Alcohol Treatment Guidelines for Indigenous Australians

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Contents

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Preface

Rationale for using the term Indigenous Australians

Aboriginal and Torres Strait Islander peoples have diverse languages, cultures and communities, and live in urban, rural and remote settings. Many of these groups seek to maintain their particular cultural identity and preferred names as distinct from others. For the purposes of this resource, and in recognition of this diversity we have chosen the term Indigenous Australians as a way of acknowledging all Australian Aboriginal and Torres Strait Islander groups. We are however aware that this terminology has limitations and ask readers to respectfully use locally preferred terms in their practice.

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PART I: INTRODUCTION

1. BACKGROUND

The 2004 National Drug Strategy Household Survey indicates that about nine out of every 10 Australians, aged 14 years and over, have tried alcohol at some time in their lives, with 84 per cent reporting drinking alcohol in the 12 months leading up to the time of the survey.[1] There is evidence that the majority of Australians who drink alcohol do so at risky levels, such as to intoxication.

People who drink at risky and high-risk levels are at serious risk of short- and long-term health problems and/or premature death.[2] Alcohol-related health effects include injuries, overdose, drowning, and serious conditions including cirrhosis of the liver, pancreatitis, heart disease, kidney disease, blood disorders, brain damage and various cancers.[3]

A significant number of drinkers are also temporarily or permanently disabled from alcohol-related illnesses, injury or attempted suicide.[4] The consequences of alcohol-related harm therefore impact greatly on the financial, social, intellectual, cultural and spiritual wellbeing of individuals, families and communities.[5]

Several surveys have shown that, while Indigenous Australians are less likely than non-Indigenous Australians to consume alcohol, those that do are more likely to drink at risky and high-risk levels.[6] Indigenous Australians are thus more likely to experience the adverse effects of alcohol consumption than their non-Indigenous counterparts – with commensurately higher levels of associated health and social problems within the Indigenous community.

- Between 2000 and 2004 an estimated 1,145 Indigenous Australians died from alcohol-related injury and disease.[7] The average age of death was about 35 years. Indigenous men died from alcohol-related causes at seven times the rate of non-Indigenous men. Women died from causes related to alcohol use at 10 times the rate of non-Indigenous women. Most (210 out of 323 deaths) were due to cirrhosis of the liver.

- Indigenous men were hospitalised for diagnoses related to alcohol use at five times the rate of other men, and Indigenous women were hospitalised for alcohol-related conditions at four times the rate of other women. Three-quarters of these hospitalisations had a principal diagnosis of mental and behavioural disorders due to alcohol use, the most common of which was acute intoxication.[8]

The higher levels of substance misuse and related harm among the Indigenous population are *both a consequence and a cause* of social and economic disadvantage.[9] See Chapter 2, 'Alcohol in an Indigenous context' below for further discussion of these issues.

Purpose of this resource

The *Alcohol Treatment Guidelines for Indigenous Australians* have been developed to give guidance to healthcare providers working with Indigenous clients who are adversely affected by alcohol consumption.

The guidelines are designed to be a reliable source of information and direction that has sufficient flexibility for appropriate situational adjustment.

As such, this resource is offered as a guide for how a healthcare provider might:

- diagnose and provide appropriate treatment for Indigenous clients with alcohol-related problems
- recognise when clients are affected by and need treatment for more than one substance or medical problem
- communicate with and support clients who wish to stop drinking or reduce their alcohol consumption
- provide clients with appropriate health information and resources that may help them minimise short- and long-term alcohol-related effects on their health.

It is important to keep in mind that addressing the problem of alcohol consumption may address the underlying cause of the alcohol related issues. Accordingly, these guidelines also discuss situations where a holistic approach to treatment is required. The challenge for healthcare providers is to achieve the best clinical outcome for their clients while being sensitive to the needs of the wider community.

Principles upon which this resource is based

These guidelines are based on the following principles:

1) All Indigenous clients of all health services have the right to expect and receive treatment for alcohol and other drug problems that is culturally appropriate professional and non-judgmental and uses best practice models.
2) Indigenous Australians have diverse cultures, histories and life experiences. There is no 'one size fits all' remedy for alcohol-related problems experienced by individuals or communities and no single approach is necessarily appropriate or suggested.
3) Indigenous peoples' worldviews in relation to health and wellbeing must be recognised and respected. Healthcare providers in particular need to understand this. Indigenous Australian definitions and experiences of health are holistic.[10]

   > *Health is not just the physical wellbeing of the individual but the social, emotional and cultural wellbeing of the whole community. This is a whole-of-life view and it also includes the cyclical concept of life death life. Health to Aboriginal peoples is a matter of determining all aspects of their life, including control over their physical environment, of dignity, of community self-esteem, and of justice. It is not merely a matter of the provision of doctors, hospitals, medicines or the absence of disease and incapacity.*[11]

4) The interventions of healthcare providers must complement strategies being implemented by Indigenous communities

themselves. This approach will have the greatest chance of success.

> *Substance misuse interventions ... are most effective when: staff have an understanding of the causes and consequences of misuse, the readiness of individual clients (or communities) to change, the range of interventions and their availability; and when a systematic, holistic approach to the problem is employed. Importantly, this requires an adequate and appropriately trained health workforce.*[12]

5) The alcohol-related problems experienced in Indigenous communities must be understood in the context of the ongoing impact of colonisation. Healthcare providers must avoid 'blaming' and 'shaming' Indigenous people for the consequences of colonisation. The trauma from dispossession and disempowerment that has contributed to alcohol and other drug use must be recognised. If the level of substance misuse among Indigenous people is to be reduced, there needs to be a concerted effort to address both substance misuse itself and the underlying social determinants of such misuse.

How this resource was developed

It is important to note at the outset that there is limited evidence regarding cross-cultural care and communication, and the extent and effectiveness of treatment and intervention approaches to alcohol use and misuse among Indigenous people. There is also limited evidence on the incidence and extent of alcohol use and misuse that comprehensively addresses issues across the Indigenous population.

The range of interventions for Indigenous substance misuse problems has increased. However, few programs and interventions for Indigenous substance misuse have been adequately documented and even fewer have been evaluated. Many evaluations that have been attempted are not culturally

appropriate, which has led to misinformation and often produced more questions than answers.

Sources of material

These guidelines were developed as an extension of the ideas, information and issues set forth in the *National Drug Strategy: Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan 2003–2009* and *The grog book*.[13] The development methodology also included using key background documents, conducting a comprehensive literature review, undertaking a review of health-related clinical guidelines being considered for development, consulting with key stakeholders and seeking input from a National Clinical Reference Group.

For primary background information, the guidelines drew upon *The treatment of alcohol problems: A review of the evidence*, *Guidelines for the treatment of alcohol problems* and *National recommendations for the clinical management of alcohol-related problems in Indigenous primary care settings*.[14]

The literature review was limited to research and other relevant documents (grey material) published in 2004 and 2005. It was conducted using a keyword search for the terms 'Aboriginal', 'Australia', 'Indigenous' and 'alcohol'. Databases searched included PubMed, Blackwell Science by Synergy, Journals @ Ovid, ProQuest 5000 and Expanded Academic ASAP. Grey material included relevant reports, monographs and clinical guidelines. The grey material databases searched were the Drug and Alcohol Services South Australia Library, Australian Indigenous HealthInfoNet, Australian Institute of Aboriginal and Torres Strait Islander Studies, National Library of Australia, National Drug Research Institute, Indigenous Australian Alcohol and Other Drugs Bibliographic Database, and the Australian Network for Promotion, Prevention and Early Intervention for Mental Health (Auseinet).

Formal consultations were held with a range of key stakeholders, including Indigenous and non-Indigenous healthcare providers,

community members, clinical specialists in mental health and pharmacology, and alcohol-related educators and researchers. Stakeholder consultations took place in several rural, remote and urban locations across Australia.

Who these guidelines are for

These guidelines have been developed for a wide range of healthcare providers located in urban, regional, rural and remote areas. The intended audience includes Indigenous and non-Indigenous healthcare providers who have been trained through universities, hospitals and community health organisations, as well as those who may have received minimal (perhaps on-the-job) training and those who are currently undertaking primary health care certificates.

They were also developed for Aboriginal Health Workers working in general hospitals and in community health or specialist services such as mental health, social and emotional wellbeing, diabetes management and education, sexual health, and alcohol and other drug services. The guidelines will be useful to Indigenous and non-Indigenous doctors, nurses, social workers, project officers, drug and alcohol clinicians, mobile patrol staff, sobering-up unit teams and clinic managers, to name a few.

2. ALCOHOL IN AN INDIGENOUS CONTEXT

These guidelines have been developed to help healthcare providers give the best care possible to Indigenous clients who are experiencing alcohol-related problems. Addressing alcohol-related issues with Indigenous people requires approaches that respond to both the underlying determinants and their causes. Therefore, in addition to clinical guidance, it is essential for healthcare providers to have an understanding of the scope of and the context for alcohol misuse in the Indigenous community.

History, health and alcohol

The underlying causes of the current health status and the prevalence of substance related issues in Indigenous communities are complex. Ill health and alcohol use and misuse among Indigenous people cannot be explained simply by characteristics of individual people. Instead, these issues need to be understood in the historical contexts of colonialism and dispossession, and the contemporary contexts of social factors such as institutional racism and poverty.[15] Indigenous peoples' feelings of despair and helplessness, and their use of alcohol to alleviate these feelings, are a consequence of the marginalisation experienced in the past and present.

During the late 19th and early 20th centuries strategies were introduced in Australia to 'manage' the Indigenous population. The overriding policy objective was assimilation. For example, Indigenous groups were removed from traditional lands to Christian missions and mixed-race children were placed into European care (these children are known as the Stolen Generation). These strategies not only produced dubious social outcomes, but also exposed Indigenous communities to other unexpected risks for which they were poorly prepared, such as alcohol, tobacco and European diseases.

Efforts to address these issues have had limited success for example:

> *In 1989 the National Aboriginal Health Strategy (NAHS) Working Party identified alcohol and other substance misuse as one of the major health problems facing Aboriginal people and emphasised that it should be addressed in the context of improving clients' social and emotional wellbeing. Although the Working Party did not set any specific targets, it identified a number of key objectives – including measures to address substance misuse. A 1994 evaluation of the NAHS (which grew out of the Working Party's report) found the Strategy was never effectively resourced or implemented and – although there had been some improvements – Aboriginal health status lagged far behind that of the wider Australian population.*[16]

The concerns about the health status of the Indigenous population continue. As recently as 2007 the Australian Medical Association reported that the life expectancy of the Indigenous community was up to 17 years less than what was expected for the rest of the Australian population

Several other surveys have shown that, while Aboriginal and Torres Strait Islander peoples are less likely than non-Indigenous Australians to consume alcohol, those that do are more likely to drink at risky and high-risk levels.[17]

There is a correlation between domestic violence and drug and alcohol use in Indigenous communities, with 70 to 90 per cent of assaults being committed under the influence of alcohol and other drugs.[18] The nexus between alcohol related issues, extreme and violent behaviour within the Indigenous community and exposure to the criminal justice system continues in a "vicious cycle".

Breaking the cycle

The Indigenous community has worked hard to raise awareness of the effects of the long history of socio-economic deprivation. It is the historical treatment of Indigenous people that is linked to their feelings of exclusion and hurt and in turn to alcohol related issues and adverse health outcomes.[19]

The positives of the strong cultural background and values of the Indigenous community must be used to the best advantage of the provider. Strong families and communities that are motivated to protect children and young people and encourage them to access education and employment opportunities, quality health care and a decent standard of living. Many of the illnesses affecting the Indigenous community, including those related to problem alcohol use, have only been relevant to the Indigenous community since the arrival of European society. Traditional values maintained the health and culture of Indigenous Australians for many thousands of years prior to the arrival of European society. These values must be tapped by healthcare providers.

Healthcare providers need to appreciate and understand that they will be dealing with a range of complex alcohol related issues exacerbated by poor health, a history of mistrust and exclusion and often low motivation. In addressing these issues, healthcare providers need to consider several domains of Indigenous wellbeing. These include:

- spiritual
- cultural
- social
- psychosocial
- physical.

Providing care that incorporates awareness of these domains will help to improve the health and wellbeing of Aboriginal and

Torres Strait Islander people, and enhance responses to alcohol-related issues. To achieve this, healthcare providers must actively engage with Indigenous people and organisations, and other care professionals, including counsellors, cultural consultants and mental health workers.

Spiritual

Spirituality is the foundation of Indigenous peoples' identity. Spirituality binds and connects Indigenous people to one another and to their land. The lives of Indigenous people today reflect a spiritual connection to all things (MacKean 2005) This strong spiritual bond provides grounding, a sense of purpose in life and a space for healing, all of which are important in any response to alcohol-related issues with Indigenous people.

Understanding this spirituality will help healthcare providers to act appropriately and establish trust and rapport. Many of the strategies developed to improve health will be more accepted if they are culturally sensitive, focus on the wellbeing of the individual and are directed at rebuilding traditional connections in consultation with the community.

Cultural

Australian Indigenous cultures are amongst the oldest surviving cultures in the world and are closely linked to land, sea and sky. There is no single Aboriginal or Torres Strait Islander culture or group, but numerous groupings, languages, kinships and tribes as well as ways of living.

Since colonisation, Indigenous cultures have been heavily influenced by other cultures, particularly European culture, and in many cases that influence has not been positive. Indigenous people have had to change and adapt over time. These changes have resulted in many losses in connections to languages, land and family, all of which are central to Indigenous cultures.

Healthcare providers will benefit from partnering with the Aboriginal community controlled health sector, social and emotional wellbeing programs for Indigenous people and national programs such as Link-Up, aimed at reconnecting Indigenous people with family and culture. Cultural identity programs are useful in this context.

Social

Family and kinship networks are fundamental to Indigenous life. These networks make up the historical and contemporary contexts to the social environments in which Indigenous people live. Many Indigenous families and individuals are struggling to determine how to reconcile Indigenous status with the new non Indigenous Australian society and way of life, and empower themselves.

> *Social and emotional wellbeing is a priority because it is strongly linked with the impact of colonisation. It is also linked with trauma, loss, grief and past government policies which brought about the separation of children and families, the loss of land, culture and identity, social inequality, stigma, racism and ongoing losses.*[20]

Psychosocial

Alcohol use can be viewed as an attempt to relieve the pain, anger and grief experienced by Indigenous people arising from the legacy of colonisation. marginalisation and racism in society, and despair arising from dispossession from land, culture and family, also contribute to the use of alcohol.

Identity, cultural pride, and sense of self and belonging are important to Indigenous people in their own communities, and in Australian society today.

Programs should be developed which respect traditional values and are empathetic, without being patronising. This sense of cultural pride can be leveraged to develop holistic programs not just addressing alcohol related issues.

Physical

Following colonisation, many Indigenous people have been denied their traditional healthy diet and lifestyles. The introduction of foreign diseases, foods, and psychoactive substances such as tobacco and alcohol, also contributed to the current poor health of Indigenous people, and alcohol related problems seen today.

The likelihood of being able to retrieve this traditional lifestyle is low, but cultural values and many practices continue to be strong to this day, and should be used to influence those requiring treatment for their drinking issues.

Healthcare providers need to consider the holistic needs of their client, and sometimes the wider family group.

3. CULTURALLY RESPECTFUL HEALTHCARE

The need for greater cultural awareness in the development and provision of healthcare services to improve the health and social outcomes of Indigenous Australian populations is widely recognised.[21] Working effectively with Indigenous people requires healthcare providers not only to acknowledge history and appreciate diversity, but also to examine their own perspectives on health, other cultures, belief systems and the ways individuals communicate. Healthcare providers need to accept their responsibility provide the best care they can. They should not let their biases and stereotyping affect their decision making in respect of their clients.

