Characteristics and Symptoms of Fetal Alcohol Syndrome

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Fetal Alcohol Syndrome
FAS is a set of mental and physical disorders that can include mental retardation, brain dysfunction, physical abnormalities, learning disabilities, and psychological disorders. FAS occurs as a result of prenatal exposure to alcohol.

Alcohol causes more damage to the developing fetus than any other substance, including marijuana, heroin, and cocaine. (Institute of Medicine, 1996)

The effects can be severe or mild, ranging from loss of IQ points, attention deficit disorder and learning disabilities to heart defects, cerebral palsy, brain dysfunction, and death. Many children experience serious behavior and social problems that last a lifetime.


Over 5,000 babies each year in the U.S. are born with FAS. Between 35,000 and 50,000 are born with related disorders. However, most cases go undiagnosed or misdiagnosed.

A diagnosis of Fetal Alcohol Syndrome (FAS) is based on certain criteria: facial features, small birth weight, central nervous system dysfunction, and history of prenatal exposure to alcohol. Babies who do not have all the physiological symptoms may be given a diagnosis of Fetal Alcohol Effects (FAE).

Facial Features
Babies with FAS have many (but not always all) of the following characteristics:

- Epicanthal folds
- Small, widely spaced eyes
- Flat midface
- Short, upturned nose
- Smooth, wide philtrum
- Thin upper lip
- Underdeveloped jaw

One or two of these facial features can occur in a healthy child as a matter of genetics, features that are inherited from a birth parent. Only when several of these features are present along with central nervous system symptoms together with prenatal alcohol exposure can FAS be considered for diagnosis.
Note: Facial characteristics may not be as apparent immediately after birth or during adolescence or adulthood as they are between the ages of two and ten.

**Physiological Anomalies**
Babies with FAS may have low birth weight, and may have trouble gaining weight. The head circumference may be smaller than normal. Some infants may have heart defects or suffer anomalies to the ears, eyes, liver, or joints.

**Developmental Delays**
Most children with FAS have developmental delays and some have lower than normal IQ. The degree of physiological characteristics usually correspond with the degree of developmental delays. Most children with FAS have IQs that are legally considered in the "normal" range.

**Central Nervous System**
Most infants with FAS are irritable, don't eat well, don't sleep well, are extra sensitive to sensory stimulation, and have a strong startle reflex. They may hyperextend their heads or limbs, and can exhibit hypertonia (too much muscle tone) or hypotonia (too little muscle tone) or both.

**Invisible but Serious**
The most serious characteristics of FAS are the invisible symptoms of neurological damage that results from prenatal exposure to alcohol. These symptoms can occur in FAS or FAE:

- Attention deficits
- Memory deficits
- Hyperactivity
- Difficulty with abstract concepts (math, time, money)
- Poor problem solving skills
- Difficulty learning from consequences
- Poor judgment
- Immature behavior
- Poor impulse control

Note: These symptoms are not “behavior problems” but are a result of permanent, unchanging damage to the brain (static encephalopathy) and are not always within the child’s control.

Adults with FAS have difficulty maintaining successful independence. They have trouble staying in school, keeping jobs, or sustaining healthy relationships. Children and adults with FAS are also quite vulnerable to physical, sexual, and emotional abuse.
Without early intervention services, these individuals have a high risk of developing secondary conditions such as mental illness, trouble with the law, trouble with school, abusing alcohol and other drugs, and unwanted pregnancies.