

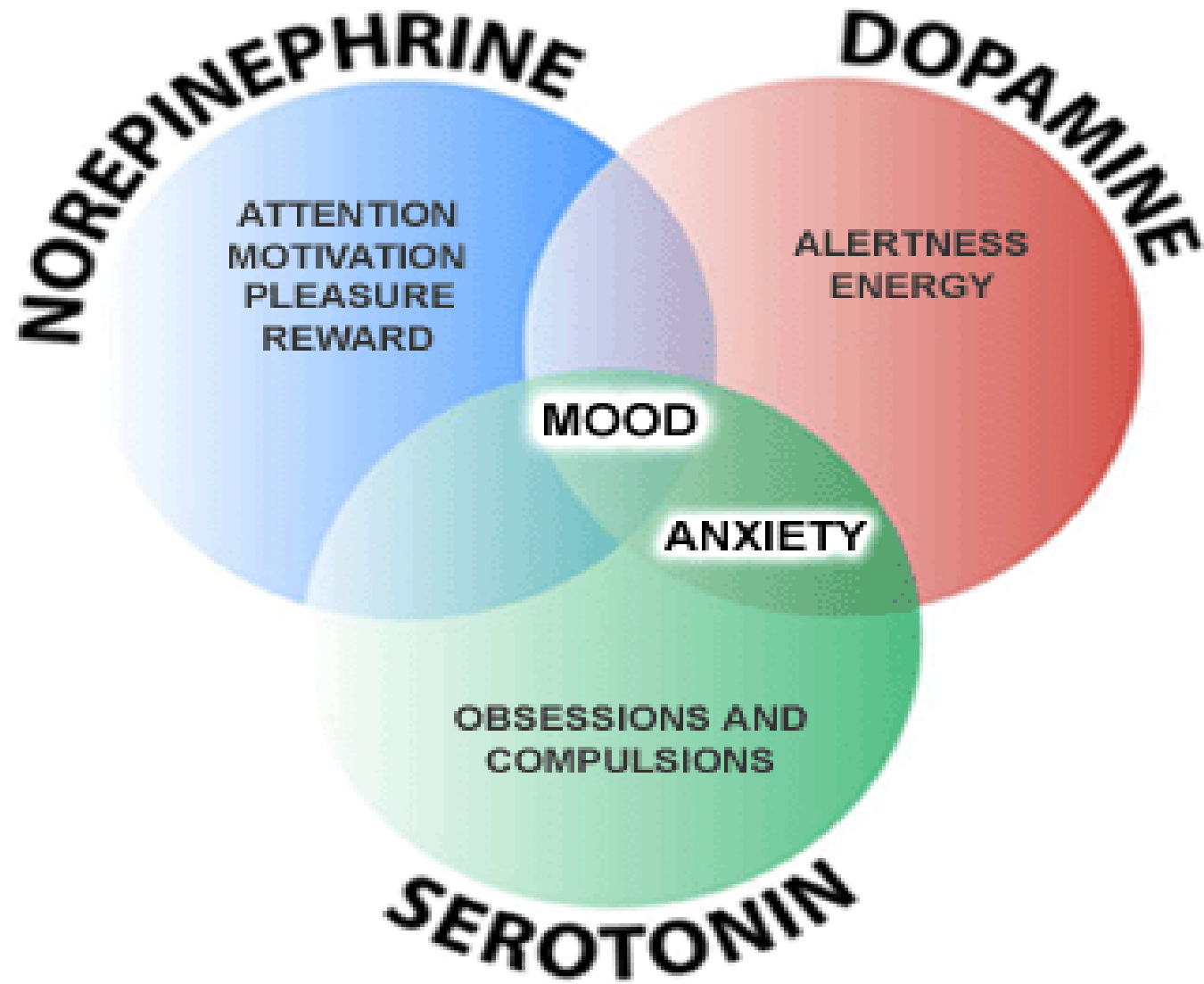
# Methamphetamine

Considerations, cautions and complications

