

Management of Withdrawal from Alcohol and Other Drugs

Clinical Guidance

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The NSW Ministry for Health acknowledges the traditional custodians of the lands across NSW. We acknowledge that we live and work on Aboriginal lands. We pay our respects to Elders past and present and to all Aboriginal people.

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Background

01

1.1 About this document

This document is to assist clinicians managing alcohol and other drug (AOD) withdrawal across a range of settings including hospitals, AOD specialist inpatient units, residential facilities such as non-government AOD services, nursing homes and corrective services, primary health and community settings including general practice, Aboriginal Community Controlled Health Organisations and community and welfare services.

1.2 Development of the Clinical Guidance

This clinical guidance has been informed by a review of the current evidence and expert clinical experience where such evidence is not available. An Expert Steering Committee provided direction on the structure and contents of the guidance. Further input occurred through a consultative group. The participants in both these groups are acknowledged in Appendix 2.

The Ministry of Health commissioned a rapid review of the evidence to inform the development of the guidance ([Lintzeris N et al, 2019](#)). The review collated and evaluated peer-reviewed evidence on effective management of withdrawal from alcohol and other drugs in outpatient, inpatient and residential settings from 2008 onwards. This included evidence regarding psychosocial, physical and pharmacological interventions in the management of withdrawal from each of the following substances:

- Alcohol.
- Benzodiazepines.
- Amphetamines, methamphetamine and cocaine.
- Methylenedioxy Methamphetamine (MDMA).
- Opioids.
- Cannabis.
- Pregabalin/Gabapentin.
- Gamma Hydroxybutyrate (GHB) and its precursors.

The rapid review also examined evidence regarding which withdrawal management strategies are the most effective in improving treatment outcomes for special population groups and the differential effects of treatment setting. Where evidence was lacking, the Expert Steering Committee drew on clinical experience to develop a consensus opinion on good practice.

Sections on individual substances and specific population groups were initially drafted by experts in the field as shown in Appendix 2. The draft sections were reviewed and amended by the Expert Steering Committee by consensus, then circulated widely for comment. The consultation draft was electronically distributed to local health district (LHD) drug and alcohol clinicians and others upon request. In person consultation occurred with the Aboriginal Drug and Alcohol Network, Aboriginal patients/consumers and the Ministry of Health Consumer Reference Committee, as well as AOD nurses forums.

The Expert Steering Committee decided against including **nicotine withdrawal** in this guidance as NSW Health has separate Guidelines for managing tobacco cessation, which are available at <https://www.health.nsw.gov.au/tobacco/Pages/managing-nicotine-dependence.aspx>.

The [Victorian Guidelines for AOD Withdrawal](#), produced by Turning Point, have been substantially drawn upon with the kind permission of the Victorian Department of Health and Turning Point. The alcohol section of these guidelines are based on the [National Guidelines for Treatment of Alcohol Problems](#).

1.3 How to use this document and the companion handbook

Sections 2-4 of this document contain guidance on screening, assessing and caring for patients who are experiencing or who are at risk of withdrawal from alcohol or other drugs in general. Sections 5 onwards provide information specific to individual substances. Where relevant, the sections on individual substances are cross referenced to direct you to the earlier sections that contain more detail.

A companion handbook has been developed that provides educational material and more detailed clinical guidance on treating substance withdrawal. Replace with 'It is available in the [resource section](#) of the Centre for Alcohol and Other Drugs website.

1.4 Key definitions

AOD

Alcohol and other drugs. This term is used interchangeably with 'drug and alcohol' and 'substances'.

Patient, client, consumer

This guidance chiefly uses the term patient to describe the person receiving withdrawal care. Client, consumer and person are also used at times. The terms are used interchangeably.

Settings

In this guidance, the terms inpatient, residential and community settings are used. The inpatient setting refers to treatment provided to a patient admitted to a hospital bed, whether a specialised withdrawal unit or a general hospital ward. Care in a residential setting refers to treatment provided at a drug and alcohol residential facility, usually operated by a non-government organisation. Residential settings may not have medical coverage.

Care in a community setting is non-residential treatment provided without requiring overnight stays. It can be home-based (with clinicians visiting the patient's home) or ambulatory/outpatient (with the patient attending at a clinic or medical centre). Community, ambulatory and outpatient are sometimes used interchangeably in this document.

Substance withdrawal

Withdrawal occurs in substance-dependent people who stop or reduce their substance use.

The relevant definitions of withdrawal in the two key classification systems, the World Health Organisation's International Classification of Diseases 11th Revision (ICD-11) and the Diagnostic and Statistical Manual 5th Edition (DSM 5), are compared in Table 1.1 below.

A glossary of terms and acronyms starts on page 79.

Table 1.1 Definition of withdrawal

Withdrawal state (ICD-11)	Withdrawal syndrome (DSM 5)
<p>Withdrawal is a clinically significant cluster of symptoms, behaviours and/or physiological features, varying in degree of severity and duration, that occurs upon cessation or reduction of use of a substance in individuals who have developed dependence or have used the substance for a prolonged period or in large amounts.</p> <p>Presenting features vary according to the substance.</p>	<p>Withdrawal is a syndrome that occurs following cessation or reduction in use of a substance by an individual who had maintained prolonged heavy use of the substance.</p> <p>The signs or symptoms cause clinically significant distress or impairment in social, occupational or other important areas of functioning and are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.</p>

General Principles of Withdrawal Care

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When a person is dependent on a substance, withdrawal of the drug carries risks of physical harm, psychological trauma and (rarely) death. The aim of withdrawal care is to minimise the risks associated with withdrawal and to reduce discomfort. This maximises the chance of completion of withdrawal, in turn enabling people to engage in treatment that will reduce harm in the longer term.

2.1 Rationale and underlying principles for withdrawal care

The purpose of withdrawal care is to provide appropriate support to enable withdrawal to be completed safely.

The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

Withdrawal is not a standalone treatment; it is only a part of the treatment journey. Post-withdrawal treatment planning should begin at the commencement of a supported withdrawal episode.

Underlying principles:

- The objective is safe withdrawal, not long-term abstinence. Withdrawal support is not to be withheld because of doubts about a patient's commitment to long term abstinence. Reduction in substance use is a valid goal for some patients. Specific goals will depend on patient circumstances and are to be developed in consultation with the patient.
- Withdrawal should be undertaken only if the anticipated benefits outweigh the harms.
- Choice of treatment setting is dependent on safety and likelihood of successful completion of withdrawal.

- Clinical monitoring and care are to be tailored to individual need. Care may range from psychosocial support only, to a combination of psychosocial support plus medication, to high level nursing and medical care in more severe and complex withdrawal syndromes.
- Key elements of withdrawal care include building therapeutic relationships, reducing patient discomfort, collaboration with patients and provision of supportive care.
- Withdrawal medications are prescribed for a limited duration only, usually in a reducing regimen.
- Be aware of, and avoid exacerbating, the shame, stigma and discrimination experienced by patients who use alcohol and other drugs. It can be challenging to seek advice and treatment for AOD issues, particularly withdrawal.
- Involvement of families and carers, with patient consent, can be beneficial.
- Linking to evidence-informed AOD treatment post-withdrawal is an integral part of withdrawal care. All patients require a post-withdrawal management plan and be connected to the next care provider on transfer of care.
- Withdrawal presents an opportunity to promote harm reduction via the provision of information and education about safer substance use practices. This may include a reduction in AOD consumption, safer means of drug administration, and lifestyle improvements.
- People seeking support will often have a range of other health issues. Withdrawal treatment presents an opportunity to provide holistic and integrated care to address these.

2.2 Trauma-informed care

A history of trauma and trauma-related disorders is commonly associated with substance use disorders. While it is not essential to explore the details of the trauma in the acute situation, an openness to the possibility that each patient presenting for withdrawal management has experienced significant trauma encourages clinicians to work in a way that promotes safe and collaborative experiences of treatment, that ensure re-traumatisation does not occur in treatment.

Clinician awareness of trauma and its physical, psychological and social impacts can contribute to them assisting patients in identifying their own strengths and survival strategies and encourage the mobilisation of these strengths in coping with withdrawal and working towards recovery.

The core principles of working in a trauma responsive paradigm are safety, choice, trustworthiness, collaboration and empowerment.

Research shows that positive experiences in a person's relationships enhance trauma recovery and negative experiences impede it. Actively working to promote positive experiences of relationships in withdrawal management can benefit patients, staff and services, and limit further negative impacts of trauma.

2.3 Addressing stigma and discrimination

All clinicians who treat patients who use alcohol and other drugs have a responsibility to provide care that is free from stigma and discrimination.

Patients who use alcohol and other drugs are often stigmatised as having made unhealthy or immoral choices, stereotyped as being dangerous or untrustworthy, and considered to have less right to access health services.

Stigma is a significant cause of health inequality: it can be a barrier to help-seeking and can lead to poor quality care and premature termination of treatment. It does not lead to reduced substance use.

Stigma and discrimination toward people who use substances may have a negative impact on patients':

- Willingness to access medical assistance for future or ongoing treatment of health conditions.
- Ability to receive quality therapeutic care and treatment from a broad range of health practitioners.
- Motivation to disclose their status of alcohol and/or drug use, a history of injecting, or associated medical conditions.

Clinicians are to ensure their interactions with all patients, including those who are substance dependent, are respectful, empathetic and non-judgmental.

2.4 Confidentiality and its limits

Advise the patient that the information they provide is confidential and necessary to predict and prevent serious complications. The limitations of confidentiality, in accordance with legal and professional obligations, are also to be discussed with the patient in a sensitive manner. Advise patients that the information they provide will be kept confidential unless there is risk to themselves or others. Disclosure is permitted to occur to:

- Department of Communities and Justice where care and protection of children or young people is involved.
- Mental health professionals where risk to self or others is considered part of a mental health condition.
- **Transport for NSW** where driver safety is a concern.
- Australian Health Practitioner Regulation Agency (AHPRA) if there is concern about impaired practitioners.
- Workplaces – if safe operation of heavy machinery or vehicles is a concern.

2.5 Providing COVID-safe care

The COVID-19 pandemic has highlighted the need for services and clinicians to be flexible in their provision of care depending on levels of community transmission. Use of telehealth and virtual care facilities have enabled many services to continue during the pandemic. Clinicians are advised to have virtual care facilities available and ready to be activated as the need arises. A risk assessment is to be undertaken for individual patients to determine suitability for virtual care.

Advice on effective use of virtual care is available from a range of sources – designed for clinicians and patients. This includes the **NSW Agency for Clinical Innovation** and **Turning Point**.

2.6 Accessing specialist addiction medicine advice through DASAS

The Drug and Alcohol Specialist Advisory Service (DASAS) is a free 24/7 telephone service that provides general advice to health professionals who require assistance with the clinical diagnosis and management of patients with alcohol and other drug related concerns. DASAS provides support to all health professionals, especially those working in regional, rural and remote areas of NSW or where timely local specialist drug and alcohol support is not available.

Callers to the DASAS line may include GPs, hospital doctors, nurses, mental health staff, pharmacists and other allied health professionals. DASAS can advise on managing withdrawal from specific substances and provide general advice on what AOD conditions can or cannot be safely and effectively managed in a community or general practice setting. All doctors on the DASAS line are qualified Addiction Specialists.

To contact DASAS phone 1800 023 687 from regional, rural & remote NSW or (02) 8382-1006 if within Sydney metropolitan area.

Common Withdrawal Syndromes

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Table 3.1 Common withdrawal syndromes

Alcohol	
Onset:	6-24 hours after last drink (depending on rate that blood levels fall).
Duration:	3-7 days (up to 14 days in severe withdrawal).
Features:	anxiety, agitation, sweating, tremor, nausea, vomiting, abdominal cramps, diarrhoea, anorexia, craving, insomnia, elevated blood pressure, pulse and temperature, headache, confusion, perceptual distortions, disorientation, hallucinations, seizures.
Benzodiazepine Receptor Agonists	
Onset:	1-10 days (depending on half-life of drug).
Duration:	3-6 weeks (may be longer).
Features:	anxiety, headache, insomnia, muscle aching and twitching, perceptual changes, feelings of unreality, depersonalisation, seizures.
GHB	
Onset:	1-4 hours after last use.
Duration:	Up to 21 days.
Features:	Mild-moderate withdrawal: Cravings, tremor, insomnia, diaphoresis, anxiety, nausea, tachycardia, hypertension, agitation, hyperthermia Severe withdrawal: Myoclonus, disorientation, perceptual disturbance, delirium, seizures, bradycardia, rhabdomyolysis, renal impairment.
Gabapentinoids	
Onset:	1-2 days after last use.
Duration:	3-5 days for severe symptoms, residual mild symptoms for several weeks.
Features:	headache, anxiety, craving, diarrhoea, chills, fatigue, palpitations, nausea and insomnia, agitation, diaphoresis, tachycardia, hypertension and tremor.
Cannabis	
Onset:	Within 24 hours.
Duration:	1-2 weeks.
Features:	insomnia, shakiness; irritability, restlessness, anxiety; anger, aggression.

Opioids

Onset:	6-24 hours (may be later with longer-acting opioids).
Duration:	peaks 2-4 days, ceases 5-10 days (more prolonged for longer-acting opioids).
Features:	anxiety, craving, muscle tension, muscle and bone ache, muscle cramps and sustained contractions, sleep disturbance, sweating, hot and cold flushes, piloerection, yawning, lacrimation and rhinorrhoea, abdominal cramps, nausea, vomiting, diarrhoea, palpitations, elevated blood pressure and pulse, dilated pupils.

Psychostimulant

Onset:	6-12 hours (cocaine); 12-24 hours (amphetamines).
Duration:	Several weeks for withdrawal phase, then months for extinction.
Features:	3 phases. Crash: fatigue, flat affect, increased sleep, reduced cravings. Withdrawal: fluctuating mood and energy levels, cravings, disturbed sleep, poor concentration. Extinction: persistence of withdrawal features, gradually subsiding.

Assessment and Care Planning

04

4.1 Primary aims of assessment

Assessment is the first step in managing AOD withdrawal. The primary aims are to:

- Predict and manage the risks that may confront the patient because of withdrawal.
- Identify and respond to co-occurring conditions.
- Identify the specific needs of the patient to enhance the likelihood of completing withdrawal (ie to match treatment to patient needs).
- Commence planning for post-withdrawal care.
- Begin building a therapeutic relationship with the patient.

4.2 Key elements in assessment

Explain the purpose of each element of the assessment process to the patient, being mindful of whether the patient's capacity to process information is affected by intoxication, withdrawal symptoms or cognitive impairment.

Provide the patient with information about the signs and symptoms of withdrawal, the course of withdrawal and options for withdrawal management. Emphasise that withdrawal is not a stand-alone treatment and is unlikely to be successful without post-withdrawal treatment.

The assessment is to include:

- Substance use history covering each substance used, risks associated with multiple substance use and the patient's history of withdrawal and any associated complications. See Appendix 8 for tips on taking a substance use history.
- Medical and mental health history.
- Psychosocial assessment to identify expectations, supports, barriers and preferences that may influence withdrawal management.
- Physical examination that includes an assessment of intoxication and withdrawal signs.
- Mental state examination.

- Appropriate laboratory investigations, including testing for blood borne viruses (BBV)/ HIV and (for women of child-bearing age) pregnancy. Ensure all results are followed up. Appendix 9 contains the recommended protocol for BBV follow up.
- Risk assessment (see 4.3 below).

Clinicians are to ensure that personal values and stereotypes do not interfere with effective assessment of the patient.

For more detailed information on each of these elements, see the companion handbook.

4.3 Risk assessments

4.3.1 Assessing risk of harm to self and others

Preliminary risk assessment

Undertake a preliminary risk assessment of danger to self and others and whether a more detailed risk assessment is indicated.

Intoxication complicates the immediate suicide risk assessment. If suicide risk is identified in an intoxicated person, he or she should be monitored in an appropriate and safe setting until a full assessment is conducted. Enduring risk cannot be appropriately assessed until the person is sober.

There is no current rating scale that has a proven predictive value in clinical assessment of suicide. Referral to specialist mental health services may be required. Replace with: Further guidance is available in [NSW Policy Directive Clinical Care of People Who May Be Suicidal](#).

Screening questions for suicide risk:

- Have things been so bad lately that you have thought you would rather not be alive?
- Have you had any thoughts of harming yourself?
- Are you thinking of suicide?
- Have you ever tried to harm yourself?
- Have you made any current plans?
- Do you have access to a firearm? Access to other lethal means?

Management of immediate risk

If there is concern about the safety of the patient, make a referral to the Local Health District mental health team: the withdrawal management will take less of a priority. The NSW Mental Health Intake Line is 1800 011 511 and additional information can be found here:

[NSW Mental Health information](#)

4.3.2 Identifying and responding to domestic violence

Questions about domestic violence (DV) must always be included in an assessment. DV screening for women provides a critical opportunity for the disclosure of domestic violence and to offer women information, referral and support. The [NSW Health Policy and Procedures for Identifying and Responding to Domestic Violence](#) mandates screening to be undertaken in key clinical areas, including AOD services, as part of routine assessment for women over 16.

If the patient is in **immediate danger** contact Police or emergency services on 000.

Where there is concern for the safety of children or young people contact the Child Protection Helpline 13 21 11.

For men experiencing domestic and family violence contact Mensline Australia on 1300 789 978.

Men who are perpetrators of domestic and family violence can contact Men's Referral Service 1300 766 491.

4.3.3 Child Protection

On initial assessment and throughout treatment it is critical to ask about the safety, welfare and wellbeing of any children and young people in the patient's care. This may include a patient's own children, those living at the same residence, or children and young people to whom the patient has access.

The duty to report possible harm through abuse or neglect overrides the duty to maintain patient confidentiality. Where a child or young person is at risk of significant harm, health workers must respond. This includes making a report to the NSW Child Protection

Helpline under the *Children and Young Persons (Care and Protection) Act 1998*. Use the online [Mandatory Reporter Guide \(MRG\)](#) to inform initial decision making. NSW Health staff may contact the NSW Health Child Wellbeing Unit for further advice on 1300 480 420.

A parent or carer of children wanting to withdraw from alcohol or other drugs **is not** itself a reason to make a child protection report to the Department of Communities and Justice.

4.3.4 Screening for gambling disorder

Screen all patients for gambling disorder as part of the assessment. Problematic gambling is common in patients with mental illness and substance use disorders. Substance use may lead to disinhibition and excessive gambling. Gambling Disorder is defined by the DSM 5 as "persistent and recurrent problematic gambling behaviour leading to clinically significant impairment or distress".

The Lie-Bet Questionnaire is a commonly used screening tool and includes the following two questions:

"Have you ever had to lie to people important to you about how much you gambled?"

"Have you ever felt a need to bet more money?"

If a patient answers yes to one or both questions a further assessment should be undertaken.

4.4 Formulating the treatment plan

Summarise the patient's overall assessment to inform the treatment plan. Identify:

- Potential risks to the patient during withdrawal.
- Problems and barriers that may prevent the patient completing withdrawal.
- Medical, mental health and social interventions that have been indicated by the assessment.
- The patient's treatment goals (for example, reduced substance use or abstinence).
- AOD treatment following completion of withdrawal.

See the handbook for more detailed information on treatment planning.

4.4.1 Setting

Consider whether the patient is most appropriately treated in an inpatient, residential or community (i.e. home-based/ambulatory/outpatient) setting. Re-evaluation of the setting is an essential part of the ongoing assessment of patients in withdrawal. When indicated, patients should be transferred to a more suitable treatment setting (either more or less intensive) as soon as possible.

Community-based withdrawal management is contraindicated if there is risk to the safety of the patient or others in the household or community or the medications to be used are high risk.

4.4.2 Monitoring

The frequency of observations and evaluation of progress will depend on the severity of withdrawal and the setting. Where there are validated scales (e.g. the Clinical Institute Withdrawal Assessment of Alcohol Scale revised or CIWA-Ar) these should be used.

4.4.3 Medication

Medication is used in withdrawal to provide symptomatic relief and treat complications and coexisting conditions. This can be an important component of withdrawal management as it optimises the individual's clinical experience of withdrawal and reduces the possibility of premature discharge or increased anxiety during withdrawal. However, caution must be exercised when administering adjunctive psychoactive medications for additional symptomatic management such as diazepam or olanzapine as, if prescribed injudiciously, they can increase the risk of intoxication, sedation and depressed respiration.

4.4.4 Routine supportive care

The aim of supportive care is to reduce discomfort and distress and to enhance the patient's ability to complete withdrawal successfully. Supportive care involves:

- Providing information, harm reduction and health promotion.
- Counselling and brief intervention aimed at helping the patient cope with symptoms and cravings, and with maintaining motivation.
- Specific strategies for addressing agitation, anger, perceptual disturbances and sleep disturbances.
- Frequent orientation, reassurance and explanation of procedures to patients with thought or perceptual disturbances, as they can easily misinterpret actions or events around them.
- Crisis intervention, addressing accommodation, personal safety, or other urgent welfare issues.

Further information on supportive care is collated in Appendix 10.

