

The NSDUH Report

September 11, 2008

Alcohol Use among Pregnant Women and Recent Mothers: 2002 to 2007

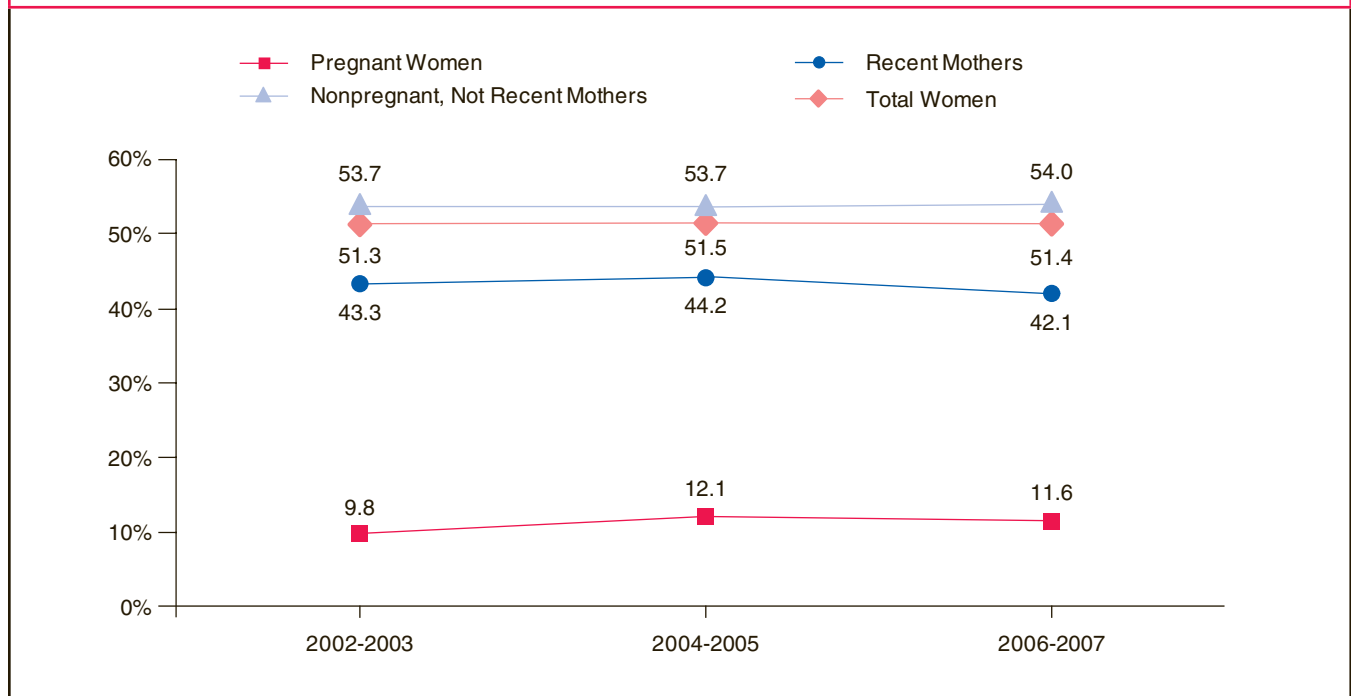
In Brief

- Combined 2006 and 2007 data indicate that the rate of past month alcohol use among women aged 15 to 44 was lower for those who were pregnant (11.6 percent) than for recent mothers (42.1 percent), who in turn had a lower rate than those who were not pregnant and not recent mothers (54.0 percent)
- Past month alcohol use among pregnant and nonpregnant women and recent mothers aged 15 to 44 did not change significantly between 2002-2003 and 2006-2007
- Nearly 16 percent of pregnant women aged 15 to 17 used alcohol in the past month, and they consumed an average of 24 drinks in the past month (i.e., they drank on an average of 6 days during the past month and had an average of about four drinks on the days that they drank)

Prenatal alcohol exposure increases the risk of birth defects, including physical, cognitive, and behavioral disorders.¹ Research also shows a link between alcohol use during pregnancy and increased risk of preterm birth.² In 2005-2006, an estimated 11.8 percent of pregnant women aged 15 to 44 reported using alcohol in the past month.³ A recent paper based on data from the National Survey on Drug Use and Health (NSDUH) found that illicit drug, alcohol, and cigarette use was lower among pregnant women, particularly during their second and third trimesters, than among their parenting or nonpregnant counterparts.⁴ The study also found indirect evidence of resumption of substance use after pregnancy.

