

The NSDUH Report

May 21, 2009

Substance Use among Women During Pregnancy and Following Childbirth

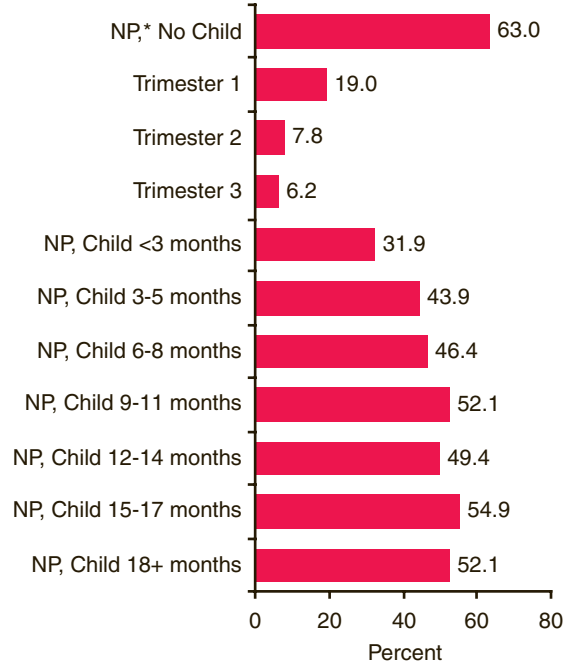
In Brief

- Combined 2002 to 2007 data show that past month alcohol use among women aged 18 to 44 was highest for those who were not pregnant and did not have children living in the household (63.0 percent) but comparatively low for women in the first trimester of pregnancy (19.0 percent), and even lower for those in the second (7.8 percent) or third trimester (6.2 percent); similar patterns were seen with marijuana, cigarette, and binge alcohol use
- Data suggest that use of these substances increases following childbirth; for example, marijuana use was higher for recent mothers with children under 3 months old in the household (3.8 percent) than for women in the third trimester of pregnancy (1.4 percent), suggesting resumption of use among mothers in the first 3 months after childbirth

In the United States, substance use among pregnant and postpartum women is a public health issue. Previous studies based on data from the National Survey on Drug Use and Health (NSDUH) have consistently shown that a substantial proportion of pregnant women, particularly those in the first trimester, were past month alcohol, cigarette, or illicit drug users^{1,2,3} and that rates among recent mothers were much higher than those among pregnant women.⁴ A recent study of this relationship that controlled for women's age and other socio-demographic characteristics found indirect evidence of resumption of substance use following childbirth.⁵

This issue of *The NSDUH Report* examines past month use of alcohol, cigarettes, and marijuana among pregnant and parenting women aged 18 to 44 to shed light on how rapidly use of these substances resumes after childbirth. It differentiates pregnant women by trimester of pregnancy and recent mothers by age of the youngest child in the household.⁶

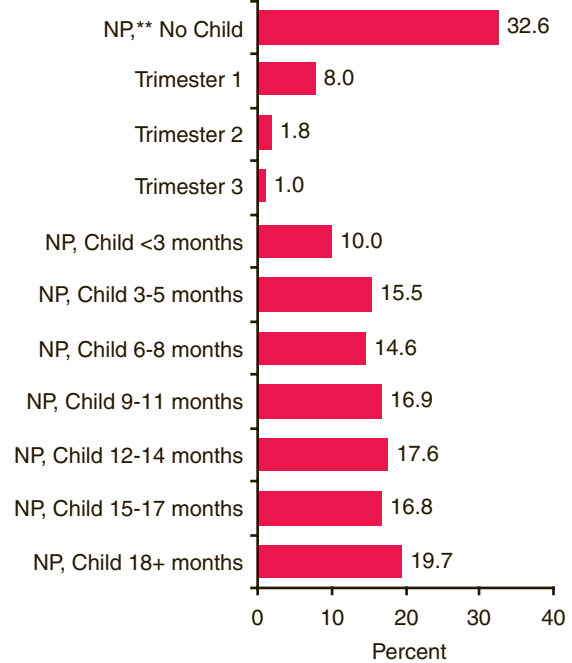
Figure 1. Women's (Aged 18 to 44 Years) Past Month Alcohol Use Rate by Pregnancy Trimester and Age of the Youngest Child in Household: 2002 to 2007



* NP = Nonpregnant

Source: 2002 to 2007 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Figure 2. Women's (Aged 18 to 44 Years) Past Month Binge Alcohol Use* Rate by Pregnancy Trimester and Age of the Youngest Child in Household: 2002 to 2007



* Binge alcohol use is defined as drinking five or more drinks at the same time or within a couple of hours on at least 1 day in the past 30 days.