4.5 Continuing care

Withdrawal treatment does not confer long term benefits unless followed by other drug and alcohol interventions. Actively link patients with ongoing AOD treatment services post-withdrawal, including AOD counselling, rehabilitation services, relapse prevention, psychological therapies, family support, accommodation assistance and financial and legal services.

When planning continuing care, patient choice is the primary consideration. Other considerations for choosing continuing care include the stability of their accommodation, whether the person lives alone or with others who use substances, and the extent of the patient's social network and existing links with health professionals in their local community. The patient's physical and mental health, cognitive capacity and financial situation (including private insurance cover) are also relevant as are obligations such as employment, study and family responsibilities. The patient's past experiences with treatment and logistical considerations such as travel are also to be considered.

Appendix 3 provides information and links to continuing care services.

4.5.1 Safety planning

The period after withdrawal is a time of high risk of relapse and in some patients increased overdose risk. It can also be associated with high levels of distress. Negotiate a safety plan with the patient prior to completion of withdrawal care that includes emergency numbers to call and where to access support.

4.5.2 Reducing harm

Give the patient information that reduces risks associated with substance use in case they resume use. Both inpatient and outpatient withdrawal provide opportunities for harm reduction interventions.

Explain to patients that after withdrawal they have an increased risk of overdose due to reduced tolerance to the substance. If they resume substance use they can reduce risk of overdose or toxicity by using smaller doses than previously. For opioid users, provide take home naloxone and advice on how to use it.

Provide advice to reduce the risk of blood borne viruses. For injecting drug users, counsel on safer injecting practices including use of sterile injecting equipment to reduce risk of blood borne transmission, give information about needle and syringe programs, and where possible provide sterile injecting kits to take home. Discuss non-injecting routes of administration such as oral or rectal ('shafting /shelving') to reduce injecting and smoking related harms. Counsel on avoiding shared drug use practices including intranasal ('snorting') equipment and pipes and advise on cleaning equipment.

Also recommend against driving or operating any heavy machinery after using stimulants or sedating drugs.

4.6 Specific population groups

Appendix 4 outlines considerations and clinical tips for the following specific population groups:

- Pregnant women.
- Patients with co-occurring mental health disorders.
- Gender and sexuality diverse patients.
- Culturally and linguistically diverse patients.
- Older patients.
- Aboriginal patients and
- Adolescents and young adults (12-24 years).

Alcohol

05

5.1 Signs, symptoms and course of alcohol withdrawal

Table 5.1 Signs and symptoms of alcohol withdrawal

Autonomic overactivity	Gastrointestinal	CNS changes
Sweating	Anorexia	Anxiety
Fever	Nausea	Insomnia or vivid dreams
Hypertension	Vomiting	Seizures
Tremor	Dyspepsia	Delusions, hallucinations
Tachycardia		Delirium

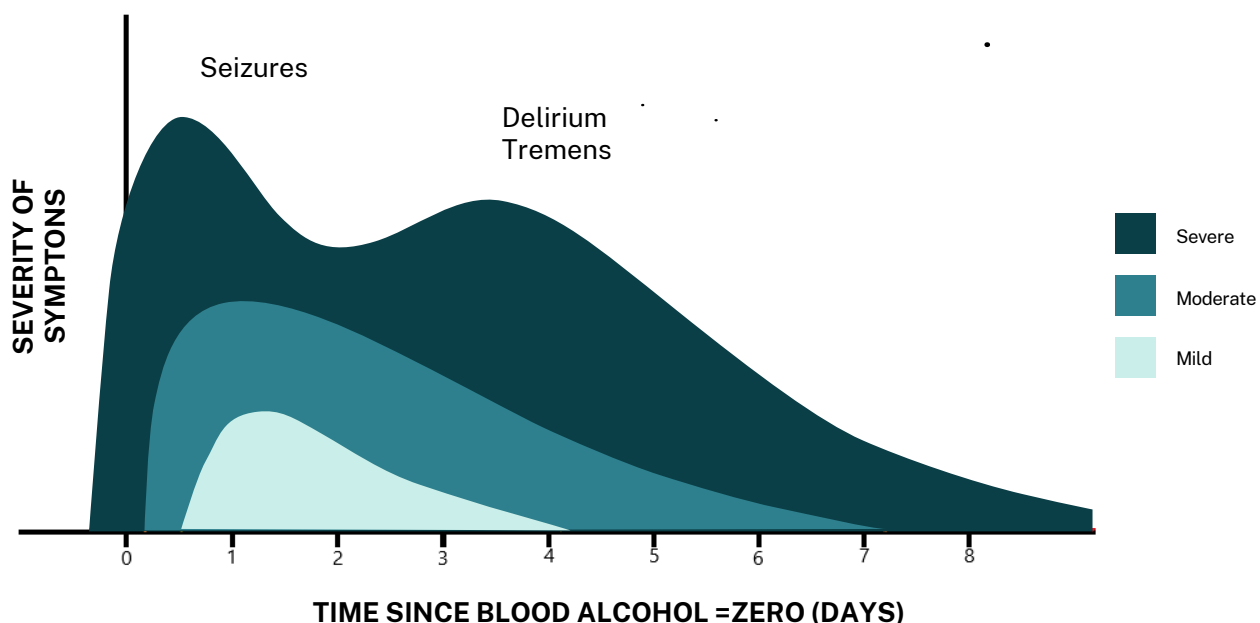
The signs and symptoms of alcohol withdrawal may be grouped into three major classes: autonomic, gastrointestinal, and central nervous system (CNS) changes.

Onset of alcohol withdrawal is usually 6-24 hours after the last drink and may occur before the blood alcohol level reaches zero. Use of benzodiazepines or other sedatives may delay the onset of withdrawal. Usually, withdrawal is brief and resolves after 2-3 days without treatment; occasionally, withdrawal may continue for up to 10 days and in rare cases, 14 days.

In some severely dependent drinkers, simply reducing the level of consumption may precipitate withdrawal, even if they have consumed alcohol recently. Withdrawal can commence when the blood alcohol level is decreasing, even if the patient is still intoxicated.

Seizures occur in about five per cent of people withdrawing from alcohol. They occur early (usually 6-24 hours after the last drink), so typically before arrival to hospital or in the ED. Seizures are grand mal in type (i.e. generalised, not focal) and are single in about 75 per cent of cases.

Figure 5.1 Time course of alcohol withdrawal¹



¹ Figure 5.1 design: Toby Marchant

Table 5.2 Clinical features of alcohol withdrawal delirium

Central Nervous System	Other
Confusion and disorientation	Gross tremor
Extreme agitation or restlessness	Fluctuations in blood pressure or pulse
Paranoid ideation, typically of delusional intensity.	Disturbance of fluid balance and electrolytes
Distractibility and accentuated response to external stimuli.	Hyperthermia
Hallucinations affecting any of the senses, though typically visual (often insects like ants or spiders).	

Alcohol withdrawal delirium, or delirium tremens ('the DTs'), is the most severe form of alcohol withdrawal syndrome, and a medical emergency. It usually develops 2-5 days after stopping or significantly reducing alcohol consumption. The usual course is three days however it can be up to 14 days. Its clinical features are described in Table 5.2 (above).

5.1.1 Factors affecting severity of withdrawal

The severity of alcohol withdrawal is difficult to predict. At risk patients include those who have: a history of previous severe withdrawal; higher blood alcohol level on arrival or presenting in withdrawal; coexisting medical conditions; seizures early in withdrawal or co-occurring dependencies on other central nervous system depressants.

5.2 Screening

All patients admitted to hospitals or presenting to the emergency department are to undergo screening for alcohol use to identify those at risk of alcohol withdrawal. Check local protocols for screening tools to be used and timeframes for screening. Example screening questions are provided in Appendix 5 and [here](#). Anyone who reports alcohol consumption is to

be asked about the amount consumed and, for daily drinkers, features of [alcohol use disorder](#) including previous withdrawal. If a risk is identified, the patient is to be monitored in hospital with an alcohol withdrawal rating scale.

The [National Guidelines for Treatment of Alcohol Problems](#) recommends that General Practitioners routinely screen for harmful alcohol use, noting that clinical judgement alone identifies only 60 per cent of patients with alcohol use disorder. Tools developed for the primary care setting are available on the RACGP website, including the [Drink-less program](#) and the [smoking, nutrition, alcohol and physical activity \(SNAP\) framework](#).

5.3 Assessment

The usual assessment for withdrawal should be undertaken as summarised in section 4.2 including:

- Substance use history and withdrawal history covering all substances used.
- Medical history and coexisting medical conditions.
- Physical examination and cognitive assessment including intoxication and delirium.
- History of seizures and delirium.
- Mental health history, mental state examination – alcohol intoxication and dependence can be associated with suicidality and major depressive symptoms.

More detailed information on each of these elements can be found in the handbook.

The patient may be intoxicated on presentation. This is not a contraindication to admission but may affect their ability to provide and receive information and hence capacity and ability to provide informed consent. Assessment of intoxicated individuals is difficult and should focus on medical and psychological safety.

5.3.1 Complications of chronic alcohol use

Chronic alcohol use is associated with a range of health conditions, some of which can complicate withdrawal management. Patients with alcohol dependence are to be assessed for:

- Thiamine deficiency (see 5.4.7 – Wernicke’s encephalopathy).

- Liver disease.
- Cognitive impairment – with consideration of capacity to consent.
- Cerebellar impairment and falls risk.
- Other nutritional deficiencies/ re-feeding syndrome.
- Acquired brain injury.
- Mood including increased suicide risk.

5.3.2 Consumption history

Record average daily consumption in grams of alcohol or in standard drinks (see table below). The Australian standard drink has 10 g alcohol. The Australian [standard drinks guide](#) is a useful tool. Table 5.3 below sets out the amount of alcohol in common drink measures and containers.

Table 5.3 Amount of alcohol in common drink measures and containers

Beverage (typical alcohol content)	Container size	Type of container	Alcohol content
Beer ² (4-5 %ABV ³)	285 mL	Middy	10 g
	425 mL	Schooner	15 g
	375 mL	Can/stubby (6 = six pack)	14 g
	750 mL	Large bottle (long neck)	28 g
	1 carton	24 cans/stubbies ('slab') or 12 large bottles	336 g
Table wine (10-14 %ABV)	150 mL	Standard glass served in restaurants	15 g
	750 mL	Bottle	60-80 g
	1 L	Cask	100 g
	4 L	Cask	400 g
Fortified wine (eg port, sherry) (18 %ABV)	60 mL	Standard glass	10 g
	750 mL	Bottle	120 g
Spirits (eg whisky, brandy, vodka) (40 %ABV)	30 mL	Nip	10 g
	750 mL	Bottle	240 g

² Light beer usually has about half the alcohol content of normal beer. Check labels for alcohol content.

³ %ABV = volume of alcohol by volume of the drink, expressed as a percent. The density of alcohol at room temperature is 0.79. The alcohol content in grams = volume (mL) x ABV% x 0.79. For example, a typical middy is 285 mL x 4.5/100 x 0.79 = 10.1 g

5.4 Withdrawal management

The purpose of withdrawal care is to provide appropriate support for withdrawal to be completed safely. The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

5.4.1 Treatment planning

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment. Attempts at reducing or ceasing alcohol use are marked by profound cravings and high rates of lapse and relapse particularly in the absence of ongoing, post-withdrawal care.

An important consideration for elective presentations is to ensure patient safety if the patient cannot immediately access withdrawal care. When there is a delay, **sudden cessation of alcohol use may be dangerous**. The usual advice is for the patient to only make small reductions in alcohol consumption until entry to treatment.

5.4.2 Treatment settings

Patients who seek alcohol withdrawal care may do so in inpatient, residential or community settings. In the absence of strong patient preference, clinical decision making regarding appropriate setting is informed by risk-benefit analysis, social factors, substance use and comorbidity factors as described above.

Inpatient alcohol withdrawal

Treatment in hospital is indicated when the patient has concurrent illness that increases the risks associated with withdrawal, or when there is a high risk of severe withdrawal complications. Specialist inpatient settings are indicated when moderate or severe withdrawal is predicted; the patient has a history of alcohol-related delirium or seizures; the patient has multiple drug dependencies; the patient has other significant medical

problems or there is a history of repeated inability to complete withdrawal in the community. Admission to intensive care may be required for severe withdrawal with major complications and /or those with severe intercurrent illness.

Outpatient or community-based alcohol withdrawal

Most alcohol withdrawal can be safely managed in the community in the absence of the risk factors outlined above. Outpatient alcohol withdrawal is undertaken over 5-7 days, with the patient monitored daily and staged supply of medication each 24 hours.

Suggested alcohol withdrawal management approaches in the community or residential settings are outlined in more detail in Appendix 6. The [RACGP](#) has a number of resources to assist GPs managing patients undergoing alcohol withdrawal as an outpatient.

5.4.3 Supportive care

Supportive care interventions can enable patients to cope with withdrawal symptoms including cravings, anxiety, sleep disturbance and emotional fluctuations. Supportive care during alcohol withdrawal includes:

- Psychoeducation regarding common withdrawal symptoms, their likely onset and duration, and coping strategies.
- Providing information about coping with cravings, which are a normal part of all withdrawal syndromes.
- Addressing environmental stressors that can have a significant effect on the severity of withdrawal. Minimise stress by making sure that the environment is quiet, calm, safe and private.
- Providing reassurance through allaying concerns and fears, positive encouragement, feedback on progress, regular contact, providing information, and dealing with immediate social and family problems.

Exercise is not supported for management of alcohol withdrawal based on the current evidence.

5.4.4 Medication

Diazepam

A long-acting benzodiazepine (diazepam) is the treatment of choice for alcohol withdrawal, confirmed by several randomised controlled trials. Diazepam treatment is best used early in the course of alcohol withdrawal to prevent progression to more severe withdrawal. There is cross-tolerance of alcohol with benzodiazepines such that relatively high doses may be required.

There are risks associated with diazepam and other benzodiazepine use. Limit the duration of benzodiazepine use to 5-7 days. Use of benzodiazepines for any indication other than short term withdrawal management is not recommended in someone with a history of substance use disorder.

Contraindications to benzodiazepine use include respiratory failure and decompensated liver disease, discussed below in section 5.6.3. If benzodiazepines are contraindicated, other medications may be used with specialist support, including carbamazepine or neuroleptic agents.

Benzodiazepine-related delirium is clinically challenging with no specific diagnostic features. If delirium persists despite significant benzodiazepine dosage, consider dose reduction rather than increase.

The most commonly used diazepam regimens are:

- Diazepam loading
- Fixed dose tapering
- Symptom-triggered
- Hybrid approach

These are described below and example regimens appear in table 5.4.

Diazepam loading involves giving a large dose over the course of day one, then limited or no further diazepam. This is recommended for patients with previous seizures or those who present in withdrawal. After 80 mg of diazepam if the patient is not settling (e.g. if CIWA-Ar is >10), a medical officer is to assess to rule out other pathology. If no other cause of anxiety or agitation is found, consider additional diazepam (10-20 mg 2nd hourly PRN, maximum 120 mg in 24 hours). If the patient is experiencing hallucinations and/or agitation, consider olanzapine 2.5-5 mg PRN up to a maximum of 20 mg in 24 hours. Persistent agitation or hallucinations require specialist advice (DASAS on 1800 023 687 or (02) 8382-1006 or the on-call Addiction Medicine Specialist or Addiction Psychiatrist).

Fixed dose tapering regimens where a predetermined dose of diazepam is administered in tapering doses over 2-6 days. This regimen is suitable for ambulatory withdrawal.

Symptom-triggered sedation where doses of diazepam are administered according to the severity of withdrawal symptoms, monitored 4 hourly or as indicated (see suggested frequency in table 5.6). A rising alcohol withdrawal score indicates a need for more aggressive management. Symptom-triggered diazepam is ideal for uncomplicated withdrawal in patients without co-occurring conditions in an inpatient setting, with frequent review by skilled clinicians.

Hybrid regimens comprising a fixed dose schedule, reviewed daily with additional doses as needed, are often the most appropriate for treatment of complex patients in hospital with co-occurring conditions. If using a hybrid regimen, prescribe diazepam in expected tapering regimen as above, guided by full clinical picture including Alcohol Withdrawal Scale (AWS) or CIWA-Ar. Prescribe doses as needed should symptoms emerge e.g. Diazepam 5-10 mg PRN max 2 doses per day. If sedation necessary: 5-10 mg oral diazepam every 6-8 hours for first 48 hours.

Table 5.4 Example diazepam regimens

Regimen	Dosage
Diazepam loading regimen example	<p>Day 1:</p> <p>Initial 20 mg diazepam, then 20 mg diazepam every two hours until patient is mildly sedated. No further loading diazepam generally needed once patient is settled (lightly sedated and easily rousable).</p> <p>Medical review required if dose required exceeds 80 mg.</p> <p>Thereafter:</p> <p>Following loading, symptom-triggered diazepam is given over subsequent days in a reducing regimen.</p>
Diazepam fixed dose tapering regimen example	<p>Day 1:</p> <p>10 mg diazepam QID</p> <p>Thereafter:</p> <p>Reduce by 10 mg each day, retaining nocte dose till day 5 or 6, then cease.</p>
Symptom-triggered diazepam regimen example	<p>CIWA-Ar score under 10 or AWS score under 4: 0-5 mg diazepam</p> <p>CIWA-Ar 10-20 or AWS 4-14: 10 mg diazepam</p> <p>CIWA-Ar above 20 or AWS above 14: 20 mg diazepam</p> <p>Medical review required if dose required exceeds 80 mg</p>

An example of a diazepam regimen suitable for alcohol withdrawal in a community setting is in Table 5.5 below.

Table 5.5 Ambulatory diazepam regimen example

Regimen	Dosage
Day 1	10 mg diazepam six hourly
Day 2	10 mg diazepam eight hourly
Day 3	10 mg diazepam morning and night
Day 4	5 mg diazepam morning and night
Day 5	5 mg diazepam at night

Milder cases may respond to lower doses (half the above).

Table 5.6 Monitoring frequency for alcohol withdrawal

Withdrawal severity	CIWA-Ar score	AWS score	Monitoring frequency
Mild	Less than 10	Less than 4	4-6 hourly
Moderate	10-20	4-14	2-4 hourly
Severe	More than 20	More than 14	Hourly

Medical review required for patients with rising scores or severe withdrawal that does not respond to medication

Alcohol

Alcohol is **inappropriate** to relieve withdrawal symptoms. It is **not a safe medication**, and its use falsely suggests that alcohol has clinical benefit for the patient. In circumstances where there is a delay before the patient can access treatment, the patient may be advised to reduce intake rather than suddenly ceasing drinking. As stated in 5.4.1, **suddenly ceasing alcohol** consumption can result in significant withdrawal symptoms in alcohol dependent people.

Thiamine

All patients undertaking alcohol withdrawal are to be administered thiamine for 1- 2 weeks to prevent Wernicke's encephalopathy. Recommended regimen is below at 5.4.7.

Other symptomatic medication

- For headache, consider paracetamol.
- For nausea or vomiting, consider metoclopramide 10 mg every 4-6 hours or prochlorperazine 5 mg every 4-6 hours orally or intramuscularly. Reduce the dose rate to eight hourly as symptoms abate.

5.4.5 Monitoring and investigations

Conduct regular and frequent observations including:

- Temperature, pulse rate and rhythm and blood pressure.
- CIWA-Ar or AWS (see Appendix 7).
- Level of hydration.

Frequency of monitoring depends upon treatment setting and clinical condition of the patient. The following is suggested:

Conduct blood tests for haematology and biochemistry guided by the patient's clinical presentation and history, with further management as indicated by the results. The usual minimum investigations are full blood count (FBC), magnesium, urea electrolytes and creatinine (UECs) and liver function tests (LFTs).

Withdrawal scales provide a systematic measure of the severity of uncomplicated withdrawal by recording changes over time. Withdrawal scales do not override clinical judgement. Consider discontinuing use of withdrawal scales in patients with multiple pathologies as the results may be misleading. Monitoring of consciousness may be compromised in patients with head injury or cerebrovascular accident. In these situations, specialist consultation is essential.

Re-evaluate the patient regularly to confirm the diagnosis of alcohol withdrawal as opposed to another medical condition, particularly if the patient is not responding well to treatment.

5.4.6 Preventing dehydration

In some cases dehydration may be serious and require aggressive fluid replacement.

- Assess and record nutritional intake, fluid intake and output.
- Encourage oral rehydration.
- Monitor carefully for signs of dehydration.
- **Do not give glucose** prior to thiamine as it risks exacerbating Wernicke's encephalopathy (see 5.4.7 below).
- In severe withdrawal:
- Intravenous rehydration, 2-5 L per day may be required.
- Monitor urea, electrolytes creatinine, liver function and acid-base balance.

5.4.7 Routine prevention of Wernicke's encephalopathy

This acute neurological syndrome due to thiamine deficiency can complicate withdrawal or present in people with continuing alcohol use. It is characterised by ataxia, ophthalmoplegia, nystagmus and anterograde amnesia (or recent memory impairment) however, most patients only experience some of these symptoms. Untreated, it can progress to Korsakoff's psychosis which may result in permanent cognitive damage and global memory impairment.

