

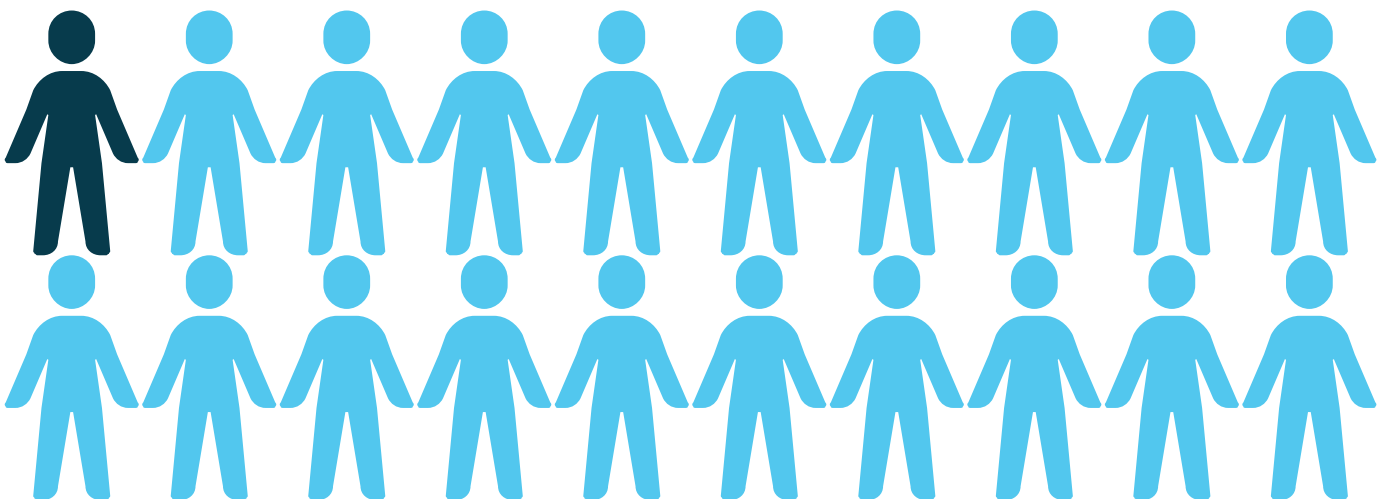
Fetal Alcohol Spectrum Disorders

Fetal Alcohol Syndrome and Beyond

Overview of FASD

Fetal Alcohol Spectrum Disorders (FASD) are a range of conditions attributable to prenatal alcohol exposure (PAE) that include behavioral, learning and physical problems. FASD are permanent and among the most common preventable developmental disabilities in the U.S. Approximately 1 of every 13 pregnant women who consumed alcohol during pregnancy delivered a child with FASD.¹⁻³

How Common is FASD?^{2,4-9}



1 IN **20** school-aged children
are affected by **FASD***

*Actual FASD numbers are unknown. This is likely a conservative estimate.

For comparison...

Autism Spectrum Disorder
1 in 44 school-aged children

Down Syndrome
1 in 700 births

Spina Bifida
1 in 2,758 births

Effects of FASD



Physical Manifestations

- Low birth weight and growth restriction
- Problems with the heart, kidneys, and other organs
- Atypical brain development and function
- Facial dysmorphology and small head size



Neurobehavioral Manifestations

- Learning disabilities
- Lower IQ
- Hyperactivity
- Difficulty with attention
- Difficulty with social communication
- Difficulty with memory^{[10](#)}
- Challenges with executive functioning
- Impulsivity and distractibility
- Challenges with social boundaries



Life-long Challenges

- Low academic attainment
- Challenges with social skills
- Challenges with independent living skills
- Increased risk for homelessness
- Mental health concerns
- Substance misuse and substance use disorders
- Employment difficulties
- Inappropriate sexual behavior
- Trouble with the law
- Vulnerability to victimization^{[11,12](#)}

Diagnoses Across the FASD Spectrum

The FASD spectrum includes the following diagnoses that represent a wide range of neurobehavioral challenges:[2.3.13](#)

1 **FAS:** Fetal alcohol syndrome

FAS represents the most involved end of the FASD spectrum. People with FAS have central nervous system (CNS) problems, abnormal facial features, and growth 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 may struggle in school and to socialize or get along with others.

2 **pFAS:** Partial fetal alcohol syndrome

When a person does not meet the full diagnostic criteria for FAS but has a history of prenatal alcohol exposure and some of the facial features, as well as a growth problem or CNS abnormalities, the person is considered to have pFAS.

3 **ARND:** Alcohol-related neurodevelopmental disorder

People with ARND have confirmed prenatal alcohol exposure (PAE) in addition to neurobehavioral impairment. They might have intellectual disabilities, problems with behavior and learning, do poorly in school and have difficulties with math, memory, attention, judgment, and poor impulse control.

4 **ARBD:** Alcohol-related birth defects

People with ARBD might have problems with the heart, kidneys, bones, or hearing.

5 **ND-PAE:** Neurobehavioral disorder associated with PAE

A child or youth with ND-PAE will have problems thinking and with their memory; behavior problems, such as severe tantrums, mood issues (e.g., irritability), and difficulty shifting attention from one task to another; trouble with day-to-day living, which can include problems with bathing, dressing for the weather; and playing with other children.

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