school students by race/ethnicity, Wisconsin, 2001-2009

Race/Ethnicity	2001-2003	2003-2005	2005-2007	2007-2009
White	53%	50%	51%	47%
African American	28%	30%	33%	33%
Hispanic/Latino	50%	45%	43%	42%
Asian/Pacific Islander	41%	42%	39%	32%
American Indian or Alaskan Native	69%	55%	51%	47%
Multiracial	43%	44%	53%	52%

Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

- Among Wisconsin adults, current alcohol use declined from 71% in 2000 to 67% in 2008 (Figure 27).
- Adults aged 25 to 44 reported the highest prevalence of current alcohol use among the age groups measured (Table 17).
- Among Wisconsin adults by race/ethnicity, whites reported the highest prevalence of current alcohol use in 2006-2008 (69%), followed by Hispanics (62%), Asians and American Indians (56%), and African Americans (55%) (Table 18).

Figure 27. Current alcohol use among adults (age 18+), Wisconsin and United States, 2000-2008



Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Note: Current alcohol use is defined as at least one drink of alcohol in the past 30 days.

Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2010

Table 17. Current alcohol use, adults age 18+, by age and sex, Wisconsin, 2000-2008

Year	U.S.	Wisconsin	Age Group				Sex		Females 18-44
			18-24	25-44	45-64	65+	Males	Females	
2000	--	71%	77%	76%	71%	59%	79%	65%	70%
2001	55%	70%	72%	75%	71%	59%	77%	64%	69%
2002	57%	70%	73%	77%	68%	56%	76%	64%	71%
2003	59%	71%	71%	75%	73%	61%	76%	67%	70%
2004	57%	68%	67%	73%	69%	57%	74%	62%	66%
2005	56%	68%	62%	74%	71%	56%	74%	62%	65%
2006	55%	69%	65%	76%	71%	54%	75%	63%	66%
2007	55%	68%	70%	75%	68%	56%	75%	62%	68%
2008	54%	67%	56%	74%	69%	56%	71%	63%	68%

Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Table 18. Current alcohol use, adults 18+, by race/ethnicity, Wisconsin, 2000-2008

Year	African American	American Indian	Asian	Hispanic	White
2000-2002	45%	69%	52%	61%	72%
2001-2003	51%	65%	50%	64%	72%
2002-2004	48%	69%	49%	65%	71%
2003-2005	49%	65%	52%	66%	70%
2004-2006	48%	65%	57%	67%	69%
2005-2007	53%	64%	64%	64%	70%
2006-2008	55%	56%	56%	62%	69%

Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2010

Table 19. Prevalence of current alcohol use among adults 18 and older, Wisconsin by county, 2004-2006 and 2005-2007