Wernicke's encephalopathy can be prevented in heavy or dependent alcohol users by good nutrition and by the early routine use of thiamine in all patients presenting to clinical services.

All people being treated for alcohol withdrawal are to routinely receive prophylactic thiamine as follows:

Alcohol is associated with thrombocytopenia and coagulopathy that may render intramuscular injection unsafe.

Administer thiamine **before** giving any form of glucose when possible. A carbohydrate load in the presence of thiamine deficiency risks precipitating Wernicke's encephalopathy.

5.4.8 Other nutritional deficiencies

In people who are chronic alcohol users, deficiencies of other B-complex vitamins, vitamin C, zinc and magnesium are not uncommon and an oral multivitamin preparation can be given for several days. Consider parenteral magnesium replacement when IV thiamine is used as described above.

Thiamine dosing for an otherwise healthy person with good dietary intake:

For the first 3 days	Oral thiamine 100 mg three times daily
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For the next 11 days	Oral thiamine 100 mg daily
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Thiamine dosing for people with chronic high level alcohol use and poor nutrition:

For first 3 days	Administer thiamine 300 mg daily intravenously
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Thereafter for several weeks	Oral thiamine doses of 300 mg per day
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Thiamine dosing for people with symptomatic or suspected Wernicke's encephalopathy

Initially	Administer thiamine 500 mg IV three times a day until a clinical response is seen
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Thereafter for several weeks	Guided by progress and specialist addiction medicine or neurological advice
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5.5 Continuing care

Begin planning at the commencement of withdrawal treatment for post-withdrawal residential or community care. Clinicians are to encourage patients to consider the range of relevant treatment options that may assist them in maintaining abstinence or a more controlled drinking pattern. Medications that may be useful include those listed for alcohol use disorder (naltrexone, acamprosate, disulfiram). More information is available in the Australian Guidelines for Treatment of Alcohol Problems at [alcohol treatment guidelines.com.au](http://alcohol.treatmentguidelines.com.au). For further information on continuing care, see section 4.5 and Appendix 3.

5.5.1 Reducing harms

Provide advice to minimise harm related to drinking alcohol by suggesting:

- Reducing the amount of alcohol consumed through strategies such as alternating with soft drinks, using smaller glasses (e.g. middies rather than schooners), starting drinking later in the day, drinking lower alcohol alternatives. Avoiding having glasses topped up can also help to keep track of how much is consumed and avoiding participating in buying rounds of drinks can reduce pressure to keep up with others.
- Avoiding combining alcohol consumption with other sedating substances such as benzodiazepines, GHB and opioids. These increase the risk of respiratory depression and overdose.
- Reducing risk of “drink spiking” by keeping drinks within view and buying or pouring your own drinks unless you can see them being poured at the bar.
- Eating food before and during drinking to slow the consumption and absorption of alcohol.

5.6 Substance-specific practice points

5.6.1 Seizure history

When there is a history of withdrawal seizures, early treatment with diazepam is indicated (diazepam loading). If a seizure occurs, medical assessment is required to exclude other contributing factors (e.g. head injury, electrolyte disturbances or other medical conditions). Prophylactic treatment with anticonvulsants (e.g. phenytoin, carbamazepine and sodium valproate) has no benefit in preventing alcohol withdrawal seizures.

5.6.2 Alcohol withdrawal delirium (delirium tremens)

Delirium tremens is a medical emergency that requires hospital treatment (often in a high dependency unit). Delirium tremens is a diagnosis by exclusion, so before commencing treatment, screen for other factors contributing to delirium, in particular subdural haematoma, head injury, Wernicke’s encephalopathy, hepatic encephalopathy, hypoxia, sepsis, metabolic disturbances, intoxication with or withdrawal from other drugs. Major psychotic disorders can sometimes mimic this state.

Management of established alcohol withdrawal delirium (delirium tremens)

Patients with delirium tremens are mentally disordered; it is not acceptable to allow them to sign themselves out of hospital. Sedation with benzodiazepines (e.g. diazepam 20 mg hourly up to 80 mg total dose in 24 hours) should be initiated however is often insufficient to reverse delirium tremens. If patients will not or cannot take diazepam orally, alternatives include use of an intravenous midazolam infusion which must be monitored in a high dependency unit, or intramuscular lorazepam if no high dependency unit is available. Aim to have the patient in a state resembling light sleep, from which he or she can be readily aroused. Occasionally, patients need doses of diazepam greater than 80 mg to achieve sedation. However, high doses of benzodiazepines can themselves produce a delirium, so specialist assessment and review is required.

Once loaded with benzodiazepines (either by intravenous infusion or oral diazepam), if patient is not settled, consider droperidol or olanzapine 2.5-5 mg orally or buccally/sublingually (wafer) to a maximum of 20 mg in 24 hours. Olanzapine can be continued on a PRN basis for several days until no longer needed. Intravenous thiamine (typically 300 mg) is to be administered as described previously.

Supportive management for patients with alcohol withdrawal delirium includes measures to ensure the safety of patient, staff and others, typically with a single room. One-on-one nursing care may be required for a period to reorient the patient and ensure regular review of the withdrawal course. Provide adequate sedation, which will mean that manual restraint is rarely required (refer to local policies). Monitor fluid balance and provide intravenous fluid and electrolyte replacement if required, as well as support for nutrition. Monitor for infections and other medical problem. Intensive care may be needed particularly for severe withdrawal and complex comorbidities.

Hallucinations

Hallucinations can be associated with both alcohol intoxication (alcohol-induced psychotic disorder or hallucinosis) and withdrawal – the history of alcohol use will enable differentiation. Where a patient is in alcohol withdrawal, hallucinations can occur in the context of a clear sensorium or as part of alcohol withdrawal delirium. Hallucinations are most commonly visual or tactile, with imagery or sensations of insects, animals or people, and may last minutes at a time or several days.

If treatment is required for hallucinations, the drug of first choice is diazepam as described above. If hallucinations do not respond to diazepam alone, add olanzapine. If olanzapine is required, the starting dose may be between 2.5-5 mg, orally or buccally/sublingually (wafer). If there is no response and

no undue side effects, an additional dose may be administered. Doses are ordered as required and continued for several days until no longer required, under constant review. The patient should already be receiving diazepam, which will reduce risks of seizures or dystonic reactions. Despite cessation of alcohol use, persistent psychosis may occur, so patients should be followed-up to complete recovery.

5.6.3 Management of alcohol withdrawal with intercurrent illness

Alcohol withdrawal is more difficult to manage in the presence of intercurrent illness. Decompensated liver disease and respiratory disease can make management of withdrawal very difficult. Consider high dependency or intensive care unit admission.

Severe liver disease

Drug withdrawal regimens must be modified when the patient has severe liver disease. Long-acting benzodiazepines are not to be administered to patients who have jaundice, ascites or hepatic encephalopathy. In these instances, oxazepam (which is renally excreted) may be used with caution. Titrate a dose of 15-30 mg carefully against response.

Severe chronic airflow limitation

Do not use diazepam loading dose regimens in patients with severe chronic airflow limitation. Use benzodiazepines with caution and with close monitoring. If a high dependency unit is available, an intravenous midazolam infusion may be the best way to control withdrawal. Alternatively, a short acting benzodiazepine such as temazepam or oxazepam may be used cautiously, with close monitoring of respiration.

Cannabis

06

6.1 Signs, symptoms and course of cannabis withdrawal

Studies suggest that approximately 50 per cent of regular or dependent cannabis users meet the threshold for a cannabis withdrawal syndrome following cessation, with higher proportions (approximately 80-90 per cent) in inpatient settings. Many regular cannabis users can stop their cannabis use without significant symptoms or concerns – and many do so without seeking specific treatment.

Most symptoms commence within 1-2 days after cessation, peaking at day 2-5 and returning to baseline after 7-14 days. Some withdrawal symptoms (e.g. sleep and mood disturbances) and cravings may persist for several weeks.

6.1.1 Factors affecting severity of withdrawal

Severity of cannabis withdrawal symptoms is associated with the amount of cannabis use. Higher doses and frequency of cannabis use is associated with increased withdrawal severity. Tobacco use and polysubstance use are also associated with more severe withdrawal symptoms.

While there is variation between studies, factors such as coexisting mental health conditions, age, gender and ethnicity have not been shown to consistently independently impact upon withdrawal severity.

6.2 Assessment

The usual assessment for withdrawal should be undertaken as summarised in section 4.2, including:

- Substance use history and withdrawal history covering all substances used.
- Medical and mental health history.
- Risk of harm to self and others.
- Physical examination.
- Mental state examination and cognitive assessment.
- History of seizures or delirium.

For more detailed information on each of these elements see the companion handbook.

The patient may be intoxicated on presentation. This may affect their ability to provide and receive information and hence may not be able to provide informed consent. Assessment of intoxicated individuals is difficult but should be pursued as far as is possible. Assessment findings may be reviewed after signs of intoxication have abated.

6.2.1 Consumption history

Assessment for cannabis withdrawal includes route of consumption, quantity and frequency of use and pattern of use over time. Heavy users can smoke more than 1 ounce/28 g a week, however as the strength of the THC is variable, frequency of use is a better measure. Daily use is the strongest predictor of likelihood of withdrawal syndrome.

Table 6.1: Common signs and symptoms of cannabis withdrawal

Psychological	Physical
Sleep disturbances	Decreased appetite
Anxiety	Nausea
Low mood	Stomach pain
Irritability and agitation	Headache
Restlessness	Sweating

Seek information on previous experiences of cannabis withdrawal and periods of prolonged abstinence (duration, how achieved, relapse triggers).

6.3 Withdrawal management

Withdrawal from cannabis is not medically dangerous, and no specific treatment has been shown to be more effective than others in reducing withdrawal symptoms.

The purpose of withdrawal care is to provide appropriate support for withdrawal to be completed safely. The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

6.3.1 Treatment planning

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment.

Sudden cessation or gradual reduction in use?

The severity of cannabis withdrawal is increased in individuals suddenly stopping a pattern of heavy and regular use. Some individuals may benefit from a gradual reduction in the frequency and quantity of cannabis use over time – which may help to diminish withdrawal symptoms and cravings when attempting complete cessation at a later time.

Gradual dose reduction may not be able to be achieved by all patients. It requires the patient to have confidence that they can reduce their use and they must identify targets and monitor levels of consumption (e.g. diaries), work with social supports (e.g. counsellor, family, friends) and have no significant stressors or co-occurring conditions. Gradual dose reductions are particularly suited to outpatient settings, reflecting the protracted treatment period.

Attending to other health issues

Alternative strategies for coping with underlying health problems (e.g. chronic pain) associated with the patient's cannabis use should be explored with the patient and their health providers and should form part of the treatment plan.

6.3.2 Treatment settings

Most individuals can undertake withdrawal from cannabis in a community, ambulatory or outpatient setting.

Inpatient (hospital) withdrawal from cannabis may be indicated if the patient has:

- Significant mental or physical health problems (e.g. psychosis, cardiac problems, dehydration).
- Significant other substance use and likely withdrawal from multiple substances (e.g. alcohol and/or benzodiazepines).

Some individuals will not require admission to hospital but would benefit from greater psychosocial and residential support during cannabis withdrawal, such as in a residential rehabilitation (“detox”) facility. Individuals with an unsuitable home environment in which to undertake withdrawal (e.g. homeless, violence in the home, other substance users) or who have a history of repeated unsuccessful attempts at ambulatory withdrawal may benefit from a residential setting.

For specialist advice on appropriate treatment settings or other matters relating to cannabis withdrawal, contact the Drug and Alcohol Specialist Advisory Service (DASAS) on 1800 023 687 (or (02) 8382-1006 if within Sydney metropolitan area).

6.3.3 Supportive care

Supportive care interventions can enable patients to cope with withdrawal symptoms including cravings, anxiety, sleep disturbance and emotional fluctuations.

Supportive care during cannabis withdrawal includes:

- Psychoeducation regarding common withdrawal symptoms, their likely onset and duration, and coping strategies.

- Providing information about coping with cravings, which are a normal part of all withdrawal syndromes.
- Addressing environmental stressors that can have a significant effect on the severity of withdrawal. Minimise stress by making sure that the environment is quiet, calm, safe and private.
- Providing reassurance through allaying concerns and fears, positive encouragement, feedback on progress, regular contact, providing information, and dealing with immediate social and family problems.

Diet, exercise and relaxation

Many patients have reduced appetite during cannabis withdrawal, which together with nausea, vomiting and poor hydration can result in dehydration and electrolyte disturbances if severe. Recommend that patients try to maintain small regular light meals over the course of the withdrawal episode, and to maintain hydration (at least 2-3L of liquids daily). Patients should refrain from caffeinated drinks as they may increase restlessness, irritation and insomnia.

Exercise may improve moods, improve sleep and reduce agitation and cravings. Many individuals also find benefits in structured exercise-relaxation-breathing techniques such as yoga. Co-occurring medical conditions need to be carefully considered in identifying appropriate exercise regimes.

6.3.4 Medication

There are no specific pharmacotherapies listed by the TGA for managing cannabis withdrawal. A range of medications is commonly used for relief of specific symptoms (see Table 6.2 below).

Symptomatic medications

Symptomatic medications should generally not be continued beyond seven days without medical review and a clear indication. For patients attempting inpatient or residential withdrawal, medications should be ceased 1-2 days prior to discharge to ensure their ability to cope with withdrawal symptoms without medication. Patients who had been mixing cannabis with tobacco are to be provided with Nicotine Replacement Therapy.

In general, caution is required when prescribing any psychoactive medications (including benzodiazepines, z-drugs (e.g. zopiclone) and anti-psychotic medications) to patients with a substance use disorder. Access to medication should be supervised (e.g. daily dispensing or supervised by carer) and limited to several days (no more than one week) – corresponding to the peak withdrawal symptoms. Use benzodiazepines with caution in adolescents and children.

Table 6.2 Symptomatic medications

Symptom	Medication (up to 7 days duration, as required)
Sleep problems	Benzodiazepines (e.g. diazepam 5-10 mg nocte) or z-drugs (e.g. zolpidem 10-20 mg nocte, zopiclone 7.5-15 mg nocte).
Restlessness, anxiety, irritability	Diazepam (e.g. 5-10 mg BD or TDS PRN) or antipsychotic medication (e.g. olanzapine 2.5-5 mg BD PRN)
Stomach pains	Hyoscine butylbromide (e.g. Buscopan 20 mg TDS PRN)
Physical pain, headaches	Paracetamol, non-steroidal anti inflammatory agents
Nausea	Metoclopramide, Ondansetron

6.3.5 Monitoring and review

Regular patient contact, monitoring and review is to take place – daily in outpatient settings (either by telehealth or in person), and more often in residential or inpatient units. Monitor the severity of withdrawal symptoms, cravings, any substance use, medication use, and other health and social conditions. Monitoring is more frequent during the first 3-5 days and then tapers until the patient has transitioned into the post-withdrawal treatment phase.

The Cannabis Withdrawal Scale (Appendix 7) – a 19-item validated scale assessing symptoms in the preceding 24-hour period – can be used to assist patient monitoring. The scale does not provide a validated link to the use of medications in response to symptoms.

6.4 Continuing care

Standard interventions aimed at reducing relapses and sustaining motivation should be used, including motivational enhancement, relapse prevention, cognitive behavioural therapies and other psychosocial interventions.

For general information on continuing care post-withdrawal, see section 4.5 and Appendix 3.

6.4.1 Reducing harms

Provide harm reduction advice for cannabis users such as:

- Avoid daily use.
- Lower tetrahydrocannabinol (THC)/higher cannabidiol (CBD) cannabis is less harmful than higher THC/lower CBD cannabis.
- Avoid cannabis use in teen years.
- Avoid mixing cannabis and tobacco together.
- Avoid drawing deeply into the lungs and holding the smoke in – it's not necessary for effect.
- Avoid bucket bongs as they may push the smoke deeply into the lungs.
- Glass utensils may be less harmful than plastics/hoses/aluminium.

- Vaporisers produce lower amounts of tar.
- Avoid driving while intoxicated.

6.5 Substance-specific practice points

6.5.1 Cannabis and pregnancy

While cannabis withdrawal in pregnancy is not usually associated with foetal distress or complications in the pregnancy, clinicians should refer to the [Substance Use in Pregnancy and Parenting Services \(SUPPS\) Guidelines](#) for more detailed information. Specialist advice is recommended in the treatment of pregnant women using cannabis.

6.5.2 Withdrawal from medical cannabis

In general, patients are advised to gradually taper THC-based medicines over several weeks before stopping to minimise withdrawal or other discontinuation effects. In these patients, careful consideration needs to be given to providing alternative management of the conditions for which the medical cannabis was prescribed when reducing cannabis use.

6.5.3 Synthetic cannabis

Synthetic cannabinoids are a group of compounds that bind to both the cannabidiol-1 and cannabidiol-2 receptors, but are not structurally the same as THC, nor extracted from cannabis plants. They mostly have a higher affinity for cannabinoid receptors than THC, leading to intense cravings when abruptly stopped.

Outside of the typical features of cannabis withdrawal, patients withdrawing from synthetic cannabinoids may experience palpitations, dyspnoea and chest pain. They may have tachycardia and hypertension. Seizures have been reported, though only in cases with polysubstance withdrawal. Features may come on quickly following cessation of use, even within an hour, though typically they peak around day two, and last for around one week.

Symptomatic management of potential withdrawal symptoms is recommended, as previously described.

6.5.4 Cannabis and mental health conditions

Management of cannabis withdrawal in patients with severe mental health conditions requires close monitoring, a safe environment (inpatient or residential care may be required) and appropriate use of medications.

Brief courses of benzodiazepines can assist with anxiety and sleep problems. Antipsychotic medications (eg olanzapine) may be of benefit for those with psychotic symptoms or severe agitation not responding to benzodiazepines. Where possible, symptomatic withdrawal medications should be discontinued prior to discharge to better assess the patient's condition. Assessment after withdrawal may permit the accurate diagnosis and appropriate treatment of concomitant mental health disorders.

Psychostimulants

07

7.1 Signs, symptoms and course of psychostimulant withdrawal

Withdrawal symptoms emerge among some, but not all people, who use psychostimulants chronically. Methamphetamine and cocaine withdrawal are clinically similar except cocaine withdrawal has a shorter duration.

Psychostimulant withdrawal has been typically characterised as occurring in three phases: crash, withdrawal and extinction. However, not all three may present in people with differing patterns of use. While not all people experience a 'crash' phase, it is more likely in people who 'binge' on high doses of psychostimulants over short periods or use high doses in a more protracted, daily pattern.

Table 7.1 Symptoms and time course of withdrawal

Phase	Time since last use	Common signs and symptoms
'Crash' (as psychostimulant effects wear off)	Methamphetamines: typically commences 12-24 hours after last use, and subsides by days 2-3 Cocaine: occurs within hours of last use, with short duration (up to 48 hours)	Exhaustion, fatigue, typically increased sleep, low mood or dysphoria; may be associated with anxiety or agitation
Withdrawal	Methamphetamines: typically commences 1-3 days after last use, peaks around day 3-5, and most symptoms except for cravings subside by the end of the first week Cocaine: typically shorter onset and duration	Strong cravings which persist for several weeks Fluctuating mood and energy levels, alternating between: irritability, restlessness, anxiety, and agitation Fatigue, lacking energy, anhedonia Disturbed sleep, including vivid dreams, insomnia General aches and pains, headaches Increased appetite Poor concentration and attention Disturbances of thought (eg paranoid ideation, strange beliefs) and perception (misperceptions, hallucinations) can re-emerge during withdrawal phase after having been masked during the crash phase.
Extinction	Weeks to months	Lacking energy, anhedonia, irritability, restlessness, anxiety, agitation, fatigue Episodic cravings, disturbed sleep.

7.1.1 Factors affecting severity of withdrawal

There is considerable variation in the severity of withdrawal upon ceasing regular and heavy psychostimulant use. The severity of withdrawal appears to be affected by the intensity of psychostimulant use (the dose, frequency and duration of use) as well as the type of psychostimulant. Less potent psychostimulants, eg ephedrine and phentermine are likely to produce less severe withdrawal. The mode of administration also affects withdrawal, with injecting often associated with greater amounts of psychostimulant use, higher incidence of psychopathology, higher severity of dependence, and perhaps more severe withdrawal.

Patients who have had previous severe withdrawal episode(s), who use multiple substances or who have mental health and other coexisting health conditions are also at increased risk of severe withdrawal symptoms. Individual expectations, environment and the presence or absence of psychosocial supports also play a role.

7.2 Assessment

Undertake the usual assessment for withdrawal as summarised in section 4.2, including:

- Substance use history and withdrawal history covering all substances used.
- Medical and mental health history.
- Risk of harm to self and others.
- Physical examination.
- Mental state examination and cognitive assessment.
- History of seizures or delirium.

Further information on assessments is contained in the companion handbook.

The patient may be intoxicated on presentation. This may affect their ability to provide and receive information and hence may not be able to provide informed consent. Assessment of intoxicated individuals is difficult but should be pursued as far as is possible. Assessment findings may be reviewed after signs of intoxication have abated.

