What are FASDs?

- Fetal alcohol spectrum disorders (FASDs) are caused by exposure to alcohol during pregnancy. Mothers who drink alcohol while they are pregnant expose their offspring to serious risks for problems with development. Exposure to alcohol during pregnancy can have lifelong effects.
- There is a range of effects occurring as a result of prenatal exposure to alcohol. Not all individuals are affected in the same way.
- Fetal Alcohol Syndrome (FAS) is the most severe form of the disorder. Individuals with FAS show facial characteristics typical of the disorder and effects on growth and intellectual development.
- Others are much less severely affected. Some may show effects on thinking or behavior while others do not seem to be affected in any way.

What do we know about adults with FASDs?

- FASD is a spectrum disorder. There is a range of effects of FASD on adults. Those who are severely affected as children are likely to continue to be more severely affected as adults.
- Studies based on affected adults in clinical treatment samples suggest that FASD is related to problem behaviors. These include substance use, illegal behavior, and mental health problems. Individuals in clinical treatment are usually among the most severely affected.
- Less is known about those who are exposed, but not severely affected. Studies of community samples suggest that they experience effects on thinking or behavior. Often, there are few differences between these exposed individuals and others of similar background.

How prevalent are FASDs?

- For FAS, the most severe form, prevalence is estimated at .5-2 per 1,000 in the U.S.
- For the full spectrum of FASD effects, including severe and milder effects, the prevalence is estimated to be as high as 1 in 100.

Do adults still show physical features characteristic of FASDs?

- Physical characteristics can still be seen in adults. Some researchers suggest that they are less apparent as individuals with FASDs mature and become adults.
What do we know about brain structure and function in adults with FASDs?

Brain imaging studies help us understand how the brain works. Some studies focus on size or structure of the brain. Others focus on how the brain responds in specific situations. These studies have provided lots of information on how adults with FASDs compare to those who have not been exposed to alcohol.

- Structural analyses show that brains of severely affected individuals are smaller overall than those of unaffected adults.
- Researchers have looked at how the brain works when adults with FASD complete tasks in specific areas. Some of the findings show, for instance, that function is affected when adults are asked to pay attention in a task situation or to solve math problems.
- Some studies have used an imaging method called diffusion tensor imaging. This method lets the researchers look at the white matter in the brain. They are trying to find out how well the brain is processing information.
- Studies have shown that FAS is related to deficits in white matter integrity. This may be the basis for lower processing speed and deficits in abilities such as planning and organizing often reported in FASD.

Do personal or environmental factors affect how adults with FASD do?

Yes, some factors can affect outcomes. Ann Streissguth, who studied adult outcomes in a clinical sample, reported several protective factors. These factors improve outcomes for individuals with FASDs. They include:

- Being diagnosed early (before age 6)
- Eligibility for services
- Living in a stable and nurturant home
- No violence in history
- Living in a qualitatively good home (based on ratings) between the ages of 8 and 12
- Not living with an alcohol abuser