

# What is FASD?

## What is FASD?

Drinking alcohol during pregnancy can cause fetal alcohol spectrum disorders (FASD). FASD includes birth defects, brain injury and disabilities.<sup>1,2</sup> As many as 1 in 20 children in the United States has an FASD.<sup>3</sup>

## What are the Signs of FASD?

FASD is a spectrum. This means that it does not look the same in everyone. In general, some of the signs to look for include:

- Trouble paying attention<sup>4</sup>
- Memory issues<sup>5</sup>
- Poor social skills<sup>6</sup>
- Impulsive behavior<sup>7</sup>
- Hearing or vision problems<sup>8</sup>
- Difficulty in school<sup>9</sup>
- Being sensitive to light, touch, or sound<sup>10</sup>
- Hyperactive behavior<sup>11</sup>

Please note that these are only some of the effects linked to FASD. If you have questions or concerns about other behaviors, ask your health care provider if they could be a sign of FASD.

## How is FASD Diagnosed?

There is not a simple test to tell if someone has an FASD.<sup>12</sup> Instead, a trained team has to do different types of testing before they can make a diagnosis. Getting the right diagnosis can help families get the services and support they need. To learn more about the assessment process, visit [proofalliance.org](http://proofalliance.org).

## How is FASD cured?

There is no cure for FASD. Drinking during pregnancy affects how the child's brain develops.<sup>13</sup> These changes to the brain are lifelong.<sup>14</sup> Even drinking at low levels can affect development.<sup>15</sup> However, everyone with an FASD has the ability to succeed. Support and interventions can improve outcomes and well-being for people with an FASD!<sup>16</sup> Early intervention is especially helpful.<sup>17</sup>

## How can FASD be prevented?

FASD is 100% preventable with the right information and support.<sup>18</sup> If someone is pregnant or might become pregnant, all major health groups recommend they do not drink alcohol. These groups include:

- Centers for Disease Control (CDC)<sup>19</sup>
- American Academy of Pediatrics<sup>20</sup>
- American College of Obstetricians and Gynecologists (ACOG)<sup>21</sup>
- U.S. Surgeon General<sup>22</sup>
- World Health Organization<sup>23</sup>

There is no known safe amount of alcohol during pregnancy. Because of this, the safest choice is to not drink any alcohol from conception through birth.<sup>24</sup>

## Everyone plays a role in preventing FASD:

- If you can become pregnant, talk with your care provider about preventing an alcohol exposed pregnancy.
- If you are a health care provider, take every opportunity to have conversations with patients about alcohol use before and during pregnancy.
- Become an advocate for change as it relates to alcohol policies in your community and state.
- Learn more about FASD and how you can support those impacted by this disorder at [proofalliance.org](http://proofalliance.org).

