Understanding Prenatal Alcohol Exposure
Prenatal Alcohol Exposure Causes Birth Defects

Alcohol and pregnancy do not mix.
The U.S. Surgeon General’s Warning

• The dangers of consuming alcohol during pregnancy are well-documented and have earned their own U.S. Surgeon General’s Warning:¹

  – “Alcohol consumed during pregnancy increases the risk of alcohol-related birth defects, including growth deficiencies, facial abnormalities, central nervous system impairment, behavioral disorders, and impaired intellectual development.”

  – “No amount of alcohol consumption can be considered safe during pregnancy.”
The U.S. Surgeon General’s Warning (cont.)

- U.S. Surgeon General’s Warning:
  - “Alcohol can damage a fetus at any stage of pregnancy. Damage can occur in the earliest weeks of pregnancy, even before a woman knows that she is pregnant.”
  - “The cognitive deficits and behavioral problems resulting from prenatal alcohol exposure are lifelong.”
  - “Alcohol-related birth defects are completely preventable.”
Fetal Alcohol Spectrum Disorders

• Abbreviated as “FASD”

• Umbrella term for a spectrum of disorders caused by prenatal alcohol exposure that includes:\(^2\)
  - Physical disabilities
  - Mental disabilities
  - Behavioral disabilities
  - Learning disabilities

• Disabilities may range from mild to severe and may last a lifetime.\(^3\)

• Any form of FASD is 100 percent preventable.\(^2, 5\)
Fetal Alcohol Syndrome

• Abbreviated as “FAS”
• The most severe end of the FASD spectrum
• Three major diagnostic criteria:
  - Distinctive, abnormal facial features
  - Growth deficiencies
  - Central nervous system problems (structural and/or functional)
Physical Signs of FAS

- Flat Midface
- Small Eye Sockets
- Short Nose
- Indistinct Lip Groove
- Thin Upper Lip
- Low Nasal Bridge
- Non-Hereditary Eyelid Fold
- Minor Ear Anomalies
- Small Lower Jaw
Non-Physical Signs of FAS

- Reduced cognitive ability
- Learning disabilities
- Attention deficits
- Hyperactivity
- Poor impulse control
- Poor social skills
- Language difficulties
- Memory deficits
Only Professionals Can Diagnose Prenatal Alcohol Exposure

- FAS can only be diagnosed by a clinical exam.³
- Because damage may be subtle, FAS is often missed or misdiagnosed.³, ⁶
- Genetic and environmental factors can cause similar disabilities and abnormalities.³
Facts About Prenatal Alcohol Exposure

• 1 in 100 babies (40,000 babies annually) is born with some effects of prenatal alcohol exposure.³
• 1 in 1,000 babies is born with full-blown FAS.³
• Annually, FAS costs up to $6 billion in direct and indirect costs.⁴
• Lifetime expenses and costs for an individual with FAS are approximately $2 million.⁴
Who Is At Risk?

• Any woman of childbearing age is at risk of having a child with FASD if she drinks alcohol during pregnancy.\(^8\)

• Women particularly at risk of drinking alcohol during pregnancy and having a child with FAS include:\(^8\)
  - Women with substance abuse problems
  - Women with mental health problems
  - Recent drug users
  - Smokers
  - Women with multiple sex partners
  - Recent victims of abuse and violence
Many Women Stop Drinking

• Many women who drink early in pregnancy will stop when they find out they are pregnant.
• Others cannot stop without help.
• Discontinuing drinking, even late in pregnancy, is better than not stopping at all.
All Types of Alcoholic Beverages Should Be Avoided

• A standard drink = 0.60 ounces of pure alcohol:
  - One 12-oz beer or wine cooler
  - One 5-oz glass of wine
  - One 1.5-oz serving of hard liquor

• Some alcoholic drinks contain more alcohol and/or come in larger containers (22 to 45 ounces).
All Types of Alcoholic Beverages Should Be Avoided

There is no safe type or known safe amount of alcohol to consume during pregnancy.

