



# ‘Toolkit top-up’: A selection of tips and tricks to support clinical AOD Workers

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# Today's Program



# Public Health at Otago.

POSTGRADUATE






CHRISTCHURCH

## An introduction to inhalants and volatile substances

*Dr. Rose Crossin  
Dept. of Population Health*

# Terminology

Volatile solvents	Nitrous oxide	Alkyl nitrites
<p>Aka:</p> <ul style="list-style-type: none"><li>- Huffing</li><li>- Sniffing</li><li>- Chroming</li><li>- Bagging</li><li>- Rexting</li></ul>	<p>Aka:</p> <ul style="list-style-type: none"><li>- Nangs</li><li>- Whippits</li><li>- Laughing gas</li></ul>	<p>Aka:</p> <ul style="list-style-type: none"><li>- Poppers</li><li>- Amyl</li></ul>
		



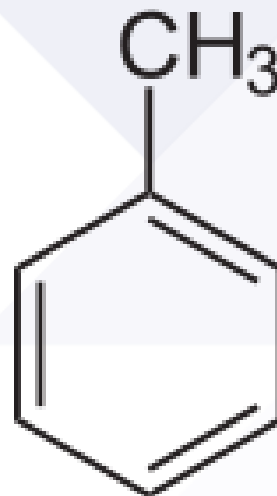
# Legalities

- Legislation by state and territory
- Not a banned drug
- In Victoria, sale of volatile solvents is illegal if the person knows, or reasonably ought to know, or has cause to believe, that someone will inhale the substance



# Common 'ingredient'

- Toluene
  - Volatile liquid
  - Aromatic hydrocarbon
  - Water insoluble
  - Colourless
  - Sweet strong smell
- Also sometimes benzene and/or xylene



# Modes of use

- Deliberate inhalation to create an altered mental state:
  - Inhalation directly from the container
  - Spray or soak a cloth, then inhale from that (“huffing”)
  - Spray or pour into a plastic bag, then inhale from that (“bagging”)
- Concentrations range from 3,000-15,000 ppm

# Pharmacokinetics & pharmacology

- Toluene is a CNS depressant
- After inhalation:
  - Rapid absorption across the lungs into bloodstream
  - Rapid metabolism
  - Primarily excreted as urinary hippuric acid
  - Can accumulate in lipid-rich organs (brain, adipose tissue, kidneys, adrenal glands) if use is chronic
- No established blood, saliva, or urine tests

# Effects

- Rapid high, within minutes
- Inverted u-shaped curve for concentration-effect
  - Excitation: locomotor stimulation, euphoria, exhilaration
  - CNS depression: slurring, weakness, disorientation
  - Sedation: cardiopulmonary failure, can result in death (“sudden sniffing death”)

# Typical population

- Youth, particularly those who are:
  - Younger (i.e. 10-14 years old)
  - Vulnerable or marginalised
  - In juvenile justice or protective services
- Other vulnerable or marginalised populations
- Thought to be a result of easy access and low cost



# Possible harms – acute

- Headache
- Burns / frostbite
- Blackouts
- Agitation / hallucinations / psychosis symptoms
- Intentional and non-intentional injuries
- Suffocation / asphyxia
- Sudden sniffing death from cardiac failure





# Possible harms – chronic

- Cognitive impairment – learning and memory
- Structural brain changes
- Anaemia
- Persistent cough or shortness of breath
- Tremors or ataxia
- Changes to mood and mental health
- Increased risk of suicidal thoughts or behaviours
- Dependence
- Appetite suppression
- Growth impairment



# Prevalence of use - NDSHS

- Definition of inhalants includes volatile solvents, nitrous and alkyl nitrites
- In 2019, 1.4% of those aged 14 and over report past-year use (increasing trend)
- But ... this is mostly nitrous and alkyl nitrites

**Table 4.93: Forms of inhalants used, people who have recently<sup>(a)</sup> used inhalant aged 14 and over, 2004 to 2019 (per cent)**

Type of Inhalant	Proportion					
	2004	2007	2010	2013	2016	2019
Nitrous oxide	n.a.	n.a.	n.a.	n.a.	n.a.	63.3
Amyl nitrate and other nitrates	55.3	52.7	38.0	44.4	34.0	61.0
Petrol	*9.6	**6.1	*7.2	*2.4	**1.3	*5.8
Other Volatile Solvents	23.4	*17.2	*9.0	**3.5	**2.5	*4.9
Aerosols	n.a.	n.a.	**4.3	*5.7	*6.6	*4.1
Fuel and refrigerant gases	n.a.	n.a.	n.a.	n.a.	n.a.	**2.1
Gases <sup>(b)</sup>	34.9	*17.3	28.7	40.1	25.7	n.a.
Other	**4.6	*17.2	23.7	21.0	38.4	**1.0



# Prevalence of use - ASSAD

- Definition of inhalants includes volatile solvents, nitrous and alkyl nitrites
- Inhalants and cannabis two most commonly reported 'illicit' drugs used by those aged 12-17
- Use decreases with increasing age
- In 2017, 13% report past year use
- Slight increase from 2011, especially in 16-17 year olds
- But ... not separated by inhalant type



# Use measurement challenges

- Likely an undercount due to sampling frame issues incl.
  - Age group
  - Household or school surveys
  - More common in marginalised groups
- Issues with definition of 'inhalant'
  - Check definitions to determine what is actually being asked

# Prevalence of harm

- Deaths in Australia 2000-2021
  - 164 cases
  - Predominantly males, median age of 26
  - Majority due to unintentional toxicity or unintentional asphyxia
- NSW calls to Poisons Info Centre 2010-2020
  - 752 calls
  - Predominantly relating to children and adolescents
  - Increasing trend since 2017
- Ambulance attendances in Victoria 2012-2017
  - 779 attendances
  - Often concurrent with suicidal behaviour or mental health issues

Darke, S., Zahra, E., Duflou, J., Peacock, A., Farrell, M., & Lappin, J. (2023). Characteristics and circumstances of volatile solvent misuse-related death in Australia, 2000–2021. *Clinical toxicology*, 61(4), 260-265.

Berling, I., Chiew, A., & Brown, J. (2023). Poisonings from hydrocarbon inhalant misuse in Australia. *Addiction*.

Crossin, R., Scott, D., Witt, K. G., Duncan, J. R., Smith, K., & Lubman, D. I. (2018). Acute harms associated with inhalant misuse: Co-morbidities and trends relative to age and gender among ambulance attendees. *Drug and Alcohol Dependence*, 190, 46-53.



# Warning signs

- Chemical smell on breath or clothes
- Stains on face, hands, or clothes
- Empty or hidden containers
- Loss of appetite and/or rapid weight loss
- Behavioural changes, particularly apathy
- Slurring or lack of coordination
- Skin irritation, blisters or ulcers around nose and mouth

# Diagnosis

- Withdrawal symptoms
  - Headache
  - Nausea
  - Tiredness
- DSM-5 defines an “inhalant use disorder”
  - Symptoms and frequency of use
  - Developing tolerance, presence of withdrawal symptoms





# Treatment

- Unclear evidence of efficacy for treatment, but, potential for:
  - Family therapy
  - Activity-based programmes
  - Residential approaches (culturally appropriate)
- No specific pharmacotherapy
- Residential rehabilitation and out-patient counselling are most common



# Harm reduction advice

- Avoid mixing with other drugs, particularly other depressants like alcohol, benzos, or opioids
- Avoid using alone
- Avoid use in confined spaces
- Avoid use near open flames or cigarettes
- Stop them from directly touching skin, mouth or nose

# Public health

- Regulation to try and restrict supply
- Product modification / reformulation
- Community-led demand reduction programs
- Co-morbidity and marker of 'global vulnerability'
- *"Ultimately, the most effective interventions into VSM are likely be those activities that redress social and economic disadvantage and enhance the opportunities, capacities and confidence of young people"*

MacLean, S., & D'abbs, P. H. (2006). Will modifying inhalants reduce volatile substance misuse? A review. *Drugs: education, prevention and policy*, 13(5), 423-439.

d'Abbs, P., & MacLean, S. (2008). *Volatile substance misuse: a review of interventions* (Vol. 65). Barton, Australia: Department of Health and Ageing.



# Resources and help available

- Poisons Information Centre
- Alcohol and Drug Foundation:  
<https://adf.org.au/drug-facts/inhalants/>
- Volatile Substance Misuse: A review of interventions:  
<https://vsu.mhc.wa.gov.au/media/1301/dh-a-2.pdf>



# Thanks

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# Setting up a nurse-led model of care

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BURNET INSTITUTE



**Burnet**

reach for the many









# Disclosures

I have the following disclosures to report for 2022-23:

- AbbVie – payment received for education presentations, membership of an advisory committee and travel support
- Gilead – payment received for membership of an advisory committee.





# Overview

- What is a nurse-led model of care?
- Setting up a nurse-led model of care – APNA Building Blocks
- Case study: Nurse-led hepatitis C models of care
- Measuring nursing activity – why and how?





## What is a model of care?

- A "Model of Care" defines the way health services are delivered
  - Outlines best practice care and services for a person, population group or patient cohort as they progress through the stages of a condition, injury or event.
  - Aims to ensure people get the right care, at the right time, by the right team and in the right place"

Agency for Clinical Innovation (ACI). Understanding the process to develop a Model of Care in the ACI. 2013. Version 1.0, May. Sydney: ACI. Available at: [https://www.aci.health.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/181935/HS13-034\\_Framework-DevelopMoC\\_D7.pdf](https://www.aci.health.nsw.gov.au/__data/assets/pdf_file/0009/181935/HS13-034_Framework-DevelopMoC_D7.pdf)





## What is a nurse-led model of care (MoC)?

- According to the Australian Primary care Nurses Association (APNA) (2020) a nurse-led MoC is an alternative model of care delivery where the nurse is the primary provider of care for the patient.
  - It involves the delivery of **holistic** and **person-centred** nursing services, with accountability and responsibility for patient care and professional practice remaining with the nurse.
- Nurse-led MoC are effective when:
  - Individuals need to be actively engaged in self-management of their condition
  - There is a need for greater patient education and understanding
  - A closer, longer-term relationship between patients and caregivers is needed (e.g. diabetes, older patients)
  - Establishing trust is important (e.g. mental health).



## Nurse-led MoC is more than “task shifting”

- Task shifting involves the rational redistribution of tasks among members of the health workforce.
- Specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications to make more efficient use of the available human resources for health.
- Task shifting is a method of expanding the health workforce to rapidly increase access to specialist health services.
- Task shifting has allowed the development of a nursing specialty
  - Task-shifting and task-sharing approaches enable nurses to work to their full scope of practice and contribute to health care services working at their most efficient and help to propel hepatitis C elimination efforts

World Health Organisation (2008). Task shifting : rational redistribution of tasks among health workforce teams : global recommendations and guidelines. Accessed from: <https://iris.who.int/bitstream/handle/10665/43821/9789?sequence=1>



# APNA building blocks

[www.nurseclinics.apna.asn.au/building-blocks/](http://www.nurseclinics.apna.asn.au/building-blocks/)

## Explore APNA's resources and tools to get started

-  **A clear plan** 
-  **Funding** 
-  **Staffing and HR** 
-  **Best-practice care** 
-  **Patient engagement** 
-  **Supporting systems and processes** 
-  **Evaluation and improvement** 





# APNA building blocks – Essential elements of a nurse clinic

- A clear plan
  - Identify your local community's health needs
  - Create your goals and develop a business case
- Funding nurse clinics
  - Understand all funding opportunities and prepare your budget
- Location and facilities
  - Plan the “where, when, and how” for your clinic
- Staffing and HR
  - Your clinic's success will be built on teamwork and staff culture – get the governance structures right!







# APNA building blocks – Essential elements of a nurse clinic

- Best practice care
  - Ensure your clinic implementation is guided by the up-to-date clinical guidelines
- Patient engagement
  - Plan patient pathways
  - Design a service delivery model that meets your patient's needs
- Support systems and process
  - Establish the systems and processes that support your clinic to deliver care that is efficient and responsive to patient need
- Evaluation and improvement
  - Is the clinic achieving its goals?
  - Use an evidence-based approach to measure progress and success



## Case study: Evolution of the nursing role in delivering hepatitis C care

- Hepatology nursing has evolved over the last 30 years:
  - Role began by focusing on the administration of interferon injections, and side effect management
- Now hepatology nurses are focused on caring for people with/at risk of:
  - Hepatitis B
  - Hepatitis C
  - Advanced Liver Disease
  - Hepatocellular Carcinoma
  - Metabolic associated fatty liver disease (MAFLD)
- Hepatology nurses work in range of settings including tertiary hospitals, community settings and non-health settings.



# The evolving role of the nurse in delivering hepatitis C care

- Nurses working in the hepatitis C sector primarily work in an outreach model of care
- Contribute specialist nursing skills in hepatitis C diagnosis, testing and treatment in priority settings including:
  - Alcohol and Other Drug services
  - Needle and Syringe Programs
  - Mental Health services
  - Homelessness services
  - Aboriginal and Torres Strait Islander services
  - Custodial health services
  - Migrant health services
  - Primary care including community health, sexual health and general practice
- Leverage the “trust” of health workers caring for priority populations in priority settings



# Eliminate hepatitis C Australia (ECA)

“We just need a nurse ...”



[https://www.burnet.edu.au/media/o1opjflt/ec-australia\\_annual-report-year-4-2022\\_v1.pdf](https://www.burnet.edu.au/media/o1opjflt/ec-australia_annual-report-year-4-2022_v1.pdf)



## Types of hepatitis C nurse-led MoC

- Protocol-driven models
- Settings-based models (outreach)
- Capacity building models
- Partnership models





# Protocol driven nurse-led models of care

“The model featured protocol-driven assessment, triage, and management of antiviral therapy by specifically trained nurses, with specialist physician support utilising telemedicine.”

## Safety and Effectiveness of a Nurse-Led Outreach Program for Assessment and Treatment of Chronic Hepatitis C in the Custodial Setting

**Andrew R. Lloyd,<sup>1,3</sup> Jac Clegg,<sup>3</sup> Jens Lange,<sup>3</sup> Aleta Stevenson,<sup>3</sup> Jeffrey J. Post,<sup>2,3,4</sup> David Lloyd,<sup>1</sup> Giulia Rudge,<sup>3</sup> Leng Boonwaat,<sup>3</sup> Gary Forrest,<sup>3</sup> Jenny Douglas,<sup>3</sup> and Denise Monkley<sup>3</sup>**

<sup>1</sup>Inflammation and Infection Research Centre, School of Medical Sciences, and <sup>2</sup>Prince of Wales Clinical School, University of New South Wales, Sydney; <sup>3</sup>Population Health, Justice Health, Matraville, and <sup>4</sup>Department of Infectious Diseases, Prince of Wales Hospital, Randwick, New South Wales, Australia

1078 • CID 2013:56 (15 April) • Lloyd et al

Clinical Infectious Diseases, Volume 56, Issue 8, 15 April 2013,  
Pages 1078–1084, <https://doi.org/10.1093/cid/cis1202>



# Protocol driven nurse-led models of care

- Nurse-led care was associated with SVR12 rates of >95% in large numbers of prisoners
- <20% of prisoners required specialist input.

