CONDITION

Fetal alcohol syndrome

Fetal alcohol syndrome is a lifelong condition caused by alcohol exposure before birth that affects brain development, growth, and facial features.

WHAT IT IS
Lifelong developmental condition caused by prenatal alcohol exposure

BODY SYSTEM
Brain, nervous system, growth, and facial development

MAIN SYMPTOMS
Learning difficulties, attention problems, poor growth, characteristic facial features

WHAT CAUSES IT
Alcohol exposure before birth

HOW IT IS DIAGNOSED
Physical, developmental, and neuropsychological assessment

MAIN TREATMENT
Developmental, educational, behavioral, and medical support

CAN IT BE CURED?
No - brain development effects are lifelong

IS IT AN EMERGENCY?
Sometimes - a seizure or immediate safety risk

LONG-TERM OUTLOOK
Lifelong effects; support often improves daily functioning

Overview

Fetal alcohol syndrome, or FAS, is a lifelong developmental condition caused by alcohol exposure before birth. It can affect how the brain and body develop.

FAS is one diagnosis within fetal alcohol spectrum disorder, or FASD. FASD is an umbrella term for effects linked to prenatal alcohol exposure. FAS refers to a particular pattern of brain-related difficulties and characteristic physical features.

FAS is not an infection, inherited through genes, or contagious. However, genetic differences may help explain why alcohol exposure affects pregnancies differently.

The effects can influence learning, attention, behavior, communication, relationships, and everyday tasks. Some people also have poor growth or problems affecting other organs.

A person's abilities may be uneven. Someone may speak well but struggle to remember instructions, understand consequences, manage time, or apply a lesson in a new setting. Recognizing this pattern helps families and schools provide suitable support.

Symptoms

The effects of FAS differ between people. They may become more noticeable when school, work, or independent living places greater demands on planning and judgment.

Brain and nervous system effects may include:

Some people have a smaller head or differences in brain structure. Seizures can occur but are not present in everyone.

Physical findings may include slow growth before or after birth. The characteristic facial pattern can include short eye openings, a smooth area between the nose and upper lip, and a thin upper lip. These features must be measured by someone trained in FAS diagnosis and may become less obvious with age.

Heart, kidney, bone, hearing, or vision problems can also occur. These findings are not unique to FAS.

Having one symptom, such as attention problems or poor growth, does not mean someone has FAS.

- Difficulties with attention, memory, learning, or problem-solving
- Delayed speech, movement, or social development
- Poor coordination or balance
- Difficulty controlling impulses or adjusting to change
- Problems understanding time, money, danger, or consequences
- Sensitivity to noise, light, touch, or busy surroundings

Causes and risk factors

FAS is caused by alcohol reaching a developing fetus during pregnancy. Alcohol crosses the placenta, and a fetus cannot process it as efficiently as an adult.

Alcohol can interfere with cell growth and brain development. The effects are influenced by when exposure happens, how often alcohol is used, the amount consumed, and individual biological factors. An individual outcome cannot be predicted from the exposure history alone.

No safe amount, type, or time for alcohol use during pregnancy has been established. Beer, wine, spirits, and mixed drinks all contain alcohol.

Not every pregnancy exposed to alcohol results in FAS, but prenatal alcohol exposure is necessary for it to develop. FAS is not caused by parenting, vaccination, or something a child does after birth.

Social pressures, trauma, mental health conditions, limited access to care, and alcohol dependence can affect alcohol use during pregnancy. Assessment and support should be respectful and free from blame.

Diagnosis

There is no single blood test, genetic test, or brain scan that confirms FAS. Diagnosis requires a detailed clinical assessment.

The process may involve a pediatrician, clinical geneticist, psychologist, speech and language therapist, occupational therapist, or other trained professionals. Adults may be assessed through specialist developmental or FASD services where available.

An assessment may include:

Diagnostic criteria differ between health systems. Some frameworks require poor growth, the characteristic facial pattern, and central nervous system impairment. Records of prenatal alcohol exposure may be unavailable, especially for an older child or adult. Whether diagnosis is possible without them depends on the framework and physical findings.

Clinicians may also check for genetic conditions, birth complications, head injury, autism, attention deficit hyperactivity disorder, or other explanations. These may resemble parts of FAS or occur alongside it.

A clear diagnosis can identify support needs. It is not a judgment about the person or family.

- Growth measurements and early medical records
- Careful measurement of facial features
- A physical and neurological examination
- Testing of memory, attention, language, reasoning, and daily living skills
- Hearing and vision checks
- A review of prenatal alcohol exposure when reliable information is available

Treatment and management

No treatment reverses brain changes caused before birth. Management focuses on building skills, adapting the environment, treating associated health problems, and reducing avoidable stress.

Support should match the person's strengths and difficulties. It may include speech and language therapy, occupational or physical therapy, educational support, and help with social or daily living skills.

Helpful approaches may include:

School support may include an individual education plan or similar arrangement. Difficult behavior may reflect memory problems, sensory overload, difficulty changing tasks, or demands beyond the person's developmental skills.

Medication does not treat FAS itself. It may be used for associated attention difficulties, anxiety, depression, sleep problems, or seizures. Decisions require individual assessment because responses and side effects differ.

