# Background

Volatile substance abuse (VSA) is the deliberate inhalation of substances for their intoxicating effects. Volatile substances are usually inhaled directly into the mouth or nose from a container, plastic bag, bottle or through a cloth.

Inhaling solvents or volatile substances is part of the broader alcohol and other drug abuse spectrum and they are often used when more appealing drug options are not available. Users are generally young people, although adults are known to be consumers as well. Children who use volatile substances are usually occasional users, often socialising with a small group of long-term volatile substance users.

# About volatile substances

Volatile substances release fumes or vapours that can cause damage to the brain and other side effects when inhaled. Examples of volatile substances include:

* petrol
* lighter fuels
* spray paint
* glue
* deodorant
* correction fluid.

More information about volatile substances can be found on the Alcohol and Drug Foundation website.

Inhaled chemicals are quickly absorbed through the lungs into the bloodstream and are spread to the brain and other organs. Within minutes, the user can experience varying degrees of intoxication, with symptoms similar to those caused by drinking alcohol. As the effect only lasts a few minutes, some users prolong the experience by inhaling repeatedly.

Inhaling volatile substances is always risky behaviour, but some situations make it even more dangerous, including:

* inhaling in an enclosed space or indoors
* running or doing other strenuous physical activity after inhaling, this could cause death due to cardiac effects
* mixing volatile substances with medicines or illegal drugs
* inhaling while suffering from other health problems.

In extreme cases, there is a risk of sudden death from cardiac arrest as a result of VSA. Inhaling solvents can cause arrhythmia, an irregular muscle contraction of the heart. If the user does not receive prompt medical attention, the heart can lose the ability to pump blood. This is a rapid and unpredictable experience.

Loss of consciousness and death can also happen several hours after inhalation from respiratory depression. This means the user’s breathing slows to a dangerous level and can reduce oxygen supply. Additionally, vomiting while the user is intoxicated or sedated can lead to choking, and the cooling agents found in some inhalants, such as aerosol cans, can freeze the throat and cause suffocation.

Inhalants also pose a risk of hypoxia, which is the reduction of oxygen levels in the blood, due to breathing in the volatile substance.

# What you should do

If you are concerned someone may be at risk of severe harm from volatile substance abuse, you should encourage them to be assessed at the local health service provider as soon as possible. The fundamental starting point is a comprehensive physical and social and emotional wellbeing assessment. This can also be supported by a referral to your local youth service or alcohol and other drugs service.

Health services can provide initial brief interventions and appropriate referrals to other specialists and diversional activities.

For schools, any child or young person who may be of significant concern must be referred to the appropriate local health service.

Referral for specialist VSA assessment is necessary if it is reasonably believed the individual is at risk of severe harm. This is best done through the local health service. If a child or young person is referred for VSA assessment, then a mandatory report to the Department of Territory Families, Housing and Communities for assessment should also made.

Resources from Menzies School of Health are available that include flip charts, presentations and videos in Warlpiri, Kriol, Yolŋgu and English. Most community health centres hold these in their libraries.

Residents and communities can apply to have a place declared a VSA management area and have a management plan approved. This helps to control the possession, sale and supply, and the use and storage of volatile substances within that area.

For more information about how to make a VSA assessment referral or have a place declared a VSA management area, visit the Department of Health website.

# Further resources

Alcohol and Drug Foundation – <https://adf.org.au/drug-facts/inhalants/>

Alcohol and Other Drugs Knowledge Centre – Volatile substance use – contains comprehensive information and links to programs to support Aboriginal and Torres Strait Islander communities – <https://aodknowledgecentre.ecu.edu.au/learn/specific-drugs/volatile-substance-use/>

Department of Health – <https://health.nt.gov.au/>

Department of Health – Volatile substances ­– <https://health.nt.gov.au/professionals/alcohol-and-other-drugs/tobacco,-volatile-substances-and-others-drugs/volatile-substances>

Drugs and the law – contains information related to legislation and diversionary programs for young people – <https://nt.gov.au/law/crime/drugs-and-the-law>

Huffing of volatile substances video containing important facts and can be used when training community, social and health workers – <https://www.youtube.com/watch?v=ACMqfUirbvw>

Menzies resources - <https://www.menzies.edu.au/page/Resources/?keywords=petrol+siffing>

*Volatile Substance Abuse Prevention Act 2005* – <https://legislation.nt.gov.au/en/Legislation/VOLATILE-SUBSTANCE-ABUSE-PREVENTION-ACT-2005>

Volatile substance use among Aboriginal and Torres Strait Islander people animated infographic - <https://www.youtube.com/watch?app=desktop&v=fek_corJIgo>