**NP = Nonpregnant

Source: 2002 to 2007 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Substance Use among Pregnant and Nonpregnant Women

Combined 2002 to 2007 data show that past month alcohol use among women aged 18 to 44 was highest for those who were not pregnant and did not have children living in the household (63.0 percent) (Figure 1). The rate was comparatively low for those in the first trimester of pregnancy (19.0 percent) and even lower for those in the second (7.8 percent) or third (6.2 percent) trimester. There were similar patterns across these four subgroups of women for past month binge alcohol use (Figure 2), cigarette use (Figure 3), and marijuana use (Figure 4).

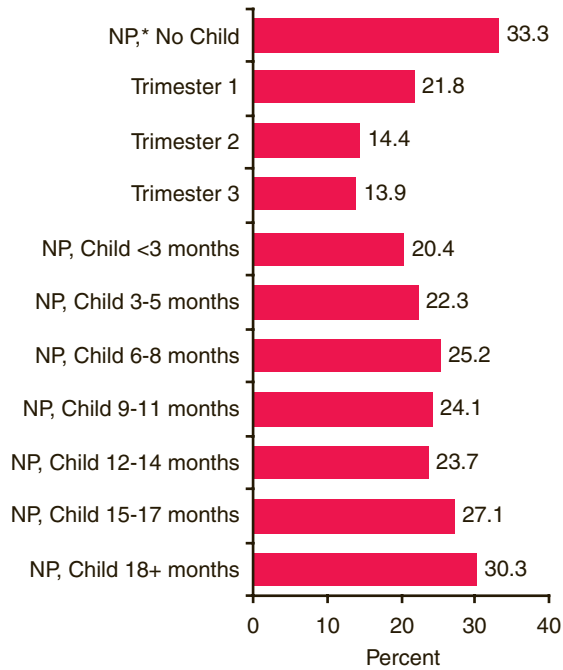
Resumption of Substance Use among Recent Mothers

When compared with women in the third trimester of pregnancy, nonpregnant women with children under 3 months old in the household had much higher rates of past month alcohol use (6.2 vs. 31.9 percent), binge alcohol use (1.0 vs. 10.0 percent), cigarette use (13.9 vs. 20.4 percent), and marijuana use (1.4 vs. 3.8 percent) (Figures 1-4), suggesting resumption of use among mothers in the 3 months after childbirth.

The increase in rates of substance use among parenting women tended to level off as the age of the youngest child increased. For alcohol, past month use increased from 31.9 percent for women with children under 3 months old to 43.9 percent for those with 3 to 5 month olds and 52.1 percent for those with 9 to 11 month olds; thereafter, the rate ranged from 49.4 to 54.9 percent, not significantly different from the rate among women with 9 to 11 month olds (Figure 1). The rate of binge alcohol use was 15.5 percent among women whose youngest children were aged 3 to 5 months and 19.7 percent for those whose youngest children were aged 18 months or older (Figure 2). Cigarette use among parenting women increased to 30.3 percent for those whose youngest children were aged 18 months or older (Figure 3), but for marijuana, there was no significant increase in use among women who had children aged 3 months or older (Figure 4).

These data provide indirect evidence of dramatic increases in the prevalence of substance use among mothers with babies under 3 months old based on cross-sectional reports from pregnant, parenting, and nonpregnant women. This increase implies a resumption of substance use following childbirth because new initiation of substance use among postpartum women is too rare to account for the observed differences.

