Clinical Guideline
Management of patients at risk of alcohol withdrawal in acute hospitals

Objective file number:  
Policy developed by: Drug and Alcohol Services South Australia (DASSA)  
Approved by SA Health Safety & Quality Strategic Governance Committee: 20 April 2016  
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Summary
This guideline provides information on active management of alcohol withdrawal and its potential complications in the acute hospital sector.

Keywords
Alcohol withdrawal management, delirium tremens, Wernicke’s encephalopathy, Wernicke-Korsakoff Syndrome, benzodiazepine, thiamine, clinical guideline

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Does this policy amend or update an existing policy? N  
Does this policy replace an existing policy? N  
If so, which policies?

Applies to
All Health Networks  
CALHN, SALHN, NALHN, CHSALHN, WCHN, SAAS

Staff impact
All Clinical, Medical, Nursing, Allied Health, Emergency, Dental, Mental Health, Pathology, Students

PDS reference
CG243

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Management of patients at risk of alcohol withdrawal in acute hospitals
Policy Guideline
### Document control information

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<th>Drug and Alcohol Services South Australia (DASSA)</th>
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<td>Contributors</td>
<td>Central Adelaide Local Health Network (CALHN), DASSA especially thanks the Working Group of the CALHN Drug and Therapeutics Committee. North Adelaide Local Health Network (NALHN) South Adelaide Local Health Network (SALHN) South Australian Medicines Advisory Committee (SAMAC)</td>
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### Endorsements

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### Approvals

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<td>&lt;Position title, branch or directorate, division (no name)&gt; (This is a Tier 1 Committee, Portfolio Executive or S&amp;QSGC, refer to policy framework [under development] for appropriate approval authority).</td>
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1. **Objective**

Alcohol withdrawal is a potentially life threatening condition. Seizures, delirium tremens and Wernicke-Korsakoff Syndrome can all complicate withdrawal from alcohol. Early active management can significantly reduce the risk of these complications. A comprehensive assessment should be made before making a diagnosis of alcohol withdrawal.

This guideline provides information on the active management of alcohol withdrawal and its potential complications in adults admitted to acute hospital services in South Australia and aim only to guide clinical practice. Clinical judgment should be used to determine the optimal medical management for each patient. When there is doubt about management, less experienced staff should confer with senior colleagues, the Drug and Alcohol Consultation Liaison Service (CLS) in their hospital or the Drug and Alcohol Clinical Advisory Service (DACAS) Ph 7087 1742. This guideline should be used in conjunction with the appropriate Alcohol Withdrawal Risk Assessment and Observation chart available in each hospital.

2. **Scope**

This guideline provides information on active management of alcohol withdrawal and its potential complications in the acute hospital sector. It applies to all SA Health employees, including consultants and contractors.

*It should not be used when a patient has severe medical and/or psychiatric comorbidities that may mimic alcohol withdrawal such as sepsis, hypoxia, hypoglycaemia, severe pain, or encephalopathy. Similar signs and symptoms may be seen in some patients after surgery or trauma. In these circumstances discuss management with ICU registrar or physician or in country areas a specialist physician [metropolitan based if not available within region].*

3. **Principles**

The principle of this guideline is to ensure appropriate systems and processes are in place to ensure equitable access to assessment and treatment for the management of patients at risk of alcohol withdrawal in all SA Health acute hospitals to enhance safe and timely patient care.
4. **Detail**

4.1 **Description of alcohol withdrawal syndrome**

**Onset of withdrawal**

Early signs of withdrawal usually appear between six and 24 hours after the last intake of alcohol. The most severe form of withdrawal – delirium tremens – typically occurs two to six days after the last drink, and may not be preceded by signs of simple alcohol withdrawal.

It is characterised by severe agitation associated with disorientation, delirium, profuse sweating and fever. Withdrawal may be delayed if other CNS depressants (e.g. benzodiazepines or sleep medications such as zolpidem) have been taken, or after anaesthesia.

**Duration of withdrawal**

Variable, between two and 12 days. The more severe the withdrawal, the longer its duration.

**Clinical features**

The alcohol withdrawal syndrome can occur when a person who is tolerant to alcohol stops drinking alcohol or drinks substantially less alcohol. It is a syndrome of central nervous system hyperactivity that is characterised by some or all of the following signs and symptoms:

- hypersensitivity to stimulation
- tremor
- perspiration
- increased pulse, blood pressure
- nightmares
- fear
- insomnia
- depressed mood
- anxiety and/or agitation
- **seizures (six to 48 hours or more)**
- **disorientation (six to 48 hours or more)**
- **confusion (six to 48 hours or more)**
- **hallucinations (six to 48 hours or more)**

The presence and severity of each of these symptoms varies with the level of severity of withdrawal. Concomitant illness, injury or other physical trauma, or recent surgery increases the likelihood of complicated alcohol withdrawal.

