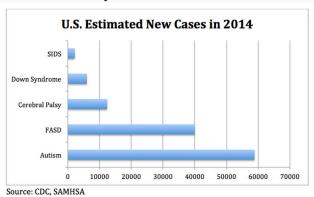
Educating the public, professionals, and policymakers about alcohol use during pregnancy



# FASD

- What Everyone
- Should Know

Alcohol use during pregnancy is the leading known cause of developmental disability and birth defects in the United States.



FASD affects an estimated 40,000 infants each year — more than Spina Bifida, Down Syndrome, and Muscular Dystrophy combined. (SAMHSA, 2003)



Fetal Alcohol Spectrum Disorders

(FASD) is an umbrella term describing the range of effects that can occur in an individual prenatally exposed to alcohol. These effects may include physical, mental, behavioral, and/or learning disabilities with lifelong implications. Fetal Alcohol Syndrome (FAS), Partial

Fetal Alcohol Syndrome (PFAS), Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE), and Alcohol Related Neurodevelopmental Disorder (ARND) are the diagnosed conditions associated with prenatal alcohol exposure.

### Who is at Risk?

Any woman is at risk of having a child with an FASD if she drinks alcohol during pregnancy. Alcohol can harm an embryo or 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—these women are still at risk. Others cannot stop drinking without help. Women who have given birth to children with an FASD are at very high risk of having additional children with an FASD.

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

Institute of Medicine, 1996

#### What Are the Effects of FASD?

Depending on the timing and frequency of maternal alcohol consumption, outcomes associated with prenatal alcohol exposure may include:

- Abnormal facial characteristics
- Growth deficits
- Brain damage including mental retardation
- Heart, lung, and kidney defects
- Hyperactivity and behavior problems
- Attention and memory problems
- Poor coordination and motor skill delays
- Difficulty with judgment and reasoning
- Learning disabilities



Normal Brain FAS Affected Brain

FASD also takes an enormous financial toll on affected families and society as a whole. Fetal Alcohol Syndrome (FAS), the most severe yet least common effect under the FASD umbrella, costs the United States \$5.4 billion annually. This is only a small portion of the total societal costs associated with FASD.

(USD, 2008)

#### How Can FASD Be Prevented?

While there is no cure for FASD, it is 100% preventable when pregnant women abstain from alcohol. NOFAS prevents FASD by raising public awareness and teaching youth to make healthy choices, among many other strategies.

Do you have questions or concerns about FASD? Visit us online.



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# FASD IDENTIFICATION

#### Recognizing Fetal Alcohol Spectrum Disorders can be

difficult. Early and accurate identification is key to receiving appropriate educational and mental support. Fetal Alcohol Syndrome (FAS) is just one FASD; others may be more difficult to distinguish, particularly when the mother's exposure to alcohol is unknown. Many of the symptoms that can lead to an

assessment for FAS cannot be identified at birth, but become more recognizable later on. Behavioral symptoms are more common than associated facial characteristics in FASD. The identifying facial features required for FAS diagnosis are shown here. (CDC 2004)

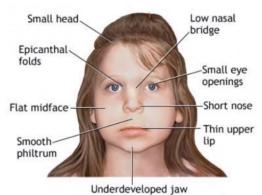


Image courtesy of the National Library of Medicine, NIH

Prenatal exposure to alcohol can affect executive functions, which are controlled by the frontal lobe.

Executive	Effects of Prenatal Exposure to
Functions	Alcohol
Planning	Inability to apply consequences from past actions
Time Perception	Difficulty with abstract concepts of time and money
Internal Ordering	Difficulty with sequencing, difficulty processing information
Working Memory	Difficulty storing and/or retrieving information
Self-Monitoring	Requires frequent cues, assistance from others with monitoring behavior
Verbal Self- regulation	Needs self-talk, verbal self-feedback
Motor Control	Fine motor skills more affected than gross motor skills
Regulation of Emotion	Difficulty in maintaining stable emotional state, swings from emotional highs to lows; unable to regain composure without assistance
Motivation	Requires external motivators, may demonstrate lack of remorse

(http://www.fldoe.org/ese/pdf/fetalco.pdf, 2005)



**Fetal alcohol spectrum disorders (FASD)** is an umbrella term describing the range of effects that can occur in a baby exposed to alcohol in the womb.

FAS (Fetal Alcohol Syndrome) 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.

Individuals with PFAS (Partial Fetal Alcohol Syndrome) meet 2/3 of these criteria.

Individuals with ARND (Alcohol Related Neurodevelopmental Disorder) experience only the brain, or central nervous system, abnormalities.

Individuals with ND-PAE

(Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure) primarily experience the behavioral effects of prenatal alcohol exposure, including those listed in the table on the left.

Concerned your child might have an FASD? NOFAS can help:



Or, call our Clearinghouse toll-free

1-800-66-NOFAS



Helping Children & Families Through Education and Advocacy to Prevent Fetal Alcohol Spectrum Disorders

# FASD: What the Foster Care System Should Know

The majority of children with Fetal Alcohol Spectrum Disorders (FASD) are not raised by their birth parents.

- It is reported that approximately 80% of children with FASD do not stay with their birth families due to the high needs of parents and children (Barth, *Child Welfare*, 2001).
- Studies suggest that a rise in alcohol and drug use by women has resulted in 60% more children coming into state care since 1986 (Stratton, Howe, & Battaglia, *Institute of Medicine*, 1996).

The incidence rate of FASD is unusually high among the U.S. foster care population.

- Children in foster care are 10-15 times more likely to be affected by prenatal alcohol exposure than other children.
- Children from substance abusing households are more likely to spend longer periods of time in foster care than other children (median of 11 months versus 5 months for others in foster care) (Foster Care Today, Casey Family Programs, 2001).

