



COUNTY OF SANTA CLARA
Behavioral Health Services

FETAL ALCOHOL SPECTRUM DISORDER (FASD) TOOLKIT
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Introduction to FASD

WHAT IS FASD?

Fetal alcohol spectrum disorders (FASD) is an umbrella term describing the range of conditions that can occur in a baby exposed to alcohol in the womb. These effects are lifelong and can include physical, mental, behavioral and/or learning problems. Often, a person with an FASD has a combination of these problems.³



CAUSE OF FASD

FASDs are caused by a woman's drinking alcohol during pregnancy. Alcohol in the mother's blood passes to the baby through the umbilical cord.¹

- There is no known amount of alcohol that is safe to drink during pregnancy. All drinks that contain alcohol, including wine and beer, can cause lifelong harm to a developing baby. Even small amounts of alcohol can result in damage.¹
- Alcohol interferes with brain development in at least the following ways: cell death, impairments in cell migration, gene expression, and cell adhesion.⁸
- Drinking during the first trimester can also cause the heart, skeleton and other systems to develop incorrectly, in addition to the brain damage of FASD.⁵

TYPES OF FASDs

- Fetal Alcohol Syndrome (FAS) is the most visible disorder associated with prenatal alcohol exposure. The criteria are abnormal facial features, below average height and/or weight, and central nervous system abnormalities.²
- Partial Fetal Alcohol Syndrome (PFAS) is a disorder that meets 2/3 of the FAS criteria.
- Individuals with Alcohol Related Neurodevelopmental Disorder (ARND) experience intellectual disabilities and problems with behavior and learning caused by abnormalities in the brain or central nervous system.²
- Individuals with Alcohol-Related Birth Defects (ARBD) may have problems with the heart , kidneys, and/or bones, as well as with hearing and/or vision.²

EFFECTS OF FASD

Many symptoms of FASD cannot be identified at birth but become more recognizable later on. Early and accurate diagnosis is key to receiving appropriate educational and mental support. Outcomes associated with prenatal alcohol exposure may include:

- Difficulty with learning due to poor memory and attention
- Hyperactivity
- Self-regulation and behavior problems
- Poor coordination and motor skill delays
- Speech and language delays
- Difficulty with judgement and reasoning
- Heart, lung, and kidney defects
- Intellectual disability (IQ under 70)
- Abnormal facial characteristics in a small percentage
- Small body and/or head in a small percentage

BACKGROUND AND DATA

- ❖ Based on the current estimate published by the CDC, between 2% and 5% of the general population has diagnosable fetal alcohol damage. In Canada, about 23% to 35% of all correctional inmates have FASD. In terms of cost, FASD is the biggest public health issue in the province of British Columbia.
- ❖ In California, 49.9% of women aged 18-44 reported any alcohol use.⁷
- ❖ Alcohol use among pregnant women aged 18-44 in the United States (having at least one drink of any alcoholic beverage in the past 30 days) increased from 9.2% in 2011 to 11.3% in 2018.⁷

PREVENTION & TREATMENT

- ❖ While there is no cure for FASD, it is 100% preventable when pregnant women abstain from alcohol. Strategies include raising public awareness and teaching youth to make healthy choices.¹
- ❖ To prevent FASDs, a woman should not drink alcohol while she is pregnant, or even when she might get pregnant. In the United States, nearly half of all pregnancies are unplanned.³
- ❖ FASDs last a lifetime. Research shows that early intervention and treatment can improve an affected child's development. There are many types of treatment options, including medication, behavior and education therapy, parent training, and other alternative approaches.²
- ❖ No one treatment is right for every child. Good treatment plans will include close monitoring, follow-up care, and changes as needed.²

Online Resources

ONLINE RESOURCES

- [National Institute on Alcohol Abuse and Alcoholism \(NIAAA\)](#)
NIAAA supports and conducts biomedical and behavioral research on the causes, consequences, treatment, and prevention of alcoholism and alcohol-related problems. This website includes publications and information, such as the Drinking and Your Pregnancy brochure, which is available both in [English](#) and [Spanish](#).
- [National Institute on Drug Abuse \(NIDA\)](#)
NIDA supports more than 85% of the world's research on the health aspects of drug abuse and addiction. NIDA-supported science addresses fundamental and essential questions about drug abuse. This website offers publications, research, training, and resources related to drug abuse and addiction.
- [National Organization on Fetal Alcohol Syndrome \(NOFAS\)](#)
NOFAS strives to prevent alcohol use during pregnancy through primary prevention, advocacy, and support, and has information and resources for educators, families, and pregnant women. They also maintain a [National and State Resource Directory](#).

