

Fetal Alcohol Spectrum Disorder

Every year in Saskatchewan, babies are born with lifelong disabilities caused by drinking alcohol during pregnancy. Alcohol consumed during pregnancy can cause a broad range of lifelong disabilities and in the Western world, is a leading known cause of cognitive disabilities.

How the Unborn Baby is Nourished

Everything a woman eats, drinks, inhales, sniffs, or injects will go into her bloodstream and then will go in varying degrees to the unborn baby through the placenta. An unborn baby gets all the nutrients and oxygen it needs to develop from the mother through the placenta.

How Alcohol Affects the Unborn Baby

Alcohol is a teratogen. A teratogen is a substance that interferes with the normal growth and development of the unborn baby. Specifically, alcohol is called a neurobehavioral teratogen because it can cause damage to the brain and can subsequently change behavior.

Range of Effects from Prenatal Alcohol Exposure

Alcohol affects each pregnant woman and fetus differently. Fetal Alcohol Spectrum Disorder (FASD) is the term used to describe the range of disabilities caused by drinking alcohol during pregnancy. These lifelong disabilities can include behavioral and learning problems that can have major impacts on the individual and his or her family and will change their lives. It is important to understand that even though an individual may not meet all the criteria for a diagnosis of Fetal Alcohol Syndrome (FAS), he or she may still be living with the effects of prenatal exposure to alcohol. Fetal Alcohol Syndrome (FAS) is a combination of mental and physical disabilities present at birth. Individuals who are not diagnosed with FAS but who have Partial Fetal Alcohol Syndrome (pFAS), Alcohol-Related Neurodevelopmental Disorder (ARND), or Alcohol-Related Birth Defects (ARBD), also have special needs, which may be as severe as an individual with FAS and will require assistance throughout their lives.

Characteristics of Individuals with FASD

The following may be observed:

- Learning and memory difficulties
- Language processing difficulties
- Speech and language deficits
- Behavioral problems
- Poor comprehension of social rules and expectations
- Sensory, hearing, and vision deficits
- Short attention span
- Impulsive behaviours
- Coordination and motor skill deficits
- Easily overwhelmed and over stimulated
- Hyperactivity
- Facial abnormalities
- Growth deficiency

Babies exposed to alcohol during pregnancy often have other health concerns. Abnormalities of the skeleton, cleft lip and palate, heart defects, and other internal organ problems are common.

Risk Factors Involved in FASD

No one can predict which infants born to mothers who drink will be affected, nor can anyone predict how severe these effects will be. There is no safe time or safe amount of alcohol to drink during pregnancy.

Five factors affect how severe the damage will be to the unborn baby:

- 1. The time in the pregnancy at which alcohol is consumed**
Damage to the fetus can occur anytime during the pregnancy. Alcohol may affect whatever growth or development is taking place at the time of the mother's consumption. The unborn baby's brain develops throughout the pregnancy and is always vulnerable to alcohol.
- 2. The amount of alcohol consumed during the pregnancy**
There is a significant risk to damage the fetus as well as stillbirth and spontaneous abortion with "heavy" drinking. However, no one knows how much alcohol a

pregnant woman can drink without hurting the baby. "Binge" drinking (four or more drinks in a drinking episode) sharply raises the amount of alcohol in the blood and greatly increases the risk to the baby.

- 3. Individual susceptibility to alcohol**
Genetic factors determine the baby's ability to deal with the alcohol in its system and how quickly the alcohol in the baby's system can be broken down.
- 4. Nutrition**
Alcohol affects how the placenta transfers important nutrients necessary for fetal growth. Good nutrition for the fetus is important throughout the entire pregnancy. It is important for women to eat a nutritious diet including a daily multivitamin with folic acid.
- 5. Additional Risks**
The damage to the baby because of prenatal alcohol exposure may be compounded if the mother has poor nutritional status, smokes, is in poor health, is under increased stress, and/or uses other drugs.

Prevention

Fetal Alcohol Spectrum Disorder is preventable by not drinking alcohol during pregnancy. If a woman is planning a pregnancy, she should decide to stop drinking before becoming pregnant. The safest decision a woman can make is to completely avoid beer, wine, and hard liquor during her pregnancy. It is important to remember that many people need professional help in order to stop using alcohol, tobacco, and other drugs. Women who need assistance to stop drinking during pregnancy should be advised to consult with their doctors or should be directed to agencies that can assist them to stop drinking.

Information for this article was adapted from:

Fetal Alcohol Spectrum Disorder: A Resource for Professionals, 2005 - Saskatchewan Prevention Institute.

Coles, C.D., Individuals Affected by Fetal Alcohol Spectrum Disorder (FASD) and Their Families: Prevention, Intervention and Support. <http://www.excellence-earlychildhood.ca/documents/ColesANGxp.pdf>.

January 2006

Drinking alcohol during pregnancy can cause lifelong disabilities.

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