

Drug and Alcohol – Management of Methamphetamine Dependence in Pregnancy



1. Purpose

This document outlines the clinical guideline to:

- assist staff to care for methamphetamine dependent women admitted to hospital in pregnancy and to engage the woman in a continuing therapeutic relationship
- minimise methamphetamine withdrawal symptoms
- reduce the incidence of pre-term birth, low birth weight and small for gestational age¹ and hypertension² which is associated with methamphetamine use
- reduce fetal methamphetamine exposure
- initiate or progress psychosocial care
- manage difficult behaviour relating to methamphetamine withdrawal²
- assess co-morbidities
- initiate appropriate care at the Women's.

For methamphetamine dependence management to be effective, psychosocial counselling and support should be concurrently provided.

2. Definitions

Methamphetamine (N-methyl-1-phenyl-propan-2-amine) is a powerful stimulant which increases the release of catecholamines and also inhibits the degradation of neurotransmitters.^{3,4,5} Methamphetamine produces euphoria for up to 24 hours⁶ and has a half-life of 10 hours.⁵ It is present in urine or blood for 46-60 hours depending on dose and route of administration.⁷

Methamphetamine is a member of the amphetamine group of drugs which include speed and ecstasy. 'Ice' or 'crystal meth' (it has many different names) is the most pure form and therefore has high potential for mental and physical problems and for dependence.²³ Its vapour can be inhaled or it can be injected intravenously.⁶ Methamphetamines can cause ischemic infarcts (myocardial or cerebral), subarachnoid haemorrhage, memory loss and psychosis². Use in pregnancy can cause cardiovascular collapse and seizures.⁹

Dependence - Substance use disorder in DSM-5 combines the DSM-IV categories of substance abuse and substance dependence into a single disorder measured on a continuum from mild to severe. It is characterised by compulsive drug use, loss of control over use and physical, social and psychological consequences. Physical dependence is characterised by withdrawal and tolerance.¹⁷

3. Responsibilities

At the Royal Women's Hospital, methamphetamine dependent pregnant women must be referred to the **Women's Alcohol and Drug Service (WADS)** for specialist management in collaboration with the treating obstetric team and ward staff. WADS staff will complete a full drug and alcohol and psycho-social assessment.

Key WADS personnel include midwives, social workers, pharmacists, psychiatrists, psychologist, paediatricians, obstetricians, dietitians and an addiction specialist.