4.2 **Which patients are at risk of alcohol withdrawal?**

Patients at risk of withdrawal from alcohol are those where it has been less than 10 days since their last drink AND who meet at least one of the following criteria:

> Average daily alcohol consumption >80g/day for males and >60g/day for females.
females (see Average Daily Alcohol Consumption Chart – Appendix A)
> Previous history of alcohol withdrawal syndrome
> CAGE questionnaire score ≥2
> Admitted with breath or blood alcohol (BAC) >0.15 g/100ml.

**Table 1: CAGE questionnaire** – score one (1) for each “yes” answer

1. Have you ever felt you needed to Cut down on your drinking?
2. Have people Annoyed you by criticising your drinking?
3. Have you ever felt Guilty about drinking?
4. Have you ever felt Guilty about drinking?

4.3 General management

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the patient at risk of alcohol withdrawal?</td>
<td>Commence alcohol withdrawal observations</td>
</tr>
<tr>
<td></td>
<td>Refer to Alcohol Withdrawal Management Flowchart – see Appendix B</td>
</tr>
<tr>
<td>Is there a medical, psychiatric or other problem that may exacerbate withdrawal or be worsened by administration of sedatives given for the treatment of alcohol withdrawal?</td>
<td>Discusses with the medical, ICU, psychiatric consultant or registrar or the hospital Drug and Alcohol CLS, or Drug and Alcohol Clinical Advisory Service (phone 7087 1742), as appropriate before prescribing sedatives</td>
</tr>
<tr>
<td></td>
<td>Continue alcohol withdrawal observations</td>
</tr>
<tr>
<td></td>
<td>Prescribe benzodiazepines as recommended</td>
</tr>
</tbody>
</table>

**Alcohol withdrawal observations**

The Clinical Institute Withdrawal Assessment for Alcohol – revised version (CIWA-Ar) observation scale (see Alcohol Withdrawal Risk Assessment and Observation chart) is used to monitor patients withdrawing from alcohol or at risk of withdrawal. It should not be used if there are significant communication problems (e.g. delirium, non-English speaking patient).

This scale can be modified by the treating doctor to suit individual patient circumstances. For example, nausea and vomiting may be common in the postoperative period and so these scores may be omitted. Similarly, patients with a psychiatric illness may be agitated and so these scores could also be omitted.

Consultation with Senior Medical/ICU or regional specialist physician

As a general guide, ask for a Senior Medical/ICU opinion if:

1. The patient has other medical problems that may cloud conscious state, e.g. neurosurgical condition;
2. The patient has florid delirium tremens;
3. The patient has a sedation score of 2 or more;
4. The patient has other medical condition(s) that make administration of CNS depressants dangerous, e.g. has COPD, hepatic impairment or is receiving opioids;
5. Patients who are difficult to manage with the usual regimen, (e.g. requiring higher than usual doses of diazepam and/or restraint) may be better managed in the high dependency/ICU environment. It is well recognised that at times (although rare) these patients may actually require intubation and ventilation to control their withdrawal;
6. Any patient where benzodiazepines will need to be administered intravenously.

Admission of the patient to ICU will be at the discretion of the ICU consultant. In country hospitals transfer from country sites to major hospital maybe required, depending on resources available. Refer to Statewide Emergency Medical Retrieval Service (ph 13 7827).

Initiation of a medical response emergency call

Initiate a medical emergency response call as appropriate for abnormalities in the patient’s vital signs, oxygen saturation and sedation score.

Environment

Low stimulation, reassurance, reorientation, regular lighting and care by the same nurse each shift will help.

Fluid and electrolytes

Monitor fluid balance and electrolytes.

> Ensure fluid intake (oral or IV) is adequate to maintain acceptable urine output
> Check electrolytes including magnesium

Reassess for presence of concurrent illness

In particular, consider hypoxia, sepsis, head injury (subdural haematoma), pneumonia, chronic airflow limitation, and encephalopathy.

