

# What's in a Cigarette

*Cigarettes contain more than 4,000 chemicals –  
of which, more than 200 are poisonous and more than 20 cause cancer in humans*

Chemical	Purpose
Acetone	Nail polish remover
Ammonia	Caustic agent – added to fertilizers and household cleaners. Is added to cigarette to enhance flavor and helps the body absorb nicotine faster, causing addiction quickly.
Arsenic	Rat poison
Benzene	Industrial chemical and substance in gasoline. Causes cancer. Responsible for causing leukemia and aplitic anemia.
Benzopyrene	One of the most potent cancer causing substances in the world. It is found in coal tar and cigarette smoke.
Butane	Highly flammable part of gasoline.
Cadmium	Used in batteries and oil-based paint. It causes cancer, damages the liver, kidney and brain and stays in your body more than 10 years. Excreted in breast milk of nursing mothers.
Carbon Monoxide	Colorless, odorless gas. Steals oxygen from blood cells.
Cocoa	Opens up the airways so cigarette smoke can be taken in easier and deeper into the lungs. This also exposes the body to more nicotine and higher levels of tar.
Formaldehyde	Embalming fluid – used to preserve dead tissue. Causes cancer and damages the lungs, skin and digestive tract.
Hydrogen cyanide	Colorless, poisonous gas. Hurts the ability of lungs to clear. Short-term exposure causes headaches, nausea, dizziness and vomiting.
Lead	A heavy metal. Stunts growth and damages the brain, kidneys and nervous system. Children are particularly vulnerable because it is absorbed easily in growing bodies. Exposure in children can cause developmental delays, lower IQ, shortened attention spans and increased behavioral problems.
Menthol and eugenol	Numbs the throat so the smoker cannot feel the irritation of cigarette smoke.
Mercury	A heavy metal. Affects the central nervous system. Exposure causes tremors, memory loss and kidney disease.
Methoprene	Insecticide used to kill fleas on pets.
Nickel	A heavy metal. Affects the central nervous system. Exposure causes increased respiratory infections.
Nicotine	Affects cardiovascular and endocrine system functioning. Highly addictive, causes dependence very quickly.
Nitric oxide	Causes airway inflammation and short-term effects in airway functioning. High concentrations can lead to acute lung dysfunction.
Phenol	Used in disinfectants and plastic. Exposure causes skin, eye, and mucus membrane irritation. Promoted tumor growth in lab animals.
Polonium	Cancer causing radioactive element.
Propylene glycol	Keeps tobacco from drying out. Protects flavor from disappearing. Helps in the delivery of nicotine to the brain.
Styrene	Found in insulation material. Causes headaches, fatigue, weakness and depression.
Toluene	Embalmer's glue. Central nervous system depressant. Exposure causes ataxia, tremors, cerebral atrophy, nystagmus, speech, vision and hearing impairment, headaches, dizziness and difficulty sleeping.
Turpentine	Toxic chemical used in paint stripper.

*Adapted from Campaign for Tobacco Free Kids fact sheet on secondhand smoke and studies of the National Cancer Institute.*