

# The NHSDA Report

July 20, 2001

## Tobacco and Alcohol Use Among Pregnant Women

### In Brief

- In 1999, an estimated 17% of pregnant women smoked cigarettes in the past month, and 3% of pregnant women engaged in “binge” alcohol use.
- Younger pregnant women were more likely than their older counterparts to smoke cigarettes and binge drink.
- Rates of smoking and drinking in the year after giving birth were similar to those among all nonpregnant women.

Given the potential harmful effects of tobacco and alcohol to human embryos and fetuses, substantial public health attention has been directed toward tobacco and alcohol use among pregnant women.<sup>1,2</sup> The 1999 National Household Survey on Drug Abuse (NHSDA) contains data on the current use (i.e., use in the month prior to the survey) of tobacco and alcohol among pregnant women aged 15 to 44.<sup>3</sup>

### Prevalence of Use Among Pregnant Women<sup>4</sup>

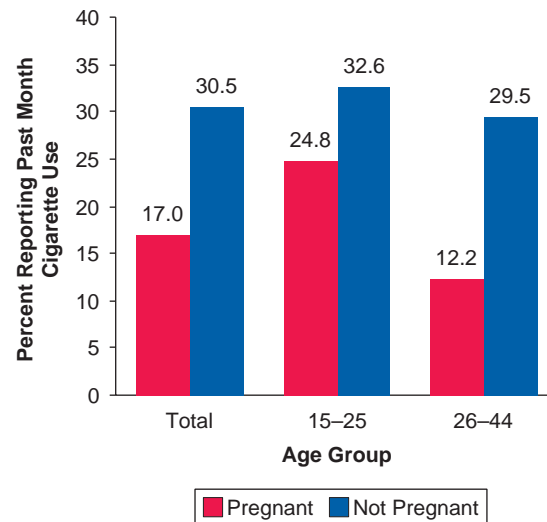
Among women aged 15 to 44 who were currently pregnant, about 17 percent reported the use of one or more tobacco products (cigarettes, smokeless tobacco, cigars, or pipes) in the past month (Table 1). Cigarettes were the most widely used tobacco product, with an estimated 416,000 pregnant women smoking cigarettes in the past month. The rate of past month cigarette smoking among pregnant women (17 percent) was about half the level of nonpregnant women (31 percent).

**Table 1. Percentages and Standard Errors of Females Aged 15 to 44 Reporting Past Month Use of Tobacco and Alcohol, by Pregnancy Status: 1999\***

	Pregnant		Not Pregnant	
	Percent	SE	Percent	SE
Any Tobacco <sup>1</sup>	17.3	1.97	31.6	0.60
Cigarettes	17.0	1.96	30.5	0.58
Smokeless Tobacco	0.4	0.24	0.5	0.12
Cigars	0.7	0.21	2.9	0.15
Pipes	0.1	0.07	0.3	0.05
Any Alcohol Use	12.9	2.35	48.5	0.63
"Binge" Alcohol Use <sup>2</sup>	3.3	0.77	19.4	0.46
Heavy Alcohol Use <sup>2</sup>	0.2	0.12	4.0	0.24

1. Use of any tobacco product indicates using at least once cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
2. "Binge" Alcohol Use is defined as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days. By "occasion" is meant at the same time or within a couple hours of each other. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all Heavy Alcohol Users are also "Binge" Alcohol Users.

**Figure 1. Percentages of Females Aged 15 to 44 Reporting Past Month Cigarette Use, by Pregnancy Status and Age Group: 1999\***



\*Data presented may differ from previously published data from the 1999 NHSDA because of corrections made to imputation procedures. Source: SAMHSA 1999 National Household Survey on Drug Abuse (NHSDA).

About 13 percent of pregnant women reported drinking alcohol in the past month, with 3 percent reporting "binge" alcohol use (drinking five or more drinks on the same occasion at least once in the past 30 days). These percentages translate to approximately 316,000 pregnant women who were past month alcohol users, and 80,000 pregnant women who were binge drinkers. An estimated 6,000 pregnant women engaged in heavy drinking (drank five or more drinks of alcohol on the same occasion on each of 5 or more days in the past 30 days). The rate of binge drinking was 6 times lower for pregnant women (3 percent) compared to nonpregnant women (19 percent).

### Age Differences

Pregnant women aged 15 to 44 were less likely to smoke cigarettes than nonpregnant women, but this

difference was smaller among younger women than among older women in the age group (Figure 1). Pregnant women aged 15 to 25 were twice as likely to have smoked cigarettes in the past month (25 percent) compared to pregnant women aged 26 to 44 (12 percent). These percentages translate to approximately 231,000 pregnant women aged 15 to 25 who were past month smokers, compared to 185,000 pregnant smokers aged 26 to 44.

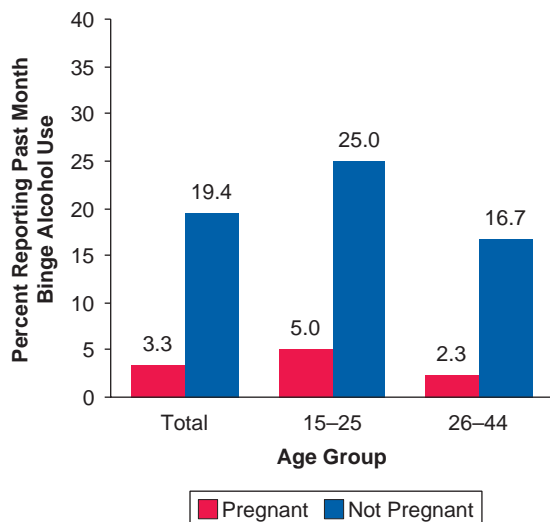
The binge drinking rate for pregnant women was 5 times lower than for nonpregnant women among those aged 15 to 25, and 8 times lower among those aged 26 to 44 (Figure 2). Approximately 5 percent of pregnant women aged 15 to 25 reported binge drinking in the past month, compared to 2 percent of pregnant women aged 26 to 44. These percentages translate to approximately 46,000

pregnant women aged 15 to 25 who were past month binge drinkers, compared to 34,000 pregnant women aged 26 to 44.