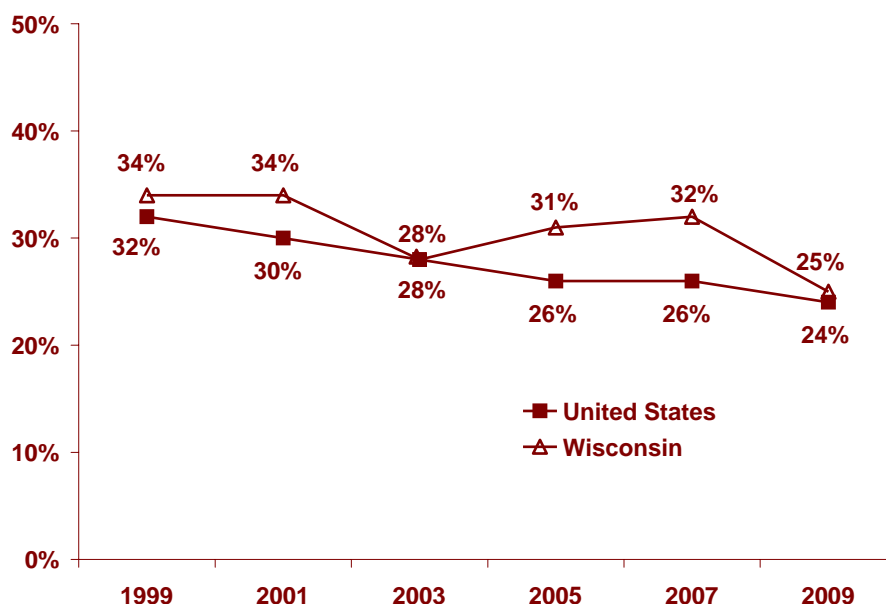
County	2004-2006	2005-2007	County	2004-2006	2005-2007
Adams	64%	61%	Marquette	70%	73%
Ashland	64%	71%	Marquette	63%	62%
Barron	51%	51%	Menominee	61%	65%
Bayfield	64%	59%	Milwaukee	66%	66%
Brown	75%	71%	Monroe	56%	52%
Buffalo	66%	67%	Oconto	60%	67%
Burnett	64%	55%	Oneida	68%	69%
Calumet	70%	74%	Outagamie	74%	73%
Chippewa	61%	58%	Ozaukee	77%	74%
Clark	53%	51%	Pepin	62%	61%
Columbia	65%	67%	Pierce	62%	69%
Crawford	57%	59%	Polk	71%	71%
Dane	74%	75%	Portage	73%	69%
Dodge	66%	64%	Price	63%	62%
Door	70%	73%	Racine	66%	67%
Douglas	62%	67%	Richland	60%	66%
Dunn	71%	62%	Rock	63%	64%
Eau Claire	68%	70%	Rusk	56%	61%
Florence	58%	57%	St. Croix	74%	75%
Fond du Lac	72%	73%	Sauk	65%	65%
Forest	53%	47%	Sawyer	57%	60%
Grant	55%	70%	Shawano	65%	64%
Green	63%	65%	Sheboygan	76%	77%
Green Lake	69%	66%	Taylor	75%	72%
Iowa	54%	63%	Trempealeau	57%	59%
Iron	70%	55%	Vernon	64%	62%
Jackson	68%	58%	Vilas	67%	69%
Jefferson	59%	60%	Walworth	63%	64%
Juneau	64%	62%	Washburn	76%	66%
Kenosha	63%	62%	Washington	69%	71%
Kewaunee	71%	73%	Waukesha	75%	74%
La Crosse	60%	64%	Waupaca	59%	60%
Lafayette	62%	62%	Waushara	69%	58%
Langlade	56%	60%	Winnebago	68%	68%
Lincoln	61%	58%	Wood	62%	63%
Manitowoc	67%	69%			
Marathon	67%	69%	Wisconsin	68%	68%

Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Binge Drinking

- The Youth Risk Behavior Survey defines binge drinking as five or more drinks of alcohol in a row.
- In 2009, 25% of Wisconsin high school students reported binge use of alcohol. This represents a sharp decline from the beginning of the decade (34%) and from 2007 (32%) (Figure 28). If this decline can be sustained, Wisconsin students will have achieved the same decline as has been seen more steadily across U.S. high school students as a whole.
- Binge drinking prevalence was lowest among African American students and Asian/Pacific Islander students (Table 20).

Figure 28. Prevalence of binge drinking among high school students, Wisconsin and the United States, 1999-2009



Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

Table 20. Binge drinking among high school students by race/ethnicity, Wisconsin, 2001-2009

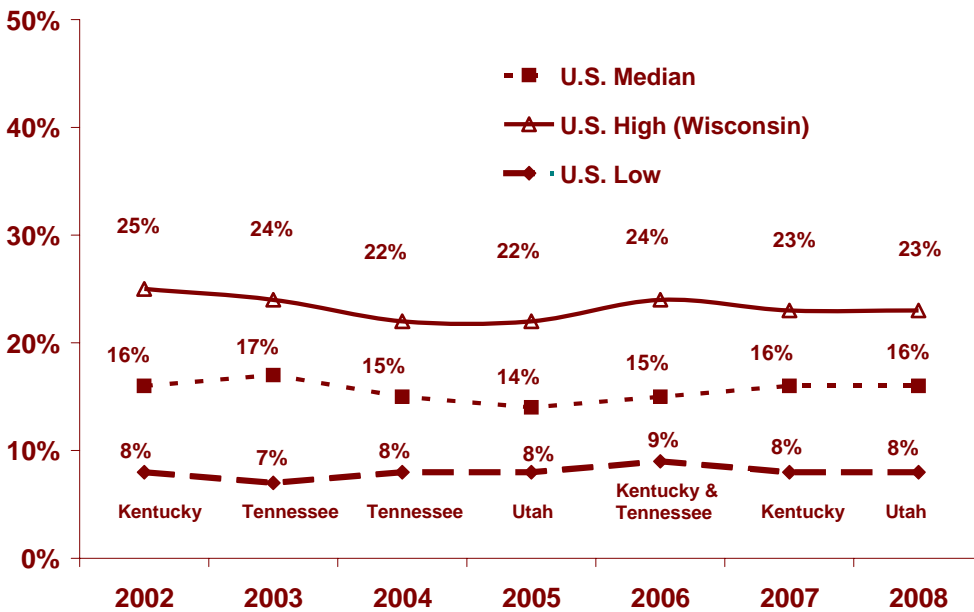
Race/Ethnicity	2001-2003	2003-2005	2005-2007	2007-2009
White	33%	31%	33%	30%
African American	16%	15%	15%	14%
Hispanic/Latino	35%	28%	26%	25%
Asian or Pacific Islander	24%	24%	22%	20%
American Indian or Alaskan Native	49%	42%	41%	35%
Multiracial	25%	26%	36%	34%

Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2010

- The Centers for Disease Control and Prevention (CDC) defines binge drinking as five or more drinks on one occasion for men, and four or more drinks on one occasion for women. Prior to 2006, it was defined as five or more drinks for both sexes.
- The prevalence of binge drinking among Wisconsin adults (age 18 and older) in 2008 was 23% (Figure 29). As has been the case in previous years, this was the highest state prevalence of binge drinking in the United States.

Figure 29. Adult binge drinking prevalence: Range of state estimates: Low, high, and United States median, 2002-2008



Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2010

- In 2008, binge drinking in Wisconsin was highest among men, adults ages 18 to 44, American Indians and whites (Tables 21 and 22).
- Binge drinking among young adults ages 18 to 24 declined from 49% in 2000 to 31% in 2008 (Table 21), although it remains higher than the 2008 U.S. prevalence of 25% in this age group (not shown). Binge drinking declined among men, from 36% in 2000 to 28% in 2008. Binge drinking also declined among American Indians, from 37% in 2000-2002 to 25% in 2006-2008 (Table 22).
- A note about the cell phone-only population and binge drinking: Current evidence from the Behavioral Risk Factor Surveillance System and the National Health Interview Survey indicates that the cell phone-only population has a higher prevalence of binge drinking than the population with landline telephones, and estimates using data from only landline interviews are likely to underestimate binge drinking by as much as 2 to 3 percentage points. CDC will make combined (landline and cell-only) data sets available to states sometime in the second half of 2010, but had not yet done so at the time this report was developed.

Table 21. Binge drinking among adults (age 18+) by sex and age, Wisconsin, 2000-2008

Year	U.S.	Wisconsin	18-24	25-44	45-64	65+	Males	Females	Females (18-44)
2000	**	25%	49%	32%	19%	4%	36%	16%	24%
2001	15%	26%	47%	34%	18%	5%	37%	15%	24%
2002	16%	25%	41%	33%	19%	5%	36%	14%	22%
2003	17%	25%	43%	31%	18%	6%	33%	15%	25%
2004	15%	22%	37%	29%	17%	5%	31%	14%	21%
2005	14%	22%	33%	28%	21%	4%	32%	12%	18%
2006	15%	24%	38%	32%	20%	6%	33%	16%	24%
2007	16%	23%	36%	29%	20%	8%	27%	17%	25%
2008	16%	23%	31%	31%	20%	8%	28%	17%	24%

Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

** No U.S. estimate for 2000. Alcohol questions not asked in all states until 2001.

Table 22. Binge drinking among adults (age 18+) by race/ethnicity, Wisconsin, 2000-2008

Year	African American	American Indian	Asian	Hispanic/Latino	White
2000-2002	16%	37%	12%	28%	25%
2001-2003	16%	34%	11%	28%	25%
2002-2004	15%	35%	15%	28%	24%
2003-2005	15%	31%	16%	28%	23%
2004-2006	14%	32%	17%	28%	22%
2005-2007	16%	29%	18%	25%	24%
2006-2008	17%	25%	17%	21%	24%

Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2010

Table 23. Prevalence of binge drinking among adults age 18 and older, Wisconsin by county, 2004-2006 and 2005-2007