Research Article  
Viral Hepatitis



JOURNAL  
OF HEPATOLOGY

## Outcomes of treatment for hepatitis C in prisoners using a nurse-led, statewide model of care

Timothy Papaluca<sup>1</sup>, Lucy McDonald<sup>1</sup>, Anne Craigie<sup>1</sup>, Annabelle Gibson<sup>1</sup>, Paul Desmond<sup>1</sup>, Darren Wong<sup>1</sup>, Rebecca Winter<sup>2</sup>, Nick Scott<sup>2,3</sup>, Jessica Howell<sup>1,2</sup>, Joseph Doyle<sup>2,4</sup>, Alisa Pedrana<sup>2</sup>, Andrew Lloyd<sup>5</sup>, Mark Stooze<sup>2,3</sup>, Margaret Hellard<sup>2,3</sup>, David Iser<sup>1,4</sup>, Alexander Thompson<sup>1,\*</sup>

<sup>1</sup>Department of Gastroenterology, St Vincent's Hospital and the University of Melbourne, Australia; <sup>2</sup>Burnet Institute, Melbourne, Australia; <sup>3</sup>Department of Epidemiology and Preventative Medicine, Monash University, Australia; <sup>4</sup>Department of Infectious Diseases, The Alfred and Monash University, Melbourne Australia; <sup>5</sup>Kirby Institute, University of New South Wales, Australia

Journal of Hepatology 2019 vol. 70 | 839–846



## Protocol driven nurse-led models of care

- Protocol driven MoC support autonomous nursing practice is facilitated through protocol driven care
- Protocol driven care is a unique arrangement between members of the clinical team, usually a Nurse and a medical specialist
- Protocol driven care allows Nurses to order routine investigations including:
  - Routine diagnostic or surveillance pathology using the Doctor's pre-signed pathology request form
  - Imaging such as abdominal or liver ultrasound once again using the Doctor's pre-signed request forms
  - Protocol driven care can extend to the interpretation of results in consultation with the Doctor.





## Protocol driven nurse-led models of care

- Protocol driven care is always based on mutual respect, and an established, trusted professional relationship that has developed over time.
  - Rules around protocol driven care may or may not be documented.
- Nurse-led models of care operate under the clinical responsibility of a Doctor.
  - Legally the Doctor has ultimate responsibility for the test ordered
  - Legally only the Doctor can prescribe viral hepatitis treatment
  - Except in the case of Nurse Practitioners who are authorized to prescribe medications related to their area of clinical expertise.
- Treatment prescriptions are facilitated through telehealth models, case presentations and case conferencing and face-to-face delivery of care.



# Settings-based models of care (outreach)





International Journal of Drug Policy

Volume 72, October 2019, Pages 195-198



## Quantitative evaluation of an integrated nurse model of care providing hepatitis C treatment to people attending homeless services in Melbourne, Australia

[Brendan L. Harney](#)<sup>a, b</sup>  , [Bradley Whitton](#)<sup>a</sup>, [Cheryl Lim](#)<sup>a, c</sup>, [Emma Paige](#)<sup>a</sup>,  
[Belinda McDonald](#)<sup>c</sup>, [Sarah Nolan](#)<sup>c, d</sup>, [David Pemberton](#)<sup>c, d</sup>, [Margaret E. Hellard](#)<sup>a, b</sup>,  
[Joseph S. Doyle](#)<sup>a, b</sup>

Harney BL, et al. Quantitative evaluation of an integrated nurse model of care providing hepatitis C treatment to people attending homeless services in Melbourne, Australia. *Int J Drug Policy*. 2019 Oct;72:195-198. doi: 10.1016/j.drugpo.2019.02.012.





# Settings-based models of care (outreach)



ORIGINAL ARTICLE

## **A multi-site, nurse-coordinated hepatitis C model of care in primary care and community services in Melbourne, Australia**

Brendan L. Harney , Bradley Whitton, Emma Paige, Rebecca Brereton, Robert Weiss, Dean Membrey, Amanda J. Wade, David Iser, William Kemp, Stuart K. Roberts, Tim Spelman ... [See all authors](#) 

First published: 25 November 2021 | <https://doi.org/10.1111/liv.15107> | Citations: 2

**Handling editor:** Alessio Aghemo

**Funding information**

Department of Health and Human Services, State Government of Victoria.

Harney BL, et al. A multi-site, nurse-coordinated hepatitis C model of care in primary care and community services in Melbourne, Australia. *Liver Int.* 2022 Mar;42(3):522-531



# Settings-based models of care (outreach)

Through my role in ECA I have encouraged nurses to move further away from the traditional settings of hepatitis C activity

- Needle and Syringe Program (NSP) cupboards
- Car parks
- Parks and gardens

## Tasmanian Eliminate Hepatitis C Australian Outreach (TEHCAO) project

Nurse-led, community-based, person-centred hepatitis C care

The TEHCAO project aimed to:

- Increase access to testing and treatment for people living with or at risk of hepatitis C
- Engage priority populations in hepatitis C education, testing and treatment services through:
  - Mental Health Services (MHS)
  - Correctional Health
  - Drug and Alcohol Services (AOD)
  - Needle Syringe Program (NSP)
  - Homelessness Services
- Build the hepatitis C knowledge and capacity of the MHS, NSPs, AOD, homelessness and correction services workforce.

**Outcomes**

**80** hepatitis C virus positive people have been identified.

**74** (93%) have commenced treatment.

Nurse-led activities include:

- 272 clinics conducted.
- 287 client phone calls.
- More than 830 hepatitis C education interactions:
  - 239 brief interactions (5 minutes)
  - 595 extended interactions (15 minutes)
- 448 clients have had venepuncture performed.

**Learnings**

- Community-based clinics have been effective in engaging clients living with and at-risk of hepatitis C.
- Nurse-led, person-centred care has led to a high proportion of clients commencing (93%), and completing hepatitis C treatment.
- Working with mental health and AOD services has enabled integration of hepatitis C testing into standard practice.

**Applying our Learnings**

- ✓ To achieve hepatitis C elimination, flexible non-traditional models of care are needed.
- ✓ The TEHCAO nurse will continue to engage with MHS, AOD and NSP services to provide on-site hepatitis C care and hepatitis C workforce development activities until April 2023.

An EC Australia project  
Learn more: [burnet.edu.au/ec-australia](http://burnet.edu.au/ec-australia)

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November 2022



# Do we need a van or a mobile mindset?

Tasmanian Eliminate Hepatitis C Australia Outreach project

## Outcomes



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## Capacity building nurse-led model

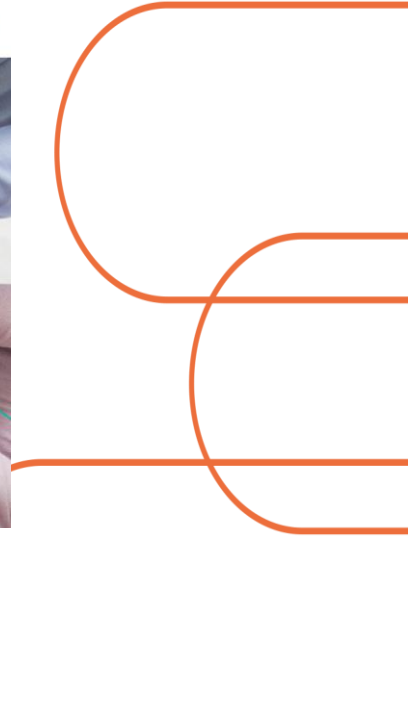
- The role of specialist hepatitis C nurses in mentoring primary care nurses through shared care models, case conferencing and providing education and support, is critical to build nursing capacity.
- Other strategies to build capacity is:
  - Conducting audits of patient management software – [www.beyondthec.com.au](http://www.beyondthec.com.au)
  - Supporting recall of patients with or at risk of hepatitis C.



Login

# Beyond the C

Help us eliminate  
hepatitis C by 2030





## Nurse partnership model of care

- Partnership models are the future of hepatitis C elimination efforts
- Nurses working with priority populations often hold the trust of clients; specialist nurses would be served well by leveraging that trust and supporting the delivery of testing and treatment through a partnership approach.
- Investing in creating and supporting competent and confident nurses creates more touchpoints for people with/at risk of hepatitis C in the health system to engage in care.



# Partnership model of care – nurses



ORIGINAL ARTICLE

## **Hepatitis C treatment in a co-located mental health and alcohol and drug service using a nurse-led model of care**

Brendan L. Harney  Rebecca Brereton, Bradley Whitton, Danusia Pietrzak, Emma Paige, Stuart K. Roberts, Susanne Birks, Sudeep Saraf, Margaret E. Hellard, Joseph S. Doyle

First published: 17 February 2021 | <https://doi.org/10.1111/jvh.13487> | Citations: 13

Brendan L. Harney and Rebecca Brereton are joint first authors.

Harney BL, Brereton R, et al. Hepatitis C treatment in a co-located mental health and alcohol and drug service using a nurse-led model of care. *J Viral Hepat*. 2021 May;28(5):771-778





# Partnership model of care - peers

## Nurse–Peer Partnership

An innovative partnership approach enabling access to hepatitis C treatment in a remote setting without visiting the hospital



Our nurse–peer partnership outreach team successfully established a holistic patient-centred clinical service offering out-of-hospital management of hepatitis C. This was focused around a weekly community-based clinic, supplemented by tailored case management, peer engagement strategies, outreach to general practice, corrections and pharmacies, and satellite needle syringe programs.

Sustained funding is required to maintain and build on the trusted relationships and successful outcomes, and to continue our work to eliminate hepatitis C by 2030.

### Success Factors

- Continued trusted relationships on all levels (between services, nurse–peer teams and with clients) are crucial to the success of this model.
- Referral sources diversified over the project through client and provider word-of-mouth as well as formal channels, and local and national media campaigns.



Images: The dynamic duo of Angie and Sai combine to create the nurse-peer partnership.

### Achievements

**CLINIC** The nurse–peer partnership enabled **159 people** to access hepatitis C care outside the hospital.

**65** outreach clinics were held between June 2021 and October 2022.

**32%** of people assisted by the service were hepatitis C positive.

**30%** identified as Australian First Nations people.

**61%** of those found to be hepatitis C positive commenced treatment.  
→ **41%** achieved a cure. → **10%** remain on treatment.

### Learnings

- The nurse–peer partnership model works.
- A consistent, mutually respectful nurse–peer working relationship led to the removal of barriers that enabled holistic care to be provided in a safe environment.
- Key to the partnership are flexible approaches, access to integrated clinical data from primary and tertiary care, and direct access to specialist services, if required.
- Financial incentives were highly effective in engaging clients throughout the cascade of care contributing to successful treatment.

An EC Australia project  
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November 2022



# Partnership model of care – peers (Nth Territory)

## Achievements



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## Partnership model of care – peers (Nth Territory)

### Learnings

- ✓ The nurse–peer partnership model works.
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- ✓ Key to the partnership are flexible approaches, access to integrated clinical data from primary and tertiary care, and direct access to specialist services, if required.
- ✓ Financial incentives were highly effective in engaging clients throughout the cascade of care contributing to successful treatment.



No matter the MoC ... how do we measure what nurses do?





## Importance of nursing data

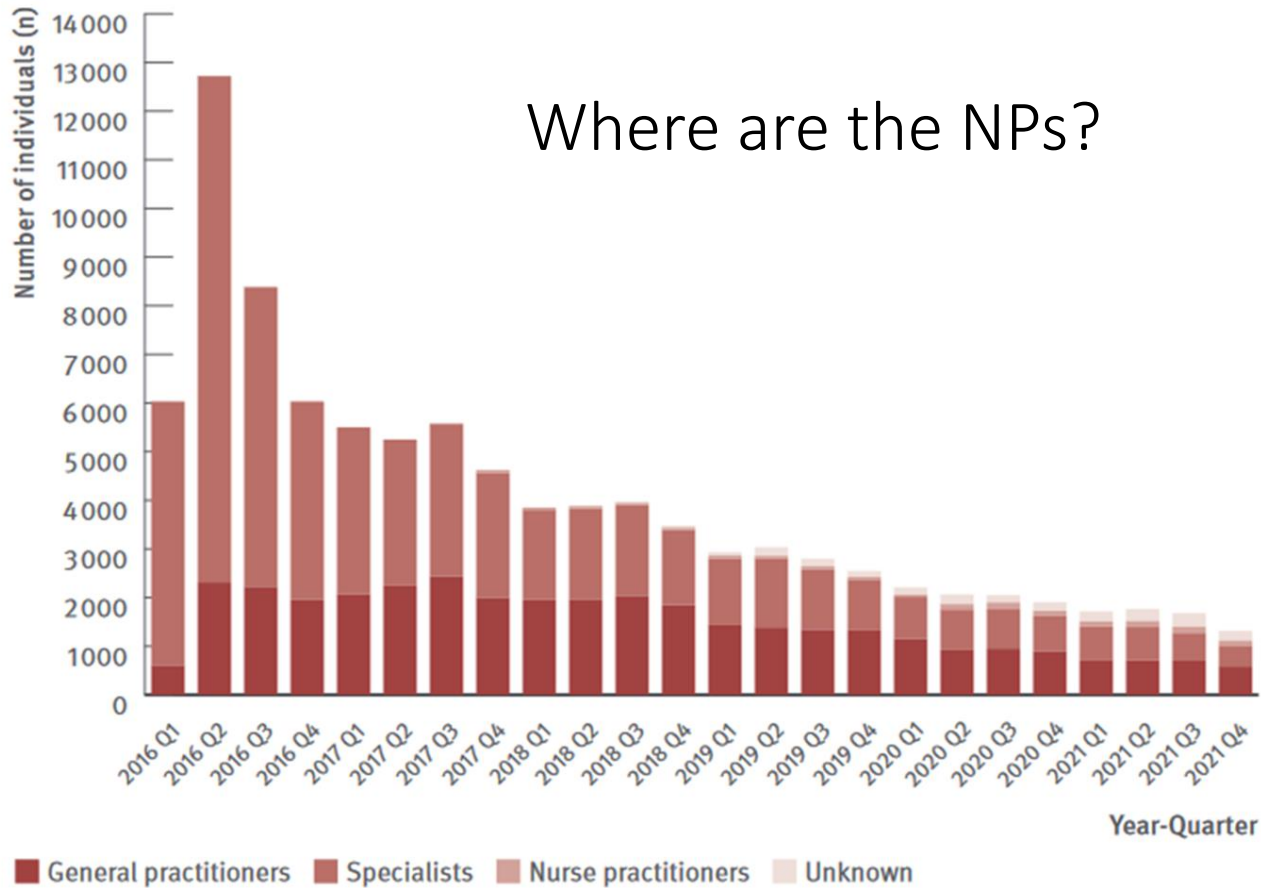
- The Australasian Hepatology Association (AHA) surveyed the NP membership of nursing organisations – DANA, ASHNA and the Australian College of NPs
- How many NPs had completed hepatitis C prescriber training in 2021?
  - 78 respondents
- How many NPs have written a script for DAAs?
  - 53 Australian NPs





