

# Drug and Alcohol - Alcohol Withdrawal Management

## 1. Purpose

Care providers should understand the importance of a non-judgemental approach, show empathy towards the woman, and should be aware of the importance of engaging her into care.<sup>1</sup>

Women who use alcohol in pregnancy tend to be poor attenders, and to benefit from additional contacts by their Drug and Alcohol Counsellor between antenatal visits.

This clinical guideline outlines the requirement for managing alcohol use in pregnancy and its comorbidities at the Women's.

## 2. Definitions

The term **alcohol** refers to ethanol.

## 3. Responsibilities

In the setting of a multidisciplinary team with frequent woman-centred consultation between care-givers, there is some role overlap. Responsibility for the ongoing care of the woman in the community and appropriate followup is shared by all.

**Social Worker:** is responsible for screening, advocacy, counselling and referral.

**Midwife:** is responsible for midwifery care, education, and referral.

**Dietitian:** is responsible for nutrition management.

**Pediatrician:** is responsible for care of the neonate, prenatal and postnatal consultation as indicated.

**Psychiatrist:** is responsible for mental health care and advocacy regarding Mother-Baby Unit admission.

**Obstetrician:** is responsible for health care, pregnancy care, drug and alcohol management, fetal wellbeing.

## 4. Guideline

### 4.1 Screening

Women with a history suggesting alcohol dependency, alcohol withdrawal symptoms in pregnancy, or signs of alcohol intoxication should have their alcohol use assessed with the T-ACE<sup>2</sup>, or other validated Screening Tool (refer to: [Appendix 1: T-ACE Questionnaire](#)). The T-ACE score must be recorded in the Antenatal Record, inpatient Progress Notes, or on the Modified Early Warning Score chart as appropriate.

Women with a history of a previous babe with alcohol induced developmental or neurobehavioural effects are at greater risk of alcohol induced fetal effects in the current pregnancy.

### 4.2 Assessment

Referral to the Women's Alcohol and Drug Service should be arranged for women who wish to withdraw from alcohol, those with polysubstance use, and for those who continue to use alcohol and who live in unstable circumstances.

Women Social Support Services social worker or WADS clinician will conduct a psychosocial assessment.

If screening indicates that the woman is likely to continue to use alcohol she should be referred to Women's Social Support Service.

If pregnant, she should also be referred to the Team Social Worker if homelessness, domestic violence, or mental health issues are suspected.

The quantity, frequency and pattern of alcohol use should be assessed.

The motivation to address alcohol use should be assessed.

Medical assessment by the Obstetric Medical Fellow (Mon - Fri in hours) or referral to the on-call Physician should be undertaken to assess any health deficits associated with alcohol use. Initial medical investigations may include liver function tests, full blood examination, coagulation screen, ferritin, vitamin B12, vitamin D and

# Drug and Alcohol - Alcohol Withdrawal Management



folate levels.

If medical sequelae to nutritional deficiency are present, inpatient referral to the Dietitian should be arranged.

Pregnancy assessment should be made to determine whether or not alcohol use has affected the development of the fetus<sup>7,8</sup> and should include a physical assessment to determine whether the fetus is of the expected size, second trimester morphology scanning, and in the third trimester cardiotocography and amniotic fluid index (AFI) measurement at each visit.

If the fetus is small for dates, serial Doppler and growth ultrasounds are arranged together with Team-Care Maternal Fetal Medicine consultation.

### **4.3 Caution should be exercised if the following are present:**

- Medical conditions:
  - diabetes
  - liver disease
  - mental health disorder on medication
  - if taking steroids
  - recent Emergency department admission
  - discrepancy between history of last substance use and the clinical presentation.
- Psychosocial issues
  - history of violent behaviour
  - current aggressive behaviour
  - past or present suicidal ideation.
- Polysubstance use.

### **4.4 Counseling and support**

The pregnant woman should be counseled about the hazard of continuing to use alcohol and given the 'Alcohol use in pregnancy' brochure produced by the Women's Alcohol and Drug Service.

Support by a Counselor from the Women's Alcohol & Drug Service is recommended.

#### **Community Support**

The woman is referred to a Community Drug & Alcohol Service and other services in her area.

She is advised about the availability of 24 hr counseling on Directline [1800 888 236] or [www.counselingonline.com.au](http://www.counselingonline.com.au)

Women can also be linked with a support group in their area such as Alcoholics Anonymous or Smart Recovery.