To guide the development of public health interventions regarding alcohol use during pregnancy, data from population-based studies such as NSDUH are needed to show the scope of the problem and to identify subgroups that may be at significant risk. NSDUH asks female respondents aged 12 to 44 whether they are currently pregnant, and it also asks persons aged 12 or older to report on their alcohol use

Figure 1. Trends in Past Month Alcohol Use among Women Aged 15 to 44, by Pregnancy Status*: Percentages, 2002-2007



Source: SAMHSA, 2002-2007 NSDUHs.

during the month prior to the survey. Respondents who drank alcohol in the past 30 days (i.e., current drinkers) also are asked the number of days they consumed alcohol in the past month and the average number of drinks they consumed per day on the days they drank.⁵

This report concentrates on alcohol use among women of childbearing age (i.e., those aged 15 to 44). Comparisons are made between the alcohol use of pregnant women, recent mothers, and women who were not pregnant and not recent mothers. Pregnant women are defined as women who were pregnant at the time of the survey. Recent mothers are defined as women who were not pregnant at the time of the survey, but who gave birth during the prior 12 months. Nonpregnant women who were not recent mothers are defined as women who were not pregnant at the time of the interview and who did not have a

biological child under 1 year old in the household. Analyses include trends and patterns based on data from 2002 to 2007. Additional findings are based on annual averages for the combined 2006 and 2007 NSDUH data.

Did Alcohol Use Change over Time?

Past month alcohol use among pregnant and nonpregnant women and recent mothers aged 15 to 44 did not change significantly between 2002-2003 and 2006-2007, with 9.8 percent of pregnant women reporting past month alcohol use in 2002-2003, 12.1 percent in 2004-2005, and 11.6 percent in 2006-2007 (Figure 1). A stable pattern also was found for both recent mothers and nonpregnant women who were not recent mothers from 2002-2003 to 2006-2007.

Table 1. Percentages of Past Month Alcohol Use among Women Aged 15 to 44, by Pregnancy Status* and Demographic Characteristics: 2006 and 2007

Demographic Characteristic	Pregnancy Status		
	Pregnant	Recent Mothers	Nonpregnant, Not Recent Mothers
Age			
15 to 17	15.8	26.8	25.3
18 to 25	9.8	41.2	62.2
26 to 44	12.5	42.9	55.7
Race/Ethnicity**			
White	14.5	52.1	61.1
Black	15.7	31.9	44.6
Hispanic	4.1	22.9	41.6
Education Status***			
Less Than High School	8.9	28.1	37.7
High School Graduate	8.3	35.7	51.8
Some College	11.7	45.6	60.9
College Graduate	15.8	53.7	69.7
Income			
Less Than \$20,000	11.7	30.9	47.3
\$20,000 to \$49,999	9.2	38.3	50.7
\$50,000 to \$74,999	9.5	47.1	55.2
\$75,000 or Higher	16.3	54.4	62.2

Source: SAMHSA, 2006 and 2007 NSDUHs.

What Percentage Currently Used Alcohol?

Combined 2006 and 2007 data indicate that the rate of past month alcohol use among women aged 15 to 44 was lower for those who were pregnant (11.6 percent) than for recent mothers (42.1 percent), who in turn had a lower rate than women who were not pregnant and not recent mothers (54.0 percent) (Figure 1).

Among pregnant women aged 15 to 44, those aged 15 to 17 had the highest rate of past month

alcohol use (15.8 percent), followed by those aged 26 to 44 (12.5 percent), and those aged 18 to 25 (9.8 percent); however, these rates did not differ significantly (Table 1). Conversely, among recent mothers and nonpregnant women who were not recent mothers, those aged 15 to 17 had lower rates of past month alcohol use than women in the older age groups. White women were more likely than Hispanic women to have drunk alcohol in the past month regardless of their pregnancy status.