4. Guideline

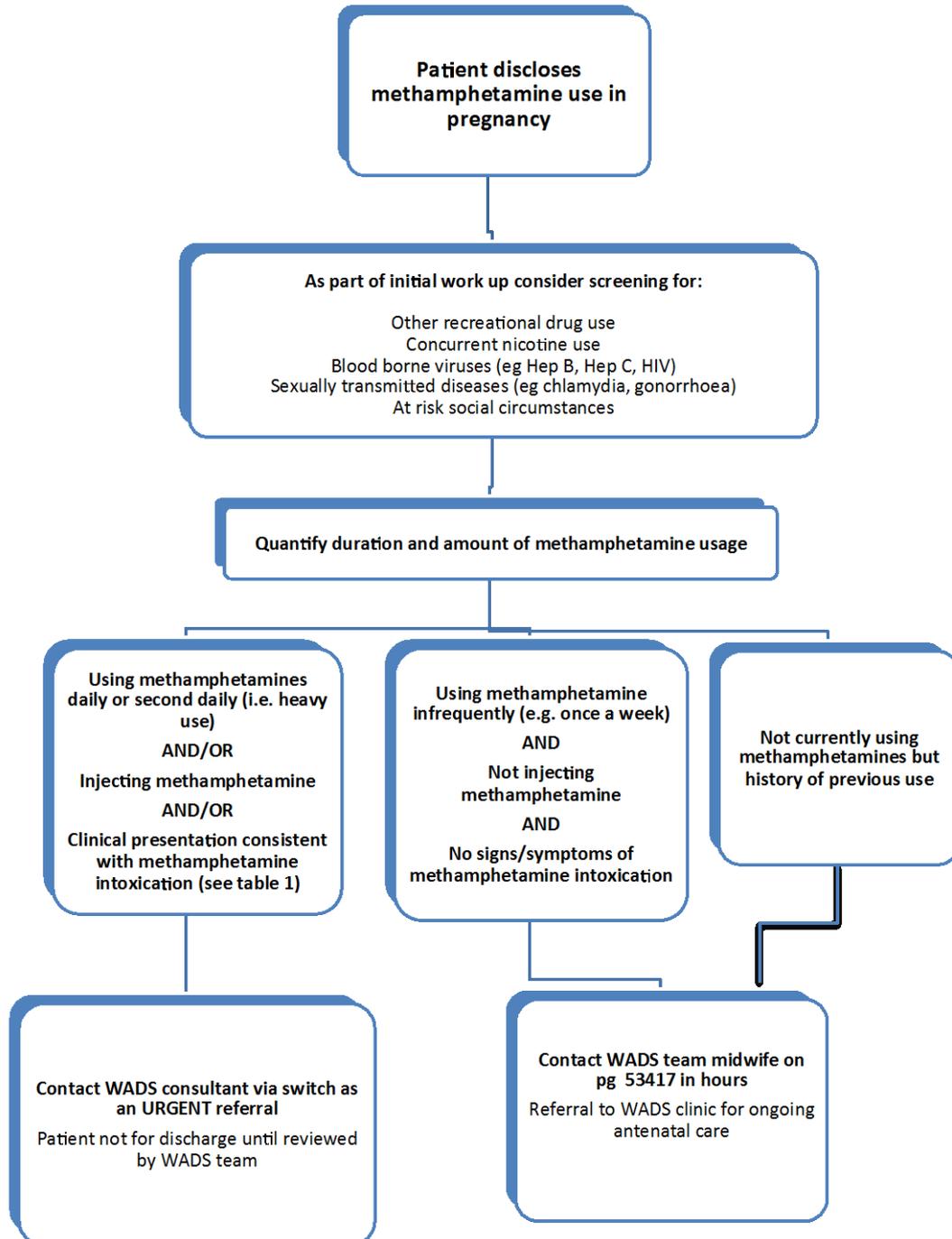
4.1. Assessment

All pregnant women must be screened for alcohol and drug use at the pregnancy booking, including name of substance, amount, route of administration and frequency of use currently and in the past. Assessment of current drug use should occur at every visit throughout the pregnancy.

Women with methamphetamine use in the last 12 months should be referred to WADS for a screening. All women dependant on methamphetamine will be cared for by the WADS team. Upon referral, WADS will complete a Psychosocial/Drug and Alcohol Assessment if this has not already been done.

Women dependent on methamphetamine need to be assessed on an individual basis and discussed with the on call WADS consultant before any medicines are given. The WADS consultant can be contacted via switchboard.

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When under the influence of methamphetamine, people may exhibit the following symptoms shown in Table 1:

Table 1

Common signs of methamphetamine intoxication

- tachycardia, hypertension, rapid breathing, profuse sweating
- difficulty speaking, trembling hands and fingers
- blurred vision and headaches, dizziness
- have reduced appetite, stomach cramps
- be easily upset over trivial things, agitation, pacing, being unsettled
- be critical of everyone and everything, feel unsupported or persecuted
- be argumentative with little or no provocation, irritable, hostile, threaten others
- have delusions, paranoia, hallucinations, psychosis, insomnia
- have itching, pick and scratch at the skin

Assess for potential behavioural problems or mental health concerns which may require support from Security or/and the Mental Health Team.

A notification to [Child Protection](#) may need to be considered and should be discussed with the WADS allied health staff.

Fetal assessment

- Assess the fetus with appropriate monitoring. Pregnancies exposed to methamphetamine are at risk of pre-term birth and intrauterine growth restriction (IUGR).¹
- All pregnancies exposed to methamphetamine use should be screened for fetal growth with serial ultrasound biometry at 28 weeks and between 33-35 weeks.
- Timing of delivery should be planned using fetal monitoring as an indicator, gestation, as well at the social situation of the women and the current level of drug use. This decision will be made in consult with the WADS obstetric consultant and the WADS Addiction consultant.
- [Neonatal Abstinence Syndrome](#) (NAS), while typically referring to withdrawal symptoms in the neonate of a mother who has been treated with opiates (methadone or buprenorphine) in pregnancy, can also apply to neonates withdrawing from methamphetamine

4.2. Who should be offered treatment?

- Women who have withdrawal symptoms when methamphetamine use ceases (ie on admission to hospital)
- Women who have received information and counselling who want treatment.

