

# SECONDHAND SMOKE

What You Can Do About Secondhand Smoke

As Parents,  Decisionmakers,   
and  Building Occupants

 EPA

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**United States  
Environmental Protection  
Agency  
Washington, DC 20460**

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# What Is Secondhand Smoke?

## WHAT IS SECONDHAND SMOKE?

- Secondhand smoke is a mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar, and the smoke exhaled from the lungs of smokers.

- This mixture contains more than 4,000 substances, more than 40 of which are known to cause cancer in humans or animals and many of which are strong irritants.

- Secondhand smoke is also called environmental tobacco smoke (ETS); exposure to secondhand smoke is called involuntary smoking, or passive smoking.

## SECONDHAND SMOKE CAN CAUSE LUNG CANCER IN NONSMOKERS

- Secondhand smoke has been classified by the U.S. Environmental Protection Agency (EPA) as a known cause of lung cancer in humans (Group A carcinogen).

- Passive smoking is estimated by EPA to cause approximately 3,000 lung cancer deaths in nonsmokers each year.

## SECONDHAND SMOKE IS A SERIOUS HEALTH RISK TO CHILDREN

- The developing lungs of young children are also affected by exposure to secondhand smoke.

- Infants and young children whose parents smoke are among the most seriously affected by exposure to secondhand smoke, being at increased risk of lower respiratory tract infections such as pneumonia and bronchitis. EPA estimates that passive smoking is responsible for between 150,000 and 300,000 lower respiratory tract infections in infants and children under 18 months of age annually, resulting in between 7,500 and 15,000 hospitalizations each year.

- Children exposed to secondhand smoke are also more likely to have reduced lung function and symptoms of respiratory irritation like cough, excess phlegm, and wheeze.

- Passive smoking can lead to a buildup of fluid in the middle

ear, the most common cause of hospitalization of children for an operation.

- Asthmatic children are especially at risk. EPA estimates that exposure to secondhand smoke increases the number of episodes and severity of symptoms in hundreds of thousands of asthmatic children. EPA estimates that between 200,000 and 1,000,000 asthmatic children have their condition made worse by exposure to secondhand smoke. Passive smoking may also cause thousands of non-asthmatic children to develop the condition each year.

## OTHER HEALTH IMPLICATIONS

- Exposure to secondhand smoke causes irritation of the eye, nose, and throat.

- Passive smoking can also irritate the lungs, leading to coughing, excess phlegm, chest discomfort, and reduced lung function.

- Secondhand smoke may affect the cardiovascular system, and some studies have linked exposure to secondhand smoke with the onset of chest pain.

## For More Information

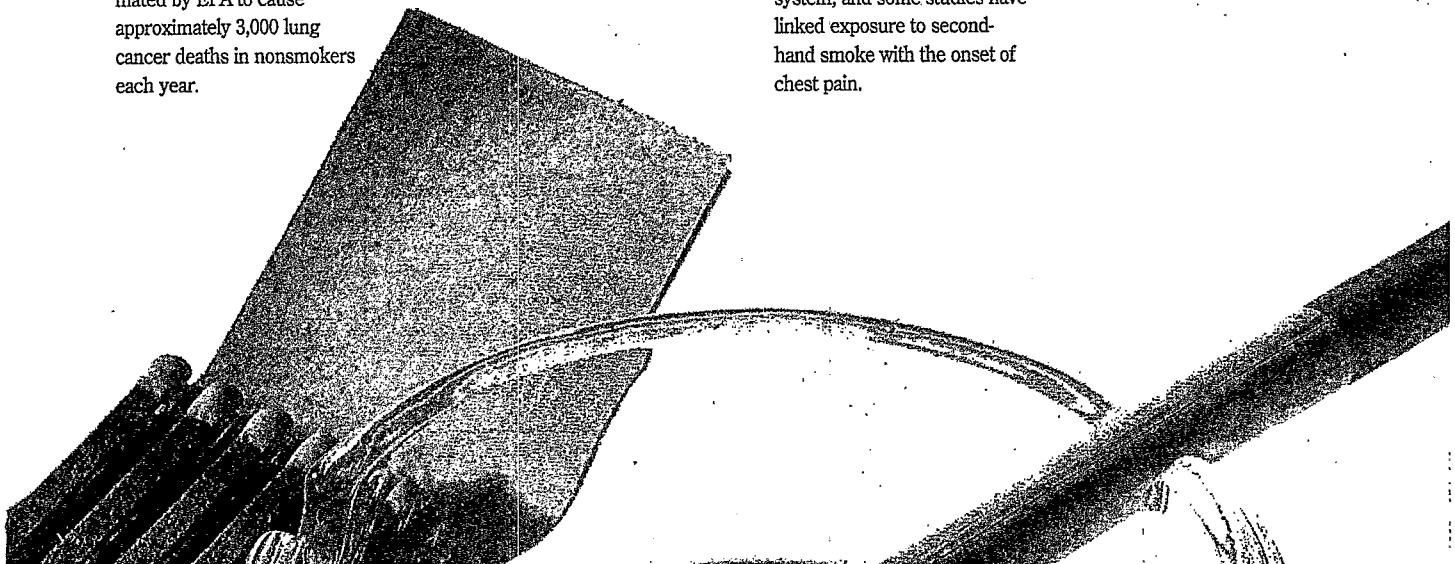
U.S. Environmental Protection Agency  
Indoor Air Quality Information Clearinghouse (IAQ INFO)  
P. O. Box 37133  
Washington, DC 20013-7133  
1-800-438-4318