This chapter provides a brief introduction to providing culturally respectful healthcare to Indigenous clients, families and communities affected by alcohol-related problems. It should not be considered a definitive source of information and should be supplemented with guidance from Indigenous and other key people who live and work in the locality of your service. The information is presented in two sections:

- developing culturally respectful healthcare settings
- cross-cultural communication in healthcare settings.

For cases where information about specific cultural considerations is needed, refer to the resources section in Part IV: Resources and contacts. The list of contacts is provided who may be able to help with more difficult cases.

KEY TERMS IN CULTURALLY RESPECTFUL HEALTHCARE

Cultural awareness

Cultural awareness is having knowledge and understanding of Indigenous history, values, belief systems, experiences and lifestyles. It is not about becoming an 'expert'; rather it is about being aware of the potential for differences, appreciating and understanding differences, accepting that differences exist and how these difference will affect your relationship with the Indigenous community

Cultural awareness is also about understanding traditional Indigenous values and the effect those values have had in developing the Indigenous society we now have.

Cultural awareness also involves personal reflection about one's own culture, biases, and tendency to stereotype.[22]

Cultural competence

Cultural competence refers to a healthcare provider's capacity to provide effective care to a client when the two have different cultural backgrounds. Cultural competence involves the healthcare provider integrating their knowledge of Indigenous culture into the clinical context to bring about better health outcomes for their clients. This is with the ultimate aim to reduce the institutional racism that maintains current Indigenous health standards.[23]

Cultural safety

Cultural safety refers to a client's perspective on and experience with a healthcare provider. Clients need to feel that their healthcare provider has acknowledged and respected differences of cultural identity, acknowledged the power relationship between healthcare provider and client, and attempted to reduce inequality. Culturally safe practice can only be fully achieved when the non-Indigenous healthcare provider undertakes a continual process of reflection on

their own cultural identity and recognises the impact their culture has on their own health practice.[24]

Unsafe cultural practice is any action that diminishes, demeans or disempowers the cultural identity and wellbeing of an individual. Clients who feel unsafe and who are unable to communicate effectively may not receive the medical treatment they need.

Developing culturally respectful healthcare settings

Why culturally respectful healthcare settings are essential

Although many Indigenous clients prefer to attend Aboriginal Community Controlled Health Services, this is not always the case or indeed always possible. Clients may choose to see their local general practitioner for some health issues and a local Indigenous health service for others, or they may choose to exclusively use one or the other. Sometimes they are required to attend a city or regionally based hospital or a specialist health service some distance from their community.

In all cases it is important that the client's right to choose their service providers is respected and that mainstream services are encouraged to find ways to offer culturally respectful, accessible and acceptable services. If Indigenous clients feel unable to seek or accept treatment or prevention and health promotion services because they consider mainstream services to be culturally unacceptable, a much greater social, physical, cultural and economic cost will affect the client and their families, as well as the wider community.

The relationship between mainstream health services and Indigenous people has been generally poor. Indigenous people continue to be misunderstood, misrepresented and mistreated – often through stereotyping. All health providers in services

accessed by Indigenous people need to be mindful of all underlying issues and may need to be an advocate to ensure that treatment is appropriate and balanced with the needs of the community. For example an explanation may be needed why a large number of people may accompany a client to a healthcare facility.

Healthcare providers and health services should make a commitment to becoming culturally competent, supporting the efforts of Indigenous colleagues, making the physical environment welcoming and being prepared to speak as an advocate in the interests of best health care.

Indigenous people and the importance of family

It is critical that healthcare providers have an understanding of the importance of family and establish family relationships. The ability to use influential family members to assist in treatment design will be very useful.

Indigenous people have a complex system of family relationships, where each person knows their kin and their land. These extended family relationships are the core of Indigenous kinship systems and determine where a person fits into the community. Kinship defines roles and responsibilities for raising and educating children and structures systems of moral and financial support within the community.

Non-Indigenous healthcare providers who do not understand the importance of kinship, as constructed by Indigenous Australians, may be frustrated in their efforts to provide their clients with effective care.

It is important that healthcare providers recognise and understand that whether they live in urban, rural or remote communities, many Indigenous people maintain strong traditional ties with others through 'auntie, 'grandmother', 'uncle', 'brother', 'sister' and 'cousin' relationships. Traditional kinship rules may determine who can give and receive information about a family member, and who can

make decisions on behalf of another. For example, decisions about a child's health treatment may need to be made in consultation with specific family members, who may or may not be the birth parents or direct next of kin. An Indigenous client may therefore present to your clinic or service alone or with one or more family members.

To support contemporary kinship relationships, health services and individual healthcare providers need to be flexible and find ways of providing the best health service to Indigenous clients. These may include:

- having more than one chair available in consulting rooms to enable family or others to stay with the client
- advocating on behalf of the client to allow their choice of support people to be present during physical examinations and medical procedures
- ensuring family members or significant others are welcomed and respected.

Providing a culturally respectful setting

The ability of healthcare providers to provide an environment or setting which respects the Indigenous community values will have a direct correlation with care delivery. Failure to provide this will adversely affect chances of success.

A review of the physical environment may serve to improve accessibility and acceptability of your service to Indigenous clients. You need to consider the diversity of Indigenous clients and groups using your service, and think about the following questions:

- Is the signage in your service culturally appropriate for the local Indigenous community?
- Can Indigenous clients who do not speak or read Standard English easily understand the signage in your service?
- Will displayed artwork or signage be considered acceptable to both Indigenous men and women?

- Is signage displaying instructions, such as 'no bad behaviour', done in a non-judgmental way? If signage is not accompanied by community education about the role and philosophy of your service it may not be accepted or have the impact that you intend.
- Does the artwork on display reflect the particular Indigenous cultural backgrounds of the various client groups that visit your service? For example, are dots or lines used, does the artwork picture marine or land animals.
- Are there designated and appropriately signed waiting areas and are treatment rooms to accommodate Indigenous men and women separately required?
- How easy is it for an Indigenous client to know what support services can be provided by your service and how they can access these?
- Is the building able to accommodate flexible visiting hours for Indigenous clients and their family members?
- Can family and support people sit comfortably with Indigenous clients in treatment areas?
- How are the needs of Indigenous clients with children balanced with the needs of those without, in terms of suitable areas for waiting, playing, eating, and resting?

Cultural safety of Indigenous staff

Indigenous healthcare providers are employed in a variety of roles across a broad range of healthcare settings, including general practice and community health clinics, sobering-up units, acute care settings, and emergency response units such as the Royal Flying Doctor Service.

Indigenous healthcare providers may find themselves caught between the tensions of what is expected and accepted by their families and communities, and what non-Indigenous employers and colleagues expect. This can place Indigenous staff in a very difficult,

even untenable, situation at times and often leads to high incidence of resignation or retirement (also known as a high attrition rate) among much-needed Indigenous healthcare providers. High attrition rates occur in urban as well as rural and remote settings and can cause significant harm to health service provision to Indigenous Australians.

Working effectively together in diverse cultural settings therefore requires Indigenous and non-Indigenous healthcare providers to establish partnerships that:

- respect and value the diversity of each others' experiences
- respect and value the diversity of each others' roles
- enable professional information to be shared willingly
- have a common goal to improve clients' health and wellbeing
- encourage self-reflection on personal expectations, values and behaviour
- establish debriefing opportunities to help alleviate stress
- acknowledge the importance of Indigenous Australian holistic concepts of health and wellbeing.

Becoming culturally competent

All non-Indigenous healthcare providers working in Australia should have access to and participate in Indigenous cultural awareness training on an ongoing basis.

Cultural awareness is fundamental to every non-Indigenous healthcare provider's ability to deliver respectful and effective healthcare to Indigenous clients. Training programs should discuss the impact of colonisation and dispossession on the health status of Indigenous people.[25]

Communicating through trusting relationships

Trust and respect are critical in developing and maintaining communications with Indigenous clients. Similarly the ability

to communicate with clients will directly affect the collection of relevant information and delivery of services. Misunderstandings must be minimised.

Direct questioning may be considered by some people to be an inappropriate and discourteous way to start a relationship. The older more respected the person, the less appropriate direct questioning may be. This practice may be unavoidable in many medical contexts; however, all healthcare providers should be strive to make interactions as friendly, courteous and non-threatening as possible.

Before asking direct questions of an Indigenous client try, wherever possible, to spend some time building a relationship by chatting about general topics. You might try to talk about where the client comes from, the weather, the local football team, or whether you might have met any of their family in the community and so on. You may be able to make the client feel more comfortable by sharing a little personal information about yourself such as 'I am a grandparent' or 'I like to go to the football too'. These simple words can reassure the client that you are interested in them personally and acknowledge the importance of their relationships with family and community. When this is successfully achieved, a trusting relationship can then exist not only between the client and healthcare provider, but also in many instances, with the family and community.

Cross-cultural communication in health settings

Poor communication between Indigenous and non-Indigenous Australians is a major, but often overlooked, problem leading to what has been described as a 'crisis in health care'.[26] When an Indigenous client is intoxicated and/or has an acute illness associated with alcohol and/or other drug use, communication can present an even greater challenge.

Helping clients to understand the issues surrounding alcohol related health and illness requires healthcare providers to

convey information in ways clients from diverse backgrounds will understand and benefit from. Healthcare providers must develop communication skills that are based on an understanding of the culture and communication styles of their clients.

Views on health and illness are influenced by people's health literacy, culture and life experiences. Unless a client has a European nursing or medical background, they are unlikely to understand complex medical terms or 'jargon'. Instead, you will need to find alternative ways to communicate your message. For example, you might tell a client that you are going to write some notes about them or put something on their arm for a moment or two rather than explaining that you need to take their temperature, pulse and rate of breathing, or measure their blood pressure.

Having some knowledge of different conversation styles within your Indigenous clients' community can also assist you to build relationships with individuals, families and other community members, and to provide effective and beneficial health services.

Beliefs

Messages that are incompatible with a person's beliefs are rarely accepted. Richard Trudgen discusses this issue at length from the perspective of the Yolŋu people of Arnhem Land in his book *Why warriors lie down and die*.[27]

It is helpful therefore to understand your health beliefs and those of your client. While non-Indigenous healthcare providers may, based on their own beliefs, be convinced of the cause-and-effect relationship between drinking too much alcohol and ill health, not all of their clients will share these beliefs. It is important for healthcare providers to analyse their own beliefs, and cultural biases they might have, even those they may not be consciously aware of.

It is also important for healthcare providers to acknowledge that many Indigenous people do not feel there are alternatives to

drinking and excessive alcohol consumption, even when they are aware of the health risks posed. For many, alcohol is used as a coping mechanism to alleviate feelings of hopelessness and despair, low self-esteem and self-worth.

Indigenous languages

Prior to colonisation, an estimated 500+ Indigenous languages were spoken across mainland Australia and the Torres Strait. Today, there are approximately only 200 remaining known, recorded and/or spoken languages – a devastating result of past policies of child removal, assimilation, and cultural degradation. Indigenous people were discouraged from and often punished for continuing to communicate in languages other than English.

Although many languages have been lost, Indigenous people have worked to ensure the survival of the remaining Indigenous languages. Many have been recorded and translated, and are now being taught to both Indigenous and non-Indigenous people. There are also many languages that are still spoken by Indigenous people yet are not recorded or taught in urban environments.

While it is unrealistic to expect all healthcare providers to learn an Indigenous Australian language, it is important to at least have a willingness to learn about local languages and communication styles. Asking for guidance from appropriate Indigenous Hospital Liaison Officers, cultural and language interpreters and community Elders can be extremely helpful whether you are in a city-based or rural or remote setting.

English language and Aboriginal English

English is the dominant language in Australian healthcare settings; however, there are significant numbers of Indigenous Australians for whom English is not their first language and may even be their third or fourth language. Furthermore, many Indigenous Australians speak Aboriginal English, which is considered a valid and rule-governed variety of the English language[28] but may be difficult

for some non-Indigenous people to understand well.[29] There is a continuum of Aboriginal English dialects ranging from the 'light' varieties that are close to Standard English through to 'heavy' varieties, such as Kriol and Torres Strait Creole.[30]

Non-Indigenous people unfamiliar with regional accents, words and phrases may have problems understanding their clients who speak the heavier varieties of Aboriginal English. However, learning even a small amount of local Aboriginal English and communication styles can help build rapport and ensure that information is conveyed and understood.

Interpreters

Wherever possible you should use an appropriate healthcare interpreter. As with other linguistically diverse people, Indigenous family members should not be used as interpreters. Client issues may be sensitive and require confidentiality and communicating about health problems may require medical or other specialist knowledge.

See Part IV: Resources and contacts for information on interpreter services.

'Indigenous' versus 'Aboriginal and/or Torres Strait Islander'

There are regional and community differences in the words used to identify a person as an Indigenous Australian. While the term Indigenous may be acceptable in some communities, it can be offensive in others. Therefore, it is vital that you ask what the locally preferred term is and use that. Some communities may use 'Indigenous', 'Aboriginal', 'Torres Strait Islander', 'Tiwi Islander' or Aboriginal and Torres Strait Islander'. Others may use broader regional names, such as the following:

- 'Anangu' in Central Australia
- 'Koori' in New South Wales and Victoria
- 'Murri' in southern Queensland

- 'Noongar' in south-west Western Australia
- 'Nunga' in southern South Australia
- 'Palawah' in Tasmania
- 'Yolŋu' in Eastern Arnhem Land, Northern Territory.

Some communities prefer to identify themselves further by their more localised region, for example the Ngunnawal people of the Australian Capital Territory.

Health literacy

Health literacy is the term used to describe the shared understanding of health-related terms, information and ideas and in the general population is relatively poor. For healthcare providers, many concepts of health and illness discussed with clients will not be well understood, including written information. High school completion rates for many Indigenous Australians are lower than for the general population, resulting in lower literacy rates. This leaves significant numbers of Indigenous adults and young people unable to access health, illness and medication information.

When gathering information from your client, you must constantly check for shared understanding. For example, a client might describe their drinking as 'social', which to you means drinking at low level. However, if you ask the client to describe what they mean by 'social' drinking, you may well find that their pattern of drinking is excessive.

Checking for understanding should therefore include the client's understanding of numbers and measures in relation to standard drinks and quantities consumed (for more information on standard drinks, see Part II, Chapter 3, 'General care').

Wherever possible, information should be provided verbally as well as in writing and discussed with the client (and others as appropriate). Aids such as photographs, diagrams, drawings or models can be helpful in this context.

Talking about alcohol

Many modern Indigenous Australian words used to describe alcohol are the same as words for sweet or salty, bitter or burning, or simply water. There may also be local slang terms commonly used to describe different alcoholic substances. For example, in Central Australia 'monkey blood' is often used to describe port and 'lady in the boat' to describe a particular brand of wine sold in four-litre casks. 'BB' is used to describe beer, or 'green can' or 'white can' to describe beer depending on the region or brand of beer usually consumed.

Knowing local terminology

The Royal Commission into Aboriginal Deaths in Custody found that a number of preventable deaths in police custody, hospitals and other settings were due to the person's intoxication and unrecognised head or other serious injuries, and complications of alcohol withdrawal.[31] These preventable deaths were also due, in part at least, to a lack of knowledge among non-Indigenous police and healthcare providers about local words and communication styles used to tell others about what might have been happening, such as pain and feeling very ill. For example, the words 'dings' and 'horrors' are commonly used in Indigenous communities to describe the serious alcohol withdrawal complication known as delirium tremens (the DTs).

Understanding differences in pronunciation and knowing local words and their meanings is essential for all healthcare providers when working with Indigenous clients. It is especially important that incorrect assumptions and judgments about any individual client's situation and medical condition are not made because of misunderstandings in language or because of cultural stereotypes.

Cultural sensitivity in information exchange

It is vital that you take time to exchange information with your Indigenous client in a way that is culturally sensitive so that you

can successfully gather all the information you need to provide them with effective and holistic care.

Indigenous Australian communications tend not to cover multiple issues in quick succession. You may need to conduct a health assessment, take a drinking history or give health advice in short verbal exchanges and over more than one consultation. Using slower-paced communication may seem contrary to the urgency of some clinical priorities; however, it may be a 'false economy' not to take this approach.