County	2004-2006	2005-2007	County	2004-2006	2005-2007
Adams	35%	28%	Marinette	19%	25%
Ashland	28%	35%	Marquette	29%	27%
Barron	16%	17%	Menominee	24%	37%
Bayfield	29%	18%	Milwaukee	22%	22%
Brown	26%	25%	Monroe	26%	25%
Buffalo	34%	28%	Oconto	26%	32%
Burnett	*	16%	Oneida	22%	16%
Calumet	32%	30%	Outagamie	30%	34%
Chippewa	18%	16%	Ozaukee	18%	17%
Clark	20%	21%	Pepin	*	25%
Columbia	24%	33%	Pierce	21%	29%
Crawford	22%	21%	Polk	16%	22%
Dane	21%	22%	Portage	24%	24%
Dodge	25%	25%	Price	*	23%
Door	20%	22%	Racine	23%	23%
Douglas	28%	32%	Richland	21%	25%
Dunn	38%	31%	Rock	26%	26%
Eau Claire	34%	35%	Rusk	*	13%
Florence	33%	24%	St. Croix	25%	23%
Fond du Lac	24%	25%	Sauk	29%	28%
Forest	*	21%	Sawyer	*	19%
Grant	19%	31%	Shawano	26%	24%
Green	19%	22%	Sheboygan	28%	29%
Green Lake	26%	20%	Taylor	30%	30%
Iowa	23%	27%	Trempealeau	25%	22%
Iron	30%	20%	Vernon	23%	26%
Jackson	28%	21%	Vilas	*	16%
Jefferson	22%	25%	Walworth	22%	20%
Juneau	19%	16%	Washburn	*	16%
Kenosha	18%	17%	Washington	21%	22%
Kewaunee	39%	35%	Waukesha	16%	14%
La Crosse	19%	18%	Waupaca	22%	22%
Lafayette	21%	14%	Waushara	17%	12%
Langlade	27%	29%	Winnebago	22%	23%
Lincoln	20%	24%	Wood	17%	15%
Manitowoc	28%	36%			
Marathon	23%	24%	Wisconsin	23%	23%

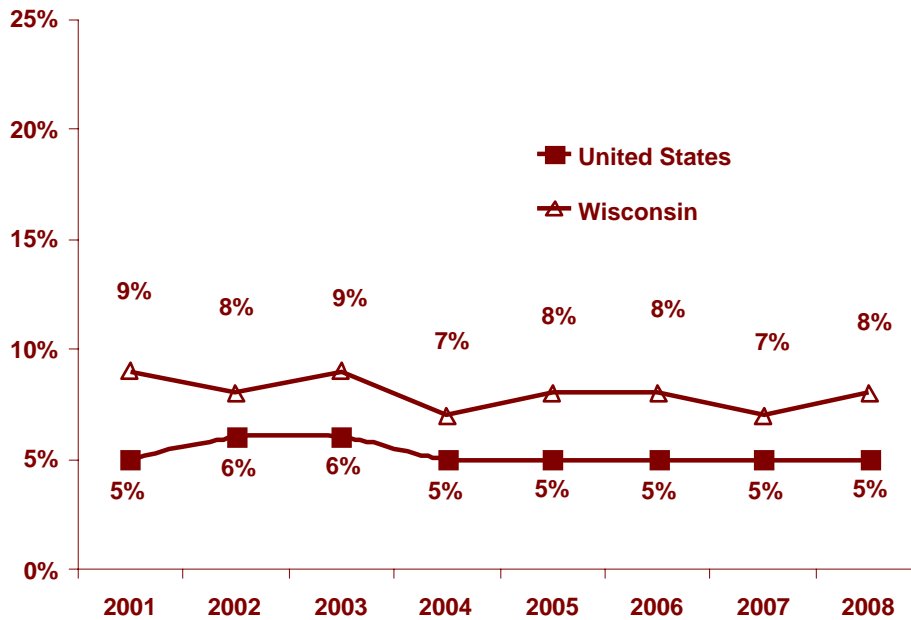
Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

* Estimate not reliable

Heavy Use of Alcohol

- The Centers for Disease Control and Prevention defines heavy drinking as more than two drinks per day for men and more than one drink per day for women. Prior to 2001, the definition was more than two drinks per day for both sexes.
- The prevalence of heavy use of alcohol among Wisconsin adults (age 18 and older) has remained at or near 8% since 2001 (Figure 30). This was consistently higher than the national average (5% in 2008).
- Heavy use of alcohol is highest among the youngest adults, ages 18-24 (Table 24). In 2008, 14% of this age group in Wisconsin reported heavy drinking.
- In 2008, the prevalence of heavy drinking was 9% among men and 7% among women. Men had higher rates of heavy drinking than women in most years since 2000.
- In 2006-2008, heavy use of alcohol was reported most frequently by American Indians (10%) and Hispanics/Latinos (8%) (Table 25). Estimates for American Indian and Asian groups should be interpreted with caution, as they are based on small sample sizes and have large standard errors relative to the size of the estimates.

