

Secondhand Smoke: The Dangers and Effects



What Is Secondhand Smoke?

Secondhand smoke refers to tobacco smoke that is passively breathed in by people in the vicinity of a person who is smoking. Secondhand smoke is a mixture of the smoke from the tobacco product itself (termed sidestream smoke) and exhaled smoke from the smoker (known as mainstream smoke). **When a nonsmoker inhales secondhand smoke, he or she is exposed to the same toxins and chemicals, including nicotine, as the smoker.** Terms that have been used to refer to secondhand smoke are passive smoking, involuntary smoking, or environmental tobacco smoke (ETS).



Secondhand Smoke and Children

Exposure of children to secondhand smoke also increases their health risks; and children are especially vulnerable to the effects of environmental tobacco smoke. **About 35% of U.S. children live in homes where smoking occurs regularly. Research has shown that 50% to 75% of children in the U.S. have detectable levels of cotinine (the breakdown product of nicotine) in their blood, so even children who do not live with smokers may be at risk for adverse effects of secondhand smoke.** Chemicals from tobacco smoke inhaled by a nursing mother are also known to reach breast milk.



What Causes Secondhand Smoke?

Cigarettes are the most common sources of secondhand smoke, followed by cigars and pipe smoke. People can be exposed to environmental tobacco smoke anywhere - in their homes, in the workplace, and in recreational settings.

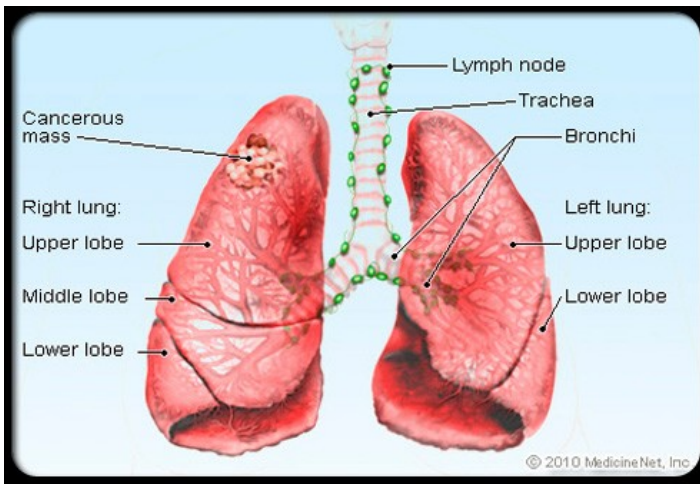


What Are the Health Risks of Secondhand Smoke?

At least 250 harmful chemicals have been identified in secondhand smoke, including at least 50 carcinogens (chemicals that are known to cause cancer). **Just some of the dangerous chemicals present in secondhand smoke include vinyl chloride, cadmium, benzene, arsenic, and ethylene oxide.** **Secondhand smoke is known to cause cancer.** It has been classified as a "known human carcinogen" by the U.S. Environmental Protection Agency (EPA). It is also associated with cardiovascular and respiratory diseases as well as other serious health conditions. We'll take a look at some of these on the next few slides.

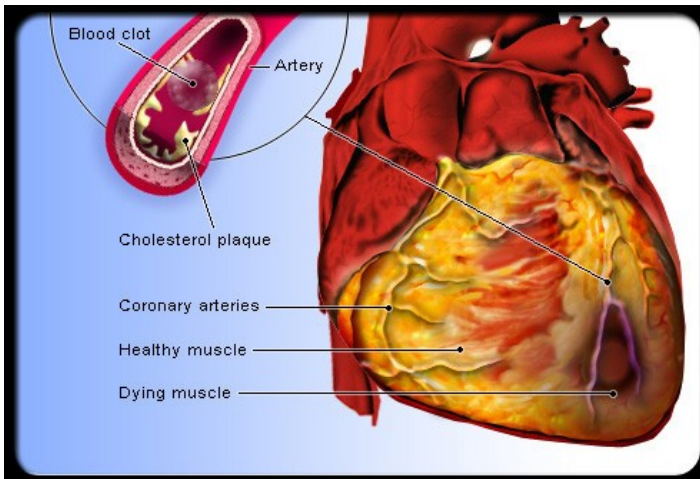
Lung Cancer

Passive smoking is an established risk factor for the development of lung cancer. Research has shown that **nonsmokers who reside with a smoker have a 20% to 30% increase in risk for developing lung cancer when compared with nonsmokers who do not reside with a smoker.** An estimated 3,400 lung cancer deaths that occur each year in the U.S. are attributable to passive smoking.



