

## 9

# Petrol, paint and other inhalants

<u>Overview</u>	208
<u>What are some commonly used inhalants?</u>	208
<u>What are some common ways to use inhalants?</u>	209
<u>Effects on the body</u>	210
<u>How to recognise harms from inhalants</u>	211
<u>How to recognise inhalant dependence and withdrawal</u>	213
<u>How to help a client who misuses inhalants</u>	213
<u>What treatments are available?</u>	214
<u>Reducing the harms if a client cannot or will not stop using</u>	215
<u>Preventing inhalant use from ever starting</u>	216
<u>Further reading</u>	216

## OVERVIEW

Inhalants (also known as volatile substances and solvents) are products like petrol, paint and glue that give off vapours (fumes that may be invisible) at room temperature. Inhalant use occurs when these vapours are deliberately breathed in to get 'high'. Most inhalants have a depressant effect on the body (e.g. petrol, paint, glue), which means that they slow down a person's brain and nervous system, but others have a stimulant effect (e.g. amyl nitrate).

There are many products available at supermarkets, newsagents, hardware stores and petrol stations that can be inhaled and cause intoxication.

Counselling is the best available treatment to help people reduce or stop using inhalants. There are no medicines currently available for the treatment of inhalant dependence, although some medicines are used to treat individual symptoms. Heavy intoxication with inhalants can be very dangerous and may require an emergency response (e.g. calling an ambulance, resuscitation).

## WHAT ARE SOME COMMONLY USED INHALANTS?

<b>The inhalant</b>	<b>Some of the chemical(s) it contains</b>
<i>Petrol</i>	Toluene and benzene
<i>Glues and resins</i>	Toluene, benzene, n-hexane, xylene, or ethyl acetate depending on the product
<i>Air fresheners, hair spray, deodorants, fly spray or refrigerants</i>	Butane and freon
<i>Paint, paint thinners and stripper, varnish</i>	Toluene, butane, dichloromethane and methylene chloride
<i>Cleaning fluids (e.g. stain removers); liquid paper</i>	Trichloroethylene or trichloroethane
<i>Lighter fluid</i>	Butane
<i>Amyl nitrate (also called 'poppers')</i>	Amyl nitrate
<i>Soda bulbs</i>	Nitrous oxide

## WHAT ARE SOME COMMON WAYS TO USE INHALANTS?

- Breathing in vapours directly from a container ('sniffing')
- Breathing in vapours from a plastic bag or a paper bag ('bagging')
- Spraying chrome-based paint from an aerosol can into a plastic bag and breathing in the vapours ('chroming')
- Wetting a piece of material (usually clothing) with an inhalant, and then holding it against the mouth or nose ('huffing')
- Spraying straight into the mouth.

### How common is inhalant use?

There is little information about how common inhalant use is in Australia. Around 1 in 30 Australians have ever used inhalants. The number could be as high as 1 in 15 for Indigenous Australians.

Petrol is the most commonly used inhalant in remote Aboriginal communities. It tends to start at a young age and is more likely to become a problem over time. The age of people who sniff petrol ranges from 8 to 30 years, with most users aged 12 to 19 years. In many remote communities, Opal fuel has been introduced to replace regular petrol. Opal fuel has less of the chemicals ('aromatics') that make the sniffer intoxicated, and in some communities Opal has greatly reduced the number of sniffers, particularly in remote and isolated areas.

Chroming (i.e. paint sniffing) is the most common form of inhalant use among Aboriginal people in urban and rural areas. In urban areas, inhalants tend to be used for a shorter length of time, and use is most common among 12 to 14 year olds.

## EFFECTS ON THE BODY

Inhalants are quickly absorbed into the body through the lungs. It takes only 3–5 minutes to become intoxicated after breathing in the vapours of most inhalants (from around 10–15 breaths). The effects are greatest after 15–30 minutes and can last for about 3–6 hours.

Most inhalants have similar effects on the body to other depressant drugs such as alcohol and cannabis and include:

- Strong sense of happiness and excitement (euphoria and exhilaration)
- Feeling tired or drowsy
- Loss of inhibitions (resulting in: increased risk of unwanted and unprotected sex, violence, feeling anxious or irritable, and involvement in crime)
- Loss of appetite (note: sometimes people sniff petrol to cope with hunger)
- Agitation and irritability
- Dizziness and giddiness
- Confusion and disorientation (not knowing where you are)
- Slurred speech, poor muscle coordination and staggering (ataxia)
- Sneezing, coughing, glazed eyes or runny nose
- Widening of the pupils of the eye (dilated pupils), blurred vision, bloodshot eyes
- Nosebleeds and sores around the mouth and nose
- Headaches
- Nausea and vomiting, general stomach pain
- Hearing problems from ringing in the ears.

