Two active substances—nicotine and cotinine—are higher in newborns of mothers who smoke than in mothers who do not. Postnatal growth deficits occur, as do deficits in emotional and behavioral development in the growing child. Maternal smoking is associated with an increased risk of SIDS, respiratory tract illnesses in childhood, and childhood learning deficits. There is evidence that even secondhand smoke can be deleterious to unborn fetuses and growing children.	Evaluate polydrug use in conjunction with smoking. An increased incidence of perinatal complications leading to preterm birth includes abruptio placentae, placenta previa, and premature rupture of membranes. Provide resources to help eliminate smoking. *During Your Pregnancy: Smoking During Pregnancy* is available from the March of Dimes.*

*http://www.marchofdimes.com.

†1200 Eton Court NW, Third Floor, Washington, DC 20007; 202-785-4585; 800 66 NOFAS; http://www.nofas.org.

‡Fetal Alcohol Syndrome Branch, Division of Birth Defects, Child Development and Disability and Health, Centers for Disease Control and Prevention, Atlanta, http://www.cdc.gov/ncbddd/fas/default.htm.

ARND, Alcohol-related neurodevelopmental disorder; *CNS,* central nervous system; *FAS,* fetal alcohol syndrome; *FASD,* fetal alcohol spectrum disorder; *SIDS,* sudden infant death syndrome.

The extent to which chemical agents affect the unborn child depends on the interplay of several factors, including the nature of the agent and its accessibility to the fetus, the gestational age at which exposure occurred, the level and duration of the dosage, and the genetic makeup of the fetus. For example, fetal exposure to valproic acid in the first 3 months of pregnancy may result in congenital anomalies such as neural tube defects, congenital heart defects, and distinctive facial features. The limited metabolic capabilities of the fetal liver and its immature enzyme and transport systems render the unborn child ill equipped for maintaining homeostasis when chemical disturbances are imposed by the mother or the environment. This includes both substances produced by the mother in response to a disease state (e.g.,