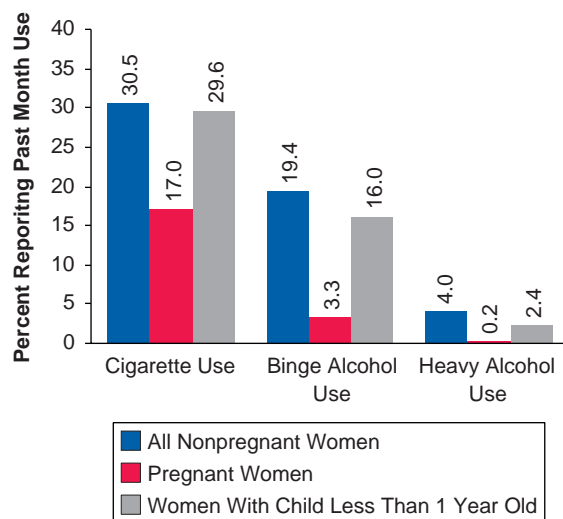
### Prevalence in the Year After Giving Birth

Consistent with previous research,<sup>5</sup> the 1999 NHSDA data indicate that reductions in tobacco and alcohol use in women during pregnancy are not permanent (Figure 3). Approximately 30 percent of recent mothers (women aged 15 to 44 who had a child less than one year old) reported smoking cigarettes in the past month, a rate that is similar to the rate for all nonpregnant women in this age group (31 percent). Binge drinking rates for recent mothers (16 percent) were also similar to the overall rate for nonpregnant women aged 15 to 44 (19 percent).

**Figure 2. Percentages of Females Aged 15 to 44 Reporting Past Month Binge Alcohol Use, by Pregnancy Status and Age Group: 1999\***



**Figure 3. Percentages of Females Aged 15 to 44 Reporting Past Month Cigarette Use, Binge Alcohol Use, and Heavy Alcohol Use, by Pregnancy and Recent Motherhood Status: 1999\***



The rate of heavy drinking was lower among recent mothers (2 percent) compared to the overall rate for nonpregnant women in this age group (4 percent), but was significantly higher than for pregnant women (0.2 percent).

for women who had a child less than one year old were similar to the rates for all nonpregnant women aged 15 to 44, indicating that changes in the use of these substances during pregnancy are temporary.

5 Morrison, D.M., Spencer, M.S., and Gillmore, M.R. (1998). Drug use and parenting in adolescence. *Journal of Research on Adolescence*, 8, 69-95.

## Summary

In 1999, approximately 17 percent of pregnant women aged 15 to 44 smoked cigarettes in the past month, and 3 percent of pregnant women engaged in binge alcohol use. Pregnant women used tobacco and alcohol less often than nonpregnant women, suggesting that many women reduce or curtail their use of these substances while pregnant. Pregnant women aged 15 to 25 did not reduce their smoking or drinking as much as women aged 26 to 44. Rates of past month smoking and drinking

## End Notes

- Centers for Disease Control and Prevention. (2001, April). *Women and smoking: A report of the Surgeon General-2001* [on-line]. Available: [http://www.cdc.gov/tobacco/sgr\\_forwomen.htm](http://www.cdc.gov/tobacco/sgr_forwomen.htm) [2001, May 17].
- National Institute on Alcohol Abuse and Alcoholism (2000, December). Fetal alcohol exposure and the brain. [on-line]. Available: <http://www.niaaa.nih.gov/publications/aa50.htm> [2001, May 17].
- Except for women who have been pregnant for less than 1 month, these measures of past month use indicate use during pregnancy.
- Note that these are conservative estimates of tobacco and alcohol use during pregnancy because they reflect use only in the past month, not during the entire pregnancy. The estimated number of tobacco and alcohol users reflects the number of users among women who were pregnant at the time of the survey, not among all women who were pregnant in 1999.

The National Household Survey on Drug Abuse (NHSDA) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). The 1999 data are based on information obtained from nearly 70,000 persons aged 12 or older, including 832 pregnant women aged 15 to 25 and 305 pregnant women aged 26 to 44. 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 NHSDA Report is prepared by the Office of Applied Studies (OAS), SAMHSA, and by RTI in Research Triangle Park, North Carolina.

Information and data for this issue are based on the following publication and statistics:

Substance Abuse and Mental Health Services Administration. (2000) *Summary of findings from the 1999 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 00-3466). Rockville, MD: Author.

Also available on-line: <http://www.DrugAbuseStatistics.samhsa.gov>.

Additional tables upon request; adapted from 6.26B; 6.27B; 6.29B; 6.30B from [http://www.samhsa.gov/oas/nhsda/2kdetailedtabs/Vol\\_1\\_Part\\_4/V1P4.htm](http://www.samhsa.gov/oas/nhsda/2kdetailedtabs/Vol_1_Part_4/V1P4.htm).