

FETAL ALCOHOL SPECTRUM DISORDERS BY THE NUMBERS



WHAT YOU NEED TO KNOW

Disorder	Prevalence
FAS	1 in 1000
ARND	1 in 1000
ARBD	1 in 1000
FASD (Total)	1 in 1000

WHAT IS FASD?

“Fetal alcohol spectrum disorders” (FASD) is an umbrella term describing the range of effects that can occur in an individual who was prenatally exposed to alcohol. These effects may include physical, mental, behavioral, and/or learning disabilities with lifelong implications. FASD

is not a diagnostic term used by clinicians. It refers to specific conditions such as fetal alcohol syndrome (FAS), alcohol-related neurodevelopmental disorder (ARND), and alcohol-related birth defects (ARBD).

FASD DATA: WHAT ARE THE CHALLENGES?

Data on FASD are limited due to lack of diagnostic criteria. Only FAS has diagnostic guidelines. A diagnosis of FAS has three major components: distinctive facial features, growth deficiencies, and brain damage.

Associated behavioral or cognitive problems may include mental retardation, learning disabilities, attention deficits, hyperactivity, poor impulse control, and social, language, and memory deficits.

ARND and ARBD describe cases in which individuals were prenatally exposed to alcohol and have some, but not all, signs of FAS. ARND refers to the various neurologic abnormalities, while ARBD describes defects in the skeletal and major organ systems. Individuals with ARND and ARBD do not have the distinctive FAS facial features.

IS FASD A SIGNIFICANT PROBLEM?

FASD is the leading known cause of mental retardation. In the United States:

- Prevalence of FAS is estimated to be between 0.5 and 2 per 1,000 births.¹
- Prevalence of FAS, ARND, and ARBD combined is at least 10 per 1,000, or 1 percent of all births.¹
- Based on the above rates of FAS, ARBD, and ARND, FASD affects at least 40,000 newborns each year.¹
- The cost to the nation of FAS alone may be up to \$6 billion each year.²
- For one individual with FAS, the lifetime cost is at least \$2 million.²

WHO IS AT RISK?

Any woman of childbearing age is at risk of having a child with an FASD if she drinks alcohol during pregnancy. Alcohol can harm a fetus at any time, even before a woman knows she is pregnant. Many women drink early in pregnancy but stop drinking when they learn they are pregnant. Others cannot stop drinking without help. Women who have given birth to children with an FASD and continue to drink are at very high risk of having additional children with an FASD.

Drinking Among Women Age 15 to 44

In the United States:

- 1 in 2 reports using alcohol use in the past month.³
- Approximately 1 in 4 reports binge drinking (defined as 4 or more drinks for a woman, 5 or more for a man, on one occasion).^{3,4}
- About 1 in 20 reports heavy alcohol use (defined as binge drinking on at least 5 days in the last month).³

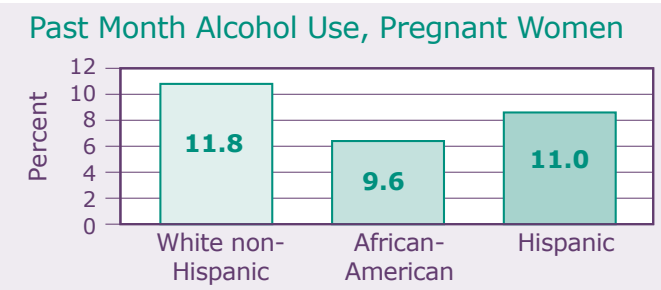
Drinking Among Pregnant Women

In the United States:

- 1 in 30 pregnant women reports high-risk drinking (7 or more drinks per week, or 5 or more drinks on any one occasion).⁵
- 1 in 9 pregnant women binge drinks in the first 3 months of her pregnancy.³
- 1 in 30 pregnant women drinks at levels that increase the risk of FASD.⁶
- More than 1 in 5 pregnant women report alcohol use in the first trimester, 1 in 14 in the second trimester, and 1 in 20 in the third trimester.³
- Those who are unmarried and over 30 tend to have the highest rates of alcohol use in pregnancy.⁷ However, in 2004, the rate of past month binge drinking among pregnant women age 15 to 17 (8.8%) was more than twice that of pregnant women age 26 to 44 (3.8%).³
- Among women of childbearing age entering substance abuse treatment, 4% were pregnant. Eighteen percent of pregnant women entering treatment say that alcohol is their primary substance of abuse.⁸



- Alcohol use during pregnancy varies by race. The chart below shows alcohol use among white, African American, and Hispanic pregnant women.³ Estimates were not available for other ethnic groups.