Office on Smoking and Health/Centers for Disease Control and Prevention  
Mail Stop K-50  
4770 Buford Highway, N.E.  
Atlanta, GA 30341-3724  
404-488-5705

National Cancer Institute  
Building 31, Room 10A24  
9000 Rockville Pike  
Bethesda, MD 20892  
1-800-4-CANCER

National Heart, Lung, and Blood Institute  
Information Center  
P. O. Box 30105  
Bethesda, MD 20824-0105  
301-951-3260

National Institute for Occupational Safety and Health  
4676 Columbia Parkway  
Cincinnati, OH 45226-1998  
1-800-35-NIOSH



# Protecting You

## IN THE HOME

- Don't smoke in your house or permit others to do so.
- If a family member insists on smoking indoors, increase ventilation in the area where smoking takes place. Open windows or use exhaust fans.
- Do not smoke if children are present, particularly infants and toddlers. They are particularly susceptible to the effects of passive smoking.
- Don't allow baby-sitters or others who work in your home to smoke in the house or near your children.

## WHERE CHILDREN SPEND TIME

EPA recommends that every organization dealing with children have a smoking policy that effectively protects children from exposure to environmental tobacco smoke.

- Find out about the smoking policies of the day care providers, pre-schools, schools, and other care-givers for your children.
- Help other parents understand the serious health risks to children from secondhand smoke. Work with parent/teacher associations, your school board and school administrators,

community leaders, and other concerned citizens to make your child's environment smoke free.

## IN THE WORKPLACE

EPA recommends that every company have a smoking policy that effectively protects nonsmokers from involuntary exposure to tobacco smoke. Many businesses and organizations already have smoking policies in place but these policies vary in their effectiveness.

- If your company does not have a smoking policy that effectively controls secondhand smoke, work with appropriate management and labor organizations to establish one.
- Simply separating smokers and nonsmokers within the same area, such as a cafeteria, may reduce exposure, but nonsmokers will still be exposed to recirculated smoke or smoke drifting into nonsmoking areas.
- Prohibiting smoking indoors or limiting smoking to rooms that have been specially designed to prevent smoke from escaping to

other areas of the building are the two options that will effectively protect nonsmokers.

The costs associated with establishing properly designed smoking rooms vary from building to building, and are likely to be greater than simply eliminating smoking entirely.

- If smoking is permitted indoors, it should be in a room that meets several conditions:

- Air from the smoking room should be directly exhausted to the outside by an exhaust fan. Air from the smoking room should not be recirculated to other parts of the building. More air should be exhausted from the room than is supplied to it to make sure ETS doesn't drift to surrounding spaces.

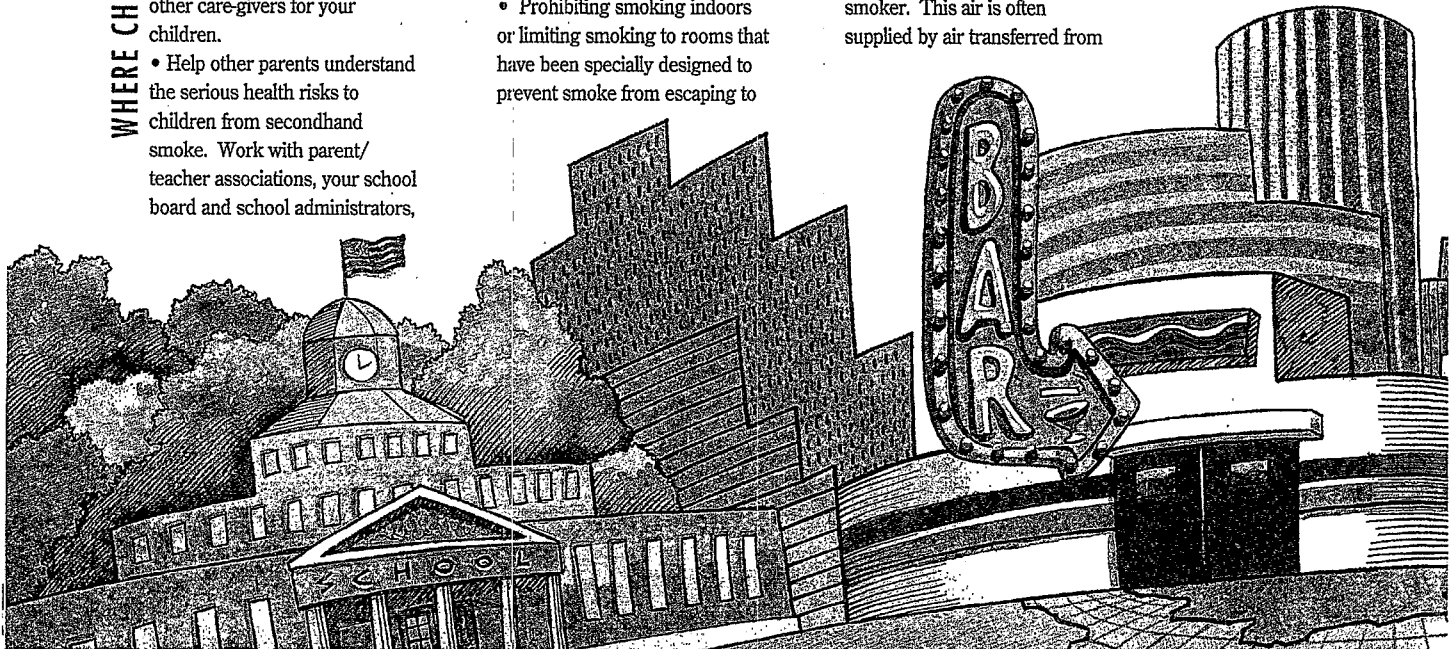
- The ventilation system should provide the smoking room with 60 cubic feet per minute (CFM) of supply air per smoker. This air is often supplied by air transferred from

