



Inhalants: Factsheet



Evidence ratings:



This resource has undergone expert review. See our Help/Q&A section for more details.

Year: Year 9–10, Year 11–12

Targeted Drugs: Inhalants

Tags: volatile solvents, petrol sniffing, aerosol sprays, propane, nitrous oxide, laughing gas, nitrites, nangs, bulbs

Time Allocated: Partial lesson (under 45mins)

Origin: Australian

Cost:

Free

What are Inhalants?

Inhalants, also known as volatile substances or solvents, are substances that are sniffed or breathed in through the nose and/or mouth to give the person using the drug an immediate high.

There are four main types of inhalants:

- Volatile solvents
- Aerosol sprays
- Gases
- Nitrites

Personal stories

"My son was sniffing aerosols. Not all the time but now and then. He was at my sister's house and he inhaled an air freshener. He passed out and went into cardiac arrest which killed him instantly."

-Natalie, 41

How many young people have used Inhalants?

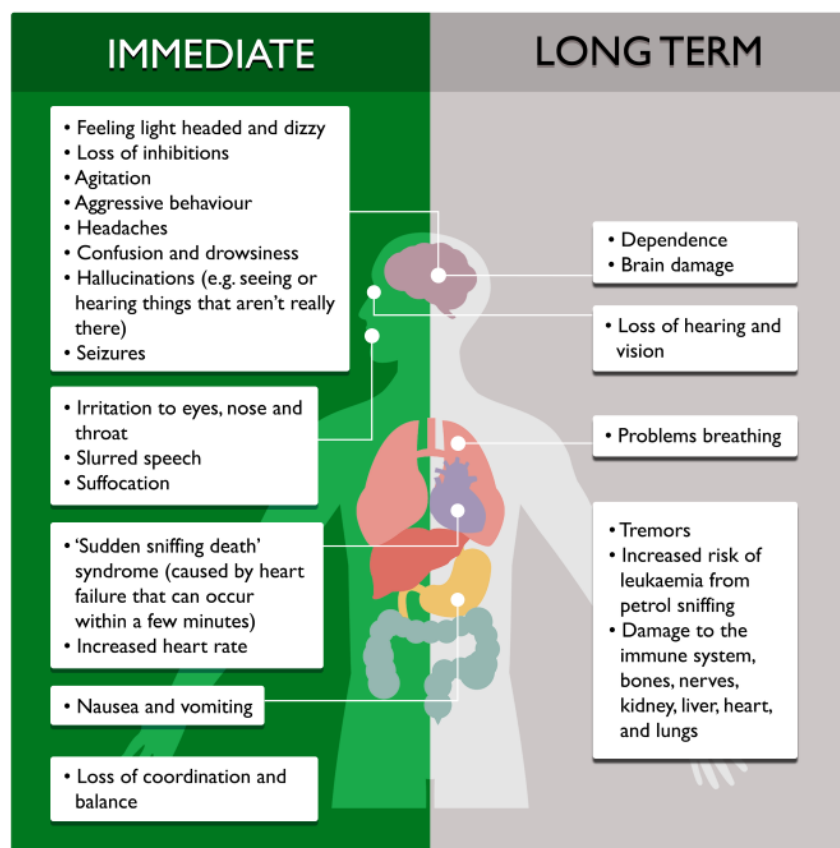
According to the 2022-2023 Australian secondary schools' survey, approximately 1 in 14 (7%) Australian students (aged 12–17 years old) reported having used inhalants in the past month. 1 in 5 students (20%) reported having ever used inhalants.

What are the effects of Inhalants?

Most inhalants have an immediate effect. The high usually only lasts for a few minutes. Users sometimes keep on sniffing to prolong the high, in some cases this can lead to loss of consciousness, brain damage, and even death.

The effects of inhalants can be immediate or long-term, as listed in the table below.

Immediate	Long-term
Increased heart rate	Dependence (see glossary)
Feeling light headed and dizzy	Brain damage
Loss of inhibitions	Tremors
Agitation	Problems breathing
Loss of coordination and balance	Loss of hearing and vision
Irritation to the eyes, nose and throat	Increased risk of leukaemia from petrol sniffing
Aggressive behaviour	Damage to the immune system, bones, nerves, kidney, liver, heart, and lungs
Slurred speech	
Headaches	
Confusion and drowsiness	
Nausea and vomiting	
Hallucinations (e.g. seeing or hearing things that aren't really there)	
Suffocation	
Seizures	
'Sudden sniffing death' syndrome (caused by heart failure that can occur within a few minutes)	



Evidence Base

This factsheet was developed following expert review by researchers at the Matilda Centre for Research in Mental Health and Substance Use at the University of Sydney, the National Drug & Alcohol Research Centre at the University of New South Wales, and the National Drug Research Institute at Curtin University.

- Credit to the Home Office for quotes adapted from Talk to Frank.

Sources

1. Scully, M., Koh, I., Bain, E., Wakefield, M., & Durkin, S. (2023). ASSAD 2022–2023: Australian secondary school students' use of alcohol and other substances. Cancer Council Victoria.
2. National Institute on Drug Abuse, 2005. Research Report Series— Inhalant Abuse, National Institute on Drug Abuse, National Institutes of Health: Bethesda, MD.
3. D'Abbs, P. and MacLean, S., 2008. Volatile substance misuse: a review of interventions. Monograph Series No. 65, Australian Government Department of Health and Ageing: Canberra.
4. MacLean, S., 2008. Volatile bodies: stories of corporeal pleasure and damage in marginalised young people's drug use. *International Journal of Drug Policy*. 19(5): p. 375-83.
5. Cruz, S.L., 2011. The latest evidence in the neuroscience of solvent misuse: an article written for service providers. *Substance Use and Misuse*. 46 Suppl 1: p. 62-7.
6. National Drug and Alcohol Research Centre, 2011. *Inhalants*, National Drug and Alcohol Research Centre, University of New South Wales: Sydney.
7. Australian Institute of Health and Welfare, 2017. 2016 National Drug Strategy Household Survey report, AIHW: Canberra.
8. White, V. and Williams, T. 2016. Australian secondary students' use of tobacco, alcohol and over-the-counter and illicit substances in 2014, Australian Government Department of Health: Canberra.
9. Garland, E.L. and Howard, M.O., 2010. Phenomenology of adolescent inhalant intoxication. *Experimental and Clinical Psychopharmacology*. 18(6): p. 498-509.
10. MacLean, S., Cameron, J., Harney, A. and Lee, N.K., 2012. Psychosocial therapeutic interventions for volatile substance use: a systematic review. *Addiction*. 107(2): p. 278-88.
11. Howard, M., Bowen, S., Garland, E., Perron, B. and Vaughn, M.G., 2011. Inhalant use and inhalant use disorders in the United States. *Addiction Science and Clinical Practice*. 6(1): p. 18-31.
12. Dingwall, K.M. and Cairney, S., 2011. Recovery from Central Nervous System Changes Following Volatile Substance Misuse. *Substance Use and Misuse*. 46(s1): p. 73-83.
13. American Psychiatric Association, 2000. *Diagnostic and statistical manual of mental health disorders*, fourth edition, text revision, Washington, DC: American Psychiatric Association.
14. Dell, C.A., Gust, S.W. and MacLean, S., 2011. Global issues in volatile substance misuse. *Substance Use and Misuse*. 46: p. 1-7.