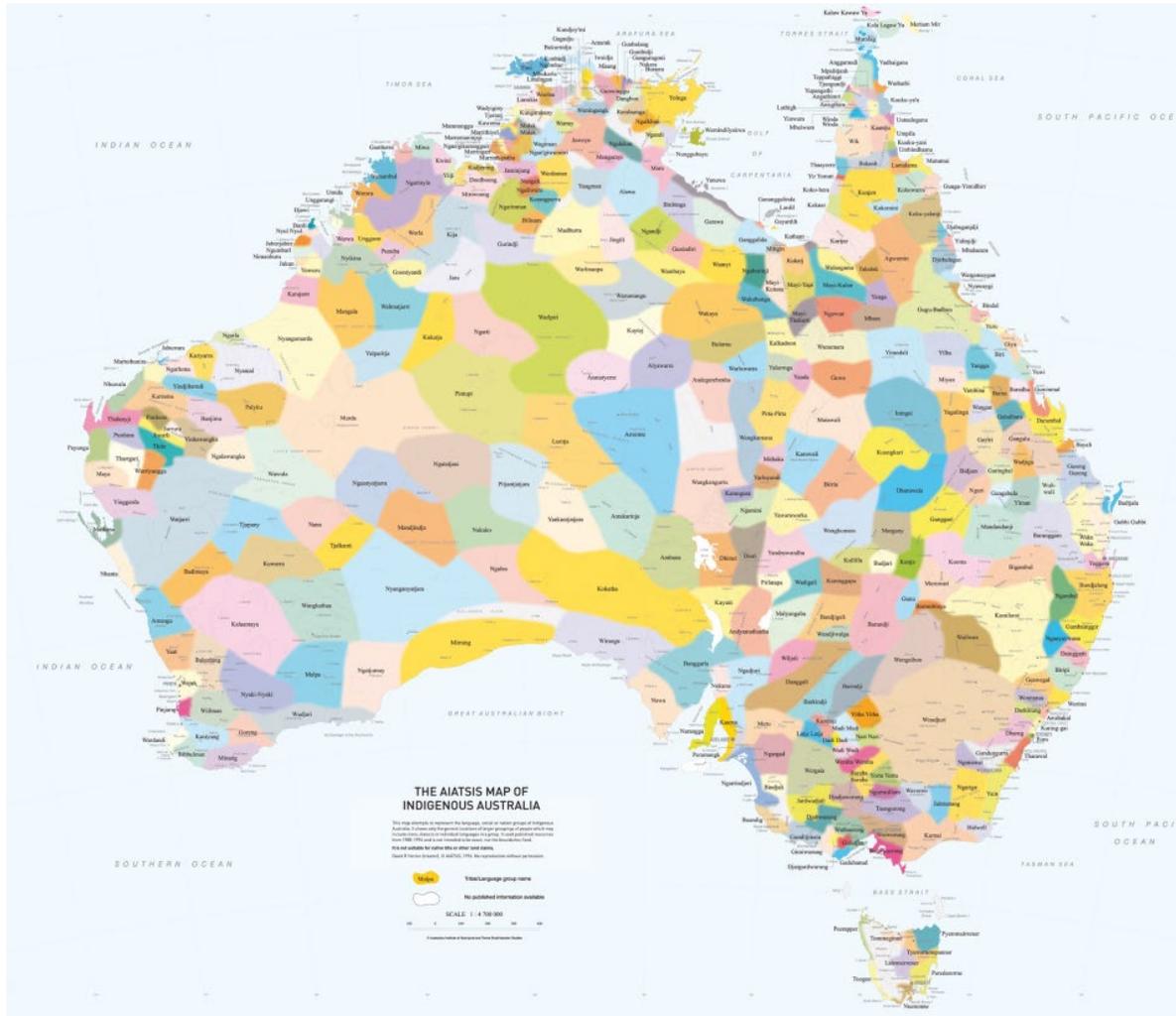


# Welcome to today's Insight APSAD webinar.

*We'll be starting a little after 10am (QLD time).*

- Use the chat icon for all questions and comments – *select All panelists and attendees.*
- If you are on a computer and Zoom enters full screen mode – you can press the escape button or visit “View Options” at the top of the screen to change the layout.
- If you are experiencing other problems or require further technical assistance call Zoom on **1800 768 027** – the webinar ID is **753-782-670**.
- A pdf version of today's presentation will be available soon in the chat window.
- A recording of this webinar will be available on our YouTube channel in the coming weeks.





