

# HEALTH EFFECTS OF SECONDHAND SMOKE EXPOSURE

## N.C. Tobacco Prevention & Control Branch

### **Overview of Secondhand Smoke (SHS)**

SHS causes premature death and disease in children and in adults who do not smoke.

Exposure of adults to SHS can quickly harm the heart and lungs and is known to cause heart disease and lung cancer.

The scientific evidence indicates that there is no safe level of exposure to SHS.

Millions of Americans, both adults and children, are still exposed to SHS in their homes and workplaces despite a great deal of progress in tobacco control.

Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to SHS. Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate exposures of nonsmokers to SHS.

### **Lung cancer:**

SHS is similar to the mainstream smoke inhaled by smokers in that it contains harmful chemicals including formaldehyde, cyanide, carbon monoxide, ammonia, and nicotine.

SHS is a known top cause cancer in humans, as it contains more than 50 chemicals that can cause cancer.

### **Respiratory effects:**

SHS contains many chemicals that can quickly irritate and damage the lining of the airways.

Even brief exposure can trigger respiratory symptoms, including coughing, phlegm, wheezing, and breathlessness.

Brief exposure to SHS can trigger an asthma attack in those with asthma.

People who already have asthma or other breathing problems are at especially high risk for being affected by SHS, and should take special precautions to avoid breathing it.



NC DEPARTMENT OF  
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### **Heart disease:**

Exposure to SHS can trigger a heart attack in someone with heart disease or risk factors for heart disease. The Centers for Disease Control and Prevention (CDC) states, "...all patients at risk of coronary heart disease or with known coronary artery disease should be advised to avoid all indoor environments that permit smoking."

State of North Carolina

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A study in Helena, Montana showed a 43% decrease in admissions for heart attack to the local hospital after a city-wide smoking ban was implemented. Admissions rates for heart attack increased to previous levels when the ban was repealed, suggesting exposure to SHS may cause heart attacks. The Office of the Surgeon General found this to be true in 2014.

Exposure to SHS also increases a person's risk of having a stroke.

### **Health Consequences for Infants and Children:**

Smoking by pregnant women has been known for some time to cause SIDS (sudden infant death syndrome). Infants who are exposed to SHS after birth are also at a greater risk of SIDS.

SHS exposure can make asthmatic children have worse asthma attacks more often, and can also cause new cases of asthma in children

Pregnant women who are exposed to SHS are more likely to have babies who are too small to be healthy.

### **No Safe Levels of Exposure**

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

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the main U.S. standard-setting body on ventilation issues, states that ventilation technology cannot completely get rid of health risks from SHS exposure.

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