

# ALCOHOL AND OTHER DRUG WITHDRAWAL PRACTICE GUIDELINES





# ALCOHOL AND OTHER DRUG WITHDRAWAL:

## **PRACTICE GUIDELINES**



Pauline Kenny Amy Swan Lynda Berends Linda Jenner Barbara Hunter Janette Mugavin Copyright © 2009 State of Victoria

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## ACRONYMS AND ABBREVIATIONS

AOD	Alcohol and Other Drug	
ABI	Acquired Brain Impairment	
ATS	Amphetamine-type stimulants	
ATSI	Aboriginal and Torres Strait Islander	
AUDIT	Alcohol Use Disorder Identification Test	
AWQ	Amphetamine Withdrawal Questionnaire	
BAL	Blood Alcohol Level	
BWSQ	Benzodiazepine Withdrawal Symptom Questionnaire	
CALD	Culturally and Linguistically Diverse	
CBT	Cognitive Behaviour Therapy	
CEAG	Clinical Expert Advisory Group	
CIWA-B	Clinical Institute Withdrawal Assessment Scale - Benzodiazepines	
CPR	Cardiopulmonary Resuscitation	
CRW	Community residential withdrawal	
CWAS	Cannabis Withdrawal Assessment Scale	
DACAS	Drug and Alcohol Clinical Advisory Services	
DHS	Department of Human Services	

#### ALCOHOL AND OTHER DRUG WITHDRAWAL: PRACTICE GUIDELINES Turning Point Alcohol and Drug Centre Inc. FAS Foetal Alcohol Syndrome GHB gamma-Hydroxybutyric acid GP General practitioner ITP Individual Treatment Plan LSD Lysergic acid diethylamide Mane Morning MDMA Methylenedioxymethamphetamine NCETA National Centre for Education and Training on Addiction NRT Nicotine Replacement Therapy PCP Phencyclidine Prn As necessary SOWS Short Opiate Withdrawal Scale Quit Victoria Quit Victorian Dual Diagnosis Initiative VDDI Youth Substance Abuse Service YSAS

WHO World Health Organization

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## **1 INTRODUCTION**

### 1.1 Background

Best practice in Alcohol and Other Drug (AOD) care is supported by access to clinical expertise and up-to-date, evidence-based resources. Essential clinical resources, such as clinical guidelines and tools, should reflect changing patterns of AOD use and advances in our understanding of drug withdrawal syndromes, assessment and care.

It is within this context that the Victorian Department of Human Services funded a review of the AOD clinical guidelines for withdrawal. The 1995 Services for Alcohol and Drug Withdrawal (SAW) resource handbook, entitled *New Concepts in Drug Withdrawal* (Frank & Pead, 1995), previously set the standard for AOD withdrawal in Victoria. However, it is now timely to update clinical guidelines for the AOD withdrawal sector to ensure consistency with the current evidence base and trends in AOD use. The Clinical Withdrawal Guidelines (or 'Guidelines') presented below are the product of this process.

### 1.2 Purpose

Clinical guidelines seek to direct clinical practice by outlining recognised, evidence-based treatment interventions. They draw on current literature and clinical practice expertise. These Guidelines provide guidance for clinical decision-making in the context of individual client requirements, withdrawal setting, treatment availability and individual service protocols.

These Guidelines are consistent with the World Health Organisation's (WHO) United Nations Principles of Drug Dependence Treatment (United Nations Office on Drugs and Crime and World Health Organization, 2008). They outline current best practice for the management of AOD-dependent clients accessing withdrawal care.

The Guidelines are suitable for use by clinicians in three settings:

- Residential and community AOD withdrawal services
- Inpatient and other acute facilities where patients experience an unplanned withdrawal during treatment for a related or unrelated medical or psychiatric condition
- Primary care clinics such as those at which general practitioners (GPs) are situated

Staff should be provided with appropriate workplace training and resources to enable the appropriate application of these Guidelines.

### 1.3 Content and language

These Guidelines reflect the current evidence base regarding AOD withdrawal syndromes and approaches to withdrawal care. They introduce three categories not present in the SAW manual: cannabis, amphetamine-type substances and nicotine. The impact of polydrug use on withdrawal is explored and advances in pharmacotherapy treatment for opioid-dependent clients outlined. The appropriate care of clients with a dual diagnosis in withdrawal is also examined, reflecting an increased focus on co-occurring AOD and mental health conditions. A range of tools for use in withdrawal care are provided in the Appendices pertaining to screening, assessment, care planning and provision.

The Guidelines outline the areas of withdrawal care relevant to the following AOD categories:

- Alcohol
- Amphetamine-type substances
- Benzodiazepines
- Cannabis
- Nicotine
- Opioids

Dosing regimens provide a guide to prescribing for AOD withdrawal. Dosing regimens are based on mono-dependence of the specified drug. It is noted

that, at all times, clinical judgement is an important element of prescribing during withdrawal care.

Note that the term 'withdrawal treatment', used in the Frank and Pead document, has been replaced by 'withdrawal care' in these Guidelines. This is consistent with the current paradigm that conceptualises AOD withdrawal as one component of a broader continuum of care.

Finally, bolded statements in this document indicate their content is a standard.

#### 1.4 Allied resources and Web access

Telephone services such as Drug and Alcohol Clinical Advisory Service (DACAS) provide expert clinical advice to doctors, nurses and other health and welfare professionals managing clients with AOD issues. Clinicians are encouraged to seek support from DACAS as required. DACAS can be contacted in Victoria on **1800 812 804**.

A list of Victorian AOD and welfare information services is provided in Appendix 1.

These Clinical Withdrawal Practice Guidelines are available online at www.turningpoint.org.au

### 2 DEFINITIONS OF DEPENDENCE AND WITHDRAWAL

There are two key definitions of AOD dependence:

- The WHO's *The Tenth Revision of the International Classification of Diseases and Health Problems* (ICD-10; (World Health Organization, 2004)
- The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, 4th edition* (DSM IV; (American Psychiatric Association, 2000)

Both definitions are considered appropriate for use in these Guidelines.

#### 2.1 ICD-10

The International Classification of Diseases (ICD-10) includes definitions of dependence and withdrawal as follows:

A cluster of physiological, behavioural, and cognitive phenomena in which the use of a substance or a class of substances takes on a much higher priority for a given individual than other behaviours that once had greater value. A central descriptive characteristic of the dependence syndrome is the desire (often strong, sometimes overpowering) to take the psychoactive drugs (which may or may not have been medically prescribed), alcohol, or tobacco. There may be evidence that return to substance use after a period of abstinence leads to a more rapid reappearance of other features of the syndrome than occurs with nondependent individuals (World Health Organization, 2004).

ICD-10 defines a withdrawal state as:

Withdrawal state: A group of symptoms of variable clustering and severity occurring on absolute or relative withdrawal of a psychoactive substance after persistent use of that substance. The onset and course of the withdrawal state are time-limited and are related to the type of psychoactive substance and dose being used immediately before cessation or reduction of use (World Health Organization, 2004).

### 2.2 DSM-IV

The Diagnostic and Statistical Manual of mental disorders fourth edition (DSM-IV) defines dependence as:

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

- Tolerance, as defined by either of the following:
  - a. A need for markedly increased amounts of the substance to achieve intoxication or desired effect
  - b. Markedly diminished effect with continued use of the same amount of the substance
- Withdrawal, as manifested by either of the following:
  - a. The characteristic withdrawal syndrome for the substance
  - b. The same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
- The substance is often taken in larger amounts or over a longer period than was intended
- There is a persistent desire or unsuccessful efforts to cut down or control substance use
- A great deal of time is spent in activities necessary to obtain the substance (e.g. visiting multiple doctors or driving long distances), use the substance (e.g. chain smoking), or recover from its effects
- Important social, occupational, or recreational activities are given up or reduced because of substance use (World Health Organization, 2004).

### 2.3 Dimensions of drug withdrawal

AOD withdrawal care has traditionally focused on an individual's neuroadaptation reversal. This is the process by which neurotransmitter adaptation to consistently high levels of a drug is reversed and withdrawal features result. However, this focus is increasingly being challenged by the presentation of clients for whom neuro-adaptation reversal is not an appropriate or singular goal of withdrawal care. Rather, these clients seek alternative treatment goals addressing physical, psychological and social needs.

These goals of withdrawal care include AOD reduction, stabilisation of use and respite. They may be addressed via:

- Pharmacotherapy reduction or maintenance
- Interrupting a pattern of heavy and dependent use
- Stabilising, reducing or abstaining from drug use
- Preventing withdrawal complications
- Initiating abstinence
- Linking into further treatment (Griswold et al., 2007; NSW Department of Health, 2008a)

In these Guidelines, withdrawal care is defined as a course of interventions which address the bio-psychosocial elements of withdrawal. These may include neuro-adaptation reversal, pharmacotherapy reduction or maintenance, management of concurrent illnesses, and psychological, social and emotional issues. The provision of non-medical psychosocial support is also acknowledged as important.

Figure 1, below, demonstrates how the bio-psychosocial elements of withdrawal require equal consideration in withdrawal care. The degree to which each dimension plays a role in an individual's substance misuse will impact significantly on their experience of withdrawal.

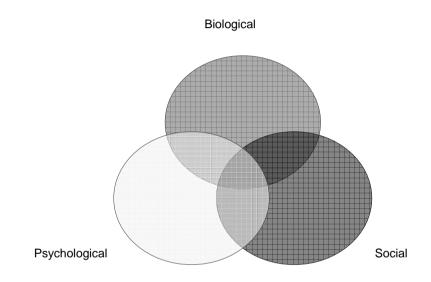


Figure 1: Dimensions of drug withdrawal

## 3 PRINCIPLES OF AOD WITHDRAWAL CARE

The following principles of withdrawal care reflect current clinical best practice in the AOD field. Such principles support the strategies that address the three dimensions of AOD withdrawal identified above.

- The primary objective of withdrawal care is to achieve a client's goals in relation to their AOD misuse, with safety. This is supported by a thorough assessment of potential risks at presentation to AOD care.
- Substance reduction and maintenance goals should not be regarded as any less meaningful than a commitment to long-term abstinence.
- Harm reduction is a central element of AOD withdrawal care. Harm reduction occurs via the provision of information and education about safer AOD use practices. This may include a reduction in drug consumption, safer means of drug administration and improved lifestyle (Frank & Pead, 1995).
- Withdrawal services represent a gateway towards further treatment and behaviour change. Treatment during withdrawal should aim to link seamlessly with a long-term, therapeutic program (Griswold et al., 2007; NSW Department of Health, 2008a; NSW Health Department, 1999; Raistrick et al., 2006).
- Appropriate and recognised screening, assessment and planning processes and protocols are essential to withdrawal care. Such tools inform the most appropriate withdrawal setting and level of care required, and identify risk factors (United Nations Office on Drugs and Crime and World Health Organization, 2008).
- Psychosocial factors play a significant part in an individual's withdrawal experience and can provide a focus for supportive care. Supportive care is fundamental to ensuring a holistic approach.
- Intake and assessment processes should maximise the opportunity for clients to access the most appropriate AOD withdrawal care. These processes should be considerate of the needs of clients from metropolitan, rural and regional areas, women, offenders, those who are parenting and clients from Koori and CALD communities (United Nations Office on Drugs and Crime and World Health Organization, 2008).

• Linkage with family/significant others, where possible, is an important aspect of withdrawal care. It can establish strong foundations for additional support, particularly in the post-withdrawal period (YSAS, 2008).

## **4 CONTINUITY OF CARE**

Withdrawal, while effective in achieving neuro-adaptation reversal, has greatest potential long-term behaviour change when it is part of a broader continuum of care. This continuum incorporates pre-admission planning, withdrawal, planning for post-withdrawal, follow-up support and linkages with a range of relevant services (Raistrick et al., 2006).

Strategies that support continuity of care should commence at pre-admission with discussion of a client's goals, strategies for preparing for withdrawal and identification of post-withdrawal linkages.

## 5 FEATURES OF AOD WITHDRAWAL

The features of AOD withdrawal, including its severity and duration, are impacted by a range of factors, including:

- Primary drug of concern
- Level of AOD dependence
- Polydrug use and/or dependence
- The existence of a co-occurring physical illness or mental health disorder
- Psychosocial factors (e.g. environment, relationships, accommodation)

The half-life of a drug also plays a significant role in the severity of an individual's neuro-adaptation reversal. The half-life of a drug is the length of time needed for half the amount of the drug consumed to be broken down by the body.

Table 1 below, outlines common features of the withdrawal syndrome for each substance addressed in these Guidelines. These features apply specifically to clients not yet medicated to prevent the onset of withdrawal symptoms. Note that low-grade symptoms such as dysphoria may persist for a number of months beyond the withdrawal phase.

All clinicians will have a sound understanding of the clinical features of AOD withdrawal.

Drug	Onset	Duration	Clinical features
Alcohol <sup>1</sup>	Within 24 hours and up to 48 hours (depending on Blood Alcohol Level (BAL); hours after last drink and level of neuro-adaptation)	3–7 days (up to 14 days in severe withdrawal)	Anxiety, agitation, sweating, tremor, nausea, vomiting, abdominal cramps, diarrhoea, craving, insomnia, elevated blood pressure, pulse and temperature, headache, seizures, confusion, perceptual distortions, disorientation, hallucinations, seizures, delirium tremens, arrhythmias and Wernicke's encephalopathy.
Opioids <sup>1</sup>	Heroin withdrawal occurs within 8– 24 hours of last use (may be slower in methadone/other withdrawal)	Heroin: Peaks 2–4 days and cease 7–10 days Methadone: Symptoms emerge 36–48 hours after last dose and low grade symptoms can remain for 3– 6 weeks	Anxiety, craving, muscle tension, muscle and bone ache, muscle cramps, sleep disturbance, sweating, hot and cold flushes, piloerection, yawning, runny eyes and nose, abdominal cramps, nausea, vomiting, diarrhoea, palpitations, elevated blood pressure and pulse, dilated pupils and agitation.
Benzodiazepines <sup>1</sup>	1–10 days (depending on half-life of drug)	3–6 weeks (or longer)	Anxiety, headache, insomnia, muscle aching twitching and cramping, nausea, vomiting, diarrhoea, perceptual changes, feelings of unreality, depersonalisation, seizures, agitation, confusion/psychosis

#### Table 1: Features of AOD withdrawal

Drug	Onset	Duration	Clinical features
Methamphet- amines <sup>2</sup>	Crash phase: within hours of last use Withdrawal: 1–4 days after last use	2–4 days Acute phase: 7– 10 days Subacute phase: a further 2 –4 weeks	Cravings, dysphoria, anhedonia, increased appetite, fatigue, agitation, anxiety, increased sleep, vivid, unpleasant dreams and slowing of movement.
Cannabis <sup>3</sup>	1–2 days of last use	Acute phase: 2–6 days, subsiding after 2–3 weeks May persist for some months	Anger, aggression, irritability, anxiety, nervousness, decreased appetite or weight loss, restlessness, sleep difficulties, chills, depressed mood, shakiness, sweating.

Adapted from Roberts, Swan and Mugavin (2008)

<sup>1</sup> NSW Health Department (1999)

<sup>2</sup> NSW Health Department (2008)

<sup>3.</sup> McGregor et al. (2005)

### 5.1 Withdrawal complications

On occasion, withdrawal may precipitate serious and/or life-threatening complications. These complications may be associated with:

- High levels of AOD use
- Concurrent medical and psychiatric illnesses
- Polydrug dependence

Withdrawal complications are associated with a range of substances and manifest in a variety of ways, as shown in Table 2, below.

Withdrawal complication	Substance/s with which complication is associated	Features of complication
Seizures	Alcohol Benzodiazepines Amphetamine-type substances	Convulsions, sensory disturbances, loss of consciousness (Merriam- Webster Inc., 2008)
Hallucinations	Alcohol Amphetamines	Transient hallucinations (visual or tactile), paranoia, psychological disturbances, abnormal affect, auditory or visual delusions (McGregor, 2005; Shand et al., 2003b)
Delirium	Alcohol Benzodiazepines GHB	Agitation, hyperactivity, tremor, confusion and disorientation. Can occur without progressing to Delirium Tremens (Ashton, 2005; Shand et al., 2003b)
Agitation	Alcohol Cannabis Methamphetamines	Anger, aggression, irritability and violent outbursts
Psychosis	Amphetamine-type substances	Thought disorder and perceptual disturbances
Wernicke- Korsakoff's syndrome (WKS)	Alcohol	Cognitive impairments in memory (i.e. anterograde amnesia), deficits in abstraction and problem solving, confusion, ocular and gait disturbances, apathy and amnesia (Shand et al., 2003b)
Dehydration	Alcohol Opioids	Increasing thirst, dry mouth, weakness or light-headedness, darkening of the urine or decrease in urination (MedicineNet, 2008)

#### Table 2: Complications of withdrawal

The safety of clients and staff is integral to effective withdrawal care. This is particularly important where withdrawal complications arise.

Ongoing monitoring and review are essential elements of managing a complicated withdrawal. In some circumstances, specialist medical attention may be warranted.

All AOD clinical service staff will be trained in First Aid, including Cardiopulmonary Resuscitation (CPR) procedures. Clear accident and emergency policies and procedures will be integrated into staff induction and orientation processes, with regular updates/reviews for all staff in clinical environments.

### 5.2 Symptomatic medications

Table 3, below, provides a general guide to symptomatic medications for AOD withdrawal. These medications may be used in accordance with the relevant Guidelines and in conjunction with pharmacotherapies and supportive care.

Alcohol and drug-specific symptomatic medication tables with detailed dosing regimens are provided within each AOD section of the Guidelines.

Symptom	Recommended medications
Diarrhoea	Loperamide
	Kaomagmaª
Headaches	Paracetamol
Nausea and vomiting	Metoclopramide (Maxolon)
	Prochlorperazine (Stemetil)
Pronounced agitation or insomnia	Tricyclic antidepressants such as:
	Doxepin
	Clomipramine
	Benzodiazepines can be used but there is a risk of misuse and exacerbation of depressive symptoms:
	Diazepam
	Temazepam tablets
Pronounced psychomotor retardation	Selective serotonin reuptake inhibitors (SSRIs) such as Fluoxetine and Paroxetine <sup>b</sup> may be prescribed by a Medical Officer upon referral.
Stomach cramps	Hyoscine (Buscopan)ª
	Atrobelª

**Table 3: Symptomatic medications** 

Source: <sup>a</sup>NSW Department of Health (2008a) <sup>b</sup>Murray (2002)

## 6 SPECIAL NEEDS GROUPS

### 6.1 Clients with a dual diagnosis

The case complexity typical of clients with a dual diagnosis requires a strategic and preferably collaborative response by AOD clinicians, primary health care providers such as general practitioners and mental health care professionals. This should be reflected in all elements of withdrawal care, from screening and assessment, choice of setting, to the delivery of care and post-withdrawal support.

Attention to the specific needs of individuals with a dual diagnosis is critical to their care. Management strategies should respond to the client's presenting condition, including high prevalence mental health disorders such as anxiety and depression and/or low prevalence mental health disorders such as schizophrenia and personality disorder.

Mental health screening is an essential component for AOD withdrawal support and should inform assessment and treatment planning. An integrated approach of both services is considered best practice and may increase the likelihood of a successful course of treatment for the client. Early recognition of a dual diagnosis provides an opportunity for creating appropriate and long-term client linkages with mental health services.

Some clients with a dual diagnosis may require an extended period of stay within a residential AOD withdrawal setting. Access to stepped care between hospital/psychiatric wards and community-based or non-residential AOD settings also affords graduated treatment responses based on client need/risk. In recognition of their specific needs, withdrawal involving clients with a dual diagnosis will be addressed in Chapter 16.

#### 6.2 Clients who use multiple substances

Polydrug use refers to the combining of two or more psychoactive drugs and is common among AOD clients presenting to withdrawal services. Polydrug users should be thoroughly assessed to detect and respond appropriately to immediate withdrawal risks. Clinicians should consider referral of complicated and high risk clients to residential withdrawal care, as appropriate. Assessing dependence for each drug is recommended in order to determine the likelihood of withdrawal syndromes occurring for multiple substances. The drug with the greater risk is the focus of assessment initially – this drug is typically alcohol (NSW Department of Health, 2008a).

Nicotine dependence is common among illicit drug users. Victoria now legislates for restrictions on smoking in buildings and within specified proximity to building entrances and exits. AOD services should ensure that clients are provided with appropriate information regarding these restrictions before admission and clients should be offered nicotine replacement and Quit counselling as part of their withdrawal care.

### 6.3 Young people

Young people (12–21 years) have particular needs that may impact on their engagement with and experience of withdrawal care. Issues may include unresolved trauma, chaotic social situations and a relative lack of cognitive and emotional resources. In addition, a lack of information about AOD treatment, poor family support, unstable/unsuitable accommodation, involvement with the juvenile justice system and feelings of vulnerability may limit young people's access to appropriate support and continuing care (United Nations Office on Drugs and Crime and World Health Organization, 2008).

Young people are more likely to inhale volatile substances in comparison to adults. Volatile substances include adhesives, aerosols, cleaning agents, petrol, solvents and gases, and produce depressant effects similar to alcohol intoxication. Withdrawal from such substances is typically mild, although prolonged and excessive use can produce a severe withdrawal syndrome. Specific guidelines for the management of young people withdrawing from volatile substances are outlined in the recently updated YSAS Clinical guidelines (YSAS, 2008).

Service providers' capacity to understand and respond to the range of AOD use and needs of young people is critical. Knowledge of, and appropriate responses to, such needs have been linked to positive treatment outcomes, treatment involvement and retention (Colby et al., 2004).

Young people presenting to adult withdrawal services should be linked with youth-specific services. Ongoing contact with, and adjunct support from,

youth-specific workers throughout withdrawal care can promote more positive experiences for the young person. Where program capacity allows, young people may benefit from limited contact with adult clients. Note, however, that premature exposure to information from clients in more advanced stages of AOD abuse may have a negative impact on the withdrawal experience for young people (United Nations Office on Drugs and Crime and World Health Organization, 2008).

Young people approaching the age of eligibility for adult withdrawal services require transitional planning. An examination of service differences, adult treatment options and client anxieties is recommended at this time.

For more detailed AOD withdrawal guidelines for young people, please refer to YSAS *Clinical Guidelines for Youth AOD Withdrawal* (YSAS, 2008).

### 6.4 Clients residing in rural and regional areas

The provision of AOD services to clients residing in rural and regional areas can be challenging. It is not always feasible to apply metropolitan strategies of intervention to these communities.

AOD clients residing in rural and regional areas experience significant barriers to adequate and appropriate withdrawal care. Barriers include geographic isolation, limited public transport, reduced service availability and economic constraints. In addition, these clients may experience heightened stigma due to the increased visibility of AOD use and treatment-seeking within such communities. Access to GPs who prescribe pharmacotherapies and pharmacotherapy-dispensing pharmacies may also be limited.

Flexible treatment strategies are therefore required to accommodate clients residing in rural and regional locations. Treatment planning may include allowances for telephone triage and assessment, travelling distances and discharge planning for post-withdrawal care.

Berends et al. (2004, p. 17) highlight the increasing capacity of nurse practitioners in rural and regional communities:

The role of the nurse practitioner is to develop an advanced nursing framework to enhance health care delivery by combining advanced nursing and health knowledge with skills and clinical expertise into their practice. This assists in the promotion of care between health providers and in partnership with clients and communities.

Rural and regional withdrawal care should include consideration of:

- Service flexibility to enable modification of metropolitan programs to suit local conditions
- Local patterns of drug use and changing patterns that may develop
- Service linkages
- Flexible waitlist management
- Pre-admission planning including preparatory activities
- Facilitation of linkages to the broader community for post-withdrawal support and relapse prevention (Berends, 2004)

### 6.5 Aboriginal and Torres Strait Islander (ATSI) clients

Culturally appropriate engagement with ATSI clients by withdrawal services should consider the potential involvement of the client's immediate and extended family in the withdrawal process. Awareness of, and sensitivity to, the experiences of those affected by the Stolen Generations is necessary throughout withdrawal care.

As such, mainstream AOD withdrawal services should:

- Offer cultural awareness training to staff
- Establish and consolidate links with ATSI services
- Assist ATSI clients to access appropriate ATSI support services, according to individual preference
- Engage Koori Community Alcohol and Drug Workers

In addition, mainstream withdrawal services may further meet the needs of ATSI clients by:

- Drawing on the expertise of ATSI services to inform appropriate withdrawal screening, assessment, planning, engagement, withdrawal care and follow-up of ATSI clients
- Using culturally-specific tools, where available

- Formalising relationships with ATSI services through a Memorandum of Understanding
- Considering the use of a narrative approach to conduct assessment with ATSI clients

# 6.6 Culturally and Linguistically Diverse (CALD) clients

Providers of withdrawal services to CALD clients should consider culturally appropriate methods of engagement. Services should:

- Offer cultural awareness training to staff
- Establish and consolidate links with CALD services
- Assist CALD clients to access appropriate CALD support services, according to individual preference

Services are also encouraged to work toward a model of care that:

- Draws on the expertise of culturally appropriate support services to inform appropriate withdrawal screening, assessment, planning, engagement, withdrawal care and follow-up of CALD clients
- Formalises relationships with CALD services through a Memorandum of Understanding, particularly in locations where there is a high proportion of ethnic minority groups
- Provides access to an interpreter to support the completion of an accurate AOD screen and assessment
- Provides information about AOD treatment options to CALD clients who are unfamiliar with the service system and facilitates access to AOD services
- · Works with clients' family and significant others, where appropriate
- Considers the most appropriate AOD setting dependent on CALD client need and preference
- Integrates and uses culturally-specific screening and assessment tools, where available
- Considers the heightened need for confidentiality among CALD clients who are members of a close community network

# 6.7 Clients with Acquired Brain Impairment (ABI)

Clients with ABI typically present to AOD withdrawal with the following conditions:

- Reduced co-ordination and balance (ataxia)
- Changes to mood
- Reduced cognitive capacity (e.g. reduced ability to make decisions, memory loss)

Clients with ABI respond well to routine and do not readily accept change. Pre-admission planning is therefore essential in preparing clients with ABI for withdrawal care. Multiple visits to the AOD service and introduction to withdrawal staff may be of benefit during this pre-admission phase.

Withdrawal staff should also take care to limit the amount of information communicated to clients with ABI at any one time. A number of short assessments are preferable to a long assessment interaction.

Thiamine supplements (Vitamin B1) are recommended for clients with ABI. A prolonged period of an inadequate and inappropriate diet may contribute to brain impairment (ARBIAS, 2008).

## 6.8 People who experience chronic pain

For some clients presenting to withdrawal care, chronic pain is the condition underlying AOD use. Withdrawal care for these clients is just one element of a broader response that also addresses pain management.

Assessment and measurement of pain are critical to appropriate diagnosis, care planning and implementation. An assessment should consider the physiological, psychological and environmental factors which influence the experience of pain (i.e. reflecting the bio-psychosocial model).

The following elements should be included in pain management assessment and care:

- A thorough general medical assessment including:
  - A specific pain history which documents:
    - Causal pathology, where possible
    - Description

- Impact
- Treatments
- Medications
- Context
- An AOD history
- A psychiatric history
- An examination which documents:
  - Features of intoxication
  - Injection sites, where relevant
  - Functional assessment (i.e. movement of relevant joints)
  - Mental state assessment
- Relevant information from other health care professionals active in a clients' chronic pain management/treatment
- Discussion of holistic, multidisciplinary management options

A pain management plan for AOD withdrawal clients should be developed and implemented under the supervision of a specialist multidisciplinary team in conjunction with an addiction medicine specialist (Roberts, 2008). The pain management plan may include:

• A non-pharmacological approach (e.g. exercise, coping strategies, counselling, psychosocial support, alternative therapies/medications etc.)

and/or

• A pharmacological approach (e.g. paracetamol, NSAIDS, trial of opioids in conjunction with other care)(NT Department of Health and Community Services, 2008). Where non-opioid analgesics are unsuitable for effective pain management, consideration may be given to the use of titrated opioids, with particular attention to route of administration. Oral rather than injection modes are recommended

It is critical that planning for the post-withdrawal management of pain is addressed during withdrawal care. This may entail:

- Linking with appropriate medical services for alternative prescribing
- Linking with other services such as pain management clinics for adjunct care
- Follow-up support

## 6.9 Pregnant women

The range of adverse effects associated with AOD misuse, dependence and withdrawal during pregnancy are well recognised. Opioids and alcohol, in particular, present risks for mother and foetus. These risks are further discussed in the relevant AOD withdrawal sections.

It is recommended that all women presenting to withdrawal services who are of child-bearing age are offered a urine pregnancy test. The limitations of the urine pregnancy test as outlined in the *Clinical Treatment Guidelines: Prescribing for Drug Withdrawal* (Murray et al., 2002) should be discussed with the client.

Screening and assessment of pregnant women should aim to elicit a range of information relevant to AOD withdrawal. Importantly, the frequency of past and current substance use must be established (NSW Department of Health, 2008b).

Tools such as T-ACE<sup>1</sup> or TWEAK<sup>2</sup> can be used to screen for AOD misuse in pregnant women. However, both tools have limited use for detecting low levels of alcohol use. The limitations of the Alcohol Use Disorder Identification Test (AUDIT) in identifying alcohol use during pregnancy are also acknowledged (NSW Department of Health, 2008b).

In some instances, a client may seek partner involvement in withdrawal care planning. This is only appropriate where the clinician believes that the partner will be a positive and useful resource in supporting the client's withdrawal.

Given that AOD use of a significant other increases a woman's risk of continuing or relapsing to drug use (NSW Department of Health, 2008b), post-withdrawal planning should address such issues.

<sup>&</sup>lt;sup>1</sup> T-ACE is a modification of the CAGE screening test and was designed for use in obstetric settings to identify at-risk drinkers (Sokol et al., 1989).