Short exchanges of information can be especially important when working with clients who are having greater difficulty understanding language and concepts because they are intoxicated or ill. For all population groups, this may also be useful for clients who have a hearing or vision impairment.

Three-way talking

Many Indigenous people use a three-way form of talking to make requests or provide information. That is, they may use a third person as a mediator, such as a family member, to exchange information between them and the healthcare provider. In the clinical setting these three-way communications can be very valuable, as they allow for an exchange of information without embarrassment even though the client may be within earshot.

Confidentiality

If your service employs Indigenous healthcare providers, do not assume that every Indigenous client will want to be referred to those staff members or have an Indigenous worker involved. It is the client's choice as to who should be involved; check with them first before you make a referral to the Indigenous worker or liaison unit.

Gender

In many Indigenous Australian communities a person's gender can strongly influence the exchange (or not) of sensitive information. Some issues, such as sexual health matters, are kept strictly separated along gender lines – often referred to as 'men's business' or 'women's business'. An Indigenous man may feel offended at being asked questions of a sensitive nature by an Indigenous or non-Indigenous woman, and an Indigenous woman may similarly be offended if asked similar questions by an Indigenous or non-Indigenous man.

It may not always be possible, however, to provide gender-appropriate staff for all clients. In these instances it is important to ensure privacy when having to ask possibly sensitive questions. Remember to keep your voice low if you are unable to use a separate private space. It may also be useful to explain your sensitivity to the situation and, where possible, offer alternatives if care can be provided at a later stage.

This does not mean that men and boys cannot or should not access women's and girl's health information and vice versa, but such information should be handled sensitively and as appropriate for each community and individual. It is therefore vital to seek advice from male and female Indigenous colleagues, Elders and community members about how these topics need to be approached in your workplace and by whom.

Verbal conversation and communication styles

It is possible that healthcare providers will face different styles of conversation, pronunciations and abbreviations. The following are some example which people may find useful, but experience will build your vocabulary.

Questions

English first language speakers tend to accept the direct question-and-answer style often used in healthcare communications (for example: What is wrong? Are you in pain? Are you pregnant?).

Speakers of Aboriginal English however, often structure their questions differently. It is common for a statement to be made followed by a question or question tag. Common Aboriginal English question tags are:

- eh? – Australia wide
- inna? – South Australia
- unna? – south-west Western Australia.[32]

Direct questions are often not used to seek important information. Indirect methods using triggers or hints in statements might be used to find the information needed. For example, you might hear an Aboriginal English speaker ask:

- Not feeling good, eh?
- Pain in head, inna?
- Expecting baby, unna?

Vocabulary

It is also quite common to find the same Standard English word has a different meaning in different locations. For example, in Central Australia Indigenous people use the word 'cheeky' to indicate someone who is rude, offensive or aggressive. It is not used in the light-hearted way that many Standard English speakers might use it.

Similarly, in many urban communities the word 'deadly' is used to indicate something very good or exciting.

Pronunciation

You might hear the following pronunciation differences:

- Standard English words beginning with 'th' may be pronounced with a beginning 'd', (for example, there = dere, that = dat).
- Standard English words that start with one of the five vowels – a, e, i, o, u – may be pronounced with an additional 'h' (for example, uncle = huncle).
- Substitution of the Standard English sounds for 'v' and 'f' for Aboriginal English 'b' and 'p'.

Discourse and care

Agreeing with your questions

Indigenous people generally strive to maintain easy relationships and to not disappoint or upset other people. This is particularly the case if the other person is seen as carrying authority such as doctors and nurses. An Indigenous client may therefore give an answer of 'yes' to avoid offending – even if the answer should be 'no'.

For example, you may get a 'yes' response if you ask questions like, 'Did you take your medication today?' or 'Have you been trying to cut down on your drinking?' when in fact the real answer is 'no'.

A useful approach can be to initially distance the request from the individual client by making a general statement, such as 'Some people find it hard to cut down their drinking', and then follow up with another question about the client's personal experience of reducing or stopping their drinking, such as 'Can you tell me about what you tried to do to stop drinking and what made it hard for you?'.

In each interaction it is critical to appreciate that there may be times when silence reflects disempowerment, and 'compliance' reflects isolation, fear or misplaced trust.

Responses to questions

What may be seemingly simple questions to a health care provider may take a long time for a client to comprehend and answer. This is because they will be seriously thinking about what you have asked them, what it means and how to respond best. For Indigenous people, they may also be translating between English and their first language.

In some regions Indigenous clients may need to consider the implications of a particular question carefully, to ensure the most appropriate response. For example, asking 'What is your name?' may require thought about which name is required now for cultural reasons and for what purpose you need their name. Is it a name for a form? Should they be giving an English name or a kinship name? Should they give another name because of their reluctance to say the name of deceased people who shared the same name?

Anxiety

Some topics can cause anxiety. Questions you ask can carry historical and personal burdens that can particularly affect your Indigenous client's responses. For example, asking what might seem like a simple question such as 'Do you have any children?' may raise serious anxieties for a client who was removed from their family or who knows of others who were removed from their families.

Moments of silence

Unlike in Standard English, where moments of silence are a sign that the conversation has ended or communication has broken down, silence is often accepted and sought during Aboriginal English discussion.

Try to avoid the temptation to fill in silences and give your Indigenous client enough time to respond, a lack of patience can

cause greater frustration and even devastating health outcomes for the client.

Non-verbal communication

All people use non-verbal communication, or body language. Developing sensitivity to body language is a very powerful way to ensure good communication.

Indigenous people from many regions use body language based on their particular cultural background. Answers can be given using facial gestures indicating yes, no, maybe, a certain geographical direction or range of other responses. In some areas 'hand talk' is used.[33]

If hand talk and/or facial gesturing are used within your community, it is worth the effort to learn some appropriate gestures and when and when not to use them.

Eye contact

Indigenous Australian communication has traditionally been focused on listening; eye contact is not always required to pay attention or show respect for the speaker. There is potential to misread an Indigenous client's avoidance of eye contact as rudeness or disrespect; however, this is rarely the case. For some clients, looking down may in fact be their way of showing respect.

Eye contact between Indigenous Australians may also be governed by strict cultural rules about relationships. You may notice that a client's eye contact is different with family members and Indigenous healthcare providers than with non-Indigenous people.

While it is generally fine to look at Indigenous clients as you talk with them, do not try to force eye contact if it is not given. Sometimes standing or sitting slightly to the side of the client allows ease in communication as neither person will be looking directly at the other. This technique can be useful when you need to discus sensitive issues.

Seek guidance from Indigenous colleagues, community members and Elders if you wish to learn more.

Written and visual communication

Understanding of written languages: Generations and diversity

Translating health brochures into an Indigenous Australian language will not necessarily bring about a significant improvement in health literacy among Indigenous people.

Written Indigenous languages are a recent development and many older clients cannot read brochures written in their first language. In these cases, providing visual aids and interpretations of written information, can be very helpful.

Also, the number and diversity of Indigenous languages that are spoken and/or translated presents a challenge for production of service and health promotion brochures and materials. It is important to seek the advice of Indigenous colleaguesand clients on this material, and to facilitate self-learning of the local Aboriginal languages to help communications.

Displaying Aboriginal English

Each health service and community organisation needs to compile its own list of relevant Aboriginal English words for alcohol, drugs and health terminology. Preparation of these materials needs to draw on the experiences of local Indigenous staff, sobering-up teams, mobile/night patrol workers and volunteers, community police and community members, particularly Elders.

Different groups of people may prefer different drinks. Young people and adults, for example, may have different drink preferences and use different terminology for the same drinks. All of these should be included in any language lists.

Consider displaying a list of the local terminology and related pictures in a highly visible location for staff reference. This locally produced resource is not only a useful orientation tool for new personnel, but may even help to save lives. The list should include the table that shows intoxication and progression of blood alcohol concentration (BAC) with associated signs and symptoms in non-dependent drinkers (see Part II: Clinical management of alcohol problems – Tool Kit).

Using Indigenous art

Indigenous artwork can be a valuable tool for cross-cultural communication. Displaying Indigenous artwork or using it on informational materials can be a way for traditional Indigenous people to recognise culturally inclusive services. It can also be valuable in communicating with people who have poor literacy and reading skills or people who have poor eyesight.

It is important to seek advice from within the indigenous community on the appropriate sourcing and use of Indigenous artwork and artists, and ensure that any works clearly and accurately depict and reflect the Indigenous people that access your services. Also make sure that the story of the artwork does not conflict with traditional recognition of images and symbols.

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PART II: CLINICAL MANAGEMENT OF ALCOHOL PROBLEMS – TOOL KIT

1. INTRODUCTION

This Tool Kit is offered as a guide for Indigenous and non-Indigenous healthcare providers when caring for Indigenous clients at risk of, or adversely affected by, alcohol consumption, wherever these clients present.

It is important to note that although many clients may not have serious long-term alcohol problems, they may still be at risk of serious injury or acute illness associated with episodes of risky drinking.

As you work through the Tool Kit, you will note that key points have been highlighted in coloured boxes to raise awareness of important issues.

MATCHING YOUR RESPONSE TO YOUR CLIENT'S NEEDS

There is no one-size-fits-all response to alcohol problems. The clinical practice guidance offered in this Tool Kit should be considered alongside your service's clinical policies and protocols, other clinical guidelines as referred to in this text, and relevant legislation, for example, mental health, controlled substances and public intoxication acts.

It is vital that you remember the underlying principles of these guidelines when considering your response to Indigenous clients in emergency and general care situations.

Responses to Indigenous clients experiencing alcohol-related problems need to be based on their individual situations and your collaboration and partnerships with local Indigenous and other relevant health services, healthcare providers and communities.

2. EMERGENCIES

Emergency situations may include acute intoxication, overdose and withdrawal, which may also be accompanied by medical complications.

Intoxicated clients and those at risk of alcohol withdrawal or overdose, or other serious alcohol-related medical conditions, require timely attention and effective care whether they are in a community or hospital setting.

While not every Indigenous client presenting to your health service appearing to be intoxicated will have an urgent medical condition or injury, you must *always be alert* to the possibility that they may have a critical medical condition needing your immediate attention. You must ensure that they are not simply assumed to be 'drunk' and that they receive timely and appropriate physical assessment and care.

Some clients may appear to be intoxicated or affected by alcohol when in fact they are experiencing a serious condition such as head injury, stroke, hypoglycaemia (low blood sugar) or acute infection. As with any other people with a serious medical condition, these clients require immediate treatment.

This section is designed to assist healthcare providers in dealing with emergency presentations related to alcohol. It offers reliable information, advice and clinical tools for effective assessment, monitoring and treatment of clients who are intoxicated or at risk of overdose, alcohol withdrawal complications or other serious alcohol-related conditions.

Guidance in assessing and managing intoxication, overdose and withdrawal are discussed in more specific detail within this chapter (see under 'Intoxication, overdose and withdrawal').

If a critical emergency presents that you will need additional help with, first:

- assess the person's vital signs (breathing and heart beat (pulse))
- place the person on their side in the recovery position (also known as coma or lateral position; see Figure II.1)
- if possible, do not leave the person alone
- ask someone else to call for emergency medical help
- apply first aid as required.

SEEKING EXPERT ADVICE

When in doubt, seek expert clinical advice from medical colleagues or the clinical advisory service at your local alcohol and drug information 24-hour telephone service or drug and alcohol medical specialists.

Remember to *always protect the person's neck and back* (cervical spine) if there is any chance that they have fallen or been assaulted or injured.

Keep your clinical and first aid skills up-to-date and have current treatment guidelines and emergency contact details close by.

EMERGENCY CONTACT INFORMATION

Have emergency contact details nearby in clear, **bold**, easy-to-read writing:

- Emergency 24-hour phone numbers of your nearest mental health assessment and crisis intervention service.
- Emergency 24-hour phone numbers of your rural/remote mental health service.
- Lifeline crisis telephone service numbers.

- Poisons Information Centre on 13 11 26 (a 24-hour national service).

Give these to your client and their family members so they can get help when they need it.

First aid

From time to time you will face situations that require immediate medical intervention to prevent loss of life or to minimise the threat to life. Because such situations may arise at any time, it is vital that family, community members and others learn how to recognise acute intoxication and other medical emergencies, and know how to perform first aid. Up-to-date first aid training is widely available from accredited training providers.

Dr ABC is a reliable and commonly used system of applying first aid and/or making an initial assessment for any life-threatening concerns. Dr ABC is sometimes referred to as DRABC; however, regardless of the terminology you are familiar with, the main objective is to quickly assess the client's safety.

Dr ABC means:

Danger
Response
Airway
Breathing
Circulation

Danger

Danger is about assessing the physical risks to yourself and/or to your client. You need to:

1. Assess whether the client or other people with them pose a danger to you, others or themselves.
2. Think about what might present as a danger to you from intoxicated clients or their environment. For example:

- Is the client confused, angry or aggressive?
- Are there any objects nearby that might be used as weapons, such as sticks, rocks, broken glass, medical instruments, furniture or pot plants?
- Are there other people nearby who may be aggressive or pose a risk to you or your client?
- Are there environmental factors, such as a busy road or machinery nearby, that may pose a risk to you or your client?

Response

Response is about assessing your client's level of consciousness. You need to determine:

1. If they are awake and alert (fully conscious), drowsy (semiconscious) or unresponsive (unconscious)?
2. Do they respond to speech or touch?
3. Are they speaking an Indigenous language? If so, check with other Indigenous people present, such as an Aboriginal Health Worker, doctor, nurse or Aboriginal Liaison Officer, or the client's family and/or friends, as to the appropriateness of their responses to your questions or conversation.
4. Are they behaving normally – as you would expect of any other client in your care? If family and friends are with them, check whether they think the client is exhibiting their usual behaviour or not.

Airway

Airway (breathing passage) is making sure your client is able to breathe. You need to:

1. Assess for, monitor and manage medical conditions such as asthma or a chest injury.
2. Observe if there is blood or other fluid coming from their mouth.
3. Observe their position: Have they been lying face up; have they vomited? Or have they been lying face down?
4. Listen for sounds of breathing difficulties. Are they choking?
5. Check for and remove foreign objects that may block their airway, such as broken or false teeth.

Breathing

Breathing is about making sure your client is breathing. You should:

1. Quickly assess whether or not they are breathing.
2. Apply mouth-to-mouth or bag and mask resuscitation if they are not breathing.

Circulation

Circulation is about your client's blood flow (internal and external). You should:

1. Assess for and manage any bleeding.
2. Assess for, monitor and manage signs of shock.

If they are fully conscious and you are satisfied that their breathing and circulation are normal, you can proceed to the next step of looking for immediate medical problems by assessing risks of alcohol intoxication, injury and illness.

Intoxication, overdose and withdrawal

Various emergency care presentations will be apparent in a client who is affected by alcohol. They range from subtle intoxication (such as showing signs of poor physical coordination, mild nausea and vomiting) through to life-threatening alcohol-related conditions, including alcohol overdose and/or alcohol withdrawal (which may include signs of significant loss of consciousness, agitation, disorientation and loss of touch with reality).

This section provides an overview of the symptoms and management of alcohol intoxication, overdose and withdrawal.

Intoxication

Intoxication is generally defined as the consumption of alcohol or drugs to the extent that the person cannot function within their normal range of physical and intellectual abilities. The effects of intoxication may appear involuntary.

Intoxication in itself can be a serious risk to life. Intoxication can also accompany severe injury and other medical conditions. Also, some medical conditions may look like intoxication or be complicated by intoxication; not recognising these can be fatal.

CRITICAL MEDICAL CONDITIONS

While slurred speech, drowsiness or loss of consciousness, headache, breathing difficulties or vomiting may be due to alcohol intoxication, these symptoms are serious and *can be mistaken* for intoxication only.

Any client presenting with these signs may be experiencing stroke, acute infection, low blood sugar (hypoglycaemia), chronic obstructive airways disease, chest or head injury or another serious medical condition.