**We acknowledge the Traditional Owners of the land on which this event takes place and pay respect to Elders past, present and future.**

This map attempts to represent the language, social or nation groups of Aboriginal Australia. It shows only the general locations of larger groupings of people which may include clans, dialects or individual languages in a group. It used published resources from 1988-1994 and is not intended to be exact, nor the boundaries fixed. It is not suitable for native title or other land claims. David R Horton (creator), © AIATSIS, 1996. No reproduction without permission. To purchase a print version visit: [www.aiatsis.ashop.com.au/](http://www.aiatsis.ashop.com.au/)



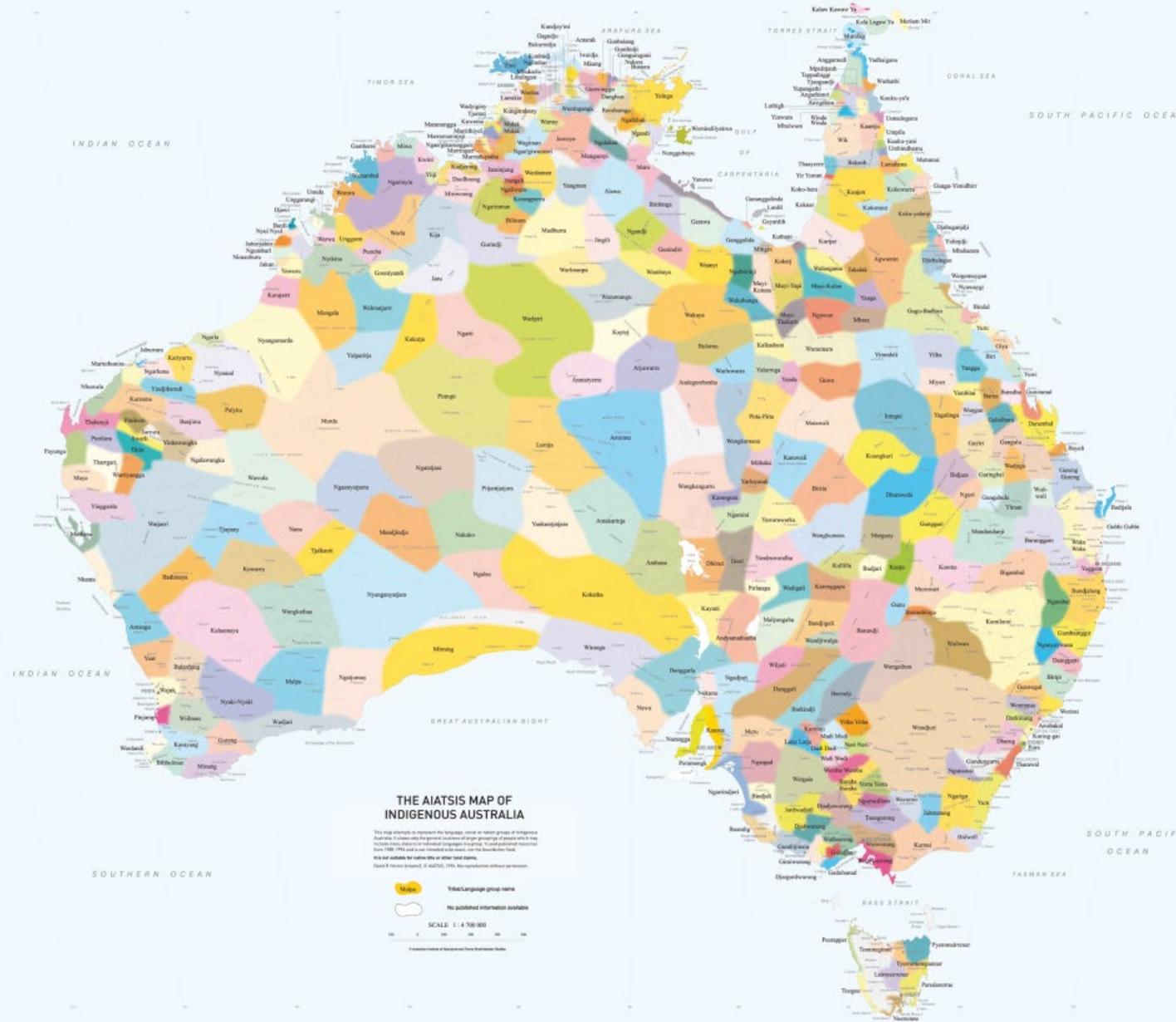
Centre for alcohol and other drug training and workforce development



# *Dovetail*

*Supporting the youth  
alcohol and drug  
sector in Queensland*





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## Firstly, what is *Dovetail*?