7.2.1 Consumption history

A substance use history for psychostimulant withdrawal is to include the type(s) of psychostimulants being used, the frequency of use (e.g. days used over past 28 days), the quantity used per day of use (e.g. grams, 'points' equivalent to approximately 0.1 g or 100 mg, or dollar amount/cost), the duration of use, the route of administration and recent pattern of use leading up to this presentation, including last dose.

Previous treatment, periods of abstinence, severity and complications of previous withdrawal experience are to be documented. Also ask about any concurrent drug use – e.g. alcohol, benzodiazepines, GHB, nicotine – including dose, frequency and duration of concurrent drug use, time and amount of last dose, route of administration.

7.2.2 Assessment of potential complications of chronic psychostimulant use

Assess coexisting physical and mental health conditions, including known complications of chronic methamphetamine use. These include neurological and cardiovascular and other conditions as set out in table 7.2. Also assess the patient's nutrition, hydration and weight loss as well as skin integrity and dental health.

Table 7.2 Complications of chronic use of psychostimulants

Neurological	Cardiovascular	Other
Seizures	Hypertension	Hyperpyrexia
Cerebrovascular complications	Cardiomyopathy	Rhabdomyolysis
Stroke	Myocardial infarct	Cognitive impairment
	Arrhythmias	Psychosis

If the patient has been injecting, consider complications of injecting drug use such as blood borne virus transmission, infective endocarditis, abscesses.

Cognitive impairment and methamphetamine-associated psychosis are important complications of psychostimulant use disorders, particularly among those with frequent high dose use and severe dependence. Features such as paranoia, delusions or perceptual disturbances occur commonly. If signs and symptoms of mental illness are severe or persist for several weeks, consider referral for specialist mental health assessment and treatment.

Cardiovascular complications (including hypertension, cardiomyopathy) of high dose regular methamphetamine use can be medically serious and require assessment. Acute cardiovascular events (including acute myocardial infarct) and cerebrovascular accidents (stroke, particularly haemorrhagic) are known complications of use, and risk increases with dose and duration of use.

If the above are apparent during withdrawal, they are to be investigated and either treated or referred for treatment and monitoring.

7.3 Withdrawal management

The purpose of withdrawal care is to provide appropriate support for withdrawal to be completed safely. Withdrawal from psychostimulant drugs is not medically dangerous, and no one specific treatment has been shown to be more effective than others in reducing withdrawal symptoms.

The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

7.3.1 Treatment planning

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment. Withdrawal is only a part of the treatment journey. Attempts at reducing or ceasing psychostimulant use are marked by profound cravings and high rates of lapse and relapse. Post-withdrawal treatment planning should begin at commencement of a supported withdrawal episode.

Treatment planning needs to consider the specific characteristics of psychostimulant withdrawal. The onset of withdrawal discomfort may be delayed for several days after stopping psychostimulant use, and subacute symptoms may persist for many weeks to months.

A stepped care approach to treatment of psychostimulant use disorders is recommended. This involves an incremental approach to care, comprising a hierarchy of interventions to match a person's needs that can be escalated or de-escalated as required.

7.3.2 Treatment settings

Most individuals can undertake withdrawal from psychostimulants in a community, ambulatory or outpatient setting.

Inpatient (hospital) withdrawal from psychostimulants may be indicated if the patient has significant mental or physical health problems (e.g. psychosis, cardiac problems, dehydration) and/or significant other substance use with likely withdrawal from multiple substances.

Some individuals will not require admission to hospital but would benefit from psychosocial and residential support during psychostimulant withdrawal, such as in a residential rehabilitation (“detox”) facility. This includes patients with an unsuitable home environment in which to undertake withdrawal (e.g. homeless, violence in the home, other substance users), or people who have had repeated unsuccessful attempts at ambulatory withdrawal.

For specialist advice on appropriate treatment settings or other matters relating to psychostimulant withdrawal, contact the Drug and Alcohol Specialist Advisory Service (DASAS) on 1800 023 687 (or (02) 8382-1006 if within Sydney metropolitan area).

7.3.3 Supportive care

Ensure supportive care is provided as required. The general principles of supportive care involve:

- Psychoeducation and coping with withdrawal symptoms. Patients should be educated regarding common withdrawal symptoms, their likely onset and duration, and coping strategies (e.g. relaxation techniques, sleep hygiene, advice regarding diet).
- Specific strategies for addressing agitation, anger and sleep disturbances.
- Frequent orientation, reassurance and explanation of procedures to patients with thought or perceptual disturbances.
- Crisis intervention, addressing accommodation, personal safety or other urgent welfare issues.
- Coping with cravings. Cravings are a normal part of all withdrawal syndromes, and all patients should be educated regarding the nature of cravings and strategies for coping with them during withdrawal.

7.3.4 Medication

Short term use of medications can treat symptoms of withdrawal and persisting symptoms associated with psychostimulant use. Use these medications in conjunction with supportive care strategies (see above and Appendix 10) to manage withdrawal features.

Benzodiazepines may be considered for the management of withdrawal-related agitation. An appropriate regimen is diazepam 5-10 mg orally as required six-hourly to maximum 40 mg a day over three days. As benzodiazepine dependence may coexist with psychostimulant dependence, assess patients for coexisting benzodiazepine dependence and withdrawal risk.

Atypical antipsychotics may also be considered for the treatment of withdrawal symptoms, including agitation, and low-level psychotic symptoms such as delusions and paranoia. Consider olanzapine 2.5 - 5 mg orally as required 6 - 8 hourly, to a maximum of 20 mg in 24 hours. An alternative is quetiapine immediate release 25 - 50 mg orally as required eight-hourly to a maximum of 150 mg in 24 hours.

7.3.5 Monitoring and review

Withdrawal scales for psychostimulant withdrawal can be helpful for staff in understanding the withdrawal syndrome. However, they are not validated for linking medication or treatment provision to the scores.

7.4 Continuing care

Integration of withdrawal services with post-withdrawal services is required to manage the protracted nature of the extinction phase of psychostimulant withdrawal. Post-withdrawal care may include relapse prevention counselling, other counselling, self-help groups, and residential rehabilitation. Consider specialist assessment for people with medical or mental health complications of psychostimulant use (e.g. persistent or severe features of psychosis or depression). Harm reduction interventions are to be provided to people who plan to, or may, resume psychostimulant use.

For more information on continuing care post-withdrawal, see section 4.5 and Appendix 3.

7.4.1 Reducing harms

Both inpatient and outpatient withdrawal provide opportunities for interventions that aim to reduce harms associated with psychostimulant use. Advise all patients about the reduction of tolerance following withdrawal and abstinence from a substance and if resuming use, that they need to use lower doses than previously to reduce overdose or toxicity risk.

Provide information about safer injecting practices including use of sterile injecting equipment to reduce risk of blood borne transmission, information regarding needle and syringe programs, and where possible, provision of sterile injecting kits to take home. Discussion of non-injecting routes of administration such as oral or rectal (shafting /shelving) to reduce injecting and smoking related harms is also recommended.

Advise patients that sharing pipes and intranasal (“snorting”) equipment is a risk for infectious disease transmission (e.g. Hepatitis B, Herpes Simplex Virus, respiratory infections, COVID-19, TB etc). Also advise that use of heat-resistant (e.g. Pyrex®) pipes is less risky than glass and recommend avoidance of use of broken or cracked pipes to reduce chance of shatter. Provide information on regularly cleaning inside pipes to reduce inhaling burnt residue and warn about burns from handling hot pipes immediately after use.

Provide counselling regarding safer sex, access to condoms/dental dams, pre- and post-exposure prophylaxis for gay and bisexual men who are HIV negative and other people at risk of HIV infection, and adherence to antiretroviral medications for people who are living with HIV.

Other harm reduction advice includes not operating any vehicle after using stimulants as well as general health advice re exercise, sleep, nutrition to reduce impacts of long-term stimulant use. Counsel regarding dental hygiene, including regular tooth brushing and flossing to avoid dental disease, and sugar free chewing gum to avoid dry mouth.

7.5 Substance-specific practice points

7.5.1 Pregnancy and early post-natal period:

Psychostimulants can cross the placenta and be present in breast milk and clinicians are to advise mothers not to breastfeed if they may resume using these substances. Infants exposed to methamphetamines prior to birth may be of low birth weight and can have difficulties feeding and sleeping which may resolve spontaneously. Cessation of methamphetamine use during pregnancy can result in fatigue, anxiety, agitation and depression.

As a general principle, discontinuation and abstinence is recommended during pregnancy. There are no specific evidence-based recommendations for supporting methamphetamine withdrawal during pregnancy. Comprehensive, individualised treatment and care programs are required that link with a range of services including antenatal and obstetric services.

The [NSW Clinical Guidelines for the Management of Substance Use During Pregnancy, Birth and the Postnatal Period](#) are available on the NSW Health website and are a useful resource.

7.5.2 Driving and psychostimulants

People who hold commercial driver’s licences and drive for long periods of time may be at increased risk of psychostimulant use, due to the ability of psychostimulants to reduce drowsiness.

Austrroads considers a person unfit to hold an unconditional licence if they have a substance use disorder or frequent substance use that is likely to impair safe driving. A person holding a commercial licence will have to be in treatment and not using substances for at least three months before a conditional licence may be issued (one month for a private driver’s licence).

People who use psychostimulants are also at higher risk of traffic accidents. This should be discussed with patients and the advice provided documented in the patient's medical record. People diagnosed with a substance use disorder are legally obligated to disclose this to their licencing authority. Clinicians should communicate these risks to all patients.

Clinicians are referred to the Austroads standards: [**Assessing Fitness to Drive for commercial and private vehicle drivers.**](#)

Opioids



8.1 Signs, symptoms and course of opioid withdrawal

Table 8.1 Signs and symptoms of opioid withdrawal

Common signs of opioid withdrawal	Common symptoms of opioid withdrawal
Perspiration	Restlessness
Vomiting	Agitation
Diarrhoea	Anorexia and nausea
Dilated pupils	Abdominal cramps or pain
Yawning	Hot and cold flushes
Rhinorrhoea	Bone, joint and muscle pain
Lacrimation	Insomnia and disturbed sleep
Piloerection	Intense craving for opioids

Short acting opioids

Heroin is a relatively short-acting drug. Symptoms of withdrawal usually commence 6-24 hours after the last dose, reach a peak at 24-48 hours and resolve after 5-10 days. Other short acting opioids with a similar withdrawal profile include morphine, oxycodone, hydromorphone, codeine and fentanyl.

Slow release short-acting opioids may have a delayed onset of withdrawal however otherwise the withdrawal syndrome is similar. Transdermal fentanyl will transfer from skin reservoirs to the systemic circulation over an unpredictable and potentially prolonged time. Therefore, withdrawal may take a number of days to develop after removal of a patch.

Long-acting opioids

Withdrawal from a long half-life opioid such as methadone usually commences 36-48 hours after the last dose. The peak severity of withdrawal tends to be lower than for heroin withdrawal, however withdrawal may be more prolonged, lasting 3-6 weeks.

The symptoms and signs of withdrawal from buprenorphine are similar to those found in withdrawal from other opioids. However, withdrawal from buprenorphine is generally milder than withdrawal from methadone or heroin. Symptoms commence generally within 3-5 days of the last dose and can last for several weeks.

Following acute withdrawal, protracted, low-grade symptoms of discomfort (psychological and physical) may last many months.

8.1.1 Factors affecting severity of withdrawal

The presence of opioid dependence (as defined by ICD-11) indicates the likelihood of opioid withdrawal developing. However, some opioid dependent patients may not develop opioid withdrawal. The patient's prior experience of withdrawal may indicate the severity of withdrawal expected. Withdrawal severity can be impacted by purity, dose and duration of use.

8.2 Assessment

The usual assessment for withdrawal should be undertaken as set out in section 4.2, including:

- Substance use history and withdrawal history covering all substances used.
- Medical and mental health history.
- Risk of harm to self and others.
- Physical examination.
- Mental state examination and cognitive assessment.

Document information on the patient's previous experiences in stopping opioids and periods of prolonged abstinence (duration, how achieved, relapse triggers) as well as past overdoses involving opioids. Note whether the person has received, and been educated on using, take home naloxone. Assess and document risk of blood borne viruses (including HCV, HBV, and HIV). Also note current or prior treatment with methadone or buprenorphine in an opioid treatment program, outcomes and reasons for ceasing. If the patient advises they are on opioid agonist treatment, confirm this through the Ministry of Health (Ph: (02) 9424 5921 or 9391 9944; www.health.nsw.gov.au/pharmaceutical/Pages/contacts.aspx), and contact the dosing point to obtain the patient's dosing history.

The patient may be intoxicated on presentation, and this may affect their ability to provide and receive information and provide informed consent. Assessment of intoxicated individuals may be difficult, and assessment findings should be reviewed after signs of intoxication have abated.

8.2.1 Consumption history

Assessment is to include type of opioid/s, route of consumption, quantity and frequency of use, and pattern of use over time.

Illicit opioids

Illicit opioids can include heroin, fentanyl analogues and diverted prescription opioids. Dosage estimates are difficult because of wide variations in the concentration and purity of illicit preparations. Consumption may be recorded as number of injections per day, number of grams ingested or dollars spent. Table 8.2 provides guidance on estimating levels of use.

Note that 'street' usage patterns alter frequently. Given the variable strength of illicit opioids, frequency of use can be a better indicator of severity of dependence than grams used.

Table 8.2 Approximate guide to a patient's level of heroin use

Low end	High end
One to two injections per day, or	Four or more injections per day, or
0.5 g ('five points') or less per day	1-2 g or more per day.

Prescription opioids

Increasingly, patients are presenting with opioid use disorder solely from prescribed opioids. It may be difficult to estimate amounts used and corroborative information sources include accessing Real Time Prescription Monitoring systems (eg SafeScript NSW) where available, contacting GP/prescribers and My Health Record.

For clinicians interested in the relative potencies of prescribed opioid analgesics, the Faculty of Pain Medicine's website includes an Opioid Dose equivalence Calculation table for this purpose ([link](#)).

8.2.2 Assessing potential complications of chronic opioid use

Chronic use of opioids can result in endocrinological changes including reduced testosterone levels, increased prolactin and reduced follicle-stimulating hormone (FSH) and luteinizing hormone (LH). Oligomenorrhoea or amenorrhoea can be caused by long term use of opioids, as can infertility.

Dental problems can occur in chronic opioid use as a result of reduced salivary flow added to poor dental hygiene. In addition, chronic constipation is commonly seen which can cause anorexia, abdominal discomfort, and abdominal cramps.

Injecting drug use is a risk for bacterial infections that can cause infective endocarditis, cellulitis, epidural abscesses or septicaemia. It is also associated with contracting infections including blood borne viruses e.g. hepatitis C, hepatitis B, and much less commonly, HIV. Test for blood borne viruses and ensure all results are followed up. Appendix 9 contains the recommended protocol for BBV follow up.

When opioid use is complicated by coexisting chronic pain, seek the assistance of pain services.

8.3 Withdrawal management

The purpose of withdrawal care is to provide appropriate support for withdrawal to be completed safely. The primary aims of withdrawal are to:

The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

8.3.1 Treatment planning

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment and addresses risk of overdose post-withdrawal. Provide assistance in accessing take home naloxone and training in its use.

Source: Australian and New Zealand College of Anaesthetists, Faculty of Pain Medicine

⁴Methadone, fentanyl lozenges and neuraxial opioids are not included in this table due to their complex and variable pharmacokinetics.

Address the patient's reasons for seeking treatment, social circumstances, and expectations about withdrawal and identify short- and long-term goals of treatment. Agree on the setting for withdrawal and establish a pattern of monitoring and review of progress. Include regular review of the patient's objectives, which may change during the course of withdrawal. Patients identifying abstinence as their goal can be encouraged to consider an opioid agonist treatment program.

8.3.2 Treatment settings

Opioid withdrawal management can be undertaken in either outpatient or inpatient settings. Inpatient management is to be considered for patients with significant cardiovascular disease or other co-occurring conditions where it is advisable to avoid sympathetic nervous system over-activity. Patient choice and social support network should also be considered, and where ambulatory attempts have been unsuccessful.

8.3.3 Unplanned withdrawal

Patients in hospital, prison or other institutional care may undergo unplanned opioid withdrawal when they lose access to opioids. Patients may not always reveal their use of opioids. Consider the possibility of opioid dependence and therefore subsequent unplanned opioid withdrawal if the patient has:

- Opioid withdrawal symptoms and signs (see table 8.1).
- Presence of injection sites.
- Difficult control of pain or high analgesic requirements. Patients who are opioid tolerant may require higher than usual doses of analgesic drugs to achieve reasonable levels of acute pain relief.

Methadone or buprenorphine treatment may be required for hospitalised patients to prevent withdrawal while other medical or mental health disorders are prioritised and managed. If so, consult a drug and alcohol specialist with experience in methadone or buprenorphine prescribing.

8.3.4 Supportive care

Supportive care can assist patients to cope with withdrawal symptoms and persist with completing the withdrawal episode. This may involve:

- Psychoeducation and coping with withdrawal symptoms. Patients should be educated regarding common withdrawal symptoms, their likely onset and duration, and coping strategies (e.g. relaxation techniques, sleep hygiene, advice regarding diet).
- Addressing environmental stressors that can have a significant effect on the severity of withdrawal. Minimise stress by making sure that the environment is quiet, calm, safe and private.
- Crisis intervention addressing accommodation, personal safety or other urgent welfare issues.
- Coping with cravings. Cravings are a normal part of all withdrawal syndromes, and all patients should be educated regarding the nature of cravings and strategies for coping with them during withdrawal.

For more details on supportive care, see section 4.4.4 above and Appendix 10.

Preventing dehydration

In untreated or inadequately treated opioid withdrawal, there may be fluid loss due to sweating, vomiting and diarrhoea. In some cases, dehydration may be serious and require parenteral fluid replacement.

8.3.5 Medication

A tapering regimen of opioid agonist medication is the preferred treatment for opioid withdrawal⁵. Either buprenorphine or methadone can be used to assist in opioid withdrawal. No benefit of buprenorphine over methadone has been identified in duration in treatment or retention, although withdrawal intensity is less severe. Due to its pharmacological profile, including safety, buprenorphine is preferred for withdrawal from other opioids. A pragmatic approach is to use methadone for withdrawal in people already consuming methadone, and use buprenorphine for withdrawal from all other opioids as first line treatment.

Other symptomatic medication may still be required in addition to opioid agonists as set out in table 8.6 below. Caution is to be used if prescribing other sedating medications due to synergistic toxicity. Combined use of other sedative substances (e.g. benzodiazepines, alcohol and tricyclic antidepressants) with opioids may result in respiratory depression, coma and death. Give consideration to the need for more intensive monitoring in an inpatient setting if patient is at increased risk of oversedation.

For specialist advice on medications or other matters relating to opioid withdrawal, contact the Drug and Alcohol Specialist Advisory Service (DASAS) on 1800 023 687 (or (02) 8382-1006 if within Sydney metropolitan area).

8.3.6 Buprenorphine tapering regimens

Buprenorphine treatment is commenced after the onset of withdrawal, with tapering regimens varying from three to 60 days. No optimal tapering duration has been identified. Duration may be dictated by treatment setting and patient choice, with shorter duration in inpatient settings. Sublingual buprenorphine is the formulation of buprenorphine used for opioid withdrawal treatment.

Buprenorphine may precipitate withdrawal in an opioid dependent person who has used short acting opioids (e.g. heroin) in the previous 12-24 hours or long acting opioids (e.g. methadone) in the previous 48 hours or longer. For this reason, if the patient does not present in overt withdrawal, give them a test dose of buprenorphine before larger doses are given.

Specialist consultation is recommended if precipitated withdrawal is suspected. This is indicated by a sustained and marked increase in the severity of withdrawal symptoms commencing within one hour of the first sublingual buprenorphine dose (e.g. Clinical Opiate Withdrawal Scale (COWS) increased by >6, Subjective Opiate Withdrawal Scale (SOWS) increased by >8). Note that onset of withdrawal, or marked increases in withdrawal symptoms, more than 6 hours after buprenorphine may reflect under-dosing rather than precipitated withdrawal.

Test dose of buprenorphine

Defer the first dose of buprenorphine until the patient is experiencing withdrawal (anxiety, abdominal or joint pain, dilated pupils, sweating) as measured by an objective scale such as the COWS (see Appendix 7). When a COWS score of 8 is reached, give 2 mg of sublingual buprenorphine as a test dose then review the patient in one hour.

Outpatient medication regimen

Following the 2 mg test dose, if the patient is experiencing no increase in withdrawal severity and is still reporting withdrawal, give another 6 mg of buprenorphine. A total of 8mg-12 mg is appropriate on day 1. This regimen is illustrated in Table 8.4 below.

Patients should be reviewed daily by an experienced health professional during the first few days of the withdrawal regimen. Adjust doses as necessary

Inpatient medication regimen

In an inpatient setting, higher doses can be given. Following the 2 mg test dose, if the patient is experiencing no increase in withdrawal severity and is still reporting withdrawal, give another 6 mg of buprenorphine. A total of 8 mg-16 mg is appropriate on day 1. Reduce the buprenorphine dose by 2-4 mg daily subject to assessment of patient response. Cease buprenorphine 1-2 days prior to discharge to assess and manage any rebound withdrawal.