<sup>&</sup>lt;sup>2</sup> TWEAK is a five-item scale developed originally to screen for risk drinking during pregnancy. TWEAK is an acronym based on the five items (tolerance to alcohol; worry by spouse about your drinking; have you ever had an eye-opener; amnesia; have you ever felt you needed to cut down on your drinking) (Russell et al., 1994).

## 6.10 Families and significant others

An individual's AOD misuse often impacts on others. In particular, family members and significant others of withdrawal clients may experience difficulties during the primary client's withdrawal care. Such difficulties may include the exacerbation of financial stresses, time away from work, and child protection intervention. Families and significant others are thus important beneficiaries of support from AOD withdrawal providers. The rationale for delivering services to families and significant others is strengthened by evidence that their inclusion in AOD care is known to have a positive impact on client treatment outcomes, particularly for young people (YSAS, 2008).

AOD services should ensure that:

- Clients are consulted about the potential supportive role of family and significant others
- Client confidentiality is upheld when engaging with family and significant others of clients, except where client consent to disclose particular information has been obtained
- Families and significant others are valued for their expertise, with a focus on their strengths and resources, and a no-blame approach
- Indirect and/or direct services are offered to families and significant others including:
  - Information and advice
  - Referral to AOD support groups, community-based advocacy and information services, and Government services
- Staff are adequately trained to deliver family work (Patterson & Clapp, 2004)

## 7 PRESENTATION TO AOD WITHDRAWAL

AOD withdrawal clients present to treatment for a range of reasons. Their presentation generally falls into one or more of the following categories:

- *Crisis Presentation:* Precipitated by an event or circumstance significant enough to impact on an individual's motivation to participate in care, where they otherwise would not have (e.g. child protection, correctional intervention)
- Unplanned Withdrawal: When withdrawal occurs following presentation to hospital, psychiatric or medical units for a non-related or co-occurring condition, or within a secure correctional setting
- Elective: An individual is independently motivated to access support

Independent of a client's motivation for engagement with AOD services, withdrawal services should:

- · Fully inform the client of what is involved in withdrawal care
- Outline the risks and benefits of participating in withdrawal care
- · Outline client and service providers' rights and responsibilities
- · Seek informed, written client consent prior to withdrawal care
- Provide ready access to complaints procedures

## 8 AOD WITHDRAWAL SETTINGS

A comprehensive assessment of the individual needs and withdrawal risks of a client should inform the most appropriate withdrawal setting (Frank & Pead, 1995). All medical and psychosocial issues that are likely to impact on withdrawal completion should be considered.

In Victoria, a range of specialist withdrawal settings may be available to individuals experiencing problematic AOD use. These include:

- Residential withdrawal
  - Hospital inpatient withdrawal
  - Community residential withdrawal
- Home-based withdrawal
- Outpatient withdrawal
- Rural and regional withdrawal support

In addition to specialist withdrawal settings, correctional, hospital and psychiatric facilities are common sites of unplanned AOD withdrawal (Saunders & Yang, 2002b).

An appropriate withdrawal setting is one that provides a safe and welcoming environment, staff expertise and a positive approach. Such a setting can play an important part in actualising the withdrawal experience for service users.

Settings with established stepped care processes have enhanced capacity to meet client needs. Step-up processes allow clients with high needs to be transferred to a more intensive withdrawal setting. Alternately, step-down care allows those for whom risk/need is reducing to be stepped down to less intensive care (refer to 8.1.3 for more detail).

An extended period of withdrawal care may be warranted for clients with a dual diagnosis or those misusing multiple substances. In such situations, service providers require additional time to assess presenting concerns and/or deliver appropriate care. Psychosocial issues may also impact on length of stay, and a case by case approach to withdrawal care is recommended.

On occasion, client preference for withdrawal setting does not align with the options informed by clinical assessment. In such cases, the client should be informed of the risks associated with each treatment option and closely monitored during withdrawal.

## 8.1 Residential withdrawal

## 8.1.1 Hospital inpatient withdrawal

Hospital inpatient withdrawal settings, when available, provide a high level of medical (including pharmacotherapy) care for patients experiencing withdrawal, subject to availability of specialist services and staff.

Hospital inpatient withdrawal may be recommended in the case of complicated withdrawal, for example, where there exists:

- A history of seizures or delirium
- Significant medical comorbidity
- Frailty
- Unstable mental illness
- Comorbid chronic pain with opioid dependence

Hospital inpatient withdrawal patients are admitted to hospital for an AODrelated or non-related condition. As such, they may be receiving treatment in one or more hospital settings. Where this is the case, the support of hospital addiction medicine liaison services and other clinical care should be sought to ensure the effective management of patients through a coordinated withdrawal care response.

### 8.1.2 Community residential withdrawal

Community residential withdrawal services typically provide 24-hour, medium level supportive care to AOD clients. Increasingly, these settings are also being recognised for their capacity to manage complicated withdrawal. Medical and pharmacotherapy support is often provided, although at a lower level than in hospital inpatient settings. Duration of stay is generally shortterm.

Community residential withdrawal services may be able to manage clients with a history of complex withdrawal, although close proximity to a public

hospital with psychiatric facilities is desirable. This facilitates a timely medical or psychiatric response (i.e. step-up to hospital inpatient withdrawal) to high level needs that may arise during withdrawal (Frank & Pead, 1995; Victorian Department of Human Services, 1997).

In Victoria, youth-specific residential withdrawal units have also been established to provide specialist withdrawal care to young people. The average length of stay for youth community residential withdrawal is seven to ten days.

### 8.1.3 Stepped care

Stepped care allows the transfer of withdrawal clients between home-based or community residential settings to hospital inpatient withdrawal settings or psychiatric facilities. There is recognition that a stepped care model of service provision has significant benefits such as:

- Step-up from home-based or community residential withdrawal to hospital inpatient withdrawal or step-down from hospital inpatient withdrawal to community residential withdrawal in response to changing client need/risk
- Enhanced access to limited hospital inpatient withdrawal services
- Significant cost benefits, particularly for hospitals with step-down clients no longer requiring hospital-level care
- A framework for collaborative approaches between community-based AOD services, inpatient psychiatric units and hospitals (Von Korff & Tiemens, 2000)

Ideally, stepped care arrangements should be formalised and supported through the development of a Memorandum of Understanding between services.

## 8.2 Home-based withdrawal

Home-based withdrawal may be suitable for adults and young people experiencing mild to moderate withdrawal symptoms. Clients with single substance dependence, no history of complicated withdrawal and no significant medical pathology are most appropriate for this level of care. Ideally, the home environment is conducive to a period of withdrawal (i.e. drug free) and family members or friends provide appropriate support (Frank & Pead, 1995; Victorian Department of Human Services, 1997).

Medical care and support is provided via regular home visits by health professionals such as GPs. Nursing and medical staff are also available to provide on-call advice. Access to 24-hour support is recommended through either the presence of a support person or contact with telephone support services (Ritter, 2003; Victorian Department of Human Services, 1997).

Home-based withdrawal carries a higher risk to clients due to unsupervised dosing, therefore, lower doses of pharmacotherapies such as diazepam are used. GPs are commonly used to manage medications and many clients are placed on daily or every second day pick-ups from pharmacies to reduce the risk of over-medication.

## 8.3 Outpatient withdrawal

Outpatient withdrawal provides short-term medical care and support to people who do not require, or no longer require, residential withdrawal care. Suitable for low level, single substance withdrawal for stable clients with low predicted withdrawal complexity, this withdrawal type includes outpatient and home-based withdrawal.

Outpatient withdrawal is provided through a hospital outpatient clinic, a health care centre or AOD service. Clients attend a series of appointments with a GP and interventions focus on establishing ongoing linkages between the client and other community-based services to support the withdrawal process (Ritter, 2003; Victorian Department of Human Services, 1997).

## 8.4 Rural and regional withdrawal support

Rural withdrawal support may involve a combination of a short hospital stay (where necessary and available) followed by a period of home-based withdrawal. This treatment setting suits clients whose withdrawal is of mild to moderate severity and who cannot access a community residential withdrawal unit due to geographical factors.

Rural and regional withdrawal support services employ specialist withdrawal nurses to provide home-based medical advice and care. Their work is supported by a local medical practitioner who provides additional care, as required. Further support from a family member or friend to care for the client between visits from local nursing staff or medical practitioner is a necessary requirement for rural and regional withdrawal (Berends et al., 2004; Victorian Department of Human Services, 1997).

# 8.5 Minimum qualifications in AOD withdrawal services

The Victorian Department of Human Services' Minimum Qualification Strategy for all Victorian AOD services was fully implemented in July 2006. Designed as a mechanism for workforce development, the Minimum Qualification Strategy is based on a consistent approach to skill development for AOD professionals, using nationally recognised minimum competency guidelines.

All professionals employed in Victorian AOD withdrawal services are expected to meet the following minimum core competencies:

- Core/Induction competencies including:
  - Orientation to the AOD sector
  - Work with clients who are intoxicated
  - Assess the needs of clients who have AOD issues
  - Work with clients who have AOD issues
- Work specific competencies including:
  - Provide needle and syringe services
  - Provide AOD withdrawal services
  - Provide advanced interventions to meet the needs of clients with alcohol and/or other drug issues
- Certificate IV in alcohol and other drugs work including:
  - Orientation to the AOD work
  - Work with clients who are intoxicated
  - Assess the needs of clients who have AOD issues
  - Work with clients who have AOD issues
  - Use specialist communication skills to build strong relationships
  - Work within a legal and ethical framework
  - Facilitate cooperative behaviour
  - Respond holistically to client issues
  - · Work effectively with culturally diverse clients and co-workers
  - Participate in workplace safety procedures
  - Maintain an effective work environment
  - Work with other services

## 9 ASSESSMENT

On presentation to treatment services, clients undergo AOD screening and assessment. The goals of screening and assessment are to:

- Obtain information about the client
- · Identify potential risks to the client during withdrawal care
- Establish rapport with the client, hence setting the foundations for continuing in the supportive relationship
- Clarify individual requirements
- Provide information about withdrawal care and treatment options

Assessment informs the level of withdrawal care required and the likely complexity of withdrawal. This is particularly the case where polydrug dependence or co-occurring illnesses may have a significant impact on an individual's experience of withdrawal.

These Guidelines recommend the use of the Victorian Department of Human Services AOD Specialist Assessment Tool (available online at http://www.health.vic.gov.au/drugservices/pubs/assess.htm).

Comprehensive screening and assessment processes are enhanced through clear communication. Good clinical practice entails a nonjudgemental, empathic and respectful approach that seeks to engage with clients. It aims to provide all clients with a positive, early treatment experience, commencing at first contact and continuing throughout withdrawal care.

Clients require adequate time to reflect on the proposed withdrawal option and pose questions. They should feel comfortable and supported in participating in decision-making processes regarding their AOD withdrawal care. The provision of information and education, reassurance and counselling may help to reduce client discomfort and anxiety at preadmission. Assessment is essential to appropriate treatment planning and implementation. The key factors for consideration at assessment include:

- Communication
  - A clear information exchange between the client and clinician, respecting client choice as well as clinical judgement
  - A detailed description of client rights, responsibilities and grievance procedures
  - A clear explanation of client confidentiality protocols, including concerns regarding harm to themselves and others
  - Establishing the withdrawal care relationship between client and clinician
- Risk factors (bio-psychosocial)
  - A consumption history (daily quantity and frequency of use, person's account of potency)
  - Underlying co-occurring physical and mental health conditions
  - Suicide risk assessment
  - Domestic/family violence
  - Child protection issues
  - Current withdrawal status
  - Identifying polydrug use
  - Identifying psychosocial factors that may present barriers to achieving client goals
- Planning
  - Client goal/s of withdrawal
  - Service setting matching
  - Pre-admission planning to identify opportunities for support and intervention, where withdrawal care is not immediately available
  - Establishing an appropriate withdrawal plan
  - Identifying existing service linkages that could offer post-withdrawal support

Psychosocial issues that should be explored in an assessment of AOD clients are detailed in Table 4, below.

Psychosocial issues	Focus
Perceived barriers to achieving goal of	Relationship issues
withdrawal care	Geographic isolation
	Access to appropriate AOD support and information
	Legal and financial issues
	Parenting and child protection issues
	Domestic violence
Beliefs about withdrawal care	Motivation for accessing withdrawal care
	Previous withdrawal experiences
	Fears and expectations
Identified supports	Appropriate accommodation
	Support network (family, friends, workers)

#### Table 4: Psychosocial issues to address during assessment

Source: Key informant interviews

## 9.1 Assessment tools

Appropriate screening and assessment tools and processes must be available to identify and respond to the range of issues with which clients present to a treatment setting. These Guidelines recommend the use of the Victorian Department of Human Services AOD Specialist Assessment Tool (available online at http://www.dhs.vic.gov.au/home).

While structured and validated screening and assessment tools have been developed for specific use in the AOD sector, there exists some support for a less structured, narrative approach to collecting client information at assessment. For some clients, an assessment process that is embedded in conversation and which occurs over time may be more appropriate. Assessment tools should guide the conversation and information is recorded post-session.

## 9.2 Pre-admission planning

Brief interventions are an effective pre-admission strategy that offers adjunct support for clients who continue drug use prior to treatment entry. Harm reduction strategies, motivational interviewing, self-care, managing anxiety and relaxation techniques may be considered at this time and drawn upon pre-, during and post-withdrawal (see Appendix 5 for coping and relaxation techniques).

Pre-admission planning may also explore and implement strategies that seek to reduce client drop-out between first service contact and treatment commencement. Waiting list support, linkage with support services and regular clinician follow-up of clients should be explored as part of pre-admission planning.

## 9.3 Planning for post-withdrawal support

Linking AOD clients into other services is associated with better treatment outcomes. Assessment presents an opportune time to plan for a range of these post-withdrawal supports (Griswold et al., 2007; Hilton et al., 2001). Regardless of whether an individual intends to remain abstinent, reduce drug use or continue drug use, increased awareness of support services is important.

Appropriate post-withdrawal services may include:

- AOD support services
- · General practitioners
- Individual counselling
- · Outpatient programs
- Outreach support
- Addiction specialists
- Self-help and peer support groups
- Residential rehabilitation
- Other community-based AOD
- Post-withdrawal support groups
- · Health and medical services
- Dieticians/nutritionists
- Approved pharmacotherapy dispensers
- · Healthy liver clinics
- Maternal nursing
- Welfare services
- Accommodation services
- Income support services
- Advocacy services
- · Legal services
- Child protection agencies
- Negotiating with employers provision of medical certificate for period of withdrawal care
- Vocational services
- Employment, education and training

Planning for post-withdrawal support should be revisited throughout withdrawal care. Such planning may help to address not only AOD issues, but precipitants to treatment presentation, such as child protection or criminal justice system involvement or other coercive influence. Such planning may also contribute to a reduction in clients' anxiety about the post-withdrawal period and play an integral part in relapse prevention (key informant interviews).

Where possible, the inclusion of family and significant others may be considered throughout withdrawal care. With client consent, family members can be involved in assessment, withdrawal care and planning for postwithdrawal. Family and significant others may also require support through referrals and linkages to community support services (YSAS, 2008).

## 9.4 Supportive care

Supportive care is a key component of drug withdrawal care for all classes of drugs. Frequent monitoring, reassurance, providing information and a suitable environment can help to reduce withdrawal symptom severity.

Regular monitoring should occur throughout withdrawal care in order to respond to client needs as they arise. The frequency of monitoring will be dependent on symptom severity and the withdrawal care setting.

The following is a guide to providing supportive care in a residential withdrawal setting. It is recommended that monitoring of clients occurs on an hourly basis.

Check withdrawal severity	Appropriate withdrawal scale	
Check general health	Consciousness	
	Blood pressure	
	Self-report	
Check environment	Calm	
	Quiet	
	Low lighting	
	Privacy	
	Safe	
	Self report	
	Supportive person(s)	
Reassure	Allay concerns and fears	
	Positive encouragement	
	Offer information	
Orientate	Time	
	Place	
	Person	
Offer fluids		
Check physical comfort	Pillows	
	Blankets	
	Hot packs	

#### Table 5: Supportive care protocols

# 9.5 Complementary therapy and natural supplements

Adjunct therapies, such as massage, acupuncture and herbal therapies, are available within some treatment settings. These therapies have limited evidence supporting their effectiveness, however anecdotal reports suggest benefits for some patients.

Information and options for referral to services that provide these interventions can be provided to clients during assessment.

## 9.6 Intoxication at assessment

Finally, and critically, an effective assessment is wholly dependent on the capacity of clients to provide relevant information, understand the treatment

options available and willingly consent to treatment. Given that client intoxication may limit comprehension, assessment information should be revisited when acute intoxication has passed. See Appendix 2 for advice on how to identify signs of intoxication and potential overdose, and guidance in managing intoxication.

## **10 ALCOHOL WITHDRAWAL**

These Guidelines provide a comprehensive approach to withdrawal care. The use of prescribing guidelines outlined below focus on alcohol withdrawal and will be supported by a comprehensive clinical assessment.

The prevalence of alcohol misuse is a cause for concern in Australia. Approximately 1,401,400 Australians are using alcohol daily (AIHW, 2007). More than seven million people or 40% of the population use alcohol on a weekly basis and approximately 3.4% of the population could be at high risk for alcohol-related problems (AIHW, 2007).

In delivering alcohol withdrawal services to clients, clinicians should consider:

- Setting
- Withdrawal syndrome and potential complications
- Assessment
- Withdrawal care planning
- Withdrawal care
- Planning for post-withdrawal
- Special needs groups

Each of these considerations is examined below.

## **10.1 Alcohol withdrawal settings**

The most appropriate setting for an individual seeking alcohol withdrawal will be informed by a thorough clinical assessment.

The most appropriate setting for an individual seeking alcohol withdrawal should be determined via a thorough clinical assessment. Alcohol withdrawal can occur in each of the treatment settings outlined in this document (outpatient withdrawal, community residential withdrawal, hospital inpatient withdrawal and rural withdrawal support). Many clients are able to undertake withdrawal from alcohol in community settings.

In some settings, such as hospitals, psychiatric facilities, prisons and police watch-houses, individuals may experience an unplanned alcohol withdrawal. Staff in such settings will be familiar with, and alert to, the signs of alcohol withdrawal in order to respond in a timely and appropriate manner.

Attention to unplanned alcohol withdrawal is critical to responding in an appropriate and timely manner to individuals. Evidence of the onset of withdrawal symptoms should be considered potential indicators of alcohol withdrawal.

The best withdrawal care facilitates step-up and step-down care, according to client need.

Regardless of withdrawal setting, the best withdrawal care facilitates step-up and step-down care, as appropriate. This allows clients whose needs warrant greater withdrawal care to be transferred to a more intensive withdrawal setting. Alternatively, stepped care allows those for whose need is reducing to be stepped down to less intensive care.

Pharmacotherapy support in alcohol withdrawal is subject to a range of setting-specific considerations. These are outlined below in Table 6.

Alcohol withdrawal setting	Pharmacotherapy considerations
Outpatient withdrawal	Appropriate for clients able to undertake alcohol withdrawal in the community
	Unsuitable for clients where there is a history of DTs, previous complicated withdrawal or a high level of alcohol dependence
	Dosing of benzodiazepines such as diazepam should be reduced over the period of withdrawal and care should be taken not to over-sedate the client
	Ideally, clients should be monitored by a health professional (e.g. outreach nurse) for the first four days of withdrawal and then every two days until the completion of withdrawal
	Detailed information should be provided to both the client and any support people who may be present throughout the withdrawal process. Symptoms, onset and duration of withdrawal and side effects of benzodiazepines should be explained. Risk factors associated with outpatient withdrawal settings should be clearly outlined and contingency planning put in place
Community residential	Appropriate where a moderate–severe alcohol withdrawal syndrome is anticipated, as determined at the time of assessment
withdrawal	These settings are increasingly recognised as having the capacity to manage complicated withdrawal
Hospital inpatient withdrawal	Appropriate where clients are likely to experience a severe or complicated alcohol withdrawal syndrome
	Alcohol withdrawal is commonly associated with presentation to hospital accident and emergency or psychiatric settings for co-occurring health issues. The cessation of alcohol consumption at this time may trigger the onset of withdrawal
	Staff in these settings should undertake screening and assessment for alcohol withdrawal, and any patient reporting alcohol consumption in excess of the NHMRC recommendations for safe levels of drinking should be considered at risk

# Table 6: Pharmacotherapy considerations for alcohol withdrawal settings

## 10.2 Alcohol withdrawal syndrome

The alcohol withdrawal syndrome occurs on a continuum from mild to severe, with the onset of alcohol withdrawal usually occurring 6–24 hours after the last drink. Use of benzodiazepines or other sedatives may delay the onset of withdrawal symptoms. In some severely dependent drinkers, simply reducing the level of consumption may precipitate withdrawal, even if they have consumed alcohol recently.

While unsupported alcohol withdrawal is generally completed within three days, polydrug use and other factors may significantly prolong symptoms. Acute symptoms of mild to moderate alcohol withdrawal commonly include:

- Agitation
- Anxiety
- Fever
- Insomnia
- Nausea
- Nightmares
- Restlessness
- Sweats
- Tachycardia
- Tremor
- Vomiting (Ntais et al., 2005)

More serious features associated with alcohol withdrawal include:

- Delirium Tremens (DTs)
  - Symptoms of DTs usually occur between two and five days after cessation of drinking
  - Symptoms include disorientation, anxiety and agitation, tremors, paranoia, hallucinations and fluctuating blood pressure
  - This most serious complication of alcohol withdrawal is potentially life-threatening and requires immediate medical attention (Shand et al., 2003a)

- Cardiac arrest and death can occur in very severe alcohol withdrawal syndrome
- · Hallucinations auditory, visual, tactile
- Increased agitation
- Seizures usually occur within the first 48 hours of cessation of drinking (Ntais et al., 2005)
- · Wernicke's encephalopathy
  - Wernicke's encephalopathy is caused by inadequate intake or absorption of thiamine (Vitamin B1) associated with prolonged alcohol consumption
  - Symptoms may include abnormal eye movement, staggering, agitation, confusion and drowsiness
  - This condition requires thiamine dosing as outlined in Section 10.5.5

The major features, time-course, onset, duration and severity of alcohol withdrawal are shown in Figure 2 below.

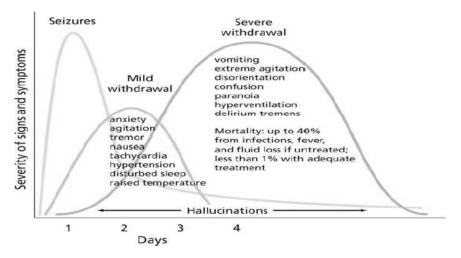


Figure 2: Symptoms and duration of alcohol withdrawal Source: NSW Health (2008, p.22)

## 10.3 Alcohol withdrawal assessment

Clinicians should be familiar with the general principles of assessment (refer section 9).

During withdrawal assessment, clinical staff will be alert to signs of client intoxication.

A thorough assessment of alcohol-dependent clients is critical in determining the most appropriate withdrawal care. Assessment is, however, largely dependent on the capacity of clients to provide relevant information. Recent alcohol use may limit clients' capacity to share and absorb accurate assessment information.

Intoxicated clients presenting to assessment may have slurred speech, reduced motor control and lack of emotional inhibition. Intoxication may limit their capacity to share and absorb accurate assessment information.

For intoxicated clients, all services should:

- As soon as possible, identify the most recent drug type, quantity and time consumed (to inform medical intervention in the event of an overdose)
- Implement regular clinical observations of the client at frequent intervals at first then decreasing over time as evidence of intoxication subsides
- Revisit the assessment when acute intoxication has passed

# 10.3.1 Medical conditions and alcohol withdrawal assessment

Withdrawal service staff will consider the potential for alcohol withdrawal to complicate clients' existing medical conditions and provide specialist medical care and monitoring, as required.

Some medical conditions may be complicated by alcohol withdrawal and are at times difficult to manage in alcohol withdrawal settings. For example, the management of malnutrition, liver and gastric conditions and platelet dysfunction may be affected by the withdrawal process. There is also an increased risk of post-operative morbidity and longer inpatient hospital stay for alcohol-dependent surgical patients. Emotional, economic and social impacts may also result from alcohol withdrawal (Foy et al., 1997).

### **10.3.2 Alcohol screening and assessment tools**

**Note:** Withdrawal scales may lack the sensitivity to detect progression to serious illness in complicated withdrawal. Withdrawal monitoring should always include regular clinical observation.

The CIWA-Ar (Appendix 6) is a tool used to scale symptom severity for simple alcohol withdrawal, and complicating factors such as co-occurring disorders and polydrug use may impact on the appropriateness of its use. The ten-item scale can be used to evaluate the presence and severity of withdrawal symptoms, with higher scores indicating increased risk for severe withdrawal.

Scoring on the CIWA-Ar correlates directly with the severity of withdrawal, that is, the higher the score, the more severe the withdrawal symptoms. It is recommended that staff using the CIWA-Ar receive appropriate training, as incorrect scoring will result in increased benzodiazepine dosing. Using benzodiazepine doses triggered by the CIWA-Ar reduces the risk of progression to serious complications of withdrawal such as seizures (Mayo-Smith, 1997).

Symptom-triggered pharmacotherapy can be titrated against the total CIWA-Ar score (Puz & Stokes, 2005). Instructive information for use of the CIWA-Ar is included in Appendix 6.

A consumption calendar (Appendix 3) can also be completed by the client to inform treatment planning. It provides information regarding the client's alcohol consumption for the week preceding the assessment. The consumption calendar records:

- Substances consumed in the past week
- Quantities of substances consumed in the past week
- Method of ingestion of substances consumed during the last week
- Most recent use and quantities of substances to alert staff to possible overdose
- Patterns of substance misuse

## 10.4 Alcohol withdrawal care planning

Information obtained during assessment will inform the withdrawal care plan.

Information obtained during assessment informs the client's withdrawal care plan, which documents:

- The likely severity of withdrawal based on the consumption calendar and CIWA-Ar
- Previous history of complicated withdrawal
- The client's motivation for withdrawal care, where this is a planned withdrawal presentation
- The client's goals during withdrawal care
- Potential barriers that may impact on achieving the client's withdrawal goals
- · Available support to enhance the likelihood of success
- A post-withdrawal plan, including relapse prevention and linkages to external support networks to address the client's psychosocial needs
- · Inclusion of family/significant others, where appropriate

## 10.5 Alcohol withdrawal care

## 10.5.1 Psychosocial support in alcohol withdrawal

Psychosocial interventions complement the medical management of alcohol withdrawal symptoms and will be available at all alcohol withdrawal services.

The overarching principles of supportive care are fundamental to the provision of a holistic model of withdrawal care. Psychosocial interventions should explore:

- Client goals, including any change in these goals over time
- Perceived barriers to achieving an individuals' goal/s of withdrawal care
- An individual's beliefs about withdrawal care
- Appropriate interventions and support services

### 10.5.2 Benzodiazepines

Where required, benzodiazepines remain the preferred pharmacotherapy for managing alcohol withdrawal symptoms.

The majority of alcohol-dependent clients complete withdrawal without pharmacotherapy support. However, where required, benzodiazepines manage a range of withdrawal symptoms and have been shown to prevent alcohol withdrawal seizures. There is also some evidence to show that benzodiazepines may prevent progression to delirium (Mayo-Smith, 1997).

Long-acting benzodiazepines, and diazepam in particular, are recommended for use in the management of alcohol withdrawal in a number of recent Australian Clinical Guidelines (D'Onofrio et al., 1999; Mattick & Jarvis, 1993; Mayo-Smith, M., 1997; Mayo-Smith, M. F. et al., 2004; NSW Health Department, 1999; Salloum et al., 1995; Shand et al., 2003a).

Treatment with benzodiazepines in alcohol withdrawal is normally considered once a client's Blood Alcohol Level (BAL) is lower than 0.1. Services may have access to breathalysers for continued monitoring of a person's BAL. Dosing commencement should also be informed by setting, level of monitoring and support available, particularly in rural and regional withdrawal settings.

Table 7 outlines three benzodiazepine medication regimes for use in alcohol withdrawal.

Type of dosing regime	Client group	Dosing regime	
Fixed schedule	Appropriate for clients at risk of complicated withdrawal who are not in a hospital or other supervised environment (e.g. community-based withdrawal)	Specified doses at fixed intervals, tapered over a set number of days	
Symptom-triggered dosing	Appropriate for alcohol withdrawal clients in a medically supervised setting	Doses administered according to individually-experienced symptoms of alcohol withdrawal	
Loading dose	Appropriate for alcohol withdrawal clients at high risk of complicated withdrawal who are in an inpatient environment	Large doses until alcohol withdrawal subsides or light sedation is reached	

## Table 7: Medication regimes for the use of benzodiazepines in alcohol withdrawal (as at March 2009)

Source: (NSW Department of Health, 2008a; Saunders et al., 2002a; Shand et al., 2003a)

Inpatient/residential withdrawal settings can administer diazepam dosing based on the results of the CIWA-Ar conducted every one to four hours. Dosing regimens may vary from setting to setting, depending on level of support available, the duration of admission and clinician preference.

A standard benzodiazepine dosing schedule example is provided in Table 8, below.

Level of dependence/setting of withdrawal	Example of diazepam dosing
Mild dependence in outpatient withdrawal	Day 1: 5–15 mg qid
setting	Day 2: 5–10 mg qid
	Day 3: 5–10 mg tds
	Day 4: 10 mg bd
	Day 5: 5 mg bd
Moderate severity dependence in inpatient setting	5–20 mg 2–4 hourly as needed if CIWA Ar score>10 for 3–4 days
High level of dependency and/or risk of complex withdrawal in inpatient setting	Loading doses of 10–20 mg every 2–4 hours until light sedation achieved followed by CIWA Ar triggered or fixed dose therapy for 3–4 days

## Table 8: Examples of benzodiazepine dosing regimens (as atMarch 2009)

Source: Key informant interviews

Dehydration is common among alcohol withdrawal clients. Continued fluid consumption and clinical monitoring is advised. In severe cases, intravenous fluid replacement may be required.

