

ENVIRONMENTAL HEALTH

Secondhand Smoke (SHS) includes smoke from a burning cigarette, cigar or pipe as well as smoke that has been exhaled by someone using these products. SHS contains more than 7,000 chemicals, including more than 250 which are toxic or known to cause cancer. Exposure to SHS among children has been linked to ear infections, increased severity of asthma symptoms, respiratory symptoms and infections, and increased risk of Sudden Infant Death Syndrome (SIDS).^{49,50} According to the Surgeon General, there is no safe level of SHS exposure for children; even brief periods can be harmful.⁵⁰

In 2009-2010, 29.9 percent of children aged 3-11 years and 31.0 percent of children aged 12-19 years were exposed to SHS, representing nearly 5.5 and 4.4 million children, respectively, in each age group (data not shown). Children were identified as having been exposed to SHS if they had a serum cotinine level greater than or equal to 0.05 ng/mL and less than or equal to 10 ng/mL. Exposure to SHS among children aged 3-19 years varied by poverty and race/ethnicity. More than 45 percent of children living in households with incomes below 100 percent of poverty were exposed to SHS compared to 17.2 percent of children living in households with incomes above 300 percent of poverty. Non-Hispanic Black children were most likely to have been exposed to SHS (50.2 percent)

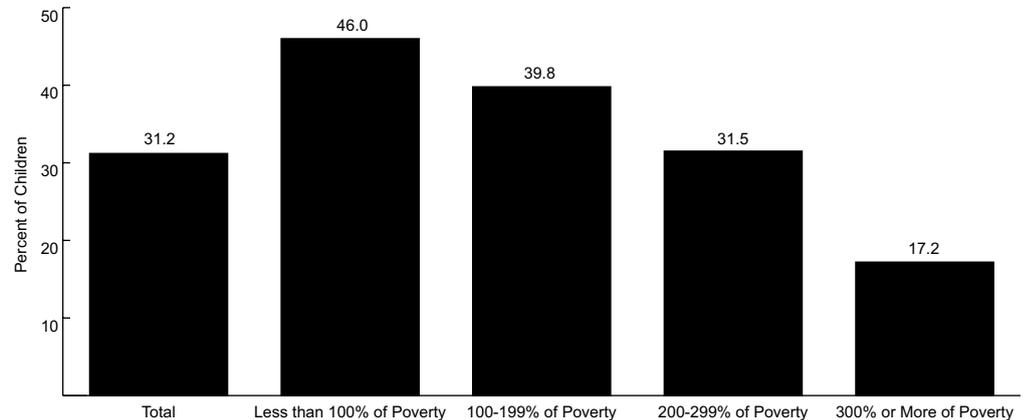
compared to less than 30 percent among children of all other racial/ethnic groups (data not shown).

Environmental contaminants to the air, water, food, and soil can adversely affect children's health and development. Children are particularly vulnerable to environmental toxins because they may be exposed to relatively higher amounts of contaminants than adults through engagement in developmentally-appropriate activities, such as putting their hands in their mouths or playing on the ground, and because their organs are still developing.^{51,52} One example of a common environmental exposure

among children is lead, which can cause delays in children's cognitive development and attention deficit disorders. Since lead was removed from gasoline, the major source of lead exposure is contaminated dust, paint, and soil. There is no safe level of lead in blood, but a blood lead level of 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) is considered elevated. In 2009-2010, 50 percent of children aged 1-5 had lead levels below 1.2 $\mu\text{g}/\text{dL}$, and 95 percent of children had levels below 3.4 $\mu\text{g}/\text{dL}$ (data not shown). These levels represented a decline of 66 percent and 72 percent, respectively, from those reported in 1988-1991.⁵³

Exposure to Secondhand Smoke,* Among Children Aged 3-19 Years, 2009-2010

Source (II.15): Centers for Disease Control and Prevention, National Health and Nutrition Examination Survey



*Defined as having a serum cotinine level greater than or equal to 0.05 ng/mL and less than or equal to 10 ng/mL. **Poverty guideline defined by the U.S. Department of Health and Human Services was \$22,050 for a family of four in 2010.