



What Is Secondhand Smoke?

Secondhand smoke is produced when a cigarette is lit. It is divided into two parts: *mainstream* smoke and *sidestream* smoke.

Mainstream smoke is what comes out of a smoker's mouth.

Sidestream smoke is produced at the lit end of the burning cigarette.

What Do They Have in Common?

They both contain chemicals that cause cancer, like benzene and nickel. Other ingredients are poisons, like carbon monoxide and ammonia.

Are Mainstream and Sidestream Smoke Different in Some Way?

Yes.

Sidestream smoke is more dangerous. The lit end of the burning cigarette burns at a slower rate when left to burn than when the smoker takes a puff. As a result, the concentration of some chemicals, including some carcinogens such as benzene, is higher in sidestream than mainstream smoke.

It has been estimated that about 85% of the smoke in an average room is sidestream smoke.

What Makes Secondhand Smoke so Harmful?

Mainstream and sidestream smoke contain more than 4,000 chemicals. According to Health Canada, about 50 of these chemicals cause cancer.

Here are few examples of harmful chemicals in secondhand tobacco smoke. Tar, a common ingredient in tobacco smoke, is made up of thousands of chemicals. Quinoline and catechol are pesticides. Cadmium and nickel are chemicals used in batteries. Ammonia is a chemical used to scrub dirty floors and clean toilets.

What You Can't See Can't Hurt You? Right?

Yes, it can.

Secondhand smoke is not entirely visible. In fact, only a fraction of all the ingredients of secondhand smoke is visible. The rest of it is there, but you can't see it. Some of it you can't even smell - carbon monoxide, for example. But it's harmful just the same.

What happens when I inhale secondhand smoke?

The poisons from secondhand tobacco smoke end up in your lungs, your blood, your tissue and your organs.

Sources:

- Action on Smoking and Health. What's in a cigarette? United Kingdom, 2001
- Physicians for a Smoke-Free Canada. Health Effects of Chemicals found in Cigarette Smoke.
- Second Hand Smoke – Fact Sheets. Health Canada, 2001
- The Columbia Encyclopedia. Ammonia. Sixth Edition, 2001.
- Tobacco Control Program. Analytical Methods – Tobacco Constituents. Health Canada, 2001
- US department of Health and Human Services. The Health Consequences of Involuntary Smoking: A Report of the Surgeon General.
- US Department of Health and Human Services, 1986.