



Alcohol and Pregnancy

Drinking alcohol during pregnancy can cause a wide range of physical and mental birth defects. The term “fetal alcohol spectrum disorders” (FASD) is used to describe the many problems associated with exposure to alcohol before birth. Each year in the United States, up to 40,000 babies are born with FASD. While many women are aware that heavy drinking during pregnancy can cause birth defects, many do not realize that moderate or even light drinking also may harm the fetus. Recent government surveys indicate that about 1 in 12 pregnant women drink during pregnancy

No level of alcohol consumption has proven to be safe.

- When a pregnant woman drinks, alcohol passes through the placenta to her fetus. The alcohol level of the baby’s blood can be higher and remain elevated longer than the mother’s. This sometimes causes the baby to suffer lifelong damage.
- Drinking alcohol during pregnancy increases the risk for miscarriage and premature birth. (before 37 completed weeks of pregnancy)
- Binge drinking, or heavy drinking, greatly increases the risk of alcohol-related damage to babies. However, no level of alcohol consumption has proven to be safe.
- Researchers have begun to look at the more subtle effects of moderate and light drinking during pregnancy, such as

A 2002 study found that 14-year-old children whose mothers drank as little as one drink a week were significantly shorter and leaner and had a smaller head circumference (a possible indicator of brain size) than children of women who did not drink at all (Day, N.L., et al. 2002)

A 2001 study found that 6- and 7-year-old children of mothers who had as little as one drink a week during pregnancy were more likely than children of non-drinkers to have behavior problems, such as aggressive and delinquent behaviors. These researchers found that children whose mothers drank any alcohol during pregnancy were more than three times as likely as unexposed children to demonstrate delinquent behaviors (Sood, B., et al., 2001)

Other studies report behavioral and learning problems in children exposed to moderate drinking during pregnancy, including attention and memory problems, hyperactivity, impulsivity, poor social and communication skills, psychiatric problems (including mood disorders) and alcohol and drug use (Centers for Disease Control and Prevention, 2006)

Alcohol use prior to pregnancy is a strong predictor of alcohol use during pregnancy.

- Many women who drink alcohol continue to drink during the early weeks of pregnancy because they do not realize that they are pregnant.
- Only about 40% of women realize that they are pregnant at 4 weeks of gestation, a critical period for organ development.

Based on 2007 and 2008 survey response data from Pennsylvania’s Pregnancy Risk Assessment Monitoring System (PRAMS), some important information has been identified regarding alcohol consumption by Pennsylvania mothers.

P According to the 2007 & 2008 PA PRAMS questionnaire responses, the following summarizes Pennsylvania’s mothers’ behavior with regard to alcohol consumption:

A 43.3% drank no amount of alcohol three months prior to pregnancy. And, 93.3% did not drink any amount of alcohol during the last three months of pregnancy

56.7 % drank some amount of alcohol three months before pregnancy. And, 6.2% drank some amount of alcohol during the last three months of pregnancy.

PA mothers who drank some amount of alcohol during the last three months of pregnancy:

- 2.2% of those in the <20 years of age group
- 5.3% of those in the 20-29 years of age group
- 10.0% of those in the 30+ years of age group

PA mothers who drank some amount of alcohol three months prior to pregnancy:

- 33.2% of those in the group with less than 12 years of education did so
- 50.1 % of those in the group with 12 years of education did so
- 66.7% of those in the group with more than 12 years of education did so





Pregnancy Risk Assessment Monitoring System
A survey for healthier mothers and babies in Pennsylvania

During prenatal care visits, health care workers often discuss various content areas with expectant mothers as a way to educate them on the importance of maintaining a healthy pregnancy.

Within the PRAMS survey, one particular question addresses alcohol discussions that a health care worker may have had during prenatal care visits (See Figure 1). According to the 2007 & 2008 response dataset, 76.2% of mothers experience an actual discussion with a prenatal health care worker regarding alcohol consumption during pregnancy. (See Figure 2).

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about how drinking alcohol during pregnancy could affect your baby? Please count only discussions, not literature or videos.

