Maternal Use of Alcohol and Tobacco

The North Dakota Pregnancy Risk Assessment Monitoring System (PRAMS) survey data, based on a representative sample of mothers who gave birth in 2002, provides information about mothers’ alcohol and tobacco usage before and during their pregnancies. Substance use during pregnancy can have devastating effects on an infant (see side bar at left), and routine use before pregnancy can be problematic since one-third of pregnancies in North Dakota are unplanned (36% in 2002). In 2002, one in 20 infants was born at a low birthweight (less than 2,500 grams/5 pounds 8 ounces) and one in 10 was placed in a neonatal intensive care unit (5% and 11%, respectively).

Alcohol Usage

The vast majority of mothers indicated they drank alcoholic drinks in the past two years (81%). In the three months before becoming pregnant, two-thirds of mothers said they drank alcohol (65%) and one-third had five or more drinks on at least one occasion (i.e., binge drinking) (37%) (see Figure 1). In the last three months of pregnancy, few mothers said they drank alcohol (4% drank alcohol and 1% binge drank).

Consuming alcohol during the early stages of pregnancy is dangerous to the fetus. Many mothers may be drinking while pregnant and not even know they are pregnant. Among all mothers who did not get prenatal care as early as they wanted, 37 percent said the reason was that they did not know they were pregnant. Even if a mother quits drinking once she knows she is pregnant, she may not have quit in time.

Women of childbearing age should consult their physician and take steps to reduce the possibility of prenatal alcohol exposure. One option for women who are sexually active and not using effective birth control methods is that they should not drink alcohol since they may become pregnant and not know for several weeks.

North Dakota data from the Behavioral Risk Factor Surveillance System show that, in 2006, 57 percent of women of childbearing age (18 to 44 years) had one or more drinks within the last 30 days, and one-fifth binge drank (22% had five or more drinks on any one occasion). Health professionals should regularly ask women of childbearing age about alcohol consumption, including advising them of the risks and telling them to not drink during pregnancy. In 2002, 31 percent of North Dakota mothers said health-care workers did not discuss during a prenatal care visit how drinking during pregnancy could affect the baby.

Figure 1. Percentage of Alcohol Usage by North Dakota Mothers Who Gave Birth in 2002

Impact of Alcohol and Tobacco on the Fetus

According to the U.S. Surgeon General, no amount of alcohol consumed during pregnancy can be considered safe, and several negative consequences can result, including:

- Risk of alcohol-related birth defects; e.g., growth deficiencies, facial abnormalities, behavioral disorders, central nervous system impairment, and impaired intellectual development.
- Damage to a fetus at any stage of pregnancy, including during the first weeks of pregnancy before a woman may even know that she is pregnant.
- Lifelong behavioral and mental problems.

A mother’s smoking during pregnancy also poses risks for the developing fetus, including:

- Risk of pregnancy complications, premature delivery, low-birth-weight infants (a leading cause of infant deaths), stillbirth, and sudden infant death syndrome (SIDS).
- Reduction of the baby’s lung function.

Fortunately, alcohol- and tobacco-related birth defects are entirely preventable!
North Dakota mothers on use of alcohol and tobacco:

“It is only 10 months out of your life. Please do not ever drink, smoke or put the baby or yourself in harm’s way.”

“I have two friends who were pregnant at the same time I was, and I told them they shouldn’t drink but they didn’t listen, and women have to understand once they become pregnant whatever they take into their body, their babies take in.”

“More teaching is needed on the effects of smoking and second hand smoke on your baby.”

“Guilt is one of the worst feelings in the world. Every day I wonder if I might have caused a problem with my baby... Message to all: STAY FREE!”

“I would like to say to please tell mothers to never smoke, drink, or do drugs when pregnant.”