Fixed regimens can be negotiated for inpatient settings where staff may have limited or no experience in managing opioid withdrawal. More flexible regimens (with orders for additional doses as required) may be used where staff have suitable expertise. In both cases, multiple small doses (eg 0.4-2 mg) can be administered as required throughout the day.

Maintenance opioid agonist treatment in NSW

If the plan is to continue buprenorphine in the post-withdrawal period (i.e. as opioid agonist treatment), then increase buprenorphine dose to effective range (e.g. usually 12-24 mg). See the [NSW Health Clinical Guidelines for Treatment of Opioid Dependence](#) for further details of regulatory requirements and recommended dosages.

Outside hospital, methadone and buprenorphine may only be used in the treatment of opioid dependence by medical practitioners authorised to deliver this treatment. In hospital settings, doctors may use methadone or buprenorphine without authority as part of management of opioid dependent individuals hospitalised with medical problems. In NSW this is limited to 14 days by policy directive.

Symptomatic medications

Medication of symptoms and supportive care are often sufficient in treating mild withdrawal (see table 8.5 below).

Clonidine may be prescribed for treatment of symptoms such as sweating and agitation. Before administering clonidine take baseline blood pressure and heart rate measurements before first dose. Do not use clonidine if patient is hypotensive (ie blood pressure is less than systolic 90mmHg or diastolic 50mmHg), heart rate is less than 50 per minute or there is clinical evidence of impaired circulation.

Initial test dose:

- Administer 75 microgram test dose and monitor for hypotension after half an hour. Measure the patient's blood pressure lying and standing. If hypotensive, clonidine is not recommended.
- If no hypotension occurs, and dizziness or other side effects of clonidine are not a problem, give a second 75 microgram dose and continue treatment as shown in the table of symptomatic treatments.

After prolonged, regular clonidine use, consider graduated reduction to avoid rebound hypertension.

Naltrexone

Planned (rapid) naltrexone-assisted opioid withdrawal is associated with high rates of adverse events and cannot be recommended.

8.3.6 Monitoring and review

Review the patient regularly according to the patient's condition, severity of withdrawal and treatment settings. Review is to include risk assessment, assessment of withdrawal symptoms and severity, adverse events, other drug use and any patient concerns.

Monitoring should be clinically based on observations, objective signs and subjective symptoms and may include structured withdrawal scales. Withdrawal scales do not diagnose withdrawal, they are only a guide to the severity of an already diagnosed withdrawal syndrome. They do not replace clinical judgement.

The Clinical Opiate Withdrawal Scale (COWS - see Appendix 7) rates 11 items describing severity of symptoms from scores of 0 (not present) to >36 (severe). The COWS is considered a reliable and valid withdrawal scale. The Subjective Opiate Withdrawal Scale (SOWS - see Appendix 7) rates 16 items from 0 to 64 and is used in some clinical settings. COWS is recommended as it assesses both objective and subjective measures.

For inpatient treatment, undertake the COWS 6-hourly. Re-evaluate the patient regularly to ensure that it is opioid withdrawal and not another underlying medical condition, particularly if the patient is not responding well to treatment.

8.4 Continuing care

During the first week of treatment, discuss post-withdrawal management options with the patient and nominated carer or family member. These include continuing with opioid agonist treatment, or abstinence counselling and residential rehabilitation.

Long term opioid agonist treatment has a robust evidence base and is often preferred by patients. Decisions are to be made in partnership with patients and based on informed consent. Further detail is available in the NSW Clinical Guidelines for the Treatment of Opioid Dependence. Section 3.4.3 (Patient information and perspective) is particularly relevant.

Reduced opioid tolerance post withdrawal increases the risk of overdose if the patient returns to opioid use subsequently. Peer administered take home naloxone is to be offered to all patients undertaking opioid withdrawal management, with education on its use.

Post-withdrawal management services include self-help programs (eg Narcotics Anonymous, SMART recovery, online resources), outpatient programs, counselling and residential services. A variety of outpatient and community-based services may also be combined with agonist or antagonist maintenance treatment.

The evidence does not support the use of oral naltrexone in prevention of relapse to opioid use. The routine use of naltrexone implants has not been approved in Australia.

See section 4.5 and Appendix 3 for more information on continuing care.

Table 8.4 Example outpatient buprenorphine tapering regimen example

Day	High end
1	8-12 mg (including 2 mg test dose)
2-4	Titrate dose so that patient is comfortable and not using additional opioids. Typically requires doses between 8-16 mg daily
5-14	Review patient progress regularly and taper dose. Aim to reduce daily dose by 2-4 mg every 1-2 days. Aim for last 1-2 days of dosing to be on 2 mg dose.

Table 8.5 Example inpatient buprenorphine tapering regimen

Day	Buprenorphine dose (sublingual, mg)	Common range
1	8 mg at onset of opioid withdrawal (including 2 mg test dose). Additional 4 mg or 8 mg for uncomfortable withdrawal	8-16 mg
2	Reduce Day 1 dose by 2-4 mg	6-12 mg
3	Reduce Day 2 dose by 2-4 mg	4-8 mg
4	4 mg as morning dose	2-6 mg
5	2 mg as morning dose	2 mg
6	Cease	0

8.4.1 Reducing harms

Provide the patient with advice to reduce harms associated with opioid and other substance use. It is critical to advise all patients about the reduction of tolerance following withdrawal and abstinence from opioids and that if resuming opioid use, they need to use lower doses than previously to reduce overdose risk.

Also provide information about safer injecting practices including use of sterile injecting equipment to reduce risk of blood borne transmission, information regarding needle and syringe programs, and where possible, provision of sterile injecting kits to take home. Discussion of non-injecting routes of administration such as oral or rectal (“shafting”/“shelving”) to reduce injecting- and smoking-related harms is also recommended.

Also provide general lifestyle advice re exercise and nutrition to reduce impacts of long-term opioid use. Warn patients against operating vehicles if sedated. Provide counselling regarding safer sex, access to condoms/dental dams, pre- and post-exposure prophylaxis for gay and bisexual men who are HIV negative and other people at risk of HIV infection, and adherence to antiretroviral medications for people who are living with HIV.

Further advice on harm reduction can be found on the NSW Users and AIDS Association’s (NUAA) website at <https://www.nuaa.org.au/harm-reductionsafer-using>.

Further advice on pharmaceutical opioid medications is available via HealthDirect.

8.5 Substance-specific practice points

8.5.1 Pregnancy and breastfeeding

The preferred treatment of pregnant opioid users is opioid agonist maintenance treatment (methadone or buprenorphine). Acute opioid withdrawal presents risks to the foetus and is usually to be avoided in pregnancy. If undertaken it requires specialist management.

Patients (including those on methadone or buprenorphine maintenance treatment) are encouraged to breastfeed in conjunction with appropriate postnatal support.

For further advice on patients who are pregnant or breastfeeding and dependent on opioids, contact the Substance Use in Pregnancy and Parenting Service in your LHD or refer to the NSW Health Clinical Guidelines on Substance Use and Pregnancy.

Table 8.6 Symptomatic treatments

Symptoms	Suggested treatments
Muscle aches/pains	Paracetamol 1 g every 4 hours as required (maximum 4 g in 24 hours) or Ibuprofen 400 mg every 6 hours as required (if no history of peptic ulcer/gastritis).
Nausea	Metoclopramide 10 mg, every 4-6 hours as required or prochlorperazine 5 mg, every 4-6 hours as required or ondansetron 4-8 mg, every 12 hours as required
Abdominal cramps	Hyoscine 20 mg, every 6 hours as required. Second line treatment for continued severe gastrointestinal symptoms (for use in a hospital setting only): octreotide 0.05-0.1 mg, every 8-12 hours as required by subcutaneous injection.
Diarrhoea	Kaomagma or loperamide 2 mg as required.
Insomnia	Temazepam 10-20 mg at night. Cease the dose after 3-5 nights.
Agitation or anxiety	Diazepam 5mg four times daily as needed. Taper/cease the dose over 3-5 days.
Dehydration/ electrolyte disturbance	Fluid and electrolyte replacement.
Restless legs, sweating, agitation	Clonidine 75-150 microgram every 6-8 hours as tolerated with regular BP monitoring.

8.5.2 Pain management and use of buprenorphine

Buprenorphine has high affinity for the mu opioid receptor and there is a theoretical risk that it may limit the effectiveness of other opioids prescribed for acute pain management. However, studies identify efficacy of full agonist opioids for analgesia while continuing buprenorphine. For advice on acute pain management when taking buprenorphine contact Drug and Alcohol Specialist Advisory Service (DASAS) or consult the Acute Pain Management, Scientific Evidence guidelines issued by Faculty of Pain Medicine ANZCA.

8.5.3 Advice about driving

Patients are to be advised not to drive while undertaking withdrawal treatment, especially where sedative medications may be prescribed. Patients can be referred to resources on the NSW Health website: <https://www.health.nsw.gov.au/aod/resources/Pages/driving-safety-medicines.aspx>.

8.5.4 Overdose risk and take-home naloxone

Patients who have completed opioid withdrawal have reduced tolerance and therefore are at increased risk of overdose. Naloxone is a drug that reverses opioid overdoses. Clinicians are to advise patients of the risk of overdose and provide them with harm minimisation advice specifically relating to reducing the dose of opioids used if they relapse. Peer administered (take home) naloxone is to be offered to all patients undertaking opioid withdrawal management, and appropriate education provided to patients and partners/carers/family. In NSW people are able to access free naloxone and training on how to administer the medicine. Further information is available for consumers at: <https://yourroom.health.nsw.gov.au/getting-help/Pages/Naloxone.aspx>.

A variety of resources on overdose prevention and treatment are available on the NUAA website: <https://nuaa.org.au/overdose>.

Gamma Hydroxybutyrate (GHB) and related substances⁶

09

⁶ The term GHB in this document includes related substances gammabutyrolactone (GBL) and 1,4-butanediol (1,4-BD). In NSW surveillance data indicates that use is mostly GBL. Most consumers are not aware of whether they are taking GHB, GBL or 1,4-BD.

9.1 Signs, symptoms and course of GHB withdrawal

The range and severity of GHB withdrawal symptoms appears to vary between individuals according to prior exposure to the drug.

Table 9.1 Signs and symptoms of GHB withdrawal

Mild to moderate	Severe
Cravings	Myoclonus
Tremor	Disorientation
Insomnia	Perceptual disturbance
Diaphoresis	Delirium
Anxiety	Bradycardia
Nausea	Rhabdomyolysis
Tachycardia	Renal impairment
Hypertension	
Agitation	
Hyperthermia	

Onset of withdrawal can be rapid: symptoms may begin within 1-12 hours of the last dose and typically within 1-4 hours of the last dose. It is therefore important that patients at risk of GHB withdrawal **are assessed and managed as a priority and treatment commenced early**. Features of withdrawal have been reported to last up to 21 days.

9.1.1 Factors affecting severity of withdrawal

The length of use and dose may influence the severity of withdrawal; previous withdrawal symptoms can be a useful guide to the likely withdrawal to come. Early disorientation or delirium and hallucinations may indicate a severe or complex withdrawal and may require early involvement of intensive care (ICU) as transfer to ICU can be necessary in severe withdrawal.

Predictors of severe withdrawal and delirium on assessment include:

- Short time intervals between dosing ($\leq 2-4$ hrs).
- Higher daily doses (>15 ml of GHB).
- Onset of withdrawal symptoms within 2-3 hours.
- Awakening throughout the night due to withdrawal symptoms and using regularly throughout the night.
- Previous severe withdrawal.
- No days without GHB for more than 4-6 weeks.

Severe withdrawal can lead to treatment-resistant delirium, seizures, muscle rigidity, and rhabdomyolysis, cardiac arrest and renal failure, and in rare cases can be fatal if left untreated. ICU referral is necessary in patients with features of very severe withdrawal.

9.2 Assessment

The usual assessment for withdrawal should be undertaken, including:

- Substance use history and withdrawal history covering all substances used
- Medical and mental health history.
- Risk of harm to self and others.
- Physical examination.
- Mental state examination and cognitive assessment.

More information on assessment for withdrawal is detailed in section 4.2 and in the companion handbook.

Be mindful of other possible causes of signs and symptoms of GHB withdrawal. The onset of delirium resulting from GHB withdrawal is a diagnosis of exclusion, so other potential causes of delirium are to be excluded.

The patient may be intoxicated on presentation. This may affect their ability to provide and receive information and hence may not be able to provide informed consent. Assessment of intoxicated individuals is difficult but should be pursued as far as is possible. Assessment findings may be reviewed after signs of intoxication have abated.

9.2.1 Consumption history

Initial assessment is to include a substance use history to elicit:

- Pattern of GHB use.
- Severity of dependence.
- Previous withdrawal episodes.
- Timing and quantity of last dose.

Ask about use of all substances, class by class, to identify amount and frequency of substances used.

9.2.2 Assessing potential complications of chronic use

Little data exists on the long-term effects of chronic GHB use. Impairment in recall has been reported subsequent to GHB withdrawal, as have cognitive problems, tremor, depression, anxiety and insomnia, which may persist for weeks or months and potentially contribute to relapse.

9.3 Withdrawal management

The purpose of withdrawal care is to provide appropriate support for withdrawal to be completed safely. The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

9.3.1 Treatment planning

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment. Provide advice about risk of overdose post-withdrawal.

Address the patient's reasons for seeking treatment, social circumstances, and expectations about withdrawal and identify short- and long-term goals of treatment. Agree on the setting for withdrawal and establish a pattern of monitoring and review of progress.

9.3.2 Treatment settings

Withdrawal from GHB can be undertaken in either outpatient or inpatient settings.

Where a moderate to severe withdrawal is predicted, patients are to be managed in an acute hospital or supervised inpatient withdrawal setting. This includes people who have concurrent high-level substance use or co-occurring significant mental health or medical issues. Management of severe withdrawal syndrome is to be conducted in a high dependency setting.

Patients with infrequent use may not experience withdrawal and can be managed at home with support from healthcare providers.

For specialist advice on appropriate treatment settings or other matters relating to GHB withdrawal, contact the Drug and Alcohol Specialist Advisory Service (DASAS) on 1800 023 687 (or (02) 8382-1006 if within Sydney metropolitan area).

9.3.3 Supportive care

Supportive care interventions can assist patients to cope with withdrawal symptoms including cravings, anxiety, sleep disturbance, and emotional fluctuations. The general principles of supportive care involve:

- Psychoeducation and coping with withdrawal symptoms. Patients should be educated regarding common withdrawal symptoms, their likely onset and duration, and coping strategies (eg relaxation techniques, sleep hygiene, advice regarding diet).
- Specific strategies for addressing agitation, anger and sleep disturbances.

- Frequent orientation, reassurance and explanation of procedures to patients with thought or perceptual disturbances.
- Crisis intervention, addressing accommodation, personal safety or other urgent welfare issues.
- Coping with cravings. Cravings are a normal part of all withdrawal syndromes, and all patients should be educated regarding the nature of cravings and strategies for coping with them during withdrawal.

For more details on supportive care, see section 4.4.4 above and Appendix 10.

9.3.4 Medication

The treatment of GHB withdrawal is primarily supportive, including the administration of medication to control agitation, delirium and seizures, with careful monitoring for respiratory depression and potential complications.

High-dose benzodiazepines are the primary treatment for GHB withdrawal. Doses used vary, however **diazepam** 10-20 mg every 1-2 hours is recommended, commenced early (within two hours of the last dose of GHB if not sedated) until light sedation and control of agitation is achieved.

Regular medical review is to be undertaken. A medical officer is to review the patient prior to exceeding 120 mg of diazepam in the first 24 hours of GHB withdrawal treatment. Consultation with an addiction specialist is recommended at this point.

Ongoing monitoring and administration of diazepam according to symptoms can be continued carefully. Diazepam is weaned over approximately seven days when treating GHB withdrawal.

Refer to ICU for consideration of management in a critical care setting if doses above 150-200 mg of diazepam are required in 24 hours, there is early confusion or delirium or severe symptoms.

Diazepam is used with caution in patients who have hypersensitivity to diazepam, have severe liver disease, are taking potent inhibitors of CYP-450 (e.g. ritonavir), are elderly or who present with a head injury or other significant co-occurring conditions (e.g. severe lung disease, cerebrovascular disease and reduced level of consciousness). Oxazepam is an appropriate alternative.

Baclofen, a high affinity GABA-B agonist, has been used in conjunction with diazepam to reduce the severity of GHB withdrawal symptoms. Baclofen can be used as an adjunct in severe cases refractory to benzodiazepine therapy or if moderate to severe withdrawal is predicted. Doses typically range from 10-25 mg TDS and are initiated at the start of withdrawal management. This can be ceased on discharge or tapered over several weeks. Given safety concerns with baclofen overdose, it is recommended to be dispensed weekly from a community pharmacy if continued following discharge.

Other medications that may be useful include short term **olanzapine** (2.5-5 mg PO as required to a maximum 20 mg in 24 hours) or **quetiapine** (25-50 mg as required to a maximum of 200 mg in 24 hours) which have well-established efficacy in managing agitation.

If the patient is not responding, obtain specialist advice urgently given the potential risks in GHB withdrawal. The Drug and Alcohol Specialist Advisory Service (DASAS) (ph 1800 023 687) is a free 24/7 telephone service that provides advice to health professionals who require assistance with the clinical diagnosis and management of patients with alcohol and other drug-related concerns.

9.3.5 Monitoring and review

Regular and frequent observations and clinical monitoring is recommended for GHB withdrawal. Monitoring should be clinically based on observations, objective signs and subjective symptoms, with the frequency determined by the severity of the withdrawal. In more severe cases, hourly or even more frequent monitoring may be required until the patient settles. Monitor vital signs, fluid balance and blood tests (full blood count, electrolytes, liver function tests, blood alcohol level and creatine kinase) in patients who are acutely unwell.

There is currently no widely accepted or validated scale for the assessment of withdrawal from GHB or its precursors.

9.4 Continuing care

Withdrawal treatment does not confer long term benefits unless followed by other drug and alcohol interventions including counselling. Relapse following discharge from an episode of GHB withdrawal is common and can be extremely risky due to reduced tolerance. Warn patients of the possibility of reduced tolerance and hence the potential risk of overdose if returning to using GHB post-withdrawal. Further information on continuing care is in section 4.5 and Appendix 3.

Actively link patients with ongoing AOD treatment services post-withdrawal, including AOD counselling, rehabilitation services, psychological therapies, family support, accommodation assistance and financial and legal services.

9.4.1 Reducing harm

Education on the principles of harm minimisation should be provided. Advise the patient on steps to minimise the risk of overdoses including avoiding combining GHB with other depressants like alcohol, benzodiazepines, sedating antihistamines and opioids. Suggest they avoid using GHB alone, or in other situations where help might not be available and that they tell a friend what they are using and where. Also note that they can reduce the risk of overdose by waiting long enough to feel any effects before taking more GHB

As GHB is a colourless and odourless liquid, it is often stored in water bottles and takeaway soy sauce containers and therefore can easily be inadvertently consumed. Advise that patients be careful where it is stored. Keep it out of reach of children or others who might mistakenly consume it as it creates high risk of accidental poisoning and overdose.

Gabapentinoids

10

10.1 Signs, symptoms and course of gabapentinoid withdrawal

Gabapentinoid withdrawal onset usually is within 1-2 days of last use. The duration of the withdrawal syndrome without treatment is up to 3-5 days for severe symptoms. Residual mild symptoms can persist for up to a few weeks. Tapering of gabapentinoids will modify the severity and duration of symptoms.

Withdrawal symptoms are similar to the withdrawal symptoms of other sedating agents – diaphoresis, tachycardia, agitation – though there are cases of severe withdrawal involving seizure and catatonia.

Delirium can be associated with both gabapentinoid intoxication and withdrawal – the history of gabapentinoid use will enable differentiation. There have been rare case reports of myoclonus, asterixis, catatonia, seizure, status epilepticus, akathisia, psychosis and encephalopathy occurring in the context of gabapentinoid withdrawal.

Table 10.1 Common signs and symptoms of gabapentinoid withdrawal

Symptoms	Signs
Headache	Agitation
Anxiety	Diaphoresis
Cravings	Tachycardia
Diarrhoea	Hypertension
Nausea	Tremor
Chills	
Fatigue	

Patients can be on gabapentinoids for as little as four weeks before developing tolerance and withdrawal symptoms when use is ceased. Patients can develop withdrawal symptoms on therapeutic doses of gabapentinoids, typically up to 300 mg of pregabalin or 3600 mg of gabapentin, but the majority are taking suprathreshold doses. Not all patients using gabapentinoids daily or almost daily will experience a withdrawal syndrome. The risk appears to be increased with multiple substance dependence, higher dose, and concomitant mental health conditions.

All patients on gabapentinoids are to have their dose **titrated** down when planning to cease use.