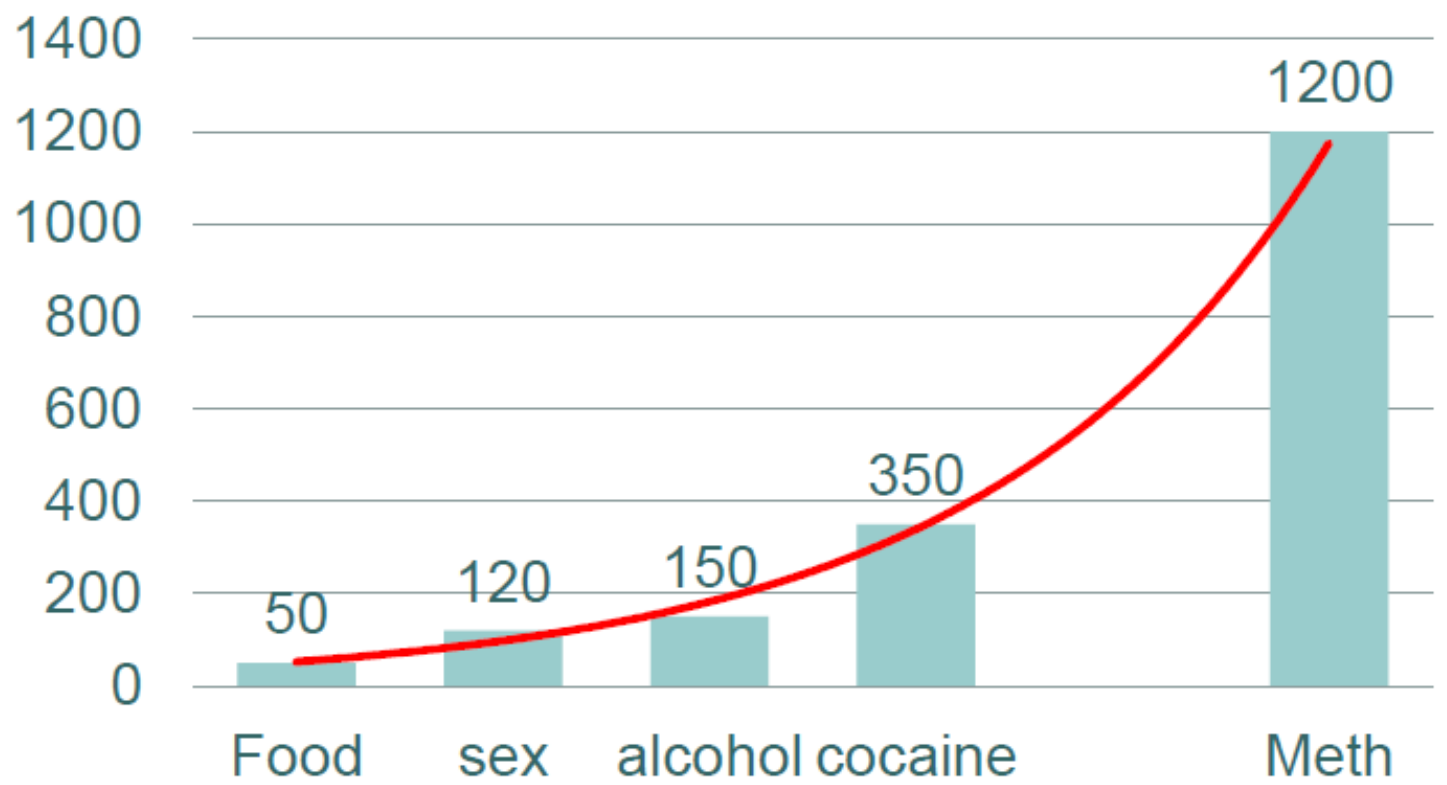
Like all other drugs, most people start using methamphetamine for the positive effects at low doses.



