

Fetal Alcohol Spectrum Disorders (FASD)

Did you know?

Alcohol use during pregnancy is the leading known cause of intellectual disability in the United States.

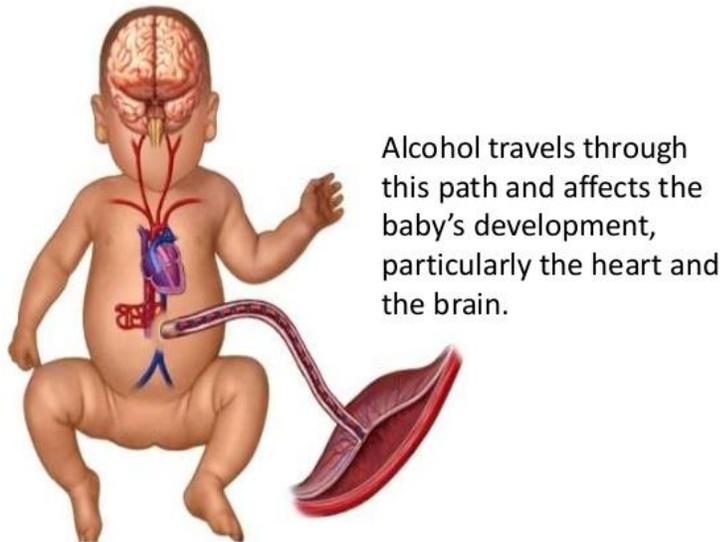
Fetal Alcohol Spectrum Disorders (FASD) affect about 40,000 infants each year. This totals more than Spina Bifida, Down Syndrome, and Muscular Dystrophy combined. According to the Institute of Medicine, "Of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects in the fetus."

What are Fetal Alcohol Spectrum Disorders (FASD)?

Fetal Alcohol Spectrum Disorders (FASD) is an umbrella term that describes a range of effects that can occur in an individual when their mother drinks alcohol during pregnancy. Alcohol is a toxin, or poison. When a pregnant woman drinks, alcohol in the mother's blood passes to the baby through the umbilical cord. The fetus' small body cannot break down the alcohol as quickly as an adult body, so it remains in the baby's blood longer. This, in turn, can affect the way cells grow and multiply.

A baby's brain is particularly sensitive to alcohol. Prenatal exposure to alcohol can reduce the number of brain cells that develop. Particularly with Fetal Alcohol Syndrome (FAS), the brain is often smaller and neurons (nerves that send messages) are often found in the wrong places.

PATHWAY OF ALCOHOL FROM MOTHER TO FETUS

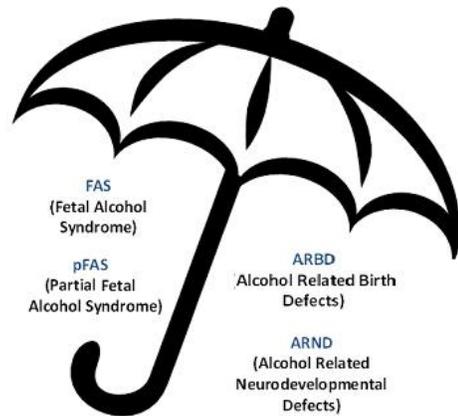


The effects of this interrupted development may include physical, mental, behavioral, and/or learning disabilities. As with other developmental disabilities, the effects of FASD will continue throughout the individual's life.

The umbrella of FASD includes the following specific conditions:

- **Fetal Alcohol Syndrome (FAS)**
- **Partial Fetal Alcohol Syndrome (PFAS)**
- **Alcohol-Related Birth Defects (ARBD)**
- **Alcohol-Related Neurodevelopmental Disorder (ARND)**

Fetal Alcohol Spectrum Disorders



Can FASD be prevented?

FASD can be totally prevented when pregnant women do not drink alcohol. Alcohol can harm an embryo or fetus at any time, including before a woman knows she is pregnant. The best advice for any woman planning a pregnancy is to stop drinking as soon as she starts trying to get pregnant.

If a woman is trying to get pregnant, she might already be pregnant and not know it. Most women don't realize they are pregnant for up to 4 to 6 weeks. This means they might be drinking and exposing the developing baby to alcohol without meaning to do so.

Also, all types of alcohol can affect the developing baby throughout pregnancy. A 4 ounce glass of red wine contains the same amount of alcohol as a 12 ounce can of beer or a 1.5 ounce shot of straight liquor. ***Remember, there is no guaranteed safe level of alcohol use during pregnancy.***

Can FASD be cured or treated medically?