Figure 30. Prevalence of heavy drinking among adults, Wisconsin and the United States, 2001-2008



Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services; U.S. Centers for Disease Control and Prevention.

Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2010

Table 24. Prevalence of heavy drinking among adults (age 18+) by age and sex, Wisconsin, 2000-2008

Year	U.S.	Wisconsin	18-24	25-44	45-64	65+	Males	Females	Females 18-44
2000	**	5%	8%	6%	6%	1%	9%	2%	3%
2001	5%	9%	18%	9%	8%	3%	11%	7%	9%
2002	6%	8%	12%	9%	7%	4%	10%	6%	7%
2003	6%	9%	15%	9%	8%	4%	9%	8%	9%
2004	5%	7%	14%	7%	7%	4%	9%	6%	8%
2005	5%	8%	11%	8%	8%	3%	9%	7%	8%
2006	5%	8%	12%	8%	8%	4%	8%	8%	10%
2007	5%	7%	10%	6%	7%	4%	7%	7%	7%
2008	5%	8%	14%	7%	8%	5%	9%	7%	7%

Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Table 25. Prevalence of heavy drinking among adults (age 18+) by race/ethnicity, Wisconsin, 2000-2008

Year	African American	American Indian	Asian	Hispanic/ Latino	White
2000-2002	5%	6%	1%	9%	7%
2001-2003	6%	8%	1%	10%	9%
2002-2004	5%	13%	3%	10%	8%
2003-2005	5%	9%	2%	12%	8%
2004-2006	5%	7%	3%	11%	8%
2005-2007	7%	5%	2%	9%	7%
2006-2008	7%	10%	4%	8%	7%

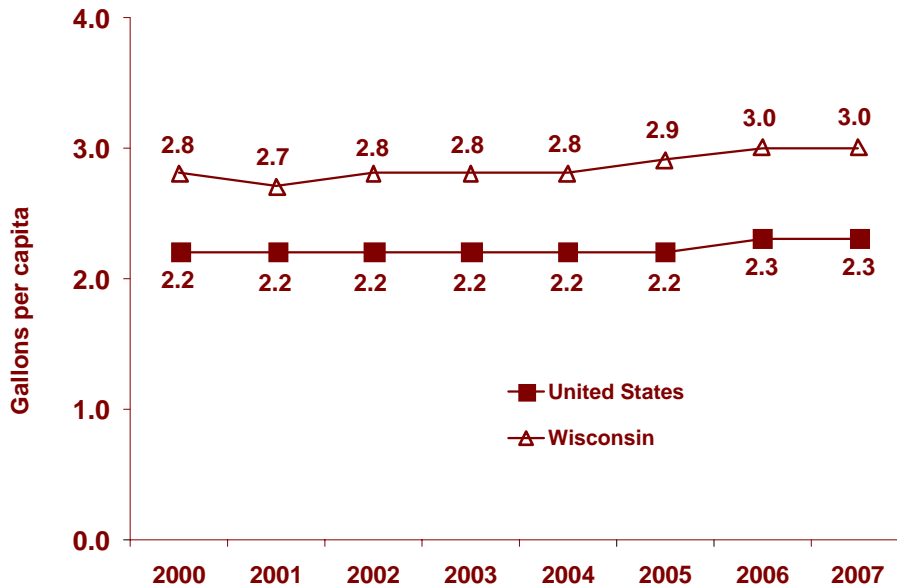
Source: Behavioral Risk Factor Survey, Division of Public Health, Wisconsin Department of Health Services.

Note: Estimates for American Indian and Asian groups should be interpreted with caution, as they are based on small sample sizes and have large standard errors relative to the size of the estimates.