4.3. Admission planning

- Women who have attended antenatal care at WADS will have a 'client at risk summary' in the front of the medical history outlining a care plan for the woman and her baby upon birth and admission.
- The woman is informed that current evidence shows use of methamphetamine in pregnancy is associated adverse birth outcomes such as preterm labour and birth, low birth weight and small for gestational age.^{1,20} The WADS Midwife should discuss and provide the woman with written information about substance use and its possible effects on the pregnancy, infant feeding, safe sleeping and other relevant issues.
- Prior to admission the woman is informed that cessation of methamphetamine use may result in a number of withdrawal symptoms for 10-14 days but may sometimes last up to 6 months. Written information regarding likely withdrawal features and coping strategies should be provided to the woman. Information for the woman is provided by ADF (Australian Drug Foundation) <http://www.druginfo.adf.org.au/drug-facts/ice>
- Contact with the WADS addiction medicine physician for management of withdrawal symptoms.

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- Planning for potential issues around problematic behaviour which may affect staff and other patient safety is prudent. For example, a 'pre-planned Code Grey' with a flowchart of precautions to be taken when the woman is demonstrating behaviour consistent with intoxication with methamphetamine.
- If the woman is showing signs of psychosis an urgent mental health assessment is required. The Women's Centre for Mental Health can be reached on via switchboard.
- A supervised urine drug screen is preferable prior to commencing medications to provide extra information relevant to the clinical care of the woman.
- Referral to the dietician should be arranged during the admission to enable nutrition assessment, to provide nutrition education and food service extras.

4.4. Management of Methamphetamine Withdrawal

- Methamphetamine withdrawal can be unpleasant and no long term replacement pharmacotherapy has to date been found effective.
- Most symptoms resolve in 2 weeks although sleep disruption has been reported up to 4 weeks.¹⁶
- There is not yet a formal amphetamine withdrawal scale that is widely used.
- Assessment of methamphetamine withdrawal should be determined at baseline and at approximately four hourly intervals during waking hours.
- People withdrawing from methamphetamine may report or exhibit symptoms¹⁶ as shown in Table 2.

Table 2. Common symptoms of methamphetamine withdrawal

Common symptoms of methamphetamine withdrawal

- loss of capacity to experience pleasure
- oversleep OR experience insomnia
- generalised aches and pains
- psychomotor agitation
- irritability
- over eating
- poor concentration.

Managing challenging behaviours:

- Women should be cared for in a single room if possible
- Admission to the Women's Hospital should occur if the obstetric concerns outweigh the substance use concerns. Where withdrawal is the main concern and pregnancy is reasonably stable, admission to an AOD withdrawal unit would be more appropriate. Admission to De Paul House can be arranged through the WADS team
- Many of the behaviours associated with methamphetamine use can elicit negative reactions from health professionals. It is important not to take these behaviours personally and to respond rationally and safely. By addressing women with understanding and providing clear information, health professionals can provide support to the woman and her family
- It is important to remain calm and speak with a soft tone
- It is also important to remain at a safe distance and avoid confrontation or arguments. If you feel you are in danger then remove yourself to a safe area. If behavioral issues persist or escalate please call Security on 2222
- Symptomatic and supportive measures such as nursing in a calm, quiet and soothing environment are important; allow sleep.

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4.5. Medicines to treat withdrawal

NOTE: These medications are only to be prescribed AFTER consultation with the on-call Addictions Consultant

For acute agitation and accepting oral medicines:

1. Diazepam 5-10mg **orally**, every 2 hours until the woman is calm and mildly sedated, up to 40mg over 24 hours.

Antipsychotics may be needed if symptoms of psychosis.

