



U.S. Department of Health & Human Services



Office of the Surgeon General

The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General, U.S. Department of Health and Human Services

Children are Hurt by Secondhand Smoke

- Secondhand smoke contains more than 250 chemicals known to be toxic or carcinogenic (cancer-causing), including formaldehyde, benzene, vinyl chloride, arsenic, ammonia, and hydrogen cyanide. Children who are exposed to secondhand smoke are inhaling many of the same cancer-causing substances and poisons as smokers.

Health Effects of Secondhand Smoke in Children

- Because their bodies are developing, infants and young children are especially vulnerable to the poisons in secondhand smoke.
- Both babies whose mothers smoke while pregnant and babies who are exposed to secondhand smoke after birth are more likely to die from sudden infant death syndrome (SIDS) than babies who are not exposed to cigarette smoke.
- Mothers who are exposed to secondhand smoke while pregnant are more likely to have lower birth weight babies, which makes babies weaker and increases the risk for many health problems.
- Babies whose mothers smoke while pregnant or who are exposed to secondhand smoke after birth have weaker lungs than other babies, which increases the risk for many health problems.
- Secondhand smoke exposure causes acute lower respiratory infections such as bronchitis and pneumonia in infants and young children.
- Secondhand smoke exposure causes children who already have asthma to experience more frequent and severe attacks.
- Secondhand smoke exposure causes respiratory symptoms, including cough, phlegm, wheeze, and breathlessness, among school-aged children.
- Children exposed to secondhand smoke are at increased risk for ear infections and are more likely to need an operation to

insert ear tubes for drainage.

Exposure to Secondhand Smoke Among Children

- The Surgeon General has concluded that there is no risk-free level of secondhand smoke exposure. Even brief exposures can be harmful.
- On average, children are exposed to more secondhand smoke than nonsmoking adults.
- Based on levels of cotinine (a biological marker of secondhand smoke exposure), an estimated 22 million children aged 3-11 years and 18 million youth aged 12-19 years, were exposed to secondhand smoke in the United States in 2000.
- Children aged 3-11 years and youth aged 12-19 years are significantly more likely than adults to live in a household with at least one smoker.
- Children aged 3-11 years have cotinine levels more than twice as high as nonsmoking adults.
- Children who live in homes where smoking is allowed have higher cotinine levels than children who live in homes where smoking is not allowed.

Information contained on this highlight sheet has been taken directly from The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. For more information, please refer to the Resources and How to Protect Yourself and Your Loved Ones from Secondhand Smoke highlight sheets. Additional highlight sheets are also available at www.cdc.gov/tobacco.

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