Per Capita Consumption

- Between 2000 and 2007, per capita consumption of alcohol in Wisconsin rose from 2.8 to 3.0 gallons per person (Figure 31). Per capita consumption is gallons of ethanol consumed per person, based on the population age 14 and older.
- Wisconsin's per capita consumption was notably higher than the national average every year (Figure 31).
- Wisconsin's per capita consumption, 3.0 gallons, is equal to 384 fluid ounces, or 768 drinks (each alcoholic drink equals 0.5 ounces of ethanol).

Figure 31. Per capita alcohol consumption, in gallons, Wisconsin and the United States, 2000-2007



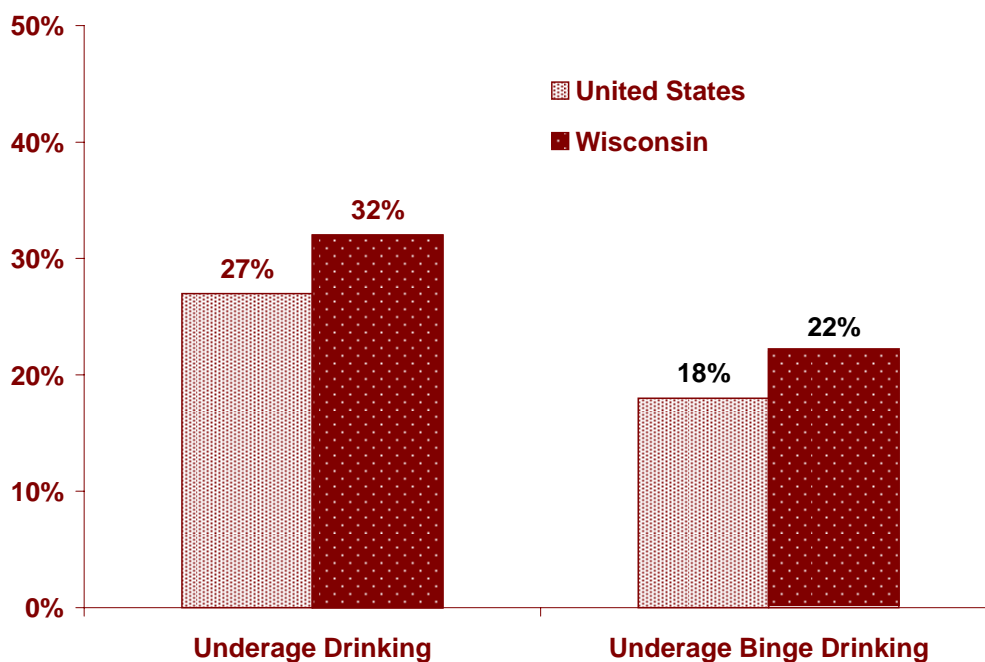
Source: *Per capita ethanol consumption for states, Census regions, and the United States, 1970-2007*. National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, U.S. Department of Health and Human Services.

Underage Drinking

Compared to the United States as a whole, Wisconsin has higher rates of “underage” drinking, defined by the National Survey on Drug Use and Health as drinking by youth ages 12 to 20. Wisconsin youth are more likely to report both current drinking (at least one drink in the past month) and binge drinking (five or more drinks on one occasion in the past month).

In 2007-2008, 22% of Wisconsin youth ages 12-20 reported binge drinking in the past month (Figure 32), down from 25% in 2005-2006 (not shown).

Figure 32. Prevalence of underage drinking, Wisconsin and the United States, 2007-2008



Source: National Survey on Drug Use and Health, Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services.