4.4 Pharmacological Management

4.4.1 Thiamine

Note: parenteral thiamine must be given before administering IV glucose

Prevention of Wernicke’s Encephalopathy (WE)

> Give thiamine 100 mg parenterally (IM or IV) as soon as possible and continue IV or IM three times a day for 3 days in total.
> Check coagulation status, including platelets, before IM injection.
> Then give thiamine 100 mg orally three times a day until discharge and then twice daily for 3 months.
Treatment of Wernicke’s encephalopathy

If there is a possible diagnosis of Wernicke’s Encephalopathy (WE), e.g. confusion OR ataxia OR ophthalmoplegia, give thiamine 200 mg IV every six hours for 1 week and evaluate whether this dosing regimen has reduced the features of WE. If it has not done so give usual doses of oral thiamine as above. If it has coincided with improvement in WE continue IV thiamine until benefits plateau.

4.4.2 Vitamins

Multivitamin or a multivitamin and mineral preparation should be given daily during admission.

4.4.3 Benzodiazepines

If opioids or any other drugs with sedative effects are prescribed at the same time as benzodiazepines, the dose of benzodiazepine should be reduced.

**Do not** administer any benzodiazepines until:

- a diagnosis of alcohol withdrawal is confirmed
- BAC is less than 0.1 g/100mL
- any concurrent illness has been fully assessed, and
- a full review of current medications has been undertaken (note that the combination of CNS depressants with opioids will significantly increase the risk of respiratory depression).

However once the diagnosis of alcohol withdrawal has been established, patients should be treated without further delay.

**Indications**

Benzodiazepine medications may be given:

a) To lessen or alleviate signs and symptoms of alcohol withdrawal using the ‘symptom triggered’ regimen described below based on CIWA-Ar alcohol withdrawal score and clinical assessment. When the CIWA-Ar alcohol withdrawal score reaches 8-10 it is likely that a benzodiazepine will be required. The total doses required will be a reflection of the severity of the withdrawal syndrome and the patient's tolerance to benzodiazepine.

b) As a ‘preventive’ regimen in patients with a past history of seizures related to alcohol withdrawal.

The objective should be to cease benzodiazepines before discharge in order to avoid the development of secondary benzodiazepine dependence. However concern about benzodiazepine dependence should not delay the management of acute alcohol withdrawal.
Signs of benzodiazepine intoxication

Sedation is the most common sign of intoxication by benzodiazepines but also be aware that dysarthria, drooling, disinhibition and paradoxical agitation or worsening of delirium can also be signs, which require benzodiazepines to be ceased.

Choice of benzodiazepine

**Diazepam**

Diazepam should be the first-line choice of benzodiazepine for most patients. It is used because of its cross-tolerance with alcohol, anticonvulsant properties and long half-life. Give orally (it should not be given by IM or IV injection).

Suggested doses and monitoring requirements are listed in Tables 2 and 3 as well as the flowchart (see Appendix B).

**Lorazepam**

Lorazepam has no active metabolites and may be used as a substitute for diazepam in patients with significantly impaired liver function.

Lorazepam 0.5 mg is approximately equivalent to diazepam 5 mg.

Suggested doses and monitoring requirements are listed in Tables 2 and 3 as well as the flowchart (see Appendix B).

**Clonazepam**

Clonazepam is used if an IV benzodiazepine is required.

Clonazepam 0.25 mg is approximately equivalent to diazepam 5 mg.

Clonazepam is preferred to midazolam because of its longer half-life and presence of active metabolites; however, if clonazepam is not available, give IV midazolam (in 1 mg increments) until clonazepam can be obtained.

Suggested doses and monitoring requirements are listed in Tables 2 and 3 as well as the flowchart (see Appendix B).

**Caution:** Patients given IV clonazepam or midazolam will require close observation (1:1 nursing) and it is preferable for them to be nursed in a high dependency unit, ICU or Emergency Department. If the patient is not in a high dependency unit, ICU or Emergency Department, a doctor with appropriate airway skills must be immediately available during IV administration of a benzodiazepine and for 30 minutes afterwards.

**Oxazepam**

Oxazepam is not recommended because it is less effective for seizure control.
## Benzodiazepine regimens

### Table 2: Benzodiazepine doses

**Note 1:** See Table 3 and flowchart (Appendix B) for timing of administration and monitoring requirements

**Note 2:** If opioids or other sedative drug are being prescribed concurrently, doses MUST be reduced but can be ordered 1 hourly prn.