Counseling of family members assists them to support the woman. Family drug help is available 24 hours a day on 1300 660068 and there are support groups in several areas.

#### **Rural and Indigenous Support**

Culturally sensitive support for indigenous women at the Royal Women's Hospital is available at (03) 8345 3047. See:

[http://intranet.thewomens.loc/departments/clinicalsupportservices/AWHBU/Documents/Working\\_with\\_Aboriginal\\_and\\_Torres\\_Strait\\_Islander\\_Women\\_and\\_Familieshm.doc](http://intranet.thewomens.loc/departments/clinicalsupportservices/AWHBU/Documents/Working_with_Aboriginal_and_Torres_Strait_Islander_Women_and_Familieshm.doc)

Telephone consultation for Rural & Indigenous Health Workers caring for women drinking alcohol in pregnancy is available by telephoning WADS on (03) 8345 3931.

## Drug and Alcohol - Alcohol Withdrawal Management

### 4.5 Brief Interventions in the Outpatient setting (acronym: FRAMES<sup>3</sup>)

These interventions should be used selectively to promote referral of the woman to the Social Worker or to the Women's Alcohol & Drug Service if this has not already been done, and to express empathy.

|                  |   |
|------------------|---|
| Feedback:        | about the risks of continued alcohol intake to the woman's health and the health of the fetus.  |
| Responsibility:  | for personal choice to reduce the current alcohol intake.   |
| Advice:          | about the importance of changing current drinking patterns should be offered.   |
| Menu of options: | choosing to set personal limits/recognizing antecedents of drinking/avoidance of drinking in high-risk situations/pacing ones drinking/coping strategies for everyday problems that lead to drinking. |
| Empathy:         | is an important motivator which facilitates changed behaviour.  |
| Self-efficacy:   | is enhanced by encouragement and instilling optimism.   |

### 4.6 Management of alcohol withdrawal

Alcohol withdrawal symptoms may occur as part of a planned alcohol detoxification programme, or may occur unexpectedly in a woman who has not disclosed alcohol use.

Consultation with the Psychiatry Registrar or Duty Psychiatrist should be arranged if the woman has symptoms of Mental Illness<sup>4</sup>, or if other anxiolytic, anti-depressant or antipsychotic medicines are currently being used.

Consultation with the Obstetric Medical Fellow or Duty Physician<sup>4</sup> or referral to external agencies as detailed in the Management Algorithm, should be considered on a case-by-case basis if there are other health issues associated with alcohol use.

Symptoms of perspiration, tremor, anxiety, agitation, or nausea and vomiting should be assessed using the alcohol withdrawal scale (refer to: [Appendix 2: Alcohol Withdrawal Scale](#)). Alcohol Withdrawal Scores calculated from the Scale should be recorded in the Progress Notes.

Alcohol withdrawal should be managed with diazepam titration<sup>5</sup> by the WADS Duty Consultant based on the Alcohol Withdrawal Score, using diazepam 10-20 mg every two hours until the withdrawal scale score is <10 and anxiety/agitation is relieved.

If the woman is currently using benzodiazepines as well as alcohol, tolerance to benzodiazepines may have developed. Under these circumstances a high dose of diazepam may be required. If a dose of diazepam over 120 mg per day is necessary, consultation with the Drug and Alcohol Clinical Advisory Service (DACAS) Consultant 1800 812 804 is recommended.

Other social or substance abuse issues identified in the Psychosocial Assessment should be appropriately addressed.

Thiamine<sup>6</sup> 100mg should be given intravenously or intramuscularly, then daily by mouth with a multivitamin supplement.

Fluid and electrolyte levels should be assessed and optimised from the commencement of treatment until measurable and satisfactory improvement of alcohol withdrawal symptoms occurs.

If the woman is not pregnant or has delivered and will not be breast-feeding, acamprosate treatment and relapse prevention counselling should be arranged after she is discharged from hospital.

Refer to [Appendix 3: Alcohol Withdrawal Management Algorithm](#).

# Drug and Alcohol - Alcohol Withdrawal Management

## 4.7 Breastfeeding advice<sup>9</sup>

Advice for breastfeeding mothers includes the following:

- not drinking alcohol is the safest option
- women should avoid alcohol in the first month after birth/delivery until breastfeeding is well established
- thereafter:
  - alcohol intake should be limited to no more than two standard drinks a day
  - women should avoid drinking immediately before breastfeeding
  - women who wish to drink alcohol could consider expressing milk in advance.
  - baby should be cared for by a responsible adult who has not been drinking until the woman is able to manage the care herself.

