

Secondhand and Thirdhand Smoke

Secondhand Smoke

Secondhand smoke is a mixture of smoke coming from the burning tips of cigarettes, pipes and cigars, and smoke exhaled by smokers.

Anyone around secondhand smoke breathes in the chemicals from the tobacco smoke. Secondhand smoke causes death and disease in people who do not smoke.

Thirdhand Smoke

Thirdhand smoke is the chemical residue left from secondhand smoke.

It is what you smell on your clothes, hair, furniture or in the car. Thirdhand smoke is also the brown film on walls. The residue can cling to surfaces for months. The particles are very tiny and can easily get into your lungs when you breathe.

No Amount is Safe

No amount of secondhand smoke is safe. The Environmental Protection Agency lists secondhand smoke as a known cause of cancer in people.

- Cigarette smoke has more than 7,000 chemical compounds. This is a combination of chemicals found in the tobacco leaf, chemicals added to tobacco, and additional chemicals formed when tobacco burns.

- The National Toxicology Program estimates that at least 250 chemicals in secondhand smoke are known to be toxic or cause cancer.

Poisonous gases and chemicals in secondhand smoke include hydrogen cyanide (used in chemical weapons), carbon monoxide (in car exhaust), butane (used in lighter fluid), ammonia, and toluene (found in paint thinners).

Toxic metals in secondhand smoke include arsenic (used in pesticides), lead, chromium (used to make steel) and cadmium (used to make batteries).

How Secondhand Smoke Affects Adults

- Secondhand smoke can cause health problems for adults who do not smoke. Each year, secondhand smoke causes:
 - about 7,300 deaths from lung cancer
 - about 34,000 deaths from heart disease.
- Breathing secondhand smoke can:
 - irritate and damage the lining of the airways
 - trigger symptoms such as cough, phlegm, wheezing and breathlessness.

How Secondhand Smoke Affects Children

- Secondhand smoke can cause sudden infant death syndrome (SIDS), breathing problems, ear infections and asthma attacks in babies and children. It causes:
 - between 150,000 to 300,000 infections (such as bronchitis and pneumonia) in children younger than 18 months old.
 - between 1,900 and 2,700 SIDS deaths in the U.S. each year.
- Older children whose parents smoke:
 - get sick more often, including bronchitis and pneumonia
 - get more ear infections and have more surgeries to place ear tubes
- Children who breathe secondhand smoke:
 - wheeze and cough more often
 - have more asthma attacks
 - have more severe asthma attacks
 - have smaller lungs than normal.

Children are also at a high risk to be exposed to thirdhand smoke. Children touch and crawl around surfaces that have chemicals on them from smoke.

How to Protect Yourself and Your Family

Smoking near an open window, blowing smoke out of a room with a fan, using an air filter, or smoking outside does not prevent secondhand and thirdhand smoke.

According to the U.S. Surgeon General, the only way to protect your family from secondhand smoke is to live in a smoke-free environment.

- Make your home and car smoke-free.
- Ask people not to smoke around you and your child(ren).
- Share information with other parents about the health risks of secondhand and thirdhand smoke.
- Teach your child to stay away from tobacco products and secondhand smoke.
- If an adult in your home smokes, only allow smoking outside.
- Wear a jacket or an overshirt when smoking and then take it off when you are done. This reduces thirdhand smoke but it doesn't get rid of it.

**Information adapted from the
U.S. Surgeon General's 2006 report
'The Health Consequences of
Involuntary Exposure to Tobacco Smoke'
and U.S. Surgeon General's 2010 report
'How Tobacco Smoke Causes Disease:
What it Means To You.'**