Continued monitoring and medical review of medications is recommended throughout the course of withdrawal.

### **10.5.3 Anti-craving therapies**

Medications used to treat alcohol use disorders include the anti-craving therapies acamprosate (Campral®) and naltrexone (Revia®), and the aversive agent disulfiram (Antabuse®). These agents may be commenced in both inpatient and outpatient settings to prevent relapse in alcohol dependence.

There is no consistent evidence to support the effectiveness of one agent over another. Choice of anti-craving medication should be dependent upon drug interactions, patient experience, likely adherence to dosing and potential adverse effects.

Some research suggests that naltrexone may be suitable in the treatment of patients seeking to reduce heavy alcohol intake and that acamprosate may be suitable for patients seeking abstinence (Rösner et al, 2008).

There is varying evidence that indicates combination therapy with acamprosate and naltrexone is more effective than monotherapy with either agent (Kiefer et al., 2003).

Alcohol pharmacotherapies are best used as part of a comprehensive management plan with appropriate psychosocial supports, and both agents may be commenced early in withdrawal treatment. Therapy should normally be maintained in the event of relapse to alcohol use, and patients should not normally be advised to discontinue anti-craving therapy in this instance. Relapse should prompt review of the individual's withdrawal care plan.

The main anti-craving medications are detailed below.

#### The following is a summary of the principles behind these therapies. Prescribers should refer to the detailed Australian product information found in MIMS or similar reference prior to prescribing these therapies.

#### Naltrexone

Naltrexone is an opioid receptor antagonist medication which exerts its effect through interruption of alcohol reward pathways. Randomised placebo controlled trials show that naltrexone increases duration of abstinence and reduces amount of alcohol consumed in relapse (Carmen, 2004; Kranzler, 2003).

#### Dosing and commencement of therapy

Naltrexone therapy may be commenced from day three of alcohol withdrawal and dosing will be determined by a medical professional. Duration of naltrexone therapy depends on the response to treatment and individual patient goals.

#### Adverse effects and contraindications

Naltrexone is generally well tolerated and adverse effects are usually associated with dosing levels, which may need to be adjusted. Side effects generally resolve within a few days of commencement of treatment and may include:

- Dizziness
- Fatigue
- Headache
- Nausea

Naltrexone is contraindicated in acute hepatitis or liver failure and its safety in pregnancy has not been established. Patients on opioid therapy should not be treated with naltrexone (see Interactions below). Liver function monitoring is usually recommended in long-term treatment.

#### Interactions

As a potent opioid mu receptor antagonist, naltrexone should not be given to patients on opioid therapy as it is likely to precipitate withdrawal. If an individual on long-term opioids is considered for this intervention, opioids should be ceased for at least seven days before commencing naltrexone.

Clients who are taking anti-depressant or anti-anxiety medications are generally able to commence naltrexone, as it possesses no mood-altering or addictive properties.

#### Acamprosate

Acamprosate acts on the brain's glutamatergic pathways through NMDA receptor systems that are involved in alcohol dependence and withdrawal. Randomised placebo controlled trials show benefit of acamprosate in prolonging duration of abstinence and increasing alcohol-free days (Mann, 2004; Carmen, 2004; Kranzler, 2003). In most cases acamprosate need not be ceased if patients relapse into alcohol use.

#### Dosing and commencement of therapy

Therapy may be commenced early in alcohol withdrawal management, and there is some evidence of the benefit of acamprosate in reducing neuronal damage in alcohol withdrawal. As acamprosate does not reduce acute alcohol withdrawal severity it should not be used as a treatment for withdrawal per se.

Acamprosate is available in 333 mg tablets and dosing regimens should be determined by a medical professional. The duration of therapy is dependent on individual response to acamprosate and treatment goals.

#### Adverse effects and contraindications

Acamprosate is generally well tolerated. Most adverse effects are mild and transient and rarely necessitate cessation of treatment. The most common adverse effect is diarrhoea.

#### Interactions

While acamprosate does not have any significant interactions, it is a calciumbased compound and a theoretical interaction may occur with drugs such as tetracyclines. There is no interaction between acamprosate and alcohol. Note that the safety of acamprosate use during pregnancy has not been established.

#### Disulfiram

Disulfiram (Antabuse <sup>®</sup>) has previously been used in the management of alcohol withdrawal. However, the severity of associated adverse effects, cost of treatment and the extensive planning required for disulfiram therapy has resulted in it rarely being used in the treatment of alcoholism in Australia. The use of disulfiram is outside the scope of these Guidelines and should be discussed with Specialist Addiction Medicine services.

### 10.5.4 Symptomatic care for alcohol withdrawal

A range of symptomatic medications is appropriate for use in alcohol withdrawal.

Alcohol withdrawal is primarily managed with benzodiazepines. Additional medication may be used for management of symptoms as described in Table 9, below.

Symptoms	Symptomatic medication
Nausea and vomiting	Antiemetics
	Metoclopramide (Maxolon®) 10 mg every 4–6 hours <sup>a</sup>
	Prochlorperazine (Stemetil®) 5 mg every 4–6 hours orally or intramuscularly. Reduce the dose rate to 8-hourly as symptoms abate <sup>a</sup>
Diarrhoea	Antidiarrhoeal
	Loperamide (Imodium®)or Kaomagma®ª
	Atropine and diphenoxylate (Lomitil®) <sup>b</sup>
Abdominal cramps	Hyoscine butylbromide (Buscopan®)
Headaches	Paracetamol
	Note: Paracetamol is often preferable to aspirin or ibuprofen, especially if there is a suspicion of peptic ulceration <sup>b</sup>
To minimise gastrointestinal symptoms encourage fluids and a simple diet b	
Prophylactic treatment for seizures (for example with phenytoin, carbamazepine or sodium	

#### Table 9: Symptomatic medications for use in alcohol withdrawal (as at March 2009)

valproate) is not proven to have any clinical benefit.

Medications which do not have any demonstrated benefits over benzodiazepines and cannot be recommended as first line treatments for alcohol withdrawal include:

- Anticonvulsants
- Antidepressants •
- Major tranquilisers

a) NSW Department of Health (2008a)

b) Murray et al. (2002)

### 10.5.5 Use of thiamine in alcohol withdrawal

Suspected or diagnosed Wernicke's encephalothopy is a serious condition that should be treated with intravenous thiamine in an acute hospital setting. Additionally, prophylactic thiamine should be given routinely to alcohol withdrawal clients.

Wernicke's is an acute encephalopathy of thiamine deficiency and may be seen in alcohol-dependent individuals presenting for withdrawal care. This condition, although uncommon, may progress to a chronic form of cognitive damage known as Korsakoff's syndrome. Signs of Wernicke's encephalopathy include confusion and ataxia.

All clients with suspected Wernicke's encephalopathy should be referred to a hospital emergency department. An example of thiamine dosing regimens and routes of administration for alcohol-dependent clients and clients with suspected Wernicke's encephalopathy are outlined in Table 10, below.

# Table 10: Example of thiamine dosing for alcohol-dependent clients and clients with suspected Wernicke's encephalopathy (as at March 2009)

Alcohol withdrawal presentation	Thiamine dose
All patients	100–300 mg intravenously or intramuscularly for 3–5 days 300 mg orally daily thereafter
Suspected Wernicke's encephalopathy	At least 300 mg intramuscularly or intravenously for 3–5 days 100–300 mg orally thereafter

Source: Key informant interviews

### 10.5.6 Complementary therapies in alcohol withdrawal

Complementary therapies such as massage, acupuncture and herbal remedies are available within some withdrawal settings. There is anecdotal evidence that these therapies assist in alcohol withdrawal and clients should be made aware of the availability of these services during treatment planning. Complementary therapies include but are not limited to:

- Dietary supplements:
  - B Group Vitamins, especially high dose B1, B3 and B6
  - Vitamin C
  - Zinc
- Stress reduction, relaxation and sleep assistance:
  - DL-Phenylalanine
  - Valerian
  - Kava
  - Rescue Remedy
  - Zizyphus & Polygala pills (Chinese Herbal Medicine)
- Nausea and vomiting:
  - Ginger or Homeopathic Remedy (Vomiplex)
  - Peppermint
- Formula for Joint Pain
  - Calcium
  - Fish oils
  - Magnesium
- Liver function
  - Silymarin (YSAS, 2008)

## 10.6 Planning for post-withdrawal

Post-withdrawal support is an essential component of the treatment continuum for alcohol-dependent clients.

Planning for post-withdrawal may include consideration of additional pharmacotherapies (acamprosate or naltrexone) for alcohol withdrawal symptom management and relapse prevention. Planning for post-withdrawal will:

- Commence at the assessment phase of withdrawal care
- Support the client's goals which may pertain to accommodation, child protection, domestic violence and legal support
- Support client access to post-withdrawal services that provide ongoing support and advocacy
- Involve family/significant others in post-withdrawal care, as appropriate, to help implement the client's post-withdrawal plan

## 10.7 Special needs groups

### 10.7.1 Infants of alcohol-dependent women

A foetus that is exposed to regular, excessive maternal alcohol consumption will be closely monitored for withdrawal symptoms during their first days of life.

Close monitoring will entail:

- Medical and nursing staff monitoring for signs of Foetal Alcohol Syndrome (FAS) and subsequent alcohol withdrawal 24–48 hours after birth
- Specialist medical attention and medication to manage alcohol withdrawal symptoms (NSW Department of Health, 2008b)

Babies with FAS will be followed up for at least the first six months by a health professional where the neonate's mother has:

- Engaged in risky levels of drinking (as defined by the Australian Alcohol Guidelines), or
- Given birth previously to a baby with FAS (NSW Department of Health, 2008b)

**Note**: Diagnosis of FAS at birth is difficult. In suspected cases, the infant should be re-assessed at about six months of age (NSW Department of Health, 2008b).

### 10.7.2 Clients with a dual diagnosis

Clients for whom a psychiatric condition emerges during alcohol withdrawal will receive care that addresses their specific needs.

Specifically, they will be:

- Linked with appropriate mental health services
- Encouraged to continue to seek mental health support beyond withdrawal care
- Monitored for symptoms, such as agitations during withdrawal, and managed appropriately

## 10.7.3 Families/significant others

Consideration will be given to the needs of family/significant others in contact with an alcohol-dependent person during outpatient withdrawal or reduction.

Where appropriate, information will be provided to family/significant others regarding the alcohol withdrawal process and support services such as Directline and/or Lifeline.

## 10.7.4 Young people

Young people presenting to AOD services will be linked with youth-specific services, where available.

As outlined above (see section 6.3), young people may present with varying psychosocial factors contributing to their drug use which impact upon their long-term plan for recovery. It is important to be mindful of the potential differences in treatment approach and care when commencing withdrawal care. Ongoing contact with, and adjunct support from, youth-specific workers throughout withdrawal care can promote more positive experiences for the young person.

For further detailed information related to the withdrawal care of young alcohol users, please refer to the YSAS Clinical Practice Guidelines (YSAS, 2008).

## 10.8 Recommended reading

Mayo-Smith, M. (1997). Pharmacological management of alcohol withdrawal: A meta-analysis and evidence-based practice guidelines. *JAMA*, *278*(2), 144–151.

Mayo-Smith, M. F., Beecher, L. H., Fischer, T., Gorelick, D. A., Guillaume, J. L., Hill, A. et al. (2004). Management of Alcohol Withdrawal Delirium: An Evidence-Based Practice Guideline. *Archives of Internal Medicine*, *164*, 1405–1412

NSW Department of Health. (2008a). *NSW Drug and Alcohol Withdrawal Clinical Practice Guidelines*. NSW: NSW Department of Health.

NSW Department of Health. (2008b). *Nursing and Midwifery Clinical Guidelines: Identifying and responding to drug and alcohol issues.* NSW: NSW Department of Health.

Ntais, C., Pakos, E., Kyzas, P. & Ioannidis, J. P. A. (2005). Benzodiazepines for alcohol withdrawal. *The Cochrane Database of Systematic Reviews, 2*.

Shand, F., Gates, J., Fawcett, J. & Mattick, R. (2003). *Guidelines for the treatment of alcohol problems*: Sydney; Commonwealth of Australia.

YSAS. (2008). YSAS Clinical Practice Guidelines - Management of alcohol and other drug withdrawal. YSAS, Melbourne.

## **11 OPIOID WITHDRAWAL**

These Guidelines provide a comprehensive approach to withdrawal care. The use of prescribing guidelines outlined below will be supported by a comprehensive clinical assessment.

Opioids are a broad class of opiate analogue compounds that have opium or morphine-like activity (e.g. methadone). The derivative term, opiates, applies only to drugs derived directly from opium (e.g. morphine, codeine, and heroin).

Opioid withdrawal involves neuro-adaptation reversal and withdrawal symptom management. Given that many opioid users fail to complete withdrawal and relapse rates are high, opioid withdrawal should be seen as one step in ongoing therapy, rather than a stand-alone intervention. Planning for post-withdrawal support is an essential component of providing a continuum of care to clients and can assist them to continue to work towards their treatment goals beyond the withdrawal itself (Amato et al., 2005; McCambridge et al., 2007).

Significant developments in pharmacotherapy treatment for opioid users have occurred in recent years. While methadone has been the gold standard for maintenance pharmacotherapy treatment of opioid addiction, buprenorphine has some features (such as safety due to 'ceiling of effects' and ease of dosing) that make it a preferable option to methadone in some settings for some clients.

In delivering opioid withdrawal services to clients, clinicians should consider:

- Setting
- Withdrawal syndrome and potential complications
- Assessment
- Withdrawal care planning
- Withdrawal care
- Planning for post-withdrawal
- Special needs groups

Each of these considerations is examined below.

## 11.1 Opioid withdrawal settings

The most appropriate setting for an individual seeking opioid withdrawal will be informed by a thorough clinical assessment.

The most appropriate setting for an individual seeking opioid withdrawal should be determined via a thorough clinical assessment. In general, opioid withdrawal clients can be managed in outpatient withdrawal settings, although residential treatment settings such as hospital-based withdrawal or community residential withdrawal are more suitable for patients with:

- A history of repeated, unsuccessful attempts at withdrawal in a non-residential setting
- Significant comorbid physical illnesses or mental health issues
- A concurrent dependence on alcohol or benzodiazepines
- Limited social and community support available to complete their withdrawal safely
- Inadequate access to a registered prescriber, such as in rural settings

In some settings, such as hospitals, psychiatric facilities, prisons and police watch-houses, individuals may experience an unplanned opioid withdrawal. Staff in settings, will be familiar with, and alert to, the signs of opioid withdrawal in order to respond in a timely and appropriate manner.

Attention to unplanned opioid withdrawal is critical to responding in an appropriate and timely manner to individuals. Evidence of injecting sites, the onset of withdrawal symptoms and frequent or unusual requests for opiate-based pain management should be considered potential indicators of opioid withdrawal.

The best withdrawal care facilitates step-up and step-down care, according to client need.

Stepped care allows clients whose needs warrant greater withdrawal care to be transferred to a more intensive withdrawal setting and those for whom need is reducing to be stepped down to less intensive care.

## 11.2 Opioid withdrawal syndrome

Unlike alcohol or benzodiazepine withdrawal, opioid withdrawal is not life threatening to users with few medical complications (Lintzeris et al., 2006; NCETA, 2004). However, opioid withdrawal does heighten the risk of overdose on relapse, due to a reduced level of post-withdrawal tolerance.

The onset and time course of opioid withdrawal is associated with the halflife of the drug used. The withdrawal symptoms of short-acting, agonist opioids, such as heroin and morphine, typically emerge more rapidly than long-acting agonist opioids, such as methadone.

### 11.2.1 Heroin and morphine withdrawal symptoms

Symptoms of withdrawal in short-acting agonist opioids such as heroin and injection morphine commence 6–24 hours after last use, peak at 24–48 hours and resolve within five to ten days. The symptoms of heroin withdrawal include:

- Abdominal cramps
- Anxiety, irritability and dysphoria
- Back aches
- Cramps
- Diarrhoea
- Disturbed sleep
- Elevated blood pressure
- Increased sweating
- Joint pain
- Lacrimation
- Muscle spasm leading to headaches
- Nausea and vomiting
- Rhinorrhoea
- Twitching
- Urinary frequency

## 11.2.2 Methadone and buprenorphine withdrawal

Management of methadone or buprenorphine withdrawal is less common in clinical withdrawal settings than the management of heroin, morphine or oxycodone withdrawal. Typically, methadone and buprenorphine clients are encouraged to remain on these pharmacotherapies unless their use is illicit.

### 11.2.3 Methadone withdrawal symptoms

Methadone is a long-acting opioid. Symptoms of methadone withdrawal mimic those experienced during heroin withdrawal (see 11.2.1, above), but emerge 36–48 hours after the last dose. The longer half-life of methadone may result in some low-grade symptoms of withdrawal lingering for three to six weeks after last use (NSW Department of Health, 2008a).

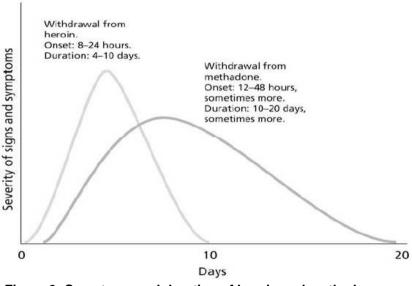


Figure 3: Symptoms and duration of heroin and methadone withdrawal

Source: NSW Health (2008, p.37)

### 11.2.4 Buprenorphine withdrawal symptoms

Buprenorphine is an opioid partial agonist used in treatment of opioid dependence.

The symptoms of buprenorphine withdrawal are consistent with those reported for heroin withdrawal (see 11.2.1 above), although milder in severity. They typically emerge within three to five days of last dose, and can continue for up to several weeks (Lintzeris et al., 2006).

## 11.3 Opioid withdrawal assessment

*Clinicians should be familiar with the general principles of assessment (refer section 9).* 

During withdrawal assessment, clinical staff will be alert to signs of client impairment.

A thorough assessment of opioid-dependent clients is critical in determining the most appropriate withdrawal care. Assessment is, however, largely dependent on the capacity of clients to provide relevant information. Recent opioid use may limit clients' capacity to share and absorb accurate assessment information.

Signs of impairment include pinpoint pupils, sedation, low blood pressure, slowed pulse, respiratory depression and slurred speech. Where the client is impaired, all services should:

- As soon as possible, identify the most recent drug type, dose and time consumed (to inform medical intervention in the event of an overdose)
- Implement regular clinical observations of the client at frequent intervals at first then decreasing over time as evidence of intoxication subsides
- Revisit the assessment when acute intoxication has passed

Assessment should determine opioid dependence based on DSM-IV or ICD-10 definitions, and explore:

- Physical health
- Mental health
- Polydrug use/dependence

- Chronic pain conditions
- Previous withdrawal history

## 11.3.1 Physical health

## Assessment will include a thorough medical examination to identify the presence of concurrent illness.

Common among opioid-dependent users are liver conditions and injectingrelated harms such as abscesses and blood borne virus infections. Nutrition may be poor and dietary management should be addressed during withdrawal care.

### 11.3.2 Mental health

## An anxiety and depression screen, such as PsyCheck or the K10, will be undertaken during assessment to inform the withdrawal care plan.

The prevalence of depression is high among opioid-dependent users. The use of appropriate mental health screening tools such as PsyCheck or K10 (Appendix 4) during assessment is critical to early identification and response to mental health issues.

In the event that screening alerts clinicians to a potential mental health issue, further risk assessment should be undertaken to ascertain potential suicidality or the need for referral/transfer of the client to a mental health service.

Section 16 provides a comprehensive overview of appropriate interventions for clients with a dual diagnosis in AOD withdrawal.

### 11.3.3 Polydrug use/dependence

## Identification of polydrug use/dependence will be undertaken at assessment.

Given the prevalence of polydrug use among individuals dependent on opioids, it is important to assess for concomitant use of all drugs. In particular, assessment for concurrent use of benzodiazepines is warranted amongst this group.

### 11.3.4 Chronic pain

## Assessment will explore the presence of chronic pain conditions among clients.

Common among opioid-dependent clients is dependence to prescribed opioids and/or over-the-counter medications. Assessment of chronic pain conditions will inform pain management options and flag the need for specialist medical advice and linkages. Guidelines for approaching withdrawal care for clients with an underlying chronic pain issue are included in section 6.8, above.

### 11.3.5 Previous withdrawal experience

Assessment will explore previous withdrawal experiences and identify helpful medication and coping strategies.

Previous withdrawal symptoms provide important information related to the likely severity of the current withdrawal experience.

## 11.4 Withdrawal care planning

## Information obtained during assessment will inform the withdrawal care plan.

The withdrawal care plan documents:

- Likely severity of withdrawal based on previous history of complicated withdrawal
- Risks associated with substance use, such as overdose history
- The client's motivation for withdrawal care, where this is a planned withdrawal presentation
- The client's goals during withdrawal care i.e. withdrawal, maintenance, reduction or substitution
- Potential barriers that may impact on achieving the client's withdrawal goals
- Available support to enhance the likelihood of success
- A post-withdrawal plan, including relapse prevention and linkages to external support networks to address the client's psychosocial needs
- Inclusion of family/significant others where appropriate

## 11.5 Opioid withdrawal care

Opioid withdrawal care options will include neuro-adaptation reversal, reduction and substitution therapies.

In recent years, withdrawal care options for opioid-dependent clients have been expanded from neuro-adaptation reversal to include reduction and substitution therapies. Maintenance on appropriate pharmacotherapies such as buprenorphine or methadone is the most widely supported option for treatment.

Clients with a history of repeated withdrawal should be encouraged to undertake substitution treatment, with a treatment goal of stabilisation. This is lower risk than unsupported abstinence-based treatment which has a high risk of overdose associated with relapse.

Opioid withdrawal can be managed through gradually reducing buprenorphine or methadone dosing. Polydrug use of substances with sedative properties carries risks when used during buprenorphine and methadone treatment. Respiratory difficulties, coma and sometimes death can occur with concurrent use of opioids, alcohol and benzodiazapines.

Symptomatic medications may be used to manage withdrawal as outlined in Table 12, below. Alternatively, clients can be provided with general principles and guidelines for coping and relaxation (refer Appendix 5).

All withdrawal care is predicated on ongoing and objective monitoring in the initial stages of a client's presentation to withdrawal care. Monitoring should then occur at regular intervals, the frequency of which is dependent on the severity of the withdrawal syndrome.

### 11.5.1 Opioid withdrawal scale

Withdrawal scales are recommended for use in determining the severity of symptoms of withdrawal. The Short Opiate Withdrawal Scale (SOWS) is recommended for use in these Guidelines (Appendix 7).

**Note:** Withdrawal scales should not be solely relied upon to monitor complicated withdrawal as they may lack the sensitivity to detect progression to serious illness. Withdrawal monitoring should always include close clinical observation and judgement.

### 11.5.2 Buprenorphine

## Buprenorphine is largely considered the most effective pharmacotherapy in the management of opioid withdrawal.

Buprenorphine effectively reduces the acute symptoms encountered during neuro-adaptation reversal. As such, buprenorphine-assisted withdrawal requires less adjunctive symptomatic medication.

Buprenorphine is registered as a Schedule 8 medication. Each Australian jurisdiction is responsible for a system of authorising medical practitioners to prescribe buprenorphine to a particular patient for the management of opioid dependence within a framework of medical, social and psychological treatment. Buprenorphine dosing is supervised and administered by registered buprenorphine prescribers and dispensaries (Lintzeris et al., 2001). In addition, buprenorphine can be prescribed by hospital-based doctors.

The use of additional substances, such as opioids, alcohol and benzodiazepines, in combination with buprenorphine can cause respiratory depression, coma and death. Where there is evidence or concern that a person may be using multiple substances, close monitoring of the client is required.

### Buprenorphine dosing

Buprenorphine dosing is initiated after a client shows signs of opioid withdrawal. This is usually after one half-life of the opioid has expired, that is, at least 6 hours for heroin and 24–48 hours for methadone. Dosing should be flexible enough to address the severity of withdrawal symptoms. Opioid withdrawal scales such as the SOWS (refer Appendix 7) can be administered to determine the severity of withdrawal symptoms.

Table 11 below, outlines the dosing regimen recommended for residential withdrawal settings by the Australian National Guidelines for the Use of Buprenorphine (Lintzeris et al., 2006).

Day	Buprenorphine S/L tablet regime	Total daily dose
Day 1	4 mg at onset of withdrawal and additional 2 to 4 mg evening dose prn	4 to 8 mg
Day 2	4 mg mane, with additional 2 to 4 mg evening dose prn	4 to 8 mg
Day 3	4 mg mane, with additional 2 mg evening dose prn	4 to 6 mg
Day 4	2 mg mane prn; 2 mg evening prn	0 to 4 mg
Day 5	2 mg prn	0 to 2 mg
Day 6	no dose	
Day 7	no dose	
Total proposed	dose	12 to 28 mg

## Table 11: Buprenorphine dosing regimen for residentialwithdrawal settings

Source: Lintzeris et al (2006)

Over the first few days of buprenorphine dosing, daily review of patients should assess the need for dosing adjustments. This period should also include provision and monitoring of symptomatic medications, information and reassurance. Thorough information and support for clients should be available due to the high risk of overdose associated with lapse/relapse to opioid use after a period of abstinence.

### 11.5.3 Methadone to buprenorphine transfer

Supervision of methadone to buprenorphine transfers by a medical professional such as an addiction medicine specialist or general practitioner is recommended.

Methadone to buprenorphine transfer can be a complex process due to the transition from a potent full agonist opioid (methadone) to a partial agonist opioid (buprenorphine). Premature transfer can precipitate a relatively rapid and potentially severe withdrawal from methadone.

Before administering buprenorphine in this context, an addiction medicine specialist may be recommended to be consulted. A methadone-buprenorphine transfer client should also:

- Show significant methadone withdrawal symptoms
- Be on a methadone dose of less than 30 mg

#### 11.5.4 Naltrexone

#### Naltrexone: ultra-rapid and rapid detoxification

## The use of naltrexone for ultra-rapid and rapid detoxification is not recommended.

Ultra-rapid and rapid detoxification aim to reduce the duration of withdrawal and manage the severe symptoms of withdrawal. Such methods use high doses of opioid antagonists such as naltrexone at the onset of withdrawal. Ultra-rapid detoxification occurs within a 24-hour period under a general anaesthetic and rapid detoxification occurs over hours to days with some level of sedation.

Ultra-rapid and rapid detoxification using naltrexone is costly due to the high level of medical supervision required. It is also associated with serious risks, including death. As such, the use of naltrexone for ultra-rapid and rapid detoxification is not recommended.

#### Naltrexone: relapse prevention

## Naltrexone is appropriate for use as a relapse prevention measure, subject to the supervision of an addiction medicine specialist.

Naltrexone may be used in relapse prevention to assist previously opioiddependent people to remain opioid-free. It achieves this by reducing cravings and blocking the euphoria experienced with opioid use. Unlike buprenorphine and methadone, naltrexone has no narcotic properties and therefore cannot be misused to obtain or elicit a euphoric effect.

Naltrexone is administered in Australia for relapse prevention in two ways:

- Daily, oral dosing that can only commence post-withdrawal
- Slow-release implants following an initial period of tablet form naltrexone (implants are only available from prescribing doctors via the Therapeutic Goods of Australia's Special Access Scheme)

The use of naltrexone for relapse prevention should incorporate consultation and monitoring by a medical professional.

## 11.5.5 Symptomatic medications

## A range of symptomatic medications is appropriate for use in opioid withdrawal.

The use of buprenorphine in the treatment of opioid withdrawal generally limits the need for symptomatic medication. Where required, Clonidine is the most commonly used symptomatic medication for opioid withdrawal. An anti-hypertensive agent that may be given in place of opioids, Clonidine can markedly reduce many of the symptoms of withdrawal (Akhondzadeh et al., 2001). It is usually administered in conjunction with other medications for symptomatic relief of nausea, diarrhoea, muscle cramps, headache and severe sleep disturbance.

The most significant side effect of Clonidine is a reduction in blood pressure. It is not appropriate to administer Clonidine to an individual who is hypotensive, has a heart rate of below 50 BPM or shows signs of poor circulation. Individuals who experience vomiting, sweating or diarrhoea should also be monitored for dehydration. Maintaining fluid levels is an important part of withdrawal care.

Other commonly used symptomatic medications for opioid withdrawal are outlined below, in Table 12.

