

Roll-your-own tobacco, herbal cigarettes, kreteks, bidis and cannabis

Tobacco is harmful whether smoked as roll-your-own, with herbs or flavours, or as factory-made cigarettes.

Burning tobacco leaf makes smoke, which has thousands of chemicals. Many of these chemicals are toxic, causing cancers, heart disease, lung disease and many other illnesses.¹

Even when a product does not contain tobacco, if you smoke any kind of plant material you breathe in carbon monoxide and tar, which can harm your health.¹⁻⁴



Roll-your-own tobacco

Roll-your-own cigarettes (RYO) made from loose tobacco have become popular.⁵ This may be partly because they are cheaper than factory-made cigarettes.⁶ In 2022-23, 41% of Australians aged 18 years and over who smoked used RYO tobacco; 26% used it daily.⁵

Research suggests that smoking RYO tobacco is as harmful as smoking factory-made cigarettes.⁷⁻¹⁰ Most of the toxic chemicals in tobacco smoke come from burning the tobacco, including carbon monoxide, nicotine, tar and many other disease-causing substances.^{1,11}

Tobacco companies add similar additives to RYO tobacco as they do to cigarettes, often in higher amounts than in factory-made cigarettes.^{12,13} These additives include chemicals that make the tobacco seem moist and the smoke less harsh.¹ Smoking tobacco without any additives would still be very harmful.¹

People who smoke RYO tobacco may smoke their cigarettes more intensely,⁸ and inhale a greater volume of smoke per cigarette.¹⁴ Limited research shows that people who smoke

RYO tobacco are exposed to similar levels of nicotine, carbon monoxide and certain cancer-causing chemicals as people who only smoke factory-made cigarettes.^{7,9,15}

[More information on roll-your-own tobacco.](#)

Herbal cigarettes, bidis and kretek or clove cigarettes

Bidis, kretek or clove cigarettes and some herbal cigarettes contain tobacco. The smoke of these cigarettes has chemicals that are known to cause cancer. Herbal cigarettes, bidis and kretek or cloves cigarettes cannot be sold in Australia.

Herbal cigarettes are made from herbs, flowers or other plant parts. They are common in Asian countries such as China, Korea, Taiwan and Thailand. Herbal cigarettes from these countries often also contain tobacco.¹⁶

The smoke from non-tobacco herbal cigarettes has similar levels of tar, carbon monoxide and other types of toxic chemicals as tobacco cigarettes.¹⁷ They are harmful to health and there is no evidence to suggest that they help people quit smoking.^{3,16,18}

[Read more about herbal cigarettes.](#)

Bidis are made in Asia with locally grown coarse tobacco flakes and hand-rolled in temburni leaf, which is tied up with a thread.¹⁹ Bidis are popular in India, Bangladesh, Nepal, Sri Lanka, Pakistan and the Maldives.^{19,20} Bidis may have a variety of flavours such as clove, mango, chocolate, vanilla or strawberry.^{19,21} Certain tobacco flavourings contain toxic chemicals.^{21,22}

Bidis are tobacco products and are harmful to health.¹⁹ When smoked, bidis can produce similar or higher levels of nicotine and cancer-causing chemicals compared to factory-made cigarettes.^{19,23,24}

Smoking bidis increases the risk of cancers of the lung, mouth, throat, oesophagus and stomach.^{19,20,25} People who smoke bidis have an increased risk for heart disease, heart attack, and lung diseases, including chronic bronchitis and chronic obstructive pulmonary disease.^{20,26}

[Read more about bidis.](#)

Kreteks (or clove cigarettes) are a type of small cigarette that contains tobacco, ground clove buds and cocoa.¹⁹ They are popular in Indonesia.^{19,27} Although kreteks are smaller than regular cigarettes, they can produce just as much smoke. Tests show that people can inhale similar levels of nicotine and carbon monoxide from them.²⁰

Cloves contain high levels of a chemical called eugenol, which can be toxic when inhaled.^{21,28} Eugenol also has a numbing effect on the throat so the smoke may seem less harsh.²⁸ However, clove cigarettes are still as dangerous as other tobacco cigarettes.^{20,29,30} Some people have had severe lung injuries after inhaling clove cigarette smoke.²⁰

Clove cigarettes contain tobacco and are likely to cause the same diseases as regular cigarettes. Research links clove cigarette smoking to heart disease, poor lung function, and a greatly increased risk of mouth cancer and dental disease.²⁰

[Read more about kreteks \(clove cigarettes\).](#)

Herbal cigarettes, kreteks (clove cigarettes) and bidis often contain some form of **flavouring**, which may be herbal, natural or synthetic.

Some flavourings, including natural ones, contain chemicals that are toxic when breathed in. Tobacco companies add flavourings to mask the harshness or unpleasant flavours in cigarette smoke and make cigarettes more appealing to young people.³¹

[Read more about flavourings and additives in tobacco.](#)

Tobacco laws in Australia restrict the flavours allowed in tobacco products. This means that some cigarettes and roll-your-own tobacco cannot be sold in Australia, including those with menthol, herbs, clove and rum flavouring, along with cigarettes that contain flavoured crushballs.^{32,33} Australian tobacco laws are designed to reduce the appeal of smoking, make the harms of smoking clear and make it easier for people to quit.³⁴

[Read more about the end of menthol and other flavourings.](#)

Cannabis (Marijuana, hashish)

Cannabis is the most frequently used illegal drug in Australia, with a survey in 2022-23 showing that about 12% of Australians had used the drug in the past 12 months.³⁵ The main forms of cannabis are marijuana, hashish (cannabis resin) and hashish oil.⁴ Marijuana is made up of the dried leaves, flowering tops, stems or seeds of the cannabis plant.⁴

Smoke from marijuana contains a similar range of harmful chemicals as tobacco. These include carbon monoxide, irritants, tar and cancer-causing chemicals.⁴ Cannabis does not contain nicotine; its main active drugs are cannabinoids. The cannabinoid that causes people to experience a 'high' is THC (delta-9 tetrahydrocannabinol).³⁶

Cannabis increases the risk for:

- cough, phlegm, wheeze and episodes of chronic bronchitis
- lower birth weight following cannabis smoking during pregnancy
- developing schizophrenia and other psychoses, more so in people who use it frequently
- motor vehicle crashes.¹⁷

Cannabis can produce euphoria, but also unpleasant side effects such as anxiety and panic, especially in high doses or in new users.³⁷ Cannabis is a depressant drug, which means it slows the activity of the central nervous system and the messages between the brain and the body.³⁸ As a result, information processing, attention, motor skills, reaction time and skilled activities such as driving, are impaired while the person is intoxicated.³⁹ It can also affect memory and learning.¹⁷

Smoking cannabis raises heart rate and blood pressure in the short term.⁴⁰⁻⁴² Regular cannabis smoking can produce chronic inflammation of the lungs in young adults; symptoms include wheeze, cough, phlegm and shortness of breath.⁴³ Stopping cannabis smoking can help improve these symptoms.⁴² People who smoke both tobacco and cannabis long term have higher rates of these symptoms than those who smoke either only tobacco or only cannabis.^{40,44}

There are many gaps in the research on the health effects of regular cannabis use.⁴² There is growing evidence that cannabis plays a role in mental illness, including major depression, suicide ideation and social anxiety disorder.¹⁷ People who use cannabis heavily for a long time are more likely to have problems affecting memory and the processing of complex information. It's not clear if these problems reverse after quitting.^{17,39,45}

[Read more about cannabis.](#)

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