# Where are the NPs?

Figure 23. Estimated number of individuals initiating DAA treatment by prescriber type, PBS database, March 2016–December 2021



Burnet Institute and Kirby Institute. Australia's progress towards hepatitis C elimination: annual report 2022. Melbourne: Burnet Institute, 2022. [https://burnet.edu.au/pages/141\\_australia\\_s\\_progress\\_towards\\_hepatitis\\_c\\_elimination\\_2022\\_report](https://burnet.edu.au/pages/141_australia_s_progress_towards_hepatitis_c_elimination_2022_report)



Source: Monitoring hepatitis C treatment uptake in Australia.<sup>(30)</sup>



## Data allows us to lift the invisibility cloak

- We have worked with friends at the Doherty Institute and the Kirby Institute who regularly request PBS and MBS data
- Between 1/01/20 and 31/10/22, 19,180 people initiated DAA treatment
- When comparing registered and derived provider types, a subset of practitioners with an NP registration were not being accurately identified in the derived variable (being listed as 'unclassified' specialty), underestimating prescribing by this group by 67%.
- **12% of all scripts were written by NPs**

Source: Jennifer MacLauchlan, Doherty Institute



## Why measure nursing activity?

- What does success look like?
- What are the intended outcomes? Have these outcomes been achieved?
- Why is the activity (e.g. nurse-led clinic) working or not working?
  - Barriers, enablers?
- How can things be done better?
  - Strategies to address or promote barriers or enablers







## How do we measure what nurses do?

- Activity-based reporting only measures the outcomes
  - Number of 'patient' interactions – face to face/phone
  - Number of people tested
  - Number of people linked to care
  - Number of people treated





## How do we measure what nurses do?

- Building a relationship with a person who is marginalised?
- Building trust with a person who has been discriminated against in the health system?
- Delivering person-centred care?





How do we measure planting the seed...?





## What is measurable?

- Conducting an audit to identify people at risk
- Recalling people at risk and offer testing
- Performing a patient assessment
  - Physical and mental health, re-infection risk, drug-drug interactions, vaccination assessment
- Treatment-related care
  - Number of referrals made and received
  - Identify barriers and enablers to treatment
- Delivery of education
- Delivery of adherence support
- Engagement in post-cure related monitoring and HCC surveillance



## Outputs vs outcomes

- Outputs are the things produced
  - Number of patients seen in a clinic
- Outcomes are the practice change
  - Knowledge and attitude changes of the patients attending the clinic
- Most importantly, not every output or outcome needs to be measured
  - But most outputs and outcomes can be measured





## Deciding which outcomes to measure

- When choosing the outcomes to evaluate consider:
  - Data availability, data quality, resources, skills and costs required, timeliness, strength of the study/project design, competing causes, risks, ethics
    - Take care to avoid bias - only measuring outcomes that can be measured, or
- Choose the outcome based on the change you want to occur
- If the outcome does not seem to be measurable (when working backwards) be curious to identify a data source



## Measurement $\neq$ numbers (all the time)

Quantitative measurement

- Counting

Qualitative measurement

- Journaling
- Interviews
- Observation









## Summary

- Increasing recognition of the role of nurse-led MoC to improve access to person-centred, holistic, high quality health care.
- APNA Building Blocks are a useful tool to guide the establishment of a MoC
  - A clear plan
  - Funding nurse clinics
  - Location and facilities
  - Staffing and HR
  - Best practice care
  - Patient engagement
  - Support systems and process
  - Evaluation and improvement
- Share knowledge and experiences with colleagues both in/out of your sector
- Measure your nursing activity – there is power in numbers/data!



**Burnet**

reach for the many

# Thank you

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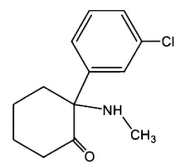
Jacqui Richmond

Email: [Jacqui.Richmond@burnet.edu.au](mailto:Jacqui.Richmond@burnet.edu.au)



[burnet.edu.au](http://burnet.edu.au)





**AoD Nurses Forum**  
November 16, 2023

# When you get bumped and trip into the K-hole:

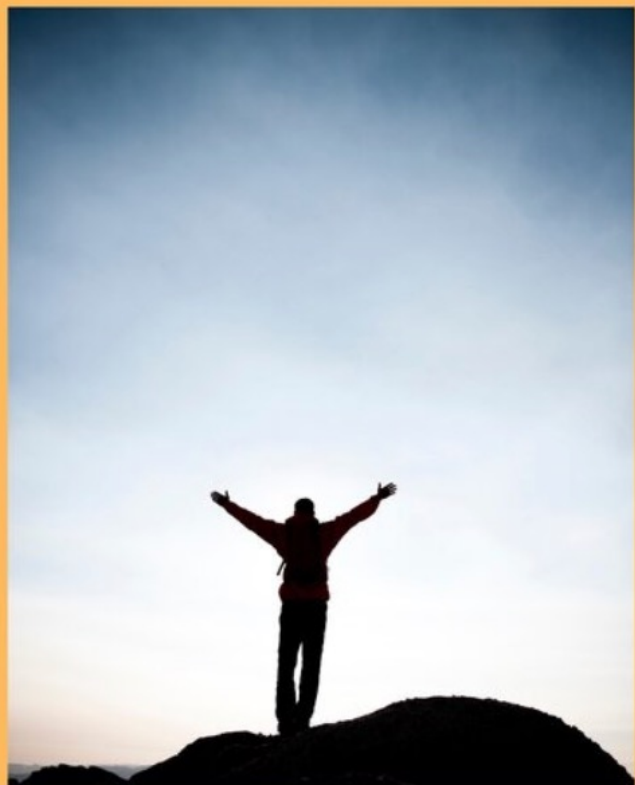
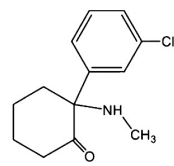
# The Toxicology of Ketamine

Zeff Koutsogiannis

Victorian Poisons Information Centre

Austin Clinical Toxicology Service

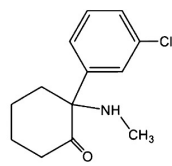
VICTORIAN POISONS INFORMATION CENTRE AND AUSTIN HOSPITAL CLINICAL TOXICOLOGY SERVICE



# KETAMINE IS GREAT, BUT IT IS DEFINITELY NOT FOR EVERYONE

Ketamine infusions could hurt more than help in certain medical conditions like uncontrolled heart conditions and schizophrenia. If you have one of these particular medical conditions you may want to hold off getting ketamine infusions until they are controlled or avoid ketamine altogether.

Another thing to consider is that if you are not willing or not ready to get ketamine infusion, then it is not for you! During the ketamine infusion you can experience a non-ordinary state of consciousness or psychedelic experience. If you don't feel ready to experience that type of experience, then listen to yourself and don't get ketamine. We've also found at our clinic that patients who undergo ketamine infusions because a family member convinces them to do it, they don't have as much of an improvement than the patients



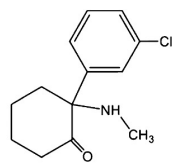
# History

**1956** - Parke-Davis synthesizes PCP

**1962** - Parke-Davis synthesizes Ketamine

**1964** – Given to a human for first time

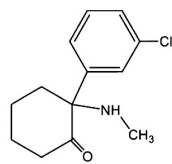
**1970** – Approved by FDA



# Battlefield (Vietnam)

## Veterinary Medicine

### Unco-operative children



# History

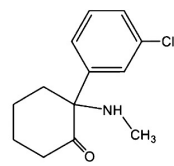
**1971**-Street use as a liquid (mind explorers)

**1974** -Street use as powder/pills

**1980s** - USA (dance/electronic/rave culture)

**1990s** - UK and Europe

**2000s** - Australia



# Street Names

K

Ket

Special K

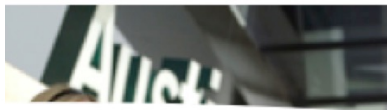
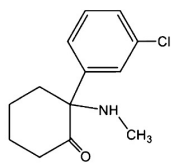
Vitamin K

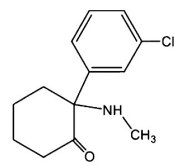
Super k

Kit Kat

Horse tranq



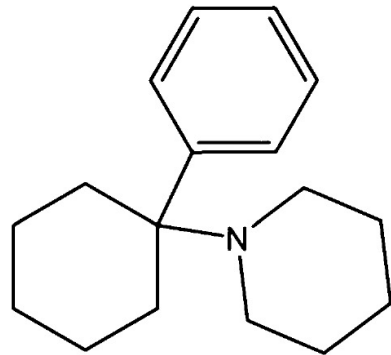
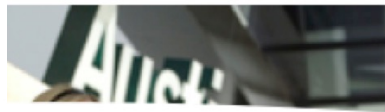
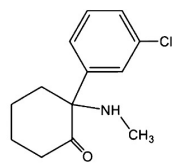




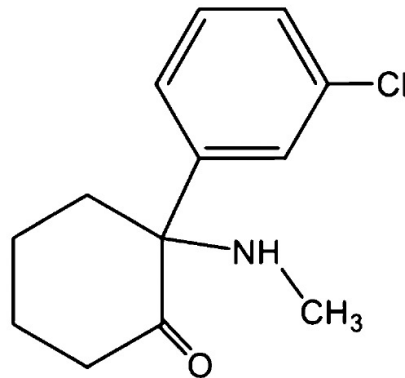
# Drug Wheel



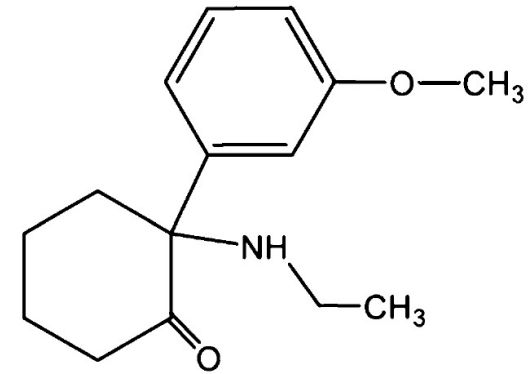




Phencyclidine



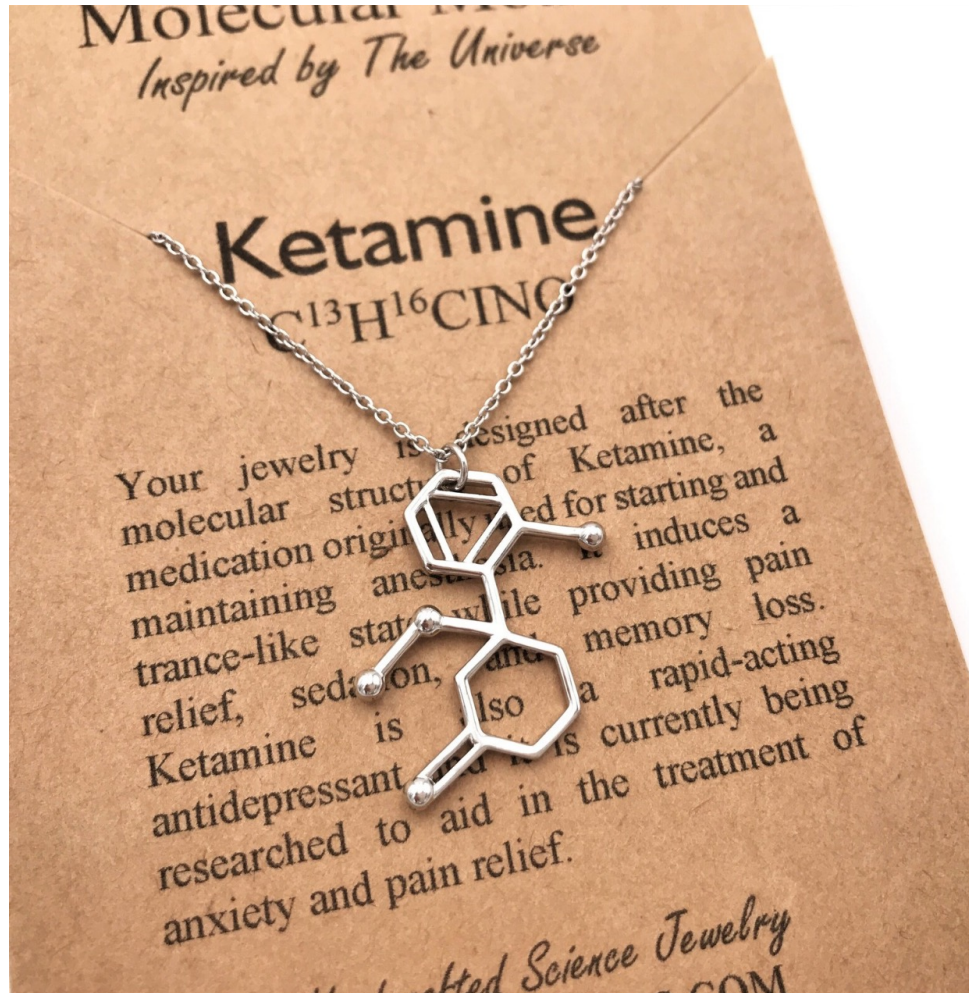
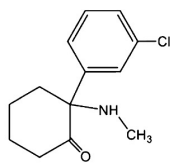
Ketamine