## 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

### Evidence

There are no prospective trials of key areas of interest as these would be both unethical and inappropriate. Most evidence is observational.

### Evidence Table

| Author  | Title  | source   | Level of Evidence |
|---|--|--|-------------------|
| 1. NSW Department of Health [Ed].                   | New South Wales Health. National Clinical Guidelines for the management of drug use during pregnancy birth and the early development years of the newborn. 2006, p26-28. | <a href="http://www.health.nsw.gov.au/pubs/2006/ncg_druguse.html">http://www.health.nsw.gov.au/pubs/2006/ncg_druguse.html</a>  | II                |
| 2. Sokol, R.J. et al                                | The T-ACE questions: Practical prenatal detection of risk-drinking.  | American Journal of Obstetrics and Gynecology 1989; 160: 863-71.   | III               |
| 3. Miller, W.R., Rollnick, S.                       | Motivational Interviewing: preparing people for change.  | 2 <sup>nd</sup> Edn., New York: Guilford, 2002.  | III               |
| 4. National Health & Medical Research Council [Ed]. | Australian Guidelines to Reduce Health Risks from Drinking Alcohol<br>NHMRC Reference No: DS10, 2009.  | <a href="http://www.nhmrc.gov.au/publications/synopses/ds10syn.htm">http://www.nhmrc.gov.au/publications/synopses/ds10syn.htm</a><br><a href="http://www.nhmrc.gov.au/files_nhmrc/file/publications/synopses/ds10-alcohol.pdf">http://www.nhmrc.gov.au/files_nhmrc/file/publications/synopses/ds10-alcohol.pdf</a> | II                |
| 5. Saitz R et al                                    | Individualized treatment for alcohol withdrawal. A randomized double-blind controlled trial.   | JAMA 1994 Aug 17;272(7):519-23.  | II                |
| 6. Hack, JB, Hoffman, RS.                           | Thiamine before glucose to prevent Wernicke encephalopathy: examining the conventional wisdom.   | JAMA 1998; 279:583.  | III               |

# Drug and Alcohol - Alcohol Withdrawal Management



| Author             | Title   | source  | Level of Evidence |
|--------------------|---|---|-------------------|
| 7. CDC             | Fetal Alcohol Spectrum Disorders<br>Updated 22 Sept 2011  | <a href="http://www.cdc.gov/ncbddd/fasd/facts.html">http://www.cdc.gov/ncbddd/fasd/facts.html</a><br><a href="http://www.cdc.gov/ncbddd/fasd/research.html">http://www.cdc.gov/ncbddd/fasd/research.html</a>  | II                |
| 8. Coyne KL et al. | Pregnancy characteristics of women giving birth to children with fetal alcohol syndrome in Far North Queensland. Australian and New Zealand Journal of Obstetrics and Gynaecology, 48: 240–247. | <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1479-828X.2008.00861.x/abstract">http://onlinelibrary.wiley.com/doi/10.1111/j.1479-828X.2008.00861.x/abstract</a>   | III               |
| 9. Haber, P et al. | Guidelines for the Treatment of Alcohol Problems 2009. [Australian Government Department of Health and Ageing].   | <a href="http://www.health.gov.au/internet/ministers/publishing.nsf/Content/76AE6384CE9A3830CA2576BF003073F8/\$File/DEZEM_Alcohol%20Guide_FA.pdf">http://www.health.gov.au/internet/ministers/publishing.nsf/Content/76AE6384CE9A3830CA2576BF003073F8/\$File/DEZEM_Alcohol%20Guide_FA.pdf</a> | II                |

## 7. Legislation/Regulations related to this guideline

Not applicable.

