



# medfacts

AN EDUCATIONAL HEALTH SERIES FROM NATIONAL JEWISH HEALTH™

## Secondhand Smoke

### Facts About Secondhand Smoke

When you are exposed to smoke in the environment it is called secondhand smoke. Secondhand smoke is a combination of two types of smoke, sidestream and mainstream smoke. Mainstream smoke is the smoke exhaled by a person who is smoking. Mainstream cigarette smoke is a mixture of over 4,000 chemicals, 40 of which cause cancer (carcinogens) in humans. Sidestream smoke is the smoke from the end of a burning cigarette. Sidestream smoke contains all of these same carcinogens.

Many studies have looked at exposure to indoor air pollution and secondhand smoke. Studies by the Environmental Protection Agency (EPA) show that indoor levels of many pollutants are often much higher than outdoor levels. These levels of indoor air pollutants are concerning because most people spend about 90 percent of their time indoors, either at home or in the workplace. In a report released in 1993, the EPA declared, "the widespread exposure to environmental tobacco smoke in the United States represents a serious and substantial public health impact." The EPA concludes that in adults, secondhand smoke is a Class A carcinogen. It is responsible for approximately 3,000 lung cancer deaths every year in U.S. non-smokers.

Reports have concluded that secondhand cigarette smoke is also associated with a higher risk of heart disease in non-smokers. Studies show that it causes approximately 53,000 deaths from heart disease a year in non-smokers.

### Groups of People at Greater Risk

Anyone breathing secondhand smoke may have symptoms of runny nose, eye irritation, sneezing, headaches and coughing. There are groups of people who may have more severe problems. Those at risk for severe problems are unborn babies and newborns, children and teens and people with asthma or other respiratory conditions. Keep in mind, however, that everyone exposed to secondhand smoke is at risk.

### Pregnancy and Newborns

When women smoke during pregnancy, the unborn baby receives a lower amount of oxygen and a higher amount of carbon monoxide. This increases the risk of miscarriage, premature birth, stillbirth or death in early infancy. Babies exposed to smoke in the womb generally have lower birth weight and shorter length. This increases the risk for many

other complications. Pregnant women who stop smoking during their pregnancy decrease the risk of these potential health problems in their babies.

## Children and Teens

Countless studies have proven that secondhand smoke affects the health of children. Both the Surgeon General and the EPA strongly urge that no one smoke in the presence of children. Studies show that children exposed to cigarette smoke in the home have more upper respiratory infections. They also have more trouble recovering from these infections. These children may have more problems with chronic cough and chronic middle-ear infections. Children in households where one or both parents smoke have twice the amount of bronchitis, pneumonia. They are hospitalized more often before their first birthday than children of non-smoking parents.

If both parents smoke, teens are more likely to become smokers themselves. Teenage smoking is a **major** health problem. Teenagers tend to underestimate how addictive smoking can be. There is concern that some teenagers may become addicted with smoking only one pack of cigarettes.

### People with Asthma, COPD and Other Lung Diseases

Secondhand smoke is a strong irritant and can cause or worsen lung diseases. With asthma, secondhand smoke can make asthma worse. Smoking in any room in the home, in the car and/or smoke odor on clothing, skin and hair can be enough to cause asthma symptoms. Studies have shown that children with asthma who are exposed to secondhand smoke require more asthma medicines, have more emergency room visits and lower lung function. Studies show it may be a major factor in the **development** of asthma in children under five.

It is very important that someone with COPD (Chronic Obstructive Pulmonary Disease) quit smoking and also not be exposed to secondhand smoke. COPD includes illnesses such as emphysema and chronic bronchitis. Exposure to secondhand smoke can cause someone with COPD to have more shortness of breath, more coughing and more mucus.

### Steps to Avoid Secondhand Smoke

- Keep your home and car free from secondhand smoke.
- Have guests and family members smoke outside.
- Never allow anyone to smoke in your (or your child's) bedroom.
- Sit in non-smoking sections of public areas (restaurants, airports, shopping malls, etc.). Visit restaurants and shopping centers that are smoke-free.
- If family members smoke, ask them to think about quitting.
- If you or a family member smokes, talk to your doctor or nurse about quitting. Quit smoking medicines are available and can approximately double a person's chance of quitting.
- There are many different programs to help people quit smoking. Check with your local health department to learn if your state offers a free telephone or Internet service for quitting. Also, contact your local chapter of the following organizations: American Lung Association, the American Cancer Society and the American Heart Association.

# **The Role of National Jewish Health**

Researchers at National Jewish are continuing to study the effects of secondhand smoke on asthma and other lung diseases. Our health care providers work with patients and family members to help them quit smoking and make their homes smoke-free. Physicians and nurses at National Jewish are actively involved in promoting smoking cessation and educating the public regarding the health hazards of smoking and exposure to secondhand smoke. National Jewish specializes in patient care, medical research and education in the fields of chronic respiratory disease and immunologic disorders.

Note: This information is provided to you as an educational service of National Jewish. It is not meant to be a substitute for consulting with your own physician.

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