Identified Risk Factors

A profile of 80 women in Washington State who have given birth to a child with FAS reveals several risk factors for drinking during pregnancy:

- 96% had at least one mental illness.
- 95% had a history of sexual or physical abuse.
- 61% had less than a high school education.
- 77% had an unplanned pregnancy, 81% had no birth control, and 92% wanted some form of birth control.
- 59% had an annual gross household income less than \$10,000.⁹

The study also identified factors that had helped pregnant women avoid alcohol. These included mental illness treatment and large social support networks.

WHAT PROBLEMS DO PEOPLE WITH AN FASD FACE?

People with an FASD are vulnerable to a range of difficulties, such as failure in school, substance abuse, mental illness, and involvement in the criminal justice system. A University of Washington study shows the percentage of people age 6 to 51 with an FASD who had difficulties in the following areas:

- 94% had mental health problems.
- 23% had received inpatient care for mental illness.
- 83% of adults experienced dependent living.
- 79% of adults had employment problems.
- 60% of those age 12 and older had trouble with the law.
- 35% of adults and adolescents had been in prison for a crime.
- 45% engaged in inappropriate sexual behavior.
- 43% had disrupted school experiences (e.g., dropped out).
- 24% of adolescents, 46% of adults, and 35% overall had alcohol and drug problems.¹⁰

CAN FASD BE PREVENTED?

The most important statistic to remember about FASD is that it is 100% preventable. The only cause of an FASD is prenatal exposure to alcohol. If a woman does not drink during pregnancy, her baby will not have an FASD. Individuals who already have an FASD should receive an accurate diagnosis and appropriate treatment, prevention, and support services. FASD prevention and treatment strategies present an opportunity to address FASD, raising hope for families everywhere.

REFERENCES

- May, P.A., and Gossage, J.P. 2001. Estimating the prevalence of fetal alcohol syndrome: A summary. *Alcohol Research & Health* 25(3):159-167. www.niaaa.nih.gov/publications/arh25-3/159-167.htm.
- Lupton, C.; Burd, L.; and Harwood R. 2004. Cost of fetal alcohol spectrum disorders. *American Journal of Medical Genetics* 127C (671):42-50.
- Office of Applied Studies. 2005. *Results From the 2004 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- National Institute on Alcohol Abuse and Alcoholism. 2004. NIAAA Council Approves Definition of Binge Drinking. NIAAA Newsletter. Winter 2004 No.3. http://pubs.niaaa.nih.gov/publications/Newsletter/winter2004/Newsletter_Number3.htm
- National Center on Birth Defects and Developmental Disabilities. July 2004. *Alcohol Use and Pregnancy*. www.cdc.gov/ncbddd/factsheets/FAS_alcoholuse.pdf.
- National Center on Birth Defects and Developmental Disabilities. August 2004. Preventing alcohol-exposed pregnancies. www.cdc.gov/ncbddd/fas/fasprev.htm.
- Centers for Disease Control and Prevention. 2002. Alcohol use among women of childbearing age—United States, 1991-1999. *MMWR* 51(13): 273-276. www.cdc.gov/mmwr/preview/mmwrhtml/mm5113a2.htm.
- Office of Applied Studies. 2004. *Pregnant Women in Substance Abuse Treatment: 2002. The DASIS Report*. Rockville, MD: Substance Abuse and Mental Health Services Administration. www.oas.samhsa.gov/2k4/pregTX/pregTX.htm.
- Fetal alcohol syndrome primary prevention through FAS diagnosis: II. A comprehensive profile of 80 birth mothers of children with FAS. *Alcohol & Alcoholism* 2000, 35(5):509-519. www.alcalc.oupjournals.org/cgi/content/full/35/5/509.
- Streissguth, A.P.; Bookstein, F.L.; Barr, H.M.; et al. 2004. Risk factors for adverse life outcomes in fetal alcohol syndrome and fetal alcohol effects. *Journal of Developmental and Behavioral Pediatrics* 25(4):228-238.

Stop and think. If you're pregnant, don't drink.

For more information, visit fasdcenter.samhsa.gov or call 866-STOPFAS.

www.stopalcoholabuse.gov



SAMHSA
Fetal Alcohol Spectrum Disorders
Center for Excellence