

TOBACCO

What is tobacco?

Tobacco is made from the dried leaves of the tobacco plant. Tobacco smoke is a mixture of almost 4,000 different chemical compounds, including nicotine, tar, carbon monoxide, acetone, ammonia and hydrogen cyanide. Forty-three of these chemicals have been proven to be carcinogenic (causing cancer).

Tobacco is ingested through smoking cigarettes, pipes and cigars. In the form of a fine powder, it may also be sniffed as snuff, or it is sometimes sold in blocks to be chewed. It can also be ingested through passive smoking. Cigarettes account for approximately 98% of tobacco consumed in Australia.

Nicotine

Nicotine is a poison. Swallowing a small amount of pure nicotine can kill an adult. Nicotine is the stimulant drug in tobacco smoke that causes dependency, as it is highly addictive, both physically and mentally. A key brain chemical involved in mediating the desire to consume drugs is the neurotransmitter dopamine, and research has shown that nicotine increases the levels of dopamine in the part of the brain that regulates feelings of pleasure. This is an important reason why nicotine is so addictive.

The nicotine hit is extremely quick. In cigarette smoke it is absorbed directly from the mouth and because it is alkaline, dissolves instantly in saliva. It is then carried through the mouth's lining into the bloodstream and straight to the brain. It only takes a few seconds for the smoker to feel somewhat light-headed and dizzy. Nicotine makes the smoker feel stimulated and alert, it makes the heart beat faster, so more blood circulates around the body per minute. However, it also causes the small blood vessels in the body to narrow, restricting the flow of blood and causing blood pressure to rise. Nicotine reduces tension in muscles, which can make the smoker feel relaxed. It seems to help some people work by improving concentration, relieving boredom and fatigue.

Many smokers believe smoking calms their nerves. However, smoking releases epinephrine, a hormone that creates physiological stress in the smoker, rather than relaxation. The addictive quality of the nicotine contained in the cigarette makes the user smoke more to calm down, when in fact the smoking itself is causing the agitation.

Nicotine is also strongly linked with the development of cancers.

Tar

Tar is released when a cigarette burns. It is the main cause of lung and throat cancer in smokers, and it also aggravates bronchial and respiratory disease. A smoker who smokes one packet a day, inhales more than half a cup of tar from cigarettes each year.

Carbon Monoxide

Carbon monoxide is a colourless, odourless and very toxic gas, which is taken up more readily by the lungs than oxygen. High levels of carbon monoxide in the blood is typical of smokers and, together with nicotine, increases the risk of heart disease, hardening of the arteries and other circulatory problems.

How many people use tobacco?

The most recent figures available in the 2001 National Drug Strategy Household Survey showed that:

- the average age at which Australian smokers took up tobacco smoking was at 15 years of age
- it was estimated that in 2001 approximately 3.6 million Australians aged 14 years or older were smokers
- one in five (19.5%) Australians aged 14 years or older smoked daily in 2001
- one in two (49.4%) Australians aged 14 years or older had smoked at least 100 cigarettes or the equivalent amount of tobacco at some time in their lives

Tobacco smoking is the single largest preventable cause of death and illness in Australia, responsible for over 19,000 deaths each year, and many more disabilities.

In 1998, the National Drug Strategy Household Survey showed that tobacco smoking remained the leading cause of drug-related hospital episodes, with 142,525 (71%) episodes in 1997–98. The main tobacco-related illnesses requiring hospitalisation were cancer, chronic obstructive pulmonary disease, and ischaemic heart disease.

Half of all teenagers who are currently smokers will die from diseases caused by smoking if they continue to smoke over the long-term. Half of these premature deaths will occur in middle age, with an average loss of 23 years of life.

Other names for tobacco

Tobacco is also known as cigs, fags, gaspers, rollies and smokes.

What are the short-term effects of tobacco?

The short-term effects produced by tobacco include:

- rise in blood pressure and heart rate
- brain and central nervous system activity stimulated then reduced
- decreased blood flow to body extremities; particularly noticeable in fingers and toes
- increased carbon monoxide levels in the bloodstream, reducing the amount of oxygen available to body organs and tissue
- acid in the stomach
- dizziness, nausea and watery eyes
- appetite, taste and smell are weakened

What are the long-term effects of tobacco?

The long-term effects of tobacco include:

- diminished or extinguished sense of smell and taste
- shortness of breath
- persistent cough
- increased risk of colds and chronic bronchitis

- increased risk of emphysema
- increased risk of heart disease
- increased risk of stroke
- premature and more abundant face wrinkles
- increased risk of cancer of the mouth, larynx, pharynx, oesophagus, lungs, pancreas, cervix, uterus and bladder
- increased risk of stomach ulcers
- increased risk of peripheral vascular disease due to decreased blood flow to the legs
- reduced fertility in both men and women

What are the effects of smoking during pregnancy?

Smoking during pregnancy can affect the unborn child. Babies are more likely to miscarry, be of low birth weight, premature or stillborn.

What is passive smoking?

Passive smoking occurs when one breathes in the tobacco smoke of others. Passive smoking has been shown to contribute to lung damage including cancer, and heart disease. Children exposed to passive smoke are especially susceptible, having more respiratory and ear infections, and suffering from higher levels, and more severe asthma.