<table>
<thead>
<tr>
<th>Indication</th>
<th>Benzodiazepine</th>
<th>CIWA-Ar score/age</th>
<th>Prescribed opioids or other CNS depressants#</th>
<th>NOT prescribed opioids or other CNS depressants#</th>
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<tr>
<td><strong>Symptom-triggered regimen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for treatment of alcohol withdrawal (based on CIWA-Ar scores)</td>
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<tr>
<td>Diazepam (first-line)</td>
<td></td>
<td>CIWA-Ar 8-12</td>
<td>5mg PO 1 hourly prn</td>
<td>10mg PO 2 hourly prn</td>
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<tr>
<td></td>
<td></td>
<td>CIWA-Ar 13-20</td>
<td>10mg PO 1 hourly PRN</td>
<td>20mg PO 2 hourly prn</td>
</tr>
<tr>
<td>Age &gt;70yrs</td>
<td></td>
<td>5mg PO 1 hourly prn</td>
<td>10mg PO 2 hourly prn</td>
<td></td>
</tr>
<tr>
<td>Lorazepam (use if liver function significantly impaired)</td>
<td></td>
<td>CIWA-Ar 8-12</td>
<td>0.5mg PO hourly prn</td>
<td>1mg PO 2 hourly prn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CIWA-Ar 13-20</td>
<td>1mg PO 1 hourly prn</td>
<td>2mg PO 2 hourly prn</td>
</tr>
<tr>
<td>Age &gt;70yrs</td>
<td></td>
<td>0.5mg PO hourly prn</td>
<td>1mg PO 2 hourly prn</td>
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<tr>
<td>Clonazepam IV (use if patient unable to take oral benzodiazepines – see precautions above)</td>
<td></td>
<td>CIWA-Ar 8-12</td>
<td>0.25mg IV hourly prn</td>
<td>0.5mg 2 hourly prn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CIWA-Ar 13-20</td>
<td>1mg IV prn</td>
<td>2mg IV 2 hourly prn</td>
</tr>
<tr>
<td>Age &gt;70yrs</td>
<td></td>
<td>0.25mg IV hourly prn</td>
<td>0.5mg 2 hourly prn</td>
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<tr>
<td><strong>Preventive’ seizure regimen</strong></td>
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<td>for patients with a past history of seizures related to alcohol withdrawal</td>
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<tr>
<td>Diazepam (first-line)</td>
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<td>5mg PO every 8 hours for 48 hours</td>
<td>10mg PO every 8 hours for 48 hours</td>
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<tr>
<td>Lorazepam (use if liver function significantly impaired)</td>
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<td></td>
<td>0.5mg PO every 8 hours for 48 hours</td>
<td>1mg PO every 8 hours for 48 hours</td>
</tr>
<tr>
<td>Clonazepam IV (use if patient unable to take oral benzodiazepines – see precautions above)</td>
<td></td>
<td></td>
<td>0.25mg IV every 8 hours for 48 hours</td>
<td>0.5mg IV every 8 hours for 48 hours</td>
</tr>
<tr>
<td><strong>Notes</strong></td>
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<tr>
<td>• a doctor with appropriate airways skills must be present during IV administration of a benzodiazepine and for at least 30 minutes afterwards the patient should be nursed in a high dependency area or ICU</td>
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</table>

# CNS depressants include antipsychotics (e.g. quetiapine, olanzapine) or sedating antihistamines (e.g. promethazine)
Table 3: Management of alcohol withdrawal using a ‘symptom-triggered’ benzodiazepine regimen (see Table 2 for doses) and CIWA-Ar scores (See Alcohol Withdrawal Monitoring Chart)