An apparent smell of alcohol on the breath of a very drowsy or unconscious client may indicate diabetic coma (ketoacidosis) and high blood sugar (hyperglycaemia).

Before you begin treating a client for acute alcohol-related problems, you must first assess their immediate condition and apply appropriate clinical responses.

An intoxicated client is at risk because they cannot manage their environment safely and their problem-solving and communication abilities are adversely affected.

An intoxicated client's:

- judgment is impaired (they cannot think and solve problems normally)
- short-term memory is impaired (their memory is not working properly)
- ability to manage their environment is impaired (they cannot judge distance, time or other people's actions adequately and their walking is unstable, causing them to trip or fall easily)
- ability to understand complex conversation or the English language (if not their first language) can be badly affected.

COMMUNICATING WITH INTOXICATED CLIENTS

Remember that even if an Indigenous client can usually speak English well, they may have difficulty understanding English while they are intoxicated or experiencing any other acute brain disorder. Even if they are able to speak and understand English, you should avoid using medical jargon when talking to them or their family.

Using plain English will help ensure good information exchange and enable you to gather essential information about the client's likely medical condition. If language is an issue, try to utilise the skills of

the Australian Government Translating and Interpreting Service (TIS, who can be contacted on 13 14 50) and/or an Indigenous Liaison Officer or Aboriginal Health Worker.

It is essential to have at hand the necessary critical resources in case of an emergency such as lapsing consciousness or overdose. This would include standard resuscitation equipment.

Acute alcohol intoxication overdose

Intoxication results from the acute effect on the brain from alcohol as a depressant, impairing normal brain function. This is directly associated with the amount of alcohol consumed over time.

As the level of alcohol in the body increases, the brain slows breathing (respiration) and heart (cardiovascular) function, which can result in irregular pulse and cardiac arrhythmia; it also affects the cough and gag reflexes, breathing (respiratory depression) or choking (asphyxiation) from inhaling vomit, food or mucous. The client may rapidly lose consciousness and die.

PREVENTING CHOKING OR ASPIRATION

An intoxicated client is at increased risk of choking or aspirating food or fluid into the lungs. To prevent choking or aspiration:

- Do not give the client any food until they are sober.
- Offer sips of water only. Intravenous fluids will be needed to maintain hydration if the client is not well enough to drink water without choking or vomiting after 12 hours.

For more details on observing and responding to an intoxicated client, see Table II.1: Providing safe care to the intoxicated client and Table II.2: Observations and actions when a client is intoxicated.

Importantly, as alcohol acts as a painkiller (anaesthetic), the client may not feel or be aware of having a serious injury or illness.

Even though a client may seem mildly intoxicated, they may have an underlying serious brain injury and become unconscious and possibly die. This can happen rapidly and unexpectedly.

Fitting Clients

Some people may have a fit (seizure) while intoxicated for a number of reasons (e.g. head injury or epilepsy). If this should happen use the following protocol:

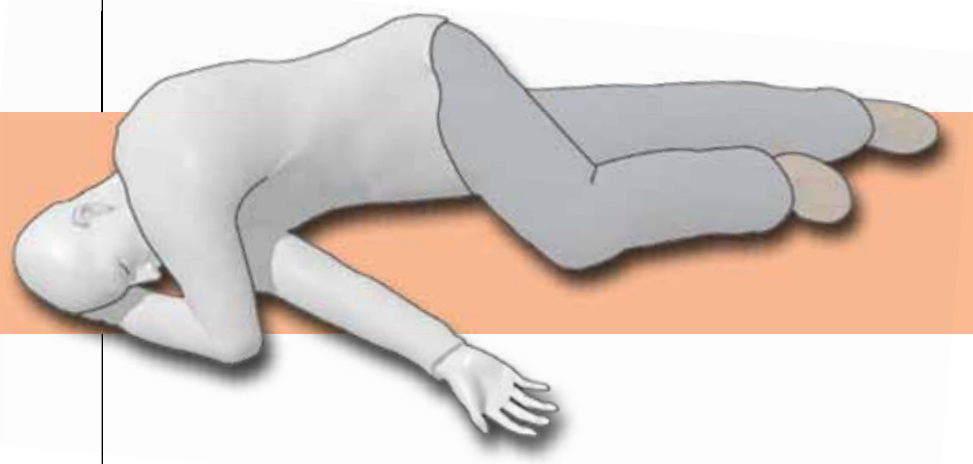
- do not try to move, restrain or hold them down
- move hard or sharp objects away from them to prevent them accidentally hurting themselves
- protect their head as best you can; use a jacket or pillow. If their body is not violently jerking, you may be able to gently support their head with your hands
- take note of the time the fit starts and ends and inform the attending healthcare worker, nurse or doctor; seek emergency medical treatment as soon as possible.

When the person has stopped fitting:

- gently roll them onto their side, and place the highest/top leg in a bent position towards their stomach (the recovery position) (see Figure II.1)
- loosen any tight clothing around their neck and make sure they can breath properly
- talk to them and reassure them they are safe
- try to get them to respond to you; if they cannot speak, gently squeeze their hand and ask them to squeeze yours if they can hear you
- if possible, stay with them until the medical team arrives and tell the team how long the seizure lasted and what the seizure looked like, for example, legs and arms on both sides of the

body or only one leg and arm on a particular side of the body were jerking.

Figure II.1: Recovery position



Assessing level of alcohol intoxication

To assess the level of intoxication, it is important to find out the following information from the client or their family or friends:

- Have they been drinking in the last 24 hours?
- When did they last have a drink? Record the date and time so you can establish a base line for assessing the level, progress and resolution of intoxication.
- What type of alcohol did they drink (wine, beer or spirits)?
- How much and over what length of time did they drink. Record the information in number of standard drinks (a standard drink contains 10 grams of pure alcohol; see 'Standard drinks' in Chapter 3 of this Tool Kit for more information)?
- Have they taken any other drugs or medicines (prescription, herbal or over-the-counter) or other legal or illegal (illicit) drugs while they have been drinking or in the last 24 hours? It is

particularly important to find out whether they have taken any depressants such as methadone, morphine, codeine, heroin, ketamine, inhalants or benzodiazepines (sedatives and sleeping tablets).

- Have they recently been involved in any violence or had an accident or fall? In particular, you are interested in any event that may have caused a hidden injury.
- Do they now, or have they had, any thoughts about hurting themselves (suicidal thoughts) or attempted suicide? Alcohol intoxication is associated with suicide among Indigenous Australians. (See 'Assessing for risk of suicide or self-harm' in Chapter 4 of this Tool Kit.)
- Have they been sick recently?
- Do they have any known illnesses – for example diabetes; lung, kidney, liver or heart disease; or chest or other infections – and have they been taking, or just started taking, any medicines for an illness?
- Have they ever experienced alcohol withdrawal? If so, when and what happened? For example, did they have serious complications such as seizures (fits), hallucinations ('horrors') or delirium tremens (the DTs)?

Family and friends may be able to give you useful information about what has been happening over the last 24 hours, such as if the client has been drinking alcohol and how much they may have had; whether they drink regularly or not very often (this will help in estimating tolerance); if they have also taken medicines or other drugs; whether they might be injured from, for example, being in a fight, falling or being in an accident; and if they have been ill recently.

Testing for blood alcohol concentration

It is important to use any reliable clinical tools available to you to make an accurate assessment of your client's level of intoxication.

These tools include the Glasgow Coma Scale to assess level of consciousness and a test to assess blood alcohol concentration (BAC; sometimes known as blood alcohol level or BAL).

A breathalyser machine (the same as those used in roadside testing of drivers) will accurately test the client's BAC by measuring how much pure alcohol is in their bloodstream at the time the BAC is taken, and therefore how intoxicated the person was. The breathalyser will give the same accurate result as a blood alcohol test. Your decision on how best to get this reading, either by breath or blood, will depend on your client's condition and the facilities you have.

Administering a breath alcohol test is simple, cheap and clinically very useful in estimating how intoxicated a client is. It can also show whether the client seems intoxicated but is actually experiencing a medical condition (such as head injury, stroke or hypoglycaemia), or has taken another depressant drug as well as alcohol and is experiencing adverse drug interaction and potential overdose.

Every emergency department, community health clinic, sobering-up unit, mental health unit and detoxification centre should have at least one breathalyser on hand, and all clinical staff should be trained on how to use it effectively.

If necessary, the local police or specialist alcohol and other drug service can usually help you to calibrate the breathalyser unit, although this procedure is not difficult.

Interpreting results of tests

Any results of tests, examinations and assessment tools should always take into account your own clinical observations.

The BAC reading should be consistent with the client's observable level of intoxication (see Figure II.2). Recognising other medical conditions early is particularly important in the event that the BAC

reading is not consistent with what appears to be the client's level of intoxication, likely level of alcohol tolerance, and recent drinking history.

ALCOHOL TOLERANCE

If the client is a regular drinker, they will have developed tolerance to alcohol and are likely to feel and appear less intoxicated than would an occasional drinker.

It is crucial that you know what to do when your clinical observations of the client's condition does not match their signs of intoxication, BAC reading and behaviour. For example, they may appear far sleepier than a low BAC reading would normally indicate or far more alert and 'sober' than a high BAC would normally indicate.

You should therefore take extreme care if faced with any of the following scenarios, as they all have the *potential to very quickly lead to death.*

If your client appears more intoxicated than the BAC reading indicates, consider and assess them for:

- head injury
- other serious illness
- other drug use and interaction
- overdose from a combination of alcohol with another depressant drugs such as sleeping tablets, painkillers or illicit drugs such as heroin.

If your client seems relatively sober even though their BAC is high, it is likely that they have a high tolerance to alcohol and may be

alcohol dependent. They are at risk of alcohol withdrawal and serious withdrawal complications, especially if they also have injuries, infection or other illnesses.

Your client may have used another drug, such as a psycho-stimulant like 'speed' or 'ice' (amphetamine, methamphetamine or ephedrine) and this other drug may be hiding (masking) their actual level of alcohol intoxication. This can be very dangerous as the effects of a short-acting stimulant like speed can mask the true level of intoxication.

Figure II.2: Likely effects of increasing blood alcohol concentration in a tolerant (non-dependent) drinker

Stages	Feeling of Wellbeing	Risky State	Dangerous State	Stupor	Death
Blood Alcohol Concentration	**up to 0.05 g%**	**0.05 - 0.08 g%**	**0.08 - 0.15 g%**	**0.15 - 0.30 g%**	**over 0.30 g%**
Likely Effects	• talkative • relaxed • more confident	• attention impaired • judgment and movement impaired • inhibitions reduced	• speech slurred • balance and coordination impaired • reflexes slowed • visual attention impaired • unstable emotions • nausea, vomiting	• unable to walk without help • apathetic, sleepy • laboured breathing • loss of bladder control • possible loss of conciousness	• coma • shock • death

Source: Adapted from de Crespigny, C, Talmet, J, Modystack, K, Cusack, L & Watkinson, J 2003, *Alcohol, tobacco and other drugs guidelines for nurses and midwives: Clinical guidelines*, Version 2, Flinders University & Drug and Alcohol Services Council, Adelaide.

Signs and symptoms of intoxication

Clinical signs of intoxication are diverse because intoxication affects a client's physical, mental and emotional states. It is important for you to observe if the client has:

- trouble walking (ataxia)
- difficulty sitting on a chair
- slurred or incoherent speech – is it difficult to understand what they are saying? (If you know the client and you know that English is not their first language, have they reverted to speaking only their first language?)
- reduced consciousness – are they getting drowsy or are they hard to rouse?
- poor hand–eye coordination
- nausea and vomiting
- outbursts of unusual or unexpected behaviour, for example, laughing or crying inappropriately
- reduced ability to feel or react to pain despite an obvious injury or illness
- altered mood or mood swings – are they very happy and then suddenly angry or sad, or vice versa?
- problems with their memory or thinking (cognition) or poor problem-solving abilities
- a way of behaving that seems too relaxed or over confident
- lost their social inhibitions – are they saying and/or doing things that would usually be considered rude or inappropriate?
- disorientation and confusion.

To help you assess and diagnose alcohol intoxication using clinical observation and measurement of BAC, Figure II.2 shows the changing behaviours and physical effects on the body you can expect to see in a client as their BAC rises.

Working safely and effectively with intoxicated clients

Alcohol intoxication changes brain function, including a client's moods, emotions and thinking. An intoxicated client's personality or character may appear to be very different compared to when they are not affected by alcohol.

If an intoxicated client becomes verbally or physically abusive, or engages in another difficult behaviour, it may be because they have a serious head injury or another medical emergency, such as stroke, acute infection, chest injury or chronic obstructive airways disease with hypoxia (not enough oxygen to the brain), or have used other drugs with alcohol.

It can be difficult not to be offended or upset by their behaviour, particularly if they are abusive. It is important that you try not to take their behaviour personally, as it is their condition that is most likely to be causing their behaviour. However, *if you feel unsafe, you are unsafe*; get assistance and approach the client only when other staff are present.

When a client is intoxicated it is not the time to try to educate them, suggest to them that they stop drinking or offer them complex health information. They are unlikely to be able to understand properly and are very likely not to remember or be able to consider what you have said.

Table II.1 describes different states that an intoxicated client may present with and how you can best support them, taking into consideration possible risks for them and yourself. This information can help you to keep the client safe and to recognise when you need to seek further medical advice.

Table II.1: Providing safe care to the intoxicated client

Record times of observations, client condition and behaviours, and your actions clearly.	
If you are in any doubt as to the wellbeing of the client, such as the possibility of illness or injury, seek medical assessment or ambulance transfer immediately.	
Client behaviours	**General care**
If the client is anxious, agitated or panicky	• protect them from injury; do not leave them alone • ensure regular observation and close supervision of the client • approach them respectfully, calmly and confidently • move and speak in an unhurried way • ensure a simple and uncluttered environment • if possible offer a quiet environment • provide frequent reassurance, for example, 'It won't take much longer' • remain with them to calm them down • explain any interventions in simple short sentences and repeat if needed • consider whether you might need an interpreter • ask a sober family member or friend to sit with the client, if possible.
If the client is confused or disoriented	• seek medical review • settle them on a mattress on the floor or very low bed to prevent falls • protect them from injury, and help them to lie on their side in the recovery position (see Figure II.1) • maintain a simple and uncluttered environment; remove unnecessary equipment and furniture • ensure frequent observation and close supervision • do not leave them alone; accompany them to any other place, including the bathroom • do not disturb them unnecessarily once settled • provide care in well-lit surroundings to avoid strange/unusual perceptions from shadows or bright lights • use a single room if possible • advise and explain to them before you touch them when and why this is necessary • address them by their preferred name • let them wear their own clothes if possible • provide frequent reality orientation; tell them where they are, who you are and your role, what day and time it is and what is happening • use/display objects familiar to them, such as a personal possession they have with them.

If the client is having altered perception and/or hallucinations	• seek medical review • ensure continual or frequent observation and close supervision • explain perceptual errors; explain to them that they may be seeing things differently due to the acute effects of the alcohol • continue to protect them from risk of injury.
If the client is angry and/or aggressive	• stand side on to their side and stay beyond reach of any immediate danger or harm; make sure you can access an exit door and that you are not in a corner or an area that you cannot quickly exit • wherever possible, clear the area of other people who are not directly involved in caring for the client • speak calmly, be reassuring, use short sentences and be reasonably flexible with your requests and actions • do not challenge or threaten by tone of voice, eyes or posture (body language) • advise and explain to them before you touch them when and why this is necessary • let them express their feelings and acknowledge their feelings • remind them that you want to help them and keep them safe • keep your own emotions in check • find out if pain or misunderstanding of something said is the possible source of anger • continue to protect them from risk of injury where possible • **if you feel unsafe, you are unsafe**; get assistance and approach the client only when other staff are present • call security or police early.

