Nicotine

What is nicotine?

Nicotine is a stimulant drug that speeds up the messages travelling between the brain and body.\(^1\) It is the main psychoactive ingredient in tobacco products and so this Drug Facts page will focus on the effects of nicotine when consumed by using tobacco.

Tar and carbon monoxide (a toxic gas) are also released when tobacco is burned, such as when it’s smoked.\(^1\)

Products such as cigarettes, cigars, pipe tobacco, chewing tobacco, and wet and dry snuff and the dried leaves from the tobacco plant all contain nicotine.\(^1\)

Electronic cigarettes (also known as E cigarettes) do not contain dried tobacco leaves, but they can contain nicotine.

Other names for cigarettes

Ciggies, darts, durries, rollies, smokes, fags, butts, cancer sticks.

How is nicotine used?

Tobacco which contains nicotine is usually smoked in cigarettes. It is also smoked in cigars and pipes. There are numerous forms of smokeless tobacco including chewing tobacco, and wet and dry. Smokeless tobacco products are not available commercially in Australia.\(^2\)

Other types of stimulants

- Amphetamines
- Betel nut
- Caffeine
- Cocaine
- Ice
- Khat
- Mephedrone
- Synthetic cathinones
Effects of nicotine

There is no safe level of drug use. Use of any drug always carries some risk. It’s important to be careful when taking any type of drug.

Nicotine affects everyone differently, based on:

- size, weight and health
- whether the person is used to taking it
- whether other drugs are taken around the same time
- the amount taken
- the strength of the tobacco and how much is contained in the product.

The following effects may be experienced among people who do not normally smoke tobacco products:

- dizziness
- headache
- nausea
- abdominal cramps
- possibly vomiting or weakness

For people who smoke tobacco products regularly, they will build up a tolerance to the immediate short-term effects of smoking tobacco, and may experience the following effects after smoking:

- mild stimulation
- increase in heart rate
- increased ability to concentrate
- relaxation
- temporary reduction in the urge to smoke
- coughing
- dizziness, headaches
- bad breath
- tingling and numbness in fingers and toes
- reduced appetite, stomach cramps and vomiting.

If a large amount of nicotine is taken the following effects may also be experienced:

- confusion
- feeling faint
- seizures
- fast breathing
- respiratory arrest (stop breathing) and death.

Some people believe that smoking ‘light’ or ‘low tar’ cigarettes is less harmful than regular cigarettes. However, there is little difference between the amount of chemicals inhaled by people who smoke ‘light’ cigarettes and those who smoke regular ones.

Long-term effects

Regular smoking of tobacco products which contain nicotine have well documented negative effects on health and is recognised as a major preventable cause of premature death and disability around the world. Use of nicotine through smoking may eventually cause the following types of chronic disease and issues:

- stroke
- blindness, cataracts (eye diseases)
- birth defects if the fetus is exposed to cigarettes
- periodontitis (yellowing teeth, gum disease)
- aortic aneurism (enlarging of major blood vessels)
- coronary heart disease
- pneumonia
- various respiratory diseases (shortness of breath, asthma, coughing fits)
- diabetes
- reduced fertility
- ectopic pregnancy (in the fallopian tube)
- hip fractures
- male sexual dysfunction
- rheumatoid arthritis
- reduced immune function (regular colds and flu)
- overall diminished health (ageing, back pain, slower healing wounds, mood swings)
- dependence on smoking
- financial, work and social problems.
Smoking cigarettes containing nicotine are causally linked to the following cancers (i.e. smoking may directly cause these cancers)

- oropharynx
- larynx
- oesophagus
- trachea, bronchus and lung
- acute myeloid leukemia
- stomach
- liver
- pancreas
- kidney and ureter
- cervix
- bladder
- colorectal

Passive smoking

Passive smoking is when someone breathes in smoke from other people smoking. Passive smoking can cause many of the health problems listed above, so it’s important not to smoke near other people, particularly babies, children, pregnant and breastfeeding women, and people with chronic respiratory conditions.

Using nicotine with other drugs

The effects of using nicotine with other drugs – including over-the-counter or prescribed medications – can be unpredictable and could cause:

- **Nicotine + benzodiazepines:** reduced effectiveness of benzodiazepines.
- **Nicotine + contraceptive pill:** increased risk of blood clots forming.

It’s important to check with a medical professional about whether nicotine might affect any medications you are taking.

Withdrawal

Giving up nicotine after using it for a long time is challenging because the body has to get used to functioning without it. Withdrawal symptoms usually start within 2–3 hours after you last use tobacco. The symptoms may last from a few days to a few weeks. These symptoms can include:

- cravings
- irritability, anxiety and depression
- restless sleep
- eating more and putting on weight
- trouble concentrating
- headaches
- coughing and sore throat
- aches and pains
- upset stomach and bowels.

You may still crave a cigarette for months and years after giving up. It’s important to ask for help if you need it. Call Quitline on 13 QUIT (13 78 48).

Nicotine and the law

Federal and state laws make it an offence to sell or supply tobacco products to people under 18 years of age. It is also illegal for anyone under 18 years to purchase tobacco products.

There are laws that regulate and restrict how tobacco products are advertised, promoted and packaged.

There are also laws and regulations that restrict smoking in public areas such as shopping centres, cafes and workplaces. Most states and territories have laws that ban smoking in cars with children.

See also, drugs and the law - adf.org.au/talking-about-drugs/law/.
Nicotine statistics

National

- Tobacco smoking is the leading cause of preventable burden in Australia
- Tobacco is the leading cause of cancer in Australia (leading to 22% of cancer burden)
- There has been a long-term downward trend in tobacco smoking since 1991 – dropping from 24% of Australians to 12% of Australians in 2016)
- People who smoke are more likely to live in remote or very remote areas of Australia
- Generally, men are more likely to be daily smokers than women.10

Young people

- Young Australians (aged 14–24) have their first full cigarette at 16.3 years on average.9
- 97.6% of 12–17 years old have not smoked.11 The proportion of 12–17 years old who have never smoked decreases in the older age groups, but by age 17 93.9% have still never smoked.11
- 2.7% of all 12-17 years old have smoked more than 100 cigarettes in their lifetime, which peaks at 7.9% among 17 year olds.12

References

Always call an ambulance on triple zero (000) if an overdose is suspected: tell the paramedic exactly what has been taken. Paramedics are there to help and will not involve the police unless there is a danger to themselves or others.

Other help, support services and resources
Links to further help and support • adf.org.au/help-support/

Further information

DrugInfo • 1300 85 85 84
Free confidential information and advice about alcohol and other drugs (9am - 5pm, Mon-Fri)

Family Drug Help • 1300 660 068 • www.familydrughelp.com.au (Victorian-based)
Services are available to support those around you who may be affected by your drug use. As well as providing understanding, they can provide information about how best to help during treatment.

Family Drug Support • 1300 368 186 • www.fds.org.au (Australia-wide)

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