Symptom of opioid withdrawal	Symptomatic medication	
Nausea and vomiting	Antiemetics such as:	
	<ul> <li>Metoclopramide (Maxolon®) 10 mg three times a day as required for up to three to four days<sup>a, b</sup> or</li> </ul>	
	<ul> <li>Prochlorperazine (Stemetil®) 5 mg three times a day for 4–7 days, best 30 minutes before food or as required<sup>a</sup>,</li> </ul>	
Severe nausea/vomiting	• Ondansetron 4–8 mg, every 12 hours as required.	
	Note: Also encourage fluids and a simple $\text{diet}^{\text{b}}$	
Diarrhoea	Antidiarrhoeal such as:	
	<ul> <li>Atropine and diphenoxylate (Lomotil®) One to two tablets three times a day for up to three to four days<sup>b</sup></li> </ul>	
	<ul> <li>Loperamide (Imodium®) One to two tablets twice a day as required for up to 5 days<sup>b</sup></li> </ul>	
	<ul> <li>Kaomagma or loperamide (Imodium®) 2 mg as required<sup>a</sup></li> </ul>	
Skeletal muscle cramps	Quinine 300–600 mg at night as required <sup>b</sup>	
	Note: Quinine is potential toxic in overdose (causing blindness or severe liver disease) <sup>b</sup> therefore supply may need to be monitored	
Abdominal cramps	Antispasmodics (but they are of limited effectiveness) <sup>b</sup> such as:	
Severe gastrointestinal	<ul> <li>Hyoscine butylbromide (Buscopan® 10–20 mg four times a day for up to three to four days<sup>b</sup> or every 12 hours as required<sup>a</sup></li> </ul>	
symptoms (for use in a hospital setting only)	• Octreotide 0.05–0.1 mg, every 8–12 hours as required by subcutaneous injection <sup>a</sup>	

## Table 12: Symptomatic medications for use in opioid withdrawal(as at March 2009)

Symptom of opioid withdrawal	Symptomatic medication
Muscles and joint pains	Non-steroidal anti-inflammatory agents (NSAIDs) such as:
	<ul> <li>Ibuprofen (Brufen® or Nurofen®) 200–400 mg four times a day for up to a week (to be taken with food as required) (Use only if no history of peptic ulcer or gastritis)<sup>a,b</sup> or</li> </ul>
	<ul> <li>Paracetamol 1000 mg, every 4 hours as required (maximum 4000 mg in 24 hours)<sup>a</sup></li> </ul>
Anxiety and insomnia (along	Clonidine <sup>a,b</sup>
with other symptoms associated with excessive sympathetic nervous system activity such as sweating, diarrhoea, vomiting and abdominal cramps)	<ul> <li>Administer 75 µg 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</li> </ul>
	<ul> <li>If no hypotension occurs, and dizziness or other side effects of clonidine are not a problem, give a second 75 µg dose and continue treatment as shown in the table of symptomatic treatments<sup>a</sup></li> </ul>
	Note: the side effects of drowsiness and hypotension, however, limit its usefulness in an outpatient setting particular if higher doses are used <sup>b</sup>
	Note: Do not use clonidine if:
	<ul> <li>Patient is hypotensive (i.e. blood pressure is less than systolic 90 mmHg or diastolic 50 mmHg)</li> </ul>
	Heart rate is less than 50 per minute
	• There is clinical evidence of impaired circulation <sup>a</sup>
Anxiety and/or sleep disturbances	Diazepam 5–10 mg per dose (maximum 40 mg per day), tapering towards the end of the withdrawal course <sup>a, b</sup>
	Note: use a reducing regime (e.g. diazepam up to 5 mg four times a day for 3/7; then twice a day for 2/7 then at night for $1/7)^{b}$

Symptom of opioid withdrawal	Symptomatic medication	
Sleep problems	Temazepam 10 to 30 mg (at night <sup>b</sup> Cease the dose after $3-5$ nights) <sup>a</sup>	
	Note with benzodiazepines:	
	<ul> <li>Reduce doses over three to seven days, no longer than 10 days medication with either drug<sup>b</sup></li> </ul>	
	<ul> <li>Higher doses may be prescribed in an inpatient setting with experienced nursing staff<sup>b</sup></li> </ul>	
	• The risk exists of adding to a potentially fatal sedative cocktail if clients continue to use heroin <sup>b</sup>	
Restless legs	Diazepam (as above) or baclofen 10–25 mg every 8 hours <sup>a</sup>	

Note: benzodiazepines can be useful but are not usually required or recommended beyond five days.

Paracetamol-codeine preparations can alleviate symptoms, but prolong the duration of withdrawal discomfort. If prescribed, use up to two tablets four times a day for 2/7 then two tablets three times a day for 2/7 then cease<sup>b</sup>. Due to the risk of liver toxicity with paracetamol combination products, these medication should be supplied under supervision, ideally with frequent interval dispensing or other supervision of medication.

a) NSW Department of Health (2008a)

b) Murray et al. (2002)

#### Natural supplements

## A range of natural supplements are appropriate for use in opioid withdrawal.

In addition to medications, natural supplements are used in adult and youth AOD withdrawal settings to manage withdrawal symptoms. These include but are not limited to:

- Dietary supplements:
  - B Group Vitamins, especially high dose B1, B3 and B6
  - Vitamin C
  - Zinc

- Stress reduction, relaxation and sleep assistance:
  - DL-Phenylalanine
  - Valerian
  - Kava
  - Rescue Remedy
  - Zizyphus & Polygala pills (Chinese Herbal Medicine)
- Nausea and vomiting:
  - Ginger or Homeopathic Remedy (Vomiplex)
  - Peppermint
- Formula for Joint Pain
  - Calcium
  - Fish oils
  - Magnesium
- Liver function
  - Silymarin (YSAS, 2008)

#### 11.5.6 Psychosocial support in opioid withdrawal

# Psychosocial interventions complement the medical management of opioid withdrawal symptoms and will be available at all opioid withdrawal services.

The overarching principles of supportive care are fundamental to the provision of a holistic model of withdrawal care. Psychosocial interventions should explore:

- · Client goals, including any change in these goals over time
- · Perceived barriers to achieving an individual's goal of withdrawal care
- · An individual's beliefs about withdrawal care
- · Appropriate interventions and support services

### 11.5.7 Planning for post-withdrawal

## Post-withdrawal support is an essential component of the treatment continuum for opioid-dependent clients.

Planning for post-withdrawal should:

- · Commence at the assessment phase of withdrawal care
- Support the client's goals, which may pertain to accommodation, child protection, domestic violence and legal support
- Support client access to post-withdrawal services that provide ongoing support and advocacy
- Involve family/significant others in post-withdrawal care, as appropriate, to help implement the client's post-withdrawal plan

## 11.6 Special needs groups

### 11.6.1 Pregnant women

## Opioid withdrawal is not recommended during pregnancy as it poses potential risks to mother and baby.

Pregnant women wishing to undertake an opioid withdrawal will be:

- Informed of the risks and benefits of withdrawal, including the risks to the foetus (increased risk of infant mortality and low birth weight for gestational age) and the high risk of relapse
- Encouraged to consider methadone maintenance treatment instead of withdrawal

Where pregnant women decline methadone maintenance treatment, the risks of supervised withdrawal may be reduced by undertaking withdrawal:

- In the second trimester only (weeks 14 to 32) with foetal monitoring, in a monitored setting, such as an inpatient obstetric unit
- Via tapered doses of methadone to produce a gradual withdrawal. During this period, the benefits of methadone maintenance should be continually discussed (NSW Department of Health, 2008b)

The following is also recommended:

- Pregnant women should be encouraged to undertake methadone maintenance treatment, given that post-partum retention in such treatment is more likely (with a view to implementing a longer-term treatment plan)
- Babies of opioid-dependent women will possibly experience a neonatal withdrawal syndrome and specialist paediatric care is required for these babies

The 2008 Nursing and Midwifery Clinical Guidelines (NSW Department of Health, 2008b) and The National Clinical Guidelines for the Management of Drug Use During Pregnancy, Birth and the Early Development Years of the Newborn (NSW Department of Health, 2006) are recommended resources for managing opioid-dependent women who are pregnant.

# Withdrawal service protocols will outline the management of withdrawal during pregnancy, particularly during the late stages and labour.

Withdrawal protocols for pregnant women should address:

- Inpatient admission
- Assessment of:
  - AOD use history
  - Physical signs and symptoms of withdrawal
- A thorough recent drug use history (due to risk of overestimating or underestimating opioid tolerance) which will also inform decisions about opioid replacement therapy (if indicated)
- Current opioid treatment by the client. If so, the prescriber, clinic or dosing point should be contacted to establish:
  - The client's current dose
  - Whether she has been dosed that day
  - Whether the client has received takeaway doses (NSW Department of Health, 2007)

With informed consent, opioid-dependent pregnant women (who are not in opioid treatment) should be inducted into methadone maintenance treatment

under close monitoring, according to the Victorian policy for inpatient induction. The general protocol and principles for commencing patients/clients onto methadone maintenance should be adhered to for pregnant women (NSW Department of Health, 2008b).

Note: Buprenorphine is currently not approved for use in pregnancy.

#### Methadone regime for pregnant women

Withdrawal from methadone should be discouraged during pregnancy (NSW Department of Health, 2008a). The Nursing and Midwifery Clinical Guidelines (2008) outline the following considerations pertinent to methadone dosing during pregnancy:

- Methadone doses should be titrated to a level that not only blocks withdrawal symptoms, but suppresses heroin use
- Methadone doses should not be kept low in an attempt to reduce neonatal abstinence syndrome
- Methadone dose increases may be required due to increased metabolism and increased blood volume during pregnancy (NSW Department of Health, 2008a)

Figure 4, below outlines the dosing regimen for pregnant women stabalising on methadone.

#### Dav 1 Dosage titrated according to woman's symptoms with rapid increases Initial dose (inpatient) at 20 mg, reviewed every 4 hours Assess for signs of withdrawal at each 4-hourly review (using OOWS) Where objective signs of withdrawal are detected, administer an additional 10 mg (where no signs of withdrawal are identified, no additional dose is given until the next scheduled review) In the first 24 hours the maximum dose should not exceed 50 ma. (Thirty (30) ma should be sufficient for most women, however, in exceptional cases higher doses of up to 40 mg or even 50 mg will be necessary and required on day 1) Day 2 Where a dose of over 30 mg is used on day 1, extreme caution should be exercised when assessing the patient's requirements on subsequent days in order to prevent accumulation and possible toxicity from methadone on subsequent days Dosage titrated according to woman's symptoms with rapid increases (as per day 1) (woman will almost certainly require less methadone) Start with a 20 mg dose in the morning, and review symptoms every 4 hours. Administer additional aliquots of 10 mg as required up to a maximum of 50 mg (as per day 1) Note: If at any time the woman becomes sedated (small pupils, drowsiness), increase frequency of observation and ensure that no methadone is administered until sedation is reversed. Day 3 A reasonable idea of the required total daily dose will have been established. If prescribing the dose as a split dose, give 2/3 in morning and 1/3 in afternoon.

## Figure 4: Inpatient methadone dosing regimen for pregnant women (as at March 2009)

Source: NSW Department of Health (2008b)

### 11.6.2 Clients with a dual diagnosis

Clients for whom a psychiatric condition emerges during opioid withdrawal will receive care that addresses their specific needs.

Specifically, they will be:

- Linked with appropriate mental health services
- Encouraged to continue to seek mental health support beyond withdrawal care
- Monitored for symptoms during withdrawal and managed appropriately

### 11.6.3 Families/significant others

Consideration will be given to the needs of family/significant others in contact with an opioid-dependent person during outpatient withdrawal or reduction.

Where appropriate, information will be provided to family/significant others regarding the withdrawal process and support services such as DirectLine and/or Lifeline.

### 11.6.4 Young people

#### Young people presenting to AOD services will be linked with youthspecific services, where available.

As outlined above (section 6.3), young people may present with varying psychosocial factors contributing to their drug use which impact upon their long-term plan for recovery. It is important to be mindful of the potential differences in treatment approach and care when commencing withdrawal care. Ongoing contact with, and adjunct support from, youth-specific workers throughout withdrawal care can promote more positive experiences for the young person.

For further detailed information related to the withdrawal care of young opioid users, please refer to the YSAS Clinical Practice Guidelines (YSAS, 2008).

## 11.7 Recommended reading

Lintzeris, N., Clark, N., Winstock, A., Dunlop, A., Muhleisen, P., Gowing, L. et al. (2006). *National clinical guidelines and procedures for the use of buprenorphine in the treatment of opioid dependence*: Commonwealth of Australia.

NCETA. (2004). *Alcohol and Other Drugs: A Handbook for Health Professionals*. Canberra: Australian Government Department of Health and Ageing.

NSW Department of Health. (2008a). *NSW Drug and Alcohol Withdrawal Clinical Practice Guidelines*. NSW: NSW Department of Health.

NSW Department of Health. (2008b). *Nursing and Midwifery Clinical Guidelines: Identifying and responding to drug and alcohol issues.* NSW: NSW Department of Health.

YSAS. (2008). YSAS Clinical Practice Guidelines - Management of alcohol and other drug withdrawal. Melbourne: YSAS.

## **12 BENZODIAZEPINES**

These Guidelines provide a comprehensive approach to withdrawal care. The use of prescribing guidelines outlined below will be supported by a comprehensive clinical assessment.

Benzodiazepines are a class of psychoactive drugs commonly used in the treatment of anxiety disorders and insomnia. Benzodiazepines are also administered as supportive pharmacotherapies in alcohol and other drug withdrawal.

Dependence on benzodiazepines can occur within weeks or months (Denis et al., 2006). Individuals dependent on high doses of benzodiazepines may 'doctor shop' or obtain the medication illegally in order to support their use.

Benzodiazepine withdrawal clients generally fall into two categories:

- Those who use benzodiazepines exclusively for therapeutic purposes
- Those who use benzodiazepines erratically, in high doses, and with other drugs

In delivering benzodiazepine withdrawal services to clients, clinicians should consider:

- Setting
- Withdrawal syndrome and potential complications
- Assessment
- Withdrawal care planning
- Withdrawal care
- Planning for post-withdrawal
- Special needs groups

Each of these considerations is examined below.

## 12.1 Benzodiazepine withdrawal settings

The most appropriate setting for an individual seeking benzodiazepine withdrawal will be informed by a thorough clinical assessment.

The most appropriate setting for an individual seeking benzodiazepine withdrawal should be determined via a thorough clinical assessment. For individuals with a high daily dose of benzodiazepines, who are elderly or use benzodiazepines in conjunction with alcohol, an inpatient setting is most appropriate. Consideration should also be given to the likelihood of a longer period of withdrawal care for these clients.

In some settings, such as hospitals, psychiatric facilities, prisons and police watch-houses, individuals may experience an unplanned benzodiazepine withdrawal. Staff in such settings will be familiar with, and alert to, the signs of benzodiazepine withdrawal in order to respond in a timely and appropriate manner.

Evidence of the onset of withdrawal symptoms and frequent or unusual requests for pain management should be considered potential indicators of benzodiazepine withdrawal.

## The best withdrawal care facilitates step-up and step-down care, according to client need.

Access to stepped care allows clients whose needs warrant greater withdrawal care to be transferred to a more intensive withdrawal setting. Alternately, stepped care allows those for whom need is reducing to be stepped down to less intensive care.

## 12.2 Benzodiazepine withdrawal syndrome

The withdrawal syndrome for mono-dependent benzodiazepine users can vary from relatively mild to extremely uncomfortable or painful, however it is rarely life threatening. The potential risks of polydrug dependence and drug substitution should be considered in withdrawal assessment and the withdrawal management plan. Polydrug users should be managed by specialist AOD services due to the risk of seizures upon sudden cessation of use.

Withdrawal typically occurs within two days of ceasing short-acting benzodiazepines (e.g. oxazepam), and between two and ten days after ceasing long-acting benzodiazepines (e.g. diazepam). However, the onset of benzodiazepine withdrawal may be as late as three weeks after cessation of drugs with a long half-life (Saunders & Yang, 2002b). Withdrawal from benzodiazepines with a short half-life tends to be more severe than from

benzodiazepines with a long half-life. Withdrawal is often protracted and may extend over a number of weeks or months.

Benzodiazepine withdrawal symptoms include:

- Anxiety
- Depression
- Diarrhoea, constipation, bloating
- Insomnia
- Irritability
- Muscle aches
- Poor concentration and memory
- Restlessness
- Less commonly, perceptual disturbances and panic attacks
- Occasionally, seizures and symptoms of psychosis (NSW Department of Health, 2008a)

As shown in Figure 5, below, the symptoms and duration of a benzodiazepine withdrawal vary. The amount and frequency of dose reduction is the most important factor affecting severity of the withdrawal syndrome. Additional contributing factors include:

- Polydrug dependence
- A history of seizures
- A history of underlying anxiety, depression or trauma
- High daily benzodiazepine doses
- Unclear daily doses (due to doctor shopping/illegal purchase)

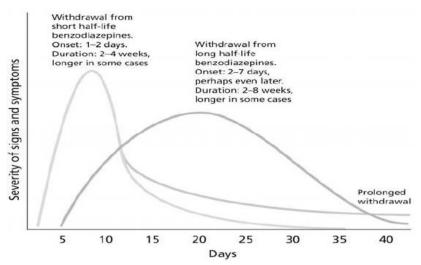


Figure 5: Symptoms and duration of benzodiazepine withdrawal Source: NSW Health (2008, p.30)

### 12.3 Benzodiazepine withdrawal assessment

## *Clinicians should be familiar with the general principles of assessment (refer section 9).*

During withdrawal assessment, clinical staff will be alert to signs of client impairment.

A thorough assessment of benzodiazepine-dependent clients is critical in determining the most appropriate withdrawal care. Assessment is, however, largely dependent on the capacity of clients to provide relevant information. Recent benzodiazepine use may limit clients' capacity to share and absorb accurate assessment information.

For impaired clients, all services should:

- As soon as possible, identify the most recent drug type, dose and time consumed (to inform medical intervention in the event of an overdose)
- Implement regular clinical observations of the client at frequent intervals at first then decreasing over time as evidence of impairment subsides

• Revisit the assessment when acute impairment has passed

The most consistent feature of benzodiazepine withdrawal is that its course can vary among individuals. Therefore, flexible, responsive and individualised assessment and treatment planning is critical.

Benzodiazepine withdrawal clients commonly experience a concurrent physical and/or psychosocial problem, such as anxiety or a sleeping disorder. This concern is typically a driver of benzodiazepine misuse and must be addressed during withdrawal care.

Assessment should seek to identify the user category into which a benzodiazepine client falls. Among therapeutically-dependent clients, the potential re-emergence of the physical and/or psychosocial problem for which they were self-medicating will require a planned response such as a non-prescription medication alternative.

Polydrug users who consume large quantities of benzodiazepines in a short period of time also require particular attention. Experienced clinicians should be consulted in relation to the potential risks of benzodiazepine stabilisation versus discontinuation. Stabilisation carries a risk of overdose due to decreased levels of substance tolerance, while discontinuing dosing risks seizure associated with sudden cessation of use. Given these potential risks, dosing changes should be informed by established regimes in combination with clinical expertise.

## 12.4 Withdrawal care planning

## Information obtained during assessment will inform the withdrawal care plan.

The withdrawal care plan documents:

- Likely severity of withdrawal based on previous history of complicated withdrawal
- Risks associated with substance use, such as overdose history
- The client's motivation for withdrawal care, where this is a planned withdrawal presentation
- The client's goals during withdrawal care i.e. withdrawal, maintenance, reduction or substitution

- Potential barriers that may impact on achieving the client's withdrawal goals
- Available support to enhance the likelihood of success
- A post-withdrawal plan, including relapse prevention and linkages to external support networks to address the client's psychosocial needs
- Inclusion of family/significant others where appropriate

Given that benzodiazepine withdrawal can occur over an extended period of time, psychosocial support and continuing care are key elements of a withdrawal management plan. Remaining flexible throughout the course of treatment is also essential due to the varied nature of the withdrawal syndrome amongst benzodiazepine clients. The development of an individualised withdrawal care plan that can be revised over the course of treatment is of most benefit to clients.

## 12.5 Withdrawal care

Benzodiazepine-dependent clients may experience mild, moderate or severe withdrawal. Clinical withdrawal symptoms upon treatment presentation generally inform dosing and reduction regimes. In cases of protracted withdrawal, substitution pharmacotherapy should be maintained at a fixed dose until the person feels able to continue reduction.

All benzodiazepine withdrawal care is predicated on the provision of ongoing and objective monitoring in the initial stages of a client's presentation to withdrawal care. Monitoring should occur at regular intervals, the frequency of which is dependent on the severity of the withdrawal syndrome.

It is noted that mono-dependent benzodiazepine clients are the focus of existing literature on benzodiazepine withdrawal regimes. Ideally benzodiazepines should be avoided or used very cautiously in polydrug users and those on methadone or buprenorphine.

Table 13, below, outlines the recommended dosing regimen for therapeutic benzodiazepine clients.

Table 14, which follows, provides a conversion table for benzodiazepine/diazepam transfer.

Client type/setting	Withdrawal goal	Recommended regime
Therapeutic users (regular dose of a long-acting benzodiazepine) in outpatient withdrawal	Reduction or stabilisation	<ul> <li>Tapered withdrawal</li> <li>Convert the patient to diazepam and reduce by 10% every 1–2 weeks</li> <li>When dose is at around 5 mg, reduce by 1 mg</li> <li>Provide ongoing review, support and reassurance</li> <li>Manage therapeutic issues underlying the benzodiazepine dependence</li> <li>Supervised pick-up of doses should be based on a management plan in conjunction with a community prescribing doctor</li> </ul>

## Table 13: Outpatient dosing regimen for therapeutic benzodiazepine users (as at March 2009)

Source: Key informant interviews; CEAG

## Table 14: Conversion table for benzodiazepine/diazepamtransfer (as at March 2009)

Benzodiazepine (brand name)	Approximate equivalent to 5 mg diazepam
Alprazolam (Xanax, Kalma)	0.5 mg
Oxazepam (Serepax, Murelax)	30 mg
Clonazepam (Rivotril)	0.5 mg
Nitrazepam (Mogadon, Aldorm)	5 mg
Flunitrazepam (Hypnodorm)	1 mg
Lorazepam (Ativan)	0.5 mg

Source: Adapted from Ashton (2005)

Clients who consume larger quantities of benzodiazepines within a short period of time generally do not require a slow tapering benzodiazepine

regimen. Low doses of benzodiazepines for a few days may be sufficient to manage anxiety. Adjunct therapy and natural supplements may also assist.

### 12.5.1 Symptomatic medications

## A range of symptomatic medications is appropriate for use in benzodiazepine withdrawal.

Table 15 outlines symptomatic medications suitable for use in managing benzodiazepine withdrawal.

Symptoms	Symptomatic medication
Sedation	Tricyclic antidepressants (TACs) <sup>b</sup> may be used but may lower the seizure threshold
Histories of multiple seizures	Anticonvulsants <sup>b</sup>
Physical symptoms such as tremors	Beta-blockers <sup>b</sup>

## Table 15: Symptomatic medications for use in benzodiazepinewithdrawal (as at March 2009)

a) NSW Department of Health (2008a)

b) Murray et al. (2002)

General principles and guidelines for coping with, and relaxing during, benzodiazepine withdrawal may also assist some clients withdrawing from benzodiazepines (Appendix 5).

### 12.5.2 Benzodiazepine withdrawal scales

Withdrawal from benzodiazepines may be monitored using the Benzodiazepine Withdrawal Symptom Questionnaire (BWSQ) (Appendix 8) (Tyrer et al., 1990). The BWSQ is a 20-item self-report, validated questionnaire (Couvee & Zitman, 2002).

The Clinical Institute Withdrawal Assessment Scale-Benzodiazepines (CIWA-B) (Appendix 9) is a 22-item instrument designed to assess and monitor the type and severity of symptoms of benzodiazepine withdrawal (Busto et al., 1989). Although the CIWA-B is commonly used within AOD treatment settings (Saunders & Yang, 2002b), its psychometric properties have not been extensively evaluated.

**Note**: Withdrawal scales should not be solely relied upon to monitor complicated withdrawal as they may lack the sensitivity to detect progression to serious illness. Withdrawal monitoring should always include close clinical observation and judgement.

### 12.5.3 Cognitive behavioural therapy

Cognitive Behavioural Therapy (CBT) is an effective adjunct to a tapered medication regimen in some benzodiazepine patients (Morin et al., 2004). It is also an appropriate way of linking clients into ongoing, post-withdrawal care.

### 12.5.4 Psychosocial support

Psychosocial interventions complement the medical management of benzodiazepine withdrawal symptoms and will be available at all withdrawal services.

The overarching principles of supportive care are fundamental to the provision of a holistic model of withdrawal care. Psychosocial interventions should explore:

- Client goals, including any change in these goals over time
- Perceived barriers to achieving an individual's goals of withdrawal care
- An individual's beliefs about withdrawal care
- Appropriate interventions and support services
- Longer term support strategies for clients whose benzodiazepine withdrawal results in the re-emergence of symptoms for which they were originally prescribed benzodiazepine medication

### 12.5.5 Planning for post-withdrawal

## Post-withdrawal support is an essential component of the treatment continuum for benzodiazepine-dependent clients.

Planning for post-withdrawal should:

- Commence at the assessment phase of withdrawal care
- Support the client's goals, which may pertain to accommodation, child protection, domestic violence and legal support

- Support client access to post-withdrawal services that provide ongoing support and advocacy
- Involve family/significant others in post-withdrawal care, as appropriate, to help implement the client's post-withdrawal plan

## 12.6 Special needs groups

## 12.6.1 Clients with chronic physical illness and the elderly

The elderly and those with chronic comorbid physical illness are likely to experience benzodiazepine withdrawal toxicity. This is typically due to poor metabolism and physical frailty. The impact of multiple drug regimes should be closely monitored by withdrawal clinicians.

### 12.6.2 Pregnant women

Pregnant women should undertake a gradual, supervised reduction of benzodiazepines, rather than abrupt withdrawal (NSW Department of Health, 2008b).

### 12.6.3 Clients with a dual diagnosis

Clients for whom a psychiatric condition emerges during benzodiazepine withdrawal will receive care that addresses their specific needs.

Specifically, they will be:

- Linked with appropriate mental health services
- Encouraged to continue to seek mental health support beyond withdrawal care
- Monitored for symptoms such as agitations during withdrawal and managed appropriately.

## 12.6.4 Families/significant others

Consideration will be given to the needs of family/significant others in contact with a benzodiazepine-dependent person during outpatient withdrawal or reduction.

Where appropriate, information will be provided to family/significant others regarding the withdrawal process and support services such as Directline and/or Lifeline.

### 12.6.5 Young people

#### Young people presenting to AOD services will be linked with youthspecific services, where available.

As outlined above (section 6.3), young people may present with varying psychosocial factors contributing to their drug use which impact upon their long-term plan for recovery. It is important to be mindful of the potential differences in treatment approach and care when commencing withdrawal care. Ongoing contact with, and adjunct support from, youth-specific workers throughout withdrawal care can promote more positive experiences for the young person.

For further detailed information related to the withdrawal care of young benzodiazepine users, please refer to the YSAS Clinical Practice Guidelines (YSAS, 2008).

## 12.7 Recommended reading

Ashton, H. (2005). The diagnosis and management of benzodiazepine dependence. *Current Opinion in Psychiatry, 18*(3), 249–255

NSW Department of Health. (2008a). *NSW Drug and Alcohol Withdrawal Clinical Practice Guidelines*. NSW: NSW Department of Health.

NSW Department of Health. (2008b). *Nursing and Midwifery Clinical Guidelines: Identifying and responding to drug and alcohol issues.* NSW: NSW Department of Health.

Saunders, J. & Yang, J. (2002b). *Clinical Protocols for Detoxification in Hospitals and Detoxification Facilities*. Brisbane; Alcohol and Drug Services, Royal Brisbane Hospital and The Prince Charles Hospital Health Service Districts. Retrieved 21 June 2008

<http://www.health.qld.gov.au/atods/documents/24904.pdf>

YSAS. (2008). YSAS Clinical Practice Guidelines - Management of alcohol and other drug withdrawal. YSAS, Melbourne.

## 13 AMPHETAMINE-TYPE SUBSTANCES (ATS)

These Guidelines provide a comprehensive approach to withdrawal care. The use of prescribing guidelines outlined below will be supported by a comprehensive clinical assessment.

Amphetamine-type substances (ATS) include amphetamines, cocaine and ecstasy. Methamphetamine, a potent ATS, is the most widely available type of ATS available in Australia (Jenner & McKetin, 2004), and injectors and smokers of crystalline methamphetamine are at great risk of developing methamphetamine dependence (Degenhardt et al., 2008; McKetin et al., 2008).

Animal and human studies have shown that long-term exposure to heavy methamphetamine use leads to both short-term neurotransmitter depletion (particularly dopamine) and changes in brain structure and function. This can cause chronic dopamine underactivity, resulting in memory and cognitive impairment, poor concentration, lack of impulse control, and emotional dysregulation (Davidson et al., 2001).

The existence and clinical significance of ATS withdrawal is firmly established (Lee et al., 2007). While scales exist to monitor ATS withdrawal (see 13.5.2, below), the role of medication in ATS withdrawal has not yet been determined.

While ATS withdrawal is not life threatening, the complex presentation of many ATS users seeking treatment warrants thorough clinical assessment. Assessment should explore physical and mental health, concurrent drug use and dependence.

ATS users are drawn from varying demographics. The underlying precipitants to commencement of use also vary, and may include professional reasons (e.g. the need to stay awake for long periods of time), management of underlying mood disorders, cultural issues and use as an aid to weight loss.

There is currently no validated dosing regimen for ATS withdrawal (NCETA, 2006; NSW Department of Health, 2008a). In practice however,

benzodiazepines (e.g. diazepam) and anti-psychotics are used to assist with agitation and sleep disturbance associated with ATS withdrawal. There is indicative support that the use of benzodiazepines enhances treatment completion (Cruickshank & Dyer, 2006). Given the potential for benzodiazepine abuse and diversion among this group, careful monitoring of benzodiazepine dosing is recommended.

Continuing care is critical to successful ATS treatment. In particular, collaborative work with external support services to address the presenting psychosocial factors associated with ATS misuse is advised.

In delivering ATS withdrawal services to clients, clinicians should consider:

- Setting
- Withdrawal syndrome and potential complications
- Assessment (CIWA-Ar and Consumption Calendar)
- Withdrawal care planning
- Withdrawal care
- Planning for post-withdrawal
- Special needs groups

Each of these considerations is examined below.

## 13.1 ATS withdrawal settings

## The most appropriate setting for an individual seeking ATS withdrawal will be informed by a thorough clinical assessment.

