

What is Secondhand Smoke?

- Secondhand smoke (SHS), also known as environmental tobacco smoke [ETS], or passive or involuntary smoking, is the mixture of particles from the burning end of a cigarette, cigar, or pipe and the smoke breathed out by the smoker.¹
 - These two types of smoke are known as:
 - **Mainstream smoke** - the smoke exhaled from the lungs of the smoker; and
 - **Sidestream smoke**- the smoke that curls up from the burning end of a cigarette, cigar, or pipe.
- Compared to mainstream smoke, sidestream smoke actually has a higher concentration of toxic chemicals. Tobacco actually burns cleaner at the higher temperatures generated when a smoker inhales. Allowing a cigarette to smolder in the ashtray between puffs is very hazardous to those around the smoker such as young children. While filters screen out some of the toxins for the smoker when inhaling, sidestream smoke, burning at lower temperatures and with no filter emits:
 - *5 times as much carbon monoxide (dangerous gas that robs blood of its ability to carry oxygen),*
 - *3 times as much benzopyrene (a substance that can cause cancer), and*
 - *50 times as much ammonia (a potent eye and respiratory tract irritant) as mainstream smoke.*²
- Secondhand smoke has been classified as a Group A carcinogen under the U.S. Environmental Protection Agency's (EPA) carcinogen assessment guidelines. This classification is reserved for those compounds or mixtures shown to cause cancer in humans, based on human populations. The EPA estimates that SHS is responsible for approximately **3,000** lung cancer deaths annually in U.S. nonsmokers and **62,000** coronary heart disease deaths annually in nonsmokers.³
- More than **4,000** chemical compounds have been identified in secondhand smoke. Of these, **200** are poisons (toxins) and at least **43** cause cancer.⁴
- Smoke-filled rooms can have up to six times the air pollution as a busy highway.⁵
- It takes about two weeks for nicotine to clear from the air in a room where smoking has occurred.⁶
- Every time you inhale smoke-filled air you draw chemicals such as cadmium (a cancer-causing metallic element), ammonia (used in toilet cleaners), benzene (used in manufacture of DDT), acetone (a powerful solvent), formaldehyde (a component of embalming fluid), and carbon monoxide (a dangerous gas) into your body.⁷

¹National Safety Council, 2000: *Environmental Tobacco Smoke*, www.nsc.org/ehc/indoor/ets.htm; ²Waite: *Secondhand Smoke-Hold The Smoke!*, Hagerstown MD: *The Health Connection*, 1994 1-800-548-8700. USEPA. *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. Indoor Air Division, Office of Atmospheric and Indoor Programs, Office of Air and Radiation, US Environmental Protection Agency, 1992. EPA/600/6-90/006F; ³Environmental Protection Agency, 1993a, *Respiratory Health Effects of Passive Smoking*, www.epa.gov/iaq/pubs/etsfs.html; ⁴American Lung Association, 2000a, www.lungusa.org/tobacco/secondhand_factsheet99.html; ⁵Centers for Disease Control, *It's Time to Stop Being a passive Victim*, 1993; ⁶Repace/Lowrey, *Environmental Journal*, 1986: 11:3, www.repace.com; ⁷Texas Department of Health, 1997a, 1-800-345-8647