Heart Disease (Cardiovascular Disease)

Like cigarette smoking itself, secondhand smoke is a significant risk factor for the development of cardiovascular disease and heart attack. An estimated 46,000 deaths from heart disease in non-smokers who live with smokers occur every year in the U.S. **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.** 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.



Other Lung Diseases and Respiratory Illnesses

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, chest congestion (phlegm), wheezing, breathlessness and decreased lung function.** Brief exposure to secondhand smoke can also trigger an asthma attack in children with asthma. **Babies exposed to secondhand smoke can also develop serious respiratory infections.** In the U.S., passive smoking is believed to cause 150,000 to 300,000 lung infections (such as pneumonia and bronchitis) in children younger than 18 months of age each year.



Other Effects on Children

In addition to the risk of pneumonia and respiratory infections in babies exposed to secondhand smoke, passive smoke is known to increase the severity of asthma in children with this condition. **About 750,000 middle ear infections in children are also estimated to occur each year as a result of exposure to secondhand smoke.** Babies who are exposed to secondhand smoke are at an increased risk for **sudden infant death syndrome (SIDS).**



Effects on Pregnant Women

Like women who smoke, **pregnant women who are exposed to secondhand smoke have an increased risk of having low-birthweight babies.**



Possible Link to Breast Cancer

The question of whether or not passive smoking is associated with an increased risk of breast cancer is currently a source of both investigation and controversy. Breast cancer risk in active smokers is not known to be increased, yet **some studies have found a possible link to breast cancer with exposure to passive smoke.** In 2006, the U.S. Surgeon General's report concluded that there is "suggestive but not sufficient" evidence of a link at this point.



Is There A Safe Level of Secondhand Smoke?

The Surgeon General has concluded that **there is no risk-free level of exposure to secondhand smoke. Breathing even a little secondhand smoke can be harmful.** While, logically, more extensive or prolonged exposure to secondhand smoke is associated with greatest risk of having medical problems as a result, no safe limit for exposure to secondhand smoke has been established. This means that **all exposure to secondhand smoke should be avoided whenever possible.**



What Can Be Done About Secondhand Smoke Exposure?

Local, state, and national governments have enacted a variety of laws designed to protect people from health dangers associated with secondhand smoke. These laws vary according to location. Legislation to prevent smoking in workplaces and public buildings is on the rise as the public becomes more informed about the risks of secondhand smoke.





If You're A Smoker

Obviously, quitting smoking if you are a smoker is the best way to protect your family and friends from secondhand smoke. A number of support systems, programs, and even prescription medications are available to help smokers break the habit.



How to Protect Yourself If You're A Non-Smoker

If you are a non-smoker, **the safest way to avoid passive smoke is not to allow others to smoke in your home. This is particularly important if there are children in your home.** According to the U.S. Surgeon General, smoke-free workplaces are the only way to protect people from exposure to secondhand smoke in the workplace, since separate smoking areas, cleaning the air, and ventilating the building are not sufficient to prevent exposure if people still are permitted to smoke inside the building.



What Is Thirdhand Smoke?

Thirdhand smoke exposure is a new concept; it is exposure to many of the toxic agents in smoke that have accumulated (as residue) in clothing, drapes, rugs, furniture, dust, and other items due to secondhand smoke. **The toxic agents, deposited in and on items from secondhand smoke, can be absorbed through the skin and mucous membranes of non-smokers, especially by infants and young children.** Prevention of secondhand smoke exposure can prevent thirdhand smoke exposure.

Source: http://www.medicinenet.com/secondhand_smoke_pictures_slideshow/article.htm

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Reviewed by Melissa Conrad Stoppler, MD on June 10, 2010