Dovetail provides clinical advice and professional support to workers, services and communities across Queensland who engage with young people affected by alcohol and drug use

## Supporting the youth alcohol & other drug sector in Queensland

Dovetail provides clinical advice and professional support to workers, services and communities who engage with young people affected by alcohol and other drug use



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# Inhalant use terminology

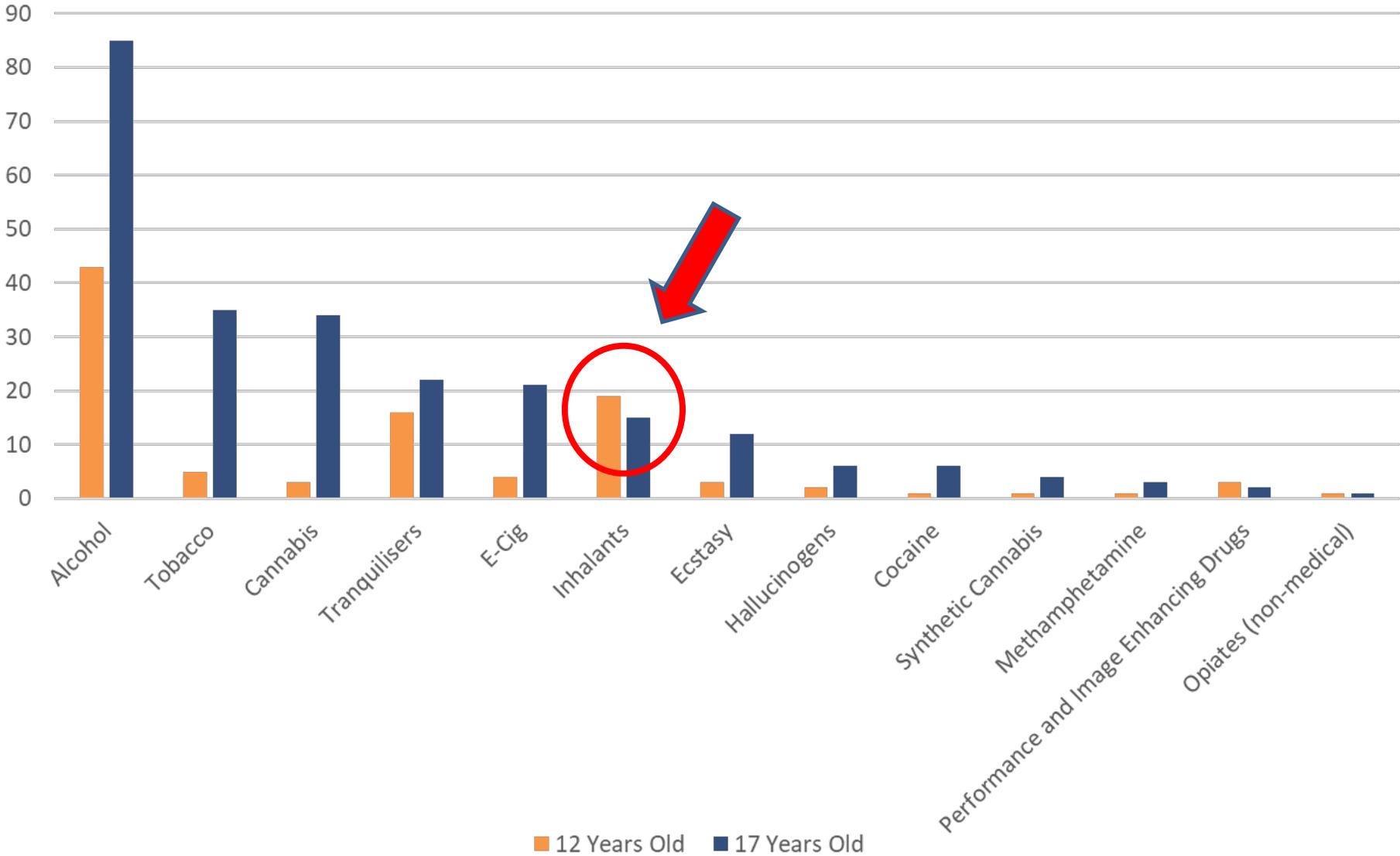
Inhalant use refers to intentionally inhaling volatile substances for the purposes of bringing about a change in mental state