Source: Adapted from Gaughwin, M & Williamson, P 1996, *Guidelines I: Alcohol: Hospital management of intoxication and withdrawal*, revised edition, Drug & Alcohol Services Council, South Australia.

Monitoring levels of consciousness

Table II.2 provides information on what behaviours and signs to look for in an intoxicated client and what to do based on these observations, including how often to observe the client and when to seek specialist emergency treatment. The table starts with the least serious condition and goes through to serious and life-threatening conditions.

Table II.2: Observations and actions when a client is intoxicated

Observations	What to do
Client: • opens eyes spontaneously • knows where they are • makes appropriate verbal responses to questions • obeys simple instructions • can stand without support • appears well • has state of intoxication and BAC that are consistent for their pattern of drinking. Note: If tolerant to alcohol, BAC may be higher.	• conduct a BAC by breathalyser (or blood test if appropriate) and record the results • observe for emerging signs of illness or injury; if condition changes seek immediate medical advice • observe vital signs (temperature, pulse, blood pressure, respiration, level of consciousness) hourly for the first three hours, then two-hourly if condition does not worsen • follow normal care/admission procedures • only shower or bath them if you can provide strict supervision • put them on their side (in recovery position) on a mattress on the floor or a very low bed • do not offer food or drink until they are more sober and alert.
Client: • opens eyes spontaneously • knows where they are • responds appropriately to questions • obeys simple instructions • cannot stand without assistance • has state of intoxication and BAC that are consistent for their pattern of drinking. Note: If tolerant to alcohol, BAC may be higher.	• conduct a BAC by breathalyser (or blood test if appropriate) and record the results • observe for emerging signs of illness or injury; if condition changes seek immediate medical advice • observe vital signs (temperature, pulse, blood pressure, respiration, level of consciousness) at no less than 15-minute intervals • ensure they can stand unaided, at least three hours after care/admission • put them on their side (in recovery position) on a mattress on the floor or a very low bed • do not shower them or offer food or drink until they are fully alert and able to stand and walk unaided.

Client: • opens eyes to simple stimuli (touch, voice) • obeys simple instructions • is unable to form appropriate answers • is disoriented, and/or • is behaving in a way that concerns you, particularly if inconsistent with their BAC. This client's condition/situation may be due to acute illness, injury and/or intoxication from other drugs.	• conduct BAC by breathalyser (or blood test if appropriate) and record the results if possible • observe for emerging signs of illness or injury; if condition changes seek immediate medical advice • observe vital signs (temperature, pulse, blood pressure, respiration, level of consciousness) continually or at no less than five-minute intervals • keep them on their side (in recovery position) on a mattress on the floor or a very low bed • consult the nearest registered nurse or doctor • refer for immediate medical care • contact the nearest emergency service to let them know you are referring the client for medical assessment and explain the reasons; take or send the client to casualty accompanied by a trained health worker in a safe and appropriate vehicle • inform emergency staff of your concerns, role and presence if you are with the client • if a doctor directs the client back into your care, make sure they provide you with written confirmation that the client's medical condition is satisfactory and that they do not require medical supervision. **Note: If the client is sent back to your service:** • keep them on their side (in recovery position) on a mattress on floor or very low bed • keep them on at least half-hourly (30-minute) observation until they are alert, can respond fully to you, and can safely manage in their environment • notify the doctor and/or emergency unit again if their condition deteriorates • if in any further doubt, return the client to the medical service for further medical assessment.

Client: • does not open eyes to simple stimuli • does not respond to painful stimuli, and/or • is disoriented and unsure of who they are.	**This is an emergency:** • do not leave them alone and unobserved • keep them on their side (in recovery position) • check that their airway is clear • apply cardio pulmonary resuscitation CPR as necessary • call an ambulance and transfer them to hospital. **Notify the medical officer and emergency service immediately.** Give your account of the client's condition and any contributing factors you know of.

Note: Always keep the emergency first aid box and phone numbers nearby.

Source: Adapted from Gaughwin, M & Williamson, P 1996, *Guidelines I: Alcohol: Hospital management of intoxication and withdrawal*, revised edition, Drug & Alcohol Services Council, South Australia.

Overdose

An overdose of alcohol is caused by the consumption of alcohol in large quantities over a short period (hours) of time. This can depress the respiratory (breathing) centre of the brain and the person can stop breathing. An overdose may also be from over-consumption of legal or illicit drugs. The combination of even a small amount of alcohol with other drugs, particularly other depressants, can increase the overall effects on the brain. These depressants include methadone, morphine, codeine, heroin, ketamine, inhalants and benzodiazepines (sedatives and sleeping tablets).

OVERDOSE IS LIFE-THREATENING

Any overdose, particularly alcohol combined with other drugs, is life-threatening. Seek immediate medical treatment or emergency assistance.

Signs of overdose

Clinical signs of alcohol overdose include one or more of the following:

- positive breath or blood test for alcohol
- strong smell of alcohol
- slow and noisy breathing
- fast heart rate (tachycardia) or slowed heart rate (bradycardia)
- lessening consciousness (increasing stupor) or coma
- cold and clammy skin
- drop in body temperature
- drop in blood pressure.

Management of overdose

When a client presents with an alcohol overdose there are a number of actions you should take:

- Apply first aid.
- Observe and manage the following:
    - breathing difficulties (respiratory depression or failure, airway obstruction, bronchospasm)
    - build up of acid in the blood, or low blood pH (acidosis)
    - inhalation of fluid or other matter into the lungs (aspiration)
    - swelling or excessive build up of fluid in the lungs or brain
    - excessive bleeding internally or externally
    - low blood sugar (hypoglycaemia)
    - low or high potassium levels in the blood
    - liver failure.

- Measure, observe and manage the following:
  - abnormally low blood pressure (hypotension)
  - abnormal heart rate or activity (bradycardia, tachycardia, cardiac arrhythmia)
  - significant increase or decrease in body temperature (hyperthermia or hypothermia)
  - decrease in or absence of urine output
  - seizures
- Keep the client as calm and quiet as possible as excessive movement and activity can rapidly increase the rate of absorption of alcohol and other drugs in the bloodstream
- Collect urine and blood samples as soon as possible
- Do not give food or oral fluids
- Seek expert medical advice.

Alcohol Withdrawal Syndrome

Alcohol withdrawal has physical, neurological and emotional effects ranging from mild to severe, with or without other complications. The usual time frame for alcohol withdrawal is five days after the last drink, but it may last up to 14 days.

A client may undergo alcohol withdrawal if they *unexpectedly stop or reduce* their alcohol consumption due to illness, injury or other circumstances that prevent them from accessing daily supplies of alcohol. In other words, they have not planned to undergo withdrawal and detoxification. For frail, sick, elderly and very young people, the risk is even greater, and at lower levels of daily consumption.

If a client has not consumed alcohol for a day or so, they may already be experiencing serious withdrawal when they come to your service. They may be seeking help with their alcohol withdrawal symptoms or some other illness or injury.

It is important to note that the time taken to assess, treat and transfer a client from a remote or rural area can also place them at risk of withdrawal. Symptoms may arise while they are being evacuated or after they arrive in the receiving hospital for treatment of their medical or psychiatric problem. This is due to their unplanned cessation of drinking. Clients may also suffer depression for several weeks after acute alcohol withdrawal and may require treatment until it resolves (see Chapter 4, 'Alcohol and mental health problems' in this Tool Kit).

The retrieval team therefore needs to be informed about the client's recent drinking pattern, risk of withdrawal, any known history of complications, time of last drink, most recent BAC reading, and withdrawal score if available (see 'Monitoring alcohol withdrawal' below).

DO NOT TREAT ALCOHOL WITHDRAWAL WITH MORE ALCOHOL

Do not give alcohol to treat clients in alcohol withdrawal. In the past, some healthcare providers believed alcohol withdrawal could be managed by giving the client more alcohol; this is a dangerous myth and can lead to serious medical complications and adverse drug interactions.

Predicting withdrawal

It is not possible to accurately and reliably predict who will experience alcohol withdrawal or the serious complications of withdrawal by the actual amount a drinker consumes. However, it is widely accepted that if a client has previously experienced alcohol withdrawal complications, such as seizures, hallucinations or delirium tremens (the DTs or the 'horrors'), they are at high risk of complicated withdrawal happening again.

There are a number of risk factors that make up an 'index of suspicion' which can guide you in making a clinical judgment about whether a client has the strong potential to go into alcohol withdrawal. You should anticipate alcohol withdrawal if your client:

- has a history of regular excessive drinking or alcohol dependence and it has been six or more hours since their last drink, but less than 10 days
- has consumed daily or almost daily eight standard drinks (80 grams of pure alcohol) or more for men, or six standard drinks (60 grams) or more for women, over several weeks or months
- has regularly consumed smaller amounts of alcohol as well as taken other depressant drugs such as sedatives or sleeping tablets, or opioids such as codeine, morphine or heroin
- has previously experienced alcohol withdrawal seizures (fits), hallucinations or other serious symptoms
- is currently experiencing alcohol-related medical problems such as high blood pressure, pancreatitis, liver disease or acute gastritis
- has a history of alcohol-related illness, for example, alcoholic hepatitis, heart problems, pancreatitis, liver disease or stomach ulcers
- has a physical appearance indicating high-risk drinking, for example, old scars, small purple blood vessels noticeable on the face, reddened eyes, signs of liver disease (jaundice), swollen belly, yellowing in the whites of the eyes, muscle wasting of legs and arms, or redness on the palms of the hands
- has had recent abnormal liver function test results, for example, raised serum levels of alanine aminotransferase, aspartate aminotransferase or gamma glutamyl transpeptidose and/or raised mean cell volume.

Using blood alcohol concentration to predict withdrawal

It is important to obtain an accurate reading of BAC, by blood test or breathalyser, for any client at risk of withdrawal. Some key points in relation to BAC and withdrawal are:

- A normal liver metabolises about one standard drink per hour (0.015 BAC per hour). For example, if a client drank eight standard drinks, it will be about eight hours before their BAC falls to zero.
- Withdrawal can start as BAC falls but before it reaches zero, for example with a reading of 0.1 BAC or higher in a dependent drinker.
- It is important to record the date and time of the last alcoholic drink and monitor the client's BAC in order to best estimate when onset of withdrawal symptoms may occur.
- Even if the client's BAC reading is low or zero and they are not experiencing withdrawal, they may have an illness or injury or have taken other drugs.

Signs and symptoms of withdrawal

Withdrawal can range from mild to severe; severe withdrawal can be life-threatening. The signs and symptoms of the various levels of withdrawal are summarised in Table II.3.

Table II.3: Signs and symptoms of mild, moderate and severe withdrawal

Alcohol withdrawal is a serious and potentially life threatening condition. It occurs as a result of stopping drinking altogether or rapidly reducing the amount consumed by a person who is tolerant (i.e. physically dependent on alcohol). It is caused by a fall in blood alcohol concentration (BAC) resulting in over-excitability of the brain due to neuro-adaptation. Symptoms emerge as the brain responds to the falling BAC, and this may occur before BAC reaches zero (e.g. 0.1 BAC). The usual time frame for 'acute phase' of alcohol withdrawal is 5 days after the last drink, but it may last for up to 14 days. Which drinker, who is at risk of withdrawal, will experience mild, moderate or sever withdrawal (and withdrawal complications) is unpredictable and does not seem to be associated with the drinker's level of drinking.	**Signs and symptoms**	**Mild withdrawal**	**Moderate withdrawal**	**Severe withdrawal**
		Acute symptoms generally begin between 6 - 24 hours (1 day) after the last drink Symptoms gradually subside over 2 to 5 days (48 -120 hours) after the last drink but can take longer for some people	Severity of symptoms increase within 24 hours (1 day) after the last drink but will generally subside over next 3 days (72 hours) after the last drink	Symptoms start to arise between 24 - 48 hours (1-2 days) after the last drink Further delays may be due to presence of other CNS depressants, such as opioids for analgesia or anaesthetics Symptoms generally subside after 5 days but may last as long as 14 days after the last drink
	headaches	✓	✓	✓
	dehydration	✓ mild	✓ moderate	✓ excessive
	anxiety	✓ mild	✓ moderate	✓ high
	tremor (shaking of hands, tongue when extended)	✓ slight shaking observed	✓ moderate shaking observed	✓ marked (obvious) shaking observed
	body temperature	✓ mild rise in body temperature in someone who does not have infection (37.0°C)	✓ mild rise in body temperature in someone who does not have infection (37.0°C)	✓ hyperthermia (high temperature) in someone who does not have infection (over 37.0°C)
	blood pressure	✓ mild rise above the person's normal blood pressure (mild hypertension)	✓ mild to moderate high blood pressure (hypertension) (e.g. diastolic reading of 100-110mmHg)	✓ moderate to severe 'high blood pressure (hypertension) (e.g. diastolic reading of greater than 120mmHg) OR ✓ hypotension (low blood pressure)
	pulse (heart rate)	✓ resting heart rate of more than 100 beats a minute (tachycardia)	✓ resting heart rate of more than 100 beats a minute (tachycardia)	✓ resting heart rate of more than 100 beats a minute (tachycardia)
	stomach upset or poor appetite	✓ nausea and vomiting and/or ✓ indigestion (dyspepsia)	✓ nausea and vomiting and/or ✓ indigestion (dyspepsia) and/or ✓ not wanting to eat and/or ✓ diarrhoea	✓ nausea and vomiting and/or ✓ not wanting to eat and/or ✓ diarrhoea

If a person has a history of alcohol withdrawal complications e.g. seizures, hallucinations, or Delirium Tremens, they are at high risk of complicated alcohol withdrawal happening again.

People who also have a **serious illness, injury or infection** are more at risk of alcohol withdrawal complications.

Diazepam should be administered to prevent or manage seizures, unless contraindicated, whereby seek specialist advice.

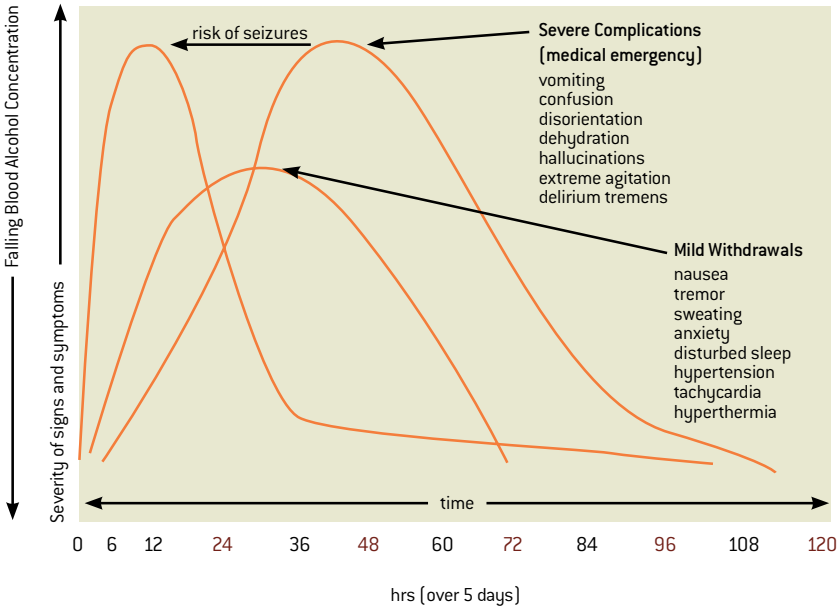
Delirium Tremens is a medical emergency that can result in death so the person requires urgent medical assessment and intensive care in an acute care hospital.