Like other developmental disabilities, FASDs last for a lifetime and cannot be cured. However, individuals with FASD may be helped by some medication. Medications may be prescribed to help lessen the impact of impulsivity, hyperactivity, oppositional behavior, and sleep disorders.

What are the Effects of FASD?

FASDs refer to a range of effects that can happen to a person whose mother drank alcohol during pregnancy. These conditions can affect each person differently, and can range from mild to severe. They can affect the body or the mind, or both.

Some effects of maternal alcohol consumption include:

Physical

- Abnormal facial characteristics
- Growth deficits
- Heart, lung, and kidney damage
- Poor coordination and motor skill delays

Behavioral and Intellectual

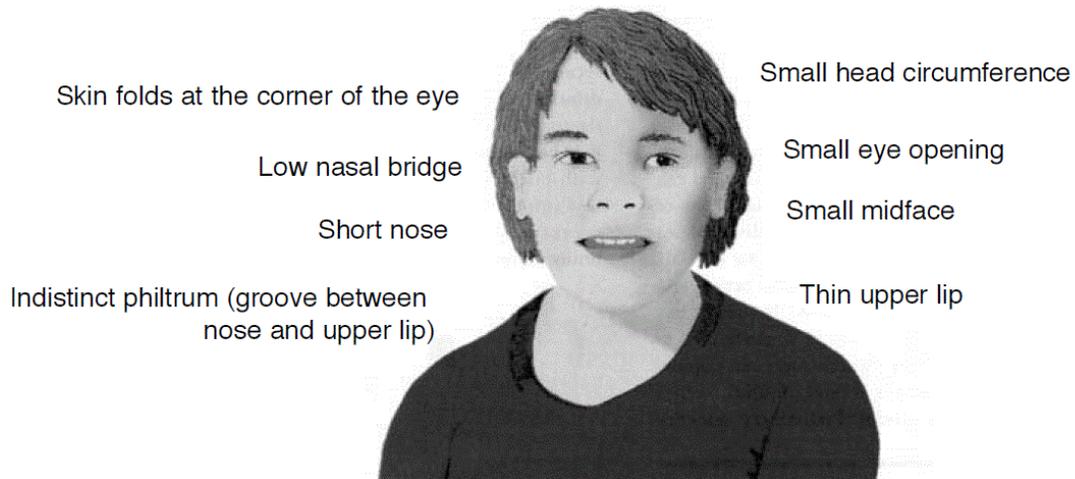
- Intellectual and learning disabilities
- Speech and language delays
- Difficulty with learning and memory
- Difficulty with attention
- Hyperactivity and behavioral problems
- Poor reasoning and judgment skills

Fetal Alcohol Syndrome (FAS)

Of the syndromes associated with FASD, Fetal Alcohol Syndrome (FAS) has the most impact on individuals. A baby born with FAS will have a small head, will weigh less than other babies, and will have distinctive facial features.

Craniofacial features associated with fetal alcohol syndrome

Facial features of FAS



How does FASD impact an individual throughout their life?

Each individual with FASD will have unique physical, education, social and medical needs. However, nearly 80% of adults with FASD do not live independently.

Secondary Conditions

As well, FASD can cause secondary conditions throughout an individual's life, including:

- Mental health issues, like depression and psychotic episodes
- Problems in school
- Trouble with the law
- Drug and alcohol abuse requiring treatment

Prevention of Secondary Conditions

Prevention of these secondary conditions associated with FASD may be possible with educational, health, and psychological services, especially when delivered at a young age. Early diagnosis and intervention, preferably by preschool, improves an individual's ability to maximize their potential.

What are some ways to help individuals with FASD?

Most adults with an FASD will need more help than others to meet the more routine demands of work and home. They may need assistance with employment, money management, housing, and social skills. Many individuals require close supervision to help them make day-to-day decisions and stay safe.

A supportive community is important for everyone, but it is essential for people with an FASD. They need a strong circle of support made up of family members, mentors, direct support providers, job coaches, and others who understand the realities and limitations of FASD. Like other individuals with developmental disabilities, support providers can help create an atmosphere in which individuals with FASD can best thrive.

Supportive environments include:

- Consistent routines
- Limited stimulation
- Concrete language and examples
- Multi-sensory learning experiences (visual, auditory, and tactile)
- Realistic expectations
- Supervision

Additionally, individuals with FASD may experience poor peer or social relationships. They may need encouragement to participate with other adults with disabilities.