While most inhalants are depressants, amyl nitrate ('poppers') is a stimulant or 'upper'. It is often used to increase sexual desire.

## HOW TO RECOGNISE HARMS FROM INHALANTS



There are no safe levels of inhalant use. Death caused by a heart attack (cardiac arrest) can happen if a person has a sudden fright or if they exercise after using inhalants. This is known as 'sudden sniffing death'. It is not known exactly how many people die from sudden sniffing death, but it is thought to be uncommon.

### Short-term harms

Problems can result from using inhalants even once:

- Injury or accidents (including drowning and road accidents) to the user or others. These are often due to poor physical coordination or because feeling high makes them say or do things they normally would not do (disinhibition).
- Violence and involvement in crime
- Burns – because inhalants can catch fire easily (i.e. are flammable)
- Breathing problems, suffocation, choking, cough and irritated lungs
- Abnormal heart rhythm (cardiac arrhythmia) and chest pain
- Temporary psychotic symptoms such as:
  - Beliefs which are not true or not reality-based (delusions)
  - Seeing or hearing things that are not there (hallucinations)
  - 'Ideas of reference' (e.g. believing that a TV show is sending a secret message to you)
  - Paranoia (wrongly thinking that people are 'out to get you')
- High doses of xylene (e.g. in bicycle tyre repair glue) can cause loss of consciousness, stopping of breathing (respiratory failure) and death
- High doses of ethyl acetate (e.g. in wood cement) can lead to coma and death
- Lack of oxygen due to sniffing can put a client into cardiac arrest, especially if they are being chased, or if they do other exercise while sniffing
- Sudden sniffing death.

**Long-term harms**

Problems that can result from using inhalants long-term:

- Damage to the brain (e.g. memory loss, not able to think things through or make decisions as well)
- Loss of hearing, vision or sense of smell
- Abnormal flickering eye movements (nystagmus)
- Feeling numb in the hands and feet due to nerve damage in the arms and legs (peripheral nerve damage)
- Difficulty walking, loss of coordination/poor balance, arm and leg spasms
- Poor immunity, so the person catches more infections
- Liver and kidney damage
- Injury to bone marrow, which is where blood cells are made – this can lead to increased risk of leukaemia (cancer of the blood)
- In pregnant women, damage to the unborn baby
- Sudden sniffing death.

**Look out for physical clues of inhalant use**

- Strong smell on the client's clothes or breath
- Looks drunk, dazed, or is staggering
- Sores around face and mouth
- Weight loss
- Client is carrying items used for sniffing (e.g. empty tins or cut down plastic bottles, plastic bag sprayed with paint or material soaked with inhalant).

## HOW TO RECOGNISE INHALANT DEPENDENCE AND WITHDRAWAL

Regular inhalant use can lead to the client becoming psychologically dependent. They may feel a powerful desire to sniff (craving). They may sniff because they need to and not just because they want to (loss of control). They may continue using despite experiencing harms from use, and find that inhalant use is becoming more important than other things in life.

In a small number of people there can also be physical dependence, where more drug is needed to feel the desired effects ('tolerance') and withdrawal symptoms happen when sniffing stops. Dependence is more common for inhalants containing toluene (e.g. petrol, spray paint, glue and paint thinner).

Withdrawal symptoms can include:

- Loss of appetite
- Irritability or aggression
- Feeling lightheaded (dizziness)
- Tremors (usually of the hands)
- Upset stomach with an urge to vomit (nausea)
- Depression
- Anxiety.

## HOW TO HELP A CLIENT WHO MISUSES INHALANTS

### If your client is intoxicated

- Remain calm. Never chase or frighten someone who has been using inhalants as this may lead to sudden sniffing death.
- Keep other people who are near the client calm. Talk quietly and use simple commands.
- Seek help (e.g. family, friends, other community members, ambulance, police if necessary).
- Make sure there is good airflow so the vapours from the inhalant can escape the area.
- Contact the National Poisons Information Centre (Telephone: 131 126) for advice on the particular inhalant that has been sniffed.
- If you are seeing a client indoors who can be aggressive, make sure you are in between the person and the door. Remove anything that could be used as a weapon and get help (see Aggressive clients, p. 398).

