

Fetal Alcohol Syndrome (FAS)

A Library and Resource Center on Alcohol, Tobacco, Other Drugs, Mental Health and Wellness

What is FAS?

- FAS stands for Fetal Alcohol Syndrome. FAS, a disorder characterized by growth retardation, facial abnormalities and central nervous system dysfunction, is caused by a woman's use of alcohol during pregnancy. FAS is potentially 100% preventable.



What are FAE, ARND, and ARDD?

- Babies affected by alcohol can have some, or all, of the clinical signs of FAS. Other terms have been used to describe children who have some, but not all, of the clinical signs of FAS. Three such terms are FAE, ARDD and ARND. In the past, Fetal Alcohol Effects (FAE) was generally used to describe children who had prenatal alcohol exposure, but only manifested two of the three major components of FAS (i.e., growth retardation, typical facies and central nervous system (CNS) impairment). Because experts in the field were unable to agree on the case definition for FAE, two terms that separately describe disabilities and CNS abnormalities associated with prenatal alcohol exposure were coined: alcohol-related neurodevelopmental disabilities (ARND); and alcohol-related developmental disabilities (ARDD).

How does alcohol cause these problems?

- Alcohol in the mother's blood crosses the placenta freely and enters the embryo or fetus through the umbilical cord. The exact mechanism(s) by which alcohol damages the fetus and critical times of exposure are not known. However, exposure during the first trimester results in the structural defects (i.e., facial changes) characteristic of FAS, whereas the growth and CNS disturbances can occur from alcohol use any time during pregnancy.

What are the effects of prenatal alcohol on the fetus?

- There is no safe level of alcohol use during pregnancy. If a woman drinks while pregnant, she puts her developing fetus at risk for a wide spectrum of adverse effects including: spontaneous abortion; growth retardation; physical, mental, and behavioral abnormalities; facial abnormalities; and CNS impairment, such as developmental delay, speech or language delay, lower IQ, and decreased head circumference. In the worst cases, prenatal exposure to alcohol may result in fetal death.

Does drinking during pregnancy always result in FAS?

- Not all women who drink heavily during pregnancy will have a child with FAS. Why some women are more susceptible than others is not entirely clear. Women can ensure that their babies will not have FAS or any other alcohol-related outcomes if they do not drink during pregnancy.

What is a "drink"? What if I only drink beer or wine coolers?

- All drinks containing alcohol can hurt an unborn baby. A standard 12-ounce can of beer has the same amount of alcohol as a 4-ounce glass of wine or a 1-ounce shot of straight liquor. In addition, some alcoholic drinks, such as malt beverages, wine coolers, and mixed drinks often contain more alcohol than a 12-ounce can of beer.

How much alcohol is reasonably acceptable to drink without running the risk of my child developing FAS?

- There is no safe amount of alcohol that a woman can drink while pregnant. Any time a pregnant woman engages in regular drinking, she increases her chance of having a spontaneous abortion and puts her unborn child at risk for growth deficiencies, learning disabilities, and behavioral problems.

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How do I know my child has been affected by maternal alcohol use?

- FAS is the severe end of a spectrum of effects that can occur when a woman drinks during pregnancy (with fetal death being the most severe case). FAS is a disorder characterized by growth retardation, facial abnormalities, and central nervous system dysfunction. If a pregnant woman drinks alcohol but her child does not have the full symptoms of FAS, it is possible that her child may be born with ARND. Children with ARND do not have full FAS, but may demonstrate learning and behavioral problems caused by prenatal exposure to alcohol. If you think a child may have FAS or other alcohol-related effects, contact a doctor. Children with FAS or ARND may have the following characteristics or exhibit the following behaviors: small for gestational age or small in stature in relation to peers; facial abnormalities such as small eye openings; poor coordination; hyperactive behavior; learning disabilities; developmental disabilities (e.g., speech and language delays); mental retardation or low IQ; problems with daily living; poor reasoning and judgement skills; and sleep and sucking disturbances in infancy. In addition, people with FAS often experience problems as they get older such as mental health problems, disrupted school experiences, trouble with the law, unemployment, and inappropriate sexual behavior.

Is FAS hereditary or is there a hereditary disposition to getting it?

- FAS is not hereditary. FAS can only occur if a woman drinks alcohol during her pregnancy. Currently, it is not known why some children are more likely to develop FAS than other children if their mothers drank during pregnancy.

Can FAS be treated? How?

- FAS is an irreversible, lifelong condition that affects every aspect of a child's life and the lives of his or her family members. With early identification and diagnosis a child with FAS can receive services that help maximize his or her potential. FAS is a birth defect that can be completely prevented.

What are the outcomes of drinking during each trimester of pregnancy?

- The adverse effects of alcohol on an unborn fetus can occur in every trimester. When a mother drinks alcohol so does her fetus because alcohol crosses the placenta freely. Again, there is no "safe" dose of alcohol in pregnancy and there does not appear to be a "safe" period of pregnancy for drinking. In general, abnormal facial features, organs, bones, etc., occur as a result of drinking during the first trimester. Decreased fetal growth is associated with drinking during the third trimester. The brain is developing throughout all trimesters so it can be affected any time during pregnancy.

What are the effects of alcohol on a fetus during the very first weeks-- before I know I am pregnant?

- The pattern and timing of prenatal alcohol use can greatly influence the impact of adverse effects on the fetus. Chronic drinking and binge drinking are recognized as the most dangerous patterns of drinking. The pattern of drinking will partly determine the effects of alcohol on a fetus during the first weeks of pregnancy. Many body parts and organs are developing in the embryonic stage, which is weeks 3 to 8. It is known that during the first 4 weeks of pregnancy, when most women are not aware that they are pregnant, the heart, CNS, eyes, arms, and legs of the fetus are developing. Also, different developing organ systems may be more vulnerable to damage at different stages of development.

How much alcohol is dangerous? Is there anything I can do before becoming pregnant to decrease the chances of having a child with FAS?

- Any amount of alcohol consumed during pregnancy is potentially dangerous to an unborn baby. There is no cure for FAS; it is irreversible. It is never too late for a woman to stop drinking during pregnancy. The sooner a woman quits drinking, the better it will be for her and her baby. If a woman is not able to quit drinking, she should contact her local social service agency or health care provider for alcohol abuse treatment, if needed. If a woman is not yet pregnant, she should use an effective form of birth control until her drinking is under control. The easiest way to prevent FAS is to abstain from alcohol use during pregnancy. Mothers aren't the only ones who can help prevent FAS. Family members, significant others, schools, social organizations and communities can help prevent FAS through education and intervention.