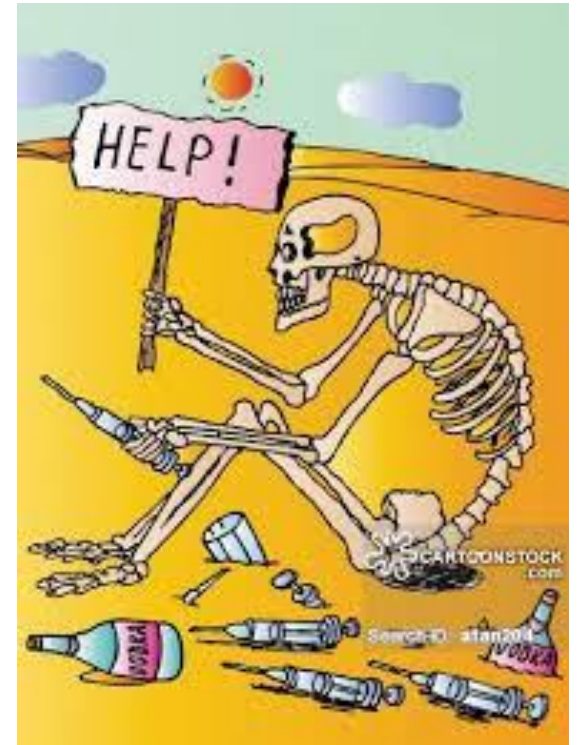
# Neurotransmitters

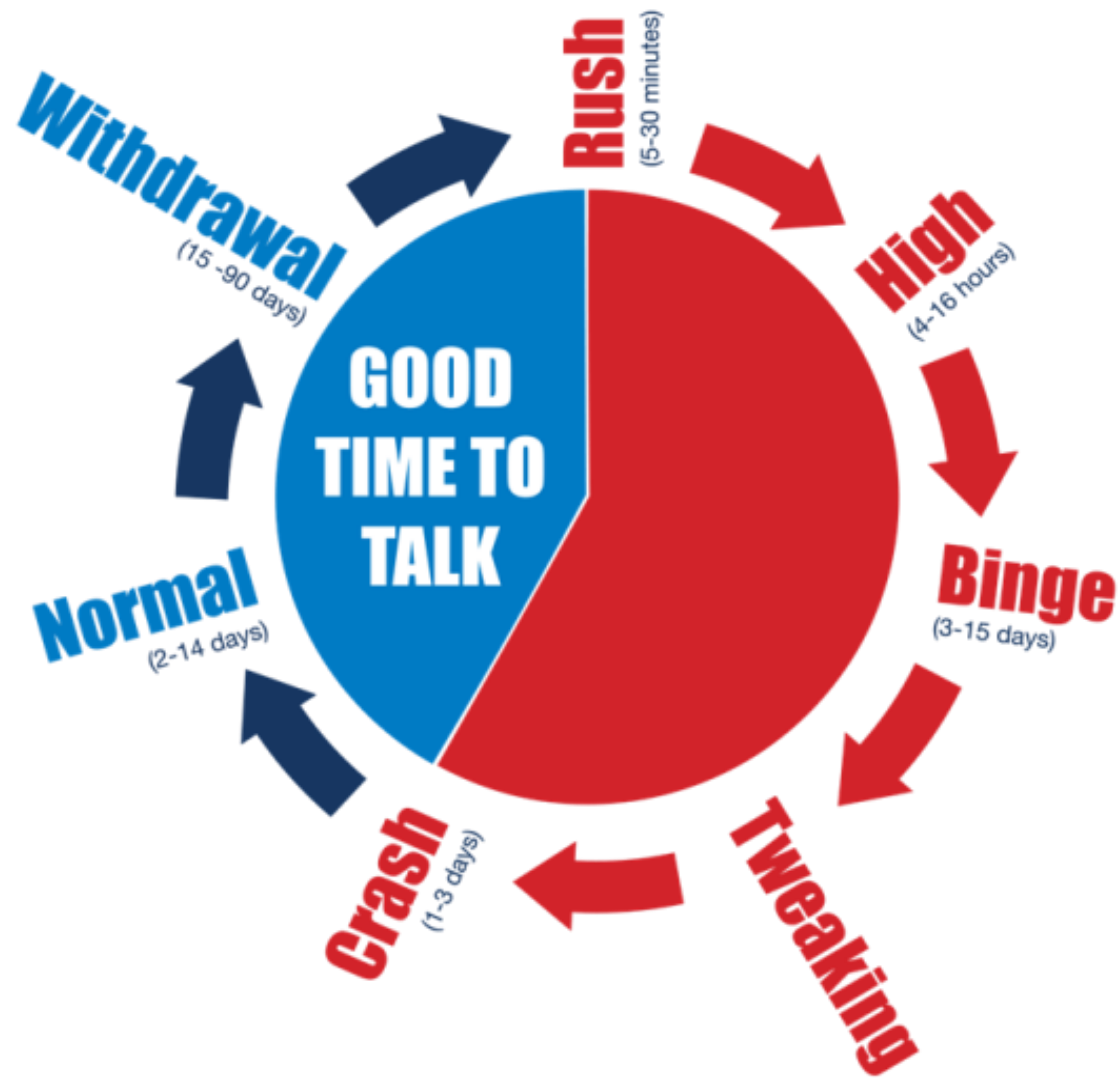


### Dopamine release in units



- If using weekly within 1-2 yrs most transition to daily or near daily use.
- Australian research found it takes 5-10 years to access tx for methamphetamine. Most people who present to our service come already scripted antidepressants or quetiapine or similar.
- Are we missing an important opportunity?





Symptom and  
Safety  
Management

## Immediate effects-

## Mild intoxication



- Euphoria (high)
- Confidence
- Alertness
- Motivation
- Talkativeness
- Decreased appetite

### Increased:

- Energy
- Heart rate
- Body temperature
- Sex drive



## Moderate Intoxication

- Nervousness, anxiety, panic
- Agitation
- Transient psychotic symptoms
- Jaw clenching, teeth grinding
- Nausea, vomiting
- Headache



- If someone using methamphetamine shows any of these symptoms, move them to a quiet place with low stimulus and monitor them until the effects wear off
- Being somewhere they know with people they trust will help.

# Harm minimisation advice

- Try to get some sleep
- Be wary of what else you use with meth
- Warn about serotonin syndrome esp if taking others meds that inc risk such as SSRI, SNRI or tramadol
- Look after teeth, use chewing gum to minimise tooth grinding
- avoid driving as your judgement will be impaired (24 hours)
- practice safe sex
- Eat something regularly, and sip water regularly