<table>
<thead>
<tr>
<th>SEVERITY OF WITHDRAWAL</th>
<th>ACTIONS</th>
</tr>
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| Mild withdrawal        | > Frequent reassurance, reorientation and attention to the nursing environment are usually sufficient.  
> Medication is generally not necessary for mild withdrawal apart from prophylactic thiamine  
> CIWA-Ar alcohol withdrawal observations should be performed every FOUR hours.  
> Monitor vital signs. |
| Moderate to severe withdrawal | > Consider need for 1:1 nursing  
> For patients without significant concurrent illnesses or conditions, give oral diazepam 1-2 hourly PRN (or oral lorazepam or IV clonazepam if indicated – see Table 2) until either the CIWA-Ar alcohol withdrawal score is <8 or three doses in total have been given.  
> If the patient is not in a high dependency area, ICU or emergency department, a doctor with appropriate airways skills must be present during IV administration of a benzodiazepine and for at least 30 minutes afterwards.  
> CIWA-Ar alcohol withdrawal observations should be performed every TWO hours.  
> Monitor sedation scores at the time of administration of a benzodiazepine and one hour later. Notify doctor if sedation score ≥2; do not administer further doses of benzodiazepine (or opioid, if ordered).  
> Monitor vital signs.  
> Oxygen administration is recommended and must be given if patient is also receiving an opioid or if sedation score is ≥2  
> If, after 6 hours or 3 doses of benzodiazepine (whichever comes first), CIWA-Ar alcohol withdrawal score is increasing or remaining ≥8, discuss with medical registrar, ICU registrar, or the hospital Drug and Alcohol Service or DACAS [24 hour phone number 7087 1742]. |
| Very severe withdrawal  | > This is a medical emergency and specialist intensive care, medical, psychiatric or Drug and Alcohol Services assistance should be obtained promptly.  
> Initiate a medical emergency, Code Blue or Code Black call as appropriate.  
> Transfer from country hospitals to a major metropolitan hospital may be required, depending on resources available. Refer to Statewide Emergency Medical Retrieval Service (MedSTAR, ph 13 7827).  
> There is a high risk of respiratory depression and apnoea associated with administration of IV or large oral doses of benzodiazepine. Therefore there must be 1:1 nursing, preferably in a high dependency or intensive care unit.  
> Higher doses of oral diazepam may be needed – e.g. up to 20 mg hourly PRN (or equivalent lorazepam dose if indicated – i.e. 2 mg).  
> If the oral route is not suitable, give a slow IV injection of clonazepam (or midazolam) over 3-5 minutes, repeated if necessary up to four times in the first 30 minutes  
> Continue to administer IV doses at intervals of 10–30 minutes as necessary  
> If patient is still at risk of alcohol withdrawal, continue CIWA-Ar alcohol withdrawal score observations every FOUR hours, or as above.  
> Aim to decrease CIWA-Ar score to ≤15.  
> Monitor CIWA-Ar alcohol withdrawal and sedation scores as well as vital signs at least every 30 mins while CIWA-Ar score is ≥20.  
> Administer oxygen. |

**MONITORING**

**ACTIONS**

> Medical review of all patients is mandatory after the patient has received three doses of benzodiazepine or after 6 hours (whichever occurs first) before further doses of benzodiazepine can be given.  
> The review should confirm adequate response to diazepam without over-sedation.  
> In country hospitals this review may occur by telephone between the responsible medical officer and the senior nurse on duty.  
> If patient is still at risk of alcohol withdrawal, continue CIWA-Ar alcohol withdrawal score observations every FOUR hours, or as above.  
> If treatment has been required, continue observations until CIWA-Ar alcohol withdrawal score is <8 for 24 hours after the last dose of diazepam.  
> Treatment should be reviewed if ≥120 mg diazepam is required in any 24 hour period.
4.5 Specific situations

Country areas

In country areas clinicians should consider the expertise and resources available locally. The patient may need to be transferred to a metropolitan hospital.

Patients with severe chronic liver disease

> Generally if there is decompensated liver disease and/or disturbance of hepatic synthetic functions, management needs to be modified. The advice of a specialist physician is necessary.
> It is important to distinguish between alcohol withdrawal and hepatic encephalopathy. Injudicious administration of benzodiazepines may exacerbate confusion and is dangerous.
> The dose of benzodiazepine may need to be much smaller than for patients with normal liver function because of impaired metabolism.
> Use of lorazepam may be considered as an alternative to diazepam (lorazepam 0.5 mg = diazepam 5 mg) as its shorter half-life and absence of active metabolites may reduce the risk of excessive sedation.

Patients receiving other CNS depressants such as opioids, antipsychotics and antihistamines

> The combination of a benzodiazepine with other drugs that cause depression of the CNS such as opioids, antipsychotics (e.g. quetiapine, olanzapine) or sedating antihistamines (e.g. promethazine) will significantly increase the risk of respiratory depression.
> Smaller doses of benzodiazepines must be prescribed in order to reduce the risk of excessive sedation/respiratory depression. Sedation scores should be monitored on a regular basis and the sedation score kept below 2 (2 = easy to rouse but cannot stay awake).

Respiratory comorbidities

> Some patients, e.g. those with significant COPD, may be at higher risk or respiratory depression.
> Seek advice from medical registrar [admitting team in hours or senior registrar after hours], ICU registrar, or responsible medical officer in country areas [who may need to confer with DACAS, ph 7087 1742].

Pregnant patients

Alcohol has harmful effects on the foetus and management of withdrawal is complex. Withdrawal increases the risk of spontaneous abortion and pre-term delivery. Seek specialist advice from:
> Obstetrics and Gynaecology registrar where available [regarding obstetric management].
> In country areas, an obstetrician or GP-obstetrician should be involved in their care. If significant withdrawal is predicted the patient should be managed in a hospital with a birthing facility.
> DACAS (ph 7087 1742) regarding alcohol or drug management.