Generally, higher education status and higher family income were associated with higher rates

Table 2. Average Number of Alcoholic Drinks Consumed per Day on the Days That Alcohol Was Used in the Past Month among Past Month Female Alcohol Users Aged 15 to 44, by Pregnancy Status* and Demographic Characteristics: 2006-2007

Demographic Characteristic	Pregnancy Status		
	Pregnant	Recent Mothers	Nonpregnant, Not Recent Mothers
Age			
15 to 17	3.6	+	4.1
18 to 25	3.6	3.4	3.6
26 to 44	1.7	2.0	2.6
Race/Ethnicity**			
White	1.9	2.6	3.0
Black	3.1	1.9	2.5
Hispanic	4.6	2.5	3.1
Education Status***			
Less Than High School	4.5	3.5	4.1
High School Graduate	2.6	2.9	3.4
Some College	2.1	2.7	3.0
College Graduate	1.6	1.7	2.2
Income			
Less Than \$20,000	3.7	3.1	3.7
\$20,000 to \$49,999	2.2	2.8	3.2
\$50,000 to \$74,999	2.3	2.0	2.8
\$75,000 or Higher	1.6	2.1	2.5

Source: SAMHSA, 2006 and 2007 NSDUHs.

of past month alcohol use among all women of childbearing age regardless of their pregnancy status. Among women aged 18 to 44, those with a college education were nearly twice as likely as their counterparts with less than a high school education to have used alcohol in the past month in each pregnancy status category. Similarly, women aged 15 to 44 with annual family incomes of \$75,000 or higher had the highest rates of alcohol use in the prior month compared with those with lower family incomes in all three pregnancy status categories.

How Often Did They Drink?

Among past month female alcohol users aged 15 to 44, pregnant women and recent mothers drank on fewer days in the past month than nonpregnant women who were not recent mothers—an average of 4.9, 4.4, and 6.1 days, respectively. Among pregnant past month alcohol users, there was no difference by race/ethnicity in the average number of days they drank in the past month, with white pregnant women drinking on an average of 4.8

days, black pregnant women on an average of 4.9 days, and Hispanic pregnant women on an average of 5.2 days.

How Much Did They Drink?

Among women aged 15 to 44 who used alcohol in the past month, those who were pregnant consumed an average of 2.4 drinks per day on the days they drank in the past month, while those who were recent mothers drank an average of 2.5 drinks, and those who were not pregnant and not recent mothers consumed an average of 3.0 drinks. Among past month alcohol users, pregnant women aged 15 to 17 and those aged 18 to 25 drank an average of 3.6 drinks per day on the days they drank compared with pregnant women aged 26 to 44, who drank an average of 1.7 drinks per day on the days they drank (Table 2). The average number of drinks consumed per day generally declined with higher education status and higher income.

Why Is This Important?

Alcohol use during pregnancy can cause physical and mental birth defects, preterm births, and miscarriages. Because a safe level of alcohol intake during pregnancy cannot be determined, both the U.S. Surgeon General and the March of Dimes Foundation recommend that pregnant women not consume *any* alcohol.^{1,6} Additionally, because small amounts of alcohol can be transmitted in breast milk, they recommend alcohol abstinence for women who are breast-feeding. Findings in this report indicate that many women may not be getting this message.

Identifying specific subgroups of women who are at risk for drinking during pregnancy is especially critical, given the need for careful allocation of scarce resources for prevention, intervention, and treatment activities. Pregnant women aged 15 to 17 may be in particular need of alcohol prevention services tailored for their age group because nearly 16 percent of them used

alcohol in the past month. Pregnant women in this age group consumed an average of 24 drinks in the past month (i.e., they drank on an average of 6 days during the past month and an average of about four drinks on the days that they drank).

End Notes

- ¹ U.S. Department of Health and Human Services. (2005, February 21 [posted]; 2007, January 4 [last revised]). *U.S. Surgeon General releases advisory on alcohol use in pregnancy: Urges women who are pregnant or who may become pregnant to abstain from alcohol*. Retrieved July 22, 2008, from <http://www.surgeongeneral.gov/pressreleases/sg02222005.html>
- ² Albertsen, K., Andersen, A. M., Olsen, J., & Grønbaek, M. (2004). Alcohol consumption during pregnancy and the risk of preterm delivery. *American Journal of Epidemiology*, *159*, 155-161.
- ³ Office of Applied Studies. (2007). *Results from the 2006 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 07-4293, NSDUH Series H-32). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- ⁴ Muhuri, P. K., & Gfroerer, J. C. (2008). Substance use among women: Associations with pregnancy, parenting, and race/ethnicity. *Maternal and Child Health Journal*. Online preprint publication, DOI 10.1007/s10995-008-0375-8. [Available at <http://www.springerlink.com/index/152552148rxw2241.pdf>]
- ⁵ Respondents with unknown or missing information regarding the number of alcoholic drinks consumed per day on the days that they drank were excluded from this analysis.
- ⁶ March of Dimes Foundation. (2005, January). *Drinking alcohol during pregnancy* [Quick reference: Fact sheet, 09-404-00]. Retrieved on July 22, 2008, from http://www.marchofdimes.com/professionals/14332_1170.asp