## Immediate effects- Higher dose or after longer use:



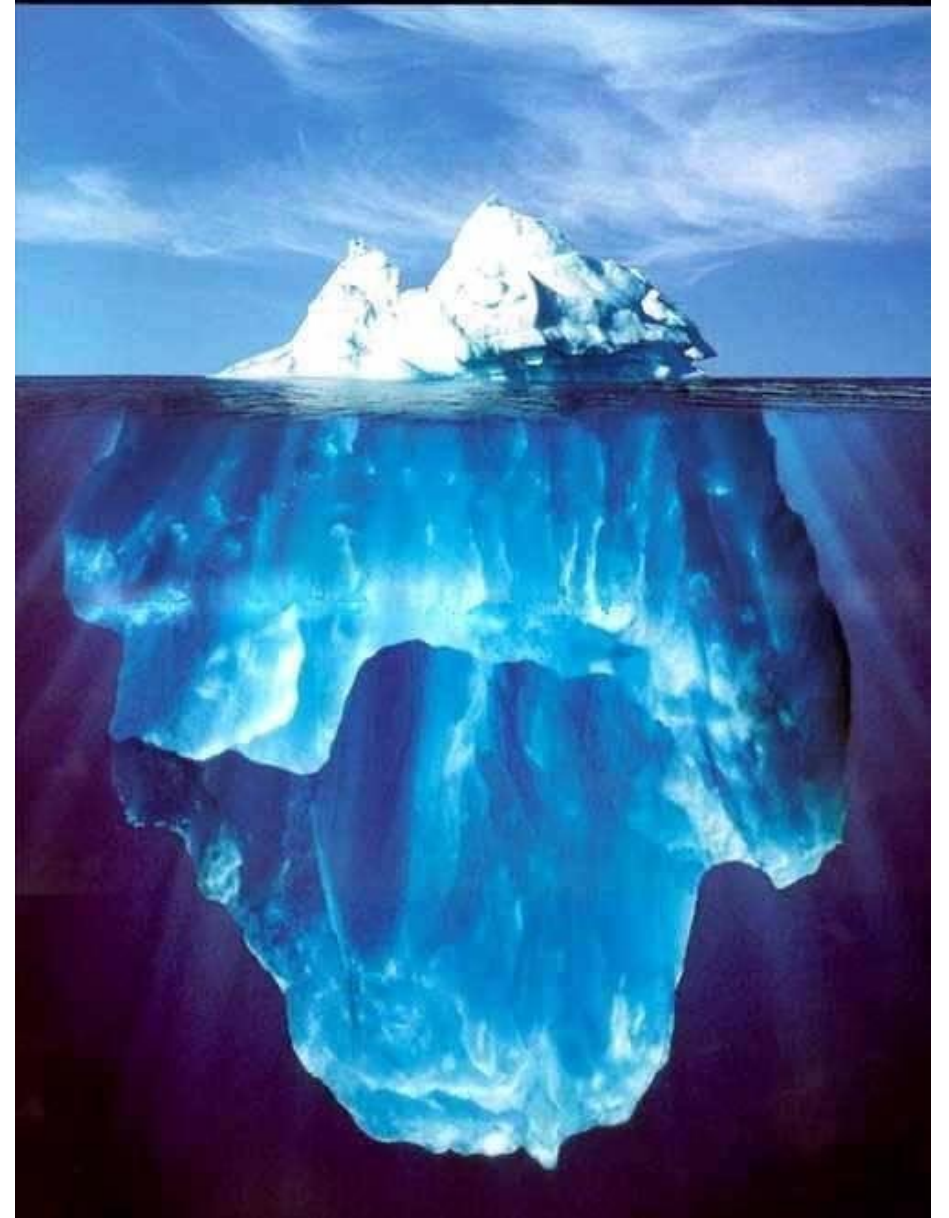
- Aggressiveness, hostility and violence
- Severe headache
- Nervousness, anxious, agitation, paranoia, hallucinations , etc.
- Psychotic symptoms , panic
- Overdose/stroke/seizure

### **Increased:**

- Energy
- Heart rate, chest pain,SOB
- Body temperature, hot, sweaty
- Sex drive

# Tip of the iceberg

- Hyperthermia
- Acute cardiac events
- Acute CVS –stroke –
- Seizures
- Violence



- 3 out of 4 meth users are likely to experience psychosis. Most will quickly recover. In about 1/3 of these the psychosis will persist for months or longer. Be aware of risk of kindling
- Hypertension and arrhythmias are common, as is hyperthermia.

- Strokes

Between March 2017 and September 2018, 13 patients (five male, 10 Māori) had 15 presentations with stroke symptoms to Lakes DHB following recent consumption of methamphetamine.

This represents one in six of all strokes in the under 60 age group. The mean age of patients was 42 years (range 24–59).

(Karim M Mahawish, et al, 2018)

# Overdose

## Signs:

hot flushed or very sweaty skin

Severe headache

Chest pain

Unsteady walking

Muscle rigidity, tremors, spasms, jerky movements, seizures

Severe agitation or panic

Difficulty breathing

Altered mental state

Also symptoms of psychosis

If someone using methamphetamine shows any of these symptoms call an ambulance.

Cool mechanically (with wet towels or fan) in low stimulus environment until they arrive.

# Impact on Babies

## During pregnancy

- Can affect organ development

- Low birth weight

- Toxicity as baby takes nearly twice as long to clear drugs

## Impact on baby

- Abnormal reflexes

- Extreme irritability

- Trouble eating and digesting

- Passed through breast milk





# Harm minimisation for carers

- Do not use when children are in the house
- Allow time to recover-sleep before children return
- Recommendation of the Best Practice Advocacy Centre NZ -It is wisest not to breastfeed if using meth regularly. If use is occasional discard breastmilk for 24-48 hours after use.