Or Volatile Substance Mis/use (VSM / VSU)

# Terms to avoid

Term	Why?	Try this instead
Chroming	Slang term that sometimes refers to spray paint use, other times refers to any inhalant use.	“Young person presented to the service while intoxicated due to inhalant use (Rexona deodorant).”
Volatile Substance Abuse (VSA)	“Substance Abuse” is a stigmatising term that is no longer used.	Inhalant Use Volatile Substance Use (VSU) Volatile Substance Misuse (VSM)
Sniffer / Chromer	Identifying a person by their substance use is stigmatising.	Person who uses inhalants.

# Lifetime substance use among 12-17yo



Guerin, N. & White, V.(2018). ASSAD 2017 Statistics & Trends: Australian Secondary Students' Use of Tobacco, Alcohol, Over-the-counter Drugs, and Illicit Substances. Cancer Council Victoria.

# Inhalant use among secondary students by year and age, 2017

	1996	1999	2002	2005	2008	2011	2014	2017
12-15yo	29%	29%	23%	19%	20%	19%	18%	19%
16-17yo	17%	17%	14%	11%	14%	13%	12%	16%

Guerin, N., White, V. (2019). ASSAD 2017 Statistics & Trends: Trends in Substance use among Australian secondary school students 1996 – 2017. Caner Council Victoria.

# Young people in AOD treatment



**10% v 1%**  
Inhalants  
Females



**31% v 5%**  
Inhalants  
12-15 years



**8% v 2%**  
Inhalants Aboriginal  
and/or Torres Strait  
Islander

Inhalant use is common amongst highly disadvantaged young people globally



# Why do young people use inhalants?

Some of the more widely reported reasons include:

- to cope with stress, grief and trauma
- to overcome boredom and loneliness
- to overcome hunger pains
- to dull or block emotional and physical pain
- availability

'It eases your mind. Clears out my mind, everything that's there. Sometimes when I have everything in my mind and it's hard to come out, I just sniff.'

'Lately I've been thinking of sniffing I'm so stressed out and the only way people will leave me alone is if I'm sniffing.'

'I sniffed cause I liked the feeling of it...it made me feel high like it wasn't me here'

'I felt like I wasn't wanted and that's why I sniffed'

