



# Substance Use During Pregnancy in Idaho

Results from Idaho's 2006 Pregnancy Risk Assessment Tracking System (PRATS)

Maternal substance use during pregnancy is a serious public health concern due to its association with several negative fetal outcomes, such as inhibited growth, prematurity, congenital malformations, and abnormal cognitive development.<sup>1</sup> Prenatal exposure to substances—such as tobacco or alcohol—is a leading cause of mental, physical, and psychological problems in infants and young children.<sup>2</sup>

## In Idaho:

- More than one-in-ten mothers (11.2%) smoked and/or drank alcohol during their pregnancy.
- 8.4% of mothers reported smoking during the last three months of their pregnancy.
- 3.4% of mothers reported drinking alcohol during the last three months of their pregnancy.

## Methodology

The Pregnancy Risk Assessment Tracking System (PRATS) is a population-based tracking system that surveys new mothers\* in Idaho about their behaviors and experiences surrounding the time of their pregnancy. The 2006 survey included questions on maternal substance\*\* use before, during, and after pregnancy.

Mothers were asked, "Have you smoked at least 100 cigarettes in your life?" If they answered "Yes," they were asked:

- "In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day?"
- "In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day?"
- "How many cigarettes do you smoke on an average day now?"

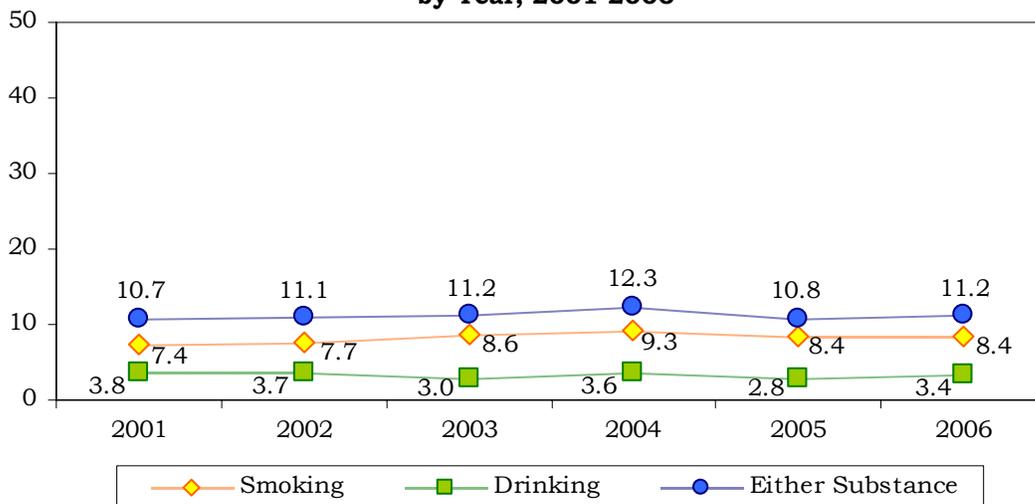
Mothers were also asked, "Have you had any alcoholic drinks in the past 2 years?" If mothers answered "Yes," they were asked:

- "During the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week?"
- "During the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week?"

## Idaho Mothers and Substance Use Prevalence

More than four-in-ten Idaho mothers (46.2 percent) reported smoking and/or drinking three months prior to pregnancy. During pregnancy, the prevalence of smoking and/or drinking reduced to approximately one-in-ten mothers (11.2 percent). Although the majority of Idaho mothers (88.9 percent) did not use either tobacco or alcohol during pregnancy, approximately one-in-one-hundred Idaho mothers (0.7 percent) used *both* substances during pregnancy. The prevalence of substance use during pregnancy has not changed significantly over the past six years.

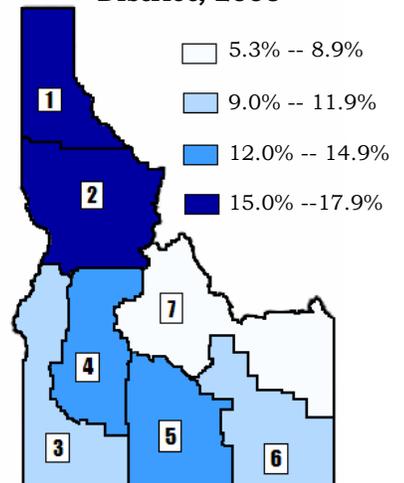
Percent of Idaho Mothers Who Used Substances During Pregnancy by Year, 2001-2006



\* The term "mother" refers to Idaho resident adult mothers (18 and older) who gave birth in Idaho.