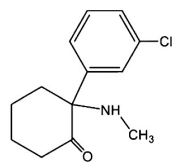


Methoxetamine

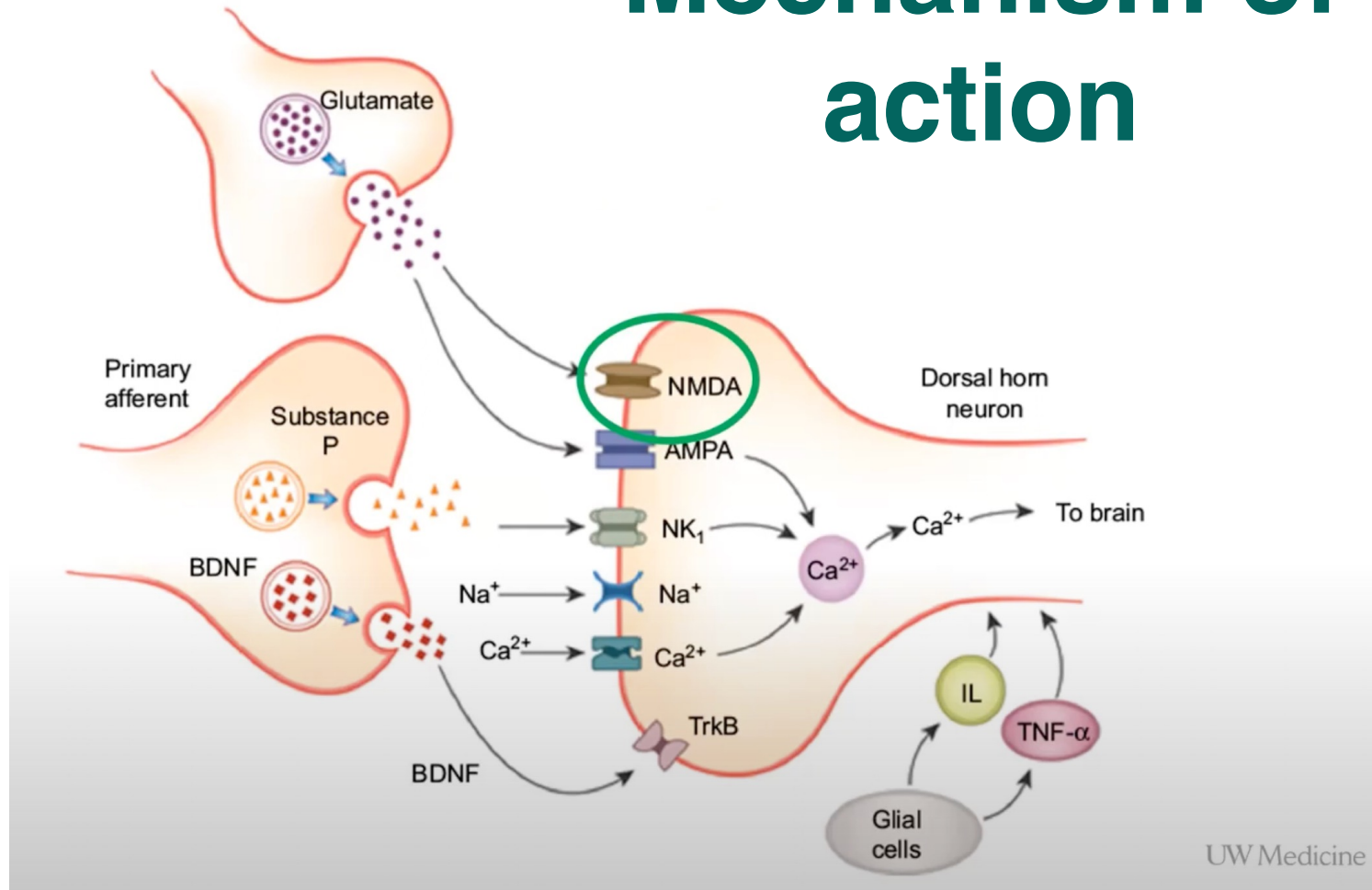
Chemical structures of the primary arylcyclohexamines: phencyclidine, ketamine, and methoxetamine



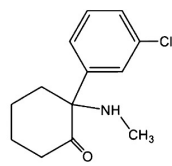




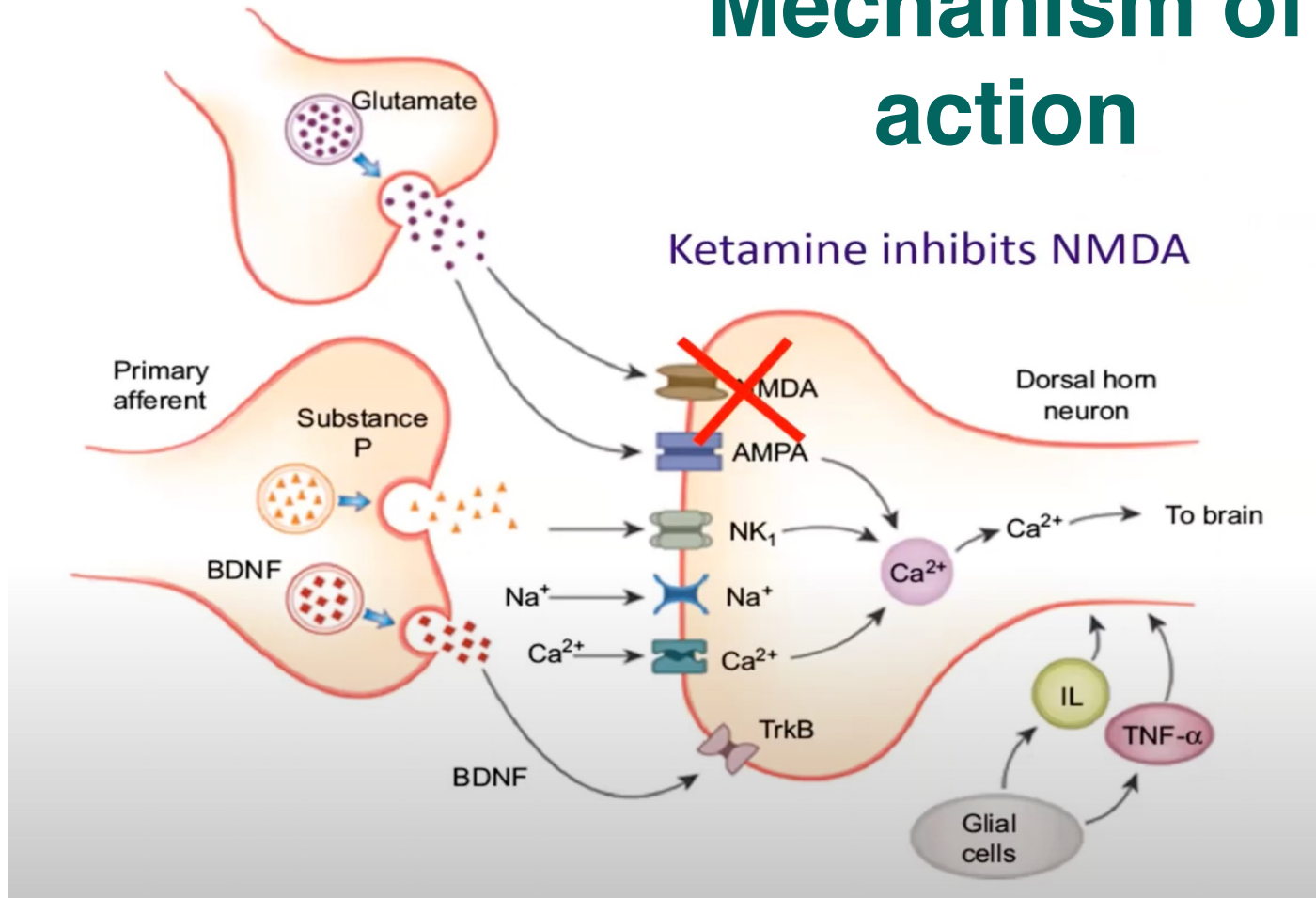
# Mechanism of action

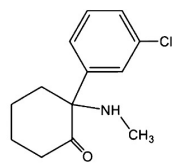


UW Medicine



# Mechanism of action



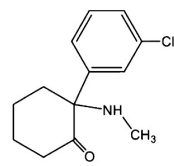


# Mechanism of action

NMDA receptor antagonist  
(Decreased excitatory glutamate)

Inhibits re-uptake NAdr, DA, 5-HT  
Activates  $\mu$ ,  $\delta$ ,  $\kappa$  opioid receptors





# Medical Use

Anaesthesia

Procedural sedation

Analgesia

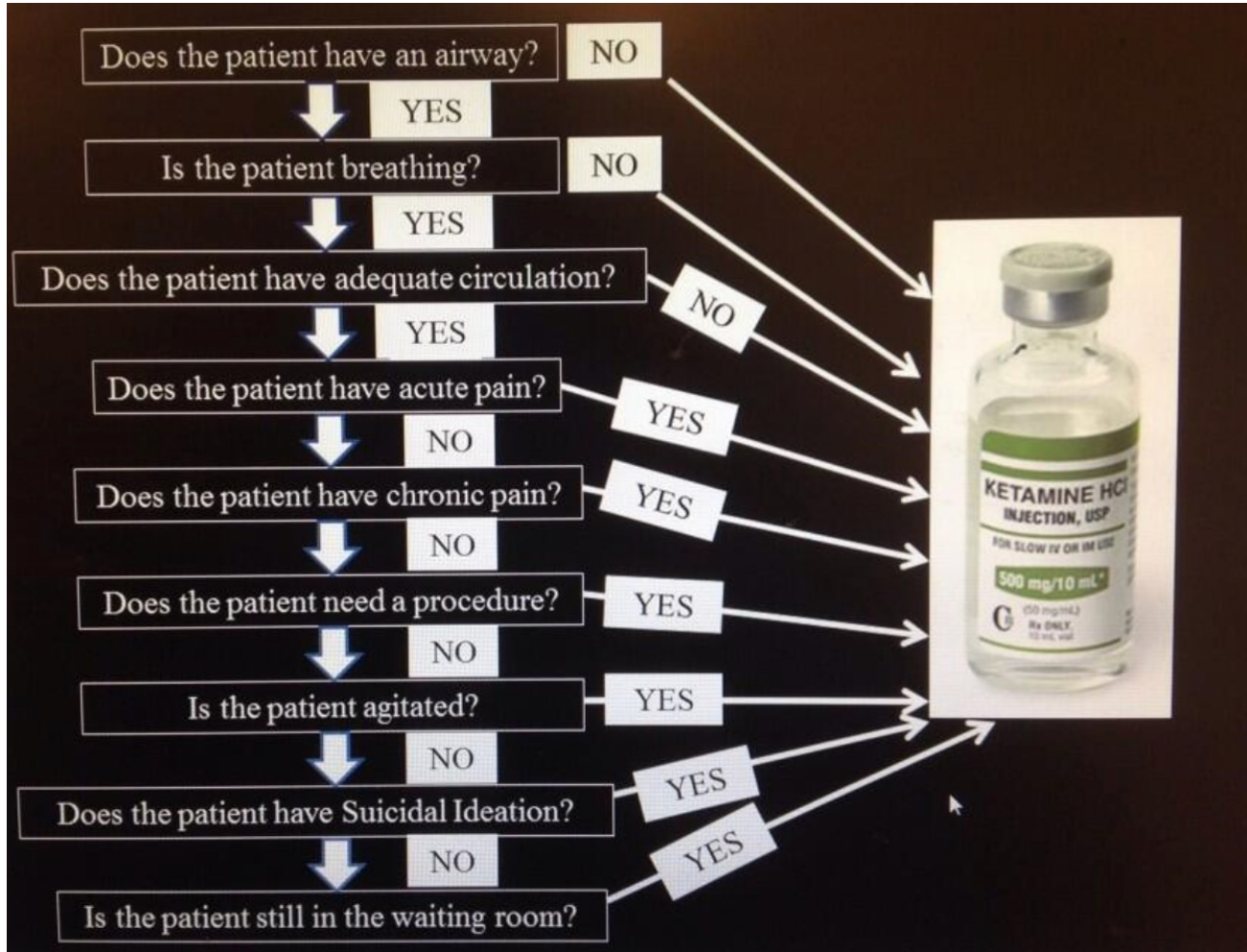
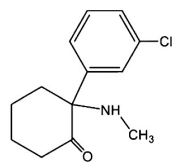
Acute Behavioural Disturbance

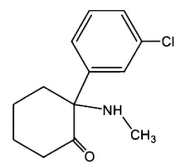
Asthma

Chronic pain

Seizures

Depression/Suicidality/PTSD



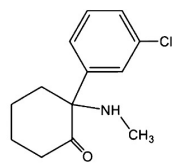


# Use in Australia

3.1% have used ketamine at least once

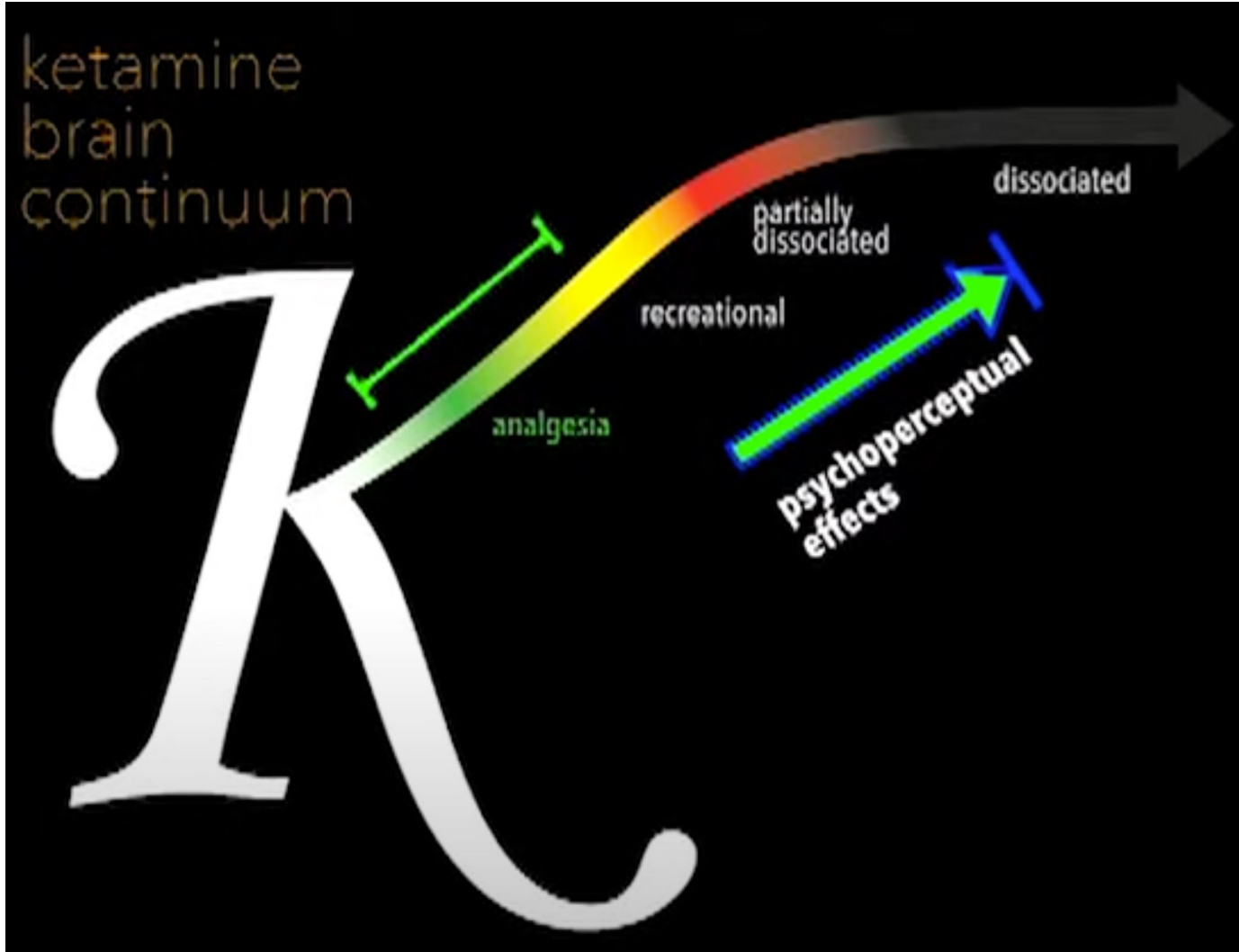
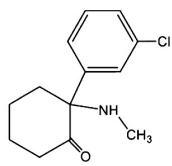
0.9% have used ketamine in last 12 months