Signs and symptoms	Mild withdrawal	Moderate withdrawal	Severe withdrawal
sweating	✓ mild	✓ moderate	✓ excessive
altered emotional state (e.g. anxiety, confusion, disorientation, agitation or restlessness)	✓ mild and will respond to reassurance	✓ moderate and may include panic attacks, and will respond to reassurance	✓ severe (unable to recognise time, place, etc.), may include panic attacks, may not respond to reassurance
sleep disturbance	✓ restless sleep and/or ✓ difficulty sleeping or staying asleep / insomnia	✓ restless sleep and/or ✓ difficulty sleeping or staying asleep / insomnia and/or ✓ nightmares	✓ restless sleep and/or ✓ difficulty sleeping or staying asleep / insomnia and/or ✓ nightmares
hypersensitivity to external stimulation (e.g. easily upset or startled by bright lights, sudden noises, other people touching them and movements)	✓ may be mild sensitivity	✓ increasing sensitivity	✓
hyperventilation (breathing faster or deeper than necessary)	✘	✓	✓
weakness in hands and limbs (lack of muscle strength)	✘	✓	✓
Complications - withdrawal seizures (convulsions or fits)	✘	✘	✓
Complications - hallucinations (can be sight, hearing or touch)	✘	✘	✓
Complications - Delirium Tremens (DTs)	✘	✘	✓

Onset and progression of withdrawal

Figure II.3 shows the probable onset and progression of alcohol withdrawal, and when complications may occur. There are of course variations among individuals as to the time of onset, when complications arise, and the number of days their withdrawal lasts.

Figure II.3: Onset and progression of alcohol withdrawal



Source: Adapted from NSW Health Department 1999, *NSW detoxification clinical practice guidelines 2000–03*, NSW Health Department, Sydney.

The general points to take from Figure II.3 are:

- Alcohol withdrawal begins between six and 24 hours after the time of the last drink, and is not necessarily related to a zero BAC reading.
- Complications can arise within the first 24 hours after the last drink.

- Seizures (fits) can occur at any time during withdrawal, but usually happen within the first 48 hours after the last drink.

Early recognition, regular observation, good monitoring and effective medical and nursing management of initial, milder stages of withdrawal are crucial to preventing withdrawal from progressing to severe, life-threatening stages.

SYSTEMATIC MANAGEMENT OF WITHDRAWAL

A client needs to be cared for in a safe, non-stimulating environment where they can be observed easily. The aim is to prevent and minimise over-stimulation of their brain and therefore decrease the risk of complications. This means no bright lights or darkness and being nursed on a low bed in an area with no pictures or other items nearby that could injure the client if they become disoriented or agitated or that could become incorporated into visual hallucinations.

Clinical observation, monitoring and diagnosis of alcohol withdrawal are always critical in recognising what might be happening, and any abnormalities and complications that might be developing.

Monitoring alcohol withdrawal

In order to accurately diagnose withdrawal, its likely time of onset and any complicating factors such as illness, injury or other drug overdose, it is necessary to observe, assess, score, monitor, document and respond to the client's symptoms.

The most systematic and accurate way to measure the onset and monitor the severity of withdrawal is using the Clinical Institute Withdrawal Assessment of Alcohol Scale – Revised (CIWA-Ar) (see Figure II.4).[1] CIWA-Ar does not allow diagnosis of alcohol withdrawal,

but guides the clinician in identifying symptoms indicative of the severity of a client's withdrawal syndrome.

CIWA- Ar is a 10-item scale provides a baseline for monitoring and scoring symptoms, with changes in withdrawal severity being measured over time. Scoring symptoms helps in predicting potential complications, instigating medical treatment, and preventing under- or overdosing with diazepam and other medications used to manage alcohol withdrawal.

The client's condition should be regularly observed, evaluated and treated according to their clinical condition. A CIWA-Ar score indicates whether or not withdrawal symptoms are worsening and when treatment is appropriate. It can also assist in recognising whether a client is actually undergoing withdrawal or has some other condition. This is particularly likely if the client does not respond well to standard alcohol withdrawal treatment.

A client may have a higher than expected CIWA-Ar score for reasons other than alcohol withdrawal due to injury or other illness. In such a case, it is important that the client be medically assessed as soon as possible.

Figure II.4: Clinical Institute Withdrawal Assessment of Alcohol Scale– Revised

Use the Clinical Institute Withdrawal Assessment for Alcohol Scale – Revised (CIWA-Ar) to record observations two-hourly or as needed.

Notify a medical officer if any of the following occurs:

- Client's CIWA-Ar score is greater than 8
- Client experiences a seizure
- Client has unexpected changes in vital signs.

Patient name												
Date												
Time of last drink												
BAC reading at time of admission												
Observations												
Time												
Temperature												
Pulse												
Respiration rate												
Blood pressure												
CIWA-Ar score												
Nausea and vomiting												
Tremor												
Paroxysmal sweats												
Anxiety												
Agitation												
Tactile disturbances												
Auditory disturbances												
Visual disturbances												
Headache, fullness in head												
Orientation and clouding of sensorium												
TOTAL SCORE												

Clinical Institute Withdrawal Assessment for Alcohol Scale – Revised

Nausea and vomiting	Tactile disturbances
Ask 'Do you feel sick in the stomach? Have you vomited?' Observation	Ask 'Have you any itching, pins and needles sensations, any burning, any numbness or do you feel bugs crawling on or under your skin?' Observation
0 No nausea and no vomiting	0 None
1 Mild nausea with no vomiting	1 Very mild itching, pins and needles, burning or numbness
2	2 Mild itching, pins and needles, burning or numbness
3	3 Moderate itching, pins and needles, burning or numbness
4 Intermittent nausea, with dry retching	4 Moderately severe hallucinations
5	5 Severe hallucinations
6	6 Extremely severe hallucinations
7 Constant nausea, frequent dry retching and vomiting	7 Continuous hallucinations
Tremor	**Auditory disturbances**
Arms extended, elbows slightly flexed and fingers spread Observation	Ask 'Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?' Observation
0 No tremor	0 Not present
1 Not visible, but can be felt fingertip to fingertip	1 Very mild harshness or ability to frighten
2	2 Mild harshness or ability to frighten
3	3 Moderate harshness or ability to frighten
4 Moderate	4 Moderately severe hallucinations
5	5 Severe hallucinations
6	6 Extremely severe hallucinations
7 Severe, even with arms not extended	7 Continuous hallucinations
Paroxysmal sweats	**Visual disturbances**

Observation	Ask 'Does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing things you know are not there?' Observation
0 No sweat visible	0 Not present
1 Barely perceptible sweating, palms moist	1 Very mild sensitivity
2	2 Mild sensitivity
3	3 Moderate sensitivity
4 Beads of sweat obvious on forehead	4 Moderately severe hallucinations
5	5 Severe hallucinations
6	6 Extremely severe hallucinations
7 Drenching sweats	7 Continuous hallucinations
Anxiety	Headache, fullness in the head
Ask 'Do you feel nervous?' Observation	Ask 'Does your head feel different? Does it feel as though there is a band around your head?' Do not rate for dizziness or light-headedness. Otherwise rate severity
0 No anxiety, at ease	0 Not present
1 Mildly anxious	1 Very mild
2	2 Mild
3	3 Moderate
4 Moderately anxious or guarded so anxiety is inferred	4 Moderately severe
5	5 Severe
6	6 Very severe
7 Equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions	7 Extremely severe

Agitation	Orientation and clouding of sensorium
Observation	Ask 'what day is this? Where are you? Who am I?' Observation
0 Normal activity	0 Orientated and can do serial additions
1 Somewhat more than normal activity	Ask person to perform serial additions of 3s up to 30, e.g. 3,6,9 ...
2	1 Cannot do serial addition or is uncertain about date
3	2 Disorientated for date by no more than 2 calendar days
4 Moderately fidgety and restless	3 Disorientated for date by more than 2 calendar days
5	4 Disorientated for place and/or person
6	
7 Paces back and forth during most of the interview or constantly thrashes about	

Note: This scale results in a quantitative rating (from 0 to 7 with a maximum possible score of 67) of the following components of withdrawal:

1. nausea and vomiting
2. tremor
3. paroxysmal sweats (a sudden attack of sweating)
4. anxiety
5. agitation
6. tactile (touch/feel) disturbances
7. auditory (sound/hearing) disturbances
8. visual (sight) disturbances
9. headache or fullness in the head
10. orientation and clouding of sensorium (intellectual and cognitive functions, thinking).

Source: Sullivan, JT, Sykora, K, Schneiderman, J, Naranjo, CA & Sellers, EM 1989, 'Assessment of alcohol withdrawal: The Revised Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA-Ar)', *British Journal of Addiction*, vol 84, no 11, pp 1353–7.

Early onset of alcohol withdrawal may be indicated by *a slight rise in temperature* (37 degrees Celsius) in a client who does not have an infection. It is useful to include the temperature, pulse, respiration scores (TPR) and blood pressure scores on the same form as the CIWA-Ar. This allows for concurrent monitoring and recording of the client's condition,

and identification of potential problems from these objective clinical signs. It also allows for identification of onset and early signs of alcohol withdrawal.

Using CIWA-Ar scores to guide frequency of monitoring

By monitoring regularly, and depending on actual scores, it is possible to identify changes in the client's symptoms and medical condition, treat accordingly, and prevent serious withdrawal complications. You should use the CIWA-Ar to monitor:

- hourly for at least the first four hours
- hourly if the CIWA-Ar score is greater than 20
- two-hourly if the CIWA-Ar score is between 8 and 20
- four-hourly if the CIWA-Ar score remains less than 8 for three days.

USING CIWA-AR SCORES TO DETERMINE WHEN TO SEEK SPECIALIST ADVICE

Always contact a doctor if the client's CIWA-Ar score increases by at least 5 points over a four-hour period, the CIWA-Ar score reaches 8 or you are concerned for the client's wellbeing.

You need to seek specialist medical advice if the CIWA-Ar score exceeds 25.

Notify a doctor if the CIWA-Ar score does not drop following the prescribed diazepam regime, or the score rises above 15.

Managing withdrawal

Withdrawal form alcohol may be life-threatening. The most important thing is to anticipate that it may occur in any male client who consumes 8 standard drinks (or more) on most days or a female who consumes 6 standard drinks (or more). Complications are more likely in a client who has an injury or illness and are most likely to occur in a client with a history of complications.

Thiamine (vitamin B1) replacement therapy

Before administering thiamine, ensure that the client's coagulation (bleeding and clotting) status is within normal range and that it is safe to give intramuscular (IM) or intravenous (IV) thiamine. Consult with a haematologist as needed.

Thiamine replacement therapy usually proceeds according to the following schedule:

- Administer 100 milligrams thiamine – IM or IV – before or with glucose (dextrose) administration.
- Subsequently, administer 100 milligrams thiamine – IM or IV – three times a day for the first three days.
- Thereafter, administer 100 milligrams tablet orally daily and continue after discharge until client has abstained from drinking alcohol for three months.

Diazepam

Diazepam is the preferred prescription medication for prevention and treatment of alcohol withdrawal complications. It is a long-acting sedative that prevents alcohol withdrawal seizures (fits) and other complications such as delirium tremens. Trade names for diazepam include Antenex®, Ducene®, Valium® and Valpam®.

Do not administer diazepam (or any other sedative) until all medical diagnoses have been confirmed and the possible impact

and required treatment of the injury or illness and withdrawal have been assessed.

Diazepam may be suitable for a client if withdrawal is likely to complicate their other illnesses and/or injuries, and only if their medical condition is assessed as not precluding diazepam as a safe treatment.

Potential hazards of diazepam include over-sedation or inadequate doses to sedate and control withdrawal symptoms and prevent seizures (fits).

Diazepam regime for mild withdrawal

Do not commence a diazepam regime until the client's BAC is 0.1 or less.

The initial treatment with diazepam is administered as follows:

- Prescribe 5 to 10 milligrams diazepam orally, four times a day as necessary to cover mild agitation if the client has a low CIWA-Ar score for example below 8.
- Should withdrawal symptoms become more severe, commence a loading dose of 20 milligrams diazepam two-hourly if the CIWA-Ar score rises to between 8 and 25 and until the score falls to below 8. The maximum dosage is 120 milligrams over 24 hours. If more is needed, the doctor must review the client before any further administration of diazepam proceeds.

More intensive nursing and medical care will be needed if the client's CIWA-Ar score is 20 or higher.

Diazepam regime when severe withdrawal is predicted

Diazepam should also be administered based on the CIWA-Ar score, to commence if the score is greater than 10 after the loading dose is completed.

You may also prescribe up to 10 milligrams diazepam orally, four times a day as necessary to cover mild agitation in the event of a low CIWA-Ar score to commence the day after diazepam loading.

Ten to 20 milligrams temazepam at night as necessary may also be prescribed for night sedation for up to three nights (not to commence until the day after diazepam loading).

Diazepam regime when the client has a history of alcohol withdrawal seizures

Any witnessed or reported seizure (fit) must be taken seriously and investigated to confirm cause and diagnosis, as it may or may not be an alcohol withdrawal seizure.

- Any client with a history of proven alcohol withdrawal seizures requires diazepam loading (as above), unless it is medically unsafe to do so.
- If a client weighs more than 75 kilograms, an additional 15 milligram dose may be needed for the first day.
- If the client's CIWA-Ar score is greater than 10 after the loading dose is completed, seek specialist medical advice.
- Thereafter, a client needing preventive or protective measures for seizures should have:
  - 10 milligrams of diazepam twice a day for two days, followed by
  - 5 milligrams of diazepam twice a day for one day.

Management when diazepam is contraindicated

Diazepam should be withheld if the client shows signs of benzodiazepine intoxication, which are very similar to the signs of alcohol intoxication. A urine test may be needed to confirm the presence of benzodiazepines.

Diazepam is generally not to be given (is contraindicated) when a client has suspected or confirmed liver failure or a chronic airflow limitation (low oxygen), is on a 'no oral intake' regime or is taking other depressant drugs. There may be other serious conditions that diazepam may compromise for which it may be necessary to seek alternative treatments.

You should seek medical advice as needed. A doctor may prescribe other medications to prevent and treat acute withdrawal symptoms without over-sedation.

When client has suspected or confirmed liver failure

The advice of a specialist physician is necessary to diagnose and determine if a diazepam regime is contraindicated.

It is very important to confirm that the client is undergoing alcohol withdrawal as poorly selected sedation is dangerous and can cause severe liver and related brain complications (hepatic encephalopathy).

Lower dosages of any sedative are therefore essential for clients with poor liver function.

Oxazepam may be preferable to diazepam due to its shorter half-life and lack of active metabolites (15 milligrams oxazepam is approximately equivalent to 5 milligrams diazepam).

Also consider seeking specialist dietary advice on the client's behalf.

When client has chronic airflow limitation (low oxygen)

The advice of a specialist physician is necessary to diagnose and determine if a diazepam regime should not be used due to respiratory failure.

Sedating benzodiazepines are not advised for clients with chronic obstructive airways disease. A shorter acting benzodiazepine, such as oxazepam, may be chosen in this instance. Seek advice of a specialist physician.

When client is on 'no oral intake' regime

The advice of a specialist physician is necessary to diagnose and determine treatment of a client who cannot eat or drink due to a medical condition.

The doctor may prescribe 5 milligrams diazepam intravenously, repeated up to half hourly, up to 120 milligrams or until the client is sedated but still rousable.

However, if the client requires more frequent doses, this is a medical emergency and you should seek further specialist advice.

When client is taking other depressants

Other depressants include strong painkillers (opioids such as morphine, fentanyl or pethidine) and sedatives.

Clients who have taken other depressants need to be observed and monitored closely.

You should monitor their oxygen saturation levels one- to two-hourly.

The dose of diazepam may need to be reduced – seek medical advice.

Medications for other withdrawal symptoms

Other medication may also be needed for:

- nausea/vomiting
- headache
- stomach cramps
- diarrhoea.

A doctor's prescription is needed for the most effective anti-nausea drugs, and the client needs to be closely monitored for side effects.