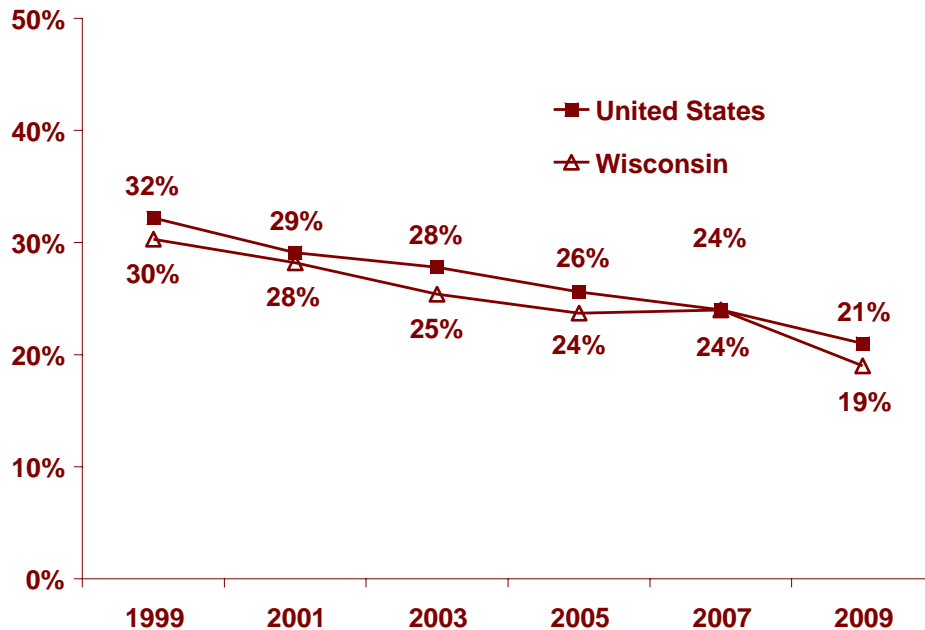
Notes: NSDUH defines “underage” drinking as drinking among youth 12-20 years of age; current drinking as alcohol use in the past month; and binge drinking as five or more drinks on at least one day in the past month.

For purposes of clarification, NSDUH data are presented here because they include estimates for ages 12-20, which is an appropriate age span for underage drinking. The other major sources of data on alcohol use, the Behavioral Risk Factor Survey and the Youth Risk Behavior Survey, only provide data for adults 18 and older (the BRFSS) and high school students (the YRBS).

Age of Initiation

- The percent of Wisconsin high school students who initiated alcohol use before age 13 declined between 1999 and 2009, from 30% to 19% (Figure 33). Prevalence of before-age-13 initiation among boys exceeded that among girls in each of those years (Table 26).
- During 2007-2009, Hispanic/Latino, African American, and multiracial students were most likely to report initiating alcohol use before age 13 (Table 27). From 2001-2003 to 2007-2009, white and Asian students showed clear decreases in the prevalence of initiation before age 13.

Figure 33. Initiation of alcohol use before age 13, high school students in Wisconsin and the United States, 1999-2009



Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

Note: The Youth Risk Behavior Survey asks high school students whether they began using alcohol "other than a few sips" before age 13.

Table 26. Initiation of alcohol use before age 13, high school students by sex, Wisconsin, 2001-2009

	<i>2001</i>	<i>2003</i>	<i>2005</i>	<i>2007</i>	<i>2009</i>
Female	27%	22%	19%	20%	17%
Male	30%	29%	28%	27%	22%

Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

Table 27. Initiation of alcohol use before age 13, high school students by race/ethnicity, Wisconsin, 2001-2009

Race/Ethnicity	2001-2003	2003-2005	2005-2007	2007-2009
White	26%	23%	23%	20%
African American	31%	27%	26%	28%
Hispanic/Latino	27%	30%	30%	29%
Asian or Pacific Islander	30%	30%	22%	20%
American Indian or Alaskan Native	**	**	**	**
Multiracial	30%	34%	31%	28%

Source: Youth Risk Behavior Survey, Wisconsin Department of Public Instruction; U.S. Centers for Disease Control and Prevention.

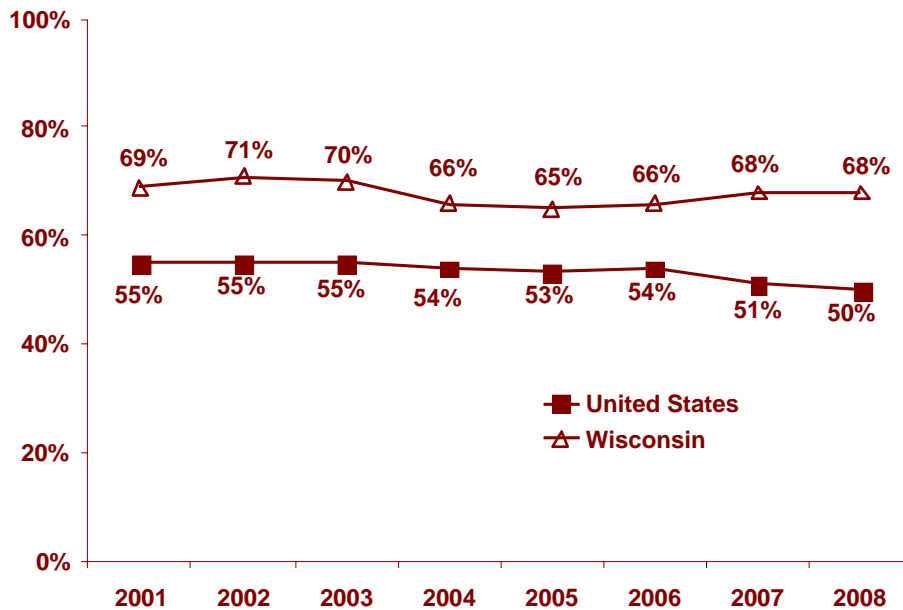
** Too few cases in sample to produce a reliable estimate.