10.1.1 Factors affecting severity of withdrawal

Factors predicting withdrawal severity have not been clearly established. Duration of use, amount used and tolerance may be predictors of withdrawal and its severity. Histories of co-occurring medical and mental health conditions have also been suggested as associated with more severe withdrawal.

10.2 Assessment

The usual assessment for withdrawal should be undertaken, including:

- Substance use history and withdrawal history including any associated complications.
- Medical and mental health history.
- Risk of harm to self and others.
- Physical examination. History or signs of renal disease is important in assessment given the metabolism of gabapentinoids.
- Mental state examination and cognitive assessment.

Further information on assessment for withdrawal is provided in section 4.2 above and the companion handbook.

The patient may be intoxicated on presentation, and this may affect their ability to provide and receive information and provide informed consent. Assessment of intoxicated individuals may be difficult, and assessment findings should be reviewed after signs of intoxication have abated.

10.2.1 Consumption history

Document a substance use history that includes frequency of use (e.g. days used over past 28 days), average quantity used per day in mgs, duration of use, route of administration, time and amount of last dose and the recent pattern of use leading up to the presentation. Also ask about periods of abstinence, severity and complications of previous withdrawal experience and any previous treatment.

Ask about use of all substances, class by class, to identify amount and frequency of substances used.

10.3 Withdrawal management

The purpose of withdrawal care is to provide appropriate support for withdrawal to be completed safely. The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

10.3.1 Treatment planning

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment. Address the patient's reasons for seeking treatment, social circumstances, and expectations about withdrawal and identify short- and long-term goals of treatment. Agree on the setting for withdrawal and establish a pattern of monitoring and review of progress. Include regular review of the patient's objectives, which may change during the course of withdrawal.

Obtain specialist advice for patients with significant renal impairment. Specialist advice is also required for patients who are pregnant, as gabapentinoids are not recommended in pregnancy (Category B3).

Communication with the patient's gabapentinoid prescriber is critical in treatment planning. Checking regularly that the patient is not obtaining gabapentinoids from other sources may be necessary. Real time prescription monitoring systems are being implemented nationally. Information on the NSW SafeScript program can be found [here](#).

Driving

Patients who will be taking gabapentinoids before planned inpatient withdrawal or during community tapering are to be advised about risks of driving under the influence of gabapentinoids.

10.3.2 Treatment settings

Withdrawal from gabapentinoids can be undertaken in inpatient or outpatient settings. The setting in which withdrawal is undertaken will be determined through consideration of:

- Amount of gabapentinoid used.
- Concomitant medical and mental health conditions.
- Other drug use disorders.
- Social situation and supports.

Rapid reductions from high doses are suitable for an inpatient setting over 5-7 days. If patients are unable or unwilling to be admitted to an inpatient unit for this period, careful consideration can be given to a planned withdrawal that commences in an inpatient setting and continues as an outpatient in the community.

Gradual reductions from typical therapeutic doses are usually suited to an outpatient setting. This involves staged supply of medication and initially second daily review, tapered according to individual responses. Higher dose reductions may include an initial rapid reduction in an inpatient setting followed by a more gradual taper in the outpatient setting.

For specialist advice on appropriate treatment settings or other matters relating to gabapentinoid withdrawal, contact the Drug and Alcohol Specialist Advisory Service (DASAS) on 1800 023 687 (or (02) 8382-1006 if within Sydney metropolitan area).

10.3.3 Supportive care

Supportive care interventions can enable patients to cope with withdrawal symptoms including cravings, anxiety, sleep disturbance, and emotional fluctuations. The general principles of supportive care involve:

- Psychoeducation and coping with withdrawal symptoms. Patients should be educated regarding common withdrawal symptoms, their likely onset and duration, and coping strategies (eg relaxation techniques, sleep hygiene, advice regarding diet).
- Specific strategies for addressing agitation, anger and sleep disturbances. Frequent orientation, reassurance and explanation of procedures to patients with thought or perceptual disturbances.
- Crisis intervention, addressing accommodation, personal safety or other urgent welfare issues.
- Coping with cravings. Cravings are a normal part of all withdrawal syndromes, and all patients should be educated regarding the nature of cravings and strategies for coping with them during withdrawal.

For more details on supportive care, see section 4.4.4 above and Appendix 10.

10.3.4 Medication

Tapering of the gabapentinoid is the mainstay of treatment. Negotiate the rate of reduction with the patient. Use a slower reduction in patients on high therapeutic/supratherapeutic doses, those on gabapentinoids for more than four weeks, and those with co-occurring mental health disorders or substance dependence.

For planned withdrawals where the stated dose is at or beyond the maximum daily dose (pregabalin 600 mg, gabapentin 3600 mg), begin the taper in a controlled setting to confirm the patient's tolerance. Admit the patient for at least 24 hours to enable monitoring of the patient in case of toxicity due to lower tolerance than expected.

Patients reporting supratherapeutic doses can be started at maximum doses (pregabalin 600mg, gabapentin 3600mg) divided into four doses spaced throughout the day. This will be sufficient to suppress significant withdrawal symptoms. Doses are to be reduced or withheld if the patient becomes sedated.

In an inpatient setting, tapering over 5-7 days is appropriate, with a daily reduction in dose. Patients who are unable to be reduced to zero during 5-7 days of inpatient treatment due to significant medical or mental health conditions, or who are experiencing significant distress from withdrawal symptoms, can be reduced to a manageable amount of gabapentinoid as an inpatient and then continue to taper in the community.

A dose below 300 mg daily of pregabalin or 1800 mg daily of gabapentin would usually be suitable for community management. An outpatient reduction is usually undertaken over 4-6 weeks, with weekly dose reductions. Use a staged supply to ensure only small amounts of gabapentinoids are dispensed at a time.

Symptomatic relief can be provided according to table 10.2 over the page:

Table 10.2 Symptomatic medications

Symptoms	Medication (up to 7 days duration, as required)
Sleep problems	Benzodiazepines (e.g. diazepam 5-10 mg nocte) or z-drugs (e.g. zolpidem 10-20 mg nocte, zopiclone 7.5-15 mg nocte).
Restlessness, anxiety, irritability	Diazepam (e.g. 5-10 mg BD or TDS PRN) or antipsychotic medication (e.g. olanzapine 2.5-5 mg BD PRN)
Stomach pains	Hyoscine butylbromide (e.g. 20 mg TDS PRN)
Physical pain, headaches	Paracetamol, non-steroidal anti inflammatory agents
Nausea	Metoclopramide, Ondansetron

10.3.5 Managing complications

Seizures are treated with benzodiazepines per standard protocols for seizure management. For other severe complications, such as psychosis or delirium, usual treatments and/or seeking specialist advice are recommended.

10.3.6 Monitoring and review

Monitor patients regularly, with the frequency of observations determined by the severity of the withdrawal. No formal scales for measuring gabapentinoid withdrawal have been demonstrated to be valid. Monitoring is clinically based on observations, objective signs and subjective symptoms.

10.4 Continuing care

Withdrawal treatment does not confer long term benefits unless followed by other drug and alcohol interventions. Ensure the patient is actively linked with continuing care after withdrawal. This may include counselling, psychosocial support and management of co-occurring conditions including pain, anxiety, trauma and/or mood disorders, and other substance use disorders.

See section 4.5 and Appendix 3 for further information on continuing care.

10.4.1 Harm reduction

For those who continue to use gabapentinoids, harm reduction advice is to be provided. Educate patients that if they recommence gabapentinoid use post-withdrawal they will have reduced tolerance and should not use at their pre-withdrawal dose due to the risk of overdose. Note the risks associated with driving under the influence of gabapentinoids due to sedation.

Provide the patient with education and advice to reduce harms associated with gabapentinoid and other substance use. It is critical to advise all patients about the reduction of tolerance following withdrawal and abstinence and that if resuming use they need to use lower doses than previously to reduce overdose risk. Other overdose avoidance tips include waiting long enough to feel any effects before taking more – typically 90 minutes for gabapentinoids – and avoiding combining gabapentinoids with other substances. Suggest patients avoid taking large amounts of gabapentinoids alone, so other people can seek help in the event of an overdose.

If the patient injects, provide information about safer injecting practices including use of sterile injecting equipment to reduce risk of blood borne transmission, information regarding needle and syringe programs, and where possible, provision of sterile injecting

kits to take home. Discuss non-injecting routes of administration. Advise that oral use is safer than intravenous injection and explain that the high bioavailability makes the oral route almost equivalent to intravenous for gabapentinoids.

Benzodiazepine Receptor Agonists (BZRA)

11

11.1 Signs, symptoms and course of BZRA withdrawal

Specific symptoms of BZRA withdrawal are subjective, with few observable signs. Most patients discontinuing BZRAs experience a degree of 'rebound' anxiety and insomnia. There may be signs of autonomic hyperactivity (e.g. tachycardia, hypertension, sweating), or postural hypotension. The withdrawal state may be complicated by seizures.

Less commonly, there may be progression to a more severe withdrawal state characterised by confusion and disorientation, delusions, and more prolonged visual, tactile or auditory hallucinations. In such cases, a separate diagnosis of sedative, hypnotic, or anxiolytic-induced delirium should be assigned. See table 11.1 for a comprehensive list of signs and symptoms.

Onset of withdrawal occurs between 2-5 days after stopping, reaching a maximum on days 7-10, and usually abating by the end of the second or third week. Withdrawal may occur earlier or later depending on the half-life of the BZRA involved.

Table 11.1 Signs and symptoms of BZRA withdrawal

Common	Less common	Uncommon
Anxiety	Nightmares	Delusions
Insomnia	Agoraphobia	Paranoia
Restlessness	Feelings of unreality	Hallucinations
Agitation	Depersonalisation	Seizures
Irritability	Panic attacks	Persistent tinnitus
Poor concentration	Decreased appetite, weight loss, GI upset	Confusion
Poor memory	Sweating, tremor	
Depression	Lethargy	
Muscle tension and twitching	Perceptual disturbances	
	Headache, body ache	
	Blurred vision	
	Increased temperature	

11.1.1 Factors affecting severity of withdrawal

Severity of withdrawal is affected by:

- Dosage.
- Potency.
- Duration of use.

Delirium is more common in frail and elderly individuals. People with pre-existing anxiety, sleep or seizure disorders will usually experience higher levels of these symptoms.

11.2 Assessment

The usual assessment for withdrawal should be undertaken as summarised in section 4.2, including:

- Substance use history and withdrawal history covering all substances used.
- Medical and mental health history.
- Risk of harm to self and others.
- Physical examination.
- Mental state examination and cognitive assessment.
- History of seizures or delirium.

Table 11.2 BZRAs dose equivalence

Drug	Approximate equivalent dose (mg) ⁷ to diazepam 5mg
Alprazolam	0.5
Bromazepam	3
Clobazam	10
Clonazepam	0.25 ⁸
Diazepam	5
Flunitrazepam	0.5

The patient may be intoxicated on presentation. This may affect their ability to provide and receive information and hence may not be able to provide informed consent. Assessment of intoxicated individuals is difficult but should be pursued as far as is possible. Assessment findings may be reviewed after signs of intoxication have abated.

11.3 Withdrawal management

Providing appropriate support for withdrawal to be completed safely is fundamental to withdrawal care. The primary aims of substance withdrawal are to:

1. Cease substance use, whether permanently or temporarily.
2. Treat symptoms, coexisting conditions and complications of chronic use.
3. Engage the patient in ongoing treatment and care.

As management will differ according to whether patients are dependent on a low dose or high dose of BZRA, assess the patient's BZRA consumption history using the oral daily diazepam equivalence (ODDE) (see table 11.2 below).

In this context:

- Low dose therapeutic dependence is ≤10 mg ODDE;
- High-dose dependence is >10 mg ODDE.

Drug	Approximate equivalent dose (mg) ⁷ to diazepam 5mg
Lorazepam	1 ⁹
Nitrazepam	5
Oxazepam	15
Temazepam	10

⁷The widely varying half-lives and receptor-binding characteristics of these drugs make exact dose equivalents difficult to establish. Conversion for z-drugs is unclear and not included in this table.

⁸Particular care is needed if changing from clonazepam to a different benzodiazepine because there is a wide variety of reported equivalences.

⁹Lorazepam may be more potent at higher doses

11.3.1 Management of low dose therapeutic BZRA dependence

Many people take prescribed benzodiazepines for many years without dose escalation, prescribed by a single doctor or practice usually for management of anxiety or insomnia. In this group, withdrawal may produce more distress and problems than continuing on a long-term stable dose. The benefits of attempting withdrawal need to be set against the risks of continued prescribing, such as falls and cognitive decline.

If the doctor and patient agree that an attempt to withdraw will be made, undertake it slowly with good preparation and patient education. Establishing a good therapeutic relationship with the patient is critical.

11.3.2 Management of high dose BZRA dependence

In engaging patients with high dose BZRA dependence, a structured approach as described below is required. Explain the risks associated with high dose BZRA use and the rationale behind the structured approach to withdrawal at the outset.

On rare occasions, there may be a need for a bridging script until a specialist review is conducted. In order to ensure the safety of the patient, this treatment is only to be continued if there are frequent reviews and avoidance of higher risk BZRAs such as alprazolam. A clear treatment agreement between patient and prescriber is to be reached which unequivocally states that this is an interim arrangement.

The Royal Australian College of General Practitioners (RACGP) has some resources to guide BZRA prescribing including managing requests for prescriptions: [Guide for Prescribing Drugs of Dependence in General Practice](#).

11.3.3 Treatment planning

It is critical that the withdrawal management is structured and the patient properly assessed and prepared for the treatment plan. If the patient is ambivalent or pre-contemplative, motivational interviewing techniques are recommended.

Summarise the patient assessment to inform the treatment plan, ensuring that it includes post-withdrawal treatment. Address the patient's reasons for seeking treatment, social circumstances, and expectations about withdrawal. Agree on the withdrawal setting and identify the patient's short- and long-term goals.

Establish the pattern of monitoring and review and include regular review of the patient's objectives, which may change during the course of withdrawal. Identify co-occurring conditions requiring management. Ensure that advice is provided about risk of overdose increasing post-withdrawal due to decreased tolerance.

11.3.4 Treatment settings

Low risk patients can be managed in general practice. High risk patients are best managed with initial stabilisation and commencement of tapering in a specialist inpatient or outpatient withdrawal service.

An outpatient setting is preferred except when:

- The safety of the patient would be at risk (e.g. documented history of seizures, delirium, alcohol dependence or significant untreated mental illness).
- The patient reports erratic, uncontrolled use of high doses of BZRAs or use of other CNS depressants.
- The likelihood of a successful outcome is poor in an outpatient setting (repeated inability to complete outpatient reductions, other drug use, unstable social environment, co-occurring mental health conditions, emotional dysregulation or impulsivity).

Specialist inpatient withdrawal units are most suitable for patients withdrawing from other drugs in addition to benzodiazepines, including alcohol, GHB and gabapentinoids, and for older patients and patients with other illnesses (especially mental health disorders). As noted above, such units should also be considered for commencing high dose users on a safe reduction regimen.

General hospital withdrawal is rarely necessary for a planned withdrawal admission, unless specialist withdrawal facilities are unavailable (e.g. in a rural setting).

For specialist advice on appropriate treatment settings or other matters relating to BZRA withdrawal, contact the Drug and Alcohol Specialist Advisory Service (DASAS) on 1800 023 687 (or (02) 8382-1006 if within Sydney metropolitan area).

11.3.5 Unplanned withdrawal

Patients in hospital for other reasons may undergo unplanned BZRA withdrawal. This can be a particular problem in elderly patients who may develop delirium as a result of BZRA withdrawal.

For hospitalised patients, take a history of BZRA use to identify risk of withdrawal. Do not abruptly discontinue BZRA, even at low doses, because of the risk in the sick and the elderly of precipitating withdrawal. Generally, maintain benzodiazepine use at preadmission levels for therapeutic dependence. Hospitalisation and sickness make a very poor context for initiating elective withdrawal.

Patients taking high doses of BZRAs or with polysubstance use disorder are to be stabilised on a long-acting benzodiazepine (preferably diazepam) at a dose about 40 per cent that of their regular intake before admission (or 40 mg/day, whichever is lower). Reduction and withdrawal in partnership with the patient should follow once their other medical condition has been stabilised.

11.3.6 Psychosocial interventions and supportive care

Psychological interventions are key components in the treatment of BZRA withdrawal. Both cognitive behavioural therapy and relaxation training – as adjuncts to BZRA taper – can be effective in reducing BZRA use in the short term (three-month period).

Provide supportive care, such as:

- Psychoeducation and coping with withdrawal symptoms. Patients should be educated regarding common withdrawal symptoms, their likely onset and duration, and coping strategies (eg relaxation techniques, sleep hygiene, advice regarding diet).

- Specific strategies for addressing agitation, anger and sleep disturbances. Frequent orientation, reassurance and explanation of procedures to patients with thought or perceptual disturbances.
- Crisis intervention, addressing accommodation, personal safety or other urgent welfare issues.
- Coping with cravings. Cravings are a normal part of all withdrawal syndromes, and all patients should be educated regarding the nature of cravings and strategies for coping with them during withdrawal.

For more details on supportive care, see section 4.4.4 above and Appendix 10.

11.3.7 Medication

BZRA withdrawal is managed with a **taper and cease** schedule, with or without first converting to diazepam. People who are on less than 10 mg ODDE may be able to reduce their BZRA dose without a switch to diazepam.

For higher doses, switching to diazepam is recommended for most patients. Use the equivalency table (table 11.2 above) for the conversion to diazepam. In most cases a daily maximum dose of 40 mg will prevent major withdrawal symptoms including withdrawal seizures.

Seek specialist advice before converting to diazepam in patients with severe hepatic dysfunction, as diazepam may accumulate to a toxic level in these people. An alternative benzodiazepine without active metabolites (such as oxazepam) may be preferred.

Negotiate a gradual drug withdrawal schedule (dose tapering) that is flexible. Titrate the reduction of dose according to the severity of withdrawal symptoms. Be guided by the patient in making adjustments so that they remain comfortable with withdrawal. Withdrawal may take three months to a year or longer. Some people may be able to withdraw in less time. There are no standard tapering regimens and the rate of tapering depends on the starting dose, duration of therapy, risk of relapse and how well tapering is tolerated by the patient. A general suggestion for the rate of reduction is 10 per cent dose reduction every 10-14 days.

High risk, high dose BZRA patients may need to commence withdrawal in an inpatient setting and continue a more gradual step-down regimen in the community post-discharge. For patients withdrawing in the community, 'staged dispensing' is to be used and is effective in both withdrawal and maintenance. This can be done by regular dispensing of small quantities at a local pharmacy with clinical review, for example daily dispensing with fortnightly clinical review. Liaison with a community pharmacist is a useful strategy.

Concurrent use of other medications such as the anticonvulsant carbamazepine or medications such as pregabalin is not supported by evidence.

11.3.8 Monitoring and review

Undertake regular patient monitoring (either by telehealth or in-person). Monitoring is to include severity of withdrawal symptoms, cravings, any substance use, medication use and other health and social conditions.

Benzodiazepine withdrawal scales such as Clinical Institute Withdrawal Assessment Scale – Benzodiazepines (CIWA-B) offer a systematic measure of the withdrawal phenomena, but if used they should only be a guide to complement clinical assessment. Good assessment and clinical judgment remain the gold standard for guiding management and clinicians should not rely on withdrawal scale scores alone.

Monitor whether the patient has obtained BZRA prescriptions elsewhere through prescription monitoring programs. Real time prescription monitoring systems are being implemented nationally. Information on the NSW SafeScript program can be found [here](#).

If used, urine drug screening is a tool to engage the patient rather than a basis for punitive measures. Routine urine drug screening will report the presence of benzodiazepines and may be helpful in ensuring patient safety. Confirmatory testing is used if specific benzodiazepine drugs need to be identified, but care is required for the interpretation of urine drug screen results. For example, temazepam and oxazepam are metabolites of diazepam which may lead the practitioner to conclude the patient had been taking other benzodiazepines during diazepam treatment. Newer BZRAs such as etizolam are generally not reported on unless requested.

11.4 Continuing care

Withdrawal treatment does not confer long term benefits unless followed by other drug and alcohol interventions. Ensure the patient is actively linked with continuing care after withdrawal. Psychosocial interventions to treat conditions including anxiety disorders, trauma-related conditions or sleep disorders that may have contributed to using benzodiazepines in the past are the mainstay of ongoing care.

If patients did not achieve the desired outcomes on their first attempt at withdrawal, encourage the person to try again. Remind the person that reducing benzodiazepine dosage, even if this falls short of complete drug withdrawal, can still be beneficial.

If another attempt is considered, reassess the person first and treat any underlying problems (such as depression) before trying again.

See section 4.5 and Appendix 3 for further information on continuing care post-withdrawal.

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Useful resources and further information

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National Mental Health Consumer & Carer Forum. Advocacy Brief – Culturally and Linguistically Diverse (CaLD) Mental Health: <https://nmhccf.org.au/our-work/advocacy-briefs/culturally-and-linguistically-diverse-cald-mental-health>.