**Elderly patients**

> Patients over 70 years may require lower doses of benzodiazepines as they are often more sensitive to any sedatives.
> Pulse and BP responses in withdrawal may be altered.
> Consider lorazepam rather than diazepam due to shorter half-life and no active metabolites.

**Patients identified as Aboriginal or Torres Strait Islanders and other patients from culturally and linguistically diverse backgrounds**

Ensure that:

> They understand any questions asked.
> They are supported by an Aboriginal Liaison Officer or family as appropriate wherever possible.
> An interpreter is used when needed.

**Patients who are “Nil by Mouth”**

> Will require IV clonazepam
  > The patient should be nursed in a high dependency area, ICU or emergency department.
  > If the patient is not in a high dependency area, ICU or emergency department, a doctor with appropriate airways skills must be present during IV administration of a benzodiazepine and for at least 30 minutes afterwards.
> Seek advice from admitting team medical registrar or ICU registrar or the responsible medical officer in country areas [who may need to confer with DACAS, ph 7087 1742].

**Seizures**

> Seizures may be due to alcohol withdrawal or other conditions.
> A full medical assessment is required to exclude other causes and a short admission to hospital is recommended. Give diazepam or lorazepam for 48 hours to patients who have a history of alcohol withdrawal seizures even if liver disease is present. This may mean providing discharge medication if patient is fit to discharge at 48 hours. Seek advice if the patient has liver disease with significant synthetic dysfunction as lorazepam may be indicated.
> Patients who present to hospital after a seizure that may be related to alcohol withdrawal are at high risk of further seizures and therefore should be admitted for observation for 48 hours.

**Poor response to benzodiazepines, use of haloperidol or other antipsychotics**

> Poor response to benzodiazepines requires urgent medical review. Assess for organic contributors to symptoms.
> Seek advice from medical registrar [admitting team in hours or senior medical
registrar after hours] or the responsible medical officer in country areas [who
may need to confer with DACAS, ph 7087 1742].

> Haloperidol or other antipsychotic medications (e.g. olanzapine or
risperidone) may be required in addition to a benzodiazepine to control
symptoms of alcohol withdrawal, especially when psychotic symptoms such
as hallucinations or paranoid ideation (particularly if acted upon with
aggression or agitation) are pronounced. Refer to LHN guideline on
management of delirium or severe behavioural disturbance.

**Violence risk**

If violence occurs or situation is assessed as being at high risk of violence, initiate a
Code Black call.

> Refer to hospital code black procedure.

**4.6 Cessation of treatment**

Continue CIWA-Ar at frequency indicated in table 3 as well as 4 hourly vital signs, for 24
hours. If below 8 for 24 hours then scoring can be discontinued.

> The objective should be to have the patient off benzodiazepines before
discharge to avoid the development of secondary benzodiazepine
dependence. Concern about benzodiazepine dependence should not delay the
management of acute alcohol withdrawal.

> For underlying or ongoing anxiety/agitation the treating team should decide on
appropriate treatment/medication.

**4.7 Discharge and follow-up**

Once withdrawal is complete, patients should be informed about the long-term treatment
and other rehabilitation options available for management of alcohol dependence. The
discharge letter to their general practitioner should include the diagnosis of alcohol
dependence and give information about referral options.

Alcohol dependence is generally a chronic relapsing condition. Patients should receive
information about services in the community and arrangements made for follow up.

Discuss with the Drug and Alcohol CL Service (if available) or with DACAS, (24 hour
phone number 7087 1742). Advice about accessing community-based services can be
obtained from the Alcohol and Drug Information Service 1300 13 13 40.

Consider:

> Self-help groups
  - Alcoholics Anonymous [24 hour phone number, 1300 222 222 or 8227 0334]
  - Smart Recovery 08 8305 9393

> Specific counselling

> Motivational interviewing

> Anti-craving therapy with naltrexone or acamprosate
4.8 Other Comments

Use of alcohol
There is no place for the prescription of alcoholic beverages in the treatment of alcohol withdrawal.