2. Olanzapine 5-10mg **orally**, repeated every 2-4 hours if necessary up to 20mg over 24 hours

For extreme agitation/violence or not tolerating oral medicines:

1. Midazolam 2.5-5mg **IM** stat dose. Repeated every 20 minutes if necessary. Max 20mg over 24 hours.

OR

2. Diazepam 2.5-5mg **IV** stat dose. Repeated every 10 minutes if necessary. Max 30mg over 24 hours.

Notes:

- Consider CCU admission in cases of extreme agitation/violence
- The dose of medicines usually does not require increase as pregnancy advances
- Administer benzodiazepines at least 1 hour after antipsychotic due to risk of over-sedation
- Monitor patient for over-sedation (flumazenil may be used for over-sedation, but note that it can induce withdrawal seizures in a woman who uses benzodiazepines chronically)
- Antipsychotic prescribing should be reviewed within 72 hours

Note: do not give phenothiazines such as chlorpromazine (Largactil) as these may lower seizure threshold.

- Nausea and vomiting can be managed with metoclopramide 10mg oral or IM TDS PRN or prochlorperazine 5mg oral TDS PRN or 12.5mg IM BD PRN.
- If dose requirements exceed the doses recommended above, call the on call WADS consultant physician via the switchboard for further advice.
- Considerable care should be exercised to avoid overdosing with sedatives especially benzodiazepines as the woman may also be self-medicating and/or using other substances in conjunction with methamphetamine. This should be considered if she appears drowsy or sedated or has had visitors who may have supplied non-prescribed substances.

4.6. Preventing and managing relapse

Psychosocial support is the mainstay of ongoing intervention for methamphetamine dependence. Supportive counselling including cognitive behavioural therapy and coping strategies for cravings, sleep and relaxation techniques as well as strategies for motivation and exercising patience are indicated. Relapse prevention is particularly important. Resources relating to counselling can be sought through WADS or obtained below.

Be alert to poor clinic attendance and check for symptoms of methamphetamine withdrawal.

If these are observed, ensure there is a management plan in the history and review the management plan as changes occur. Continuation or resumption of methamphetamine use may be due to social/relationship pressures. These are best dealt with by counselling and support, not by changing doses of medicines.

Counselling and support strategies can be seen [here](#).

Direct-line – 1800 888 236 to arrange counselling in the community setting.

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4.7. Medicines for methamphetamine dependence in labour and immediately after the birth

- Medicines for methamphetamine dependence management should continue without interruption if the woman goes into labour
- Post-partum analgesia with paracetamol and ibuprofen may be used
- If the woman presents in labour and is intoxicated with methamphetamine treat with medicines as outlined in Section 4.4
- If giving benzodiazepines in labour, there will be considerations around the respiratory state of the baby at birth. A paediatrician should be present at the birth with daily review by the paediatrician during the postnatal stay.

4.8. Breast feeding

- Breast feeding is not recommended for women who are dependent on methamphetamines or currently using methamphetamines as methamphetamine is found in breast milk²²
- If a woman denies ongoing methamphetamine use and is keen to breastfeed, the WADS team will assist the woman in performing daily urine drug screen (UDS) during their inpatient stay
- If the urine drug screens are positive, these women will be recommended NOT to breastfeed
- If the urine drug screens are negative, the decision will be made by the WADS team on a case by case basis. This will be in consult with the pharmacist and the lactation consultant.

4.9. Discharge planning

The WADS team will be responsible for organising:

- 1) Drug and Alcohol services follow up for these patients
- 2) Social work referrals and ongoing needs
- 3) Psychiatric follow up
- 4) DHS referrals.

Medical staff and midwives on the ward are to arrange the following to address routine post-natal care needs:

- 1) Contraception planning
- 2) Pap smear follow up
- 3) SIDS/safe sleeping education
- 4) Routine post-partum perineum or caesarean section wound care
- 5) Notification of GP (e.g by discharge summary).

Safe sleeping

Women should be counselled as to the dangers of using any drugs or alcohol including tobacco and sharing a sleep surface with baby in terms of Sudden Infant Death Syndrome due to the sedating nature of these substances. See [Safe Sleeping Guidelines](#)

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance with this guideline will be monitored, evaluated and reported through a review of incidents, annual audit and other internal reviews achieved through staff meetings.

6. References

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7. Legislation/Regulations related to this guideline

Not applicable.

8. Appendices

Not applicable.

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