The most appropriate setting for an individual seeking ATS withdrawal should be determined via a thorough clinical assessment. ATS users typically undertake withdrawal in the community, and, for the most part, it is considered safe to do so (Jenner & Saunders, 2004).

Supervised residential withdrawal settings are appropriate for clients with:

- Multiple drug dependence
- Severe amphetamine dependence
- Serious medical or psychiatric complications

- An unfavourable home environment
- A history of multiple, unsuccessful attempts to withdraw from ATS (Jenner & Saunders, 2004; NSW Department of Health, 2008a)

In some settings, such as hospitals, psychiatric facilities, prisons and police watch-houses, individuals may experience an unplanned ATS withdrawal. Staff in such settings should be familiar with, and alert to, the signs of ATS withdrawal in order to respond in a timely and appropriate manner to unplanned withdrawal. Evidence of the onset of withdrawal symptoms should be considered potential indicators of ATS withdrawal.

## The best withdrawal care facilitates step-up and step-down care, according to client need.

Stepped care allows clients whose needs warrant greater withdrawal care to be transferred to a more intensive withdrawal setting. Alternately, stepped care allows those for whom need is reducing to be stepped down to less intensive care.

## 13.2 ATS withdrawal syndrome

Many users of ATS will experience what is sometimes called a 'crash' following their use. During this time, the user is likely to sleep and eat excessively and experience some irritability of mood. This is akin to an alcohol 'hangover' and does not in itself constitute a clinically significant withdrawal syndrome, although withdrawal can follow in some dependent users.

Unlike the features of alcohol or opioid withdrawal, which tend to be the opposite of intoxication, some symptoms of ATS withdrawal can mimic intoxication, with symptoms of agitation, hyper-arousal and sleep disturbance (Jenner & Saunders, 2004).

### 13.2.1 ATS withdrawal syndrome

ATS include amphetamine and methamphetamine, but also extend to other substances such as MDMA, ephedrine, pseudoephedrine and methcathinone. Symptoms of withdrawal tend to emerge at day one of abstinence, peak during days one to three and decrease in a linear fashion over seven to ten days. Some symptoms persist for several weeks, particularly sleep disturbance and increased appetite. Some individuals might experience more prolonged symptoms which are probably attributable to neurotoxicity (McGregor et al., 2005; Newton et al., 2004).

Reports of the natural history of ATS withdrawal are variable. Onset, symptom severity and duration of withdrawal are likely to be influenced by the severity of dependence, duration and frequency of use, medical or psychiatric complications and psychosocial factors (Jenner & Saunders, 2004).

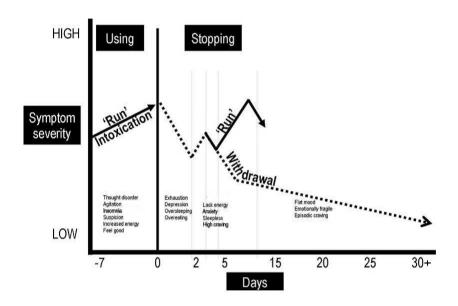
Amphetamine withdrawal is characterised by:

- Craving for sleep
- Irritability
- Depressed mood
- Lack of energy
- Slowing of movement
- Loss of interest or pleasure (Jenner & Saunders, 2004)

Symptoms of methamphetamine withdrawal include:

- Inactivity
- Fatigue
- Depressed mood
- Anxiety
- Motor retardation
- Agitation
- Vivid dreams
- Craving
- Poor concentration
- Irritability and tension

Figure 6 shows the symptoms and duration of a methamphetamine withdrawal syndrome.



## Figure 6: Symptoms and duration of methamphetamine withdrawal

Source: Connolly (2006)

## 13.3 ATS withdrawal assessment

## Clinicians should be familiar with the general principles of assessment (refer section 9).

## During withdrawal assessment, clinical staff will be alert to signs of client impairment.

A thorough assessment of ATS users is critical in determining the most appropriate withdrawal care. Assessment is, however, largely dependent on the capacity of clients to provide relevant information. Recent ATS use may limit clients' capacity to share and absorb accurate assessment information.

Signs of ATS intoxication include:

• Increased confidence and energy

- Decrease fatigue and appetite
- Increased heart rate and breathing
- Sweating
- Anxiety
- Panic attacks
- Paranoia
- Psychosis
- Headaches
- Agitation
- Depression

For impaired clients, all services should:

- As soon as possible, identify the most recent drug type, dose and time consumed
- Implement regular clinical observations of the client at frequent intervals at first then decreasing over time as evidence of impairment subsides
- Revisit the assessment when acute impairment has passed

Assessment of ATS withdrawal clients should explore:

- ATS dependence as determined by DSM-IV and ICD-10 (see section 2: Definitions of dependence and withdrawal)
- Quantity, potency, frequency of ATS use, and route of administration
- Polydrug use/dependence, particularly concurrent alcohol, cannabis and nicotine use (common in the psychostimulant-dependent population)
- Physical health issues associated with injecting stimulant use, as required
- Physical health issues, including medical complications associated with ATS use, such as respiration, neurological and cardiovascular conditions.
- Mental health issues, including symptoms of depression and/or psychosis
- Pregnancy

• The severity of any previous withdrawal symptom (Cruickshank et al., 2008; Dyer & Cruickshank, 2005; McKetin et al., 2005; McKetin et al., 2008)

Assessment of these domains will inform the likely severity of the current withdrawal syndrome and contribute to appropriate withdrawal care planning.

## 13.4 ATS withdrawal care planning

## Information obtained during assessment will inform the withdrawal care plan.

The withdrawal care plan documents:

- Likely severity of withdrawal based on previous history of complicated withdrawal
- Risks associated with substance use, such as overdose history
- The client's motivation for withdrawal care, where this is a planned withdrawal presentation
- The client's goals during withdrawal care, i.e. withdrawal, maintenance, reduction or substitution
- Potential barriers that may impact on achieving the client's withdrawal goals
- Available support to enhance the likelihood of success
- A post-withdrawal plan, including relapse prevention and linkages to external support networks to address the client's psychosocial needs
- Inclusion of family/significant others where appropriate

## 13.5 ATS withdrawal care

## Clients will be withdrawn from other drugs prior to commencing ATS withdrawal.

Withdrawal care for ATS clients typically entails use of:

• Benzodiazepines to manage anxiety and agitation, however, this may not be appropriate in the event that a client is on a methadone or buprenorphine maintenance program

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- Additional symptomatic pharmacotherapies such as antidepressant and antipsychotic medications
- Supportive care such as counselling or specialist mental health interventions (Jenner & Saunders, 2004)

Amphetamine-type substance withdrawal requires regular monitoring of mental health symptoms. Symptoms still present a week after withdrawal commencement may require further investigation by a mental health professional (Jenner & Saunders, 2004). Clients with psychosis secondary to ATS dependence are typically managed in mental health hospitals and require antipsychotic medication to relieve associated symptoms.

All withdrawal care is predicated on ongoing and objective monitoring in the initial stages of a client's presentation to withdrawal care. Monitoring should then occur at regular intervals, the frequency of which is dependent on the severity of the withdrawal syndrome.

### 13.5.1 Symptomatic medications

## A range of symptomatic medications may be appropriate for use in ATS withdrawal.

While a range of symptomatic medications may be useful in managing withdrawal symptoms, the role of symptomatic medication in amphetamine withdrawal remains unclear, and no specific medication schedule is recommended (NSW Department of Health, 2008a). The toxicity of some medications in overdose, in particular tricyclic antidepressants, should be considered, and supply should be monitored for this reason. Daily dispensing may be appropriate in some cases.

Symptomatic medications available for ATS withdrawal are outlined in Table 16 below.

Symptoms	Symptomatic medication	
Pronounced agitation or insomnia	<ul> <li>Tricyclic antidepressants (TCAs) may be useful for their sedative effects:</li> <li>Doxepin (50 mg to 75 mg at night, titrating upwards if required and tolerate to 150 mg maximum dose)<sup>b</sup></li> <li>Clomipramine<sup>b</sup></li> <li>Benzodiazepines can be used, however, there may be a risk of misuse and exacerbation of depressive symptoms:</li> <li>Diazepam 5–20 mg twice a day for restlessness (split doses are best)<sup>b</sup></li> <li>Temazepam 10–40 mg at night for insomnia<sup>b</sup></li> </ul>	
Pronounced psychomotor retardation or lowered affect (these drugs may counter the reduced dopaminergic, noradrenergic and/or serotonergic activity associated with stimulant withdrawal) <sup>a</sup>	<ul> <li>Selective serotonin reuptake inhibitors (SSRIs) such as:</li> <li>Fluoxetine (20 mg mane, titrating upwards if required and tolerated to 80 mg as the maximum dose)</li> <li>Paroxetine<sup>b</sup></li> <li>Desipramine, bromocriptine, amantadine<sup>a</sup></li> </ul>	
Psychotic features are present (psychosis, thought disorder, such as paranoid ideation, or perceptual disturbances)	<ul> <li>Antipsychotic medication such as:</li> <li>Haloperidol</li> <li>Atypical agents (such as olanzapine or risperidone)</li> <li>Chlorpromazine</li> <li>Note: If these symptoms are marked, assessment with an experience mental health clinician (or psychiatrist) may be required. In some cases involuntarily certification may be required for the safety of the patient and others<sup>b</sup></li> <li>Consult a psychiatrist if symptoms are severe or do not quickly resolve (within days). Medication should be continued for at least 1–2 weeks after symptoms resolve with careful monitoring for return of symptoms as the medication is withdrawn<sup>a</sup></li> </ul>	
Note: Do not use more than one antidepressant at the same time, and an appropriate 'wash out' time should be observed if changing from one antidepressant to another <sup>b</sup> In each of these situations, start on a low dose and titrate the dose upwards		

## Table 16: Symptomatic medications for use in ATS withdrawal(as at March 2009)

a) NSW Department of Health (2008a)

b) Murray et al. (2002)

General principles and guidelines for coping with, and relaxing during, ATS withdrawal may also assist some clients (Appendix 5).

### 13.5.2 ATS withdrawal scale

The Amphetamine Withdrawal Questionnaire (AWQ) (Appendix 10) is a 10item self-report instrument based on DSM-IV criteria for amphetamine withdrawal (Srisurapanont et al., 1999). While not a validated instrument, it is a useful guide for monitoring an ATS withdrawal syndrome.

**Note**: Withdrawal scales should not be solely relied upon to monitor complicated withdrawal as they may lack the sensitivity to detect progression to serious illness. Withdrawal monitoring should always include close clinical observation and judgement.

## 13.5.3 Psychosocial support in ATS withdrawal

# Psychosocial interventions complement the medical management of ATS withdrawal symptoms and will be available at all withdrawal services.

The overarching principles of supportive care are fundamental to the provision of a holistic model of withdrawal care. Psychosocial interventions should explore:

- Client goals, including any change in these goals over time
- Perceived barriers to achieving an individual's goals of withdrawal care
- An individual's beliefs about withdrawal care
- Appropriate interventions and support services

## 13.6 Planning for post-withdrawal

## Post-withdrawal support is an essential component of the treatment continuum for ATS-dependent clients.

Planning for post-withdrawal should:

- Commence at the assessment phase of withdrawal care
- Support the client's goals which may pertain to accommodation, child protection, domestic violence and legal support
- Support client access to post-withdrawal services that provide ongoing support and advocacy
- Involve family/significant others in post-withdrawal care, as appropriate, to help implement the client's post-withdrawal plan

## 13.7 Special needs groups

### 13.7.1 Pregnant women

The health risks associated with ATS use during pregnancy are limited. The National Guidelines recommend the following approach:

- Advise the client of the potential health risks to herself and to her baby (higher rates of obstetric complications such as spontaneous abortion, miscarriage and placental abruption)
- Provide, or refer the client to, relevant support services (preferably within a multidisciplinary framework)
- Encourage the client to reduce or cease ATS use
- Discuss the risks associated with ATS use and mental illness, and monitor mental health where necessary (NSW Department of Health, 2008b)

## 13.7.2 Clients with a dual diagnosis

## Clients for whom a psychiatric condition emerges during ATS withdrawal will receive care that addresses their specific needs.

Specifically, they will be:

- Linked with appropriate mental health services
- Encouraged to continue to seek mental health support beyond withdrawal care
- Monitored for withdrawal symptoms and managed appropriately

## 13.7.3 Families/significant others

Consideration will be given to the needs of family/significant others in contact with an ATS-dependent person during outpatient withdrawal or reduction.

Where appropriate, information will be provided to family/significant others regarding the withdrawal process and support services such as Directline and/or Lifeline.

### 13.7.4 Young people

#### Young people presenting to AOD services will be linked with youthspecific services, where available.

As outlined above (section 6.3), young people may present with varying psychosocial factors contributing to their drug use which impact upon their long-term plan for recovery. It is important to be mindful of the potential differences in treatment approach and care when commencing withdrawal care. Ongoing contact with, and adjunct support from, youth-specific workers throughout withdrawal care can promote more positive experiences for the young person.

For further detailed information related to the withdrawal care of young ATS users, please refer to the YSAS Clinical Practice Guidelines (YSAS, 2008).

## 13.8 Recommended reading

Jenner, L. & Saunders, J. B. (2004). Psychostimulant withdrawal and detoxification. In A. Baker, N. K. Lee & L. Jenner (Eds.), *Models of intervention and care for psychostimulant users - 2nd Edition.* (pp. 102–119): Commonwealth of Australia.

Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., & Cash, R. (2007). *Clinical Treatment Guidelines for alcohol and drug clinicians. No. 14: Methamphetamines dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

NSW Department of Health. (2008a). *NSW Drug and Alcohol Withdrawal Clinical Practice Guidelines.* NSW: NSW Department of Health.

NSW Department of Health. (2008b). *Nursing and Midwifery Clinical Guidelines: Identifying and responding to drug and alcohol issues.* NSW: NSW Department of Health.

YSAS. (2008). YSAS Clinical Practice Guidelines - Management of alcohol and other drug withdrawal. Melbourne: YSAS.

## **14 CANNABIS**

These Guidelines Provide a comprehensive approach to withdrawal care. The use of prescribing guidelines outlined below will be supported by a comprehensive clinical assessment.

Cannabis is the most widely used illicit drug worldwide (AIHW, 2007). It is estimated that around ten per cent of people who ever use cannabis will become dependent at some time in their lives (Copeland et al., 2006). Cannabis can be smoked (generally mixed with tobacco) in a pipe, a joint, or a water-pipe (bong). Cannabis can also be ingested with food.

In delivering cannabis withdrawal services to clients, clinicians should consider:

- Setting
- Withdrawal syndrome and potential complications
- Assessment
- Withdrawal care planning
- Withdrawal care
- Planning for post-withdrawal
- Special needs groups

Each of these considerations is examined below.

## 14.1 Cannabis withdrawal syndrome

The existence of a cannabis withdrawal syndrome is now well established. The nature of the withdrawal syndrome is not life threatening and is suited to community-based withdrawal settings.

Cannabis dependence is often seen in clients with polydrug dependence (alcohol, opioid, benzodiazepine and/or tobacco dependence). The cannabis withdrawal syndrome is generally longer than the syndrome for these other substances.

Adverse effects of cannabis intoxication can include anxiety and depression, paranoia, increased appetite and sedation. In users who have a psychiatric

predisposition, acute drug-induced psychosis can occur from the ingestion of toxic levels of cannabis and during cannabis withdrawal. Agitation is associated with cannabis withdrawal and management of this condition should be carefully considered in withdrawal care planning.

While benzodiazepines are commonly used for symptomatic relief during cannabis withdrawal, there is currently no data to support this approach (NSW Department of Health, 2008a; Palmer, 2001).

## 14.2 Cannabis withdrawal settings

## The most appropriate setting for an individual seeking cannabis withdrawal will be informed by a thorough clinical assessment.

The nature of the cannabis withdrawal syndrome is not life threatening and, in most cases, withdrawal can occur in the community. On occasion, cannabis withdrawal warrants an inpatient setting. The most appropriate setting should be determined via a thorough clinical assessment.

## The best withdrawal care facilitates step-up and step-down care, according to client need.

Stepped care allows clients whose needs warrant greater withdrawal care to be transferred to a more intensive withdrawal setting. Alternately, stepped care allows those for whom risk/need is reducing to be stepped down to less intensive care.

## 14.3 Cannabis withdrawal syndrome

The extent to which withdrawal symptoms occur in light or non-daily cannabis users remains unclear (Budney & Hughes, 2006). However, the presence of a cannabis withdrawal syndrome in heavy or daily cannabis users who cease use has been established. The most common symptoms for these clients are:

- Anger, aggression, irritability
- Anxiety/nervousness
- Agitation
- Decreased appetite or weight loss
- Nausea and vomiting

- Restlessness
- Sleep difficulties including strange dreams

Less common symptoms include:

- Chills
- · Depressed mood
- Stomach pain/physical discomfort
- Shakiness
- Sweating

Most symptoms emerge on day one to two of abstinence and peak between days two and six. Most symptoms abate within two to three weeks (Budney & Hughes, 2006; Kouri & Pope, 2000). Figure 7 below, shows the symptoms and duration of cannabis withdrawal.

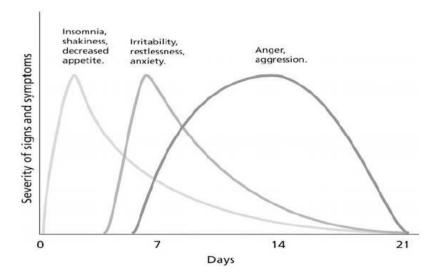


Figure 7: Symptoms and duration of cannabis withdrawal Source: NSW Health (2008, p.44)

## 14.4 Cannabis withdrawal assessment

Clinicians should be familiar with the general principles of assessment (refer section 9).

During withdrawal assessment, clinical staff will be alert to signs of client impairment.

A thorough assessment of cannabis-dependent clients is critical in determining the most appropriate withdrawal care. Assessment is, however, largely dependent on the capacity of clients to provide relevant information. Recent cannabis use may limit clients' capacity to share and absorb accurate assessment information.

For impaired clients, all services should:

- As soon as possible, identify the most recent drug type, dose and time consumed (to inform medical intervention in the event of an overdose)
- Implement regular clinical observations of the client at frequent intervals at first then decreasing over time as evidence of impairment subsides
- Revisit the assessment when acute impairment has passed

A cannabis assessment should explore AOD use, including:

- Cannabis dependence as determined by DSM-IV and ICD-10 (see section 2: Definitions of dependence and withdrawal)
- Quantity, potency, frequency of cannabis use, and route of administration
- Polydrug use/dependence
- Physical health issues
- Mental health issues, including symptoms of depression and/or psychosis
- Pregnancy
- The severity of any previous withdrawal symptoms (Cruickshank & Dyer, 2006; Cruickshank et al., 2008; Dyer & Cruickshank, 2005; McKetin et al., 2005; McKetin et al., 2008)

Assessment of these domains will inform the likely severity of the current withdrawal syndrome and contribute to appropriate withdrawal care planning.

## 14.5 Cannabis withdrawal care planning

## Information obtained during assessment will inform the withdrawal care plan.

The withdrawal care plan documents:

- Likely severity of withdrawal based on previous history of complicated withdrawal
- Risks associated with substance use, such as overdose history
- The client's motivation for withdrawal care, where this is a planned withdrawal presentation
- The client's goals during withdrawal care i.e. withdrawal, maintenance, reduction or substitution
- Potential barriers that may impact on achieving the client's withdrawal goals
- Available support to enhance the likelihood of success
- A post-withdrawal plan, including relapse prevention and linkages to external support networks to address the client's psychosocial needs
- Inclusion of family/significant others where appropriate
- Care plan for agitation management

The use of self-help booklets can be helpful, such as: *Mulling it over,* available at:

http://www.adf.org.au/store/article.asp?ContentID=product\_33212

## 14.6 Cannabis withdrawal care

Although no medications have proven to be successful in cannabis withdrawal, benzodiazepines such as diazepam are commonly used to treat some symptoms of cannabis withdrawal, such as anxiety and insomnia (NSW Department of Health, 2008a; Palmer, 2001). Benzodiazepine dosing during cannabis withdrawal is based on ongoing assessment and monitoring. The efficacy of benzodiazepines in human cannabis withdrawal has not been empirically determined.

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In outpatient settings, tapered or reducing benzodiazepine dosing may be used in conjunction with psychosocial interventions. There are numerous strategies to consider for outpatient cannabis reduction, including:

- Gradually limiting the quantity used per day
- Gradually reducing the frequency of use per day in conjunction with a smaller quantity
- Setting weekly reduction goals

Severity of cannabis withdrawal symptoms is dependent on a number of key factors such as:

- Method of ingestion
- Potency
- Quantity used per day
- Comorbid mental health conditions
- Polydrug dependence, including tobacco
- Current engagement in an outpatient or inpatient treatment setting

All withdrawal care is predicated on ongoing and objective monitoring in the initial stages of a client's presentation to withdrawal care. Monitoring should then occur at regular intervals, the frequency of which is dependent on the severity of the withdrawal syndrome.

### 14.6.1 Symptomatic medications

## A range of symptomatic medications is appropriate for use in cannabis withdrawal.

Symptomatic medications are also useful in managing cannabis withdrawal symptoms, as outlined in Table 17 below.

Table 17: Symptomatic medications for use in cannabis		
withdrawal (as at March 2009)		

Symptoms	Symptomatic medication	
Stomach cramps	Hyoscine (Buscopan®) <sup>a</sup>	
	Belladonna Herb (Atrobel®)ª	
Nausea	Promethazine (Phenergan®) <sup>a</sup>	
	Metoclopramide (Maxolon®) <sup>a</sup>	
Physical pain and/or	Paracetamol <sup>a</sup>	
headaches	Non-steroidal anti-inflammatory drugs (NSAIDS) <sup>a</sup> such as ibuprofen (Brufen® or Nurofen®)	
Sleep problems/ sleep disturbances	Short-acting benzodiazepines may be helpful for sleep problems (in small, controlled doses in the initial few days) <sup>b</sup>	
	Temazepam 10 mg tablets: one or two at night as required for up to seven days	
	Zolpidem (Stilnox®) or zopiclone (Imovane®) or sedating	
	antihistamines such aspromethazine (e.g. Phenergan®) may also	
	be of some value	
Anxiety/restlessness/irrit ability	If anxiety symptoms predominate, a longer acting benzodiazepine may be of more value e.g.	
	Diazepam 5 mg tablets: up to 20 mg daily (in divided doses) initially, reducing the doses over three to seven days (maximum	
	of 10 days duration) <sup>b</sup>	
	Outpatient regimens might be:	
	<ul> <li>7 days of diazepam 5 mg four times daily,</li> </ul>	
	Zopiclone 7.5 mg at night	
	• NSAIDs/hyoscine butylbromide (Buscopan®) as needed;	
	or	
	<ul> <li>7 days of zolpidem 7.5 mg at night<sup>a</sup></li> </ul>	
Sedation	Tricyclic antidepressants (TCAs)	
	Doxepin 50–75 mg at night for up to seven days <sup>b</sup>	
Note:		
Do not mix benzodiazepines - use one or the other		
Dosages and prescribing schedules for symptomatic relief will most effectively be decided		

upon only after thoroughly exploring the individual patient's symptom profile and circumstances

a) NSW Department of Health (2008a)

b) Murray et al. (2002)

General principles and guidelines for coping with, and relaxing during, cannabis withdrawal may also assist some clients (Appendix 5).

### 14.6.2 Cannabis withdrawal scales

At present, there are no validated cannabis withdrawal scales. However, the Cannabis Withdrawal Assessment Scale (CWAS)(Appendix 11) is currently used in some Australian AOD settings and is a useful tool for assessment purposes. The CWAS is a nine-item scale that assesses the domains of restlessness/agitation, fear, racing thoughts, drowsiness, mood changes, hunger, feelings of unreality and amount of sleep, on a scale of zero to seven (de Crespigny et al., 2003).

**Note:** Withdrawal scales should not be solely relied upon to monitor complicated withdrawal as they may lack the sensitivity to detect progression to serious illness. Withdrawal monitoring should always include close clinical observation and judgement.

## 14.6.3 Psychosocial support in cannabis withdrawal

# Psychosocial interventions complement the medical management of cannabis withdrawal symptoms and will be available at all cannabis withdrawal services.

The overarching principles of supportive care are fundamental to the provision of a holistic model of withdrawal care. Psychosocial interventions should explore:

- Client goals, including any change in these goals over time
- Perceived barriers to achieving an individual's goals of withdrawal care
- An individual's beliefs about withdrawal care
- Appropriate interventions and support services

## 14.7 Planning for post-withdrawal

## Post-withdrawal support is an essential component of the treatment continuum for cannabis-dependent clients.

Planning for post-withdrawal should:

- Commence at the assessment phase of withdrawal care
- Support the client's goals, which may pertain to accommodation, child protection, domestic violence and legal support

- Support client access to post-withdrawal services that provide ongoing support and advocacy
- Involve family/significant others in post-withdrawal care, as appropriate, to help implement the client's post-withdrawal plan

## 14.8 Special needs groups

### 14.8.1 Pregnant women

There is limited evidence of adverse effects of cannabis consumption on a pregnant woman or foetus. Where polydrug use exists, specialist paediatric consultation should be sought. Cannabis reduction or abstinence should be encouraged among pregnant women and the use of supportive medications should be minimal.

### 14.8.2 Tobacco

Cannabis is commonly mixed with tobacco for smoking and there is some evidence that withdrawal from both nicotine and cannabis at the same time leads to more severe withdrawal symptoms than would be experienced during withdrawal from either substance alone (Vandrey et al., 2008). The role of nicotine replacement therapy (NRT) in residential withdrawal settings should be strongly considered for all clinically dependent on nicotine.

## 14.8.3 Clients with a dual diagnosis

## Clients for whom a psychiatric condition emerges during cannabis withdrawal will receive care that addresses their specific needs.

Specifically, they will be:

- Linked with appropriate mental health services
- Encouraged to continue to seek mental health support beyond withdrawal care
- Monitored for symptoms such as agitation during withdrawal and managed appropriately.

## 14.8.4 Families/significant others

Consideration will be given to the needs of family/significant others in contact with a cannabis-dependent person during outpatient withdrawal or reduction.

Where appropriate, information will be provided to family/significant others regarding the withdrawal process and support services such as Directline and/or Lifeline.

### 14.8.5 Young people

#### Young people presenting to AOD services will be linked with youthspecific services, where available.

As outlined above (section 6.3), young people may present with varying psychosocial factors contributing to their drug use which impact upon their long-term plan for recovery. It is important to be mindful of the potential differences in treatment approach and care when commencing withdrawal care. For example, young people have reported an increase in disputes with parents and peers during cannabis withdrawal and a reduction in capacity to undertake school work (Dawes et al., 2006). Ongoing contact with, and adjunct support from, youth-specific workers throughout withdrawal care can promote more positive experiences for the young person.

For further detailed information related to the withdrawal care of young cannabis users, please refer to the YSAS Clinical Practice Guidelines (YSAS, 2008).

## 14.9 Recommended reading

Budney, A. J., & Hughes, J. R. (2006). The cannabis withdrawal syndrome. *Current Opinion in Psychiatry, 19*(3), 233–238.

NSW Department of Health. (2008a). *NSW Drug and Alcohol Withdrawal Clinical Practice Guidelines*. NSW: NSW Department of Health.

Palmer, B. (2001). Alcohol and Drug Withdrawal: A Practical Approach. A manual for doctors to assist in the treatment of patients withdrawing from alcohol and other drugs. Mt Lawley: Next Step Specialist Drug & Alcohol Services.

YSAS. (2008). YSAS Clinical Practice Guidelines - Management of alcohol and other drug withdrawal. Melbourne; YSAS.

*'Mulling it over':* A self-help booklet for cannabis users. Available at http://www.adf.org.au/store/article.asp?ContentID=product\_33212

## **15 NICOTINE**

These Guidelines provide a comprehensive approach to withdrawal care. The use of prescribing guidelines outlined below will be supported by a comprehensive clinical assessment.

In Australia, the prevalence of tobacco use is high among the AOD treatment population, with reports that 80–90% of clients are dependent on nicotine (Lee et al., 2005). This represents a rate at least four times higher than the general population (AIHW, 2008).

The adverse health effects and pharmacokinetic properties of nicotine are well established. The most common health problems associated with nicotine include acute effects on the central nervous system, gastrointestinal and musculoskeletal systems and longer-term effects on the cardiovascular system and respiratory system (NSW Department of Health, 2008a).

In delivering nicotine withdrawal services to clients, clinicians should consider:

- Setting
- Withdrawal syndrome and potential complications
- Assessment
- Withdrawal care planning
- Withdrawal care
- Planning for post-withdrawal
- Special needs groups

Each of these considerations is examined below.

## **15.1 Nicotine withdrawal settings**

In general, nicotine dependence may be addressed in conjunction with treatment for another drug in both residential and outpatient withdrawal settings. Withdrawal from other drugs creates an opportunity for clients to address their nicotine dependence simultaneously.

## 15.2 Nicotine withdrawal syndrome

According to the DSM-IV, the diagnostic criteria for nicotine dependence include at least four of the following symptoms occurring within 24 hours after cessation or reduction of nicotine intake:

- Depressed mood
- Insomnia
- Irritability, frustration or anger
- Anxiety
- Difficulty concentrating
- Restlessness
- Increased appetite or weight gain

While craving is considered an important element of nicotine withdrawal, it is not considered a diagnostic criterion for nicotine dependence (Ruiz et al., 2007).

The number and severity of nicotine withdrawal symptoms varies between individuals, with most clients experiencing only mild symptoms. Withdrawal symptoms generally present within several hours of the last cigarette and peak in the first 24–72 hours. Most withdrawal symptoms will decline and resolve within two to four weeks, although some symptoms may fluctuate for longer (Benowitz, 1988).

