



## Chemicals in Tobacco Smoke

A dangerous cocktail of over 4000 chemicals are produced by a lit cigarette, and at least 69 of these are known to cause cancer plus hundreds of other poisons. An illustration showing some of the chemicals found in tobacco smoke:



## Some cancer-causing chemicals in tobacco smoke and their other common uses

- Tar - a mixture of dangerous chemicals
- Arsenic - used in wood preservatives
- Benzene - an industrial solvent, refined from crude oil
- Cadmium - used in batteries
- Formaldehyde - used in mortuaries and paint manufacturing
- Polonium-210 - a highly radioactive element
- Chromium - used to manufacture dye, paints and alloys
- 1,3-Butadiene - used in rubber manufacturing
- Polycyclic aromatic hydrocarbons - a group of dangerous DNA-damaging chemicals
- Nitrosamines - a group of carcinogens only found in tobacco
- Tobacco-specific nitrosamines - a group of carcinogens only found in tobacco
- Acrolein - used as a chemical weapon in World War 1 - and acetaldehyde - used in the industrial production of acid

## Other chemicals in cigarette smoke

- Nicotine – highly addictive
- Hydrogen cyanide - used as an industrial pesticide
- Carbon monoxide - found in car exhausts and used in chemicals manufacturing
- Nitrogen oxides - a major component of smog
- Ammonia - used to make fertilisers and explosives