

# Inhalants

## What are inhalants?

Inhalants, also known as volatile substances or solvents, are chemicals that evaporate and give off fumes at room temperature. These vapours can be inhaled through the nose and/or the mouth to give the user an immediate 'high.' These substances are easily absorbed through the lungs and carried around the body affecting areas such as the brain and liver.

### There are four main types of inhalants:

1. **Volatile solvents** are liquids or semi-solids. Examples include paint thinners and removers, glues, petrol and correction fluid (liquid paper).
2. **Aerosol sprays** which contain intoxicating propellant chemicals. Examples include some spray paints, deodorants and hairsprays, fly sprays and vegetable oil sprays.
3. **Gases** include medical anaesthetics (e.g. nitrous oxide) and gases used in household or commercial products such as butane, propane, refrigerants and fire extinguishers.
4. **Nitrites** are liquids such as amyl, butyl and cyclohexyl nitrite found in room deodorisers and leather cleaner. While nitrites are inhaled like other substances discussed here, they have different effects and are associated with different harms.

The first three categories of inhalants are respiratory depressant drugs that slow down the activity of the central nervous system (CNS).

In contrast, nitrites such as amyl nitrite do not slow down the CNS. Inhaling nitrites expands blood vessels, drops blood pressure and accelerates heart rate, causing a quick rush sensation.

Nitrous oxide is also known as laughing gas, nitrous, whippets and bulbs. Amyl and butyl nitrate are also known as 'poppers'. Inhaling spray paint is also known as 'chroming'.

## How many people use inhalants?

According to the 2013 [National Drug Strategy Household Survey](#), 3.8% of Australians aged 14 and over have ever tried inhalants (which includes such substances as solvents, aerosols, glue, petrol, laughing gas, nitrous oxide and amyl nitrite), and 0.8% have used inhalants in the past year.

Use among females remained stable in 2013, with 0.5% reporting recent inhalant use. This is consistent with the 0.5% of females who reported inhalant use in 2010.

According to the [Australian secondary school students' use of tobacco, alcohol, and over-the-counter and illicit substances in 2011](#), just over one in six students aged 12-17 reported having used inhalants at least once in their lives, and 12.6% reported use in the past year.

Use was higher among younger students than older students, with 20% of 12 year olds having ever used inhalants compared to 11% of 17 year olds.

Recent use was also more common among younger students, with more than twice as many 12 year olds (15.2%) than 17 year olds (7%) reporting use in the past year.



## What are the effects?

The short-term effects produced by using inhalants are similar to those of alcohol, such as

- slurred speech
- blurred vision
- dizziness
- nausea
- euphoria
- loss of co-ordination

Other short-term effects include irritation to eyes and throat, hallucinations, loss of memory, headaches and nose bleeds. Some, such as amyl nitrite, may lead to increased sensual awareness and create a loss of inhibitions.

## What are the risks?

There is limited research on the long-term effects of inhalants. It is generally accepted that health problems may include **possible brain damage** affecting coordination, movement and memory, weight loss, fatigue and tremors, paranoia, hostility and depression, and social and psychological delays in development.

There are many serious effects for long term users of petrol. Chronic use may lead to irreversible brain damage.

Lead poisoning is a major problem and can lead to **liver, kidney and brain damage**.