\*\* The term "substance" refers to either tobacco or alcohol.

Prevalence of Substance Use During Pregnancy by Health District, 2006



At the health district level, prevalence of smoking and/or drinking during pregnancy ranged from a low of 5.3 percent in District 7 to a high of 17.9 percent in District 2. When compared with the overall state prevalence, District 7 was significantly lower and District 1 and 2 were significantly higher.

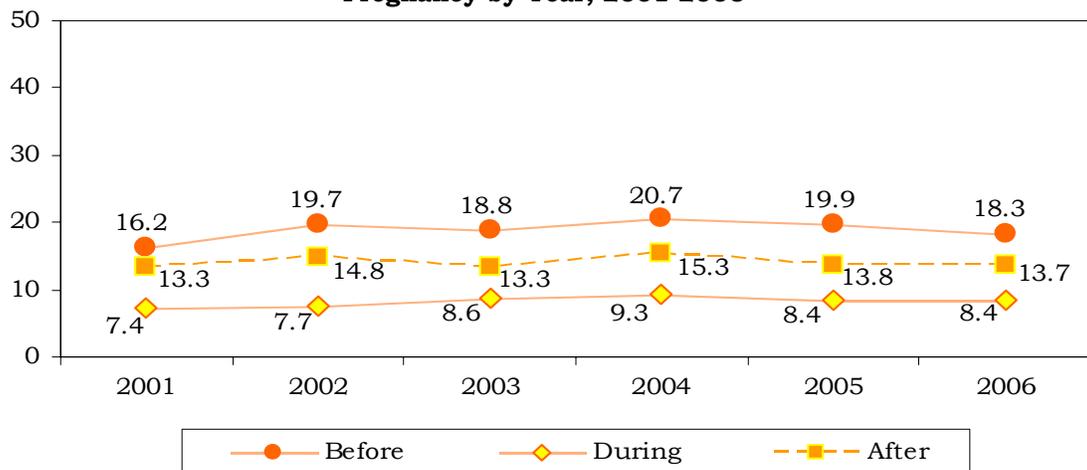
# Smoking During Pregnancy

Smoking during pregnancy increases the risks of unfavorable birth outcomes, such as intrauterine growth retardation, placental attachment problems, low birth weight, and premature birth. Infants born to women who smoked during pregnancy weighed an average 200 grams (or about 1.1 pounds) less than those born to women who did not smoke during pregnancy.<sup>3</sup> Furthermore, smoking during pregnancy increases the risk of premature delivery by 30 percent.<sup>4</sup>

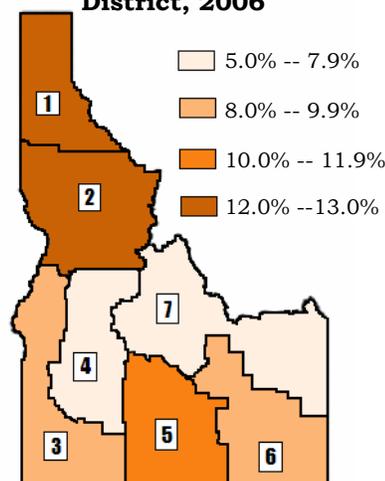
## Idaho Mothers and Smoking Prevalence

In 2006, 18.3 percent of Idaho women reported smoking in the three months prior to becoming pregnant. During the last three months of pregnancy, the percentage of women who smoked decreased to 8.4 percent. Also, 13.7 percent of Idaho women reported that they were smoking cigarettes postpartum. The prevalence of smoking during pregnancy has remained relatively steady since 2001.

**Percent of Idaho Mothers Who Smoked Before, During, and After Pregnancy by Year, 2001-2006**



**Prevalence of Smoking During Pregnancy by Health District, 2006**



At the health district level, prevalence rates ranged from a low of 5.0 percent in District 7 to a high of 13.0 percent in District 2.