Legal options for treatment without consent
Alcohol withdrawal delirium is considered an illness under the *Mental Health Act*. A patient who has delirium related to alcohol withdrawal and who is aggressive, non-compliant with treatment or at risk of absconding, may be treated under the *Medical and Palliative Care Act* in emergency situations. An Inpatient Treatment Order [ITO] may also be used under the *Mental Health Act*. Refer to the SA Health Policy Directive *Providing Medical Assessment and/or Treatment where consent cannot be obtained* for more information.
Patients in these situations require close nursing supervision.
The instigation of an ITO must be reported to the hospital psychiatric team.

Restraint
Agitated patients may need to be restrained physically. Restraint should not occur without an ITO, and protocols for restraining patients must be adhered to.

Driving
If a treating medical practitioner has reasonable cause to believe the patient may be likely to endanger the public, if the person drove a motor vehicle, then the Registrar of Motor Vehicles should be notified. Seek advice from DACAS [7087 1742].

4.9 Appendices
4.9.1 Appendix A: Average Daily Alcohol Consumption Chart

Use this chart to estimate the patient’s alcohol consumption. The number of standard drinks in common serving sizes of alcohol is shown. One standard drink is equal to 10 grams of alcohol.

<table>
<thead>
<tr>
<th>Types of alcohol</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
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<tbody>
<tr>
<td>Beer</td>
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<tr>
<td>Table wine</td>
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<td></td>
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<tr>
<td>Spirits</td>
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<tr>
<td>Fortified wine</td>
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</tbody>
</table>

Weekly total (drinks)

Average standard drinks per day in past week (Weekly total divided by 7)

Average daily alcohol consumption during the past week in grams (standard drinks times 10)
4.9.2 Appendix B Alcohol withdrawal management flowchart

**CAUTION – Do not proceed to flow chart before reading these cautions**

Do not use when patient has severe medical and/or psychiatric comorbidities that may mimic alcohol withdrawal, such as sepsis, hypoxia, hypoglycaemia, severe pain, or encephalopathy. Similar signs and symptoms may be seen in some patients after surgery or trauma.

The CIWA-Ar alcohol withdrawal scale should not be used if there are significant communication problems.

Do not administer any benzodiazepines until:
- a diagnosis of alcohol withdrawal is confirmed
- blood alcohol concentration (BAC) is less than 0.1g/100mL
- any concurrent illness has been fully assessed, and
- a full review of current medications has been undertaken (note that the combination of other CNS depressants with opioids will significantly increase the risk of respiratory depression).

Once the diagnosis of alcohol withdrawal is established, initiate treatment without further delay.

If the patient is pregnant, seek advice regarding obstetric management.

For specialist advice call Drug and Alcohol CL Service (if available) or DACAS, 24 hour phone number 7087 1742.

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**History of seizures:**
- Give diazepam 10 mg PO 8 hourly (on a regular basis) – continue for 48 hours
- If prescribed opioids or other CNS depressants give 5mg 8 hourly for 48 hours
- Record sedation score hourly for 24 hrs and then 2 hourly
- Notify doctor if sedation score ≥ 2; do not administer further doses of diazepam (or opioid, if ordered)
- Oxygen administration is recommended and must be given if patient also receiving an opioid or if sedation score ≥ 2

**Symptom triggered regimen:**
- If prescribed opioids or other CNS depressants give diazepam 1 hourly PRN orally every 1 hr for up to 3 doses
  - CIWA-Ar  8–12     5 mg
  - CIWA-Ar 13–19  10 mg
  - Any patient > 70 yrs      5 mg
- If not, then give diazepam every 2 hrs PRN orally for up to 3 doses
  - CIWA-Ar  8–12   10 mg
  - CIWA-Ar 13–19  20 mg
  - Any patient > 70 yrs     10 mg
- Record sedation score at the time of administration of each dose and one hour later
- Notify doctor if sedation score ≥ 2; do not administer further doses

**Patient at risk of alcohol withdrawal?**

**Yes**

**Previous history of alcohol withdrawal seizures?**

**Yes**

**In addition**

Continue CIWA-Ar alcohol withdrawal observations and manage patient according to CIWA-Ar score and sedation

**YES**

**Patient confused?**

**YES**

**CIWA-Ar ≥ 8?**

**NO**

Continue CIWA-Ar observations and manage according to score

Medical review of ALL patients after 3 doses of benzodiazepine or at 6 hrs (whichever occurs first) is mandatory before further

**YES**

**CIWA-Ar score increasing or > 12 at 6 hrs?**

**NO**

Diazepam required >120 mg in 24 hour period?

**NO**

If patient is still at risk of alcohol withdrawal continue observations every 4 hours and continue ‘symptom-triggered’ regimen.

