

# TOBACCO

NICOTINE ADDICTION



**Australian Government**  
**Department of Health**

# WHAT ARE NICOTINE AND TOBACCO?

Cigarettes are made from the dried and cured leaves of the tobacco plant (mainly *Nicotiana Tabacum*). Nicotine is a naturally occurring chemical in tobacco leaves,<sup>1</sup> and the key addictive drug in tobacco.<sup>2</sup> Like heroin or cocaine, nicotine changes the way the brain works and causes cravings for more nicotine.<sup>2</sup>

Nicotine is usually classed as a mild stimulant drug, similar to coffee, as it raises a smoker's blood pressure and heart rate. Regular smokers report feeling more alert and less stressed. While the experience of smoking is to feel less stressed, once the effects of the nicotine wear off, smokers typically feel worse. They therefore feel the need for another cigarette just to feel good again.

Nicotine is classified as a dangerous poison which can lead to death. At the low levels that people knowingly take it in, it is not immediately dangerous. Risk of overdosing on cigarettes is low as nausea typically occurs well before a fatal dose can be reached. However, young children can be poisoned by eating tobacco or nicotine medications.<sup>1</sup> Vomiting is the most common outcome, but in less common, severe cases children have needed to be treated in hospital.<sup>1</sup>

Because nicotine doesn't make people very intoxicated it can be difficult for people to accept that it is addictive.<sup>3</sup> Modern cigarettes are manufactured to increase the impact of the nicotine and increase addiction.<sup>4</sup>

Cigarette smoking is by far the most common use of tobacco in Australia.<sup>1</sup> Smokeless tobacco refers to forms of tobacco use that do not involve burning the tobacco and inhaling the smoke. Smokeless tobacco products cannot be sold within Australia.<sup>1</sup>

Types of tobacco used in Australia include:

- **'Tailor-made' manufactured cigarettes – the most commonly used.**
- **Roll-your-own cigarettes – made from manufactured loose tobacco and rolled into paper tubes by the smoker.**
- **Cigars – which are designed to be puffed on, rather than inhaled into the lungs. However, cigarette smokers who also smoke cigars tend to inhale the smoke which delivers very similar toxins to cigarettes.**
- **Pipe tobacco – pipe smoke is also designed to be puffed rather than inhaled.**
- **Water pipe tobacco (shisha, narghile) – tobacco used in water pipes is often mixed with dried fruits to create aromatic flavours. Water pipe smoke typically has very high tar and carbon monoxide (CO) levels per unit of nicotine, even though it may give a 'safer' impression because the smoke passes through water.<sup>1</sup>**
- **Chop-chop – illegal loose rolling tobacco that has not been taxed, often sold under-the-counter in plastic bags.**
- **Herbal and spiced cigarettes – some 'herbal' cigarettes contain tobacco, whilst spiced cigarettes contain tobacco mixed with spice flavourings such as clove or cinnamon.**
- **In Australia, some Aboriginal Australians have traditionally also used pituri, a plant unrelated to tobacco, which contains nicotine.**

# WHAT ARE THE EFFECTS OF NICOTINE?

Nicotine is a psychoactive drug which causes chemical or biological changes in the brain, producing a mood altering effect.<sup>5</sup> Most smokers say they get a buzz from cigarettes, particularly after they have not had a cigarette for a while, for example first thing in the morning.<sup>2</sup> Whilst many smokers say they smoke to relieve stress, smoking disrupts underlying brain stress systems.<sup>6</sup> Smokers are more stressed overall than non-smokers and become less stressed overall once they quit.<sup>7</sup>

Nicotine has several properties that lead to it being classified as addictive.

It is *reinforcing*, meaning that smokers will keep using the drug because they enjoy its effects or because it makes them feel normal by reversing negative withdrawal effects.<sup>4</sup>

It is *hard to stop using nicotine*, even though people want to.<sup>8</sup> On average, smokers try unsuccessfully to quit about once a year.<sup>7</sup> Even after long periods of not smoking, people who decide to have an occasional cigarette are at risk of returning to previous levels of smoking. As it takes most people several attempts to quit successfully, it is important that smokers persevere and seek support to overcome their dependence on nicotine (see 'Quitting Smoking' factsheet).