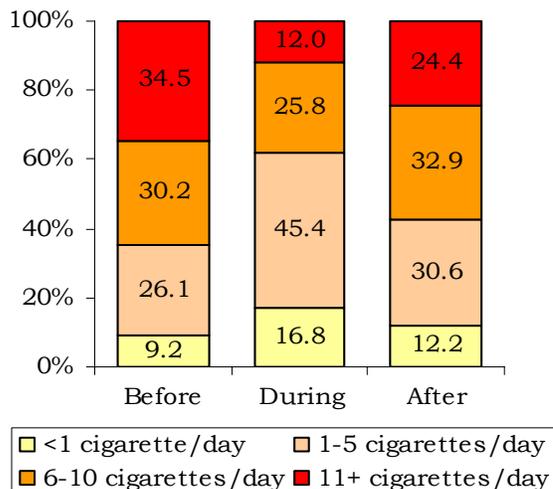
## Prenatal Care Discussions About Smoking and Changes in Smoking Habits

### • Prenatal Care Discussions

Over eight-in-ten women (82.6 percent) were asked in a prenatal care setting if they were smoking during pregnancy. When asked if their health care provider gave them information on how smoking during pregnancy could affect their baby, almost nine-in-ten women (88.1 percent) reported that they were counseled on this subject. Women who smoked during pregnancy were significantly more likely to report having this conversation

with their health care provider when compared with women who did not smoke during pregnancy (93.7 percent and 87.5 percent, respectively).

**Comparison of Daily Cigarette Intake Among Mothers Who Smoked Before, During, and After Pregnancy, 2006**



### • Of those who smoked cigarettes *before* pregnancy, how many completely abstained from smoking *during* pregnancy?

Of women who smoked cigarettes *before* pregnancy, 54.5 percent reported that they abstained from smoking *during* pregnancy. Of those women who smoked *before* pregnancy and abstained from smoking *during* pregnancy, 51.3 percent reported that they had resumed smoking postpartum.

### • Of those who were smoking *during* pregnancy, how many cigarettes were they smoking daily?

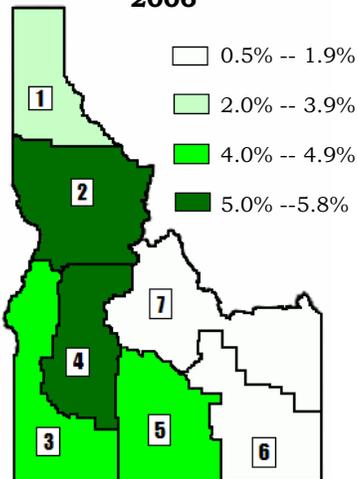
During pregnancy, an intake of one to five cigarettes a day was reported significantly more than any other amount. The least reported amount among women who smoked during pregnancy was 11 or more cigarettes per day.

# Alcohol Use During Pregnancy

Prenatal exposure to alcohol is a leading preventable cause of birth defects and developmental disabilities in the United States.<sup>5</sup> The most severe effect is known as Fetal Alcohol Syndrome (FAS), which causes growth deficiencies, facial abnormalities, impaired intellectual abilities, and central nervous system impairment. In 2005, the U.S. Surgeon General published an *Advisory on Alcohol Use in Pregnancy* to raise awareness about this serious public health concern. The advisory stated that there is no amount of alcohol that is considered safe during pregnancy, and therefore, it is recommended that pregnant women and women who may become pregnant abstain from alcohol.<sup>6</sup>