Can individuals with FASD work and support themselves?

Many individuals with FASD may have problems with employment. They may also have difficulty understanding and handling money. Given that individual lifetime health costs of FASD can soar to hundreds of thousands, of not millions, of dollars, these individuals may need assistance in providing for themselves financially.

Employment support for individuals with FASD include:

- Providing productive work with structure and routine to reduce stress, enable them to stay focused, and increase their self-esteem
- Emphasizing life skills through pre-employment vocational skills programs
- Providing highly structured, part-time jobs
- Providing on-going job coaching and minor adjustments in work hours and demands

A 1996 study of adults with an FASD conducted by the University of Washington found that:

- 50 percent had trouble finding a job
- 60 percent had trouble keeping a job
- 18 percent achieved independent living, but most had employment problems
- About 80 percent had trouble managing money and making decisions.

What are some strategies for instructing individuals with FASD?

While each individual will learn differently, certain strategies can improve the instructional experience for individuals with FASD:

Provide concrete experiences and language.

Students with FAS do well when support providers talk in concrete terms. Avoid using words with double meanings, idioms, etc. Simplify your language when instructing or giving instructions to individuals with FASD.

Provide consistent learning experiences.

Individual with FASD may experience difficulty trying to transfer learning from one situation to another. Therefore, they do best in an environment with few changes. This includes language. Support providers should coordinate with each other to use the same words for key phases and oral directions.

Use repetition.

Chronic short-term memory problems can cause individuals with FASD to forget things they want to remember as well as information that has been learned and retained for a period of time. In order for something to make it to long term memory, it may need to be taught over and over again. Remain patient and provide lots of encouragement and positive feedback.

Provide routine.

Stable routines that don't change from day to day will make it easier for consumers with FASD to know what to expect next. This will decrease their anxiety, enabling them to learn.

Keep it simple.

Remember to Keep it Short and Sweet (KISS method). Individuals with FASD are easily over stimulated, leading to "shutdown" at which point no more information can be taken in. Therefore, maintain a simple environment and provide simple lessons.

Be specific.

Say exactly what you mean. Remember that individuals with FASD may have difficulty being able to "fill in the blanks" when given a direction. Tell them step by step what to do, developing appropriate habit patterns. Utilize visual aids to enable understanding.

Provide structure.

Structure is the "glue" that helps the world make sense for a individuals with FASD. If this glue is taken away, the walls fall down! Learners with FASD achieve and succeed when their world provides the appropriate structure as a permanent foundation.

Give appropriate supervision.

Because of their cognitive challenges, individuals with FASD may need constant supervision to develop habit patterns of appropriate behavior.

When a situation with a student with FASD is confusing and the intervention is not working, then:

- **Stop Action!**
- **Observe.**
- **Listen carefully to find out where he/she is stuck.**
- **Ask: What is hard? What would help?**

FASD in a Nutshell

- **Fetal Alcohol Spectrum Disorders (FASD) refers to FAS and other alcohol-related birth defects.**
- **FASD is the leading known cause of intellectual disabilities.**
- **Most people with FASD test higher on an IQ test than they are capable of functioning in real life.**
- **FASD causes serious social and behavior problems.**
- **Each year in the US 40,000 babies are born with FASD.**
- **No amount of alcohol is known to be safe during pregnancy.**
- **Alcohol causes more damage to a baby than any other drug.**
- **FASD is 100% preventable.**

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REFERENCES

Eight Magic Keys: Developing Successful Interventions for Students with FAS. Retrieved from

<http://www.fasdcenter.samhsa.gov/documents/EightMagicKeys.pdf>

FASD Intervention. Retrieved from <http://www.nofas.org/wp-content/uploads/2012/05/intervention.pdf>

FASD: What Everyone Should Know. Retrieved from

http://www.nofas.org/wp-content/uploads/2014/08/Fact-sheet-what-everyone-should-know_old_chart-new-chart1.pdf

FASD: What the Business Community Should Know. Retrieved from

<http://www.nofas.org/wp-content/uploads/2012/05/business.pdf>

Independent Living for People with Fetal Alcohol Spectrum Disorders. Retrieved from

http://www.fasdcenter.samhsa.gov/documents/WYNKIndLiving_6_col_orJA_new.pdf

Living with FASDs: In Taylor's Own Words. (2015). Retrieved from

<http://www.cdc.gov/features/fasd-taylors-story/index.html>