Play it safe!

Do not drink if you are pregnant, think you might be pregnant, or if there is a chance you could become pregnant!
How Alcohol Reaches the Fetus

• When a pregnant woman drinks alcohol, it readily moves across the placenta into the fetus’s bloodstream through the umbilical cord.\(^{10}\)
How Alcohol Reaches the Fetus

Alcohol is transferred from the mother to the baby through the placenta and umbilical cord.
Alcohol Can Damage All Organ Systems

- External Genitalia (As early as week 7)
- Heart (As early as week 4)
- Ears (As early as week 4)
- Eyes (As early as week 3)
- Teeth (As early as week 6)
- Palate (As early as week 6)
- Upper Limbs (As early as week 4)
- Central Nervous System (As early as week 3)
Alcohol Can Damage All Organ Systems

• A mother’s drinking can affect all parts of a developing fetus.\(^\text{10}\)

• The time during pregnancy at which she drinks alcohol determines the type of injury.\(^\text{3, 10}\)

• The more alcohol she drinks, the greater the injury.\(^\text{3}\)
Alcohol Can Harm an Unborn Child Even Before a Woman Knows She Is Pregnant

• If you’ve consumed alcohol and are pregnant, be sure to let your doctor know.
Babies Are Also Vulnerable While Breastfeeding

• A breastfeeding baby takes in alcohol, too, in the breast milk of a mother who drinks.  
• Because a baby’s brain continues to grow and mature after birth, alcohol could still affect a child’s normal development.  
• If a breastfeeding mother has four alcoholic drinks in a day, the alcohol her baby takes in may impair motor development – the baby’s ability to roll over, to sit, to crawl, and to walk.
Severe Injury to the Developing Brain

“Of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects on the fetus.”

- Institute of Medicine Report to Congress, 1996
FASD = Lifelong Problems and Lower Quality of Life

- People with FASD can have lifelong disabilities and a reduced quality of life:
  - Low self-esteem
  - Poor impulse control
  - Disruptive school experiences
  - Incomplete education
  - Unemployment
  - Psychiatric problems
  - Inappropriate sexual behavior
  - Criminal behavior
What Can We Do?

• Stop all drinking, including social drinking, if we are pregnant or could become pregnant.

• Help our pregnant partners and friends to stop all drinking, including social drinking.

• Encourage our pregnant partners and friends to see a doctor.

• Help families of babies born with FASD find medical, county, and community resources.
How to Stop Social Drinking

• To avoid social drinking and continue getting along with your partner and friends:
  – Explain that there is no known safe amount of alcohol, and that any type of alcoholic beverage can hurt your unborn baby.\(^5\)
  – Keep several alternate activities in mind that you, your partner, and your friends enjoy doing.
  – Be assertive!
  – If you cannot stop drinking:\(^2\)
    • Talk with your physician
    • Seek community services and intervention
    • Ask your partner and friends for support
How to Help Pregnant Partners and Friends Stop Social Drinking

• Share information about FASD and the importance of not drinking during pregnancy.  

• Model safe behavior by abstaining from drinking alcohol yourself and attend social gatherings that do not involve drinking alcohol.

• Encourage her to discuss the reasons leading her to drink alcohol (e.g. various problems in her life).

• Help her find community services and/or interventions to help her stop drinking alcohol.
How to Help Families of Babies Born With FASD

• Encourage families to contact medical, county, and community resources.

• Encourage families to visit their local school district’s early childhood and family education programs.

• Attend meetings or sessions with families as they learn about available services and interventions.

• Offer to stay and help care for the baby to relieve caregiver stress.
Remember…

Prenatal injuries from alcohol exposure are completely preventable!\(^2, 4\)

Education and abstaining from drinking alcohol while pregnant can mean that NO BABY NEEDS TO SUFFER from prenatal alcohol exposure!


