

# ADVICE

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# NATIONAL STATISTICS



- There has been a consistent rise in the number of regular and dependent users of ICE since 2010 with 2.09% of the population being regular users and 1.24% are dependent users
- This means of the Gold Coast population which was estimated to be 570,000 in May 2016 – 11,913 individuals are regular users and 7,068 are dependent users
- This increase in use has been most concentrated in users aged 15-24 years and users aged 25-34 years. Dependent use has doubled in both of these groups
- 1.14% of young people aged 15-24 years are estimated to be dependent on the drug compared with only 0.4% in 2009/2010
- The rise in dependent users among younger age group (15-24) suggests an increase in new methamphetamine users





# BACKGROUND



- April 2015 National ICE taskforce established due to growing concerns of crystal methamphetamine use in Australia
- Aim: Consider options for treatment that are effective, efficient and collaborative
- In September 2015 seven sites received state funding for specialist programs within a hospital setting and/or community setting





# GOLD COAST ICE RESPONSE PROJECT

The Gold Coast Hospital and Health Service (GCHHS) received funding to enhance Alcohol and Other Drug Services (AODS). The Gold Coast ICE Response Project has three central objectives:

1. Develop a community engagement and education program for professionals, family and friends, as well as young people who are using ICE;
2. Develop and implement a treatment program for young people, aged 15 to 25 years, who are using or at risk of using ICE
3. Enhance the existing Drug and Alcohol Brief Intervention Team (DABIT) at Gold Coast University Hospital (GCUH) and Robina Hospital Emergency Departments (EDs)





# NATURE OF ADDICTION

## **Pleasure principle**

- Drugs cause a release of dopamine in the brain. The dopamine motivates us, increasing our energy and drive and compelling us to engage in the pleasurable activity. With the increase in dopamine in the brain, individuals feel good and engage in the activity more, the rewards of the behaviour (drug use) is pleasure.

## **Social Learning Theory**

- Learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement.

## **Clinical addiction (Dependence)**

- Involves tolerance to a substance, withdrawal, substance is taken in larger amounts or for a longer period than intended, persistent desire or unsuccessful efforts to cut down or control substance use, time spent in activities necessary to obtain the substance, use the substance or recover from its effects, activities are reduced or given up because of substance use and persistent or recurrent physical or psychological problems.

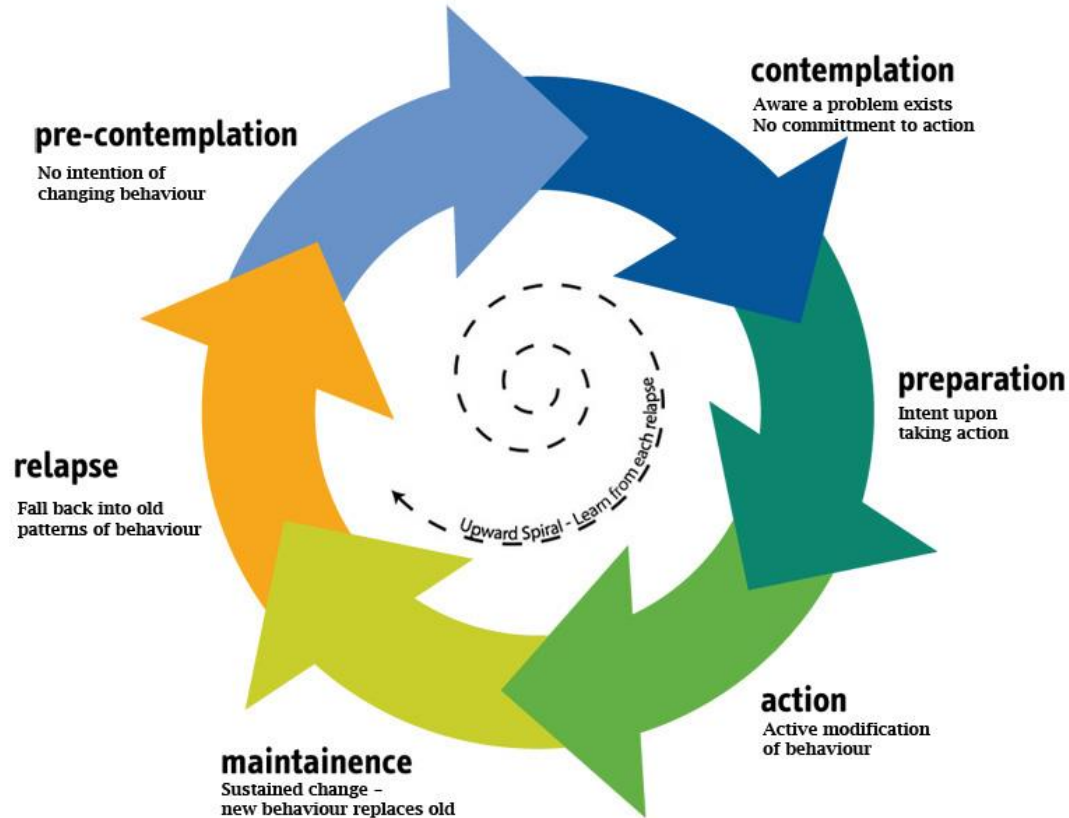
## **Psychosocial factors**

- Peer use, family history of substance use, and mental health and physical health concerns may increase the possibility of substance use in an individual. These factors also contribute to the maintenance of the addiction cycle.