ONLINE RESOURCES

- Through a partnership with CDC, NOFAS has developed a school-based [K-12 FASD Education and Prevention Curriculum](#) for teachers to implement with students.
- Centers for Disease Control and Prevention www.cdc.gov/fasd
- American Academy of Pediatrics FASD Toolkit www.aap.org/fasd
- National Organization on Fetal Alcohol Syndrome (NOFAS) www.nofas.org
- CDC Training and Resources for Professionals <https://nccd.cdc.gov/FASD/>
- Resources for parents and professionals www.Proofalliance.org
- Helpful information for all aspects of FASD www.CanFASD.org
- Resources from local parent groups and professionals including support group information www.fasdnorcal.org

Supplemental Information

RISK AND PROTECTIVE FACTORS

Commonly recognized maternal risk factors for FASD was summarized from a Public Health Variable study. Also, studies have shown that some positive factors can help prevent FASD or reduce secondary effects of FASDs, helping people with conditions reach their full potential.⁶

Risk Factors

- Low Socioeconomic Status
- Depression/psychological distress
- Nutritional deficiency
- Tobacco use
- Ethnic and societal instabilities
- Unstable family relationships
- Social isolation
- Length of alcohol use
- Low level of maternal guidance & education

Protective Factors

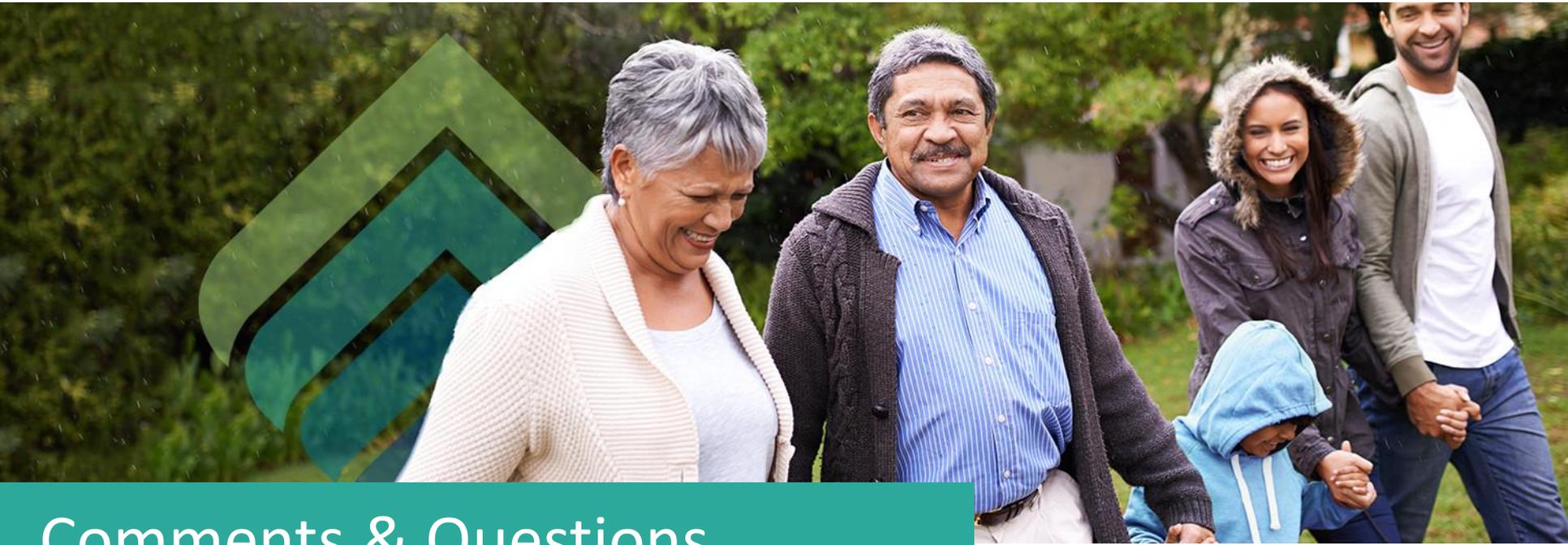
- Abstinence and alternative activities
- Contraception
- Absence of violence
- Early diagnosis
- Involvement in special education and social services
- Loving, nurturing, and stable home environment
- Parent training

STRATEGIES TO REDUCE THE EFFECTS OF FASDs

- **Early Diagnosis** - A child who is diagnosed at a young age can be placed in appropriate educational classes and get the social services needed to help the child and his or her family. Early diagnosis also helps families and school staff to understand why the child might act or react differently from other children sometimes.
- **Involvement in special education & social services** – Children who receive special education geared towards their specific needs and learning style are more likely to reach their full potential. Children with FASDs have a wide range of learning needs and behavior challenges that might need to be addressed. Special education programs can better meet each child’s needs. In addition, families of children with FASDs who receive social services, such as counseling or respite care have more positive experiences than families who do not receive such services.
- **Loving, Nurturing, and stable home environment** - Children with FASDs can be more sensitive than other children to disruptions, changes in lifestyle or routines, and harmful relationships. Therefore, having a loving, stable home life is very important for a child with an FASD. In addition, community and family support can help prevent secondary conditions, such as criminal behavior, unemployment, and incomplete education.
- **Absence of violence** - People with FASDs who live in stable, non-abusive households or who do not become involved in youth violence are much less likely to develop secondary conditions than children who have been exposed to violence in their lives.¹

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Comments & Questions