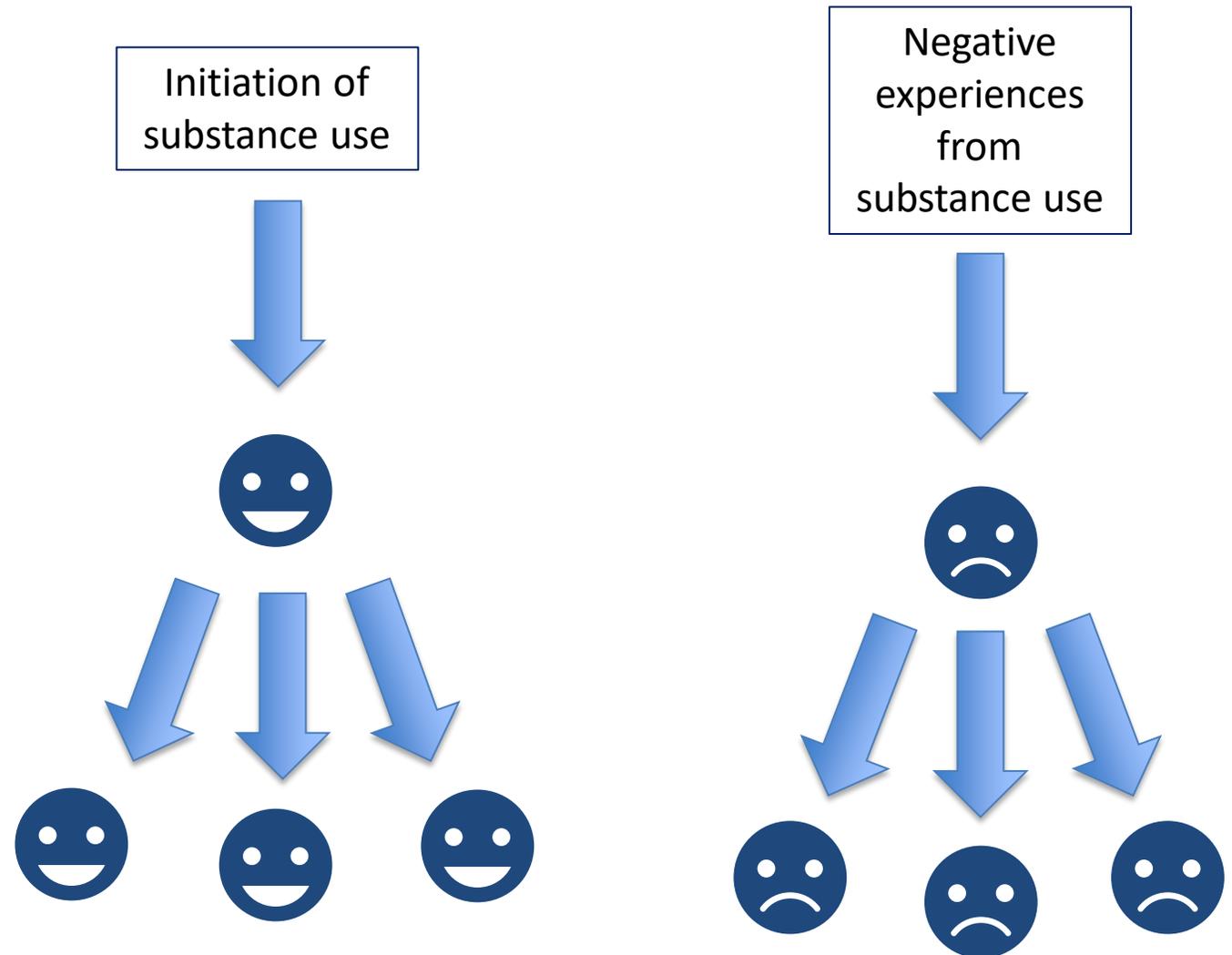
# Why do young people use inhalants?

- Jackson et al (2009) conducted a study of adults filling their cars with petrol.
- While exposed to ambient petrol fumes, they were asked to rate how “pleasant” and “intense” they found the smell.
- There was a strong correlation between the ratings of pleasantness and intensity, and the time since last meal
- Those who were hungry found the smell of petrol more pleasing

Jackson, C., et al. 2009. "Hunger and the perception of the scent of petrol: A potential neurobiological basis for increase risk of petrol inhalation abuse." *Addiction Research and Theory* 17(5): 518-524.

# Inhalant use is cyclical

- A number of theories attempt to describe these cycles
- “Musto Effect” is one theory describing the uptake / decline of substance use
- First hand experience of the negative impacts of substance use can eventually impact rates of use



# Contents of Common Inhalants

Type	Chemical	Product
Aromatic Hydrocarbons	Benzene Toluene Xylene	Glue Spray paint Petrol
Aliphatic Hydrocarbons	Butane / Isobutane Propane Naptha	Glue Spray Paint Petrol Deodorant + other aerosols BBQ /Gas stoves

# Contents of Common Inhalants

Type	Chemical	Product
Halogenated hydrocarbons	Tetrafluroethane Freons	Some refrigerators and airconditioners Computer dust removing spray
Ketones	Acetone	Nail polish remover Some paint strippers

# Contents of Common Inhalants

Type	Chemical	Product
Alkyl nitrites	Amyl nitrite Isobutyl nitrite	“Poppers” (a generic slang term for alkyl nitrites) “Rush” (a popular brand of amyl nitrite)
	Nitrous Oxide	Whipped cream chargers (aka nangs) Automotive gas for turbo charging car engines Medical / dentist

# Nitrous Oxide – Whipped Cream Chargers



# Amyl Nitrite – Poppers



## “Chroming” – Spray Paint

“Chroming” is a slang term that usually describes the practice of inhaling spray paint.

The practice involves spraying paint into a bottle, allowing the paint to stick to the walls of the bottle. The solvent and the propellant evaporate and is inhaled from the opening of the bottle.