# Withdrawals

Begin within 24 hours of last dose

Peak 2-3 days later

Can continue for 2-3 weeks

Agitation

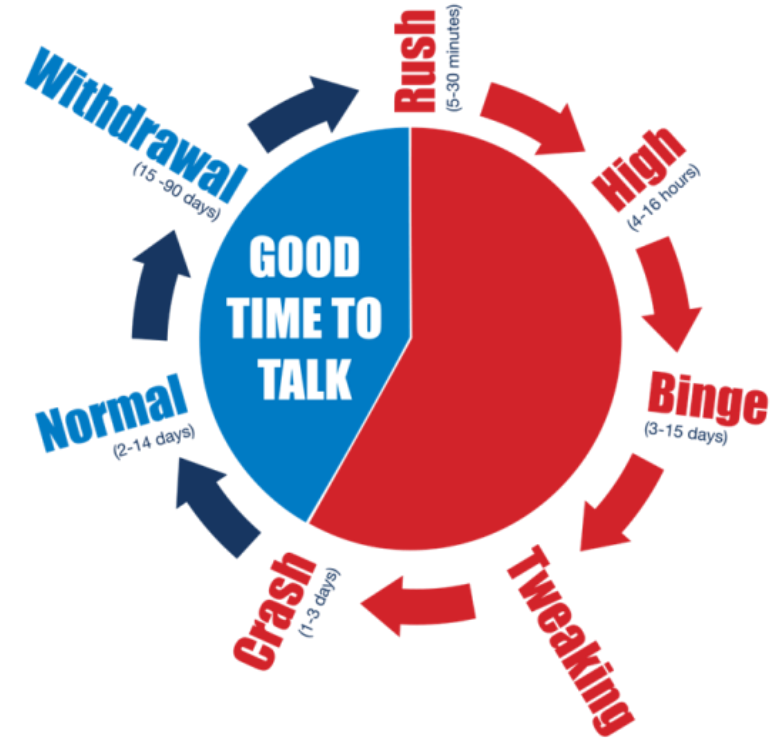
Irritability

Mood swings

Disrupted sleep patterns

Poor concentration

Intense cravings



These symptoms may occasionally warrant the use of Diazepam (10-20mg), or Quetiapine (25-50mg).

