FETAL ALCOHOL SPECTRUM DISORDERS



What are Fetal Alcohol Spectrum Disorders (FASD)?

Fetal alcohol spectrum disorders (FASD) represent a range of physical, mental, and behavioral disabilities caused by alcohol use during pregnancy and are one of the leading developmental disabilities in the world.

Fetal alcohol spectrum disorders include diagnoses of fetal alcohol syndrome (FAS), partial FAS, and alcohol-related neurodevelopmental disorders. The specific diagnosis depends on the symptoms present. There are five characteristics that are assessed in a FASD evaluation (1):

- 1. A prenatal alcohol exposure, defined as consuming 60 grams per week for 2 weeks or more, or 30 grams or more on two or more occasions during any period of the pregnancy.
- 2. Facial features, with two of the three main facial features: small opening between the eyelids, thin upper lip, and a smooth groove between the upper lip and nose. These require measurements and should not be used by non-professionals for a diagnosis.

- **3. Growth anomalies.** These are defined as individuals with low height and/or weight for their age.
- 4. Central nervous system anomalies, with one or more of the following: small head circumference, structural brain anomalies, or recurrent non-fever related seizures.
- **5.** Neurobehavioral impairments, such as brain impairments in perception, learning, memory, mood regulation, attention, and behavior control.

Fetal alcohol spectrum disorders are diagnosed by exclusion, having first ruled out any other condition that would better explain the features seen in an individual.

Fetal alcohol spectrum disorders are often misdiagnosed or underdiagnosed, thus delaying impactful interventions. A multidisciplinary team of providers including physicians, psychologists, allied health professionals, and social workers who understand the diagnostic requirements is crucial for an accurate FASD diagnosis.

FACT 3:

It is estimated that over 11 million individuals in the general population between the ages of 0–18 years have FASD: 25 million between the ages of 0–40 years (2).

FACT 4:

FASD prevalence is 10 to 40 times higher in some sub-populations (e.g., children in care, correctional, special education and specialized clinical settings) than in the general population globally (2).

FACT 1:

One out of every 10 pregnancies is exposed to alcohol worldwide (2).

FACT 2:

Globally, there are 630,000 children born with FASD every year (3), of which an estimated 119,000 children are born with FAS.





FETAL ALCOHOL SPECTRUM DISORDERS

What are the consequences of FASD?

Fetal alcohol spectrum disorders affect children and adults by impairing physical and mental abilities, including vision and hearing problems, mood, memory, behavioral regulation, attention, and impulse control (1, 4).

Individuals with the most severe cases of FASD may also have physical problems such as organ defects, teeth malformations, nervous system and musculoskeletal diseases (1, 4).

Fetal alcohol spectrum disorders impair learning, writing, reading, memory, and speech abilities, leading to poor academic performance, obtaining/maintaining employment, and other problems later in life (1, 3–4).



Why it is important to recognize FASD?



- •Fetal alcohol spectrum disorders are a life-long disorders that requires consistent support from parents, caregivers, teachers, and the community to create inclusive healthy environments to maximize individuals living with FASD well-being and avoid stigmatization (1, 5).
- •Identification and diagnosis allow for interventions and supports, which may help prevent a range of adverse outcomes later in life such as mental health concerns, disruptive school experiences, involvement in the criminal justice system, difficulties with independent living and inappropriate sexual behavior (1, 3, 5).
- Individuals with FASD can be successful when people understand their disabilities, provide the appropriate support and advocate for them across systems (5).

What actions should be taken?



- When a FASD diagnosis is suspected, it is important to initially exclude any other possible causes of the symptoms such as a genetic disorder that may require specific medical interventions.
- Increase public awareness and understanding of FASD so that individuals living with FASD, and their caregivers, get the information they need to access all services and resources available without discrimination.
- Early referrals to services such as speech and language therapy

- or physical therapy are important in optimizing function and social participation of individuals with FASD.
- Ensure caregiver and provider interventions are available across the lifespan of the child, and these interventions are proactive, individualized, comprehensive, and coordinated across systems.

Individualized educational and academic support for children with FASD in school settings provided by trained educators (1, 5).

Key recommendations

- Prenatal alcohol exposure and, therefore, FASD can be prevented.
- Screening, brief interventions and referrals to treatment should be available to all parents, caregivers, and those of reproductive age, especially before they become pregnant.
- Individuals living with FASD are unique and have their own strengthens and interests. Recognition and inclusivity of individuals living with FASD in the community are needed to provide appropriate support and services to help them thrive.

References

- Pan American Health Organization. Assessment of Fetal Alcohol Spectrum Disorders. Washington, DC: PAHO; 2020. Available from: https://doi.org/10.37774/9789275122242
- Popova S, Lange S, Shield K, Burd L, Rehm J. Prevalence of fetal alcohol spectrum disorder among special subpopulations: a systematic review and meta-analysis. Addiction. 2019;114(7):1150–72.
- 3. Popova S, Lange S, Shield K, Mihic A, Chudley AE, Mukherjee RA, et al. Comorbidity of fetal alcohol spectrum disorder: a systematic review and meta-analysis. Lancet. 2016;5(387-10022):978–87.
- 4. Popova S, Lange S, Probst C, Gmel G, Rehm J. Estimation of national, regional, and global prevalence of alcohol use during pregnancy and fetal alcohol syndrome: a systematic review and meta-analysis. Lancet Glob Health. 2017; (3):e290-9.
- Common messages CANFASD. Common messages guidelines for talking and writing about FASD. Ottawa: Canada FASD Research Network; 2022. Available from: https://canfasd.ca/wp-content/uploads/2022/03/Common-Messages-2022.pdf

PAHO/NMH/MH/22-0020

© Pan American Health Organization, 2022.

Some rights reserved. This work is available under license



CC BY-NC-SA 3.0 IGO.