Figure 1: PRAMS Question

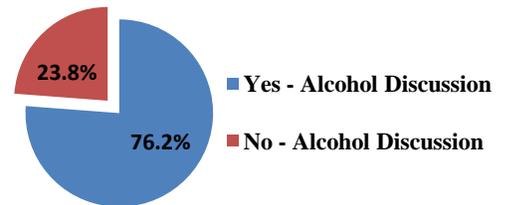


Figure 2: HCW Prenatal Alcohol

Agenda for Action

The Department of Health supports efforts to prevent FASD through education and outreach. As no level of alcohol consumption has proven to be safe during pregnancy, a focus on increasing awareness of the importance of complete abstinence is warranted. In addition to knowing that there is no safe level of alcohol consumption, it is also widely accepted that there is no known method for predicting which babies will be damaged by alcohol, or the extent of that potential damage. The safest course is for all women who are pregnant, or considering pregnancy, to abstain from any level of alcohol consumption. According to the March of Dimes, about 50 percent of pregnancies are unplanned. Therefore, all women should avoid heavy drinking during childbearing years.

The Department of Health continues to coordinate and support collaborative efforts to reduce alcohol use by women who are pregnant, planning to become pregnant, or at risk for an unplanned pregnancy. Through the collection, analysis and interpretation of maternal behavior related to alcohol consumption, efforts can be targeted most effectively on populations at risk. Through outreach and education, awareness campaigns aimed at specific target groups can produce positive attitude shift and, ultimately, reduce alcohol consumption and FASD. Analysis of the 2007 PRAMS survey response data supports the recognition and value of prenatal health care worker talks with women as a preventive measure.



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Resources & Contacts

- The PA Department of Health, Maternal and Child Health Services
Contact: Giselle Hallden, Public Health Program Administrator, Phone: 717-772-2762
Email: ghallden@state.pa.us
- The Fetal Alcohol Spectrum Disorders (FASD) Center for Excellence – A Federal initiative devoted to preventing and treating FASD. Phone: (866) 786-7327 Website: <http://fasdcenter.samhsa.gov/>
- The Centers for Disease Control and Prevention (CDC) Fetal Alcohol Spectrum Disorders
Website: <http://www.cdc.gov/ncbddd/fasd/index.html>
- A 2005 Message to Women from the U.S. Surgeon General: Advisory on Alcohol Use in Pregnancy:
Website: <http://www.cdc.gov/ncbddd/fasd/documents/SurgeonGenbookmark.pdf>
- The National Council on Alcoholism and Drug Dependence (NCADD) – A voluntary health organization dedicated to fighting alcoholism and drug addiction. Phone: (800) NCA-CALL (622-2255).
Website: <http://www.ncadd.org/>

Sources:

- PA Prams 2007 and 2008 combined Data Set – Source: PONDER (PRAMS On-Line Data for Epidemiologic Research). PONDER is a Web-based query system that allows users to design analysis by choosing from an indexed list of variables
- March of Dimes, Professionals & Researchers Preconception Health & Healthcare, Drinking Alcohol During Pregnancy Website: http://www.marchofdimes.com/professionals/19695_1170.asp#head1
- Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Fetal Alcohol Spectrum Disorders. 2007.
- The Centers for Disease Control and Prevention (CDC). Fetal Alcohol Spectrum Disorders. Updated 5/2/06. Website: <http://www.cdc.gov/ncbddd/fasd/index.html>
- Strandberg-Larsen, K., et al. Binge Drinking in Pregnancy and Risk of Fetal Death. *Obstetrics and Gynecology*, volume 111, number 3, March 2008, pages 602-609.
- Sokol, R.J., et al. Extreme Prematurity: An Alcohol-Related Birth Defect. *Alcoholism Clinical and Experimental Research*, volume 31, number 6, June 2007, pages 1031-1037.
- Day, N.L., et al. Prenatal Alcohol Exposure Predicts Continued Deficits in Offspring Size at 14 Years of Age. *Alcoholism Clinical and Experimental Research*, volume 26, number 10, 2002, pages 1584-1591.
- Sood, B., et al. Prenatal Alcohol Exposure and Childhood Behavior at Age 6 to 7. *Pediatrics*, volume 108, number 2, August 2001, page e34.