Fetal Alcohol Spectrum Disorder (FASD) is a term used to describe a group of conditions that can occur in a person who has prenatal alcohol exposure. These effects can include physical problems and problems with behavior and learning. Often, a person with an FASD has a combination of these conditions. These conditions can affect each person in different ways, and can range from mild to severe (CDC, 2014).

Fetal alcohol spectrum disorder (FASD) is a fairly new term introduced to the field. It is a descriptive term and not a diagnostic term. Fetal Alcohol Syndrome (FAS) represents the severe end of the FASD spectrum. The term spectrum disorder indicates that there is a variety or a continuum of effects caused by prenatal alcohol exposure (NOFAS, 2014).

Although the various fetal alcohol spectrum disorders are permanent conditions, specific symptoms may be treatable or manageable. Thus, the definition notes possible lifelong implications, depending on the specific nature of the disorder and the individual affected. FASD is 100% preventable if women abstain from drinking during pregnancy (CDC, 2010).

How Does FASD Happen? FASDs are caused by a woman drinking alcohol during pregnancy.

According to the surgeon general, there is **NO safe amount** or type of alcohol to consume during pregnancy or when planning to become pregnant. It makes no difference if the alcohol is wine, beer, or liquor. To prevent FASD, a woman should not drink alcohol while she is pregnant, or when planning to become pregnant. This is because a woman can get pregnant and not know for several weeks. Half of all pregnancies in the United States are unplanned. (SAMHSA, 2013)

### Key Facts:

A developing baby *can't process any amount of alcohol.* Developing babies lack the ability to process alcohol with their liver, which is not fully formed. They absorb all of the alcohol and have the same blood alcohol content as the mother.

Alcohol causes **more harm than heroin or cocaine during pregnancy.** The Institute of Medicine says, “Of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects in the fetus.”

Alcohol used during pregnancy can result in FASD. An estimated 40,000 newborns each year are affected by FAS, Fetal Alcohol Syndrome, or have FASD, Fetal Alcohol Spectrum Disorders, with damaging effects ranging from major to subtle. (NOFAS, 2013)
Characteristics often seen...

**Newborns or Infants**
- Difficulty Sleeping – Unpredictable Sleep/Wake Cycle
- Electroencephalogram (EEG) Abnormalities
- Failure to Thrive
- Feeding Difficulties including Weak Sucking Reflex
- Heart Defects, Kidney Problems, or Skeletal Anomalies
- Increased Sensitivity to Light and Sound – Easily Overstimulated
- Neurological Dysfunctions
- Poor Fine and/or Gross Motor Control
- Seizures, Tremors, or Jitteriness
- Small Size
- Susceptibility to Infections

**Preschool Aged Children**
- Emotional Over-Reaction and Tantrums
- Hyperactivity
- Lack of Impulse Control
- Cognitive Impairment
- Poor eye–hand and physical coordination
- Poor Judgment (often seen as difficulty recognizing danger including not fearing strangers; children of this age may seem overly friendly)
- Speech Delays (may include poor articulation, slow vocabulary or grammar development, or perseverative speech)

**Elementary School Aged Children**
- Attention Deficits
- Hyperactivity
- Language Difficulties (delayed development or difficulties with expressive, receptive and social pragmatic language)
- Learning Disabilities or Cognitive Disabilities
- Memory Difficulties
- Poor Impulse Control (often seen as lying, stealing or defiant acts)
- Small Size
- Social Difficulties (may include overly friendly, immaturity, easily influenced)

**Adolescents and Young Adults**
- Difficulties with Abstract Reasoning
- Difficulty Anticipating Consequences (which may lead to poor decision making)
- Low Academic Achievement
- Low Self-Esteem
- Memory Impairments
- More Pronounced Impulsiveness (often seen as lying, stealing or defiant acts)
- Poor Executive Function (e.g., judgment, planning, organization)

…with FASD

(NOFAST, 2013)
So what can be done?

Most students with Fetal Alcohol Spectrum Disorder (FASD) are unidentified or go misdiagnosed as most people with FASD do not have the characteristic physical features associated with fetal alcohol syndrome. Recognizing FASD can be a challenging task. The majority of students with FASD are not cognitively impacted, and they can be articulate and skilled at performing specific tasks. Many times students with FASD score within normal limits on formal assessments, indicating to most school teams that the student is capable of performing academic, communication and social skills at the same level as their typical peers. Due to the nature of the brain damage incurred from prenatal exposure to alcohol, students may experience significant difficulties which are not reflected on formal assessments.