# STAGES OF CHANGE



**Transtheoretical Model of Change**  
Prochaska & DiClemente



## BASIC CRYSTAL METHAMPHETAMINE INFO

- Methamphetamine first synthesised in 1893 by a Japanese Chemist, Nagai Nagayoshi then in 1919 Crystalline Methamphetamine was synthesised by Akira Ogata
- Christina, Tina, Crystal Meth, ICE, Glass, Shard .....just for a few names.....
- Smoked, injected, snorted and ingested
- Point = 0.1gram
- Cap = .05gram
- One ounce = 28 grams
- Point = \$50-100
- One gram (10 points) = \$600 to \$1,200

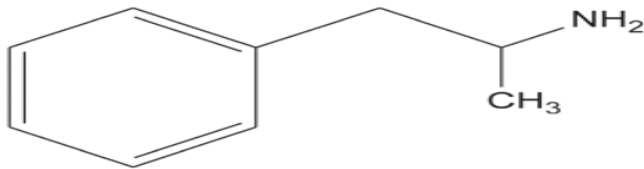




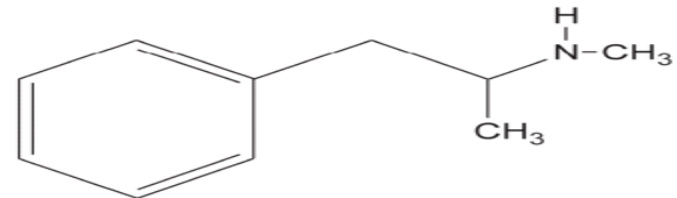
# AMPHETAMINE OR METHAMPHETAMINE??

- Methamphetamine breaks down and metabolises into amphetamine
- Different binding site at VMAT2: meth binds at the TBZ/DTBZOH site blocking the cells ability to vesicularise DA
- Methamphetamine also inhibits VMAT1 (NB associated with a SZ gene locus)
- Meth agonises alpha 2 and sigma receptors directly
- Meth:- > NA activity; < cortical activity esp. DAT
- Neurotransmitter release ratios eg. DA:5HT, DA:NA higher with methamphetamine
- Neurotransmitter uptake ratios are also very different
- Methamphetamine causes DAT efflux at much lower concentrations than