Regular care may include growth monitoring, dental care, hearing and vision checks, and treatment for heart, kidney, bone, or neurological problems. Mental health support can help with anxiety, low mood, trauma, or relationship difficulties.

- Short instructions given one step at a time
- Visual schedules, reminders, and predictable routines
- Repeated teaching where a skill will be used
- Extra supervision for safety, money, or medication tasks
- Quiet spaces and breaks when sensory input becomes overwhelming

Complications

FAS can affect education, employment, relationships, and independent living. Challenges may become clearer when someone must manage schedules, money, transport, healthcare, or unfamiliar situations without support.

Difficulty judging risk or consequences can increase vulnerability to exploitation, unsafe relationships, accidents, substance use, or contact with the justice system. These outcomes are not inevitable. Clear expectations, appropriate supervision, and stable support can reduce risk.

Anxiety, depression, sleep disorders, attention deficit hyperactivity disorder, and other

conditions may occur alongside FAS. Physical complications depend on which organs were affected.

Repeated punishment for difficulties outside the person's control can damage confidence and mental health. Understanding the developmental cause of behavior can lead to safer, more effective support.

Prevention

FAS can be prevented by avoiding alcohol during pregnancy. Because no safe level or stage has been established, health authorities advise not drinking alcohol when pregnant.

If you drank alcohol before realizing you were pregnant, this does not mean the baby has FAS. Stop drinking and discuss the exposure honestly during prenatal care. Pregnancy checks can monitor growth and development, although they cannot rule FAS in or out.

If avoiding alcohol is difficult, ask for support. Treatment may include counseling, addiction services, mental health care, and practical help. A partner or household can help by keeping alcohol out of the home and supporting alcohol-free activities.

People who may be physically dependent on alcohol should seek medical advice rather than managing withdrawal alone. Severe alcohol withdrawal can cause seizures, hallucinations, or confusion and requires urgent care.

FAS cannot be prevented after exposure has occurred, but early developmental support can improve skills, participation, and safety.

Living with it and what to expect

FAS is lifelong, but its effects vary by setting and age. Facial differences may become less distinct, while difficulties with planning, judgment, memory, or independent living may become clearer.

Children may need repeated teaching and more supervision than their language skills suggest. A skill learned in one place may not transfer automatically to another. This reflects brain development, not laziness or deliberate disobedience.

Teenagers often need direct teaching about relationships, online safety, alcohol and drugs, transport, and money. Planning for adulthood may include supported education, employment coaching, help with benefits, or supervised housing.

Some adults live independently. Others need ongoing help with appointments, finances, work,

parenting, or legal decisions. Support should be based on the person's abilities and environment, not the diagnosis alone.

Stable relationships, realistic expectations, predictable routines, and recognition of strengths can improve daily life. Regular review is useful because needs can change with school transitions, work, relationships, aging caregivers, or new health problems.

When to get medical help

Arrange a routine appointment if a child has persistent concerns involving growth, learning, attention, coordination, communication, or behavior. Assessment may be appropriate when prenatal alcohol exposure is known or suspected, although these concerns can have other causes.

Seek routine follow-up for worsening school performance, sleep problems, anxiety, low mood, hearing or vision concerns, or difficulty with everyday tasks. Adults who think a diagnosis was missed can ask about developmental, neuropsychological, or FASD assessment.

If you are pregnant and drinking alcohol, contact a prenatal care or addiction service. Seeking help early can reduce further exposure. If you drink heavily or develop withdrawal symptoms when you stop, get medical advice promptly.

Call emergency services for:

FAS itself is not usually an emergency. Emergency care is needed for acute medical or safety problems.

- A first seizure, a prolonged seizure, or repeated seizures
- Trouble breathing, severe injury, or suspected alcohol poisoning
- Severe withdrawal with confusion, hallucinations, or seizures
- Suicidal behavior or an immediate risk of harm to anyone

Common questions

Is fetal alcohol syndrome the same as FASD?

No. FASD is the broader term for conditions linked to prenatal alcohol exposure. FAS is one diagnosis within that spectrum and includes a specific combination of developmental and physical findings.

Can one drink cause fetal alcohol syndrome?

An individual outcome cannot be predicted from one drink or episode. There is no established safe amount of alcohol during pregnancy, but exposure does not automatically mean FAS will develop. If exposure occurred, stop drinking and discuss it during prenatal care.

Can an ultrasound diagnose fetal alcohol syndrome?

No. An ultrasound may identify poor growth or certain structural problems, but it cannot assess the brain function and facial findings needed for diagnosis. Assessment usually happens after birth and may take time.

Can fetal alcohol syndrome be cured?

No. The developmental brain effects are lifelong. Treatment can address associated medical conditions and help with skills, daily tasks, school, work, and relationships.

Can adults have fetal alcohol syndrome?

Yes. Children with FAS grow into adults with the condition. Some adults were not assessed in childhood, especially if exposure records were unavailable or their difficulties were attributed to another condition.

Is fetal alcohol syndrome inherited or contagious?

No. It is caused by alcohol exposure before birth, not an inherited gene or infection. Genetic differences may influence vulnerability, but a person with FAS cannot pass the condition to someone else.

Sources

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