Although there may be similarities, many students may be misidentified as having Autism Spectrum Disorder or Attention Deficit Hyperactivity Disorder (ADHD). When considering special education services, it is imperative to identify specific student needs and determine whether a student meets the criteria for specially designed instruction within a category. Since there isn’t a specific special education category for FASD, the school team may consider the category that best fits the needs of the student (e.g., Specific Learning Disability, Speech Language Impairment) and ensure details are provided in the body of the Individualized Education Program (IEP).

In addition, whether a mother had issues with addiction or innocently drank alcohol at some point during pregnancy, there is a stigma attached to this disorder. Mothers can be discriminated against and made to feel like they are forever marked as a bad, immoral, unloving, or an abusive mother. This only makes treatment and diagnosis more difficult. Educators must be supportive and non-judgmental and partner with the student and parent to address needs. (SAMHSA, 2013)

Individuals with FASD can benefit from:

- Consistent routines
- Limited stimulation and strategies for reducing emotions when over stimulated
- Concrete language and examples
- Multi-sensory learning (visual, auditory and tactile)
- Realistic expectations
- Supportive environments and supervision.

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

Students with Fetal Alcohol Spectrum Disorders (FASD) have special learning needs and a wide range of social and behavioral challenges. (SAMHSA, 2013)
Planning for Success

In addition to the suggestions above, educators can play a critical role in ensuring children with FASD reach their maximum potential by:

- **Partnering with parents/caregivers:** Educators and parents must work together and learn from each other to develop consistent support for students with FASD. Talk about physical, behavioral, social, and learning strengths as well as concerns. Parents may be hesitant to work with the school team, try these strategies if parents are reluctant to work with you:
  a. Maintain a positive, non-judgmental approach, even if the response may seem negative.
  b. Ask for assistance from an agency that is involved with the family such as social services (if appropriate).
  c. Offer to meet with the parents at a location of their choosing.
  d. Suggest parents invite someone to come to the school/meeting with them, such as a family member or advocate.
  e. Provide a single contact person at school.
  f. Try to partner parents with other parents for support.

- **Shifting attitudes and improving understanding:** FASD is a physical disability with behavioral symptoms. As mentioned, children with FASD may test well on standardized tests and may have IQ scores in the average range. These results often lead educators to believe the student could do better if only he or she tried harder. Recognizing that a child is trying hard, but is nevertheless struggling, goes a long way toward facilitating learning. Think “this child can’t” versus “this child won’t.” And remind yourself frequently that you have the skills to help this child. In addition, it helps to work with caregivers with the same level of understanding.

- **Doing comprehensive Functional Behavioral Assessments:** A functional behavioral assessment (FBA) is a key element in designing individualized behavioral strategies and supports for a child with FASD. It provides information on why the child engages in the behavior; when the child is most likely to demonstrate the behavior; and situations in which the behavior is least likely to occur. FBAs should be conducted on a regular basis to assess the effectiveness of interventions.

Additional information and training opportunities to address the needs of students with FASD are available at the Colorado Department of Education - www.cde.state.co.us/cdesped/FASD.asp or by contacting Heather Hotchkiss, FASD and Brain Injury Education Consultant at hotchkiss_h@cde.state.co.us.

**References**
- CDC Centers for Disease Control and Prevention (http://www.cdc.gov/ncbddd/fasd/)
- NOFAS Colorado – An organization dedicated to improving the lives of Colorado children affected by fetal alcohol spectrum disorder (www.nofascolorado.org)
- NOFAS – National Organization on Fetal Alcohol Syndrome (www.nofas.org)
- SAMHSA Fetal Alcohol Spectrum Disorders (FASD) Center for Excellence (www.fasdcenter.samhsa.gov)

**Resources**
- *All About Me - Getting to Know the Child Affected by Prenatal Alcohol Exposure* (www.kyfasd.org)
- *Brain Injury In Children and Youth: An Manual for Educators* (www.cde.state.co.us/cdesped/sd-thi)
- *Reach to Teach: Educating Elementary and Middle-School Children with Fetal Alcohol Spectrum Disorders* (http://fasdcenter.samhsa.gov/publications/reachToTeach.aspx)
- *Teaching Students with FASDs: Building Strengths, Creating Hope* (https://education.alberta.ca/admin/supportingstudent/diverselearning/fasd.aspx)