## Sources:

1. Lebel C, Roussotte F, Sowell ER. Imaging the impact of prenatal alcohol exposure on the structure of the developing human brain. *Neuropsychol Rev.* 2011;21:102-118.
2. Subramoney S, Eastman E, Adams C, Stein DJ, Donald KA. The early developmental outcomes of prenatal alcohol exposure: A review. *Frontiers in Neurology.* 2018;9.
3. May et al. Prevalence of Fetal Alcohol Spectrum Disorders in 4 US Communities. *JAMA.* 2018;319(5): 474-482.
4. Viteri OA, Soto EE, Bahado-Singh RO, Christensen CW, Chauhan SP, Sibai BM. Fetal anomalies and long-term effects associated with substance abuse in pregnancy: A literature review. *American Journal of Perinatology.* 2015;32(5):405-415.
5. Comasco E, Rangmar J, Eriksson UJ, Orelund L. Neurological and neuropsychological effects of low and moderate prenatal alcohol exposure. *Acta Physiologica.* 2018;222:e12892.
6. Panczakiewicz AL, et al. Neurobehavioral deficits consistent across age and sex in youth with prenatal alcohol exposure. *Alcohol Clin Exp Res.* 2016;40(9):1971-1981.
7. Fuglestad AJ, Whitley ML, Carlson SM, et al. Executive functioning deficits in preschool children with Fetal Alcohol Spectrum Disorders. *Child Neuropsychology.* 2015;21(6):716-731.
8. Stephen JM, et al. Delays in auditory processing identified in preschool children with FASD. *Alcohol Clin Exp Res.* 2012;36(10):1720-1727.
9. Domeij H, et al. Experiences of living with fetal alcohol spectrum disorders: A systematic review and synthesis of qualitative data. *Developmental Medicine & Child Neurology.* 2018;60:741-752.
10. Fjeldsted B, Xue L. Sensory processing in young children with fetal alcohol spectrum disorder. *Physical & Occupational Therapy in Pediatrics.* 2019;39(5):553-565.
11. Subramoney S, Eastman E, Adams C, Stein DJ, Donald KA. The early developmental outcomes of prenatal alcohol exposure: A review. *Frontiers in Neurology.* 2018;9.
12. Coles CD, Gailey AR, Mulle JG, Kable JA, Lynch ME, Jones KL. A comparison among 5 methods for the clinical diagnosis of fetal alcohol spectrum disorders. *Alcohol Clin Exp Res.* 2016;40(5):1000-1009.
13. Noor S, Milligan ED. Lifelong Impacts of Moderate Prenatal Alcohol Exposure on Neuroimmune Function. *Frontiers in Immunology.* 2018.
14. Treit et al. Longitudinal MRI reveals altered trajectory of brain development during childhood and adolescence in fetal alcohol spectrum disorders. *Journal of Neuroscience.* 2013;33(24):10098-109.
15. Terasaki LS, Schwarz JM. Impact of Prenatal and Subsequent Adult Alcohol Exposure on Pro-Inflammatory Cytokine Expression in Brain Regions Necessary for Simple Recognition Memory. *Brain Sciences (2076-3425).* 2017;7(10):1-16.

## Sources Continued:

16. Rutman D. Becoming FASD informed: Strengthening practice and programs working with women with FASD. *Substance Abuse: Research and Treatment*. 2016;10(S1):13-20.
17. Hagan JF, et al. Neurobehavioral disorder associated with prenatal alcohol exposure. *Pediatrics*. 2016;138(4):e20151553.
18. Hubberstey C, Rutman D, Hume S, Van Bibber M, Poole N. Toward an Evaluation Framework for Community- Based FASD Prevention Programs. *Canadian Journal of Program Evaluation*. 2015;30(1):79-89.
19. Centers for Disease Control and Prevention. Fetal Alcohol Spectrum Disorders (FASDs). <https://www.cdc.gov/ncbddd/fasd/alcohol-use.html>
20. American Academy of Pediatrics. AAP Says No Amount of Alcohol Should Be Considered Safe During Pregnancy. <https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/AAP-Says-No-Amount-of-Alcohol-Should-be-Considered-Safe-During-Pregnancy.aspx>
21. American College of Obstetricians and Gynecologists (ACOG). Fetal alcohol spectrum disorders (FASD) prevention program. <https://www.acog.org/About-ACOG/ACOG-Departments/Tobacco--Alcohol--and-Substance-Abuse/Fetal-Alcohol-Spectrum-Disorders-Prevention-Program>
22. Centers for Disease Control and Prevention. Notice to Readers: Surgeon General's Advisory on Alcohol Use in Pregnancy. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5409a6.htm>
23. World Health Organization. Counting the Costs of Drinking Alcohol During Pregnancy. <https://www.who.int/bulletin/volumes/95/5/17-030517/en/>
24. Roozen S, Peters G-JY, Kok G, et al. Systematic literature review on which maternal alcohol behaviours are related to fetal alcohol spectrum disorders (FASD). *BMJ Open*. 2018;8:e022578.