## Idaho Mothers and Drinking Prevalence

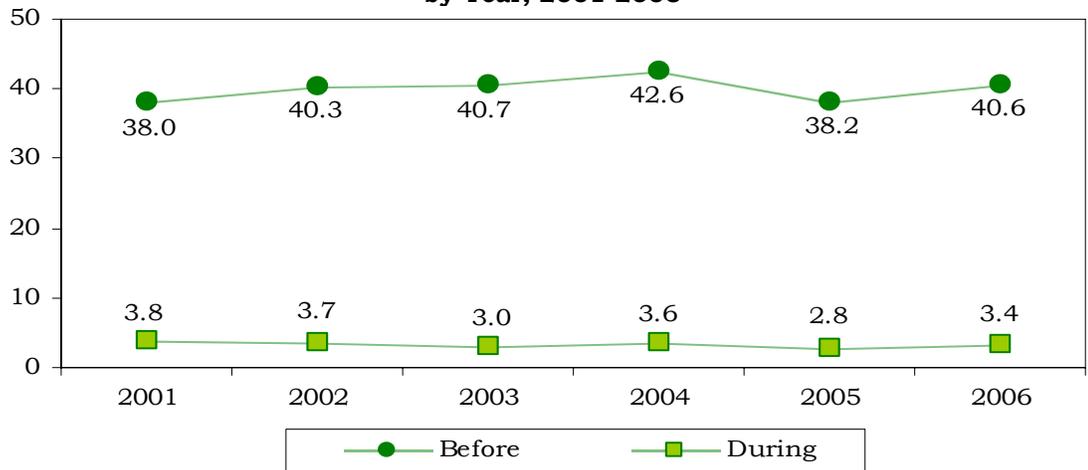
### Prevalence of Drinking During Pregnancy by Health District, 2006



At the health district level, rates ranged from a low of 0.5 percent in District 7 to a high of 5.8 percent in District 4.

Four-out-of-ten Idaho mothers (40.6 percent) reported that they consumed alcohol in the three months prior to becoming pregnant. The percentage of women who reported drinking during the last three months of pregnancy decreased dramatically to 3.4 percent. Rates of drinking during pregnancy have not changed significantly in the past six years.

### Percent of Idaho Mothers Who Drank Before and During Pregnancy by Year, 2001-2006



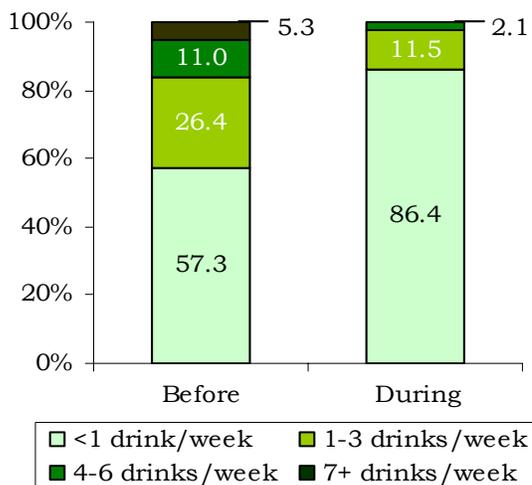
## Prenatal Care Discussion About Drinking and Changes in Alcohol Consumption

### • Prenatal Care Discussion

Almost eight-in-ten women (79.1 percent) reported that their prenatal care provider had asked them if they were drinking alcohol during pregnancy. Nearly nine-in-ten women (88.3 percent) reported that their health care provider informed them of how alcohol consumption could affect their baby. There were no significant differences

between the likelihood of mothers who drank during pregnancy and mothers who did not drink during pregnancy having these discussions with their healthcare provider.

### Comparison of Weekly Alcohol Intake Among Mothers Who Drank Before and During Pregnancy, 2006



### • Of those who drank alcohol before pregnancy, how many completely abstained from drinking during pregnancy?

Of those mothers who drank *before* becoming pregnant, over nine-in-ten (91.9 percent) reported that they abstained from drinking alcohol *during* their pregnancy.

### • Of those who were drinking during pregnancy, how many alcoholic drinks were they consuming weekly?

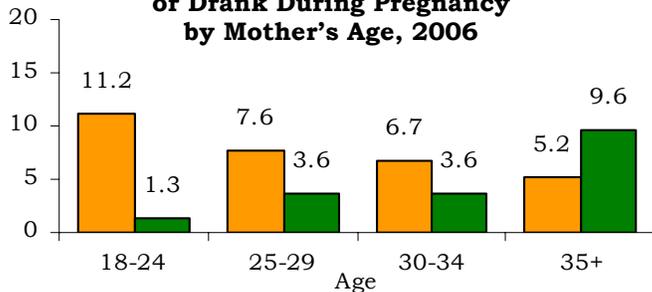
Less than one alcoholic beverage per week was the most common reported amount among women who drank during pregnancy. The least common reported amount was four to six drinks per week, with no reports of seven or more drinks per week.