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NSW Health. Communicating positively: a guide to appropriate Aboriginal terminology: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2019_008.pdf.

NSW Centre for the Advancement of Adolescent Health and Transcultural Mental Health Centre. Adolescent Health GP Resource Kit 2nd Edition: <https://www.health.nsw.gov.au/kidsfamilies/youth/Documents/gp-resource-kit-revised-2nd-edition.pdf>.

NSW Health. Substance Use and Young People Framework: <https://www.health.nsw.gov.au/aod/professionals/Publications/substance-use-young-framework.pdf>.

NSW Health. NSW Youth Health Framework: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2017_019.pdf.

Screening tools to screen patients for substance use. SBIRT, CRAFFT AUDIT: <https://www.sbirt.care/tools.aspx>.

Youth Support + Advocacy Service. Youth Drug and Alcohol Advice for Professionals: <https://ysas.org.au/for-professionals-1>.

National Health and Medical Research Council (NHMRC). Australian guidelines to reduce health risks from drinking alcohol: <https://www.nhmrc.gov.au/health-advice/alcohol>.

Deprescribing guide for benzodiazepines and z drugs: <https://www.nswtag.org.au/wp-content/uploads/2018/06/1.1-Deprescribing-Guide-for-Benzodiazepines-and-Z-Drugs.pdf>.

NSW Health. Take Home Naloxone training site: <https://www.health.nsw.gov.au/aod/programs/Pages/naloxone-public-health-services.aspx#bookmark2>.

Glossary of terms

Acronyms & Abbreviations

AA	Alcoholics Anonymous
ABV	alcohol by volume
AHPRA	Australian Health Practitioner Regulation Agency
ALO	Aboriginal Liaison Officer
AOD	alcohol and other drug
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
AUDIT and AUDIT-C	Alcohol Use Disorders Identification Test
AWS	alcohol withdrawal scale
BD	twice a day
BZRA	benzodiazepine receptor agonists
CALD	Culturally and Linguistically Diverse
CBD	Cannabidiol
CCCP	Continuing Coordinated Care Program
CIWA-Ar	Clinical Institute Withdrawal Assessment of Alcohol Scale revised
CIWA-B	Clinical Institute Withdrawal Assessment Scale – Benzodiazepines
CMA	Crystal Meth Anonymous
CNS	central nervous system
COWS	Clinical Opiate Withdrawal Scale
D&A	drug and alcohol
DASAS	Drug and Alcohol Specialist Advisory Service
DSM 5	Diagnostic and Statistical Manual 5th Edition
DT	delirium tremens
DV	domestic violence
ED	emergency department
FBC	full blood count

FDS	Family Drug Support
FSH	follicle-stimulating hormone
GHB	gamma hydroxybutyrate
GI	gastrointestinal
HBV	hepatitis B virus
HCL	hospital consultation liaison
HCV	hepatitis C virus
HIV	human immunodeficiency virus
ICD-11	International Classification of Diseases 11th Revision (World Health Organisation)
ICU	intensive care unit
IRIS	Indigenous Risk Impact Screen
LFTs	liver function tests
LH	luteinizing hormone
LHD	local health district
MDMA	Methylenedioxy Methamphetamine
MR	modified release
MRG	Mandatory Reporter Guide
NA	Narcotics Anonymous
Nocte	at night
NUAA	NSW Users and AIDS Association
ODDE	oral daily diazepam equivalence
oMEDD	oral Morphine Equivalent Daily Dose
QID	four times a day
RACGP	Royal Australian College of General Practitioners
PHN	Primary Health Network
PRN	as required
TDS	three times a day
TGA	Therapeutic Goods Administration
SDS	Severity of Dependence Scale
SMART	Self Management and Recovery Training
SOWS	Subjective Opiate Withdrawal Scale

STI	sexually transmitted infection
SUPPS	Substance Use in Pregnancy and Parenting Services
TB	tuberculosis
THC	Tetrahydrocannabinol
UEC	urea electrolytes and creatinine

Terms & Explanations

Alcohol Withdrawal Scale (AWS) – A tool to measure alcohol withdrawal severity.

Ambulatory – Treatment in which the patient attending a clinic or hospital from home without an overnight stay. Also known as ‘outpatient’ treatment.

Abstinence – Refraining from drug and alcohol use at all times.

Amphetamine – A central nervous system stimulant drug affecting the central and peripheral nervous systems, and causing an efflux of neurotransmitters (dopamine, serotonin and noradrenaline) in the brain. The term includes three types of amphetamines: amphetamine, dexamphetamine and methamphetamine.

Buprenorphine – a partial opioid agonist medication.

Benzodiazepine receptor agonists (BZRA) – A class of drugs that act on the central nervous system, increasing GABA binding and chloride ion channel opening. They facilitate inhibitory activity and have hypnotic, anxiolytic, anticonvulsant and muscle relaxant properties.

Cannabis – The generic name given to the psychoactive substances found in the plant *Cannabis sativa* and *Cannabis indica*. Cannabis is made from the dried flowering heads and leaves of the plant. The main active constituents in cannabis are tetrahydrocannabinol (THC) and cannabidiol (CBD).

Cocaine – A powerful central nervous system stimulant derived from the coca plant, used non-medically to produce euphoria or wakefulness. Often sold as white, translucent, crystalline flakes or powder.

Community settings – Non-residential treatment provided without requiring overnight stays. It can be home-based (with clinicians visiting the patient’s home) or ambulatory/outpatient (with the patient attending at a clinic or medical centre).

Comorbidity / coexisting condition – In the context of withdrawal management, refers to a person who has coexisting substance use and mental health or physical health problems.

Continuing care – In the context of withdrawal management, continuing care means managing the transition to post-withdrawal care. Continuing care includes referral to counselling, maintenance treatment, self-help groups and family services.

Craving – A very strong desire for a substance, or for the intoxicating effects of that substance.

Delirium Tremens / Alcohol withdrawal delirium – An acute confused state occurring during withdrawal from alcohol, characterised by rapid pulse, clouding of consciousness, dehydration, delirium, elevated body temperature, sweating, extreme fear, hypertension, tachycardia, tremor and hallucinations.

Dependence – A disorder of regulation of psychoactive substance use arising from repeated or continuous use. The characteristic feature is a strong internal drive to use the substance, which is manifested by impaired ability to control use, increasing priority given to use over other activities and persistence of use despite harm or negative consequences. These experiences are often accompanied by a subjective sensation of urge or craving to use the substance.

Depressant – Any substance that suppresses, inhibits or decreases some aspects of central nervous system activity. The main classes of central nervous system depressants are sedatives/hypnotics, opioids and neuroleptics.

Gabapentinoids – The gabapentinoids (pregabalin and gabapentin) are GABA analogues. Gabapentinoids are approved for the treatment of neuropathic pain in adults, and some seizure disorders. These medicines are also prescribed off label for anxiety. The desired effects of recreational use of gabapentinoids include sedation, euphoria, hallucinations, disinhibition and dissociation.

Gamma hydroxybutyrate (GHB) / gamma butyrolactone (GBL) – A central nervous system depressant, that acts on GABA-B and GHB receptors in the brain. Lower doses produce stimulant-like effects including euphoria, disinhibition and increased libido, however, supra-therapeutic doses can lead to profound CNS and respiratory depression. Gamma-butyrolactone (GBL) is known as a precursor to GHB as it converts to GHB once ingested. In NSW over the past 2 years, surveillance data indicates that use is mostly GBL and is almost never GHB.

Inpatient – Treatment provided to a patient admitted to a hospital bed, whether a specialised withdrawal unit or a general hospital ward.

Intoxication – The condition resulting from use of a psychoactive substance that produces behaviour and/or physical changes.

Methadone – A synthetic opioid drug.

Methamphetamine – The most common illicit amphetamine, available in powder, base or ice form.

Methylenedioxy methamphetamine (MDMA) – A synthetic psychostimulant drug that effects on the central nervous system. More commonly known as ecstasy.

Naloxone – An opioid-receptor antagonist that reverses the features of opioid intoxication. It is often used for the treatment of opioid overdose.

Opioid – The generic term applied to alkaloids from the opium poppy, as well as their synthetic analogues and compounds synthesised within the body.

Outpatient – Treatment provided to a patient in a clinic or medical centre setting. Patients are not admitted to hospital and do not stay overnight.

Overdose – Can occur when a person has taken more of a substance than the recommended therapeutic dose or an amount that exceeds their tolerance, whether intentionally or by accident. Overdose may result in a substantially reduced level of consciousness, seizure, coma or death.

Psychostimulants – A class of drug affecting the central and peripheral nervous systems, and causing an efflux of neurotransmitters (dopamine, serotonin and noradrenaline) in the brain. The psychostimulants most commonly used illicitly in Australia are methamphetamines, ecstasy and cocaine.

Relapse – A return to substance use after a period of abstinence.

Residential – Treatment provided at a residential facility, usually operated by a non-government organisation. Residential settings often do not have medical or nursing coverage.

Stimulants – Any agent that activates, enhances or increases neural activity of the central nervous system. Stimulants include the amphetamines, cocaine, caffeine and nicotine.

Tolerance – A decrease in response to a drug dose that occurs with continued use. Increased doses of the substances are required to achieve the effect originally produced by lower doses.

Wernicke's encephalopathy – An acute, life-threatening, neurological syndrome consisting of confusion, palsies of the ocular muscles and of gaze (nystagmus), peripheral neuropathy and ataxia. Its most common cause is thiamine (vitamin B1) deficiency, often associated with long-term excessive use of alcohol. If not treated immediately with thiamine, the patient is likely to progress to a permanent amnesic syndrome (Korsakoff's psychosis). In some cases, fatality can occur. NB: Always ensure thiamine is given before glucose if there is any suspicion of Wernicke's encephalopathy.

Withdrawal – Signs and symptoms associated with cessation of a substance on which a person is dependent.

Withdrawal syndrome – Withdrawal is a clinically significant cluster of symptoms, behaviours and/or physiological features, varying in degree of severity and duration, that occurs upon cessation or reduction of use of a substance in individuals who have developed dependence or have used the substance for a prolonged period or in large amounts.

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 - 7. Withdrawal scales**

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Appendix 1. Implementation/Compliance Checklist

Organisation / Facility:			
Assessed by:		Date of Assessment:	
Key Requirements	Not commenced	Partial compliance	Full compliance
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Notes:		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Notes:		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Notes:		
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	Notes:		

Appendix 2.

Contributors

Table 1: Expert Steering Committee membership

Name	Organisation
Dr Anthony (Tony) Gill (Chair)	NSW Chief Addiction Medicine Specialist, Ministry of Health; Clinical Director, Alcohol and Other Drugs, Southern NSW Local Health District (LHD).
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Dr Suzie Hudson	Clinical Director, Network of Alcohol and Drug Agencies.
Dr Johnathan Ho	GP Liaison Officer, Murrumbidgee Primary Health Network.
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Associate Professor Bridin Murnion	Senior Staff Specialist, Drug & Alcohol Services, Western Sydney LHD; Senior Staff Specialist, Clinical Pharmacology and Toxicology, St Vincent's Hospital Sydney Clinical Associate Professor, Faculty of Medicine and Health, University of Sydney
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Carolyn Stublely	Nurse Manager, We Help Ourselves (WHOS)
Dr Kathryn Watson	Addiction Psychiatrist NSW Director of Advanced Training (Addiction Psychiatry) Faculty of Addiction Psychiatry, RANZCP

Appendix 2.

Contributors (cont.)

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Name	Organisation
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Appendix 2.

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Name	Organisation
Specific population: Aboriginal people	Bradley Freeburn, Dr Kate Conigrave, and Kylie Lee
Specific population: Adolescents and Young Adults	Dr Bronwyn Milne and Ms Gabriella Holmes
Alcohol	Professor Paul Haber
Cannabis	Professor Nick Lintzeris
Psychostimulants	Professor Nadine Ezard and Dr Anthony Gill
Opioids	Assoc Professor Bridin Murnion and Dr Craig Sadler
GHB	Dr Merissa Cappetta
Gabapentinoids	Dr Chris Tremonti
Benzodiazepine Receptor Agonists	Dr Apo Demirkol and Dr Bronwyn Hudson
Trauma-informed care	Dr Kathy Watson

Appendix 3.

Options for continuing care post-withdrawal

Counselling and group programs

These include free or fee-charging services provided by government, non-government and private organisations. Drug and alcohol counselling provided by local health districts is normally free and can be accessed via the intake lines (see [NSW Health webpage](#)).

Peer based programs

There are two main types of peer-based programs.

One is modelled on the 12 step program developed by [Alcoholics Anonymous](#) (AA) and includes [Narcotics Anonymous](#) (NA), [Crystal Meth Anonymous](#) (CMA), [Gamblers Anonymous](#) and so on. They are based on the belief that total abstinence is the only way to recovery. People interested in attending need to be motivated to attend meetings and become part of the program.

The SMART ([Self Management and Recovery Training](#)) program is another self help meeting-style program available in Sydney and other parts of NSW. It is an evidence-based program structured around the principles of cognitive behavioural therapy and motivational therapy. Groups are led by trained peers and/or professional counsellors and are not faith-based.

There is no formal referral process to peer-based programs and patients can be advised to make contact with a functioning group in their area.

Support for families

Involving family and carers in treatment may improve outcomes. Support services for families and carers benefit both the patients and the families. Services include [Family Drug Support](#) (FDS) and [Al Anon](#) (for people affected by someone's alcohol use).

Rehabilitation programs

Government and private rehabilitation programs include outpatient programs and live-in programs. The length, philosophy, cost, assessment procedures, target groups (exclusions) and support afterwards all vary.

As with most service providers, the agencies will want to speak to the person being referred before offering them a place. Programs run for periods ranging from three weeks to more than a year. Patients should be advised of any waiting times and clinicians should work with patients to identify and minimise risks during this period.

Information on accessing rehabilitation programs can be found on the NSW Health website: www.health.nsw.gov.au/aod

Other programs

Individuals with moderate to severe substance use disorders who have complex needs can be referred to other NSW Health-funded programs.

The **Continuing Coordinated Care Program** (CCCP) aims to help people stay in alcohol and other drug treatment by providing intensive support. Participants are provided with living skills support and clinical care linkages as well as family and community connections. Referrals can be made by AOD clinicians directly to the organisations providing the treatment

<https://www.health.nsw.gov.au/aod/resources/Pages/ccp-program-factsheet.aspx>

Assertive Community Management is a multi-disciplinary program providing care-coordination and support for people who have chronic drug or alcohol problems plus a chronic physical health issue with significant social issues (e.g. accommodation and housing, social isolation, vocational re-training). Access to the program is via the [Local Health District's drug and alcohol intake line](#).

Appendix 4.

Specific population groups

Clinical tips are provided below to support clinicians to ensure that the care they provide meets the needs of patients from specific population groups. The handbook contains further reading, resources and references in relation to pregnant patients, patients with co-occurring mental health conditions, gender and sexuality diverse patients, patients from culturally and linguistically diverse backgrounds, older patients and patients from Aboriginal communities.

Pregnant patients

Pregnant substance-dependent women requiring withdrawal care will benefit from specialist assessments and support, consistency of case manager and care team during pregnancy, and specific drug and alcohol treatments (eg counselling, pharmacotherapies). All women using substances who are pregnant or attempting to become pregnant are entitled to receive accurate information and to be treated sensitively in a **non-judgmental manner**.

When clinicians consider that an unborn child may be at 'risk of significant harm' due to substance use, they are to report their concerns to the Child Wellbeing Unit or use the NSW Mandatory Reporter Guide (MRG) to support decision making about reporting to Family and Community Services. It is important to note that a parent or carer of children wanting to withdraw from alcohol or other drugs is not itself a reason to make a child protection report to the Department of Communities and Justice.

There are obstetric risks for women who are experiencing or at risk of severe substance withdrawal, and a need for observation and monitoring. It is important to determine the most suitable location for the pregnant woman's withdrawal management. Best practice advice regarding the management of alcohol and other drug withdrawal during pregnancy can be found in the [NSW Health Guidelines for the](#)

[Management of Substance Use during Pregnancy, Birth and the Postnatal Period](#). Women using substances who are pregnant should be referred to the LHD's Substance Use in Pregnancy and Parenting Services (SUPPS). SUPPS is a specialist AOD treatment service that provides support to pregnant women who use substances from the antenatal period to up to two years post-delivery. Contact the local SUPPS through the LHD's intake line or the District specialist drug and alcohol service. Alternatively contact the [Drug and Alcohol Specialist Advice Service](#) (DASAS).

Patients with co-occurring mental health and substance use disorders

Coexisting mental illness is very common in substance-using populations. The 2007 Australian National Survey of Mental Health and Wellbeing revealed that more than one-third of people with a substance use disorder have at least one co-occurring affective or anxiety disorder. Conversely 63 per cent of those who used alcohol or other drugs nearly every day had a mental disorder in the previous 12 months.

Withdrawal from alcohol or other drugs can precipitate or exacerbate mental health symptoms. Collaborative or integrated care with Mental Health Services and AOD Services is ideal. Withdrawal may be managed in a mental health ward if considered medically safe to do so and can involve support from AOD Hospital Liaison services. Withdrawals involving significant medical issues are usually not managed in a mental health unit.

Patients' ability to attend appointments and adhere to medication regimes may be impaired as a result of multiple co-occurring conditions, increasing the need for additional supports.

More detailed information on managing care for patients with co-occurring mental health and substance use disorders is available from:

- NSW Health Clinical Guidelines for the Care of Persons with Comorbid Mental Illness and Substance Use Disorders in Acute Care Settings <https://www.health.nsw.gov.au/aod/resources/Publications/comorbidity-report.pdf>
- National Guidelines on the Management of Co-Occurring Alcohol and Other Drug and Mental Health Conditions in Alcohol and Other Drug Treatment Settings (<https://comorbidityguidelines.org.au/pdf/comorbidity-guideline.pdf>)

Gender and sexuality diverse patients

Strategies for inclusive practice include:

- Ensuring an awareness of the lived experience of gender and sexuality diverse people and their unique AOD-related vulnerabilities.
- Allowing people to describe their biological and chosen families, as some support networks are neither heteronormative nor biological.
- Ensuring sexual health questions do not make assumptions about sexuality or gender.
- Ensuring proper privacy and disclosure processes for gender, sexuality, HIV status and AOD use, including seeking permission to disclose to external agencies.
- Being aware patients might disclose their sexual orientation or gender identity to a health service provider, but may not be out to everyone.
- Reflecting on personal values and beliefs and the organisation's expectations regarding gender and sexuality diverse inclusivity.

In responding to the needs of gender and sexuality diverse patients, it is important to understand the communities' lived experience as well as the history of experiencing discrimination. Relevant context may include:

- Substance use to cope with societal responses to their gender identity or sexuality.
- The importance of bars and clubs as safe venues for building relationships. This may have the unintended effect of creating pressure to adopt similar drinking patterns and may encourage other drug use.
- Significantly higher risk of mental illness, including attempted suicide, suicidal ideation, self-harm, depression and anxiety.

Patients from Culturally and Linguistically Diverse (CALD) Communities

CALD populations may be vulnerable to the harms associated with alcohol and/or drug use due to past experiences of torture and trauma resulting from war, migration and settlement. This can be further impacted by experiences of labelling, stereotyping, social rejection, discrimination and shame. Patients from CALD backgrounds are more likely to delay seeking help and are more hesitant to disclose information about their substance use to health staff.

Strategies for inclusive practice include:

- Engaging an interpreter to assist in assessment, discussing options for treatment and providing referral information. Family members or friends are only to be used as an interpreter in an emergency.
- Recognising that friction with CALD patients may occur as a result of misunderstandings instead of rushing to make judgments.
- Ensuring engagement with culturally appropriate support services for family and significant others.
- Being mindful that discussing certain topics with a member of the opposite sex or a younger person may be inappropriate. Assure the patient that you are cognisant of their concerns and offer them other options.
- Avoiding over-generalising and labelling.
- Having the capacity to demonstrate empathy, tolerance and respect when engaging with people from diverse cultures.
- Applying appropriate means of verbal and non-verbal communication.
- Acknowledging how cultures and literacy may differ on key aspects.
- Recognising the impact culture and history can have on treatment methods and professional practice.
- Understanding the broader issues which impact CALD patients, such as discrimination and racism.
- Familiarising yourself with CALD communities in the area and understanding their specific AOD issues.

- During the consultation, it may be useful to explain via an interpreter, or if not used, ensure you are clear and concise in your explanations about, treatment options and the rationale underpinning the treatment. It may be necessary to spread the discussion over more than one consultation.
- Explain what screening and assessment processes entail, what information will be recorded and obligations related to duty of care. Tailor the screening and assessment process to the needs and concerns of the patient. Explain that the information will be kept confidential unless it affects the safety of the client or someone else.

Older people

In the context of withdrawal, older people may have more complicated cases, experience a longer withdrawal and require more supervision. Moreover, older people may have specific clinical needs depending on the drug of dependence. For drug-specific withdrawal advice for older people, please see the relevant drug chapter in these guidance.

