How a Cigarette Is Engineered

The design and content of cigarettes continue to make them attractive, addictive, and deadly. Every day, more than 1,300 people in the United States die because of cigarette use.1

Filter
- Typically made from bundles of thin, hair-like fibers.
- Designed to trap smoke, but only stops a small portion of the smoke from being inhaled.
- The filter (and ventilation holes) in most cigarettes may lead smokers to inhale more deeply, pulling dangerous chemicals farther into their lungs.

Cigarette paper
- Holds the tobacco filler.
- Manufacturers add chemicals to the paper to control how fast the cigarette burns.
- Smokers inhale everything that is burned—the tobacco filler, the paper... everything.

Additives
Manufacturers can add hundreds of ingredients to a cigarette to make smoking more appealing and to mask the harshness of smoke.
- Certain additives, like sugars, can form cancer-causing chemicals when they are burned.
- Sugar and flavor additives can change the taste of smoke and make it easier to inhale, but no less harmful.
- Ammonia and other chemicals added to tobacco may increase the absorption of nicotine, which is addictive.

Tipping paper
- Wraps around the filter, connecting it to the rest of the cigarette.
- Ventilation holes, if unblocked, dilute inhaled smoke with air.
- Manufacturers have chosen to place the ventilation holes where they are. The holes are largely ineffective. Because of their location, most smokers unknowingly block them with their fingers or lips.

Tobacco filler
- Made up of chopped tobacco leaves, stems, reprocessed pieces, and scraps.
- Dangerous chemicals can form in and be deposited on tobacco during the processing of the tobacco leaves.
- Other dangerous chemicals are created when the tobacco filler is burned.

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**Center for Tobacco Products**

How Tobacco Smoke Causes Disease (Fact Sheet), Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2007.

European Commission, Directorate-General, Joint Research Centre; 2007.

Consumer Booklet, Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2010.

Prevention and Health Promotion, Office on Smoking and Health; 2014.

**FDA’s Regulatory Authority:** The FDA Center for Tobacco Products (CTP) has broad authority, via the Tobacco Control Act, to regulate the manufacturing, distribution, and marketing of tobacco products. To protect public health, CTP has the authority to regulate what ingredients tobacco manufacturers can put into their products.


7 Mumpower RC II. The Design of Cigarettes. 1987;11:555-573.


9 Kiefer J. Monopower BCTI: Parameters That Affect the Pressure Drop and Efficiency of Cellulose Acetate Cigarette Filters. Research Laboratories, Tennessee Eastman Company; 2004; Bates number: 81052204/2269.


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