Active ingredients: Propellants (Butane, Isobutane, Propane) + Solvent (Toluene, Benzene, Xylene)

## “Chroming” – Spray Paint

‘The main colours I was only sniffing was plum purple and navy blue. And when they didn’t have that on the shelf, that’s when I would’ve went for the other colours. Every other colour that smelt good. I used to spray paint into the lid before I buy it. Cause, if it’s got a yucky smell to it, I wouldn’t buy it.’

Karam, J., Sinclair, G., Rackstraw, L. (2014). Dignity, Diversion, Home and Hope: A review of interventions for volatile substance misuse in Regional north Queensland. Youth Empowered Towards Independence.



Active ingredients: Propellants (Butane, Isobutane, Propane) + Solvent (Toluene, Benzene, Xylene)

# Glue Sniffing

Glue sniffing usually involves placing a small quantity of glue into a plastic bag, from which the vapours are then inhaled. This practice is sometimes referred to as “bagging” or “huffing.”

Occasionally glue is sniffed out of a plastic bottle – a small amount of glue is placed into the bottle, with the fumes inhaled through the opening of the bottle.



Active ingredients: Solvents (Toluene, Benzene, Acetone)

# Huffing or Bagging

'Plastic bags is better. You get high quick. When you sniff through plastic bags, you see different colours. Like rainbows everywhere. That's how high and how quick you get high.'

Karam, J., Sinclair, G., Rackstraw, L. (2014). Dignity, Diversion, Home and Hope: A review of interventions for volatile substance misuse in Regional north Queensland. Youth Empowered Towards Independence.



# Aerosol Sniffing

Aerosols such as deodorants are usually inhaled directly into the mouth, filtered through fabric such as sleeves of clothing, or through a sock.

The fabric filters some of the fragrance and antiperspirant, allowing the hydrocarbon to pass through.



Active ingredients: Propellants (Butane, Isobutane, Propane)

# Aerosol Sniffing

'When I was sniffing deodorant I used to talk to a person that was not real. I would see a person. Glue I never saw anybody, it was something like a game, sniffing deodorant you would actually see people.'

Karam, J., Sinclair, G., Rackstraw, L. (2014). Dignity, Diversion, Home and Hope: A review of interventions for volatile substance misuse in Regional north Queensland. Youth Empowered Towards Independence.



Active ingredients: Propellants (Butane, Isobutane, Propane)

# Petrol



Active ingredients: Benzene, polycyclic aromatic hydrocarbons

# Low aromatic fuel (LAF)

The replacement of regular unleaded fuel with low aromatic fuel is a proven strategy to reduce petrol sniffing. Research has shown:



- low aromatic fuel is linked with a continuing decline in the numbers and frequency of young people sniffing petrol in remote communities
- sniffing rates have been reduced by 88% across communities surveyed since 2005-07
- a comprehensive regional approach works best to reduce petrol sniffing.

# How do inhalants work?

- When inhaled, the fumes enter the bloodstream via the lungs very quickly and the effects are felt after just a few seconds.
- Hydrocarbons are CNS depressants working on either glutamate or GABA receptors
- Because the high from inhalants lasts only a few minutes, young people often continue to inhale repeatedly over the course of several hours to “top up”

# Sudden Sniffing Death



- Butane seems to be higher risk for Sudden Sniffing Death
- Sudden Sniffing Death may involve a number of underlying mechanisms
- Some young people could be more vulnerable than others

# Sudden Sniffing Death



- Commonly thought to follow physical exertion
- Theory that the heart becomes sensitive to catecholamines that are released on physical exertion
- Chronic use of toluene has been shown to increase QT dispersal – a marker for sudden death in a variety of clinical conditions
- However – many deaths in Queensland have not involved physical exertion

## Other health risks include:



- Accidents / Injuries
- Cough, breathlessness, pneumonia
- Neurological / Cognitive
  - Dermatitis
  - Dependence

'I do get chest pains from the sniffing, makes my eyes are sore and blurry and it does make your whole throat here so sore... that's why I lost a lot of weight that's cause of the sniffing I don't eat when I'm sniffing - I can't eat.'

'Sometimes my eyes close up and go blurry that's from the fumes itself that go up under your eyelashes with the paint fumes or the glue fumes everyone gets it.'