First try ketamine at 20.4 years on average

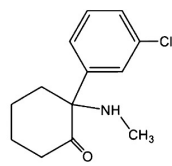


# Liquid or Powder









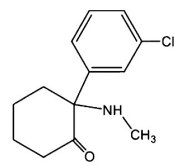
# Typical Doses

Lower = Dancing

Higher = Perception/Hallucination

Even Higher = Lose grasp of reality

Higher Still = Unconscious



# K- Land (Recreational)

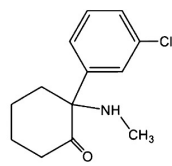
Euphoria

Floating

Empathogen

Libido

Hallucinations/Perception



# K- Land (Recreational)

## Hallucinations/Perception

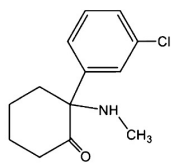
A sensation of light throughout the body

Colourful visions

Absence of sense of time

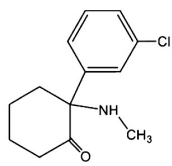
Distorted shape, size, 'consistency' of body parts



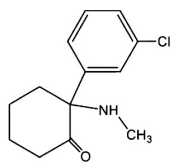


# Completely Dissociated

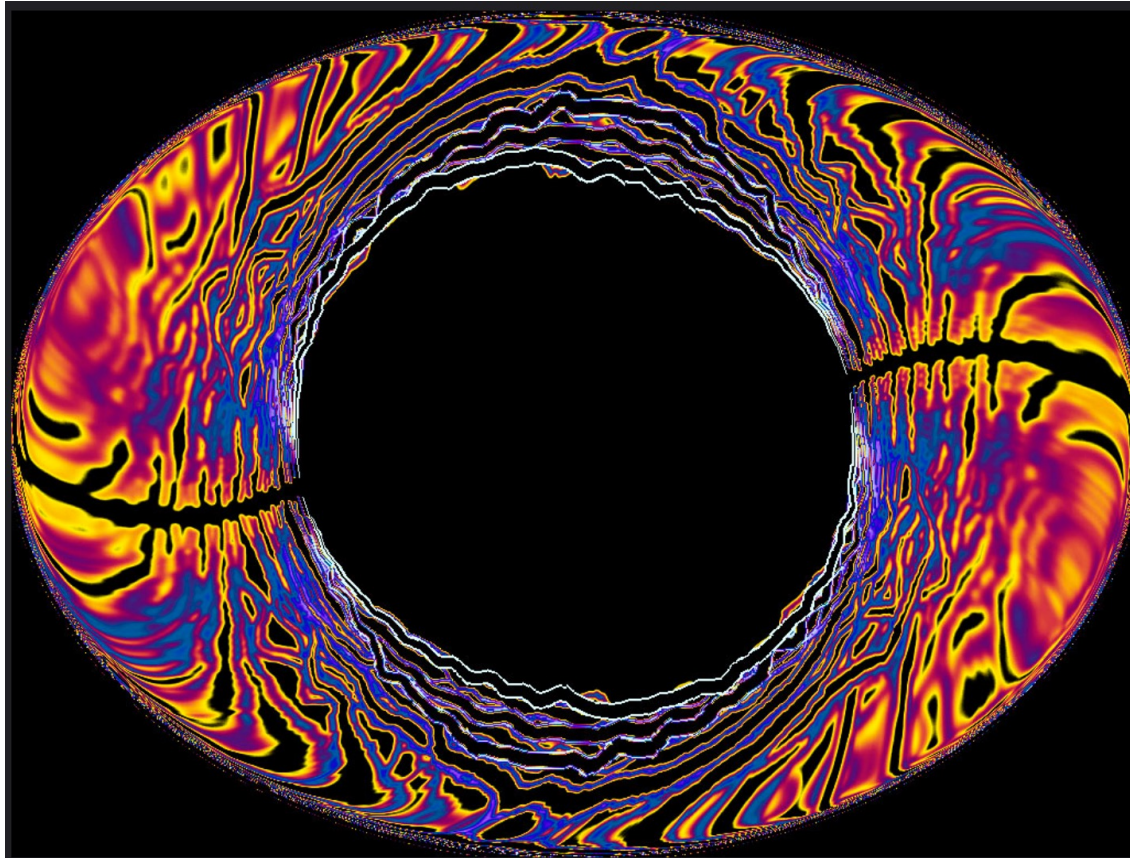
‘Awake’  
&  
Unconscious

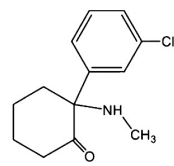


# Between K-Land & Complete Dissociation =



# K Hole





# K Hole

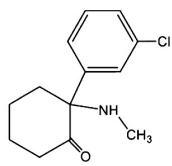
(Partial) Dissociated

=

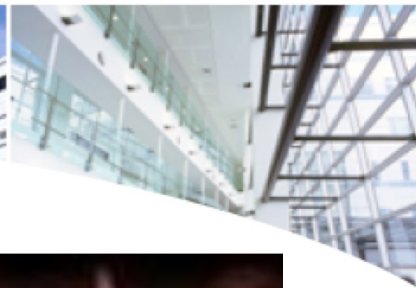
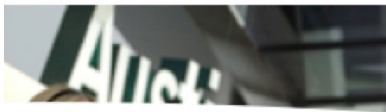
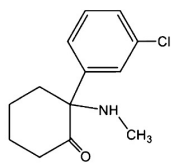
Complete Detachment from  
Reality

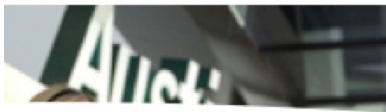
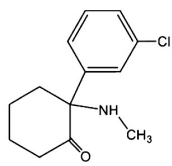
=

Enjoyable Vs Frightening

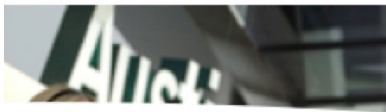
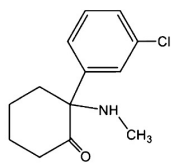




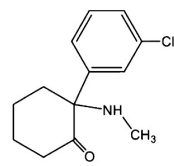












# K Hole – 6 Main Categories

Out-of-body-near-death states

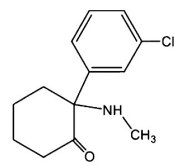
Aliens

Information networks

Alternative realities

Creative problem-solving

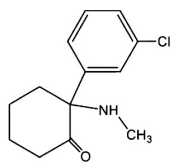
Tantric sexual state



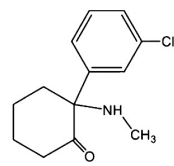
# Near Death Experiences

Intense visions and out-of-body experiences

'Dead'  
Tunnel  
God  
Sounds



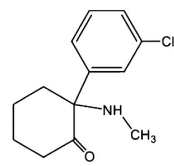
**The only way to truly know  
what ketamine feels like  
is  
to take it**



# How Do You Take it?

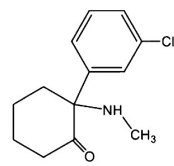
Snorting (most common)  
Bumps/Lines

- Injection
- Ingesting
- Drinking
- Gumming



# What's the Dose?

	Snorting	Ingestion	Injection
Light (bump)	20-50 mg	50-100 mg	15-30 mg
Common	50-100 mg	100-300 mg	25-50 mg
Strong	100-150 mg	200-450 mg	40-100 mg
K-Hole	150+ mg	500+ mg	60-125 mg



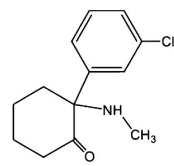
# When do the effects kick in & for how long?

## Snorting

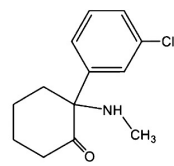
START: 5-15 minutes

DURATION: 45-90 minutes

Feel after-effects for 1-3  
hours after taking it.



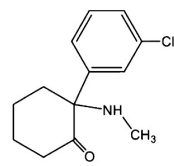
The Higher the Dose  
=  
More Intense the Effects  
=  
Increased likelihood of  
experiencing  
Negative Effects



# Short Term

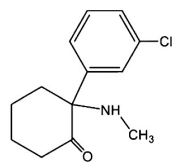
- ↑ Pupils
- ↑ Blood pressure
- ↑ Heart rate
- ↑ Salivation
- ↑ Eye movements
- Muscle stiffening
- Nausea/Vomiting





# Coming Down

- Memory loss
- Impaired judgement
- Disorientation
- Clumsiness
- Aches and pains
- Depression/Anxiety



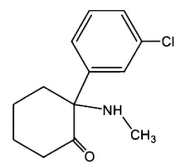
# Mixing with Other Drugs

**Low risk**

Psilocybin, N<sub>2</sub>O, MDMA, LSD

**High risk**

GHB, Opioids, BDZ, Alcohol



# LEAVE THE MIXING TO THE DJ!

WARNING! THE CHARACTERS OF ONE REFERENCE GUIDE, LEARN MORE AND REMAIN CAUTIOUS!



Spoleczna Inicjatywa  
Narkopolityki

	LSD	DMT	DOx	NBOMe	2C-x	2C-T-x	5-MeO-x	Ketamine	DXM	N2O	Amphetamines	MDMA	Cocaine	a-PVP*	4-MMC*	%	GHB/GBL	Opioids	Tramadol	Benzo	MAOI	SSRI		
LSD	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	LSD
Mushrooms	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Mushrooms
DMT	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	DMT
Mescaline	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Mescaline
DOx	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	DOx
NBOMe	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	NBOMe
2C-x	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	2C-x
2C-T-x	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	2C-T-x
5-MeO-xxT	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	5-MeO-xxT
Cannabis	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	Cannabis
Ketamine	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Ketamine
MXE	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	MXE
DXM	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	DXM
Nitrous oxide	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Nitrous oxide
Amphetamines	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Amphetamines
MDMA	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	MDMA
Cocaine	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Cocaine
a-PVP*	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	a-PVP*
4-MMC*	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	4-MMC*
Caffeine	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	Caffeine
Alcohol	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Alcohol
GHB/GBL	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	GHB/GBL
Opioids	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Opioids
Tramadol	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Tramadol
Benzodiazepines	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Benzodiazepines
MAOI	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	MAOI
SSRI	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	SSRI



TripSit.me

Added by SIN: \*a-PVP analogs: all PVP, PHP, PPP, hexedron, hexen

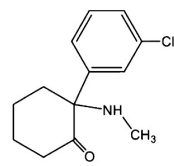
\*4-MMC analogs: methcathinone, ethcathinone, all MMC, CMC, CEC, methylone, ethylone



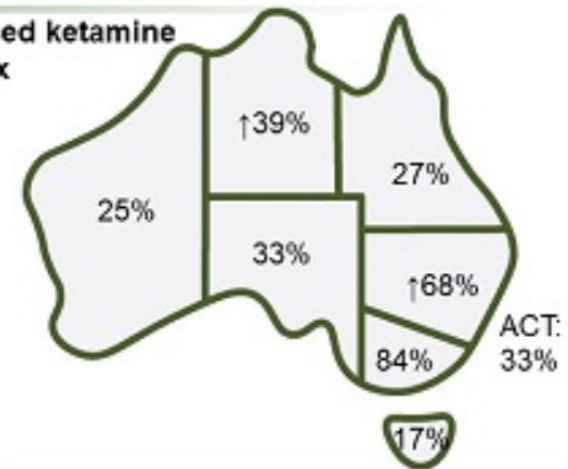
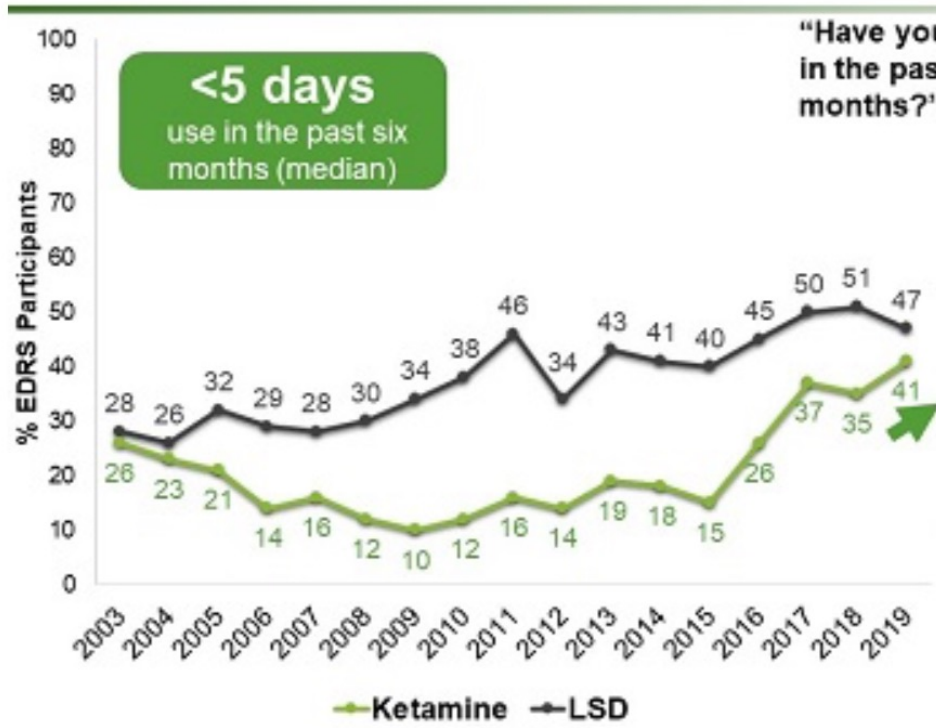
sin.org.pl