# Medications

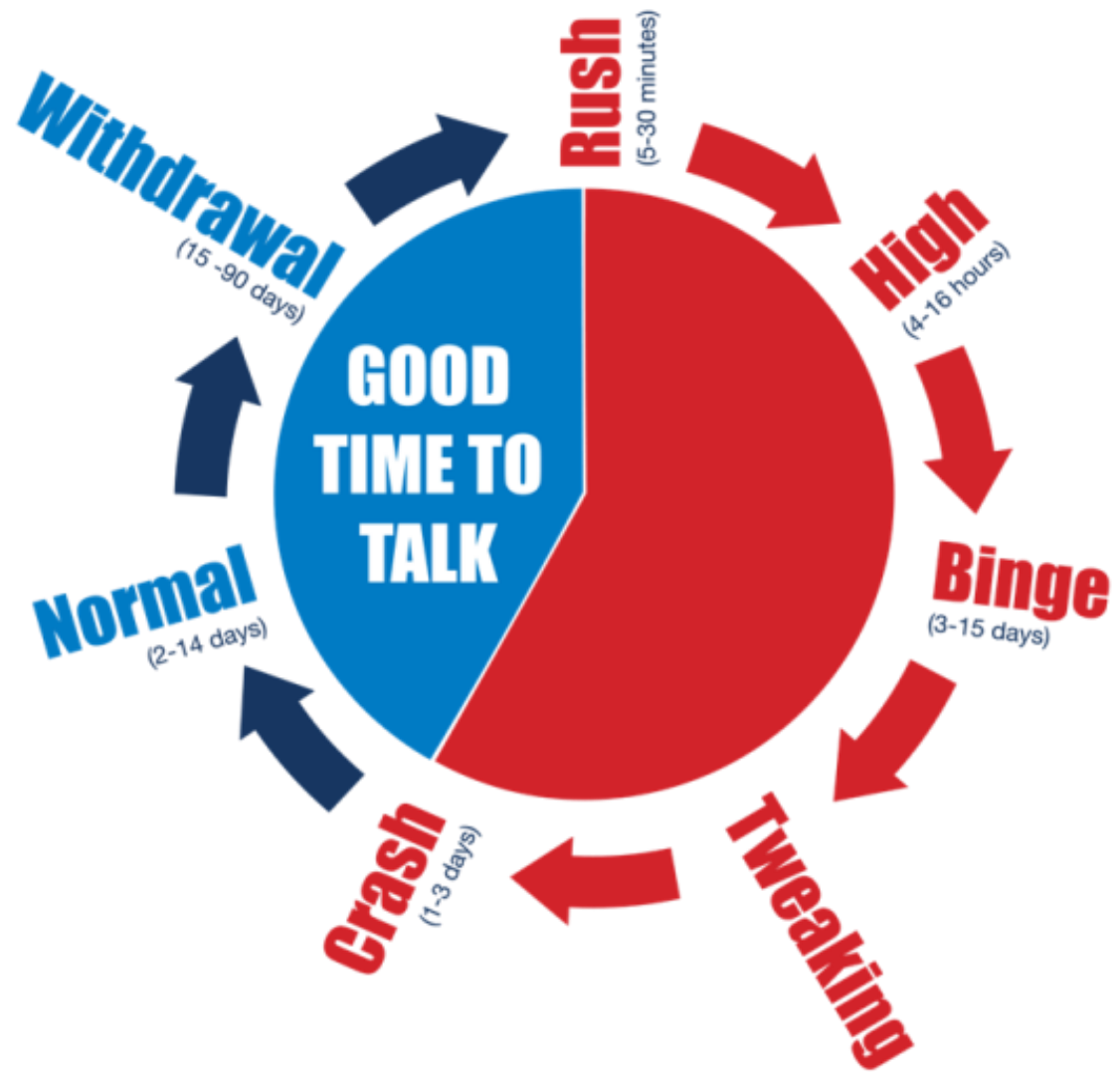
- Evidence does not support the use of any currently available medications to help people quit or prevent relapse.
- There is evidence that medication for the symptoms of withdrawal or acute presentations is useful. These may be required for 5-10 days depending on strength of symptoms.
- Need to be aware of what else is being used. Advise against the use of multiple drugs.
- Watch for interactions or changes in status.

- There is evidence of the usefulness of medication for acute symptoms such as agitation, sleep problems
  - Suggestions
  - Diazepam 5-10 mg, three to four times daily. Max 20 mgs per day.
  - Quetiapine 25-50 mg per day
- or
- Olanzapine 2.5 mgs to 5 mgs nocte

# Remember to allow for

- Any meds should be close control and frequent review at least 2-3 times a week.
- Dosing should be just a few days at a time.
- Waning of symptoms as drug is metabolised.
- Potential to use more of this drug or another.

- There is **no** evidence for usefulness of medication for methamphetamine treatment over the longer term
- There is **mixed** evidence for SSRI's etc but mostly for underlying, usually pre-existing problems.



# Who can your client contact?

Need to talk – 1737 (text or call)

A&D Helpline – 0800 787 797

Meth Helpline – 0800 638 4357

Mental Health Line – 0800 22 33 71

Supporting Families – 0800 732 825

Police – 111

Or your local AOD service



# And you

- Guidelines for the acute assessment and management of amphetamine type stimulant intoxication and toxicity.

St. Vincent's Hospital, Melbourne

- Interventions and Treatment for Problematic Use of Methamphetamine and Other Amphetamine-Type Stimulants.
- Matua Raki 2010. Wellington: Ministry of Health.