

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

There is No Risk-Free Level of Exposure to Secondhand Smoke

The U.S. Surgeon General has concluded that breathing even a little secondhand smoke poses a risk to your health.

- Scientific evidence indicates that there is no risk-free level of exposure to secondhand smoke. Breathing even a little secondhand smoke can be harmful to your health.

Secondhand smoke causes lung cancer.

- Secondhand smoke is a known human carcinogen and contains more than 50 chemicals that can cause cancer.
- Concentrations of many cancer-causing and toxic chemicals are potentially higher in secondhand smoke than in the smoke inhaled by smokers.

Secondhand smoke causes heart disease.

- Breathing secondhand smoke for even a short time can have immediate adverse effects on the cardiovascular system, interfering with the normal functioning of the heart, blood, and vascular systems in ways that increase the risk of heart attack.
- Even a short time in a smoky room can cause your blood platelets to become stickier, damage the lining of blood vessels, decrease coronary flow velocity reserves, and reduce heart rate variability.
- Persons who already have heart disease are at especially high risk of suffering adverse effects from breathing secondhand smoke, and should take special precautions to avoid even brief exposure.

Secondhand smoke causes acute respiratory effects.

- Secondhand smoke contains many chemicals that can quickly irritate and damage the lining of the airways.
- Even brief exposure can trigger respiratory symptoms, including cough, phlegm, wheezing, and breathlessness.
- Brief exposure to secondhand smoke can trigger an asthma attack in children with asthma.
- Persons who already have asthma or other respiratory conditions are at especially high risk for being affected by secondhand smoke, and should take special precautions to avoid secondhand smoke exposure.

Secondhand smoke can cause sudden infant death syndrome and other health consequences in infants and children.

- Smoking by women during pregnancy has been known for some time to cause SIDS.
- Infants who are exposed to secondhand smoke after birth are also at greater risk of SIDS.
- Children exposed to secondhand smoke are also at an increased risk for acute respiratory infections, ear problems, and more severe asthma. Smoking by parents causes respiratory symptoms and slows lung growth in their children.

Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate secondhand smoke exposure.

- The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the preeminent U.S. standard-setting body on ventilation issues, has concluded that ventilation technology cannot be relied on to completely control health risks from secondhand smoke exposure.
- Conventional air cleaning systems can remove large particles, but not the smaller particles or the gases found in secondhand smoke.
- Operation of a heating, ventilating, and air conditioning system can distribute secondhand smoke throughout a building.

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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