↓	⊙	↑	⚠	☠	✖
Low Risk and Counteracting	Low Risk No Amplification	Low Risk and Amplification	Caution	Unsafe	Dangerous to life and health





# Past six month hallucinogen use in the sample who use ecstasy



**Harm reduction**

- Avoid alcohol
- Avoid driving
- Safe setting
- Urinary tract issues

<https://www.dancewizen.sw.org.au/resources/ketamine>  
<https://www.drugsandme/en/drugs/ketamine/>

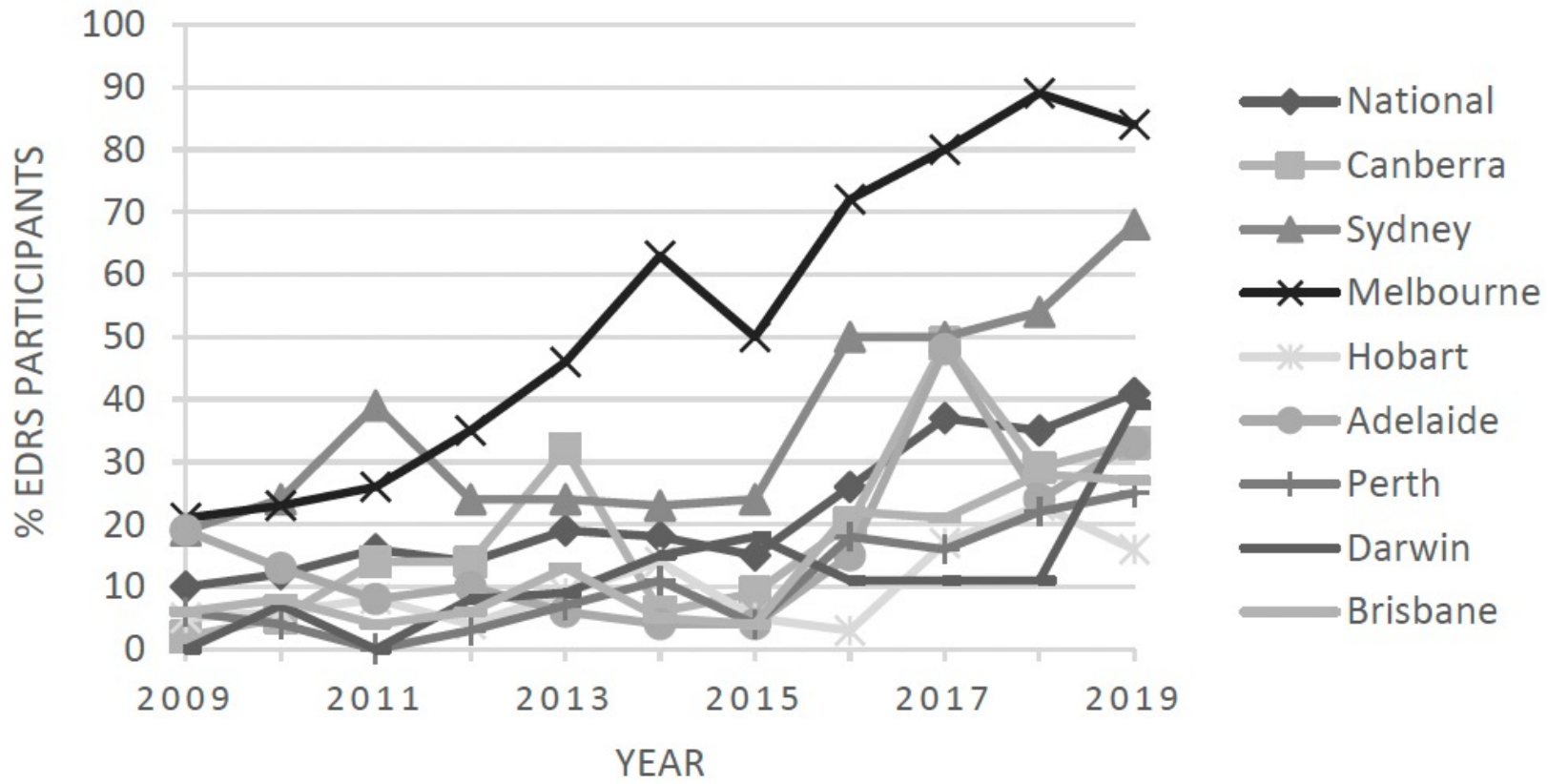
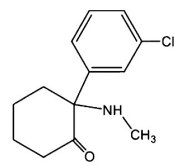
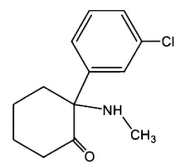


Figure 1. Recent ketamine use among EDRS participants nationally and by Australian state capital, 2009 -19.

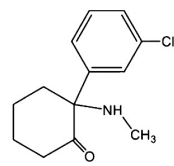


# Deaths

Rare as the only drug

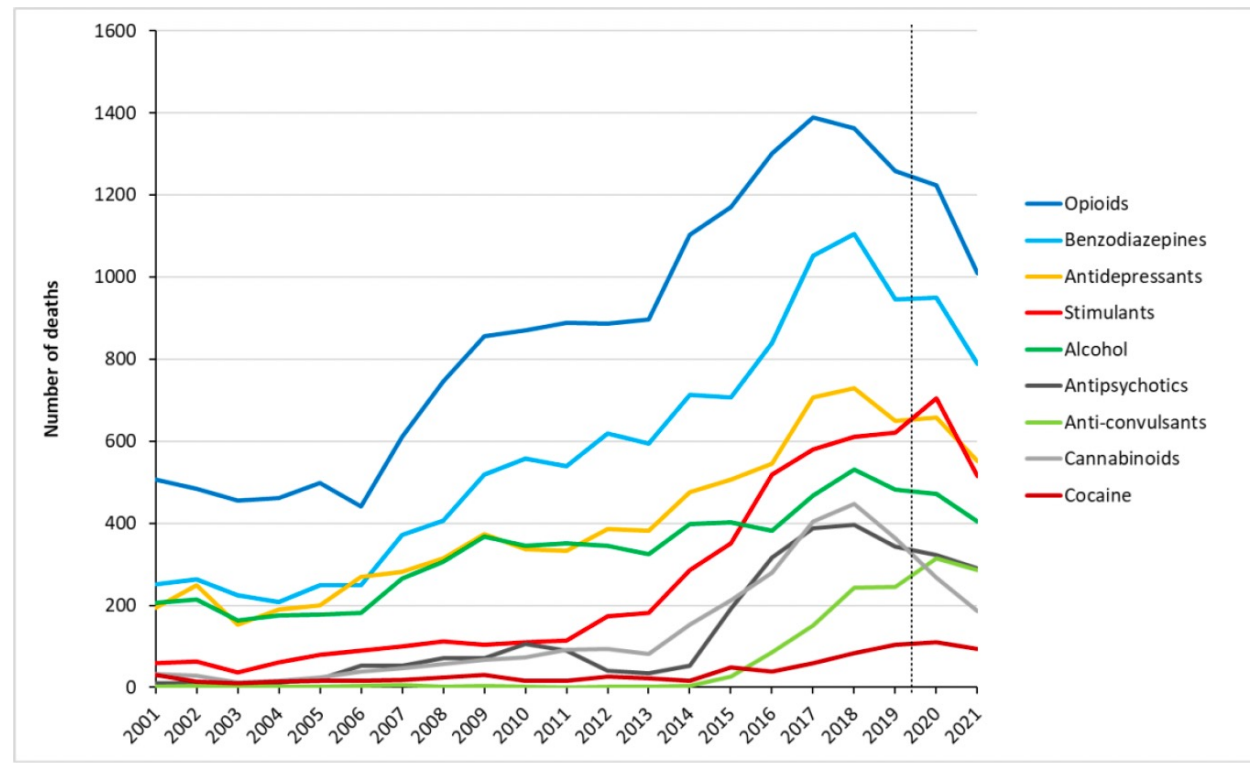
Trauma

Mixed with other drugs



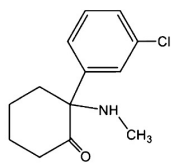
# Deaths

Figure 2. Number of drug-induced deaths in Australia, by drug type, 2001-2021

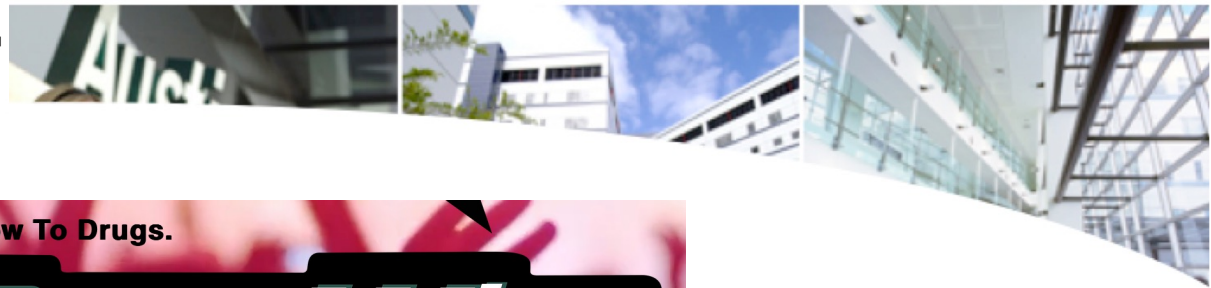
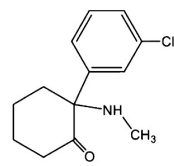


Note: Data to the right of the dotted line (2020 and 2021 data) are preliminary, and likely to rise. Smaller drug groups including other sedatives (including ketamine), and succinimides and oxazolidinediones (including GHB) are not shown on the figure above, due to low numbers.



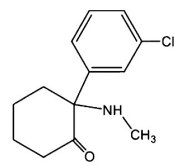






2<sup>nd</sup> most reported substance at festivals

161 out of 557



# Management

Supportive Care

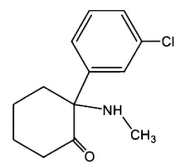
Reassurance

Observation in a low-stimulus environment

Manage concomitant drugs

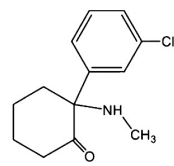
No antidote

No decontamination



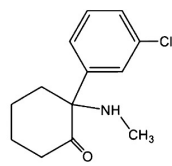
# Chronic Effects

- Psychiatric
- Neurological
- Urological
- Biliary/GI
- Tolerance/Addiction



# Drug Testing

Lack of correlation  
between  
blood or urine concentrations  
and  
clinical effects  
=  
Limited Value



# Emerging Drugs Network Australia VIC (EDNAV)

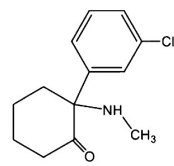


 Austin  
HEALTH

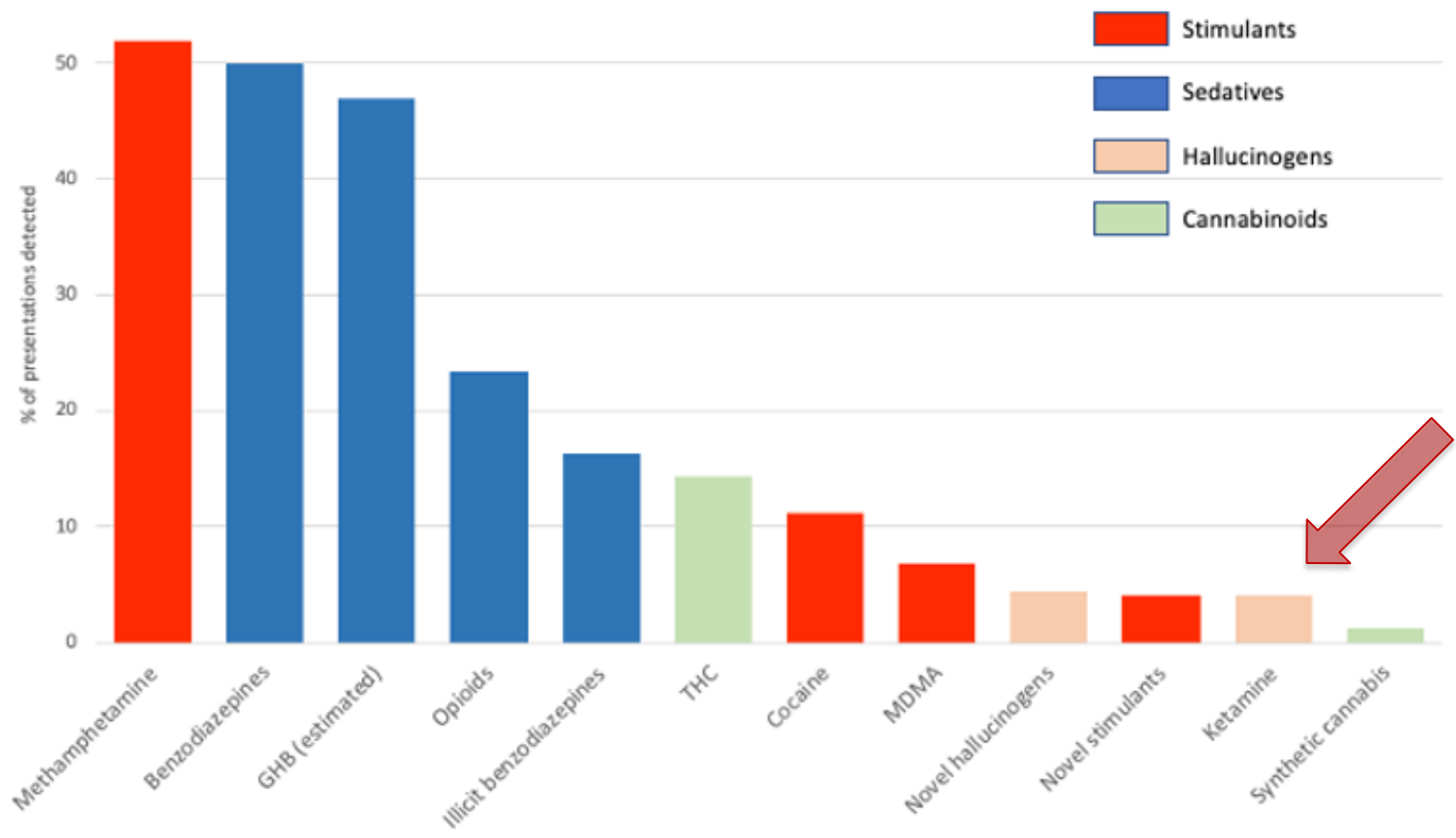
 VPIC  
Victorian Poisons  
Information Centre