## 8. Appendices

Appendix 1: [T-ACE Questionnaire](#)

Appendix 2: [Alcohol Withdrawal Scale](#)

Appendix 3: [Alcohol Withdrawal Management Algorithm](#)

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## T-ACE Questionnaire



**A total score of 2 or greater in these four questions indicates potential risk for pregnancy and identification of prenatal risk.**

|  |                   |
|--|-------------------|
| <p>How many drinks does it take to make you feel high?</p> <ul style="list-style-type: none"> <li>• 0 = less than or equal to two drinks</li> <li>• 1 = more than two drinks</li> </ul>      | <b>Tolerance</b>  |
| <p>Have people annoyed you by criticising your drinking?</p> <ul style="list-style-type: none"> <li>• 0 = No</li> <li>• 1 = Yes</li> </ul>   | <b>Annoyance</b>  |
| <p>Have you felt you ought to cut down on your drinking?</p> <ul style="list-style-type: none"> <li>• 0 = No</li> <li>• 1 = Yes</li> </ul>   | <b>Cut down</b>   |
| <p>Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?</p> <ul style="list-style-type: none"> <li>• 0 = No</li> <li>• 1 = Yes</li> </ul> | <b>Eye opener</b> |
| <b>Total Score =</b>   |                   |



## Alcohol Withdrawal Scale

UR number: \_\_\_\_\_

Surname: \_\_\_\_\_

Given name/s: \_\_\_\_\_

Date of birth: \_\_\_\_\_ Gender: \_\_\_\_\_

(AFFIX PATIENT LABEL)

**Please see the back of this form for instructions on how to use the Alcohol Withdrawal Scale**

|   | DATE |  |  |  |  |  |  |  |  |  |
|---|------|--|--|--|--|--|--|--|--|--|
|   | TIME |  |  |  |  |  |  |  |  |  |
| <b>PERSPIRATION</b>   |      |  |  |  |  |  |  |  |  |  |
| No abnormal sweating  | 0    |  |  |  |  |  |  |  |  |  |
| Moist skin  | 1    |  |  |  |  |  |  |  |  |  |
| Localized beads of sweat (e.g. on face, chest)  | 2    |  |  |  |  |  |  |  |  |  |
| Whole body wet from perspiration  | 3    |  |  |  |  |  |  |  |  |  |
| Profuse maximal sweating: clothes, linen etc are wet  | 4    |  |  |  |  |  |  |  |  |  |
| <b>TREMOR</b>   |      |  |  |  |  |  |  |  |  |  |
| No tremor   | 0    |  |  |  |  |  |  |  |  |  |
| Slight intention tremor   | 1    |  |  |  |  |  |  |  |  |  |
| Constant slight tremor of upper extremities   | 2    |  |  |  |  |  |  |  |  |  |
| Constant marked tremor of extremities   | 3    |  |  |  |  |  |  |  |  |  |
| <b>ANXIETY</b>  |      |  |  |  |  |  |  |  |  |  |
| No apprehension or anxiety  | 0    |  |  |  |  |  |  |  |  |  |
| Slight apprehension   | 1    |  |  |  |  |  |  |  |  |  |
| Apprehension or understandable fear e.g. of withdrawal symptoms                                       | 2    |  |  |  |  |  |  |  |  |  |
| Anxiety occasionally accentuated to a state of panic  | 3    |  |  |  |  |  |  |  |  |  |
| Constant panic-like anxiety   | 4    |  |  |  |  |  |  |  |  |  |
| <b>AGITATION</b>  |      |  |  |  |  |  |  |  |  |  |
| Rest normally during day, no signs of agitation   | 0    |  |  |  |  |  |  |  |  |  |
| Slight restlessness, cannot sit or lie still, awake when others sleep                                 | 1    |  |  |  |  |  |  |  |  |  |
| Moves constantly, looks tense, wants to get out of bed but obeys request to remain in bed             | 2    |  |  |  |  |  |  |  |  |  |
| Constant restlessness, gets out of bed for no obvious reason, returns to bed if escorted              | 3    |  |  |  |  |  |  |  |  |  |
| Maximally restless, aggressive, ignores requests to stay in bed                                       | 4    |  |  |  |  |  |  |  |  |  |
| <b>NAUSEA AND VOMITING</b>  |      |  |  |  |  |  |  |  |  |  |
| No nausea and no vomiting   | 0    |  |  |  |  |  |  |  |  |  |
| Mild nausea and no vomiting   | 1    |  |  |  |  |  |  |  |  |  |
| Intermittent nausea and dry retching  | 2    |  |  |  |  |  |  |  |  |  |
| Constant nausea, frequent dry retching and vomiting   | 3    |  |  |  |  |  |  |  |  |  |
| <b>HALLUCINATION</b>  |      |  |  |  |  |  |  |  |  |  |
| No evidence of hallucinations   | 0    |  |  |  |  |  |  |  |  |  |
| Distortion of real objects – aware these are not real if pointed out                                  | 1    |  |  |  |  |  |  |  |  |  |
| Appearance of new objects/perceptions – aware these are not real if pointed out                       | 2    |  |  |  |  |  |  |  |  |  |
| Believes hallucinations are real, still oriented in place and person                                  | 3    |  |  |  |  |  |  |  |  |  |
| Believes him/herself to be in non-existent environment, preoccupied, cannot be diverted and reassured | 4    |  |  |  |  |  |  |  |  |  |
| <b>ORIENTATION</b>  |      |  |  |  |  |  |  |  |  |  |
| Patient is oriented to time, place and person   | 0    |  |  |  |  |  |  |  |  |  |
| Patient is fully orientated in person, but is unsure about time and place                             | 1    |  |  |  |  |  |  |  |  |  |
| Patient is oriented in person but disoriented in time and place                                       | 2    |  |  |  |  |  |  |  |  |  |
| Doubtful personal orientation, disoriented in time and place, there may be short periods of lucidity  | 3    |  |  |  |  |  |  |  |  |  |
| Disoriented in time, place and person, no meaningful contact can be obtained                          | 4    |  |  |  |  |  |  |  |  |  |
| <b>HEADACHE</b>   |      |  |  |  |  |  |  |  |  |  |
| Not present   | 0    |  |  |  |  |  |  |  |  |  |
| Mild  | 1    |  |  |  |  |  |  |  |  |  |
| Moderate  | 2    |  |  |  |  |  |  |  |  |  |
| Severe  | 3    |  |  |  |  |  |  |  |  |  |
| <b>FACIAL FLUSHING</b>  |      |  |  |  |  |  |  |  |  |  |
| None  | 0    |  |  |  |  |  |  |  |  |  |
| Mild to moderate  | 1    |  |  |  |  |  |  |  |  |  |
| Severe  | 2    |  |  |  |  |  |  |  |  |  |
| <b>SEIZURES</b>   |      |  |  |  |  |  |  |  |  |  |
| None  | 0    |  |  |  |  |  |  |  |  |  |
| Generalised seizures  | 1    |  |  |  |  |  |  |  |  |  |
| <b>TOTAL SCORE</b>  |      |  |  |  |  |  |  |  |  |  |
| <b>INITIALS OF SCORER</b>   |      |  |  |  |  |  |  |  |  |  |