## 15.3 Nicotine withdrawal assessment

Clinicians should be familiar with the general principles of assessment (refer section 9).

#### During withdrawal assessment, clinical staff will be alert to signs of client intoxication or impairment.

A thorough assessment of nicotine-dependent clients is critical in determining the most appropriate withdrawal care. Assessment is, however, largely dependent on the capacity of clients to provide relevant information. Recent AOD use may limit clients' capacity to share and absorb accurate assessment information.

For intoxicated or impaired clients, all services should:

- As soon as possible, identify the most recent AOD type, dose and time consumed (to inform medical intervention in the event of an overdose)
- Implement regular clinical observations of the client at frequent intervals at first then decreasing over time as evidence of intoxication or impairment subsides
- Revisit the assessment when acute intoxication or impairment has passed

Assessment of nicotine use and dependence is becoming increasingly important as part of the overall drug history for clients attending withdrawal services. This is particularly so for clients attending residential AOD services, which are now required to comply with legislation restricting smoking in these settings.

The two-item, modified Fagerström nicotine dependence scale (Appendix 12) is the recommended tool for determining nicotine dependence (Heatherton et al., 1991).

## 15.4 Nicotine withdrawal care planning

## Information obtained during assessment will inform the withdrawal care plan.

The withdrawal care plan documents:

- Likely severity of withdrawal based on previous history of complicated withdrawal, based on the Fagerström nicotine dependence scale
- Risks associated with substance use, such as overdose history
- The client's motivation for withdrawal care, where this is a planned withdrawal presentation
- The client's goals during withdrawal care i.e. withdrawal, maintenance, reduction or substitution
- Potential barriers that may impact on achieving the client's withdrawal goals
- Available support to enhance the likelihood of success

- A post-withdrawal plan, including relapse prevention and linkages to external support networks to address the client's psychosocial needs
- · Inclusion of family/significant others where appropriate

## 15.5 Nicotine withdrawal care

Nicotine is known to interact with and affect the action and metabolism of some medication and drugs. Changes in metabolism, particularly related to the use of clozapine and olanzapine, may occur upon cessation of smoking or Nicotine Replacement Therapy (NRT)(Benowitz, 1988; Next Step Inpatient Withdrawal Unit, 2008).

Clients withdrawing from nicotine should be informed of the body's ability to more readily metabolise and absorb caffeine (i.e. coffee, chocolate, tea and soft drinks). An increase in caffeine levels may lead to increased restlessness and sleep disturbances. Clinicians should also monitor clients for signs of depression and anxiety. This is particularly relevant to clients with previous mental health concerns (NSW Department of Health, 2007; Zwar et al., 2007).

First-line pharmacotherapy options for nicotine withdrawal include nicotine replacement therapy (NRT), varenicline and bupropion sustained-release. Nortriptyline can be used as a second-line option (Zwar et al., 2007). Each of these pharmacotherapies is outlined below.

## 15.5.1 Nicotine replacement therapy (NRT)

Where required, NRT can minimise the physiological withdrawal symptoms of nicotine withdrawal and increase the likelihood of a successful intervention (NSW Department of Health, 2008a).

There are four main types of NRT, including:

- Patches
- Gum
- Inhaler
- Lozenges

Nicotine replacement therapy should not be commenced without a clinical assessment, including exploration of the following:

- Patient preference
- Pattern of any previous withdrawal symptoms
- Need for a combination of NRT agents rather than a single agent, especially if withdrawal not controlled
- Consideration of the local toxic effects associated with NRT:
  - Sore mouth, mouth ulcers (nicotine gum)
  - Local itching, erythema, burning (nicotine patches)
  - Nasal irritation, sneezing, watery eyes (nicotine spray)(NCETA, 2004; Zwar et al., 2007)

NRTs are not recommended for clients who:

- Are pregnant or likely to become pregnant
- Are currently breastfeeding
- Have significant active cardiac or vascular disease
- Report nicotine sensitivities or allergies (Zwar et al., 2007)

Clinicians managing clients on NRT should:

- Regularly review the client's withdrawal to tailor the NRT dose
- Emphasise the need for complete abstinence from nicotine
- Address cravings, triggers and stress through psychosocial interventions

NRT dosing guidelines are outlined in Table 18 below.

## Table 18: Nicotine replacement therapies: dose, duration, side effects and contraindications (as at March 2009)

Туре	Dose and duration			Side effects	Contra- indications
	Low dependence (0–9 cigarettes per day)	Low to moderate dependence (10–20 cigarettes per day)	Moderate to high dependence (21+ cigarettes per day)		
Patches	None	Nicobate® 14 mg (if dependence requirement not met increase patch to 21 mg/24 hrs OR Nicorette® 10 mg	Nicobate® 21 mg Nicorette® 15 mg	Transient skin irritation Itching Dreams Sleep disturbance Indigestion Diarrhoea	Relative: Ischaemic heart disease Absolute: Recent MI Serious arrhythmias Unstable
Gum	None	2 mg, 8–12 per day	4 mg, 8–12 per day	Jaw discomfort Nausea Indigestion Hiccups Excess saliva Sore throat	angina Pregnancy
Inhaler	None	Nicorette® 6– 12 cartridges per day	Not recommended	Mouth/throat irritation Cough Nausea Indigestion	

Source: Adapted from *Alcohol and Other Drugs: A Handbook for Health Professionals* (NCETA, 2004)

### 15.5.2 Bupropion

Bupropion is a partial nicotine agonist and is another first-line pharmacotherapy for nicotine withdrawal. It can be offered as an alternative to NRT. Bupropion blocks the re-uptake of dopamine and norepinephrine, with no clinically significant effects on serotoin (Ruiz et al., 2007).

Bupropion is not recommended for clients with a history of:

- Previous seizures
- Bipolar disorders
- Eating disorders (bulimia, anorexia)(NCETA, 2004)

It is recommended that the bupropion regime commences seven days prior to the negotiated quit date and is taken for seven weeks (NCETA, 2004). Table 19 outlines the appropriate dosing schedule for bupropion.

Туре	Dose and duration		Side effects	Contraindications	
	0–9 cigarettes per day	10–20 cigarettes per day	21+ cigarettes per day		
Bupropion			Headaches Dry mouth Impaired sleep Seizures Nausea Constipation Anxiety Dizziness	Seizure disorders or risk of seizure Bulimia Anorexia nervosa Bipolar disorder	

## Table 19: Dosing schedule of bupropion (Zyban (R)) (as at March 2009)

Source: NCETA (2004, p.67)

Insomnia, headache, dry mouth, nausea, dizziness and anxiety are the most commonly reported adverse effects associated with bupropion (Zwar et al., 2007).

## 15.5.3 Varenicline (Champix®)

Varinicline is a new first-line pharmacotherapy available on the Australian PBS as a short-term adjunct therapy for nicotine dependence. It is recommended that clients set a nicotine quit date of one to two weeks after commencing varenicline. Table 20 outlines the dosing schedule for varenicline.

#### Table 20: Varenicline dosing schedule (as at March 2009)

The recommended dose of varenicline is mg twice daily following a 1 week titration as follows:		
Day 1–3	0.5 mg once daily	
Day 4–7	0.5 mg twice daily	
Day 8	I mg twice daily	

Source: Zwar (2007, p.12)

For clients with severe renal impairment, dosing should begin at 0.5 mg once daily for the first three days, increased to 1 mg once daily. No dose adjustment is needed for patients with hepatic impairment (Zwar et al., 2007).

Adverse effects of varenicline include abnormal dreams and nausea. Nausea can be reduced if taken with food and water. As the efficacy and safety of varenicline in clients with a dual diagnosis is not well established, its use with such clients should be avoided (Zwar et al., 2007).

## 15.5.4 Supplementary NRTs

Nicotine lozenges may be used as supplementary NRT and administered as follows:

- Nicotine Lozenge Max dose: up to 15 lozenges per day, spaced at least one-hourly
- 2 mg lozenge if time to first cigarette after waking is greater than 30 minutes
- 4 mg lozenge if time to first cigarette after waking is less than 30 minutes (Next Step Inpatient Withdrawal Unit, 2008)

#### ALCOHOL AND OTHER DRUG WITHDRAWAL: PRACTICE GUIDELINES Turning Point Alcohol and Drug Centre Inc.

Two second-line pharmacotherapies, clonidine and nortriptyline have been identified as efficacious and may be considered by clinicians if first-line pharmacotherapies are not effective. Note that both of these pharmacotherapies have potentially serious adverse side effects if ceased abruptly (NCETA, 2004).

### 15.5.5 Psychosocial support in nicotine withdrawal

Psychosocial interventions complement the medical management of nicotine withdrawal symptoms and will be available at all withdrawal services.

The overarching principles of supportive care are fundamental to the provision of a holistic model of withdrawal care. Psychosocial interventions should explore:

- · Client goals, including any change in these goals over time
- · Perceived barriers to achieving an individual's goals of withdrawal care
- An individual's beliefs about withdrawal care
- Appropriate interventions and support services

### 15.5.6 Complementary therapies in nicotine withdrawal

Adjunct therapies such as massage, acupuncture and herbal remedies are available within some withdrawal settings. Where available, these options should be explored with clients.

Note that scientific evidence on the efficaciousness of acupuncture, hypnosis and relaxation therapy for assisting with nicotine withdrawal and cessation is limited (NCETA, 2004).

## 15.6 Planning for post-withdrawal

## Post-withdrawal support is an essential component of the treatment continuum for nicotine-dependent clients.

Planning for post-withdrawal should:

- · Commence at the assessment phase of withdrawal care
- Support the client's goals, which may pertain to accommodation, child protection, domestic violence and legal support

- Support client access to post-withdrawal services that provide ongoing support and advocacy
- Involve family/significant others in post-withdrawal care, as appropriate, to help implement the client's post-withdrawal plan

## 15.7 Special needs groups

## 15.7.1 Clients with a dual diagnosis

## Clients for whom a psychiatric condition emerges during nicotine withdrawal care will receive care that addresses their specific needs.

Specifically, they will be:

- Linked with appropriate mental health services
- Encouraged to continue to seek mental health support beyond withdrawal care
- Monitored for withdrawal symptoms during withdrawal and managed appropriately

## 15.7.2 Families/significant others

# Consideration will be given to the needs of family/significant others in contact with a nicotine-dependent person during outpatient withdrawal or reduction.

Where appropriate, information will be provided to family/significant others regarding the withdrawal process and support services such as Directline and/or Lifeline.

## 15.7.3 Young people

#### Young people presenting to AOD services will be linked with youthspecific services, where available.

As outlined above (section 6.3), young people may present with varying psychosocial factors contributing to their drug use which impact upon their long-term plan for recovery. It is important to be mindful of the potential differences in treatment approach and care when commencing withdrawal care. Ongoing contact with, and adjunct support from, youth-specific workers throughout withdrawal care can promote more positive experiences for the young person.

For further detailed information related to the withdrawal care of young nicotine users, please refer to the YSAS Clinical Practice Guidelines (YSAS, 2008).

# 15.8 Recommended reading

Benowitz, N. L. (1988). Pharmacologic aspects of cigarette smoking and nicotine addiction. *New England Journal of Medicine, 319*, 1318–1330.

Lee, N., Coonan, D., Dunlop, A., Stephens, R., & Ritter, A. (2005). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 12: Smoking cessation - working with clients to quit.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

NCETA. (2004). *Alcohol and Other Drugs: A Handbook for Health Professionals*. Canberra: Australian Government Department of Health and Ageing.

Ruiz, P., Strain, E., & Langrod, J. (2007). *The Substance Abuse Handbook: A Comprehensive Textbook*. Philadelphia, Pennsylvania, Lippincott Williams & Wilkins

YSAS. (2008). YSAS Clinical Practice Guidelines - Management of alcohol and other drug withdrawal. Melbourne; YSAS.

Zwar, N., Richmond, R., Borland, R., Peters, M., Stillman, S., Litt, J., et al. (2007). *Smoking cessation pharmacotherapy: an update for health professionals*. Royal Australian College of General Practitioners.

# 16 AOD WITHDRAWAL FOR CLIENTS WITH A DUAL DIAGNOSIS

# **16.1 Introduction**

There is increased recognition and responsiveness in the Victorian AOD sector to the needs of clients with co-occurring AOD and mental health problems. The case complexity involved requires a collaborative response that draws on the skill base of the AOD and mental health professions. This is true for all elements of withdrawal care, from withdrawal placement, screening and assessment and treatment matching to treatment and post-withdrawal support.

The impact of dual diagnosis on the individual, carers, family and significant others as well as the AOD and mental health service systems should be recognised. These Guidelines act as a supporting framework for the AOD sector in its approach to the enhancement of service capability and, ultimately, service users and their supportive networks.

## 16.2 Understanding what is meant by the term 'dual diagnosis'

The term 'dual diagnosis' is commonly used to describe "one or more diagnosed mental health problems occurring at the same time as problematic drug and alcohol use" (DHS, 2007, p. 4). This inter-relationship between AOD use and mental health conditions may include the following (DHS, 2007, p 4):

- A mental health problem or disorder leading to or associated with problematic alcohol and other drug use;
- A substance use disorder leading to or associated with a mental health problem or disorder; and
- Alcohol and/or other drug use worsening or altering the course of a person's mental illness.

Definitions for mental health conditions are provided in:

- The Tenth Revision of the International Classification of Diseases and Health Problems (ICD-10;(World Health Organization, 2004)
- Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV; (American Psychiatric Association, 2000).

Both sources are considered appropriate for use with these Guidelines, and can be accessed online:

- DSM-IV http://www.psychiatryonline.com/resourceTOC.aspx?resourceID=1
- ICD-10 http://www.who.int/classifications/apps/icd/icd10online/

Table 21 provides a brief overview of the mental health disorders that may be experienced by clients with AOD problems.

In an analysis of the 1997 National Study of Mental Health and Well Being, Burns and Teesson (2002) identified that 37% of respondents with an alcohol use disorder had at least one other mental health disorder. Of these, 18% had an affective disorder (predominantly depression (17%)), 15% had an anxiety disorder (predominantly generalized anxiety disorder (7%)) and 17% had another drug use disorder (predominantly cannabis (14%)).

High prevalence disorders include anxiety spectrum disorders, mood disorders and personality disorders. These high prevalence dual diagnoses can often be missed by health practitioners and later re-emerge with severe consequences, presenting a greater impact to the individual and on health services (Croton, 2005).

Mental health conditions with increased visibility tend to be lower prevalence but higher impact psychotic disorders, such as schizophrenia (Esterberg et al., 2009). Individuals with psychosis have been observed as having a higher prevalence of substance use than the general population (Smith et al., in press),

		General characteristics	Specific disorders
High prevalence disorders	Anxiety spectrum disorders	<ul> <li>Abnormal or inappropriate anxiety, including:</li> <li>Increased heart rate</li> <li>Tensed muscles</li> <li>Quickened breathing in the absence of reason for this to occur (i.e. medical or physical cause)</li> </ul>	Panic disorder Phobic anxiety disorders (including agoraphobia, social phobias and specific phobias) Generalised anxiety disorder Post traumatic stress disorder (PTSD) Obsessive compulsive disorder
	Mood disorders	A disturbance in mood, including inappropriate or exaggerated mood	Dysthymia Major depression Ante/post natal depression Mania Bipolar disorder
	Personality disorders	Disorder of thoughts, emotions, interpersonal functioning and impulse control that impacts the way a person interacts with the world	Anti-social personality disorder Borderline personality disorder
Low prevalence disorders	Psychotic disorders	Psychosis, delusions and/or hallucinations	Schizophrenia Schizoaffective disorder Delusional disorder Acute and transient psychotic disorders Schizotypal disorder

# Table 21: Mental health conditions that may be observed in the AOD setting

# 16.3 Principles and practice in withdrawal care for dual diagnosis

In addition to the principles documented in section 3, Principles of Withdrawal Care, the following are reflective of best practice in the AOD and mental health sectors for withdrawal care for dual diagnosis clients:

- A dual diagnosis should be considered the normal expectation, not the exception in AOD clients (Minkoff, 2001; Croton, 2007)
- Screening should occur for both mental health disorders and substance use disorders in all instances, and through both mental health and AOD services (i.e., the 'no wrong door' philosophy) (Croton, 2007; Staiger, 2008)
- An integrated and collaborative approach must be applied to screening, assessment and care (Minkoff, 2001; Croton, 2007; Proudfoot et al, 2003; Sacks and Ries, 2005)
- Interventions need to be matched to diagnosis, phase of recovery and stage of treatment (Minkoff, 2001)
- There is no single correct dual diagnosis intervention or program. The correct intervention must be individualised, according to diagnosis, stage of treatment or stage of change, phase of recovery, need for continuity, extent of disability, availability of external contingencies (e.g. legal), and level of care assessment (Minkoff, 2001)

## 16.4 Screening and assessment

Clinicians will be familiar with the general principles of assessment (refer section 9).

# All clients presenting to AOD services will undergo mental health screening as a part of initial screening procedures.

The factors needing consideration during assessment that have been identified in section 9 also apply when screening and assessing clients with a suspected dual diagnosis. Effective communication, the consideration of bio-psychosocial risk factors and individualised care planning are central to the process.

At all times, and particularly when clients present with complex conditions, screening and assessment should be a part of a broader continuum of care to increase the likelihood of successful outcomes wherever possible. Continuous monitoring of clients' needs and risks throughout withdrawal care is essential.

## 16.4.1 Components of screening

Mental health screening is a mandatory component for people accessing AOD withdrawal support. Screening aims to identify the presence of key psychiatric symptoms as a flag for the need to complete a more targeted assessment.

An assessment should subsequently look further at presenting symptomatology and gather information needed to make a diagnosis through either an internal or external assessor, and to develop an Individual Treatment Plan (ITP).

An integrated approach of AOD, primary care providers and/or mental health services is considered best practice, as it increases the likelihood of a successful episode of care. Early recognition of a dual diagnosis provides opportunity for the establishment of appropriate long-term linkages to such service providers for clients.

Screening for both mental health and substance use disorders should occur when the client is first seen by a clinician or practitioner in an AOD service or a mental health service. This initial screening will determine if further treatment is required and when it is required (Sacks and Ries, 2005; Lee et al, 2007). In addition, it will also establish the most appropriate setting in which withdrawal should take place.

Factors for consideration include:

- Risk of self-harm and suicide
- Risk to others
- Current level of intoxication
- Severity of substance use disorder
- History of repeated, unsuccessful withdrawal
- Severity of mental health disorder

- Previous diagnoses and treatment
- Any complicating factors such as additional co-occurring health conditions
- Current medications
- Clients current level of motivation and willingness to engage in support
- Current level of support available to a client (Croton, 2007)

## 16.4.2 Screening and assessment tools

The use of screening tools within AOD withdrawal care provides guidance during assessment. Clinical judgement is critical and secondary consultation should be sought where uncertainties exist about the client's presentation and the results of screening tools.

There are numerous validated screening tools for dual diagnosis that are available for use in AOD withdrawal services. In Australia, the *Screening for and Assessment of Co-occurring Substance Use and Mental Health Disorders by Alcohol and Other Drug and Mental Health Services* (Croton, 2007) provides an overview of the available tools for screening and assessment of patients/clients at intake. The following options, outlined in Table 22, are recommended for consideration:

- Kessler 10(K10)
- PsyCheck
- Modified Mini Screen
- Mental Health Screening Form (MHSF 3)

Links to these tools are available in Appendix 4.

Tool	Description		
Kessler 10 (K10)	Ten item scale designed to detect high prevalence mental health disorders		
PsyCheck	Screening tool designed for non-mental health experts that includes:		
	Self-Reporting Questionnaire (WHO mental health screen)		
	Suicide risk assessment		
	Brief mental health history		
	Mental health probes		
Mental Health Screening Form (MHSF 3)	17 item tool that examines lifetime psychiatric history		
Modified Mini Screen	Assessment tool designed to detect mood disorders, anxiety disorders and psychotic disorders		

Table 22: Screening and	assessment tools
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As mental health symptoms may or may not be related to AOD use and intoxication, it is important that screening for each condition is repeated following withdrawal. This will ensure that the care plan developed initially is still relevant (Minkoff, 2005).

## 16.4.3 Components of assessment

Assessment forms the basis for development of an ITP. Results inform the most appropriate withdrawal setting, service involvement, medication and pharmacotherapy options as well as initiating both pre-admission and post-withdrawal planning. In addition to issues covered in the screening process, assessments will seek more information on the following:

- History of suicidality, suicide attempt or self-harm
- Recent substance use history
- Longitudinal substance use history
- Previous experience of withdrawal
- Bio-psychosocial history

- History of mental health issues
- History of contact with mental health services
- History of medications
- Interactions between substance use and mental health issues (i.e. what a client experiences when substance use increases or ceases.

A suicide risk assessment should be included in services' standard assessment processes. Identification of imminent risk warrants an immediate response in accordance with organisational protocols. The PsyCheck screening tool (Appendix 4) includes a suicide risk assessment and can be referred to as an example.

In any screening or assessment process, clinicians should be aware of recall bias (which may be due to memory impairment resulting from substance use or mental health disorders) when obtaining the following information:

- Chronology of symptoms, i.e. substance use or the mental health symptom
- Substance use history
- Family history of addiction
- Family history of mental health disorders
- Nature of the symptoms, e.g. presence of visual hallucinations or other psychotic symptoms
- Experience in the event of abstinence or controlled use (more than one month)

Clients have a range of needs that drive their withdrawal care, from high to low risk. Table 23 provides an overview of the treatment pathways that may result from risk assessments. Clinicians with less experience should ensure they have access to senior/more experienced staff for a secondary consultation where there is any doubt as to a client's current level of risk. Results of the risk assessment may necessitate internal or external referral to a dual diagnosis specialist, with the client's consent.

Staff in settings such as hospitals, psychiatric facilities, prisons and police watch-houses will be familiar with, and alert to, the signs of mental health distress in order to respond in a timely and appropriate manner.

Treatment pathway →	Assessment	Referral	Setting	Service linkages
High risk	Continuous review	As required	Inpatient or high care	CAT team Psychiatric units
Medium risk	Admission, exit and follow-up	GP	Home-based Community residential	Area mental health services
Low risk	Admission, exit and follow-up	GP	Home-based Outpatient community	Area mental health services

Table 23:	Risk	assessment	and	care	planning
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## Symptomatology

# Clinicians will focus on symptom acuity and respond to risk factors accordingly.

Distinguishing between intoxication, symptoms of withdrawal and mental health symptoms can be extremely challenging. On presentation, clinicians should not necessarily be concerned by the origin of the symptoms. Instead, their focus should be on treating symptom acuity and responding to risk factors accordingly.

If a client has engaged in very recent substance misuse prior to service presentation, it is more likely that their symptoms are substance-related. However, as time between the symptoms and point of admission lengthens, the likelihood of symptoms being caused by mental illness increases. This can be complicated by longer periods of withdrawal for some patients (e.g. where alcohol withdrawal is complicated by polydrug use).

In the absence of substance use, it is easier to obtain a clearer view of causal pathology. Attempts should be made to ascertain the clients' understanding of the relationship between mental health symptoms and substance use. Clients may be able to indicate whether symptoms are

related to substance use or mental health conditions. This is especially the case if they enter withdrawal care with a known diagnosis or via direct referral from a mental health service.

A thorough assessment of psychiatric history and AOD use, along with any experience of previous episodes of withdrawal, should be conducted. Variance in clinician skill and experience may impact on the quality of these assessments, and a secondary consultation should be considered in the event of uncertainty of results.

Table 24 provides an overview of symptoms present in withdrawal, and identifies symptoms that may also be present in a mental health disorder.

Substance	Withdrawal symptoms	Symptoms also present in mental health disorders			
Alcohol	Mild to moderate severity Tremor, restlessness, insomnia, nightmares, sweats, tachycardia, fever, nausea and vomiting	Restlessness, insomnia, nightmares, nausea and vomiting			
	Severe Hallucinations, increased agitation, tremulousness	Hallucinations, increased agitation, tremulousness			
	<i>Most severe</i> Delirium tremens (DTs), cardiac arrest, death	N/A			
Benzodiazepine	Common Anxiety, insomnia, restlessness, irritability, poor concentration and memory, depression and muscle aches	Anxiety, insomnia, restlessness, irritability, poor concentration and memory, depression and muscle aches			
	Less common Perceptual disturbances and panic attacks	Perceptual disturbances and panic attacks			
	Rare Seizures and symptoms of psychosis	Symptoms of psychosis			

 Table 24: Symptoms of AOD withdrawal that are also present in

 mental health disorders

Substance	Withdrawal symptoms	Symptoms also present in mental health disorders
Amphetamine- type substances	Amphetamine Craving sleep, irritability, depressed mood, lack of energy, slowing of movement, loss of interest or pleasure	Craving sleep, irritability, depressed mood, lack of energy, loss of interest or pleasure
	Methamphetamine – less severe Anxiety, motor retardation, agitation, vivid dreams, craving, poor concentration, irritability and tension, mild to moderate depression	Anxiety, motor retardation, agitation, vivid dreams, craving, poor concentration, irritability and tension, mild to moderate depression
	Methamphetamine – severe Inactivity, fatigue, anhedonia and dysphoria	Inactivity, fatigue, anhedonia and dysphoria
Opiates (severity alters with different substances)	Increased sweating, lacrimation, rhinorrhea, urinary frequency, diarrhoea, abdominal cramps, nausea, vomiting, muscle spasm leading to headaches, backaches and cramps, twitching, arthralgia, piloerection, papillary dilatation, elevated blood pressure, tachycardia, anxiety, irritability, dysphoria, disturbed sleep, increased cravings for opioids	Anxiety, irritability, dysphoria, disturbed sleep
Nicotine	Depressed mood, insomnia, irritability, anxiety, difficulty concentrating, restlessness, decreased heart rate, and increased appetite	Depressed mood, insomnia, irritability, anxiety, difficulty concentrating, restlessness
Cannabis	Most common Anger, aggression, irritability, anxiety, nervousness, decreased appetite or weight loss, restlessness, sleep difficulties (inc strange dreams)	Anger, aggression, irritability, anxiety, nervousness, decreased appetite or weight loss, restlessness, sleep difficulties (inc strange dreams)
	Less common Chills, depressed mood, stomach pain/physical discomfort, shakiness, sweating	Depressed mood

# 16.5 Withdrawal settings for clients with a dual diagnosis

Clients with a dual diagnosis frequently have complex needs, and they may require longer episodes of care than patients with a substance use *or* mental health disorder.

Treatment presentation may be for a range of reasons<sup>3</sup> (Section 7, Presentation to AOD withdrawal). The motivation for presenting to withdrawal care will influence the location at which withdrawal occurs. The current 'no wrong door' philosophy aims to ensure that people have access to the AOD and mental health services that they require, irrespective of their entry point to health services (DHS, 2008).

Clients with a dual diagnosis may be placed on an involuntary order by public mental health services as a result of their mental illness (*Mental Health Act 1986*, s 8), if all of the following conditions are met:

- The person appears to be mentally ill
- The person's mental illness requires immediate treatment and that treatment can be obtained by the person being subject to an involuntary treatment order
- Because of the person's mental illness, involuntary treatment of the person is necessary for his or her health or safety (whether to prevent a deterioration in the person's physical or mental condition or otherwise) or for the protection of members of the public
- The person has refused or is unable to consent to the necessary treatment for the mental illness
- The person cannot receive adequate treatment for the mental illness in a manner less restrictive of his or her freedom of decision and action

<sup>&</sup>lt;sup>3</sup> Crisis Presentation: Precipitated by an event or circumstance significant enough to impact on an individual's motivation to participate in care, where they otherwise would not have (e.g. child protection, correctional intervention);

*Unplanned Withdrawal*: When withdrawal occurs following presentation to hospital, psychiatric or medical units for a non-related or co-occurring condition, or within a secure correctional setting;

Elective: An individual is independently motivated to access support

In these circumstances, clients can be treated as an inpatient or on a community treatment order, depending on the outcomes of a risk assessment.

It should be noted that a person is not considered to be mentally ill based solely on the fact that they use alcohol or other drugs.

The most appropriate setting for an individual with a dual diagnosis seeking withdrawal will be informed by a thorough clinical assessment, including a risk assessment.

## 16.5.1 Settings

The following information provides an overview of the withdrawal treatment settings available to clients with a dual diagnosis. The most appropriate setting will be determined by the outcomes of screening and assessment in conjunction with clinical judgement. Clients with a dual diagnosis should ultimately undergo the same pathway of referral as other clients; however decisions about the best care options should involve clinicians from both services to determine whether a mental health or AOD setting is more appropriate.

As noted previously, dual diagnosis clients are not a homogenous group due to the complicated mix of AOD and mental health diagnoses. It is important that the most acute presentation (substance use or mental health disorder) is treated first. In the event of significant distress resulting from either disorder, screening and assessment may be deferred until severe symptoms abate.

# The best withdrawal care facilitates step-up and step-down care, according to client need.

Clients' progress should be continuously monitored in any treatment setting; observing their mental health and substance use disorder symptoms and ensuring that the current setting continues to be the most appropriate according to their changing needs.

## Hospital or psychiatric inpatient

It is important to understand the individual needs of the client/patient, and their care requirements, including levels of anxiety, depression and other psychiatric symptoms. Patients with severe mental health disorders or severe substance use disorders are more likely to be matched to an inpatient or residential program, given their risk profiles and specific needs.

Psychiatric inpatient withdrawal care often occurs as a result of a client presenting with serious mental health symptomatology, such as suicidality or psychosis, through a hospital ED, CAT team, or if the client is known to a psychiatric unit. Admission and the decision to undergo a period of detoxification is made on the basis of risk and acuteness of the client's mental health issue, including measures (or judgement) of impairment and function.