Many children with FASD go unidentified or are misdiagnosed. Often, behavioral problems caused by brain damage due to prenatal alcohol exposure are mistakenly thought to be solely a result of difficulties in the child's previous home environment.

Secondary behavioral disorders associated with FASD can further complicate a child's transition into and out of foster care homes.

Children with FASD often have difficulty:

- translating body language and expressions;
- understanding boundaries;
- focusing their attention; and
- understanding cause and effect.

Children with FASD can be easily frustrated and require a stable, structured home and school environment. Adjusting to a new home, a new family, and a new school can be particularly difficult.

Children with FASD can benefit from:

- Consistent routines;
- Limited stimulation;
- Concrete language and examples;
- Multi-sensory learning (visual, auditory and tactile);
- Realistic expectations;
- Supportive environments; and
- Supervision.



The foster care system can help prepare for children with FASD by:

- Providing training to foster care/adoption personnel to help recognize the disorder's characteristics in order to seek diagnoses for suspected cases and ensure appropriate placements;
- Providing education to parents entering the foster care system, as well as for families who already have foster children, in order to help recognize the disorder's characteristics, seek a diagnosis, and appropriately respond to the unique needs of the child; and
- Developing and/or enforcing policies on obtaining and disclosing information on birth mothers' history of drinking during pregnancy.

Source: SAMHSA, FASD Center for Excellence, 2007

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- What School Systems Should
- **Know About Affected Students**

Students with Fetal Alcohol Spectrum Disorders (FASD) have special learning needs and face a wide range of behavioral challenges.

Characteristic Facial Features of a Child with FASD

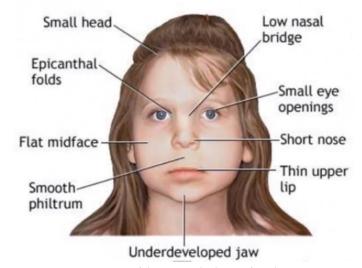


Image courtesy of the National Library of Medicine, NIH

## How does FASD affect learning and behavior?

Students with FASD have problems receiving and processing information. They from 29 to 140, their overall often cannot store what they learn or lack the mental capacity to use new information they have been given.

While students with FASD have IQ scores that range level of adaptive functioning (i.e. ability to perform daily life skills) is often much lower than would be expected.

(Teresa Kellerman)

Educators can play a critical role in determining whether children with FASD reach their maximum potential.

Common challenges for educators who teach students with FASD include:

- Hyperactivity, impulsivity, attention and memory deficits
- Inability to complete tasks, disruptiveness
- Poor social skills
- Need for constant supervision
- Disregard for rules and authority.

### Successful strategies for educating children with FASD include:

- Using concrete, hands-on learning methods
- Establishing structured routines
- Keeping instructions short and simple
- Providing consistent and specific directions
- Repeating tasks again and again
- Providing constant supervision

According to the Substance Abuse and Mental Health Services Administration, FASD affects 1 in 100 live births.

## Recognizing FASD can be a challenging task.

Most students with FASD are unidentified or go misdiagnosed as most people with FASD do not have the characteristic features associated with fetal alcohol syndrome. The majority of students with FASD are not significantly developmentally disabled, and they can be articulate and skilled at performing specific tasks.

Students who exhibit behavior or learning problems may require psychoeducational testing to identify possible presence of central nervous system damage.

For more information on FASD, go to www.nofas.org

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- What the Justice System Should
  - Know About Affected Individuals

## What is FASD?

**FASD** is an umbrella term describing the range of effects that can occur in an individual prenatally exposed to alcohol. These effects may include physical, mental, behavioral, and/or learning disabilities with lifelong implications. These individuals have a strong tendency to get into legal trouble- **35**% of individuals with FASD have been in jail or prison at some point.

(SAMHSA 2007)

Over 60% of people with FAS over 12 have been charged with a crime

**55%** of people with ARND will be confined to a prison, psychiatric institution, or drug/alcohol treatment center

95% of people with FAS also have a mental illness

(American Bar Association 2012; SAMHSA 2007)

#### The Justice System can help FASD-affected individuals by:

- Educating judges, lawyers and parole officers about the characteristics and behaviors of persons with FASD
- Establishing screening, analysis, and treatment procedures for those with FASD who enter the juvenile justice or adult criminal justice system
- Establishing/utilizing alternative sentencing programs for persons with FASD who have committed non-violent offenses
- Offering referral information for the children of incarcerated women who may have been prenatally exposed to alcohol.

Individuals with Fetal Alcohol Spectrum Disorders, FASD, have trouble with assessment, judgment, and reasoning. Many will never socially mature beyond the level of a 6 year old. This makes it more difficult for them to make "smart" long-term goals, and makes them vulnerable to manipulation and coercion into false confessions. Many individuals also suffer from poor memory, misunderstanding cause and effect, and an inability to understand and interpret concepts. These behavioral impairments make people with FASD more likely to get into trouble with the law.

People with FASD often repeat the same mistakes multiple times due to their disabilities.

It is important to identify these individuals and support them to improve functioning in society rather than forcing rehabilitation. Visit **fasdcenter.samhsa.gov** for more information.



## Signs and Symptoms of FASD Relevant to the Justice System

Primary Disability	Secondary Disability	Possible Reason for Behavior	
Memory problems	Lying	Making things up to fill in the blanks	(0/2
Failure to understand ownership	Stealing	Attempt to buy friends	CLIMIAC
Little understanding of value of objects	Destructive behavior	Anger and frustration	A 200/
Slow cognitive or auditory pace	Defiance	Avoidance as a result of frequent failure, inability to process instructions	

For more information, visit NOFAS online!