## Alcohol Withdrawal Scale

UR number: \_\_\_\_\_

Surname: \_\_\_\_\_

Given name/s: \_\_\_\_\_

Date of birth: \_\_\_\_\_ Gender: \_\_\_\_\_

(AFFIX PATIENT LABEL)

### Management of Alcohol Withdrawal

- Frequency of scoring and diazepam dosing varies according to severity of symptoms as shown in table below:

|                 | Alcohol Withdrawal Scale Score | Frequency of monitoring | Oral diazepam dose based on score |
|-----------------|--------------------------------|-------------------------|-----------------------------------|
| <b>Mild</b>     | <4                             | 6 hourly                | No dose required                  |
| <b>Moderate</b> | 4-7                            | 4 hourly                | 5-10mg                            |
| <b>Severe</b>   | >7                             | 2 hourly                | 20mg                              |

- Scoring should be completed during waking hours
- Alcohol withdrawal should be managed with diazepam titration in consultation with the WADS consultant on call.
- Diazepam dosing is based on the Alcohol Withdrawal Score until the score is <10 and anxiety/agitation is relieved.
- If not confused, thiamine 100mg should be given IM or slow IV injection over at least 3-5 minutes (dilute in 10-20mL of sodium chloride 0.9% for IV administration) for three days prior to any glucose infusion or oral carbohydrate intake, thereafter 100mg daily by mouth with a multivitamin supplement.
- Note: if the woman is confused, Wernicke Korsakoff Syndrome should be considered and the WADS consultant should be notified urgently and thiamine 300mg IV over 3-5 minutes should be administered before any carbohydrate load (eg intravenous glucose). This is a medical emergency.
- Fluid and electrolyte levels should be assessed and optimised from the commencement of treatment until measurable and satisfactory improvement of alcohol withdrawal symptoms occurs.
- Refer to the Drug & Alcohol: Alcohol Withdrawal Management PGP on the Intranet.*

### Staff Signature Log

| Print name | Signature | Designation | Initial |
|------------|-----------|-------------|---------|
|            |           |             |         |
|            |           |             |         |
|            |           |             |         |
|            |           |             |         |
|            |           |             |         |



# Alcohol Withdrawal Management Algorithm