# Maternal Risk Factors

■ Smoked during pregnancy ■ Drank during pregnancy

## Mother's Age

**Percentage of Mothers Who Smoked or Drank During Pregnancy by Mother's Age, 2006**



**IN GENERAL**, younger mothers were more likely to smoke during pregnancy, while older mothers were more likely to drink during pregnancy.

### SPECIFICALLY:

- Mothers between the ages of 18 and 29 were almost four (3.8) times more likely to smoke during pregnancy than to drink during pregnancy (9.4 percent versus 2.5 percent).
- Drinking during pregnancy was nearly four (3.6) times as prevalent in mothers age 35 or older compared with younger mothers (9.6 percent versus 2.7 percent).

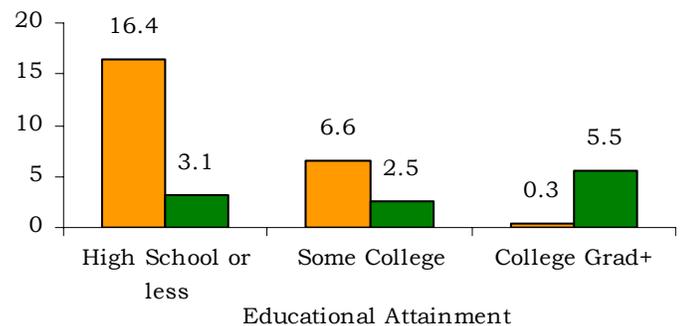
## Mother's Educational Attainment

**IN GENERAL**, less educated mothers were more likely to smoke during pregnancy, while mothers with higher education were more likely to drink during pregnancy.

### SPECIFICALLY:

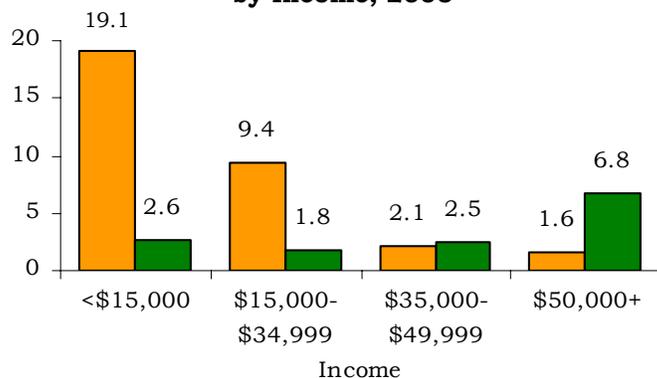
- Mothers with a high school education or less were over five (5.3) times more likely to smoke during pregnancy than to drink during pregnancy (16.4 percent versus 3.1 percent). In contrast, mothers with a Bachelor's degree or beyond were 18 (18.3) times more likely to drink during pregnancy than to smoke during pregnancy (5.5 percent versus 0.3 percent).
- Smoking during pregnancy was 37 times more prevalent in mothers without a Bachelor's degree compared with more educated mothers (11.1 percent versus 0.3 percent). In contrast, mothers with a Bachelor's degree or beyond were twice as likely to drink during pregnancy when compared with less educated mothers (5.5 percent versus 2.7 percent).

**Percentage of Mothers Who Smoked or Drank During Pregnancy by Educational Attainment, 2006**



## Annual Household Income

**Percentage of Mothers Who Smoked or Drank During Pregnancy by Income, 2006**



**IN GENERAL**, mothers with lower incomes were more likely to smoke during pregnancy, while mothers with higher incomes were more likely to drink during pregnancy.

### SPECIFICALLY:

- Mothers with an annual household income less than \$15,000 were seven (7.3) times more likely to smoke during pregnancy than to drink during pregnancy (19.1 percent versus 2.6 percent). In contrast, mothers with an income of \$50,000 or greater were over four (4.3) times more likely to drink during pregnancy than smoke (6.8 percent versus 1.6 percent).
- Smoking during pregnancy was nearly four (3.9) times more prevalent among mothers whose households made less than \$15,000 per year when compared with mothers whose households made \$15,000 or greater (19.1 percent versus 4.9 percent). In contrast, drinking was three (3.1) times more prevalent among mothers whose households made \$50,000 or greater per year when compared with lower incomes (6.8 percent versus 2.2 percent).

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