

Fetal Alcohol Spectrum Disorders (FASDs)

Facts About FADs

Fetal alcohol spectrum disorders (FASDs) are a group of conditions that can occur in a person whose mother drank alcohol during pregnancy. These effects can include physical problems and problems with behavior and learning. Often, a person with an FASD has a mix of these problems.

Cause and Prevention

FASDs are caused by a woman drinking alcohol during pregnancy. Alcohol in the mother's blood passes to the baby through the umbilical cord. When a woman drinks alcohol, so does her baby.

There is no known safe amount of alcohol during pregnancy or when trying to get pregnant. There is also no safe time to drink during pregnancy. Alcohol can cause problems for a developing baby throughout pregnancy, including before a woman knows she's pregnant. All types of alcohol are equally harmful, including all wines and beer.

To prevent FASDs, a woman should not drink alcohol while she is pregnant, or when she might get pregnant. This is because a woman could get pregnant and not know for up to 4 to 6 weeks. In the United States, nearly half of pregnancies are unplanned.

If a woman is drinking alcohol during pregnancy, it is never too late to stop drinking. Because brain growth takes place throughout pregnancy, the sooner a woman stops drinking the safer it will be for her and her baby. Resources are available [here](#).

FASDs are completely preventable if a woman does not drink alcohol during pregnancy—so why take the risk?

Signs and Symptoms

FASDs refer to the whole range of effects that can happen to a person whose mother drank alcohol during pregnancy. These conditions can affect each person in different ways, and can range from mild to severe.

A person with an FASD might have:

- Abnormal facial features, such as a smooth ridge between the nose and upper lip (this ridge is called the philtrum)
- Small head size

- Shorter-than-average height
- Low body weight
- Poor coordination
- Hyperactive behavior
- Difficulty with attention
- Poor memory
- Difficulty in school (especially with math)
- Learning disabilities
- Speech and language delays
- Intellectual disability or low IQ
- Poor reasoning and judgment skills
- Sleep and sucking problems as a baby
- Vision or hearing problems
- Problems with the heart, kidneys, or bones

Types of FASDs

Different terms are used to describe FASDs, depending on the type of symptoms.

- **Fetal Alcohol Syndrome (FAS):** FAS represents the most involved end of the FASD spectrum. Fetal death is the most extreme outcome from drinking alcohol during pregnancy. People with FAS might have abnormal facial features, growth problems, and central nervous system (CNS) problems. People with FAS can have problems with learning, memory, attention span, communication, vision, or hearing. They might have a mix of these problems. People with FAS often have a hard time in school and trouble getting along with others.
- **Alcohol-Related Neurodevelopmental Disorder (ARND):** People with ARND might have intellectual disabilities and problems with behavior and learning. They might do poorly in school and have difficulties with math, memory, attention, judgment, and poor impulse control.
- **Alcohol-Related Birth Defects (ARBD):** People with ARBD might have problems with the heart, kidneys, or bones or with hearing. They might have a mix of these.

The term fetal alcohol effects (FAE) was previously used to describe intellectual disabilities and problems with behavior and learning in a person whose mother drank alcohol during pregnancy. In 1996, the Institute of Medicine (IOM) replaced FAE with the terms alcohol-related neurodevelopmental disorder (ARND) and alcohol-related birth defects (ARBD).

Diagnosis

The term FASDs is *not* meant for use as a clinical diagnosis. CDC worked with a group of experts and organizations to review the research and develop guidelines for diagnosing FAS. The guidelines were developed for FAS only. CDC and its partners are working to put together diagnostic criteria for other FASDs, such as ARND. [Clinical and scientific research on these conditions is going on now.](#)

Diagnosing FAS can be hard because there is no medical test, like a blood test, for it. And other disorders, such as ADHD (attention-deficit/hyperactivity disorder) and Williams syndrome, have some symptoms like FAS.

To diagnose FAS, doctors look for:

- Abnormal facial features (e.g., smooth ridge between nose and upper lip)
- Lower-than-average height, weight, or both
- Central nervous system problems (e.g., small head size, problems with attention and hyperactivity, poor coordination)
- Prenatal alcohol exposure; although confirmation is not required to make a diagnosis

Treatment

FASDs last a lifetime. There is no cure for FASDs, but research shows that early intervention treatment services can improve a child's development.

There are many types of treatment options, including medication to help with some symptoms, behavior and education therapy, parent training, and other alternative approaches. No one treatment is right for every child. Good treatment plans will include close monitoring, follow-ups, and changes as needed along the way.

Also, "protective factors" can help reduce the effects of FASDs and help people with these conditions reach their full potential.[1, 2](#)

Protective factors include:

- Diagnosis before 6 years of age
- Loving, nurturing, and stable home environment during the school years
- Absence of violence
- Involvement in special education and social services

Get Help!

If you or the doctor thinks there could be a problem, **ask the doctor for a referral to a specialist** (someone who knows about FASDs), such as a developmental pediatrician, child psychologist, or clinical geneticist. In some cities, there are clinics whose staffs have special training in diagnosing and treating children with FASDs. To find doctors and clinics in your area visit the [National and State Resource Directory](#) from the National Organization on Fetal Alcohol Syndrome (NOFAS).

At the same time as you ask the doctor for a referral to a specialist, **call your state's public early childhood system** to request a free evaluation to find out if your child qualifies for intervention services. This is sometimes called a *Child Find* evaluation. You do not need to wait for a doctor's referral or a medical diagnosis to make this call.

Where to call for a free evaluation from the state depends on your child's age:

- **If your child is younger than 3 years old**, contact [your local early intervention system](#).

Find your state's early intervention contact information [here](#).

[Learn more about early intervention](#)

- **If your child is 3 years old or older**, contact your local public school system. Even if your child is not old enough for kindergarten or enrolled in a public school, call your local elementary school or board of education and ask to speak with someone who can help you have your child evaluated.

[Learn more about this process](#)

References

1. Streissguth, A.P., Bookstein, F.L., Barr, H.M., Sampson, P.D., O'Malley, K., & Young, J.K. (2004). Risk factors for adverse life outcomes in fetal alcohol syndrome and fetal alcohol effects. *Developmental and Behavioral Pediatrics*, 5(4), 228-238.
2. Streissguth, A.P., Barr, H.M., Kogan, J. & Bookstein, F. L., Understanding the occurrence of secondary disabilities in clients with fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE). Final report to the Centers for Disease Control and Prevention (CDC). Seattle: University of Washington, Fetal Alcohol & Drug Unit; August 1996. Tech. Rep. No. 96-06.