Alcohol Use by Women of Childbearing Age

Alcohol use can impair decision-making and result in risk-taking behaviors, including sexual behaviors; an unplanned pregnancy may be one result. Studies also have shown that alcohol use during pregnancy can harm the developing fetus. The Centers for Disease Control and Prevention (CDC) has reported that Wisconsin is among the states that report the highest rates of drinking among pregnant women and high-risk drinking among women of childbearing age.⁴

- Wisconsin women of childbearing age are more likely to drink than women nationally (Figure 34). In 2008, 68% of Wisconsin women ages 18-44 said they had at least one alcoholic drink in the past 30 days; this compares with 50% of women in the United States.
- Binge drinking is also more prevalent among Wisconsin women of childbearing age, compared with their national counterparts. In 2008, among women ages 18-44, 24% in Wisconsin and 15% nationally said they had consumed four or more drinks on one occasion in the past 30 days (Figure 35).

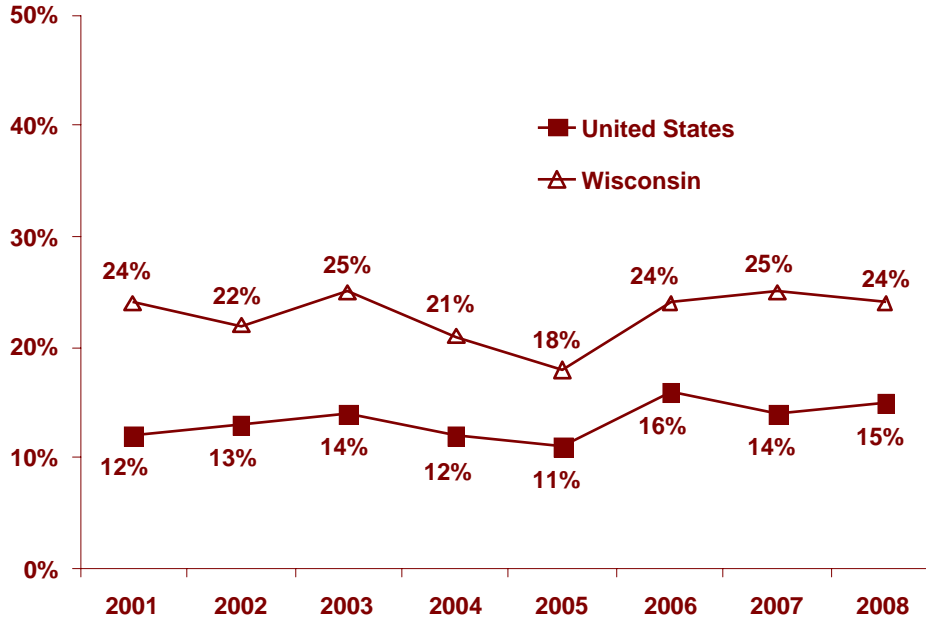
Figure 34. Prevalence of current alcohol use among women ages 18-44, Wisconsin and the United States, 2001-2008



Source: Wisconsin Behavioral Risk Factor Survey; Behavioral Risk Factor Surveillance System, U.S. Centers for Disease Control and Prevention.

⁴ U.S. Centers for Disease Control and Prevention (2004). Alcohol consumption among women who are pregnant or who might become pregnant - United States, 2002. *Morbidity and Mortality Weekly Report*, 53(50), 1178-1181.

Figure 35. Binge drinking among women ages 18-44, Wisconsin and the United States, 2001-2008



Source: Wisconsin Behavioral Risk Factor Survey; Behavioral Risk Factor Surveillance System, U.S. Centers for Disease Control and Prevention.