### **If your client is heavily intoxicated**

When a client is heavily intoxicated (i.e. when they show many of the signs of intoxication described in ‘effects on the body’), a standard emergency response approach can be used:

- Resuscitation (see CPR guide, p. 436)
- Call an ambulance
- Remain with the person until medical assistance arrives
- Look out for and treat physical illnesses, injuries or burns particularly lung/airway disorders, head injuries and seizures.

### **If your client uses inhalants but is not currently intoxicated**

If a client is not intoxicated but does currently use inhalants, a full drug and alcohol assessment should be conducted.

- Inhalant use: what substances they use, how often, where, who with, why they use, and any harm they have experienced from use
- Alcohol and other drug use: tobacco, alcohol and illegal drugs
- Physical health: prescribed medicines, medical conditions and allergies
- Psychological health: mental health, involvement with mental health service
- Social factors (e.g. legal, employment, family, housing, any current crisis)
- Risk behaviours (e.g. risk of suicide, self-harm, harm to others and harm from others).

## **WHAT TREATMENTS ARE AVAILABLE?**

### **Counselling**

Counselling can include brief intervention, motivational interviewing, and general relapse prevention counselling. This may include building up skills in goal setting, self-monitoring, managing emotions, decision-making and communication. Counselling can happen in different settings: in a clinic, an outreach service (i.e. in the community), or in a residential treatment or rehabilitation service.

It can be helpful to include families or other support people in counselling. An outreach approach, rather than waiting for the client to come to the clinic, is an advantage. Providing alternative activities to inhalant use (e.g. recreational and cultural activities, and training opportunities) can be important.

Intensive follow-up and counselling is important after release from a residential program (known as aftercare). Aftercare is often provided through an outreach model, and focuses on monitoring for any sign of relapse and reinforcing skills learned in treatment.

## Medicines

No medicines are yet available to treat inhalant dependence. Anti-depressant or anti-psychotic medicines can be used to treat co-occurring mental health concerns. Medicines are sometimes used to relieve individual symptoms (e.g. diazepam for agitation).

## REDUCING THE HARMS IF A CLIENT CANNOT OR WILL NOT STOP USING

Some individuals are not yet ready to stop sniffing. It is important to try to keep them as safe as possible until they are ready to change. You can:

- Encourage the client to use in a safer setting; for example:
  - Away from fires to prevent burns
  - Away from roads or rivers to prevent injuries
  - Not sniffing in closed areas like cupboards but in outside areas where the client can get clean oxygen and where communities can see if help is needed
  - Sniffing with just the mouth or the nose so the client can get clean oxygen
  - Sniffing with other non-sniffers so that if anything happens when client is intoxicated, help can be called
- Keep spray paints or other commonly used inhalants locked away (in shops, at work or in personal houses)
- In working with a client who sniffs, remember that what is important to you as a clinician (e.g. for the client to stop sniffing) could be different to the client's needs (e.g. finding a place to sleep, getting some food or money and feeling a sense of belonging)
- Communities in remote areas can apply to the Australian Government for a subsidy to use Opal fuel instead of regular petrol supply. This can greatly reduce sniffing, or even stop it.

**PREVENTING INHALANT USE FROM EVER STARTING**

If you are in a remote setting, your community can approach the Australian Government for a subsidy for Opal fuel. In communities where common household products (such as paint) are being inhaled, shop owners and community members can be asked to lock these products away. Many communities try to work broadly to engage with people who might otherwise use inhalants. Creating opportunities for recreation, cultural, work and other activities that are meaningful alternatives to using inhalants, could do this. These positive opportunities can also help make stronger communities.

**FURTHER READING**

Aboriginal Drug and Alcohol Council SA Inc. (2000). *Petrol sniffing and other solvents – a resource kit for Aboriginal communities*. Adelaide: ADAC SA Inc., SA Department of Human Services and the Commonwealth Department of Health and Aged Care.

Central Australian Rural Practitioners Association 2009, *CARPA standard treatment manual*, 5th edition, Central Australian Rural Practitioners Association, Alice Springs.

National Health and Medical Research Council (2011). *Caring for people who sniff petrol or other volatile substances: A quick reference guide for health workers*. Canberra: Commonwealth of Australia. See: [www.nhmrc.gov.au/\\_files\\_nhmrc/publications/attachments/cp136a\\_volatile\\_substance\\_use\\_quick\\_reference\\_guide.pdf](http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cp136a_volatile_substance_use_quick_reference_guide.pdf)