SITUATIONS REQUIRING SPECIALIST CONSULTATION

Consult a medical specialist if the client:

- is undergoing combined alcohol and benzodiazepine withdrawal
- has an oxygen saturation level of less than 94 per cent on air
- has a respiratory rate of fewer than eight or more than 25 breaths per minute
- cannot be easily roused, woken or stirred by touch or speech
- has delirium tremens
- has an injury or illness that may cloud their conscious state, for example, head injury, stroke, hypoglycaemia (low blood sugar) or neuro-surgical condition
- has other illnesses that make administering sedatives dangerous, for example, chronic obstructive airways disease or liver failure; or they are taking a strong pain reliever, such as morphine, fentanyl, pethidine or codeine
- has acute alcohol withdrawal that is difficult to manage and requires higher than usual doses of diazepam
- displays psychotic symptoms (such as hallucinations or paranoia) as they may require haloperidol, risperidone or other anti-psychotic medicines.

A client experiencing one or more of these symptoms or conditions may need to be transferred to an acute care hospital.

Serious complications of withdrawal

There are people for whom alcohol withdrawal can be very serious. There is risk of death if complications are poorly recognised and untreated or if there are also other serious medical conditions.

It is impossible to predict which drinkers will experience alcohol withdrawal complications. If they meet the index of suspicion for withdrawal, each client should be assumed to be at risk and regularly observed and monitored. The risk of complications is greater in people with concurrent injury, acute infection or illness and for those with a history of complications in the past such as seizures (fits), hallucinations or delirium tremens.

Early recognition and correct management of the initial, milder stages of withdrawal are crucial in preventing complications and progression to the severe, life-threatening stages.

Serious complications include delirium tremens, seizures, hallucinations and Wernicke's encephalopathy.

Delirium tremens

Delirium tremens (the DTs) is the most severe form of acute alcohol withdrawal syndrome and is a medical emergency. The DTs are characterised by profound disorientation, confusion and hallucinations. The DTs can occur unexpectedly: a client may appear to be undergoing uncomplicated withdrawal but suddenly progress to the DTs.

The DTs can result in deaths of up to 20 per cent of untreated cases (two out of 10). The client must be admitted to an intensive care unit and you must seek expert medical advice if the DTs are suspected.[2]

Onset

The DTs usually develop between two and five days after the last drink or if the drinking level has been significantly reduced. The

usual course is then over three days, but can be up to 14 days. However, in some people it may take up to seven days to emerge.[3]

Dehydration, injury, infection, cardiac arrhythmia, low blood pressure (hypotension), kidney failure and pneumonia may trigger the DTs.

Signs

Signs include:

- fluctuations in blood pressure or pulse, high blood pressure, rapid heart beat, disturbance of fluid balance and electrolytes (such as sodium, potassium and magnesium), fever and excessive sweating
- gross tremor
- confusion and disorientation
- extreme agitation
- restlessness
- hallucinations affecting any of the senses, but typically visual (for example, brightly coloured animals)
- paranoia, typically of delusional intensity
- disturbed/ abnormal behaviour which is unusual for the individual (for example giggling or laughing at events not normally considered funny or suspicion of people without cause).

RESTRAINING OR DETAINING A CLIENT

A client experiencing the DTs may need to be physically restrained or temporarily detained under the relevant state or territory mental health act for their own safety.

Management

All clients undergoing alcohol withdrawal should be considered at risk of the DTs and need to be regularly observed, monitored and treated immediately if symptoms start to emerge.

Management of the DTs usually includes:

- medical treatment of concurrent conditions, for example, diabetes, acute infection and kidney disease
- thiamine (vitamin B1) replacement therapy
- effective sedation (for example, an appropriate diazepam regime)
- other withdrawal medications as required, for example, anti-emetics to stop vomiting or anti-psychotics to manage hallucinations
- intravenous fluids to maintain hydration
- electrolytes (such as sodium, potassium and magnesium) to maintain or stabilise electrolyte balance.

Some people may have lingering cognitive dysfunction (difficulties in memory, problem solving and learning new things) from which they may recover in four to 12 weeks after a severe episode of alcohol withdrawal. If the DTs are accompanied by Wernicke's encephalopathy, cognitive dysfunction may be permanent.

Seizures

Seizures (fits) may occur at any time during withdrawal, but usually within the first 48 hours (see under 'Intoxication' in this chapter for more detail). Seizures can be treated with adequate doses of diazepam or as recommended for the client's particular condition. This is referred to in figure 11.3 on page II.29.

Hallucinations

Hallucinations occur in about 25 per cent of people experiencing withdrawal. These are usually visual or tactile (typically insects crawling over the body) but can be auditory. They can be unpleasant, frightening and cause severe anxiety.

Wernicke's encephalopathy

Wernicke's encephalopathy is a serious, acute condition caused by a thiamine (vitamin B1) deficiency resulting from high-risk alcohol consumption and dependence. Non-drinkers or low-risk drinkers may develop the condition if they are suffering malnutrition and cannot absorb sufficient daily thiamine.

Clinical signs of Wernicke's encephalopathy include:

- acute disorientation and confusion
- Poor balance and ataxia - very unsteady on feet(lack of muscle control of arms and legs)
- nystagmus - involving(rapid involuntary movements of one or both eyes, which move from side to side, up and down, or around in circles).
- neuropathy - (person has altered sensation with 'pins and needles' or loss of feeling, for instance in their feet, lower legs, fingers and hands)
- very poor short term memory, concentration, judgement and 'flat' mood (may also happen with intoxication and withdrawal).

Signs of Wernicke's encephalopathy *may coexist with* alcohol intoxication or withdrawal. This is further discussed in Part III: Alcohol effects on the body.

Reducing the risk of Wernicke's encephalopathy

Do not give any intravenous fluids containing glucose or glucose-based drinks (including sugared tea, coffee or soft drinks). This worsens thiamine deficiency. If thiamine is not administered prior

to any glucose, the risk of precipitating Wernicke's encephalopathy is high and can lead to permanent brain damage and memory loss.[4]

The preferred method for thiamine replacement in an emergency is by intramuscular (IM) injection, which is quite painful, or intravenous (IV) injection.

Rapid thiamine replacement of 100 milligrams by IM injection must be given before any sugar drinks or oral doses or IV injections of glucose (dextrose).

If rapid glucose replacement is needed, for example a client with diabetes who is experiencing low blood sugar (hypoglycaemia), 100 milligrams of IV thiamine can be given at the same time as oral, IM or IV glucose.

In rare situations IV thiamine may result in anaphylactic shock requiring immediate access to adrenalin injection and resuscitation equipment. For this reason it should only be administered where such equipment and appropriate expertise are available.

On discharge it is advised that 100 milligrams oral thiamine be prescribed to be taken daily (in tablet form), especially if the client is likely to continue to drink.

Essential nutrients following acute phase of withdrawal

Following acute alcohol withdrawal the client needs a healthy intake of foods and oral multivitamin and mineral supplements. Nutritional planning and support is needed to treat deficiencies.

The client may have a poor appetite, especially if they feel nauseated or have bouts of vomiting. Encourage them to eat frequent snacks and light foods regularly. If they are suffering from poor nutrition or liver disease it is advisable to seek specialist dietary advice on their behalf.

Taking daily 100 milligram thiamine tablets is particularly important for clients who continue to drink alcohol at high-risk levels and/or who are at risk of malnutrition.

The client's fluid balance also needs to be maintained. Encourage them to drink plenty of non-alcoholic fluids (such as water, tea and juices) to prevent dehydration (from excessive alcohol consumption, sweating, vomiting and/or diarrhoea) as this can impact on their general health and complicate future withdrawal symptoms.

You may need to monitor the client's electrolytes (such as sodium, potassium and magnesium) by urine or blood testing, and treat as needed.

3. GENERAL CARE

People of any age, and from all walks of life, can experience alcohol-related problems. Alcohol-related problems vary in nature and in severity. They may resolve quickly, come and go, or become long-standing (chronic). The same person may experience different types of alcohol-related problems at various times in their life.

Many people recover from their alcohol-related problems by helping themselves or through the help of family, friends or general healthcare providers. However, some people have complex problems from which they have difficulty recovering without expert help from healthcare providers and without access to specialist services. These clients commonly need ongoing support from their local healthcare providers and families.

It is well recognised that many Indigenous clients who have been risky or high-risk drinkers have either stopped drinking altogether or reduced their drinking to low-risk levels following advice and support from their family, community and/or healthcare providers.

Your Indigenous client needs to feel respected, comfortable and not ashamed to talk to you about their drinking and related issues.

It is important that you and your client share a common understanding about their drinking problem, its risks and current implications as well as their needs, options and priorities in the short- and longer-term. You both need to be involved in their care planning and in deciding which services are suitable and/or available for them and their family. Your client needs to be fully informed and able to make their own decisions about their care and 'safe passage' to recovery.

The first steps in helping your client are to conduct screening and assessment of their drinking problem. One you have done this preliminary work, you can then focus on identifying the appropriate response.

Screening and assessment

Many drinking problems can be stopped or reduced through early recognition followed by intervention (early intervention is discussed in more detail under 'Intervention for non-dependent clients – Early and brief intervention' in this chapter). Systematically screening for and responding to the range of drinking problems your Indigenous clients may have enables them to receive timely advice, effective medical and social care, and alcohol education. Importantly, this boosts the likelihood of preventing and minimising the known serious deterioration in health and wellbeing that can occur without treatment.

You should therefore include screening and assessment for drinking problems in all health checks and routine health examinations, as well as in all consultations that are covered by item 710 of the Medicare Benefits Schedule for adult health checks for Aboriginal and Torres Strait Islander peoples aged 15 to 54 years.

Terminology used in screening and assessment

There is often confusion when discussing the quantity of alcohol in a drink and what "a drink" is. This section provides details of what constitutes a standard drink and what numbers of drinks can become problematic.

Care should be taken when assessing standard drinks as there are different terms used within the industry which may mean different things in different States (see figure II.5).

Standard drinks

In Australia all alcohol screening, assessment and education guidelines are presented in 'standard drinks'. A standard drink in Australia is any alcoholic drink that contains 10 grams of pure alcohol.

1.5
375ml
Full Strength Beer
4.9% Alc/Vol

1
375ml
Mid Strength Beer
3.5% Alc/Vol

0.8
375ml
Light Beer
2.7% Alc/Vol

1.5
375ml
Full Strength Beer
4.9% Alc/Vol

1
375ml
Mid Strength Beer
3.5% Alc/Vol

0.8
375ml
Light Beer
2.7% Alc/Vol

1
285ml
Middy/Pot
Full Strength Beer
4.9% Alc/Vol

0.7
285ml
Middy/Pot
Mid Strength Beer
3.5% Alc/Vol

0.5
285ml
Middy/Pot
Light Beer
2.7% Alc/Vol

1.5
170ml
Standard Serve of
Sparkling Wine/
Champagne
11.5% Alc/Vol

1.8
180ml
Average Restaurant
Serve of Wine
12% Alc/Vol

7
750ml
Bottle of Wine
12% Alc/Vol

Labels on alcoholic drink containers state the number of Standard Drinks in the container. In order to make this easier, the alcohol industry is now starting to use a standard drink logo.

Check the label to find out how many Standard Drinks are in the bottle or can.

The Standard Drinks shown are calculated to one decimal place. To make counting your drinks easier, you can round the numbers up or down. For example count 0.9 as 1.0 and 1.6 as 1.5.

Figure II.5: Standard drinks and alcohol content

1.5
375ml
Pre-Mix spirits
5.0% Alc/Vol

1.5
340ml
Alcoholic Soda
5.5% Alc/Vol

1
30ml
Spirit Nip
40% Alc/Vol

22
700ml
Bottle of Spirits
40% Alc/Vol

0.9
60ml
Port/Sherry Glass
18% Alc/Vol

1
100ml
Standard Serve of Wine
12% Alc/Vol

38
4 Litres
Cask Wine
12% Alc/Vol

36
Slab/24 cans/9 Litres
Full Strength Beer
4.9% Alc/Vol

24
Slab/24 cans/9 Litres
Mid Strength Beer
3.5% Alc/Vol

19.2
Slab/24 cans/9 Litres
Light Beer
2.7% Alc/Vol

28
2 Litres
Cask Port
18% Alc/Vol

Because the concentration of pure alcohol varies in different types of alcoholic drinks – such as wine, spirits, port or beer – the fluid volume (amount) of the drink is not what counts; it is the concentration or percentage of pure alcohol in each drink that matters.

For example, a 30-millilitre nip (shot) of spirits contains the same amount of pure alcohol as a 375-millilitre can of light beer, a 285-millilitre glass of full strength/heavy beer, or a 100-millilitre glass of wine. Even though these drinks vary in overall volume in millilitres, each contains 10 grams of alcohol, which is one standard drink.

People need to know that by consuming certain types of alcoholic drinks they may exceed low-risk drinking levels and that this can happen more quickly than if they choose other drinks with lower concentrations of pure alcohol, such as light beer instead of wine.

*Across Australia there are various terms used for beer containers in hotels, according to different states or territories. For example, NSW, WA, ACT = middy; Vic., Qld and Tas. = pot; NT = handle; SA = schooner. These generally contain 285 millilitres (equivalent to one standard drink) of full-strength beer.

Further information about standard drinks, and how to calculate the alcohol content of different drinks, can be found at www.alcohol.gov.au/guidelines/standard.htm.

Levels of drinking

The National Health and Medical Research Council asks health professionals to use precise terminology that is value-free and clinically accurate in describing and recording actual drinking patterns and risks of harm to health.[5] All drinking of alcohol has some level of risk associated with it. For this reason, use of terms such as 'safe drinking' is discouraged, as it is both inaccurate

and misleading. Descriptors such as 'social drinker' are similarly unhelpful, as there can be differences in understanding of exactly what this means to the client and to the health professional. The recommended terms to use, when describing levels of drinking are:

- **Low risk** – a level of drinking at which there is only a small risk of harm. At this level, there may even be health benefits for some of the population (provided they are adults and otherwise healthy).
- **Risky** – drinking at a level and frequency that increases the risk of harm to health and safety, for example, injuries or overdose due to intoxication, such as can happen for occasional intoxicated drinkers or binge drinkers. If the person regularly drinks alcohol at a risky level, this is also referred to as regular use or regular excessive use.
- **High risk** – drinking at a level and frequency that will cause harm to health, for example, physical (such as heart, liver or pancreatic disease) and mental health problems such as depression, anxiety, sleep disturbances and suicidal thoughts. High-risk drinking often has serious adverse family and social consequences. Again, this pattern of drinking is also referred to as regular use or regular excessive use.

Each of these drinking levels is associated with risks of short-term and long-term harm. Table II.4 outlines how risk of harm relates to the number of standard drinks consumed for each level of drinking.

Table II.4: Drinking levels: risks in the short and long term

	Low risk (standard drinks)	Risky (standard drinks)	High risk (standard drinks)
For risk of harm in the short term			
Healthy adult men			
On any one day	Up to 6 on any 1 day, no more than 3 days per week	7 to 10 on any 1 day	11 or more on any 1 day
Healthy adult women			
On any 1 day	Up to 4 on any 1 day, no more than 3 days a week	5 to 6 on any 1 day	7 or more on any 1 day
For risk of harm in the long term			
Healthy adult men			
On an average day	Up to 4 per day	5 to 6 per day	7 or more per day
Overall weekly level	Up to 28 per week	29 to 42 per week	43 or more per week
Healthy adult women			
On an average day	Up to 2 per day	3 to 4 per day	5 or more per day
Overall weekly level	Up to 14 per week	15 to 28 per week	29 or more per week

Source: Adapted from Shand, F, Gates, J, Fawcett, J & Mattick, R 2003a, *Guidelines for the treatment of alcohol problems*, National Drug and Alcohol Research Centre, Australian Government Department of Health and Ageing, Canberra.

Patterns of drinking

Pattern of drinking refers to aspects of drinking behaviour other than the level of drinking, and includes when and where drinking takes place, the number and characteristics of heavy drinking occasions, activities associated with drinking, personal characteristics of the drinker and drinking companions, the types of drinks consumed, and the drinking norms and behaviours that comprise a 'drinking culture'.[6]

There is a range of physical, psychological and social effects of alcohol that can be associated with particular patterns of drinking. Thorley (A) identified a spectrum of drinking problems based on the incidence, magnitude and characteristics of alcohol consumption in the overall population.[7] These were problems arising from intoxication, regular excessive use and dependence.