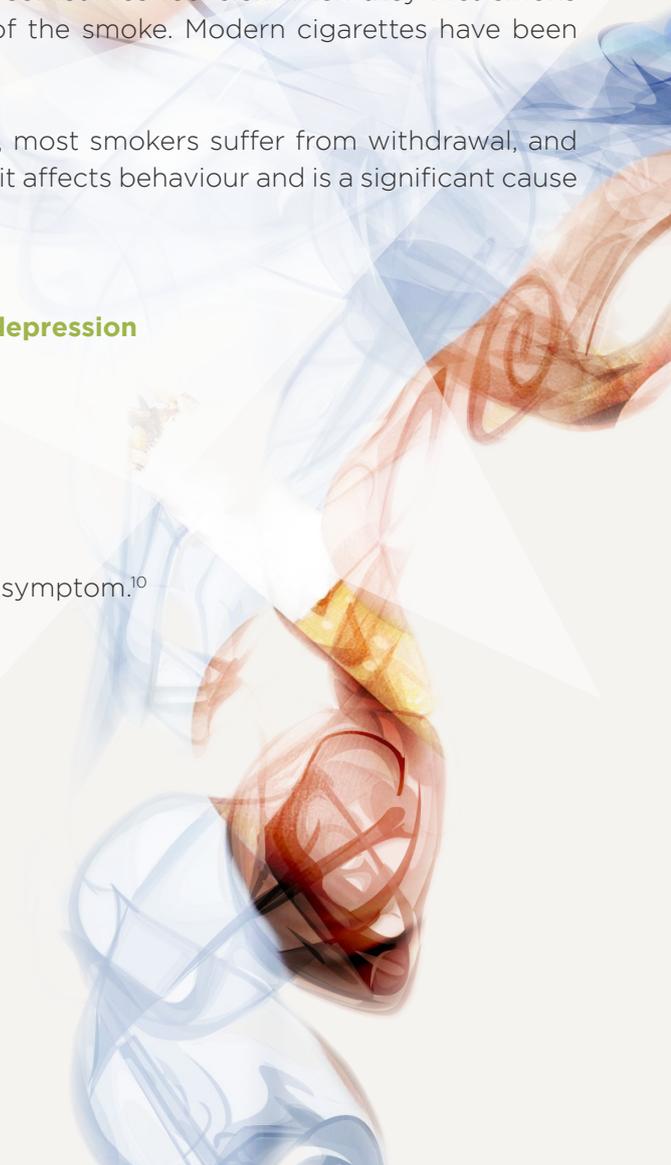
Nicotine is *used despite harmful effects*. Most smokers know about the harmful effects of smoking, for example lung cancer, but continue to smoke. One in two of all long term smokers will die as a result of their habit.<sup>9</sup>

Smokers develop a *tolerance* to nicotine. The body gets used to the drug and its effect is reduced. One result of this is that regular smokers are able to take in far greater amounts of tobacco smoke and associated poisons than if they had not become tolerant.<sup>9</sup> New smokers sometimes feel sick when they first smoke because they are not used to nicotine or the other aspects of the smoke. Modern cigarettes have been engineered to minimise this initial aversive reaction.

Smokers are *physically dependent* on nicotine. When quitting, most smokers suffer from withdrawal, and although withdrawal is not as severe as from some other drugs, it affects behaviour and is a significant cause for taking up smoking again.<sup>8</sup> Withdrawal symptoms include:<sup>10</sup>

- **Cravings to smoke**
- **Emotional effects such as anger, anxiety, irritability, depression**
- **Reduced ability to experience pleasure**
- **Hunger**
- **Restlessness**
- **Concentration problems**
- **Insomnia**

For teenagers, cravings may be the most apparent withdrawal symptom.<sup>10</sup>





## FOR MORE INFORMATION

**There are many places you can find out more information about tobacco and smoking, including health information and advice to quit. These include:**

### **Quitline**

Telephone service for smokers who want to quit **13 7848 (13 Quit)**

### **[www.quitnow.gov.au](http://www.quitnow.gov.au)**

Provides information about smoking and quitting, including a downloadable quit phone app My QuitBuddy

### **[www.yourhealth.gov.au](http://www.yourhealth.gov.au)**

Commonwealth government website with information about tobacco plain packaging and health warnings

### **[www.oxygen.org.au](http://www.oxygen.org.au)**

Website for young people with information about smoking, tobacco and the tobacco industry

### **[www.tobaccoinaustralia.org.au](http://www.tobaccoinaustralia.org.au)**

An encyclopaedia of just about anything you ever wanted to know about smoking and ways to control it

## INTERNATIONAL SOURCES OF INFORMATION

**The United States Office of the Surgeon General publishes two informative booklets:**

### **Health effects of smoking**

**[www.surgeongeneral.gov/library/reports/tobaccosmoke/index.html](http://www.surgeongeneral.gov/library/reports/tobaccosmoke/index.html)**

### **Preventing smoking amongst young people**

**[www.cdc.gov/tobacco/data\\_statistics/sgr/2012/consumer\\_booklet/pdfs/consumer.pdf](http://www.cdc.gov/tobacco/data_statistics/sgr/2012/consumer_booklet/pdfs/consumer.pdf)**

Some state and territory based websites with information about smoking and quitting are listed below.

State/Territory	Website
New South Wales (I Can Quit)	<a href="http://www.icanquit.org.au">www.icanquit.org.au</a>
Queensland (QLD Health)	<a href="http://www.health.qld.gov.au/atod/prevention/quitline.asp">www.health.qld.gov.au/atod/prevention/quitline.asp</a>
Victoria (Quit Victoria)	<a href="http://www.quit.org.au">www.quit.org.au</a>
Western Australia (Cancer Council)	<a href="http://www.cancerwa.asn.au">www.cancerwa.asn.au</a>
Australian Capital Territory (Cancer Council)	<a href="http://www.actcancer.org">www.actcancer.org</a>
Northern Territory (NT Health)	<a href="http://www.health.nt.gov.au/Alcohol_and_Other_Drugs/Tobacco/Quitline">www.health.nt.gov.au/Alcohol_and_Other_Drugs/Tobacco/Quitline</a>
Tasmania (Quit TAS)	<a href="http://www.quittas.org.au">www.quittas.org.au</a>
South Australia (Quit SA)	<a href="http://www.quitsa.org.au">www.quitsa.org.au</a>

### Kids Helpline

Free, private and confidential telephone and online counselling service for young people aged 5–25 years.

**Tel 1800 55 1800**

### Lifeline

A 24 hour crisis help line. **Tel 13 11 14**. Also provides one-on-one crisis support online chat.

[www.lifeline.org.au/Find-Help/Online-Services/crisis-chat](http://www.lifeline.org.au/Find-Help/Online-Services/crisis-chat)

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