Strategies for inclusive practice include:

- Collaborating with aged health services, older people's mental health services and primary care settings.
- Addressing barriers to access, including providing outreach services and home visiting appointments.
- Using the drug and alcohol hospital consultation liaison (HCL) service as a key point of referral for older people with substance use issues in the inpatient system.
- Incorporating the management of other physical and mental issues into AOD treatment, including screening for cognitive impairment and mental health problems.
- Developing and maintaining partnerships to engage older people in relevant sub-populations, including aboriginal people and CALD communities.
- Engaging families and carers.
- Being familiar with and engaging with other relevant services locally and statewide, including non-specialist services.
- Being familiar with and engaging with pain management specialists.

- Developing targeted services for older people.
- Understanding that prescription drug misuse is a significant and growing issue among older people, and considering this in assessment and screening processes.
- Tailoring information to the age of the patient and using a slower pace of treatment.

Patients from Aboriginal communities

Aboriginal and Torres Strait Islander Australians can be at increased risk of harms from alcohol or drug use because of their shared and often lived history of trauma. Strategies for inclusive practice for individual patients are detailed below.

Engagement and communication:

- For many Aboriginal people there is shame associated with seeking treatment for a substance use disorder. This can include shame from internalised racism. There is also concern about legal or social implications of help-seeking. For example, concerns over losing their children may be a major barrier for Aboriginal women in seeking help. Finding ways to address these concerns at intake can help improve engagement and retention. This may include linking with legal support and seeking guidance on best ways to ensure not only a good treatment outcome, but a good way of demonstrating that outcome.
- Culturally appropriate and holistic engagement with Aboriginal patients by withdrawal services is needed. For example, consider offering the patient the option of involving others in the treatment process, such as their immediate or extended family, specialist Aboriginal drug and alcohol (D&A) workers, community workers, leaders or Elders.
- Be alert for and sensitive to the experiences of Aboriginal patients who may have been affected by economic and sociocultural marginalisation, racism and trauma from colonisation. If patients have had a bad experience of authority figures (for example those who were taken from parents and raised in damaging institutions), be aware of potential transference and ways to defuse this. Involving the patient in planning their treatment regime where appropriate can be valuable. Strive for good communication.

- Take the time to interact with the patient at a personal level. Show that you take an individual interest in them. Where possible, use an unrushed and friendly interaction, rather than a series of questions. Allow the assessment to happen as a conversation, then return to fill in any points that have not been covered.
- For Aboriginal people from relatively isolated or traditional communities, it can be polite to avoid eye contact. In someone raised in an urban setting, lack of eye contact can alternatively reflect shyness, or fear or distrust of authority figures.
- In NSW, most Aboriginal people speak English well, and fewer speak their traditional language. However, visitors from more remote parts of Australia may have limited English. They may require an interpreter and there can be large cultural differences, including very different beliefs about the causation and cure of illness.
- Level of formal schooling can vary tremendously. Check that you and the client are understanding each other and be prepared to explain or seek clarification. Visual resources can be a useful aid to communication. The better a person understands their health condition, the more likely they will want to adhere to the treatment being offered.
- Where a patient would like it, involving a specialist Aboriginal D&A worker or an Aboriginal Liaison Officer (ALO) can greatly improve comfort and communication.

Integrated care:

- You can provide more appropriate care if you consider the whole person (including physical and mental health) as well as their family and community context. For many Aboriginal people connection to their traditional land is also very important.
- Many patients have major stresses in their life, financial and/or personal. These can sometimes make it difficult for them to contemplate making a big change. Being aware of these stresses and offering integrated support can help. For example, social work advice on how to deal with their normal rental costs if they will be away in a residential rehabilitation facility.
- You may also be able to help the patient see the withdrawal process as the first step in starting to simplify their life. Once withdrawal symptoms have become manageable, you may be able to start the process of linking them with appropriate support for their various needs.

Other specific clinical issues for Aboriginal patients

- Many Aboriginal people share their alcohol, cigarettes or other drugs with friends or relatives. If you ask: “How much do you use?” some Aboriginal patients will answer the amount that the couple or group consumes. You can check by asking “Is that just you? Or you and your partner/group?” to avoid overestimating consumption.
- If estimating alcohol use, check what the drinking container is. For example, a ‘drink’ of wine or spirits may be a 250mL kitchen tumbler filled near to the top, or a repurposed 600mL water bottle.
- Some Aboriginal people have a stop-start pattern of substance use. This can sometimes mean less severe than expected withdrawal symptoms, given the quantity consumed. Others may be daily or continuous drinkers or users. In the case of alcohol, comorbidities such as past head injuries can increase the risk of withdrawal seizures.
- Smoking and cannabis use can be relatively common. Be alert to the potential need to prevent or manage withdrawal from these, if a person is withdrawing from another substance.
- Many Aboriginal people have had major traumas in their life. Memories of this can come flooding back when they stop drinking or using drugs. During the withdrawal syndrome is rarely the right time to ask about past traumas. The individual’s stress level is high, and the discussion can be traumatic.
- If the patient chooses to raise these issues spontaneously, you can acknowledge their importance and the distress they cause. You can also explain that the distress can be particularly intense during withdrawal, that the intensity of the pain will reduce a little following time away from alcohol and drugs, and that help is available should they wish to discuss these in the future. The patient’s efforts to escape the cycle of substance use and withdrawal is a step towards healing.

Inpatient or outpatient withdrawal?

- As with other patients, careful screening for suitability for outpatient withdrawal is needed. In particular this can include considering whether the patient has somewhere safe to live (either in their own home, or that of a friend or relative), and what supports are available to them.
- Some Aboriginal community-controlled health services offer limited outpatient detoxification services. Others may not have the staffing or funding to make this possible.
- Some mainstream services offer outpatient withdrawal service. With the agreement of the patient, involving Aboriginal staff or local Aboriginal health services in their care and support can be valuable.

Planning for relapse prevention

- In addition to carefully explaining options like relapse prevention pharmacotherapies, counselling and mutual support groups, consider Aboriginal-specific options. For example, is there a good local men's or women's group available? This can help provide alternative activities, cultural strengthening and support. Some cultural groups also offer opportunities to return to country (where the person does not live on their traditional land), spend time in the bush or have cultural excursions. These all can be sources of strength.
- With regard to both residential and community-based treatment options, some Aboriginal patients prefer Aboriginal-specific services (eg community controlled primary care services or Aboriginal-specific residential rehabilitation). Others prefer the anonymity of a mainstream service.
- Discuss with your patient where they would like to go for follow-up when they leave a residential service (eg be linked to the mainstream service, through an Aboriginal community controlled health service, or other health service).

Adolescents and Young Adults

Adolescents and young adults (aged 12- 24 years) presenting to AOD services require a youth friendly, developmentally appropriate approach to engagement and intervention. Risk factors for adolescent substance use include adverse childhood experiences, trauma, mental health disorders, and genetic and environmental factors increasing the likelihood of alcohol, illicit substance or prescription medication use for non-medical reasons.

Clinical tips for inclusive practice for individual patients are detailed below.

- A comprehensive drug and alcohol history is required to identify risk of substance use disorder, physiological dependence and withdrawal symptoms. Adolescents and young adults may have polysubstance use and may experience withdrawal symptoms from multiple substances concurrently.
- Withdrawal from alcohol or other substances may precipitate or exacerbate behavioural disturbance, risk of self-harm and/or risk of suicidal ideation. Emerging mental illness occurs in the adolescent and young adult population and may have a two-way relationship with substance use. Consider risk of behavioural disturbance and manage this accordingly. [NSW Health Policy Directive: Management of patients with Acute Severe Behavioural](#).
- Medication may be prescribed during withdrawal to provide symptomatic relief, treat complications and coexisting conditions, and reduce the discomfort of withdrawal symptoms.
- Benzodiazepines may be considered for the treatment of alcohol or benzodiazepine withdrawal in young people. Consider dose requirements, safety and monitoring specific to the needs of the adolescent or young adult. Atypical antipsychotic medication may also be considered for management of substance withdrawal for the management of acute anxiety, agitation and aggression in the short term. Consultation with child and adolescent psychiatrist may be of benefit.

- Link the adolescent or young adult to ongoing treatment after substance withdrawal - this may include referral to general practitioner, Headspace, community mental health, family intervention service and/or Youth Drug and Alcohol service.
- Inpatient admission may be required if there are safety concerns, risk of withdrawal seizures or coexisting mental health conditions requiring joint medical and psychiatric approach.

Appendix 5.

Screening

Ask the patient the questions about the quantity and frequency of substance use as follows:

In the last month have you:

- Smoked tobacco or vaped?
- Consumed alcohol on 4 days or more in a week or had 6 or more standard drinks on one occasion?
- Used any recreational drugs?
- Taken medication for pain, anxiety/stress or sleeping problems?
- Used any other substances?

If 'yes' to any of the above, then clarify:

- How frequently have you used the substances you have identified?
- When did you last use this drug, smoke tobacco/vape or drink alcohol?
- How do you take the drug or alcohol? (e.g. drink, inject, snort, smoke, vape)
- Have you ever overdosed or experienced withdrawal symptoms?

- Have you ever attended a drug or alcohol service for treatment for your alcohol or drug use?

The clinician should:

- Document the results of the screen, including the quantities of substances a person is using, or has used.
- Ask the patient if they are using more than one drug at a time, as polysubstance use can significantly increase the risk involved.
- Use the results of the screening to take action as required.
- Avoid duplicating the screening undertaken by other clinicians during the admission.

Some screening tools commonly used include:

- Alcohol Use Disorders Identification Test ([AUDIT](#)) ([AUDIT-C](#)).
- [Indigenous Risk Impact Screen](#) (IRIS).
- [Substance and Choices Scale](#) (for ages 13-18).
- Alcohol, Smoking and Substance Involvement Screening Test ([ASSIST](#)) (short and long version).
- [Severity of Dependence Scale](#) (SDS)

Appendix 6.

Community-based alcohol withdrawal regimen

Prior to commencing withdrawal

Undertake an initial consultation that includes a comprehensive drug and alcohol assessment including risk assessment.

Give the patient, and where possible the carer, information and advice on:

- Expected symptoms and course of withdrawal.
- Possible complications, and measures that should be taken if complications do arise.
- The medication (diazepam) to be used, its side effects (ie sedation, incoordination, disinhibition, respiratory depression, impaired driving capacity) and the added risks if combined with alcohol.

Medication

The standard therapeutic regimen involves regular and reducing doses of diazepam over 2-6 days and thiamine for 1-2 weeks.

An example of a medication regimen for alcohol withdrawal in a community setting is in Table 1 below. Tailor the diazepam dose to the patient's needs – the aim is to control withdrawal symptoms without over-sedation. Milder cases may respond to lower doses (half of the example regimen).

Supply only 24 hours of medication at a time, as self-medication presents a risk during alcohol withdrawal, particularly when there is minimal supervision. Inform patients of the risks of self-medication (e.g. overdose, undiagnosed complications, failure to complete withdrawal).

Thiamine is to be provided to prevent Wernicke's encephalopathy. For an otherwise healthy person with good dietary intake, administer oral thiamine 100 mg three times daily for 3 to 5 days, followed by 100 mg oral thiamine for a further 4 to 9 days (for a total of 1 to 2 weeks of oral thiamine).

Initiating withdrawal treatment

On the morning that withdrawal commences, assess the patient for early withdrawal symptoms, intoxication, or alcohol consumption in the past eight hours. Intoxication or alcohol consumption within the past eight hours are contraindications to commencing treatment. Take baseline vital signs.

Monitoring and review

A medical practitioner or nurse is to review the patient each day for the first three or four days. Additional telephone contact in the first one or two days may be helpful. The medical practitioner or nurse should continue daily or second-daily contact with the patient until withdrawal is completed.

If a patient deteriorates, they should return to the outpatient clinic for review and consideration of the need for inpatient care. If outside of clinic hours, the patient should present to the Emergency Department or call an ambulance if severely unwell.

Table 1: Ambulatory alcohol withdrawal regimen

Day	Intervention
Day 1	Assess the patient: Baseline temperature, blood pressure, heart rate. Prescribe 10 mg diazepam six hourly. Provide 24 hours supply to commence after the patient arrives home from attending the consultation. Supply 300 mg oral thiamine
Day 2	Review by medical practitioner or nurse: temperature, blood pressure, heart rate. Prescribe 10 mg diazepam to be taken eight hourly, with 24 hours supply provided. Supply 300 mg oral thiamine.
Day 3	Review by medical practitioner or nurse: temperature, blood pressure, heart rate. Prescribe 10 mg diazepam to be taken morning and night, with 24 hours supply provided. Supply 300 mg oral thiamine
Day 4	Review patient by phone or in person. Prescribe 5 mg diazepam morning and night, provide 24 hours supply.
Days 5	5 mg diazepam at night. Diazepam should not normally be continued beyond 6 days.

Appendix 7.

Withdrawal scales

Withdrawal scales provide a systematic measure of the severity of uncomplicated withdrawal by recording changes over time. Withdrawal scales do not override clinical judgement.

Some withdrawal scales commonly used include:

Clinical Institute Withdrawal Assessment of Alcohol Scale - Revised (CIWA-Ar)

<https://insight.qld.edu.au/shop/clinical-institute-withdrawal-assessment-of-alcohol-scale-revised-ciwa-ar-insight-2019>

Alcohol Withdrawal Scale

<https://www.health.nsw.gov.au/aod/professionals/Documents/appendices.pdf>

<https://adis.health.qld.gov.au/sites/default/files/resource/file/Withdrawal%20Scale%20-Alcohol.pdf>

COWS (opioids)

<https://www.health.nsw.gov.au/aod/professionals/Documents/appendices.pdf>

<https://insight.qld.edu.au/shop/clinical-opiate-withdrawal-scale-cows-insight-2019>

SOWS (opioids)

<https://insight.qld.edu.au/shop/subjective-opiate-withdrawal-scale-sows-insight-2019>

Cannabis Withdrawal Assessment Scale

<https://www.health.nsw.gov.au/aod/professionals/Documents/appendices.pdf>

<https://insight.qld.edu.au/shop/cannabis-withdrawal-scale-cws-insight-2019>

Amphetamine Withdrawal Questionnaire

<https://insight.qld.edu.au/shop/amphetamine-withdrawal-scale-aws-2019>

<https://www.smartcjs.org.uk/wp-content/uploads/2015/07/AmphetamineWithdrawalScale.pdf>

Clinical Institute Withdrawal Assessment – Benzodiazepine

<https://insight.qld.edu.au/shop/clinical-institute-withdrawal-assessment-scale-benzodiazepines-ciwa-b-insight-2019>

<https://www.smartcjs.org.uk/wp-content/uploads/2015/07/CIWA-B.pdf>

Appendix 8.

Consumption history

One way to increase accuracy is to obtain a retrospective substance use or consumption history. This involves asking about consumption over a typical week (or month) starting from today and working backwards. This may easily be recorded on a “consumption calendar”. There is a degree of correlation between quantity consumed and the severity of withdrawal.

Obtain a general history of alcohol and drug use first, then attempt to identify daily patterns of alcohol and drug consumption from a retrospective consumption history.

Most people, with or without drug problems, are likely to underestimate or estimate inaccurately how much they use if asked the question: “On average how much do you use a day or a week?”

An accurate consumption history should record for each drug (whether prescribed or not):

- the quantity, frequency, duration and pattern of use;
- time and amount of last use;
- route of administration;
- recent pattern leading up to this presentation; and
- average daily consumption.

For prescribed medications, also record prescribed dose and prescribing doctor.

How to take a retrospective consumption history:

- Always ask about each drug group (eg, tobacco, alcohol, opioids, benzodiazepines, cannabis, amphetamines, cocaine, “club drugs”).
- Start with most recent use. Ask “When did you last have anything to drink/use?”
- Ascertain how much was consumed at that time.
- Inquire back through that day: “What about during the day?”
- Link consumption to activities. “What were you doing during the day?” Then, for example, “How much did you drink/use when you went to your friends’ house?”
- Examine consumption through each day for the past week.
- Then ask if that was a typical week’s pattern. If not, ask specifically how it differed (ie, how much more or less of each drug than usual).
- Recording a complete consumption history is not always practical because of the context of the presentation, including the physical and mental state of the person in withdrawal.
- A common drug combination that should be noted is alcohol and benzodiazepines. These drugs produce cross-tolerance, and regular use of both can make withdrawal more severe and/or protracted.

The Australian Treatment Outcomes Profile (ATOP) is a drug and alcohol specific instrument that includes a 4 week retrospective substance use calendar. The ATOP tool can be found here: <https://www.seslhd.health.nsw.gov.au/australian-treatment-outcomes-profile>.

Appendix 9.

BBV testing follow up protocol

Table 2.9: STI and BBV tests, results and actions

Test	Results	Action
Hepatitis B	See table 2	
Hepatitis C antibody	Positive	Request HCV RNA &, if positive, liver clinic review
HIV antigen/antibody	Positive	If you haven't already received a call from the NSW HIV Support Program request urgent local Sexual Health Service review or call NSW Sexual Health InfoLink 1800 451 624
Gonorrhoea PCR	Positive	Collect specimen for culture & sensitivity; treatment per the STI management guidelines
Chlamydia PCR	Positive	Commence treatment per STI management guidelines
Syphilis	Positive RPR & positive TPPA or other treponemal test	Call NSW Sexual Health InfoLink 1800 451 624 and request urgent local Sexual Health Service review

Table 2.10 Hepatitis B results and actions

	Susceptible	Immune – prior infection	Immune – prior vaccination	Chronic infection	Indeterminate
Action	Recommend vaccination	Advise past infection cleared	Advise HBV immune	Request GP or liver clinic review	Request GP or liver clinic review

Information and advice on interpreting Hepatitis B Serology is available at the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) portal: <http://testingportal.ashm.org.au/national-hbv-testing-policy/conveying-hepatitis-b-test-results/>

Appendix 10.

Supportive care

The aim of supportive care is to minimise environmental stimuli that may exacerbate withdrawal symptoms and to enhance the patient's ability to complete withdrawal successfully.

Supportive care and patient choice are crucial to success. Supportive care should include attention to the patient's environment, the transfer of information, reassurance, attention to anxiety and assistance with the development of coping skills.

Use a protocol for supportive care, particularly for managing withdrawal in hospital and residential settings. The supportive care routine should go hand in hand with monitoring of physical signs and should be undertaken and recorded at least every four hours.

Key elements of supportive care

Information about what to expect can allay fear and anxiety. Studies show that patients who are given information will have lower withdrawal scale scores than those who are not. Information given to the person in withdrawal should include:

- orientation to the setting and primary care giver
- a description of the likely course of withdrawal
- the likely length and intensity of withdrawal symptoms
- the support plan for withdrawal and afterwards
- the risks associated with withdrawal.

The environment can have a significant effect on the severity of withdrawal. Minimise stress by making sure that the environment is quiet, calm, homely, not overly bright, without striking colours or patterns, safe and private.

Attention to the environment also includes considering the person's physical comfort by making adjustments to position, pillows and blankets when necessary. Hot packs, hot spa bath and massage can also relieve aches and increase comfort.

Reassurance is probably the most effective intervention in reducing the severity of withdrawal symptoms. Reassurance might be achieved through allaying concerns and fears, positive encouragement, feedback on progress, regular contact, providing information, and dealing with immediate social and family problems. The reassurance of family members will help them provide support to the person during withdrawal (active participation and support of family is likely to be a significant factor in the completion of withdrawal).

Coping skills, such as relaxation techniques, dietary guidelines, sleep disturbance management, and methods to reduce craving should be introduced to the patient.

Managing acute distress

As with any acute illness, withdrawal can lead to increased anxiety, agitation, confusion and aggression. Responding to these symptoms proactively and in a manner that helps the person de-escalate will allow further assessment of any complications in the withdrawal process, such as delirium or worsening psychiatric symptoms. This also prevents any trauma or re-traumatisation from occurring and reduces the risk of harm to patient and staff.

Withdrawal can produce a range of experiences that someone using substances or alcohol has managed to avoid for an extended period. Assisting the person to tolerate these symptoms during withdrawal is a useful step towards relapse prevention. In the acute setting, **escalated behaviour** can mean withdrawal **has not been adequately treated**.

Approaches to managing distress include verbal de-escalation, low stimulus environments, frequent supervision and medications. Work towards increasing a sense of safety for the person, asking them what they need to feel safe or comfortable, and providing choice/options as much as possible to promote a sense of control.

Suggested management approaches for different types of distress appear below.

Anxiety/agitation/panic

- Approach in a calm and confident manner.
- Reduce stimulation and the number of people attending the patient.
- Explain interventions carefully.
- Minimise the risk of self-harm.

Confusion/disorientation/hallucinations

- Provide frequent reality orientation.
- Ensure frequent supervision.

- Explain perceptual errors.
- Ensure environment is simple, uncluttered and well lit.
- Protect from self-harm and harm to others.

Anger/aggression

- Use space to protect yourself.
- Remain calm and reassuring.
- Do not challenge the patient.
- Acknowledge the patient's feelings.
- Remove the source of anger, if possible.
- Be flexible within reason.
- Be aware that many patients will have experienced trauma in the past. Information on providing trauma informed care appears in section 2.2.