Table and Figure Notes

- * Pregnant women are defined as women aged 15 to 44 who were pregnant at the time of the survey. Recent mothers are defined as women aged 15 to 44 who were not pregnant at the time of the survey but who gave birth during the prior year. Nonpregnant, not recent mothers are defined as women aged 15 to 44 who were not pregnant at the time of the interview and who did not have a biological child under 1 year old in the household.
- ** The estimates for American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Asian respondents as well as respondents of two or more races are not shown because of low precision. Race/ethnicity categories are determined by combining the responses from two separate questions. For this report, respondents identifying themselves as Hispanic were assigned to the Hispanic group regardless of their racial identification. Respondents identifying themselves as non-Hispanic were grouped according to their racial identification. Thus, "white" refers to those identifying themselves as non-Hispanic and white.
- *** Education status includes only women aged 18 to 44.
- + Estimates for recent mothers aged 15 to 17 are not shown because of low precision.

Suggested Citation

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (September 11, 2008). *The NSDUH Report: Alcohol Use among Pregnant Women and Recent Mothers: 2002 to 2007*. Rockville, MD.

For change of address, corrections, or to be removed from this list, please e-mail: shortreports@samhsa.hhs.gov.

Research findings from the SAMHSA 2002 to 2007 National Surveys on Drug Use and Health (NSDUHs)

Alcohol Use among Pregnant Women and Recent Mothers: 2002 to 2007

- Combined 2006 and 2007 data indicate that the rate of past month alcohol use among women aged 15 to 44 was lower for those who were pregnant (11.6 percent) than for recent mothers (42.1 percent), who in turn had a lower rate than those who were not pregnant and not recent mothers (54.0 percent)
- Past month alcohol use among pregnant and nonpregnant women and recent mothers aged 15 to 44 did not change significantly between 2002-2003 and 2006-2007
- Nearly 16 percent of pregnant women aged 15 to 17 used alcohol in the past month, and they consumed an average of 24 drinks in the past month (i.e., they drank on an average of 6 days during the past month and had an average of about four drinks on the days that they drank)

The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). The 2002, 2003, 2004, 2005, 2006, and 2007 data used in this report are based on information obtained from 145,611 women aged 15 to 44 who had nonmissing data on pregnancy status, including 6,576 pregnant women, 9,267 recent mothers, and 129,768 nonpregnant women who were not recent mothers. 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 NSDUH Report is prepared by the Office of Applied Studies (OAS), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

Information on the most recent NSDUH is available in the following publication:

Office of Applied Studies. (2008). *Results from the 2007 National Survey on Drug Use and Health: National findings* (DHHS Publication No. SMA 08-4343, NSDUH Series H-34). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Information for earlier NSDUHs is available in the following publications:

2006 NSDUH: (DHHS Publication No. SMA 07-4293, NSDUH Series H-32)

2005 NSDUH: (DHHS Publication No. SMA 06-4194, NSDUH Series H-30)

2004 NSDUH: (DHHS Publication No. SMA 05-4062, NSDUH Series H-28)

2003 NSDUH: (DHHS Publication No. SMA 04-3964, NSDUH Series H-25)

2002 NSDUH: (DHHS Publication No. SMA 03-3836, NSDUH Series H-22)

Also available online: <http://oas.samhsa.gov>.

Because of improvements and modifications to the 2002 NSDUH, estimates from the 2002 through 2007 surveys should not be compared with estimates from the 2001 or earlier versions of the survey to examine changes over time.



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Substance Abuse & Mental Health Services Administration
Office of Applied Studies
www.samhsa.gov