'I ended up going to mental health. So I talked about, I think I got a crack in my head. And like I thought I had a crack in my head, but it wasn't a crack. Then I just started talking about, like, I've been sniffing and I've been seeing things and hearing things.'



# General tips for responding to intoxication



Ensure the safety of yourself, your colleagues and other members of the public



Approach people using inhalants slowly. If the person is actively inhaling, they may be initially too intoxicated to speak to you



Volatile hydrocarbons are flammable. Open doors and windows to allow fresh air to clear the hydrocarbons



Be mindful of any injuries or medical issues the person may be experiencing

# De-escalation: The S.A.F.E.R. Model



**S** = Step back: Don't rush in, physically and emotionally step back



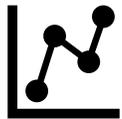
**A** = Assess the situation: Identify possible risks



**F** = Find Help: Seek assistance from colleagues or emergency services



**E** = Evaluate options: Options could include leaving the situation, handing over to emergency services, or containing the situation



**R** = Response: Continually evaluate the situation, and consider if the situation is getting worse, staying the same or beginning to resolve

# De-escalation: P.A.L.M.S. Model



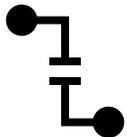
**P** = Position: Make sure you are not blocking exit routes for yourself or the person who is intoxicated



**A** = Attitude: Maintain a calm and positive attitude



**L** = Look & Listen: Maintain regular eye contact and check in that the person is understanding your instructions



**M** = Make space: Keep your distance



**S** = Stance: Stand side on, and avoid a stance that could be perceived as threatening

## If someone is sniffing

- Ensure fresh air (open doors and windows)
- Remove the substance if possible / safe to do so
- If the person won't hand over the substance, don't attempt to wrestle it from them
- Don't chase, argue or use force
- Don't attempt to counsel while intoxicated
- Talk calmly and try to encourage them to gradually hand you the substance
- Call for assistance if required (e.g. another worker, QPS, QAS)

**NB: How long you are prepared to do this will depend on a range of factors e.g. level of risk, setting, agency policy etc**

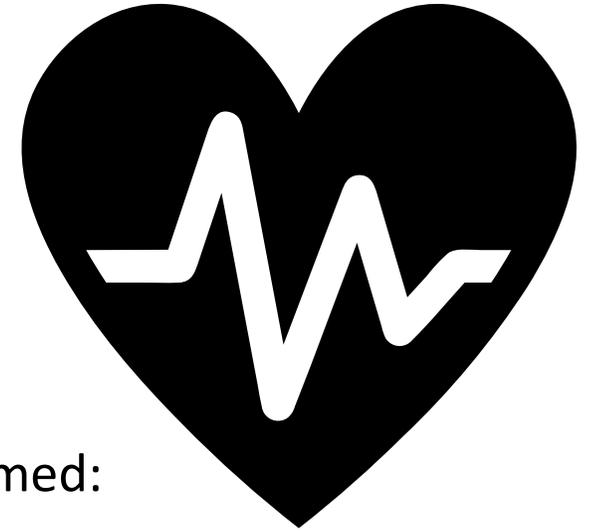
## After care once the person stops

- The person should start to recover within 10 – 15 minutes (heavy use can take longer)
- Encourage the person to resit in a quiet safe place
- Monitor them closely to make sure they continue recover from the effects
- Ask the person how they are feeling – Physically? Emotionally?
- Offer the person some water
- If they are able to swallow water ok, offer then so food that is easy to eat / swallow
- Encourage the person the change their clothing if there are inhalants on them



# Medical management

- Balance between what can be done versus what is realistic to do
- “Up to Date” guidelines recommend the following:
  - All patients with inhalant intoxication should have the following performed:
    - Rapid blood glucose
    - Pulse oximetry
    - Electrocardiogram and continuous monitoring for cardiac arrhythmias
  - In addition, the following may be performed especially in adolescents suspected of chronic use:
    - Complete blood count to evaluate bone marrow suppression (caused by the benzene in petrol)
    - Serum electrolytes to identify hypokalemia and metabolic acidosis (caused by the toluene in glues, spray paint and low aromatic fuel)
    - Urine rapid dipstick and microscopic urinalysis to assess for renal tubular acidosis (caused by chronic toluene use)