Amphetamine



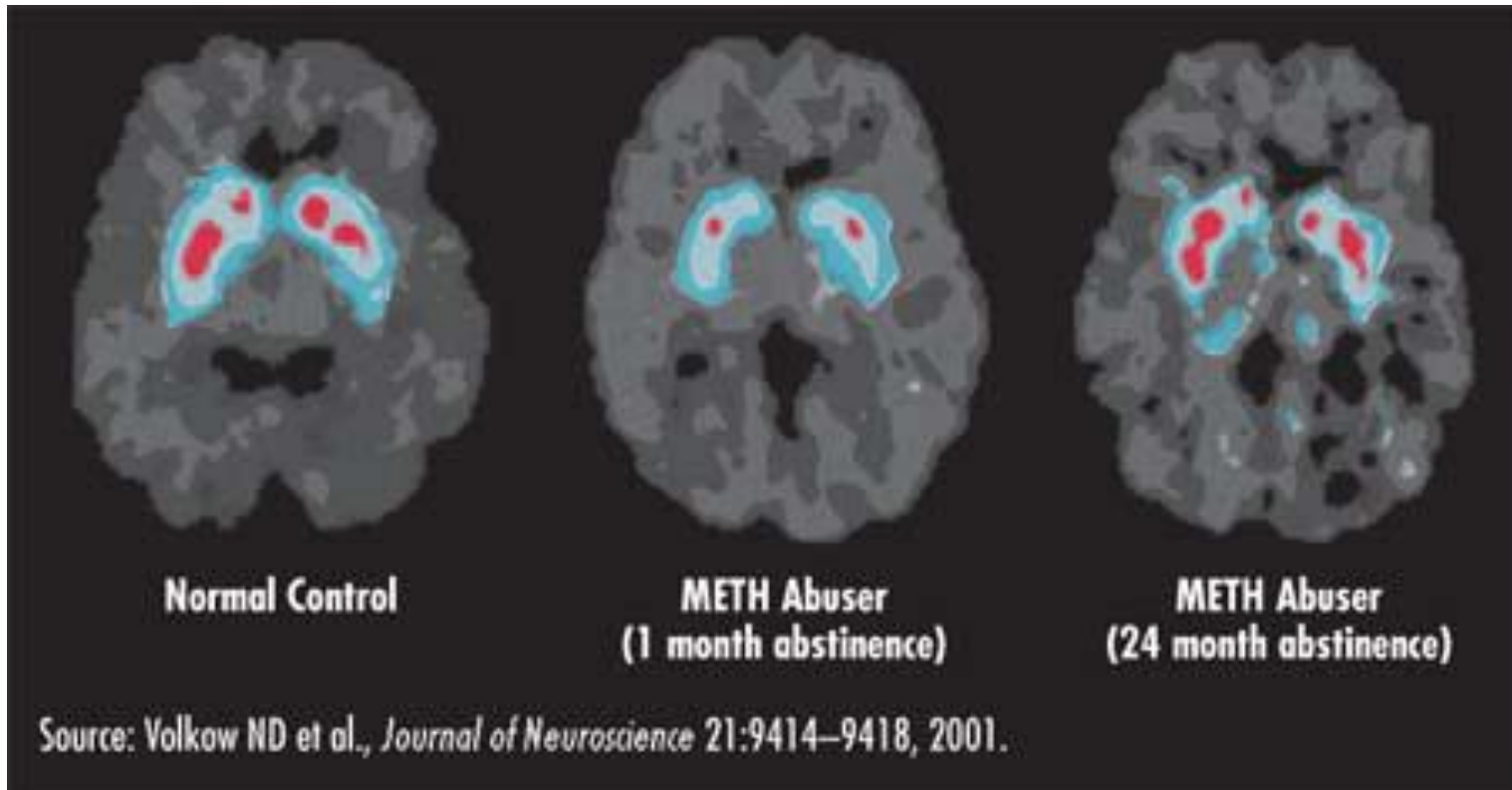
Methamphetamine







# METH AND THE BRAIN





# METH AND THE BRAIN

- Psycho Motor Stimulant - effects mood and movement
- Neuro-toxic (brain damage) effect – destroys cells with dopamine and serotonin
- Loco-motor Stimulant (reflexes and basic movements) – produces “stereotypic behaviours – random, repetitive, compulsive movements and actions (eg. Twitching)
- Brain health, with abstinence, can improve
- <https://www.youtube.com/watch?v=T-duk-PilXo>





# METH CYCLE

- The Rush – 30 minutes; increase in heartbeat, metabolism, blood pressure and pulse
- The High – four to 16 hours; sense of grandiosity; argumentative; delusions
- The Binge – three to 15 days; hyperactive (mentally and physically); rush and high are diminishing
- Tweaking – no rush or high; cannot relieve cravings; itching; increase in psychotic symptoms; sleeplessness; hostile; self-mutilation (picking)
- Crash – the body shuts down and there are long periods of sleep
- Hangover – two to 14 days; starved; dehydrated; exhausted (physically, mentally and emotionally)
- Withdrawal – depressed, loss of energy, inability to experience pleasure; cravings; suicidal ideation





# INTOXICATION AND WITHDRAWAL

## INTOXICATED

- Increased physical activity, dilated pupils, heavy sweating, euphoria (initially) sleeplessness, loss of appetite, dry mouth, jaw clenching, teeth grinding repetitive and meaningless tasks, unpredictable behaviour, irritability, paranoia

## WITHDRAWAL

- Stomach cramps, nausea, tremors, migraines, aggression, psychosis, fatigue, intense anxiety and/or depression, suicidal ideation





# MANAGING INTOXICATION

- If other people are present, try to steer the intoxicated person to an **area that is less stimulating** while ensuring that the client and worker both have an easily accessible exit.
- Maintain a **calm, nonjudgmental, respectful** approach.
- **Listen and respond** as promptly as possible, to needs or requests. (*I hear what you are saying, so let me see what I can do to help.*)
- Allow the person more **personal space** than usual.
- Use **clear communication** — short sentences, repetition, and ask for clarification if you are unsure what is said. (*I really want to help, but I'm not sure what you need. Please tell me again.*)
- Have **written information** available for the person to take away.
- Provide opportunistic, relevant, **brief interventions** if you are able.





# MANAGING WITHDRAWAL

No specific treatment has been shown to be effective in reducing withdrawal symptoms. The primary aim of withdrawal management is to attend to complications and engage the patient in relapse prevention.

- Tell the person **what to expect** during withdrawal
- Determine what **was and was not helpful** during any previous withdrawals.
- Identify **dependence on other drugs** and offer appropriate interventions.
- Recommend adequate **diet, rest, and fluid intake**.
- Encourage the person to **monitor him or herself for symptoms of depression**
- Identify key **social supports** and **educate the family or carers** about withdrawal and what to expect
- Some people benefit from the prescription of a short course of sedative-hypnotic medications such as temazepam for sleep or diazepam for agitation and anxiety.
- Assist with **managing cravings** to use, by explaining how cravings occur and by developing an early intervention and relapse prevention plan
- **Recommend ongoing interventions** such as counselling to prevent relapse.





# CONTACT INFORMATION

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**THANK YOU!!**

**FEEDBACK WELCOME.**