If the severity of psychopathology and associated risk factors is prominent, AOD withdrawal is generally more appropriate in a mental health facility. The staff, setting and structure of the ward are designed to support a high level of responsiveness to an exacerbation of psychosis or the presentation of suicidal ideation or highly aggressive behaviour. Time out facilities that are available in mental health settings and staff training in the management of severe behavioural disturbances facilitate adequate support for clients with low-prevalence mental health problems/disorders.

### **Community residential withdrawal**

Community residential withdrawal (CRW) settings are appropriate for some clients with low to medium severity mental health and substance use symptom acuity. CRW is generally suitable provided there has been sufficient preparatory planning with the client and other service providers who are engaged prior to admission.

To facilitate effective integrated withdrawal care, CRW units should have access to internal or consultant psychiatry services. Ideally, area mental health case managers and primary health care services such as GPs will also work in partnership with CRW units throughout withdrawal care.

Consideration must be given to clients who may have commenced medication for mental health disorders, such as anti-depressants, before admission. It is important to ensure that appropriate follow-up strategies have been initiated for continuation of medication management during and post-withdrawal.

Linkage to a community GP can be useful in the management of high prevalence disorders, as well as those with untreated psychotic symptoms.

CRW settings may also facilitate early intervention for individuals who have been experiencing psychotic symptoms for a number of years but are not yet diagnosed. In these cases, establishing a link with a community GP for an

assessment post-withdrawal will provide an opportunity for referral to a psychiatrist, should this be required.

A residential setting is generally best suited to the needs of people with lower prevalence mental health disorders. A home-based environment may not be appropriate for these individuals due to the level of structure and support that is required to undergo withdrawal. In the event that the client is residing in community mental health supported accommodation, it may be best to make an alternative arrangement for the duration of the withdrawal phase. Clinical judgement is required to determine the degree and nature of support and care that is needed. It may be possible to work in collaboration with the Psychiatric Disability Rehabilitation and Support Services (PDRSS) or AOD case manager to address this.

### Home-based withdrawal/Outpatient community withdrawal

Some clients may benefit from remaining in their own environment. The critical issue to consider is the level of risk posed for the client as an outpatient. In these instances, risks include the client's capacity to manage their medication and the stability of their mental state and personal vulnerability.

Adequate preparatory planning is necessary prior to commencement of withdrawal, involving the client as well as both AOD and mental health service staff. Ideally, there will be liaison between the mental health treating team and withdrawal team throughout the withdrawal phase. Extra services may be needed as well; such as home visits or clinic reviews. Clients should be provided with information on how to access mental health support services readily throughout the withdrawal phase.

Referral to home-based withdrawal or outpatient community withdrawal is contingent on a number of factors, including:

- History of repeated, unsuccessful attempts at withdrawal in this setting
- History of a significant psychiatric disorder
- The complexity and severity of the client's co-occurring condition
- Limited social support for the client
- The suitability of the home environment for withdrawal

Client preference

### Clinicians will provide clients with information on how to access mental health support services throughout withdrawal.

### Length of stay

As mentioned, dual diagnosis clients are not a homogenous group. An extended period of stay within residential AOD withdrawal settings or mental health facilities (if appropriate) may be necessary for some clients. Access to stepped care between hospital/psychiatric wards, community-based or non-residential AOD settings also affords graduated treatment responses based on client need/risk.

The length of stay for a client in withdrawal care may impact on the effectiveness of their treatment. Clients with a dual diagnosis may require time for mental health symptoms to stabilise, and withdrawal is often protracted because of the impact of mental health medications.

A client's anxiety is generally not apparent in a residential withdrawal setting until they have ceased withdrawal medications (around day 5). An extended period within the treatment setting provides an opportunity for further assessment and the exploration of interventions that are matched to presenting symptoms. Withdrawal may not be completed within a standard period of care and flexibility is required.

Post-withdrawal planning is an integral part of withdrawal care. Dual diagnosis clients often experience poorer social functioning, hence linkages with mental health and primary health care providers need to be established prior to discharge, to reduce the risk of relapse.

Discharge planning should also attempt to address psychosocial issues such as the client having access to appropriate and stable accommodation and contact with significant others for additional support. It is acknowledged that services may have limited capacity to address such issues in their entirety prior to discharge; however the provision of contact details for targeted services is an appropriate alternative.

Clinicians will ensure clients have access to appropriate and stable accommodation prior to discharge.

Clinicians will ensure that clients have access to sufficient support prior to discharge.

## 16.5.2 Service capability and linkages

Current best practice for clients with a dual diagnosis requires treatment capability of both disorders across the AOD and mental health sectors. The inclusion of cross-sectoral development and training as part of organisational strategic planning will enhance service capacity to meet the needs of this client group.

Organisational policy articulating the 'no wrong door' philosophy should be actualised through the development of partnerships with primary care and mental health providers. These Primary Care Partnerships, through formalised memoranda of understanding, enable linkages and referral processes across agencies; ensuring that comprehensive and appropriate assessments occur in a timely manner.

Relationships between AOD and mental health services provide the opportunity for a seamless service delivery in withdrawal and postwithdrawal care. Implementation of these strategies will minimise the risk of clients 'falling through the gaps' at critical care transition points (e.g., mental health condition not severe enough to be case managed by area mental health services).

Mental and primary health care providers (e.g., area mental health case managers, GP and psychiatrists) who are engaged in client care will provide important support during pre- and post-withdrawal phases. As part of care planning, AOD services should seek to maintain these links when a client commences withdrawal, to ensure continuity of care.

The Victorian Dual Diagnosis Initiative (VDDI) was established in 2001 to facilitate dual diagnosis capacity building across AOD and mental health services in Victoria. Services provided by VDDI include primary and secondary consultations, and education and training to AOD and mental health services, to enhance service capacity at a local level.

Localised dual diagnosis teams can produce effective relationships across agencies, to support the integrated management of clients. These teams operate at a local level, between allied AOD and mental health services, and include representatives from the AOD service, the mental health service and dual diagnosis specialists.

An integrated approach between mental health and AOD services is considered best practice.

### Skills and training

AOD clinicians have varying degrees of skill, knowledge and experience. In accordance with dual diagnosis capability standards for AOD services, clinicians should demonstrate competence in screening, assessment and the development of IITPs based on the outcomes of the assessment. Staff should also have the capacity to identify personal and organisational limitations in care and management of either disorder; referring for further treatment or assessment as required.

VDDI has developed a diploma encompassing the five core competencies required of staff working in this area:

- AOD staff must complete two mental health competencies:
  - Orientation to mental health work
  - Provide non-clinical services to people with mental health issues
- Mental health staff must complete two AOD competencies:
  - Orientation to AOD work
  - Assess the needs of clients who have AOD issues
- All staff must complete the dual diagnosis competency:
  - Provide interventions to meet the needs of consumers with mental health and alcohol or other drug issues

Mental health first aid training is recommended for AOD clinicians, including suicide intervention. It is an effective strategy for care of clients presenting with mental health crisis before specialised professional assistance is received or until the crisis resolves.

All AOD clinical service staff will complete a dual diagnosis induction program.

All AOD clinical service staff will be trained in mental health first aid. Clear emergency policies and procedures will be integrated into staff induction and orientation processes, with regular updates/reviews for all staff in clinical environments.

## 16.6 Withdrawal care planning

The complexities of clients with a dual diagnosis require a flexible approach toward withdrawal care planning. Substance misuse and mental health conditions should both be regarded as primary disorders. Both warrant independent assessment and the development of an ITP should integrate strategies for substance and mental health issues.

Integrated treatment relationships between AOD and mental health clinicians enhance treatment outcomes for the client. Multidisciplinary responses can be a useful approach in the development of an ITP. Service providers from both AOD and mental health teams discuss the elements of withdrawal care with the client; ensuring role clarity and consistency in working toward mutually agreeable treatment goals.

An integrated approach involving the assessment of both disorders and their interactions will help to identify which symptoms are the most urgent/high risk and require clinical attention first.

Information about mental health and substance use disorders obtained during assessment will inform the withdrawal care plan.

# 16.7 Pre-admission planning

Pre-admission planning provides an opportunity for clients to obtain information about the withdrawal care experience. For dual diagnosis clients, it is particularly important to reduce the level of anxiety associated with entry to an unfamiliar environment in the event of community residential or inpatient withdrawal. Therefore, clients should receive adequate orientation to the service, staff and layout as well as information regarding the withdrawal itself and what may be experienced, including common withdrawal symptoms and changes that may occur during the episode.

In addition, the following should be ascertained:

- If the client is currently linked with other health service providers
- If the client is taking, or requires, any mental health medications during the withdrawal care period
- Links with a primary health care provider, such as a GP, who is able to take on prescribing responsibilities

If the client is case managed by an area mental health service, there should be liaison between their case manager and/or treating doctor with the AOD service and client prior to admission to ensure treatment plans are complementary and, where possible, integrated. The dual diagnosis team (AOD service, mental health and dual diagnosis specialist) can ensure the client is fully informed of their treatment options.

Interactions associated with any psychotropic medications and the client's primary drug of concern, as well as withdrawal medication, need to be ascertained prior to withdrawal. Alterations in medication dosing may be necessary to accommodate these potential interactions. Further, some illicit drugs will potentiate the effects of the prescribed drugs and some will inhibit their effects.

Psychosocial issues, such as ensuring that a client's accommodation and income will remain secure whilst undertaking withdrawal care, also need to be considered in pre-admission planning.

## 16.8 Withdrawal care

# Clinicians will be familiar with the general principles of withdrawal care (refer section 3).

Careful monitoring of physical and emotional health is essential throughout withdrawal care. As withdrawal symptoms can exacerbate underlying mental health conditions such as depression, it is important to differentiate between symptoms of withdrawal and mental health conditions for early identification of suicidality.

Assessment should also continue throughout withdrawal care. The emergence of more significant mental health issues, such as mania or psychosis, may occur as the withdrawal progresses. When mental health symptoms arise in withdrawal, it is important to consider how well the client is medicated for their withdrawal, as inadequate medicating may exacerbate these symptoms.

Withdrawal service staff will consider the potential for withdrawal to complicate clients' existing medical conditions and provide specialist medical care and monitoring, as required.

# 16.8.1 Psychosocial and pharmacological interventions for withdrawal care

Care of both AOD and mental health disorders can be loosely categorised into pharmacological and non-pharmacological/psychosocial strategies. Ideally, these interventions will be integrated into psychosocial and pharmacological treatments.

Goodness-of-fit between client and treatment strategy can be determined through a thorough assessment of:

- Individual circumstances (e.g. do they have sufficient support)
- Level of need (e.g. does symptom severity require a pharmacological response)
- Level of risk (e.g. are they a high risk for self harm)
- Previous treatment success

# Mental health interventions will be tailored to individual needs and will complement the medical management of withdrawal symptoms.

## **Psychosocial considerations**

Psychosocial issues that should be explored during assessment are detailed in Table 25 below. Where relevant, strategies to address these issues will be incorporated in the treatment plan.

Table 25: Psychosocial issues to address during withdrawal	
care	

Psycho-social issues	Focus	
Perceived barriers to achieving goal of	Relationship issues	
withdrawal care	Geographic isolation	
	Access to appropriate AOD and mental health support and information	
	Legal and financial issues	
	Parenting and child protection issues	
	Domestic violence	
Beliefs about withdrawal care	Motivation for accessing withdrawal care	
	Previous withdrawal experiences	
	Previous experience with mental health episodes	
	Fears and expectations	
Identified supports	Appropriate accommodation	
	Support network (family, friends, workers)	

Source: Key informant interviews

Some AOD services may have clinical psychologists who are able to bulk bill for psychosocial services. Under the GP Mental Health Care scheme (covered by Medicare), GPs may undertake early intervention (including providing focused psychological strategies), assessment and management of patients with mental health disorders, and refer clients to clinical psychologists for further care. Further information can be found at:

http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pcd-gp-mental-health-care-medicare.

A range of psychosocial interventions may be available in AOD settings for people with a dual diagnosis, including:

- Assessment and brief intervention
- Motivational interviewing

- Contingency management
- Cognitive behaviour therapy (CBT)
- Psychodynamic therapy
- Self-help approaches
- Continuing care

Motivational interviewing and CBT are often regarded as particularly successful when working with clients who have a dual diagnosis.

The success of psychosocial strategies is dependent on the appropriateness of these strategies for the individual client and the development of an integrated treatment plan that includes medication management assistance where required.

### Pharmacological considerations

# Clinicians will consider the interactivity between prescription withdrawal medications and prescription mental health medication

# Clinicians will consider the ongoing pharmacological treatment needs of the client during withdrawal and prior to discharge.

Prior to commencement of pharmacotherapy, prescription medications for mental health disorders should not be ceased without consultation with mental health services regarding any medication regimes. It is also important to ascertain whether the client is taking their mental health medications as prescribed and if there is any poly-substance use.

To ensure a holistic approach to pharmacological interventions, clinicians must consider risk management strategies. They must also complete a thorough assessment, refer to appropriate dual diagnosis specialists, and maintain linkages and supports with community mental health services.

It is essential that care is taken not to over-sedate clients with withdrawal medications due to the possible interactions with mental health medications. Interactivity between commonly prescribed withdrawal medications and those prescribed for mental health disorders can impact dosing regimes. Ongoing pharmacological treatment needs of the client need consideration in discharge planning. The risk of relapse should be included as an area of concern when deciding on the most appropriate discharge medications.

Table 26 provides an overview of the interactivity of commonly prescribed withdrawal medications and medications commonly prescribed for mental health disorders.

# Table 26: Interactions between medication prescribed for substance misuse disorder and medication prescribed for mental health disorder

		Prescribed withdrawal medications				
Medications prescribed for mental health disorders		Methadone	Morphine/ diamorphine	Disulfram	Benzo	Lofexidine
ealth	Amitryptiline		1,7			
al he	Antipsychotics	1	1		1	
enta	Barbituates	1, 2*	1			
E L	Benzo	1,3	1,3	3		3
ed fo	Buprenorphine	1,2**				
ribe	Chloral hydrate	1				
reso	Chlorpromazine		7			
d st	Clomipramine		1			
atior	Fluoxetine	1			1	
dica	SSRIs	1				
Me	Tricyclics	1		3		

(Source: adapted from Trathen 2006)

Table Key:

- 1 Increased effect/toxicity of SM prescription
- 2 Decreased effect of SM prescription
- 3 Increased effect/toxicity of other MH prescription

#### 7 Myoclonus

\*reduced methadone levels but enhanced CNS depression

\*\* can cause either opiate withdrawal or enhanced CNS depression

# 16.9 Planning for post-withdrawal

Post-withdrawal support is an essential component of the treatment continuum for clients with a dual diagnosis.

In addition to the principles documented in section 9.3, this section provides some specific considerations for clients with a dual diagnosis. Planning for post-withdrawal is an essential element of appropriately managing the needs of dual diagnosis clients and it needs to be in place prior to discharge.

The following provides an overview of areas for consideration in postwithdrawal planning, which will vary according to individual need:

- Clients are linked with a primary health care provider such as a GP for medication management
- An integrated care plan with primary health care providers and/or area mental health services is developed, including the provision of a mental health diagnosis post-withdrawal and monitoring of both disorders over time
- Psychosocial issues are identified and appropriate linkages with support services and significant others are in place
- Relapse prevention has been addressed in relation to a client's AOD use as well as their mental health condition. Clients have an awareness of stressors and cues and how to avoid them, what to do if they do find themselves in a problematic situation, and where to find help (including psychiatric triage numbers and telephone counselling)
- Educational material has been provided to clients regarding the effects of AOD on mental health and mental health medications
- Links have been established with post-withdrawal and dual diagnosis support groups/agencies

## 16.10 Resources

A range of resources are available to provide clinicians, clients and families of people with a dual diagnosis with further information and support. They comprise journals, websites and support agencies. Examples include:

### • Families where a Parent has a Mental Illness (FaPMI)

Support and information for families where a parent may have a mental illness and/or substance abuse problems

http://www.health.vic.gov.au/mentalhealth/families/index.htm

### • The Journal of Dual Diagnosis

Providing the latest research in the co-occurrence of mental health and substance use disorders. Available on a subscription basis, in print or online

### • InfoXchange

Information and resources for Victorian community support services

http://www.infoxchange.net.au/news

### • National Cannabis Prevention and Information Centre (NCPIC)

Information and resources for Australian service providers, cannabis users and family members

http://ncpic.org.au/

#### SANE

Advocacy, education and research for people with a mental illness, their families, health professionals and the community

http://www.sane.org/

### • Mental Illness Fellowship Australia (MIFA)

Self-help, support and advocacy group for people with a mental illness, their families and friends

http://esvc000144.wic027u.server-web.com/

#### ARAFMI

Peak support agency for carers of people with a mental illness. Also provides respite care, intensive home-based and outreach support, prevention and recovery care, and education for service providers

http://www.arafemi.org.au/

#### • Association of Participating Service Users (APSU)

Advocacy group for AOD service users

www.apsuonline.org.au

#### • beyondblue

Information, support, training, programs and research related to depression

http://www.beyondblue.org.au

#### • Victorian Dual Diagnosis Initiative (VDDI) support services

#### • Dual Diagnosis Support Victoria

A support network for students, clinicians and health professionals working with people with a dual diagnosis

http://dualdiagnosis.ning.com

#### o Dual Diagnosis Australia and New Zealand

Community website providing information related to dual diagnosis. Maintained by Eastern Hume Dual Diagnosis Service

http://www.dualdiagnosis.org.au/

#### • VDDI Education & Training Unit (State-wide)

T: 03 9288 2383

#### • Metropolitan Lead Agencies

Eastern Dual Diagnosis Team (Blackburn)

T: 03 9875 1600

NEXUS (Fitzroy)

T: 03 9288 3824

Southern Dual Diagnosis Service (Dandenong)

T: 03 8792 2330

SUMITT (Western) (Footscray)

T: 03 8345 6682

Further contact details for metropolitan and regional VDDI units can be found in Appendix 1.

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# **18 APPENDICES**

# Appendix 1: AOD support services

## DirectLine

24-hour counselling and referral for anyone with a question or problem related to alcohol or drug use.

DirectLine is part of Turning Point's statewide telephone service network, providing 24-hour, seven-day counselling, information and referral to alcohol and drug treatment and support services throughout Victoria. Turning Point's professional counsellors are experienced in alcohol and drug-related concerns.

DirectLine counsellors can provide:

- Immediate counselling and support, including crisis intervention
- Support in dealing with the impact of drug use on the family and relationships
- Assistance to develop strategies to deal with an alcohol or drug problem
- Harm minimisation strategies
- Information and referral to treatment and support services across Victoria

DirectLine is a free, anonymous and confidential service.

DirectLine (Victoria) T: 1800888 236 ADIS (Tasmania) T: 1800 811 994 ADIS (Northern Territory) T: 1800 131 350

## Drug and Alcohol Clinical Advisory Service (DACAS)

24-hour specialist telephone consultancy service for alcohol and drug practitioners and health and welfare workers.

DACAS takes calls from doctors, nurses and other health and welfare professionals seeking advice on the clinical management of alcohol and drug issues. DACAS consultants include counsellors, specialist doctors and pharmacists.

DACAS (Victoria) T: 1800 812 804 DACAS (Tasmania) T: 1800 630 093 DACAS (Northern Territory) T: 1800 111 092

## Family Drug Help

The 'listening ear' service responding to families experiencing alcohol and drug-related difficulties.

T: 1300 660 068 (Victoria)

## Quit Victoria

Quit offers a range of direct and indirect resources for people wanting to quit and resources for professionals helping others to quit.

Professionals in the health, education and community service areas can encourage and support smoking cessation. Quit provides information and training to assist them in this role.

T: 03 9663 7777

F: 03 9635 5510

Web queries: webquery@quit.org.au

General queries: query@quit.org.au Quitline: Quitline@quit.org.au

## Syringe Helpline

Information and referral service responding to the problem of discarded injecting equipment.

T; 1800 552 355 (Victoria)

## Women's Alcohol and Drug Service (WADS)

WADS is located at the Royal Women's Hospital, Victoria

T: 03 9344 3631 E: wads@thewomens.org.au

## YSASline

Alcohol and drug assessment and referral service for young people.

YSASline 24-hour telephone service provides information, counselling and referral to YSAS services and youth-specific alcohol and drug services throughout Victoria.

YSASline is open to young people, their families, health and welfare workers, police and ambulance workers, and the wider community.

T: 1800 014 446 (Victoria)

## Victorian Dual Diagnosis Initiative (VDDI) Units

Support network for professionals working in AOD or mental health services with the objective of facilitating building dual diagnosis capacity across Victoria.

VDDI units operate in metropolitan and regional areas.

## VDDI Education & Training Unit (Statewide)

St Vincent's Hospital

Nicholson St, Fitzroy VIC 3065

(PO Box 2900)

T: 03 9288 2383

### Metropolitan Lead Agencies

Eastern Dual Diagnosis Team

Suite 6 60-64 Railway Rd, Blackburn VIC 3130

T: 03 9875 1600

Metropolitan areas: Central East, Outer East Rural areas: Eastern Hume

NEXUS

St Vincent's Hospital

P.O. Box 2900, Fitzroy VIC 3065

T: 03 9288 3824

Metropolitan areas: Yarra, Boroondara, Banyule, Nillumbik Rural areas: Loddon and Northern Mallee

Southern Dual Diagnosis Service c/- SEADS 2/229 Thomas St, Dandenong VIC 3175 T: 03 8792 2330

Metropolitan areas: Port Phillip, Kingston, Bayside, Greater Dandenong, Casey, Cardinia, Mornington Peninsula, Frankston, parts of Monash, Glen Eira, Stonington

Rural areas: Gippsland and La Trobe Valley

SUMITT (Western) 3-7 Eleanor St, Footscray VIC 3011 T: 03 8345 6682 Metropolitan areas: Maribyrnong, Wyndham, Brimbank, Hobsons Bay, Melton, Moonee Valley, Moreland, Hume, Darebin, Melbourne City and Whittlesea Rural areas: Grampians, Barwon, South West and Goulburn Valley VDDI Rural Services Barwon Barwon Health, Drug Treatment Service 40 Little Malop St, Geelong VIC 3220 T: 03 5273 4000 Gippsland Gippsland Dual Diagnosis, Box 424, Traralgon VIC 3844 T: 03 5128 0009 Glenela South West Health Care Lava St (PO Box 197), Warrnambool VIC 3280 T: 03 5561 3813 Goulburn Monash St, Shepparton VIC 3630 T: 03 5832 2111 PO Box 800, Seymour VIC 3660 T: 03 5735 0333 Grampians **Grampians Psychiatric Services** P.O Box 577, Ballarat VIC 3356 T: 03 5320 4100 Loddon Bendigo Health Care Group PO Box 126, Bendigo 3550 VIC T: 03 5454 7608

Eastern Hume Eastern Hume Dual Diagnosis Service Box 1225, Wangaratta VIC 3677 T: 03 5722 2677 www.dualdiagnosis.org.au Northern Mallee

Ramsay Health, Mildura Base Hospital 107 Pine Ave, Mildura 3500 VIC T: 03 5018 7917

# **Appendix 2: Client intoxication**

Patients who use drugs or alcohol often present intoxicated or having overdosed. The correct management of these conditions is an essential part of practice. Intoxication occurs when a person's intake of a substance exceeds his or her tolerance and produces behavioural and/or physical abnormalities. It complicates the assessment and management of patients because:

- psychoactive drugs affect mood, cognition, behaviour and physiological functioning
- intoxication can have a major impact on informed consent to treatment and the validity of all further information reported by the patient
- intoxication can mimic or mask serious illness and injury
- patients who are aggressive or disruptive because they are intoxicated can risk their own safety or the safety of others
- severe intoxication can be life threatening by altering physical and mental functions leading to inappropriate actions or central nervous system depression and death

## Identifying intoxication and overdose

In withdrawal settings, always assess the possibility that the patient is intoxicated. Some serious medical conditions can mimic intoxication. Objective observations should be given more weight than the patient's report.

## Managing intoxication

Assessment is urgent if intoxication is pronounced, and medical assessment is required if intoxication is worsening or affecting breathing, blood pressure or level of consciousness. Identify the most recent drug type, dose and time consumed.

Consider the possibility that underlying illness (e.g. concussion, subdural haematoma, infections, diabetes or electrolyte disturbances) may be the cause of apparent intoxication.

Check for possible head injury if the patient is incoherent, disoriented or drowsy.

Monitor the airway if breathing is affected or consciousness is impaired, as death may occur from respiratory depression or aspiration pneumonia.

Keep intoxicated patients under observation until their intoxication diminishes and they are considered safe.

If the intoxication does not diminish, assess the patient for other possible causes of the condition.

## Managing suspected overdose

Monitor signs of intoxication to identify possible overdose (i.e., intoxication to the point of loss of consciousness) on the patient's arrival and then as frequently as the patient's state requires (usually 1–4 hourly). The Glasgow Coma Scale plus vital signs provide the best method of assessment.

Indications of intoxication	Indications of overdose
Maladaptive behaviour	In order of progressive impairment:
Evidence of intoxication by history and physical examination	<ul> <li>increasing agitation</li> <li>cold and clammy skin</li> </ul>
Blood alcohol level by breath analysis. Saliva, urine or blood testing for alcohol and other drugs	<ul> <li>pinpoint pupils (opioids)</li> <li>changing mental state</li> </ul>
Behavioural and physical signs:	(hallucinations, panic or deep depression)
Alcohol: loss of control of voluntary movements, slurred speech, disinhibition, low blood pressure, smells of alcohol	<ul> <li>changes to heart rate (e.g, irregular, below 60/min, or above 120/min)</li> </ul>
Benzodiazepines: slurred speech, loss of control of voluntary movements, sedation, nystagmus (repetitive eye movement), low blood pressure,	<ul><li>lowered body temperature</li><li>slow and noisy respiration</li></ul>
drooling, disinhibition	muscle twitching
Opioids: pinpoint pupils, sedation, low blood pressure, slowed pulse, itching and scratching	• cyanosis
GHB: rapid onset of drowsiness, disinhibition,	pulmonary oedema
dizziness, nausea, muscle spasms, movement and speech impairment	• stupor
	convulsions

## ALCOHOL AND OTHER DRUG WITHDRAWAL: PRACTICE GUIDELINES

Turning Point Alcohol and Drug Centre Inc.

Indications of intoxication	Indications of overdose
<i>Cannabis:</i> increased pulse, confusion, restlessness, excitement, hallucinations, anxious or panicky, disconnected from reality, paranoia, violent or suicidal behaviour <i>Psychostimulants (amphetamines, cocaine and ecstasy):</i> Increased confidence, excitement,	coma. People with decreased levels of consciousness require:     urgent medical assessment     management in a medical     setting
euphoria, anxiety, agitation, speech, hypervigilance, increased body temperature and blood pressure, dry mouth, paranoia, psychotic features <i>LSD:</i> anxiety, fear, frightening hallucinations,	<ul> <li>monitoring of vital signs and neurological</li> <li>function</li> <li>examination and support of</li> </ul>
panic, feeling of loss of control, going mad, paranoia, violent or suicidal behaviour Magic mushrooms (psilocybin): Similar to LSD	airway, breathing and circulation.
<i>PCP</i> : similar to LSD, with euphoria, numbness, psychosis, aggression	
Ketamine: thought disorder, hallucinations, perceptual distortion, anxiety, agitation, tachycardia, hypertension, analgesia and sensory dissociation	

Source: NSW Department of Health (2008a) NSW Drug and Alcohol Withdrawal Clinical Practice Guidelines.

Appendix 3: One wee	k consumption calendar
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Drug type	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
А	L 100g	L 20g	L 200g	L10g	L150g	L 150g	L 150g
Т	H 40 cigs/day Nicotine =40x8 = 320 mg	H 320 mg	H 240 mg	Н			

Drug type	Route	Amount
A = alcohol	L = oral	g = grams
B = benzodiazepines	N = anal mg	mg = milligrams
O = opioids	I = injecting	\$ = amount spent
M = amphetamines	H = inhalation	F = number of injections
T = tobacco	S = subcutaneous	

Source: Frank, L., & Pead, J. (1995). New Concepts in Drug Withdrawal: A Resource Handbook.

# Appendix 4: Mental health screening tools

## PsyCheck

Introduction, guides for use and training materials: http://www.psycheck.org.au/download.html

Tool:

http://www.turningpoint.org.au/library/psycheck/RESOURCES/SCREENING \_TOOL\_FORM/Screening%20Tool\_A4.pdf

# Kessler 10 (K10)

Online scoring tool:

http://www.beyondblue.org.au/index.aspx?link\_id=1.237

Tool:

http://www.health.vic.gov.au/pcps/downloads/coordination/tool\_profile\_psych osocial\_may02.pdf or www.mhnocc.org/amhocn/Kessler\_10\_Manual.pdf

# Modified Mini Screen (MMS)

Tool: http://www.oasas.state.ny.us/hps/research/documents/MMSTool.pdf

# Mental Health Screening Form MHSF3

Tool:

http://pathwayscourses.samhsa.gov/bully/pdfs\_bully/bully\_supps\_pg40.pdf

# Appendix 5: Coping and relaxation techniques

## **Relaxation practice 1 – slow breathing**

This type of breathing uses your diaphragm rather than your chest. Your diaphragm is a membrane located across the abdomen, just underneath your ribcage. It serves as a kind of plunger to move air in and out of the lungs. When you are relaxed, your diaphragm is doing most of the work in breathing, while your chest should remain relatively still and shouldn't move much at all.

**Step 1:** Sit comfortably in a chair with your head, back and arms supported. Uncross your legs and close your eyes if that feels comfortable.

**Step 2:** Put one hand flat on your chest and the other hand over your stomach between the ribs and the navel. Remember that you want your bottom hand – the one on your stomach – to move during this exercise, but not the hand on your chest.