other parts of the building, such as corridors.

- Nonsmokers should not have to use the smoking room for any purpose. It should be located in a non-work area where no one, as part of his or her work responsibilities, is required to enter.

- Employer-supported smoking cessation programs are an important part of any smoking policy. Approximately 25 percent of American adults still smoke. Many smokers would like to quit, but cigarette smoking is physically and psychologically addictive, and quitting is not easy. While working in a smoke-free building may encourage some smokers to quit, a goal of any smoking policy should be to actively support smokers who want to kick the habit.

- If there are designated outdoor smoking areas, smoking should not be permitted right outside



# r Health

## What You Can Do to Reduce the Health Risks of Passive Smoking

the doors (or near building ventilation system air intakes) where nonsmokers may have to pass through smoke from smokers congregated near doorways. Some employers have set up outdoor areas equipped with shelters and ashtrays to accommodate smokers.

### IN RESTAURANTS AND BARS

- Know the law concerning smoking in your community. Some communities have banned smoking in places such as restaurants entirely. Others require separate smoking areas in restaurants, although most rely on simply separating smokers and nonsmokers within the same space, which may reduce but not eliminate involuntary exposure to ETS.
- If smoking is permitted, placement of smoking areas

should be determined with some knowledge of the ventilation characteristics of the space to minimize nonsmoker exposure. For example, nonsmoking areas should be near air supply ducts while smoking areas should be near return registers or exhausts.

- Ask to be seated in nonsmoking areas as far from smokers as possible.
- If your community does not have a smoking control ordinance, urge that one be enacted. If your local ordinances are not sufficiently protective, urge your local government officials to take action.
- Few restrictions have been imposed in bars where drinking and smoking seem to go together. In the absence of state or local laws restricting smoking in bars, encourage the proprietor to consider his or her nonsmoking clientele, and frequent places that do so.

### IN OTHER INDOOR SPACES

- Does your state or community have laws addressing smoking in public spaces? Many states have laws prohibiting smoking in public facilities such as schools, hospitals, airports, bus terminals, and other public buildings. Know the law. Take advantage of laws designed to protect you. Federal laws now prohibit smoking on all airline flights of six hours or less within the U.S. and on all interstate bus travel.

### A Special Message for Smokers

This is a difficult time to be a smoker. As the public becomes more aware that smoking is not only a hazard to you but also to others, nonsmokers are becoming more outspoken, and smokers are finding themselves a beleaguered group.

If you choose to smoke, here are some things you can do to help protect the people close to you:

- Don't smoke around children. Their lungs are very susceptible to smoke. If you are expecting a child, quit smoking.

- Take an active role in the development of your company's smoking policy. Encourage the offering of smoking cessation programs for those who want them.
- Keep your home smoke free. Nonsmokers can get lung cancer from exposure to your smoke. Because smoke lingers in the air, people may be exposed even if they are not present while you smoke. If you must smoke inside, limit smoking to a room where you can open windows for cross-ventilation. Be sure the room in which you smoke has a working smoke detector to lessen the risk of fire.
- Test your home for radon. Radon contamination in combination with smoking is a much greater health risk than either one individually.
- Don't smoke in an automobile with the windows closed if passengers are present. The high concentration of smoke in a small, closed compartment substantially increases the exposure of other passengers.

More than two million people quit smoking every year, most of them on their own, without the aid of a program or medication. If you want to quit smoking, assistance is available. Smoking cessation programs can help. Your employer may offer programs, or ask your doctor for advice.

