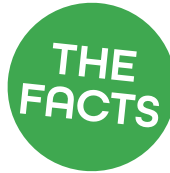


# Chemicals in cigarettes and nicotine addiction



## What is smoking?

- ▶ Smoking is when people **burn tobacco so they can breathe in the smoke** or taste it
- ▶ People consume smoke in many forms including **cigarettes, cigars, pipes, chewing tobacco and hookah** (also called shisha)

**If a person continues to smoke, over time the brain requires more nicotine to feel the same effect, resulting in addiction.**

## Smoking withdrawals

- ▶ Withdrawal from nicotine causes **irritability, restlessness, increased appetite and headaches**
- ▶ Many people think that smoking relieves stress; however, **it's only relieving the symptoms of nicotine withdrawal** by feeding the addiction
- ▶ In fact, **smokers are more likely to suffer from depression and anxiety** than non-smokers
- ▶ Nicotine is also a **stimulant**, so **heart rate and blood pressure increase** after every cigarette

## Why is smoking so addictive?

The main chemical in tobacco is **nicotine**, it's **highly addictive and toxic**. Here's why:

- ▶ Nicotine causes the brain to release a chemical called **dopamine**, which is a **'feel good' chemical** that creates feelings of pleasure and also suppresses appetite
- ▶ It also causes the brain to release other chemicals, which improve concentration and mood, and reduces depression and anxiety

## The impact of carbon monoxide

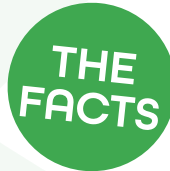
- ▶ Tobacco smoke contains **carbon monoxide** which enters the body's **red blood cells**
- ▶ Red blood cells **carry oxygen around the body** and is needed for us to survive
- ▶ Since **smoking increases the body's carbon monoxide levels**, it means there's less oxygen, making it harder to exercise or do anything energetic
- ▶ This is why **smokers tend to get breathless** when carrying out everyday activities
- ▶ It can take up to **24 hours for the body's carbon monoxide levels to return to normal** after a cigarette
- ▶ A **smokelyser machine** can measure the amount of carbon monoxide in your blood

Keen to butt out your boondah? Contact us to learn more about our support programs:

**Email:** [tis@gph.org.au](mailto:tis@gph.org.au) | **Call:** [02] 6298 2900

**Website:** <https://bit.ly/ButtOutBoondah> | **Facebook:** <https://www.facebook.com/GPHTIS>

# Chemicals in cigarettes and nicotine addiction



## Chemicals in cigarettes

- ▶ Tobacco smoke contains more than **7,000 different chemicals**, with at least 250 of these known to be harmful to smokers and non-smokers
- ▶ When **tobacco is burned it forms a substance called tar**, which contains many of these harmful chemicals
- ▶ When inhaled, **tar collects in the lungs** which can lead to lung cancer, emphysema (COPD) and other lung problems
- ▶ Many of the **chemicals also move into the blood stream** and go on to affect most parts of the body
- ▶ **Smoking is known to cause at least 16 types of cancer**, including mouth, throat, bladder, bowel and blood

When quitting gets tough, think about all of those toxic chemicals that you are no longer putting into your body.



Image: Augustus Binu

Here's some of the chemicals found in a cigarette

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