# When to call an ambulance?

## An ambulance should be called if the person:

- is not breathing
- is losing consciousness (e.g. you cannot wake them)
- is still grunting or wheezing as they breathe after more than 15 minutes
- is becoming more anxious or agitated
- is becoming less able to think clearly over time
- is behaving unusually
- has a seizure (fit)



# Recovery Position



# Are there withdrawals when someone stops?

Sometimes. But it should only last 2-5 days (slightly longer in people who have used for a long time)

Reports of withdrawals include:

- Runny eyes or nose
- Fast heart beat
- Trembling
- Irritability
- Headaches
- Nausea

# When to call police

## **If there is a threat to anyone's safety including:**

- A young person
- Your own safety or the safety of your colleagues
- Another community member
- A member of the public

If you are worried a young person needs medical attention, but you (or ambulance staff) cannot get to them safely

If you cannot safely remove access to a substance and the young person is at a significant risk of harm



# How should we respond to people who use inhalants?

## Evidence supports:

- Limiting supply (where possible)
- Responses to manage acute intoxication
- Provision of psycho-education and harm reduction information
- Activity-based programs
- Engaging peer group leaders
- Counselling and Case-management
- Connecting to culture (e.g. Building identity, linking with elders and community, cultural camps, returning to country)

# How should we respond to people who use inhalants?

- Identify triggers for use (e.g. people, places, times, feelings)
- Identify alternative coping strategies to try first (e.g. activities, supports, distractions)
- Have a clear and consistent framework for responding – policies and procedures that everyone agrees on
- Communicate your policies and procedures to the young people – get their feedback and input
- Be trauma informed in your work
- Involve the young person in safety planning

# How should we respond to people who use inhalants?

'I stopped cause probably I used to go to a youth service, it was just when I lived on the streets more that I sniffed'

'I quit sniffing when I had my baby when I was pregnant because I was pregnant I dropped sniffing when I had the baby I knew I had to stop'

'Services should be doing activities a lot more activities...like fishing or going out for a barbecue...going to the lookout...stuff'

'I had new friends and they didn't like me sniffing'

'Cause I was sick of getting kicked out of where I was staying and it causes too much problems, fights, family fights and that and my family won't let me go there if I've been doing it. And now that I've moved into my own place, I don't sniff, can't sniff there and that.'

'I reckon the problem starts from home there's something wrong at home that's why people sniff, try and get the family to understand where we're coming from, why we do it...I prefer my case worker spoke to my family, not a different worker who doesn't know the family otherwise you have to start from the start and explain it all again'

## What not to do...

- Lecturing young people about ceasing
- Attempting to scare young people into stopping
- Coercing rather than encouraging young people to make change
- Workers who don't have a relationship with the young person talking to them about their use
- Broad based education programs that target non-users

# What can we do as a system?

- Collaborative responses
- Communicate with other services
- Remaining flexible and responsive
- Educate staff on inhalant issues
- Supply, Demand and Harm Reduction approaches



# Further reading

*The Chroming Report: A Government Framework for children-in-care*, (2011). The State of Queensland, Commission for Children and Young People and Child Guardian. <https://healthinfonet.ecu.edu.au/key-resources/resources/23059/>

*Dignity, Diversion, Home and Hope: A review of interventions for volatile substance misuse in Regional north Queensland*. (2014). Youth Empowered Towards Independence. <https://www.pmc.gov.au/resource-centre/indigenous-affairs/dignity-diversion-home-and-hope-review-interventions-volatile-substance-misuse-regional-north-queensland>

Volatile Substance Misuse: A Review of Interventions:

<https://www1.health.gov.au/internet/publications/publishing.nsf/Content/drugtreat-pubs-volatile-toc>

Consensus-Based Clinical Practice Guideline for the Management of Volatile Substance Use in Australia (No longer current however the information is still useful) <https://vsu.mhc.wa.gov.au/media/1189/nhmrc-1.pdf>

Delivery of the Petrol Sniffing Strategy in Remote Indigenous Communities

<https://www.anao.gov.au/work/performa...>

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# A Retailer's Response to Inhalants

Practical advice that's good for your business  
and good for your community.

---

**Queensland**

[www.dovetail.org.au](http://www.dovetail.org.au)



Contact Dovetail:

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(07) 3837 5621

Thanks to:

Laura Quinlan, CHQ CYMHS

Staff at YETI, Cairns



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