**Step 3:** Take a breath in and hold it as you count to 10. Don't make this a really deep breath. Just breathe in normally, using your diaphragm, and hold it in for a count of 10.

**Step 4**: When you get to 10, breathe out and mentally say the word 'relax' to yourself in a calm, soothing manner.

**Step 5:** Practise breathing in and out slowly in a 6-second cycle. Breathe in for 3 seconds and out for 3 seconds (in–2–3, out–2–3). As you breathe in, use your diaphragm as opposed to your chest. Your hand on your chest should remain relatively still. Every time you breathe out, mentally say the word 'relax' to yourself in a calm manner.

**Step 6:** After every 10 breaths in and out, hold your breath again for 10 seconds and then continue breathing in the 6-second cycle (in-2-3, out-2-3).

Each time you breathe in imagine you are filling your stomach with air. Picture your stomach as a balloon that you are inflating with each in-breath and deflating with each out-breath. Observe your hands as you breathe. If you are relaxed, the hand over your abdomen should be moving more than the hand over your chest. There is no need to slow down the rate of your

breathing – this will happen naturally as you become relaxed. Try to breathe in through your nose and out through your mouth. Continue this process until any symptoms of anxiety, stress, tension or anger are gone. Monitor your slow breathing relaxation practice during the week using the relaxation practice log.

Source: Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 14: Methamphetamine dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

Available at www.turningpoint.org.au/library/cg\_14.pdf

## Relaxation practice 2 – progressive muscle relaxation

**Step 1, Learn to relax:** Close your eyes. Remember to 'relax' as you move your body into a relaxed position. Make sure you are in a comfortable position with your eyes closed.

**Step 2, Hands and arms:** Imagine that you are squeezing a lemon with your left hand. Squeeze it really hard so all the juice runs out. Hold it for five seconds really tight. Now, RELAX. Notice what it feels like as your hand relaxes. Do the same thing with your right hand.

**Step 3, Arms and shoulders:** Imagine that you are like a cat stretching after lying in the sun. Stretch your arms high above your head. Reach as far as you can. Hold it for a few seconds. Now RELAX. Notice what your arms feel like when they are completely relaxed.

**Step 4, Shoulders and neck:** Imagine you are a turtle and you see someone coming. Try to push your head back down into your shell so that you can hide. Push your head down. Hold it for five seconds. Now RELAX. Let the tightness in your neck go completely.

**Step 5, Jaw:** Imagine you have a nut in your mouth and you are trying to crush it with your teeth. Bite down on it and try to break it. Hold it for five seconds. Now RELAX. Notice how good it feels to let your jaw relax completely.

**Step 6: Face and nose:** Imagine a fly has landed right on the tip of your nose but you can't use your hand to shoo it away. Wrinkle your nose up to try and get rid of the fly. Now RELAX. Notice how good it feels to have a relaxed face. Now the fly has come back and it has landed on your forehead. Wrinkle your forehead up as much as you can to try and get the fly to go away. Now RELAX. Notice how good your forehead feels when it is not wrinkled and tense.

**Step 7, Stomach:** Imagine someone is about to jump on your stomach. Try and make your stomach as hard as you can so that someone standing on it won't hurt. Hold it for five seconds. Now RELAX. Notice how much better your stomach feels when it is completely relaxed and floppy. Now imagine that you have to squeeze through a narrow gap in the fence. Suck in your stomach and make it really skinny so that you can fit through. Now RELAX. Let your stomach go completely relaxed.

**Step 8, Legs and feet:** Imagine that you are walking at the beach down where the sand is wet and squishy. Squish your toes down as far as you can in the sand. Keep squishing for five seconds. Now RELAX. Notice how different your legs and feet feel.

Monitor your progressive muscle relaxation practice during the week using the Relaxation practice log.

Source: Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 14: Methamphetamine dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

Also available at www.turningpoint.org.au/library/cg\_14.pdf

## **Relaxation practice 3 – mindful walking**

Mindful walking is a way of stepping out of 'automatic pilot' and can help you to practise paying attention to the present.

**Step 1:** Stand at one end of your walk, keeping your feet pointed forward and eyes straight ahead.

**Step 2:** Start slowly at first and, as best you can, pay attention to the way your feet and legs feel when you take each step forward.

**Step 3:** Start with the left foot and follow with the right.

**Step 4:** Slowly move from one end of your walk to the other, aware of the particular sensations in the bottoms of your feet and heels as they make contact with the floor, and the muscles in your legs as they swing forward.

**Step 5:** Continue this process up and down the length of your walk for about 10 minutes.

**Step 6:** Your mind will wander away from this activity during your 10 minutes of practice. This is normal. As best you can when you notice this has happened, gently re-focus your attention on your feet and legs and how they feel when they contact with the floor.

Once you have mastered the basic steps of mindful walking, you may like to look for books or groups that can teach you more advanced techniques. Mindfulness has been developed by Buddhist practitioners and many groups conduct courses.

Monitor your progressive muscle relaxation practice during the week using the Relaxation practice log.

Source: Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 14: Methamphetamine dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

Available at www.turningpoint.org.au/library/cg\_14.pdf

## Relaxation practice 4 – imagery

## Imagery/Visualisation

Here is a copy of the imagery activity completed during your session. You may like to record this on a tape and listen to it during your relaxation practice.

**Step 1:** Sit comfortably in a chair with your head, arms and back supported. Close your eyes and take a few deep breaths. When you're ready, clear your mind of thoughts and images as if it is a blank computer screen.

**Step 2:** Think of a place where you feel relaxed and safe. It could be a place you've been in the past or a place you can imagine being relaxed. When you think of a place, imagine it in as much detail as you can.

**Step 3:** Ask yourself the following questions about your relaxed and safe place:

- Is it night or day?
- What can you see around you?
- Are you alone or with someone else?
- What can you hear?
- Is there any characteristic smell of this place?
- What can you feel with your fingertips and on the surface of your skin?

**Step 4:** Stay in your relaxing place and tune in to your body sensations. Ask yourself the following questions:

- What do you notice about your muscles?
- Are they tense or loose?
- What about your heart rate?
- And your breathing rate?
- Do you feel relatively warm or cool?
- Do you notice anything else about your body?

**Step 5:** Stay in this relaxed place for a few minutes, giving you time to just continue breathing and being in a state of relaxation. Remember this relaxed state so that you can enter it again later when you need to.

**Step 6:** Slowly clear your mind of images and thoughts again and bring your awareness back to the here and now. Turn your attention to the sounds in the room and perhaps outside the room. Stretch your arms and legs and yawn if you want to. When you are ready, slowly open your eyes.

Source: Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 14: Methamphetamine dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

Available at www.turningpoint.org.au/library/cg\_14.pdf

Relaxation pract	ice lo	g					
Tension/craving level AFTER relaxation 1 = not at all tense 10 = most tense							
Tension/craving level BEFORE relaxation 1 = not at all tense 10 = most tense							
Minutes spent on relaxation practice							
Type of relaxation SB = slow breathing PMR = muscle relaxation MW = mindful walking I = imagery							
	Mon	Tue	Wed	Thu	Fri	Sat	Sun

Source: Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 14: Methamphetamine dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

Available at www.turningpoint.org.au/library/cg\_14.pdf

## Better sleep checklist

- Go to sleep as soon as you feel tired. Sleep cycles cause people to feel tired approximately every 90 minutes if you ignore the cues, you may have to wait for another 90 minutes.
- Set an alarm to wake you at the same time each morning, even on weekends and holidays. This helps your body to get into a regular sleep-wake routine.
- Use the bed only for sleeping and for sex. Reading, thinking and eating in bed can lead people to associate bed with activity and stress.
- Get out of bed when you can't sleep after trying for 30 minutes and go back to bed as soon as you feel tired. Do something enjoyable when you get up (e.g. watching television or reading a book).
- Make sure that it is a quiet and relaxing activity, not one that will stimulate your brain too much!
- Do not watch the clock if you're lying awake. Worrying that you're not sleeping keeps your mind active and prevents you from actually getting to sleep.
- Write your problems on a piece of paper before going to bed then throw the paper out or put it aside to tackle in the morning. Say to yourself: 'There's nothing I can do about this tonight'.
- Avoid consuming caffeine (tea, coffee, cola drinks, chocolate) after mid-afternoon.
- Avoid drinking alcohol at dinnertime or afterwards. Although alcohol can induce sleep, it causes you to become wakeful (rebound insomnia) several hours after drinking it. Alcohol also interferes with the energy-restoring benefits of good sleep.
- Practise relaxation before going to bed. This helps to calm your body and mind and promotes entry into sleep.
- Sleep with a minimum of covers so that you do not overheat. Turn off heaters and electric blankets, and keep a window open. Overheating causes restlessness and a lack of deep sleep.

Source: Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). *Clinical Treatment Guidelines for Alcohol and Drug Clinicians. No 14: Methamphetamine dependence and treatment.* Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.

# Appendix 6: Alcohol Withdrawal Assessment Scoring Tool & Guidelines (CIWA-Ar)

A googgement Duots1	D.	to	1	T	r	r	r	r		r		r	
Assessment Protocol a. Vitals, Assessment Now,	Da												
<ul> <li>a. Vitais, Assessment Now.</li> <li>b. If initial score ≥ 8 repeat q1h</li> </ul>	x 8 hrs. then Ti	ne											
if stable q2h x 8 hrs, then if s		lse											
c. If initial score < 8, assess q4h		R											
If score $< 8$ for 72 hrs, d/c as	sessment.		-										
If score ≥ 8 at any time, go to d. If indicated, (see indications		at											
administer prn medications a		BP											
record on MAR and below.													
Assess and rate each of the follow		Refer	to reverse	for detail	ed instruc	tions in us	se of the C	IWA-Ar s	scale.	r	1	r	
Nausea/vomiting (0 - 7) 0 - none; 1 - mild nausea, no vomiting													
7 - constant nausea, frequent dry he													
Tremors (0-7)	C.												
0 - no tremor, 1 - not visible but can		5											
extended; 7 - severe, even w/ arms m	not extended.												
<b>Anxiety</b> (0 - 7)	4												
<li>0 - none, at ease; 1 - mildly anxious guarded; 7 - equivalent to acute pan</li>													
Agitation (0 - 7)					l	l	l	l		l		l	
0 - normal activity; 1 - somewhat no	ormal activity; 4 - moderately												
fidgety/restless; 7 - paces or constan			-										
Paroxysmal Sweats (0 - 0 - no sweats; 1 - barely perceptib			1	1									
4 - beads of sweat obvious on forehe	ead; 7 - drenching sweat												
Orientation (0 - 4)													
0 - oriented; 1 - uncertain about date	e; 2 - disoriented to date by n	с											
more than 2 days; 3 - disoriented to 4 - disoriented to place and / or per	date by > 2 days; son												
Tactile Disturbances (0													
0 - none; 1 - very mild itch, P&N, ,n													
burning, numbness; 3 - moderate ito 4 - moderate hallucinations; 5 - sew		i;											
6 – extremely severe hallucinations		IS											
Auditory Disturbances	(0 - 7)												
0 - not present; 1 - very mild harshn		l											
harshness, ability to startle; 3 - mode startle; 4 - moderate hallucinations;	erate harshness, ability to 5 severe ballucinations:												
<li>6 - extremely severe hallucinations;</li>													
Visual Disturbances (0 -													
0 - not present; 1 - very mild sensi	tivity; 2 - mild sensitivity	;											
	erate hallucinations; 5 - sev vere hallucinations; 7 -	ere											
continuous hallucinations	vec minematoris, 7 =												
Headache (0 - 7)													
0 - not present; 1 - very mild; 2 - mi severe; 5 - severe; 6 - very severe; 7	kl; 3 - moderate; 4 - moderat	ely											
Total CIWA-Ar score:	- cauchiery severe												
Total CIWA-Ar score:													
PRN Med: (circle one)	Dose given (m												
Diazepam Lorazepam	Rou			ļ									
Time of PRN medic	ation administration	:											
Assessment of response (	CIWA-Ar score 30	60	-	1									
minutes after medication		00											
RN Initials	uummistereu)			1									
ixi y filituais			1	1	l	l				1		1	

## Procedure:

Assess and rate each of the 10 criteria of the CIWA scale. Each criterion is rated on a scale from 0 to 7, except for 'orientation and clouding of sensorium' which is rated on scale 0 to 4. Add up the scores for all ten criteria. This is the total CIWA-Ar score for the patient at that time. Prophylactic medication should be started for any patient with a total CIWA-Ar score of 8 or greater (i.e. start on withdrawal medication). If started on scheduled medication, additional PRN medication should be given for a total CIWA-Ar score of 15 or greater.

Document vitals and CIWA-Ar assessment on the Withdrawal Assessment Sheet. Document administration of PRN medications on the assessment sheet as well.

The CIWA-Ar scale is the most sensitive tool for assessment of the patient experiencing alcohol withdrawal. Nursing assessment is vitally important. Early intervention for CIWA-Ar score of 8 or greater provides the best means to prevent the progression of withdrawal.

Source: www.chce.research.va.gov/apps/PAWS/pdfs/CIWA-Ar.pdf

## Guidelines

Ouldennes	
Nausea/Vomiting - Rate on scale	<u><b>Tremors</b></u> have patient extend arms & spread fingers. Rate on scale $0 - 7$
0 - None	0 - No tremor
<ol> <li>1 - Mild nausea with no vomiting</li> <li>2</li> <li>3</li> <li>4 - Intermittent nausea</li> <li>5</li> <li>6</li> </ol>	<ol> <li>Not visible, but can be felt fingertip to fingertip</li> <li>3</li> <li>4 - Moderate, with patient's arms extended</li> <li>5</li> <li>6</li> </ol>
7 - Constant nausea and frequent dry heaves and vomiting	7 - severe, even w/ arms not extended

Continued over page

Anxiety - Rate on scale 0 – 7 Agitation - Rate on scale 0 – 7 0 - no anxiety, patient at ease 0 - normal activity 1 - somewhat normal activity 1 - mildly anxious 2 2 3 3 4 - moderately anxious or guarded, 4 - moderately fidgety and restless so anxiety is inferred 5 5 6 6 7 - equivalent to acute panic states 7 paces back and forth, or seen in severe delirium or acute constantly thrashes about schizophrenic reactions.

Paroxysmal Sweats	Orientation and clouding of
Rate on Scale 0 – 7	sensorium
	Ask, 'What day is this? Where are
	you? Who am I?"
0 and anneate	Rate scale 0 – 4
0 - no sweats 1- barely perceptible sweating.	0 – Oriented
<ol> <li>barely perceptible sweating, palms moist</li> </ol>	0 – Onenteu
2	1 – cannot do serial additions or is
3	uncertain about date
0	
4 - beads of sweat obvious on	2 - disoriented to date by no more
forehead	than 2 calendar days
5	
6	3 - disoriented to date by more than 2
	calendar days
7 - drenching sweats	4 - Disoriented to place and/or person

Continued over page

#### ALCOHOL AND OTHER DRUG WITHDRAWAL: PRACTICE GUIDELINES

Turning Point Alcohol and Drug Centre Inc.

burning or numbness, or a feeling of bugs crawling on or under your skin?'	around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn't there?
0 – none	0 - not present
1 - very mild itching, pins & needles, burning, or numbness	1 - Very mild harshness or ability to startle
2 - mild itching, pins & needles, burning, or numbness	2 - mild harshness or ability to startle
<ul> <li>3 - moderate itching, pins &amp; needles, burning, or numbness</li> <li>4 - moderate hallucinations</li> </ul>	<ul> <li>3 - moderate harshness or ability to startle</li> <li>4 - moderate hallucinations</li> </ul>
4 - moderate nanucinations 5 - severe hallucinations	5 - severe hallucinations
6 - extremely severe hallucinations	6 - extremely severe hallucinations
7 - continuous hallucinations	7 - continuous hallucinations

#### Visual disturbances

Ask, 'Does the light appear to be too bright? Is its colour different than normal? Does it hurt your eyes? Are you seeing anything that disturbs you or that you know isn't there?'

- 0 not present
- 1 very mild sensitivity
- 2 mild sensitivity
- 3 moderate sensitivity
- 4 moderate hallucinations
- 5 severe hallucinations
- 6 extremely severe hallucinations
- 7 continuous hallucinations

#### <u>Headache</u>

Ask, 'Does your head feel different than usual? Does it feel like there is a band

around your head?' Do not rate dizziness or light headedness.

- 0 not present
- 1 very mild
- 2 mild
- 3 moderate
- 4 moderately severe
- 5 severe
- 6 very severe
- 7 extremely severe

# Appendix 7: The Subjective Opiate Withdrawal Scale (SOWS)

Date \_\_\_\_\_

Time \_\_\_\_\_\_dd

		Please score each of the 16 items below according to how you feel <u>now</u> (Circle one number)							
	Symptoms	Not at all	A little	Moderately	Quite a bit	Extremely			
1	I feel anxious	0	1	2	3	4			
2	l feel like yawning	0	1	2	3	4			
3	l am perspiring	0	1	2	3	4			
4	My eyes are teary	0	1	2	3	4			
5	My nose is running	0	1	2	3	4			
6	l have goosebumps	0	1	2	3	4			
7	I am shaking	0	1	2	3	4			
8	l have hot flushes	0	1	2	3	4			
9	l have cold flushes	0	1	2	3	4			
10	My bones and muscles ache	0	1	2	3	4			
11	I feel restless	0	1	2	3	4			

		Please score each of the 16 items below according to how you feel <u>now</u> (Circle one number)						
	Symptoms	Not at all	A little	Moderately	Quite a bit	Extremely		
12	I feel nauseous	0	1	2	3	4		
13	l feel like vomiting	0	1	2	3	4		
14	My muscles twitch	0	1	2	3	4		
15	I have stomach cramps	0	1	2	3	4		
16	I feel like using now	0	1	2	3	4		
Rang	Range 0–64							

Source: Handelsman, L., Cochrane, K. J., Aronson, M. J. et al. (1987) Two New Rating Scales for Opiate Withdrawal, *American Journal of Alcohol Abuse*, 13, 293–308.

# Appendix 8: Benzodiazepine Withdrawal Assessment Scale (BWAS)

Vital signs to be taken daily—otherwise at the discretion of clinical staff.

**Note:** Total score is indicative of increasing or decreasing severity of withdrawal. Scores are not directly linked to pharmacological management as occurs with alcohol scores based on the CIWA-Ar.

Name: \_\_\_\_\_

UR:

Date					
Time					
Blood pressure					
Temperature					
Pulse					
Respiration rate					

Benzodiazepine assessment score—Range 0, 1, 4 or 7 (see next page)

Anxiety					
Restlessness/agitation					
Palpitations					
Headache					
Concentration					
Appetite					
TOTAL					

Sleep (0700) Staff observation					
Sleep (0800) Client observation					
Other symptoms					

These questions refer to how the person is feeling **right now**, at the present moment.

Anxiety	Ask: 'Do you feel nervous?'	<ul> <li>0 No anxiety—at ease</li> <li>1 Mild</li> <li>4 Moderately anxious or guarded so anxiety is inferred</li> <li>7 Equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions</li> </ul>
Restlessness/ Agitation	Ask 'Do you feel more restless or agitated than you are normally?	<ol> <li>Normal activity</li> <li>Somewhat more than normal activity</li> <li>Moderately fidgety or restless</li> <li>Unable to sit or stand still</li> </ol>
Palpitations	Ask 'Are you aware of your heart racing in your chest?'	<ol> <li>No palpitations</li> <li>Mild palpitations</li> <li>Moderate awareness of heartbeat</li> <li>Aware of heart racing constantly</li> </ol>

Headache	Ask 'Do you have a headache or feeling of fullness in the head?'	<ol> <li>No headache</li> <li>Mild</li> <li>Moderate</li> <li>Severe</li> </ol>
Concentration	Ask 'Do you have any difficulty concentrating?'	<ol> <li>No difficulty concentrating</li> <li>Mild</li> <li>Moderate</li> <li>Severe</li> </ol>
Appetite	Ask 'Have you noticed any change in your appetite?'	<ol> <li>No loss of appetite</li> <li>Slight loss</li> <li>Moderate loss</li> <li>Complete loss of appetite, unable to eat at all</li> </ol>
Sleep (0800 observations only—not to be included in total score)	Ask 'How did you sleep last night?'	<ol> <li>Sufficient sleep</li> <li>Some sleep</li> <li>Moderately/restless sleep</li> <li>No sleep</li> </ol>

Source: DeCrespigny, C et al. (2003) *Alcohol Tobacco and Other Drugs Guidelines for Nurses and Midwives: Clinical Guidelines.* Flinders University and Drug and Alcohol Services Council Adelaide.

Also available at www.dassa.sa.gov.au

# Appendix 9: Clinical Institute Withdrawal Assessment Scale - Benzodiazepines

Guide to the Use of the Clinical Withdrawal Assessment Scale for Benzodiazepines

## Person Report:

For each of the following items, circle the number that best describes how you feel.

Do you feel irritable?	0	1	2	3	4
Do you leer limable?	· ·	1	2	5	·
	Not at all				Very much so
Do you feel fatigued?	0	1	2	3	4
	Not at all				Unable to function
Do you feel tense?	0	1	2	3	4
	Not at all				Very much so
Do you have difficulties	0	1	2	3	4
concentrating?	Not at all				Unable to concentrate
Do you have any loss of	0	1	2	3	4
appetite?	Not at all				No appetite, unable to eat
Have you any numbness or	0	1	2	3	4
burning on your face, hands or feet?	No numbness				Intense burning/numbness
Do you feel your heart racing?	0	1	2	3	4
(palpitations)	No disturbance				Constant racing
Does your head feel full or	0	1	2	3	4
achy?	Not at all				Severe headache

Do you feel muscle aches or stiffness?	0	1	2	3	4
	Not at all				Severe stiffness or pain
Do you feel anxious, nervous	0	1	2	3	4
or jittery?	Not at all				Very much so
Do you feel upset?	0	1	2	3	4
	Not at all				Very much so
How restful was your sleep	0	1	2	3	4
last night?	Very restful				Not at all
Do you feel weak?	0	1	2	3	4
	Not at all				Very much so
Do you think you didn't have	0	1	2	3	4
enough sleep last night?	Very much so				Not at all
Do you have any visual	0	1	2	3	4
disturbances? (sensitivity to light, blurred vision)	Not at all				Very sensitive to light, blurred vision
Are you fearful?	0	1	2	3	4
	Not at all				Very much so
Have you been worrying	0	1	2	3	4
about possible misfortunes lately?	Not at all				Very much so

#### **Clinician Observations**

for res	oserve behaviour sweating, stlessness and itation	O	oserve tremor	Observe feel palms			
0	None, normal activity	0	No tremor	0	No sweating visible		
1		1	Not visible, can be felt in fingers	1	Barely perceptible sweating, palms moist		
2	Restless	2	Visible but mild	2	Palms and forehead moist, reports armpit sweating		
3		3	Moderate with arms extended	3	Beads of sweat on forehead		
4	Paces back and forth, unable to sit still	4	Severe, with arms not extended	4	Severe drenching sweats		

Total Score Items 1 - 20

- 1-20 = mild withdrawal
- 41-60 = severe withdrawal
- 21-40 =moderate withdrawal
- 61-80 = very severe withdrawal

Source: Adapted from Busto, U.E., Sykora, K. & Sellers, E.M. (1989). A clinical scale to assess benzodiazepine withdrawal. *Journal of Clinical Psychopharmacology*, 9 (6), 412–416.

## Benzodiazepine withdrawal scale (CIWA-B)

UR:											
Name:											
Address:											
DOB:											
Last Benzodiazepine use: Date:/											
	DATE										
	TIME										
BLOOD PRESSUR	E										
PULSE											
TEMPERA	TURE per axilla										
RESPIRAT	TIONS										
CONSCIOUS- ENESS	1 Alert,obeys,oriented 2 Confused, responds to speech 3 Stuporous, responds to pain 4 Semi-comatose 5 Comatose										
+ reacts no reaction	SIZE (in mm)										
B brisk S sluggish	REACTION										
MEDICATIC GIVEN?	)N		-	-				-		-	
NURSE INIT	TIALS								_		
• • 1 2	• • • • • • • • • • • • • • • • • • •	6	• 7	8	Scale	in mm					

Source: Queensland Health (2002) Protocols for detoxification: General Practice and Community Settings. Queensland Government.

# Appendix 10: Amphetamine Withdrawal Questionnaire

#### During the past 24 hours:

(Circle one answer per question)

1	Have you been craving amphetamine or methamphetamine?	Not at all	Very little	A little	Quite a lot	Very much
2	Have you felt sad?	Not at all	Very little	A little	Quite a lot	Very much
3	Have you lost interest in things or no longer take pleasure in them?	Not at all	Very little	A little	Quite a lot	Very much
4	Have you felt anxious?	Not at all	Very little	A little	Quite a lot	Very much
5	Have you felt as if your movements are slow?	Not at all	Very little	A little	Quite a lot	Very much
6	Have you felt agitated?	Not at all	Very little	A little	Quite a lot	Very much
7	Have you felt tired?	Not at all	Very little	A little	Quite a lot	Very much
8	Has your appetite increased or are you eating too much?	Not at all	Very little	A little	Quite a lot	Very much
9	Have you had any vivid or unpleasant dreams?	Not at all	Very little	A little	Quite a lot	Very much
10	Have you been craving for sleep or sleeping too much?	Not at all	Very little	A little	Quite a lot	Very much

#### Scoring

Not at all = 0 Very little = 1 A little = 2Quite a lot = 3 Very much = 4

Possible range of scores is 0-40 with higher score indicating greater severity.

Source: Srisurapanont M, Jarusuraisin N & Jittiwutikarn J (1999) Amphetamine withdrawal: Reliability, validity and factor structure of a measure. *Australian and New Zealand Journal of Psychiatry* 33:89–93.

# Appendix 11: Cannabis Withdrawal Assessment Scale

**Note:** Total score is indicative of increasing or decreasing severity of withdrawal. Scores are not directly linked to pharmacological management as occurs with alcohol scores based on the CIWA-Ar.

Name: \_\_\_\_\_

DOB: \_\_\_\_\_

Date					
Time					
Temperature					
Pulse					
Respiration rate					
Blood pressure					
Pupil size					
Reaction					
Weight					

Continued over page

## Score range = 0–7

Restlessness/agitation					
Palpitations					
Racing thoughts					
Headache					
Feelings of unreality					
Fear					
Drowsiness					
Hunger					
Appetite					
TOTAL					
Sleep (0800 obs only)					
Other symptoms					

Continued over page

These questions refer to how the person is feeling **right now**, at the present moment.

Restlessness/Agitation	Ask 'Do you feel more restless than you are normally?'	<ol> <li>Normal activity</li> <li>Somewhat more than normal activity</li> <li>Moderately fidgety or restless</li> <li>Unable to sit or stand still</li> </ol>
Racing thoughts	Ask 'Are your thoughts racing?'	<ol> <li>No racing thoughts</li> <li>Mild</li> <li>Moderate</li> <li>Severe</li> </ol>
Mood changes— Observation	Ask 'Are your moods changing over a short period (hours)?'	<ol> <li>No mood changes, feels stable</li> <li>Mild</li> <li>Moderate</li> <li>Severe</li> </ol>
Feelings of unreality	Ask 'Do you feel that things around you are not real or change in shape?'	0 No 1 Mild 4 Moderate 7 Severe feelings of unreality, everything looks strange or different
Fear	Ask 'Do you feel fearful?'	<ol> <li>No fear</li> <li>Mildly fearful</li> <li>Moderately fearful</li> <li>Extremely fearful</li> </ol>

Drowsiness— Observation	Ask 'Do you feel sleepy or drowsy?'	<ol> <li>No drowsiness</li> <li>Mild</li> <li>Moderate</li> <li>Severe, unable to stay awake</li> </ol>
Hunger	Ask 'Do you feel hungry?'	<ol> <li>No hunger</li> <li>Mild</li> <li>Moderate</li> <li>Severe and constant feelings of hunger</li> </ol>
Appetite	Ask 'Have you noticed any change in your appetite?'	<ol> <li>No loss of appetite</li> <li>Slight loss</li> <li>Moderate</li> <li>Complete loss of appetite, unable to eat at all</li> </ol>
Sleep	Ask 'How did you sleep last night?'	<ol> <li>Sufficient sleep</li> <li>Some sleep</li> <li>Moderate/restless sleep</li> <li>No sleep</li> </ol>

Source: DeCrespigny, C et al. (2003) Alcohol Tobacco and Other Drugs Guidelines for Nurses *and Midwives: Clinical Guidelines*. Flinders University and Drug and Alcohol Services Council, Adelaide.

Available at www.dassa.sa.gov.au/webdata/resources/files/ATOD\_Clinical\_Guidelines-book2.pdf

# Appendix 12: Fagerström Nicotine Dependence Scale

Question	Answer	Score
1. How soon after waking up do you smoke	Within 5 minutes	3
your first cigarette?	6–30 minutes	2
	31–60 minutes	1
2. Do you find it difficult to abstain from	Yes	1
smoking in places where it is forbidden?	No	0
3. Which cigarette would you hate to give up?	The first one in the morning	1
	Any other	0
4. How many cigarettes a day do you smoke?	10 or less	0
	11–20	1
	21–30	2
	31 or more	3
5. Do you smoke more frequently in the	Yes	1
morning than in the rest of the day	No	0
6. Do you smoke even though you are sick in	Yes	1
bed for most of the day?	No	0
	Total	
Score	very low dependence	0–2
	low dependence	3–4
	medium dependence	5
	high dependence	6–7
	very high dependence	8+

Source: Fagerstrom KO, Heatherton TF, Kozlowski LT. (1990) Nicotine addiction and its assessment. *Ear, Nose and Throat Journal*, 89(11), p.763–765.



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