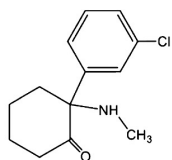
 VICTORIA  
State  
Government

 VICTORIAN INSTITUTE  
OF FORENSIC MEDICINE



# Percentage of EDNAV Cases in which Specific Substance or Class of Substance was Detected





# EDNAV – last 12 months

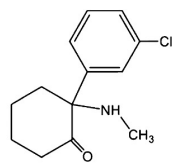
Total cases = 1187

Ketamine = 79

*Co-detections*

*Methamphetamine, GHB, MDMA, Cocaine*

Only 4 had no co-detections



VICTORIA  
GOVERNMENT

Department of Health

Hospitals & health services ▾ Primary & community health ▾ Public health ▾

Home > Alcohol & other drugs > Drug alerts > 3-Hydroxy-PCP sold as ketamine

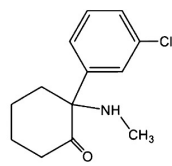
# 3-Hydroxy-PCP sold as ketamine



**Note:** White powder containing '3-Hydroxy-PCP' is being sold as ketamine in Victoria.

**3-HO-PCP is a “dissociative” drug that takes longer to have an effect than ketamine, but is more potent and unpredictable**





VICTORIA  
Department of Health

Hospitals & health services ▾ Primary & community health ▾ Public health ▾

Home > Alcohol & other drugs > Drug alerts > Protonitazene sold as ketamine

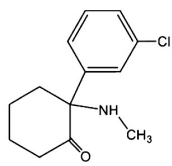
# Protonitazene sold as ketamine



### Note:

Yellow powder containing the potent opioid 'protonitazene' has been mis-sold as ketamine in Melbourne.

**Protonitazene is a novel synthetic opioid**



# Harm Reduction

drugs and  me

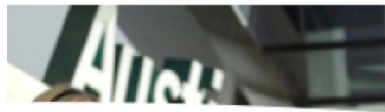
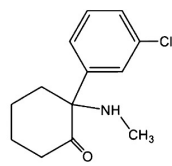


**HARM REDUCTION VICTORIA**



**ADF**

Alcohol  
and Drug  
Foundation



# Harm Reduction

Start low

Avoid using alone

Avoid mixing other drugs

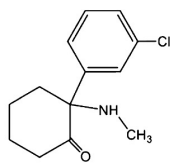
Don't share equipment

Consider mood and environment

Have a friend to 'trip sit'

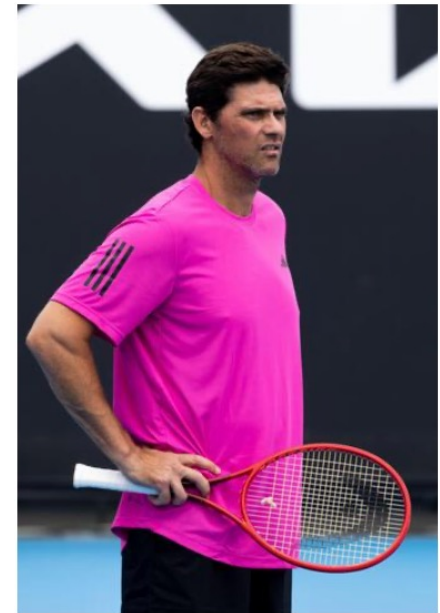
Driving advice

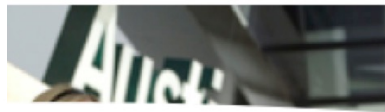
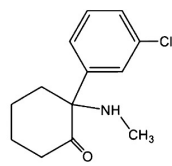
## Naloxone



# Some Notable Cases

## Mark Philippoussis 100-year-old Tonsillitis



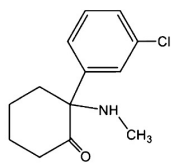


Remember kids, if someone offers you drugs, say thank you, because drugs are expensive.



your  cards  
someecards.com





# Culture, Language & *pain*

- Perspectives from a CaLD lens

Monita Mascitti-Meuter (she/her)  
Cultural Inclusion Lead  
St Vincent's Hospital Melbourne

Under the stewardship of Mary Aikenhead Ministries



# Acute Pain Management: Scientific Evidence

FIFTH EDITION 2020

Schug SA, Palmer GM, Scott DA, Alcock M, Halliwell R, Mott JF; APM:SE Working Group of the Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine (2020), **Acute Pain Management: Scientific Evidence (5th edition)**, ANZCA & FPM, Melbourne

Edited by:

“So, here you are  
too foreign for home  
too foreign for here.  
Never enough for both.”

Ijeoma Umebinyuo  
*Questions for Ada* (2015)

*Songs of Wisdom* by  
Boman Ali Wakilzada





**255** Countries of birth  
**50.1 %** Born/parent overseas  
**350** Languages  
**135** Faiths  
*ABS 2021*

**199** Countries of birth  
**41%** Born overseas  
**89** Languages  
**34** Faiths  
*SVHM PAS 2022-23*

**64%** of SVHM staff –  
Born/parent overseas  
*Orientation Project 2018-19*





When you experienced pain as a child – how were your reports and expressions of pain handled?



How did a recent pain experience (eg injury, childbirth, persistent pain) make you feel and behave? How did people around you react to your pain?



Think about how you react to pain experienced by your partner, immediate family or children in comparison to the patients you care for.

Religion?

Ethnicity  
?

Culture?

Communication  
preference?

Migration  
experience?



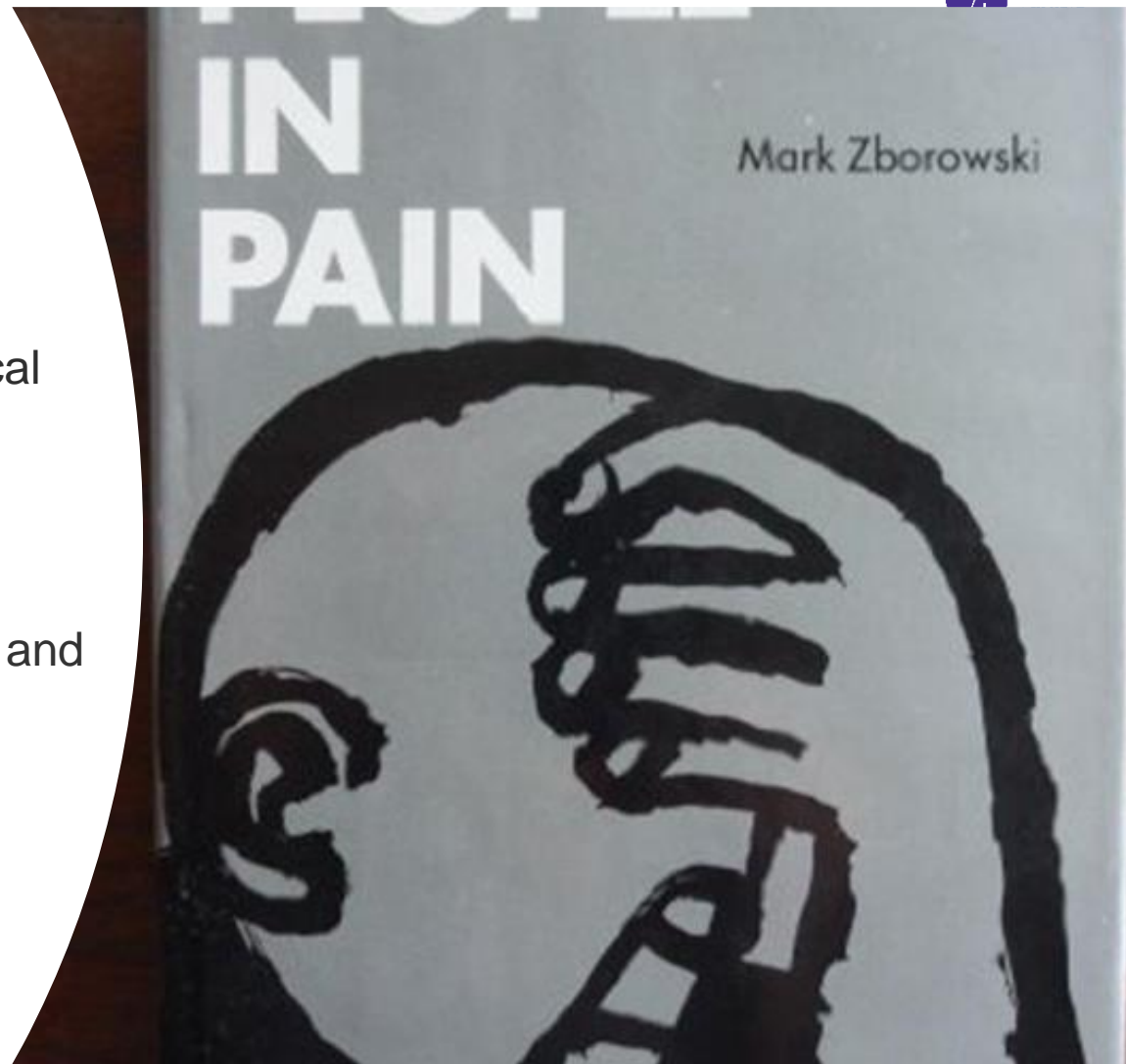
## Pain & culture

neurological or physiological  
experience

+

socially learned behaviors and  
attitudes within cultures

Mark Zborowski  
People in Pain  
(1969)



## Pain - beliefs

- ...God's will
- ...punishment
- ...bewitching
- ...external
- ...part of ageing
- ...seeking care reactively
- ...opioid phobia
- ...Acculturation?

Givler et al 2023; Reis et al 2022; Meints et al 2019



*The inside story* by Boman Ali Wakilzada



## Pain - perception

A person's empathy and ability to perceive pain in the other differs across cultures ...

Rosa 2018; Atkins et al. 2016

Racial and ethnic differences influence analgesia prescription, perceived pain tolerance and threshold.

Givler et al 2023; Clarke et al 2022; Meints et al 2019;  
Groenewald et al. 2018; Kim et al. 2017; Aufiero et al. 2017;  
Konstantatos 2012





## Pain - perception

...Chinese patients required less opioid but ...their pain scores were higher.

Konstantatos 2012



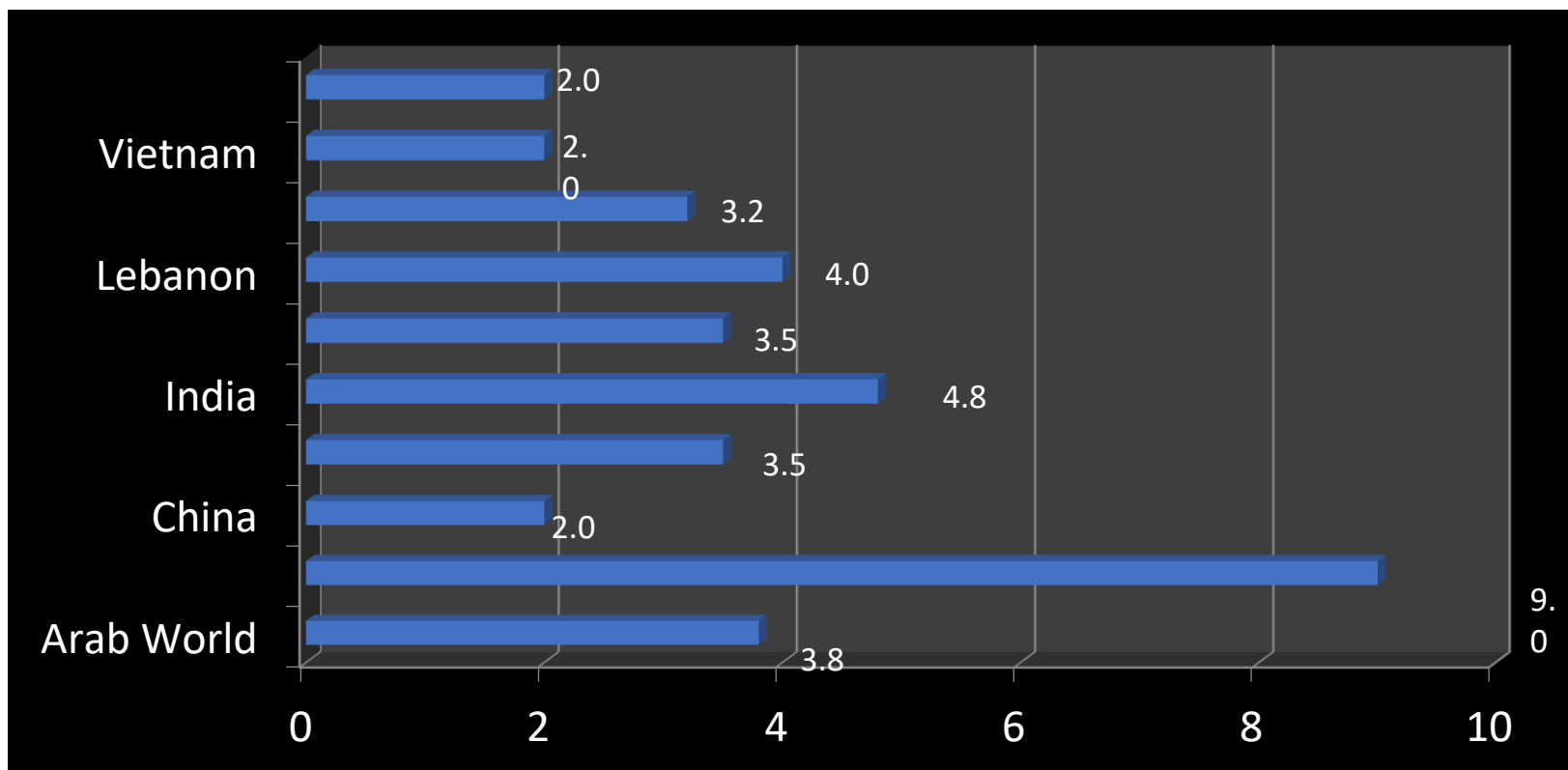
## Pain – seeking help

...a young Vietnamese woman did not ask for pain relief because she felt **it was an imposition to ask a doctor to do something for her and that her doctor may have been unhappy with her request...**