If treatment has been required, continue observations until CIWA-Ar alcohol withdrawal score < 8 for 24 hrs

**NOTE lorazepam should be used instead of diazepam where there is severely impaired liver function**
- 0.5mg lorazepam ≈ 5mg diazepam ≈ 0.25mg clonazepam
- IV benzodiazepines not appropriate in general wards

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**Yes**

**Previous history of alcohol withdrawal seizures?**

**Yes**

**In addition**

Continue CIWA-Ar alcohol withdrawal observations and manage patient according to CIWA-Ar score and sedation

**YES**

**Patient confused?**

**YES**

**CIWA-Ar ≥ 8?**

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- IV benzodiazepines not appropriate in general wards
5. Roles and Responsibilities

- **Chief Executive, SA Health** is responsible for ensuring there is a consistent approach to the management of alcohol withdrawal in acute hospitals.
- **Chief Executive Officers of the Local Health Networks (LHNs)** are responsible for ensuring effective implementation of this guideline.
- **Clinical Directors and Managers** are responsible for ensuring all clinical staff (including contractors and consultants) are aware of the content of this guideline and have access to it.

6. Reporting

Any medication incidents should be reported via the Safety Learning System (SLS).

7. EPAS

N/A

8. National Safety and Quality Health Service Standards

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<td>Governance for Safety and Quality in Health Care</td>
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<td>Preventing &amp; Controlling Healthcare associated infections</td>
<td>Medication Safety</td>
<td>Clinical Handover</td>
<td>Blood and Blood Products</td>
<td>Preventing &amp; Managing Pressure Injuries</td>
<td>Recognising &amp; Responding to Clinical Deterioration</td>
<td>Preventing Falls &amp; Harm from Falls</td>
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9. Other

N/A

10. Risk Management

N/A

11. Evaluation

Hospital system performance will be monitored annually through the proportion of alcohol withdrawal episodes complicated by delirium. DASSA will also take comments regarding improvement of this guideline via email (DASSACLRAH@health.sa.gov.au).
12. Definitions

In the context of this document:

**alcohol withdrawal** means: a physiological response to abrupt cessation or significant reduction in alcohol intake in a person who has been drinking alcohol heavily for a prolonged period of time and who is dependent. The signs and symptoms of alcohol withdrawal may be grouped into three major classes – autonomic hyperactivity, gastrointestinal, and cognitive and perceptual changes – and may feature uncomplicated or complicated withdrawal.

**alcohol withdrawal seizures** mean: generalised tonic-clonic type seizures that can occur in the setting of alcohol withdrawal. Their occurrence is somewhat independent of the severity of the withdrawal. They usually occur within 6 to 48 hours of the person’s last drink. They tend to be recurrent and become more frequent with successive episodes of alcohol withdrawal.

**Clinical Institute Withdrawal Assessment for Alcohol** means: a revised version (CIWA-Ar) observation scale is used to monitor patients withdrawing from alcohol or at risk of withdrawal. Refer to the Alcohol Withdrawal Monitoring Chart for details of the CIWA-Ar.

**delirium tremens** means: one of the complications of alcohol withdrawal. The features of alcohol withdrawal delirium (also known as delirium tremens or DTs) are disturbance of consciousness and changes in cognition or perceptual disturbance. The terms ‘alcohol withdrawal delirium’ and ‘delirium tremens’ can be used interchangeably. Alcohol withdrawal delirium is an acute organic brain syndrome characterised by confusion and disorientation, agitation, hyperactivity and tremor. Alcohol withdrawal delirium typically commences 2 to 3 days after cessation of alcohol intake and usually lasts for a further 2 to 3 days, although it can persist for weeks.

**Wernicke’s encephalopathy** (WE) means: a form of acute brain injury resulting from a lack of thiamine (vitamin B1) that most commonly occurs in alcohol-dependent people with poor nutrition. In alcohol-dependent patients thiamine deficiency occurs due to poor dietary intake and/or intestinal malabsorption. Its features include confusion [most commonly], ataxia and abnormal eye signs.

13. Associated Policy Directives / Policy Guidelines

SA Health Policy Directive Dealing with Intoxicated Patients

SA Health Policy Directive Providing Medical Assessment and or Treatment Where Patient Consent Cannot be Obtained

SA Health Policy Guideline Management of seizures in the context of harmful drinking

14. References, Resources and Related Documents
Related documents

SA Health Alcohol Withdrawal Assessment and Observation Chart

Relevant legislation, directives and guidelines

Consent to Medical Treatment and Palliative Care Act 1995
Mental Health Act 2009
Motor Vehicles Act 1959

References


