



## Solvents / Inhalants

Solvents include any chemical substance producing fumes that can be inhaled, such as adhesives/glue, paint, thinners, aerosols, anti-freeze, household cleaners, shoe polish, petrol and other fuels. They are relatively accessible compared to other drugs; they can be obtained legally and are cheap.

Solvent use is more of a concern among teenagers in New Zealand than among adults (though there are adult users who began using solvents when they were much younger and find it hard to stop). Young people are often unaware of how risky solvent use is.

Generally it is not illegal to inhale solvents. However, it can be illegal to inhale solvents in some public places. Also, the police can hold people under the influence of solvents for detoxification under the Alcoholism and Drug Addiction Act 1965.

### What solvents/ inhalants do

Solvents and other inhalants vary in the way they work. They can each produce different effects. Most inhalants initially produce a rapid high that is similar to alcohol intoxication. They are absorbed into the brain and central nervous system and act as a depressant, meaning they slow down the user's mental and physical responses. The effects usually last up to an hour.

#### Effects of solvents include:

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>feeling of well-being and relaxation</li> </ul>                          | <ul style="list-style-type: none"> <li>light-headedness</li> </ul>             |
| <ul style="list-style-type: none"> <li>hallucinations where you see or hear things that are not real</li> </ul> | <ul style="list-style-type: none"> <li>sleepiness</li> </ul>                   |
| <ul style="list-style-type: none"> <li>dizzy, disoriented and confused</li> </ul>                               | <ul style="list-style-type: none"> <li>lack of bodily co-ordination</li> </ul> |

#### As users continue to inhale solvents they can experience:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>nausea and headaches</li> </ul>  | <ul style="list-style-type: none"> <li>irritated eyes and nose</li> </ul>   |
| <ul style="list-style-type: none"> <li>Diarrhoea and/or vomiting</li> </ul>   | <ul style="list-style-type: none"> <li>The more solvent a person uses, the slower their breathing becomes and they can lose consciousness. Heavy use of solvents can cause sudden death.</li> </ul> |
| <ul style="list-style-type: none"> <li>Sometimes people become agitated, impulsive, aggressive and violent, especially those using petrol.</li> </ul> |   |

#### After-effects of solvent use include:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>feeling like you have a hangover</li> </ul> | <ul style="list-style-type: none"> <li>memory loss</li> </ul> |
| <ul style="list-style-type: none"> <li>uncharacteristic behaviour</li> </ul>       |   |

### Long term effects

Although there is debate about whether the health damage caused by occasional solvent use is permanent or not, there is evidence that heavier and more sustained solvent use significantly increases the likelihood of significant long terms effects.

People who use solvents often can experience memory loss, shaking, slow reactions, mood swings, depression and paranoia. Users' general health can deteriorate with symptoms of fatigue, anaemia, weight loss, reduced co-ordination, tinnitus (ringing in ears), sores around the nose and mouth, and trouble in breathing and sleeping. For women long term use can cause their menstruation to stop.

The lead in petrol and some chemicals in other solvents can build up in the body, irritating the lining of the stomach and intestines, damaging the brain, nervous system, kidneys and liver and can also cause various types of cancer.

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Inhaling chrome based paints (chroming) may lead to bloodshot eyes as blood vessels in the eye burst, eventually leading to blindness.

The substances in solvents are stored in fat deposits, particularly in the brain, causing long-lasting effects. Brain damage cannot be reversed once solvent use has ceased.

## Potential harms

People who use solvents/ inhalants risk an array of devastating medical consequences. The highly concentrated chemicals in solvents or aerosol sprays can induce irregular and rapid heart rhythms and lead to fatal heart failure within minutes of a session of prolonged sniffing. **Sudden sniffing death** can result from a single session of inhalant use by an otherwise healthy person.

People have died from a range of causes including suicide while intoxicated with solvents. For example, people risk:

- asphyxiation — from repeated inhalations that lead to high concentrations of inhaled fumes in the lungs
- suffocation — from blocking air from entering the lungs when inhaling fumes from a plastic bag placed over the head
- convulsions or seizures — from abnormal electrical discharges in the brain
- coma — from the brain shutting down all but the most vital functions
- choking — from inhaling their own vomit after inhalant use
- serious and fatal injury — from risk-taking behaviour and being unaware of your surroundings. People risk burns through smoking while using solvents; car accidents; falls, etc.

During pregnancy, solvent use can increase the chance of miscarriage, and can reduce the baby's birth weight. It can also cause a 'foetal alcohol' type syndrome from some solvents.

## Harm reduction

- No use is safest.
- Never use around babies and children.
- Never use in combination with other drugs, especially alcohol or other depressants.
- Don't drive or operate heavy machinery.

## Tolerance and dependence

If someone inhales solvents regularly, they can develop a high tolerance, i.e., they find that they need to use more of the solvent to get the same effect as they did before with smaller quantities.

People can become psychologically dependent on solvents, i.e., the use of solvents becomes central to their thoughts, emotions and activities. There is a low risk of becoming physically dependent on solvents though regular users may experience withdrawal symptoms when they stop.

Withdrawal symptoms can be experienced for up to two weeks, or in some cases, several months. These can be similar to a 'hangover', i.e., headaches, nausea, drowsiness, chills, stomach pains and muscle cramps.

## Looking for help?

If you're looking for more information, or maybe want to talk to someone about solvents or other drug issues for yourself or someone close to you give **Auckland CADS** a call on **845-1818**

For more information on solvents in NZ go to <http://www.drugfoundation.org.nz/inhalants-solvents>

For confidential advice, support or information on alcohol & drug services in your region contact Alcohol & Drug Helpline on 0800-787-797 10am to 10pm daily

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