Stewart and Do, 2003

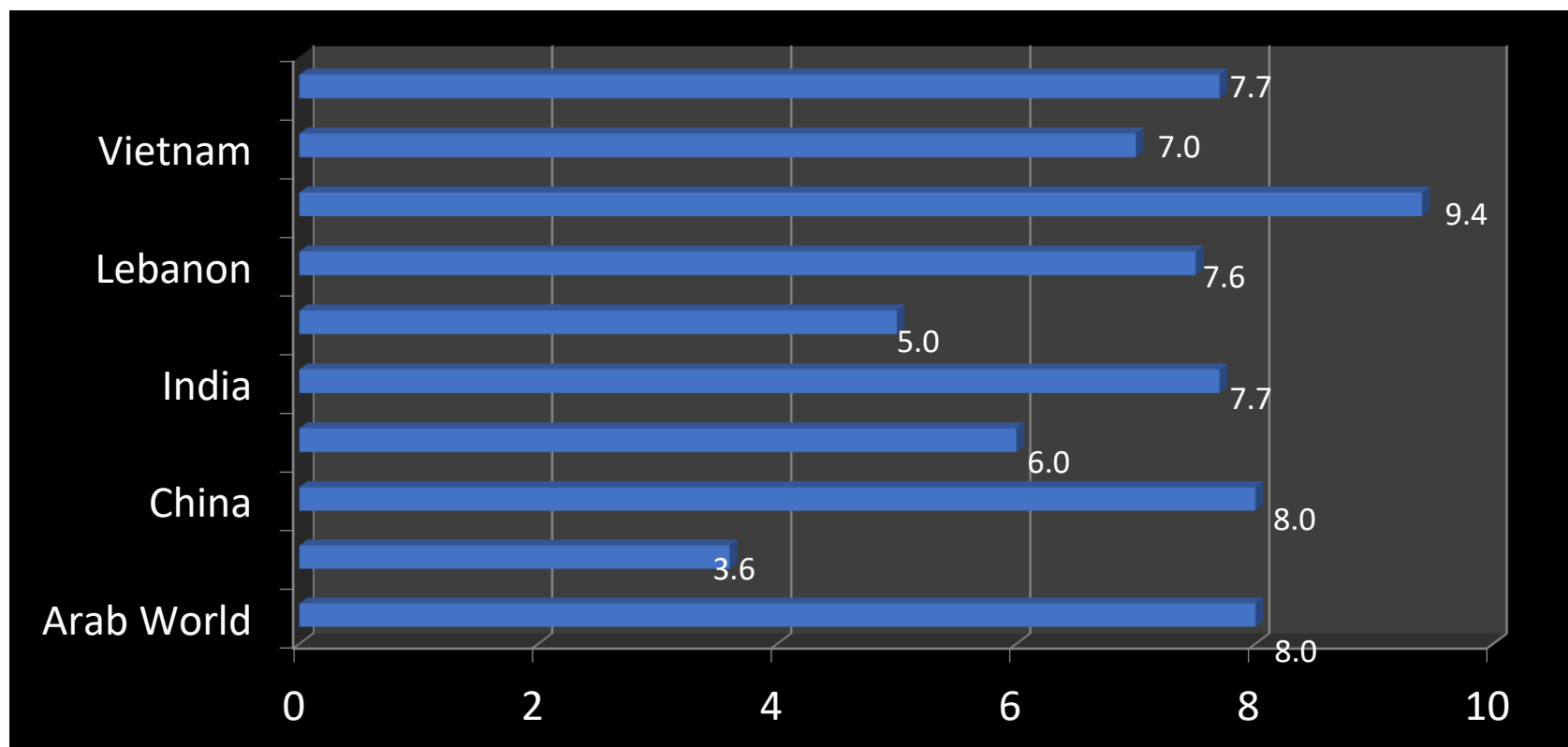


## Individualism (vs Collectivism)



(Hofstede, 2010)

## Power distance



(Hofstede, 2010)

## Pain – seeking help

...in a number of **collectivist/high power distance** cultures the concept of patient autonomy is foreign and **interdependence** is preferred, which results in patients **prioritising wellbeing of family** over self and **waiting** for a health professional to offer pain relief as the latter is seen as the primary medical decision maker...

Martin and Barkley 2017; Pillay et al.2014



# Pain - coping

## Stoicism

**Spiritual coping, fatalism** - suffering is punishment, karma building and relief happens through **prayer** and **hope**.

## Emotive reaction

**“Catastrophising”** - usually verbal, varying tonality, volume (related to locus of control).

Reis et al 2022; Xu et al. 2018; Meints et al. 2019;  
Cagle and Bunting 2017





## Pain - coping

“agitation and calling out  
behaviour...”



## Pain - language

...a painful dizziness or vertigo

...dolor de cabeza (headache)  
and dolor de cerebro  
(brainache)

"it seems as if pepper were put into  
my head," "things like ants keep on  
creeping in various parts of my  
brain," or "by merely touching parts  
of my brain it hurts"

Kleinman, et al. 1992







# Communication preferences across cultures

German-speaking countries  
Netherlands  
Eastern Europe  
Scandinavian countries  
North America  
United Kingdom  
France  
Italy  
Spain  
Greece  
Arab countries  
Latin America  
South East Asia  
Japan

**Low Context Cultures (Verbal)**  
Preference for Direct  
Communication

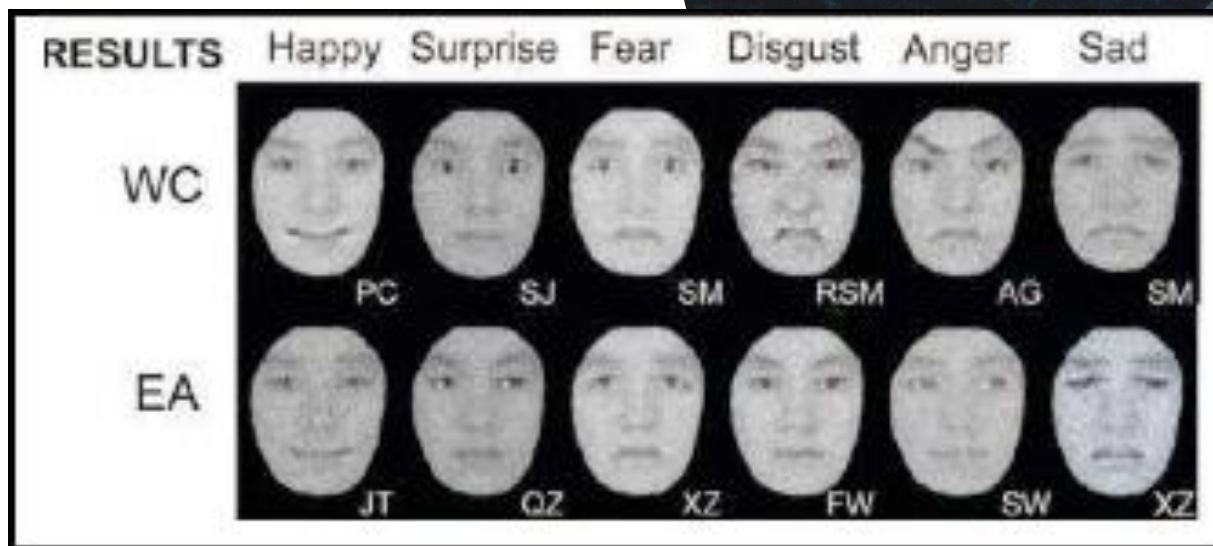


(Hall, E. and M. Hall, 1990)

(Laroche and Rutherford, 2007)

**High Context Cultures (Non-verbal)**  
Preference for Indirect  
Communication

# High/Low context cultures and emotion



"Internal Representations Reveal Cultural Diversity in Expectations of Facial Expressions of Emotion," Rachael E. Jack, Roberto Caldara and Philippe G. Schyns, PhDs; University of Glasgow; *Journal of Experimental Psychology: General*; Vol. 141, No. 1.



### Asian

(^\_^;) (>\_<) (@\_@)

(^\_^;) (u\_u\*) (T\_T;)

(-- --) (ノ へ ヽ) (↑\_↑)

### Western

:-) :-( :[ :@ :{ :-} :b

Pogosyan, M., & Engelmann, J. B. (2011). Cultural differences in affect intensity perception in the context of advertising. *Frontiers in Psychology*, 2, 313.





## ...and what about Unconscious / Implicit bias?

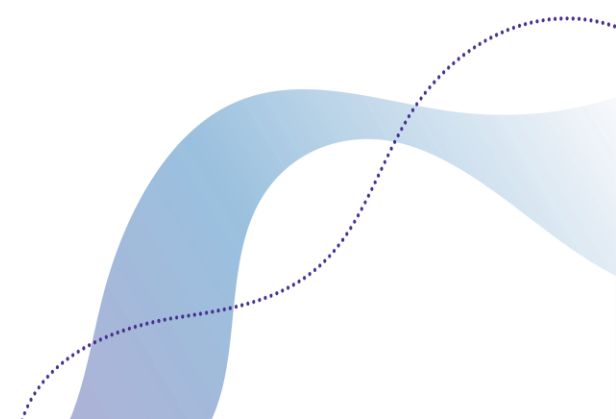
“Currently, many emergency medical service **training manikins** have ‘**white**’ **skin**, which means students may not have opportunities to treat non-white patients”

Lord and Khalsa 2019

“...tragically the individuals who experience the **greatest burden** from pain are the same individuals who are **underrepresented in studies** that seek to understand and alleviate pain”

Palermo et al 2023





## Promoting cultural inclusion and safety

Be aware of preferred forms of address, pronunciation of names

Make sure to use an **interpreter**

Use **translation** of screening and assessment tools only as support – not main assessment

**Combine tools** with reports from patient/family

Engage in **respectful** communication

*Make no assumptions* - address **unconscious bias**

Inform yourself, **be curious**

Ask **open ended** questions

**Modify language** if needed *-no slang, separate questions*

Build **relationship/trust**

**Listen** actively

Be aware of **non-verbal cues**

**Chunk and check, teach back method**

Recognise, accept and **celebrate** diversity



# Culturally sensitive pain assessment

**What** do you call your pain? What name do you give it?

**Why** do you think you have this pain?

**What** does your pain mean to your body?

**How** severe is it? Will it last a long or short time?

Do you have any fears about your pain?

If so, what do you fear most about your pain?

**What** are the main problems that your pain causes you?

**What** cultural remedies have you tried to help you with your pain?

Have you seen a traditional healer for your pain? Do you want one?

Who, if anyone, in your family do you talk to about your pain? What do they know? What do you want them to know?

Do you have family and friends that help you because of your pain? Who helps you?

The Explanatory Model Interview for Pain Assessment is another tool that provides cultural insight into the patient's perception and response to pain (Lasch, 2000; Narayan, 2010)



MODERATE

# UNIVERSAL PAIN ASSESSMENT TOOL

This pain assessment tool is intended to help patient care providers assess pain according to individual patient needs. Explain and use 0-10 Scale for patient self-assessment. Use the faces or behavioral observations to interpret expressed pain when patient cannot communicate his/her pain intensity.

	0	1	2	3	4	5	6	7	8	9	10
Verbal Descriptor Scale	NO PAIN	MILD PAIN	MILD PAIN	MODERATE PAIN	MODERATE PAIN	MODERATE PAIN	MODERATE PAIN	SEVERE PAIN	SEVERE PAIN	SEVERE PAIN	WORST PAIN POSSIBLE
WONG-BAKER FACIAL GRIMACE SCALE											
ACTIVITY TOLERANCE SCALE	NO PAIN	CAN BE IGNORED	CAN BE IGNORED	INTERFERES WITH TASKS	INTERFERES WITH TASKS	INTERFERES WITH TASKS	INTERFERES WITH CONCENTRATION	INTERFERES WITH CONCENTRATION	INTERFERES WITH BASIC NEEDS	INTERFERES WITH BASIC NEEDS	BEDREST REQUIRED
SPANISH	NADA DE DOLOR	UNPOQUITO DE DOLOR	UNPOQUITO DE DOLOR	UN DOLOR LEVE	UN DOLOR LEVE	UN DOLOR LEVE	DOLOR FUERTE	DOLOR FUERTE	DOLOR DEMASIADO FUERTE	DOLOR DEMASIADO FUERTE	UN DOLOR INSOPORTABLE
TAGALOG	Walang Sakit	Katiling Sakit	Katiling Sakit	Katamtamang Sakit	Katamtamang Sakit	Katamtamang Sakit	Mataling Sakit	Mataling Sakit	Pinaka-Mataling Sakit	Pinaka-Mataling Sakit	Pinaka-Mataling Sakit
CHINESE	不痛	輕微	輕微	中度	中度	中度	嚴重	嚴重	非常嚴重	非常嚴重	最嚴重
KOREAN	통증 없음	약한 통증	약한 통증	보통 통증	보통 통증	보통 통증	심한 통증	심한 통증	여우 심한 통증	여우 심한 통증	최악의 통증
PERSIAN (FARSI)	بدون درد	درد ملایم	درد ملایم	درد معتدل	درد معتدل	درد معتدل	درد شدید	درد شدید	درد بسیار شدید	درد بسیار شدید	بدترین درد ممکن
VIETNAMESE	Không Đau	Đau Nhẹ	Đau Nhẹ	Đau Vừa Phải	Đau Vừa Phải	Đau Vừa Phải	Đau Nặng	Đau Nặng	Đau Thật Nặng	Đau Thật Nặng	Đau Đến Tột Cùng
JAPANESE	痛みがない	少し痛い	少し痛い	いくらか痛い	いくらか痛い	いくらか痛い	かなり痛い	かなり痛い	ひどく痛い	ひどく痛い	ものすごく痛い

# CaLD Resources



Talk to Me app



CALD Assist app



Cultural Atlas (SBS)



Centre for Cultural Diversity in Ageing



Centre for Ethnicity & Health



Victorian Transcultural Mental Health

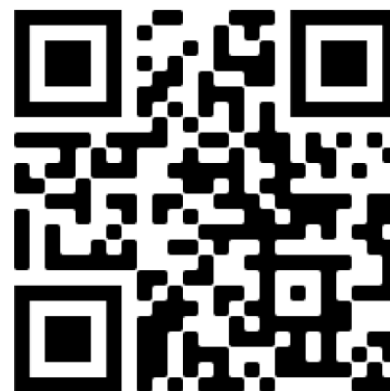


Victorian Multicultural Commission



Health Translations





<https://talktome.svhm.org.au>

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