

# Special Developmental Problems of Infants and Toddlers

## Fetal Alcohol Spectrum Disorder

Sokol & Delaney-Black (2003) (p. 4) state that prenatal alcohol “exposure has been implicated as the most common cause of mental retardation and the leading preventable cause of birth defects in the United States, accounting for significant educational and public health expenditures.”

Alcohol destroys and damages cells in the central nervous system. Widespread destruction of brain cells in early fetal development causes malformations in the developing brain structures. This, of course, can produce abnormalities in brain function.

Some physicians and researchers are now using the term Fetal Alcohol Spectrum Disorder (FASD) to indicate the continuum of effects, from severe to mild. The most severe end of the spectrum is often called Fetal Alcohol Syndrome. It refers to a combination of symptoms that are associated with prenatal exposure to large amounts of alcohol. Fetal Alcohol Effect (FAE) is a milder form and refers to children who have some of the following outcomes. Since there are no physical features, these children often are not recognized as having FAE.

### Outcomes of FASD

- Pre and post-natal growth deficiency (failure to grow)
- An average IQ of 63, which falls within the mild range of mental retardation
- Irritability in infancy
- Inattention, distractibility, hyperactivity, mood disorders in childhood (Sokol & Delaney-Black, 2003)
- Decreased reaction time in infancy and preschool children
- Mild to moderate degrees of microcephaly. (Microcephaly is small head circumference. It is usually associated with varying degrees of mental retardation and abnormal brain development.)
- Dysfunction in fine motor control, such as weak grasp, poor eye-hand coordination and tremulousness

- Specific facial features, including thin upper lip, epicanthal folds, low nasal bridge, minor ear abnormalities, flat midface. These features often become less obvious during adolescence.
- Difficulties with executive functioning: problem solving, higher-level thinking, self-monitoring, regulation of emotion, motivation, judgement, planning, working memory, time perception. These behaviors are often misinterpreted as willful, deliberate or “bad behavior”. This is unfortunate, because children with these problems may not be accurately diagnosed and may not receive developmental services.
- The degree and type of damage done to the developing fetus depends upon several factors, including which developmental processes were occurring when the alcohol was ingested, how much was ingested and whether the drinking was chronic or binge drinking. Research has shown that even low levels of alcohol consumption and infrequent binges can damage the developing fetus. Research has not identified a safe limit for drinking during pregnancy. “The only prudent conclusion is that alcohol can affect the developing brain even at low exposure levels. Abstinence during pregnancy is the only way to avoid such effects” (Goodlett & West, 1992, pp 64-65, found in Streissguth, 1997, p 61).

### **Recommended Interventions**

- Prevention, including counseling to pregnant women regarding the risks to their offspring and referral to medical services and alcohol programs
- Developmental assessment of children thought to have been exposed prenatally to alcohol to identify growth retardation and delay and to diagnose Fetal Alcohol Syndrome
- Referral of affected children to infant stimulation and early intervention programs
- Training the parent or caregiver to plan and implement activities that will address developmental delays and promote healthy development of their children
- Advocating for special school, social and work accommodations throughout the child’s life so that he/she can function to his/her full potential, and to prevent “secondary conditions” such as depression and anxiety
- Counseling and education for parents about meeting the child’s developmental needs and promoting optimal development and adjustment