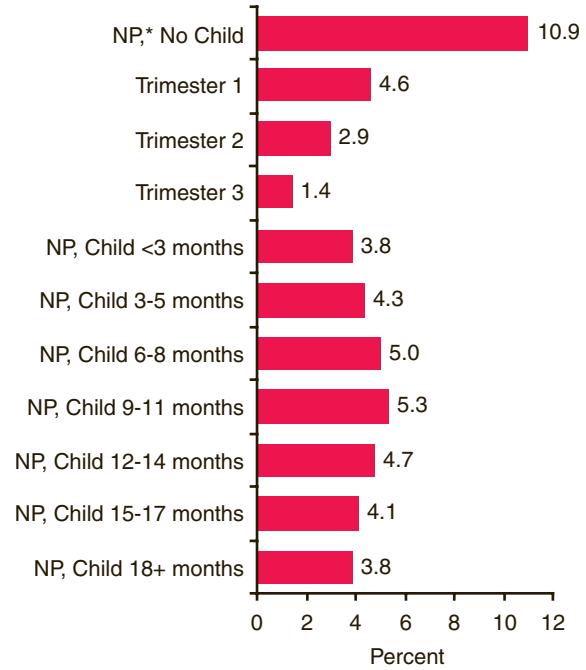
Figure 3. Women's (Aged 18 to 44 Years) Past Month Cigarette Use Rate by Pregnancy Trimester and Age of the Youngest Child in Household: 2002 to 2007



* NP = Nonpregnant

Source: 2002 to 2007 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Figure 4. Women's (Aged 18 to 44 Years) Past Month Marijuana Use Rate by Pregnancy Trimester and Age of the Youngest Child in Household: 2002 to 2007



* NP = Nonpregnant

Source: 2002 to 2007 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Discussion

Alcohol, cigarette, and illicit drug use during pregnancy can cause poor pregnancy outcomes and early childhood behavioral and development problems. The findings in this report suggest that many U.S. women, particularly those in the third trimester, are getting the message and abstaining from substance use. Still, a sizeable proportion of women in the first trimester of pregnancy were past month users of alcohol, cigarettes, or marijuana, and one in seven women used cigarettes in the second or third trimester. In addition, many women are resuming use of these substances after childbirth, and that resumption appears to be rapid given the higher rates for mothers of infants under 3 months old compared with pregnant women in the second or third trimesters. Effective interventions for women to further reduce substance use during pregnancy and to prevent postpartum resumption of use could improve the overall health and well-being of mothers and infants.

End Notes

¹ Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (May 17, 2002). *The NHSDA report: Substance use among pregnant women during 1999 and 2000*. Rockville, MD.

² Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (February 9, 2007). *The NSDUH report: Cigarette use among pregnant women and recent mothers*. Rockville, MD.

³ Muhuri, P. K., & Groerer, J. C. (2008). Substance use among women: Associations with pregnancy, parenting, and race/ethnicity. *Maternal and Child Health Journal*. Online preprint publication, DOI10.1007/s10995-008-0375-8. Retrieved on January 12, 2009, from <http://www.springerlink.com/index/152552148rwx2241.pdf>

⁴ See End Note 2.

⁵ See End Note 3.

⁶ Pregnant women with or without a child in the household were classified into pregnancy trimester categories, and nonpregnant women's parenting status was classified according to the age of the youngest child living in the household, including biological, step-, adopted, or foster children. (An earlier analysis showed that 99.1 percent of nonpregnant women with children aged 0 to 2 years in the household were the biological mothers.) Nonpregnant women with no children living in the household were the residual group. Groups shown in the figures followed these definitions and are mutually exclusive.

Suggested Citation

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (May 21, 2009). *The NSDUH Report: Substance Use among Women During Pregnancy and Following Childbirth*. Rockville, MD.

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

Substance Use among Women During Pregnancy and Following Childbirth

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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 2002-2007 NSDUH data used in this report were based on information obtained from 113,140 females aged 18 to 44 including 6,036 who were in their first, second, or third trimester of pregnancy at the time of the survey interview. 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. Also available online: <http://oas.samhsa.gov>.



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