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**Fetal Alcohol Syndrome  
and other  
alcohol-related  
birth defects**



ASSEMBLY HEALTH AND HUMAN SERVICES  
DATE: 05/05 ROOM: 3138 EXHIBIT D1-5  
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# Frequently Asked Questions

## **What are alcohol-related birth defects?**

Alcohol-related birth defects are a wide range of injuries that the fetus suffers as the result of exposure to alcohol during pregnancy. The nature of the defect generally depends upon the severity of the exposure. Alcohol-related birth defects are 100% preventable, because they occur only when a woman drinks alcoholic beverages during pregnancy.

## **What is FAS?**

FAS stands for Fetal Alcohol Syndrome, the most severe of the alcohol-related birth defects. FAS is characterized by growth retardation, facial abnormalities, and central nervous system (CNS) damage.

## **What are FAE, ARND, and ARDD?**

Babies affected by fetal alcohol exposure 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, ARND, and ARDD. In the past, Fetal Alcohol Effects (FAE) was generally used to describe children who had prenatal exposure, but only manifested two of the three major components of FAS (i.e. growth retardation, facial abnormalities, and CNS damage). Because experts in the field were unable to agree on the case definition for FAE, the Institute of Medicine (IOM) coined two terms that separately described disabilities and central nervous system abnormalities associated with prenatal alcohol exposure: 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 mechanisms 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 could occur from alcohol use any time in pregnancy.

# Frequently Asked Questions

## **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 liquors, wine coolers, and mixed drinks often contain more alcohol than a 12-ounce beer.

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

No amount of alcohol has been determined to be safe to drink during pregnancy. Any time a pregnant woman engages in regular drinking she increases her chance of having spontaneous abortion and puts her unborn child at risk for growth deficiencies, learning disabilities, and behavioral problems.

## **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). If you think a child may have an alcohol-related birth defect, 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 judgment skills; and sleep and sucking disturbances in infancy. In addition, people with alcohol related birth defects often experience problems as they get older such as mental health problems, disrupted school experiences, trouble with the law, unemployment, and inappropriate sexual behavior.

Are the consequences of drinking during pregnancy influenced by the timing when the pregnant woman consumes alcohol, i.e. by the trimester in which the drinking occurs?

The adverse effects of alcohol on an unborn baby can occur in every trimester. There is no "safe" dose of alcohol during pregnancy and there does not appear to be a "safe" period of pregnancy for drinking. In general, though, abnormal facial features, organs, bones, etc., occur as a result of drinking during the first trimester, and decreased fetal growth is associated with drinking during the third trimester. The brain, on the other hand, is developing throughout all trimesters, so it can be affected throughout pregnancy.

## **How much do Alcohol-Related Birth Defects cost the taxpayers?**

For a variety of reasons, including the tremendous expense that would be involved in screening all children in Nevada for alcohol-related birth defects, reliable statistics on the frequency of alcohol-related birth defects are not available. The Centers for Disease control generally cites 2 cases of Fetal Alcohol Syndrome (FAS) per 1000 live births as the most likely rate of FAS in the United States. FAS is the most severe of the alcohol-related birth defects. It is anticipated that for each case of FAS there are at least four cases of other alcohol-related birth defects. Because one of the more common injuries that fetal alcohol exposure inflicts upon the fetus is brain damage, all forms of alcohol-related birth defects are debilitating.

Because there is no cure for alcohol-related birth defects, including FAS, the costs of fetal exposure to alcohol continue over the entire course of the child's lifetime.

Estimates of the economic cost of alcohol-related birth defects, including FAS, during the course of each child's lifetime range from \$1.5 million to \$5 million. The Office of National Drug Control Policy estimates that the total annual cost in the United States is \$1.9 billion, which is \$5 million per day.

Much of the economic cost of alcohol-related birth defects, including FAS, is due to the Central Nervous System damage caused by fetal exposure to alcohol:

- Much of the cost of FAS is due to the costs of providing rehabilitation and supportive services to the mentally retarded. FAS is the leading known cause of mental retardation.
- Attention deficit disorder is relatively common among children who have alcohol-related birth defects, and these children commonly require Special Education services.
- Impulse-control is commonly impaired in children with alcohol-related birth injuries. Persons with alcohol-related birth injuries, including FAS, are more likely to:
  - Abuse alcohol and other drugs which, in turn, incurs costs to the taxpayers;
  - Become involved with the criminal-justice system which, in turn, incurs costs to the taxpayers; and
  - Become both victims and perpetrators of child sexual abuse, both of which, in turn, incurs costs to the taxpayers.

- These materials are brought to you through a cooperative effort of
- The Fetal Alcohol Syndrome Subcommittee of the Maternal and Child Health Advisory Board
  - The Nevada March of Dimes
  - The Nevada Health Division

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