- **Intoxication** is usually taken to refer to an elevated blood alcohol concentration such that a person cannot function within their normal range of physical and intellectual abilities. It is a subjective state that involves the experience of a substantial effect of alcohol on mood, thoughts and physical movement.[8]
- **Regular** excessive use is typified by daily or almost daily use above recommended low-risk levels for healthy adults. There may be short- or longer-term harm to the person's safety and health. This applies even though the person may have a high tolerance to alcohol and therefore not feel or seem very intoxicated.
- **Dependence** (often called addiction) is a complex physiological and psychological state, which varies in severity for different people. People may be physically dependent on alcohol because they have developed a tolerance, without realising or being psychologically dependent, due to their regular risky drinking. Others will be physically and psychologically dependent.

Table II.5 summarises the physical, psychological and social effects associated with each of these patterns of drinking.

Table II.5: Effects associated with drinking pattern

Intoxication	Regular excessive use	Dependence
One-off or repeated episodes of intoxication can result in: • injuries • overdose • complications of other medical problems • suicide • vomiting and choking • burns • drowning • injuries to other people • violence • drink driving • crime • imprisonment • family problems • social and legal problems • community and cultural problems • employment and education problems • premature disability or death	Regular drinking at risky or high-risk levels can result in the same problems as intoxication, and any of the following: • serious physical conditions • mental health problems • alcohol withdrawal • malnutrition • muscle wasting • blackouts (not knowing what happened after a drinking bout) • thiamine deficiency and Wernicke's encephalopathy • memory and problem-solving problems • alcohol-related brain damage • diabetes • liver disease • oesophageal varices • acute or chronic pancreatitis • high blood pressure • heart disease • nerve damage • kidney disease • blood disorders • infections • cancers	Alcohol dependence may lead to any or all of the problems listed for intoxication and regular excessive use and may be further complicated by: • serious mental health problems • Korsakoff's syndrome (permanent brain disability and memory loss) • seriously disrupted social and cultural networks • loss of family • lost or seriously reduced ability to manage daily living • homelessness • institutionalisation

Source: *Adapted from Thorley, A 1982 'the effects of alcohol, in M Plant(ed), Drinking and problem drinking Junction Books, London, and 1990.*

Screening

As with other types of health problems, systematic and timely alcohol screening can reliably indicate whether or not there may be a problem, based on the client's actual drinking pattern.

Screening for drinking problems will enable you to identify your client's level of drinking, and give you an indication of any risk or likely health problems. Screening is the backdrop to assessment, diagnosis and treatment, and it increases the effectiveness of client-centred intervention.

A recent United States study found good evidence that screening in primary care settings can accurately identify clients whose levels or patterns of alcohol consumption do not meet criteria for alcohol dependence, but whose drinking places them at increased risk of illness and/or other alcohol-related harm.[9]

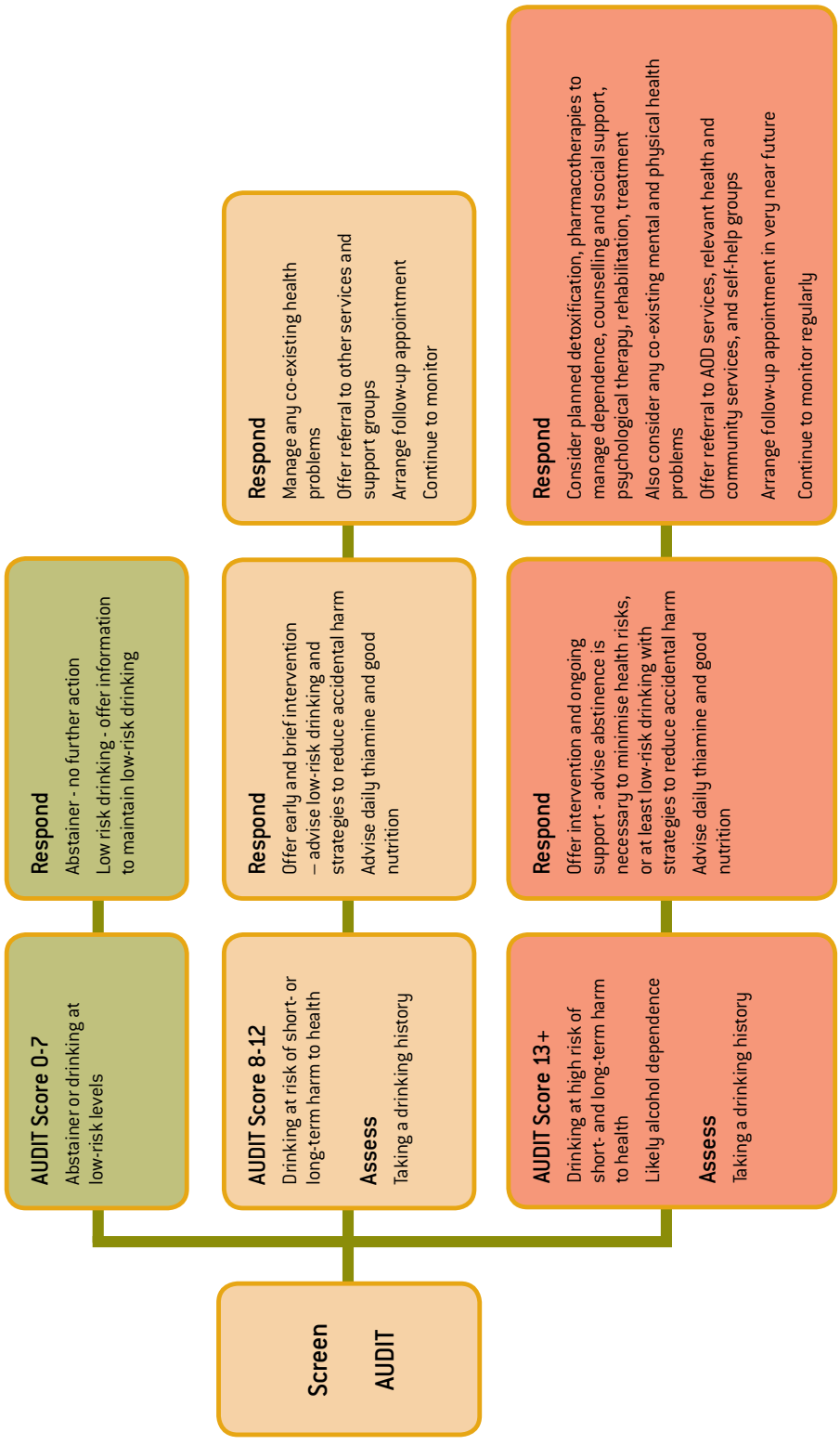
Due to the prevalence of drinking among people aged 15 years and over it is advisable to screen all clients from that age onwards for any risk of alcohol-related problems.

Healthcare providers need to be flexible in not only screening in a systematic manner but also when an unplanned opportunity arises. For example, screening can be done in the emergency department, pre-admission clinic, general practice, remote clinic, mental health service, medical and surgical ward, prenatal clinic, well men's and well women's programs, as well as during medical and mental health assessments.

In addition, as with other health screening, such as for hearing loss, kidney disease, high blood pressure, diabetes or high cholesterol, you can conduct screening for alcohol-related problems at health promotion events, such as community health expos and Drug Action Weeks.

When offering any health screening activities during community events, it is advisable to ensure there is a suitably trained healthcare provider present who can immediately assist and speak privately to any person who has been identified as being at risk.

Figure 11.7: A client-centred approach responding to drinking and related problems based on screening process and AUDIT score .



Source: Adapted from de Crespigny, Talmet, Modystack, Cusack & Watkinson, 2003; NSW Health Department 1999.

CHOOSING THE RIGHT TIME

It is only appropriate to screen for alcohol-related problems when the client is able to understand and respond effectively. It is *not* appropriate if they are intoxicated, injured or acutely ill.

AUDIT – An easy and reliable screening tool

The best practice tool currently recommended for alcohol screening in the general population is the Alcohol Use Disorders Identification Test (known as AUDIT).[10] This tool was developed and validated by the World Health Organization in 1989.

AUDIT is a reliable, brief screening tool that gathers information about a person's pattern of alcohol consumption and likely level of health risk. Note, however, that it has not been validated for use with Indigenous clients. The AUDIT questions may need to be slightly modified to suit your local context.

Administering AUDIT

AUDIT is available in an interview version (Figure II.6) and as a self-administered questionnaire (Figure II.7). The choice between these formats will depend on the client's wishes, health status and ability to read and write simple English.

AUDIT consists of 10 questions and takes only a few minutes to complete. A score is given for the answer to each question; the total score indicates the type of problem the client may have. You will need to have the 'Scoring AUDIT' information with you to calculate and interpret your client's score (see box on page II.66).

Figure II.6: AUDIT: Interview version

Read questions as written. Record answers carefully. Begin the AUDIT by saying 'Now I am going to ask you some questions about your use of alcoholic beverages during this past year'. Explain what is meant by 'alcoholic beverages' by using local examples of beer, wine, vodka, etc. Code answers in terms of 'standard drinks'. Place the correct answer in the box at the right.

1. How often do you have a drink containing alcohol? (0) Never [Skip to Qs 9-10] (1) Monthly or less (2) 2 to 4 times a month (3) 2 to 3 times a week (4) 4 or more times a week	6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
2. How many drinks containing alcohol do you have on a typical day when you are drinking? (0) 1 or 2 (1) 3 or 4 (2) 5 or 6 (3) 7, 8 or 9 (4) 10 or more	7. How often during the last year have you had a feeling of guilt or remorse after drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
3. How often do you have six or more drinks on one occasion? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily	8. How often during the last year have you been unable to remember what happened the night before because of your drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily	9. Have you or someone else been injured because of your drinking? (0) No (2) Yes, but not in the last year (4) Yes, during the last year
5. How often during the last year have you failed to do what was normally expected from you because of drinking? (0) Never (1) Less than monthly (2) Monthly (3) Weekly (4) Daily or almost daily	10. Has a relative, friend, doctor or other healthcare worker been concerned about your drinking or suggested you cut down? (0) No (2) Yes, but not in the last year (4) Yes, during the last year

Record total of specific items here

If total is greater than recommended cut-off, consult user's manual

1. Questions 1 to 8 are scored as 0, 1, 2, 3 or 4.
2. Questions 9 and 10 are scored as 0, 2 or 4 only.
3. The minimum score (non-drinkers) is 0.
4. The maximum possible score is 40.
5. A score of 8 is associated with risky or high-risk drinking.
6. As a general guide, a score of 13 or more is likely to indicate alcohol dependence.

Source: Babor, TF, Higgins-Biddle, JC, Saunders, JB & Monteiro, MG 2001, *The Alcohol Use Disorders Identification Test: Guidelines for use in primary care*, 2nd edn, World Health Organization, Geneva.

Figure II.7: AUDIT: Self-administered questionnaire

PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest.

Place an X in one box that best describes your answer to each question.

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor or other healthcare worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

1. Questions 1 to 8 are scored as 0, 1, 2, 3 or 4.
2. Questions 9 and 10 are scored as 0, 2 or 4 only.
3. The minimum score (non-drinkers) is 0.
4. The maximum possible score is 40.
5. A score of 8 is associated with risky or high-risk drinking.
6. As a general guide, a score of 13 or more is likely to indicate alcohol dependence.

Source: Babor, TF, Higgins-Biddle, JC, Saunders, JB & Monteiro, MG 2001, *The Alcohol Use Disorders Identification Test: Guidelines for use in primary care*, 2nd edn, World Health Organization, Geneva.

SCORING AUDIT

1. Questions 1 to 8 are scored as 0, 1, 2, 3 or 4.
2. Questions 9 and 10 are scored as 0, 2 or 4 only.
3. The minimum score (non-drinkers) is 0.
4. The maximum possible score is 40.
5. A score of 8 is associated with risky or high-risk drinking.
6. As a general guide, a score of 13 or more is likely to indicate alcohol dependence.

Responding to your client's AUDIT score

Table II.6 outlines how you might respond to your client's AUDIT score. Your response may include providing advice and/or undertaking further assessment of their drinking (see 'Assessment' in this chapter).

Table II.6: Possible responses to client's AUDIT score

Low risk of alcohol-related problems	At risk of alcohol-related problems	At high risk of alcohol dependence and other related problems
Score 0–7	Score 8–12	Score 13+
Provide advice to client to support no drinking (score 0) or low-risk drinking (score 1 to 7). Advise how risk increases in some circumstances, including: • intoxication • occasional binge sessions • pregnancy • poor health • taking medications • taking other drugs • driving or operating machinery • younger than 25 years • older or frail person (remembering frailty can be observed in Indigenous Australians from as young as 25 years).	Take a drinking history. Provide advice on health risks and strategies to reduce or stop drinking. Educate about risks of intoxication and withdrawal. Provide psychological and social support to reduce or stop drinking. Continue to monitor.	Take a drinking history and assess further for alcohol dependence, including any history of withdrawal complications and thiamine deficiency. Undertake full assessment, including medical, mental health and other drug use. Provide advice on health risks and strategies to reduce or stop drinking. Provide psychological and social supports and anti-craving medications as appropriate for the client. Continue to monitor.

Source: Adapted from Babor, TF, Higgins-Biddle, JC, Saunders, JB & Monteiro, MG 2001, *The Alcohol Use Disorders Identification Test: Guidelines for use in primary care*, 2nd edn, World Health Organization, Geneva, & University of Sydney 2003, *Drink-less program,* Faculty of Medicine, University of Sydney.

There are some situations in which the full 10-item AUDIT questionnaire is likely to take too long to complete or where alcohol consumption is one consideration in an assessment but not the only, or even the most important, health issue to be assessed. In these situations, a subset of the full AUDIT questionnaire can be used, called the AUDIT-C.

As its name suggests, AUDIT-C measures consumption of alcohol, and comprises the first three AUDIT questions. As for the full AUDIT, responses to each question are scored from 0 to 4 and summed to a total score out of 12. To indicate which patients are likely to be drinking at risky levels and are most likely to benefit from brief advice or further investigation of their drinking, a cut-off score of either 4 or 5 can be used. It is advisable to use the lower cut-off score of 4 as the cut-off score in order to be conservative

ASKING ABOUT ALCOHOL CONSUMPTION

When administering AUDIT, if your client cannot describe or provide the exact amounts of alcohol they drink in terms of standard drinks, you could ask questions such as:

1. What do you usually drink (wine, port, beer ('BB'), other)?
2. How much do you usually have when you drink?
3. What do you drink from (a cup, glass, cask, stubby, bottle, beer can)?
4. Can you tell me or show me the size of that glass/bottle/cask?
5. How often do you have that amount?
6. Do you drink like this every day? Or most days?
7. How long have you been drinking like this?
8. When do you not drink? How long would this be for – weeks, days, months?

Alternative screening tools for pregnant women and girls

AUDIT has generally been recommended for screening pregnant women and girls. However, because of concerns that standard screening instruments may be less sensitive with women or when used in prenatal clinics, two alternative screening tools have been developed and are also recommended.[11] These alternative tools are the T-ACE (see Figure II.8) and the TWEAK (see Figure II.9), both of which are administered as interviews.

Figure II.8: T-ACE screening tool

T	**Tolerance**: how many drinks does it take to make you feel high?
A	Have people **Annoyed** you by criticising your drinking?
C	Have you ever felt you ought to **Cut** down on your drinking?
E	**Eye opener**: have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?

Scoring: (5-point scale)

Give 2 points: If the woman reports two or more drinks are needed to make her feel high (Tolerance)

Give 1 point for each 'yes' answer to the remaining questions:

Annoyed

Cut down

Eye opener

A total score of 2 or more indicates that the client may be drinking at risky levels, and further follow-up is required.

Source: Sokol, RJ, Martier, SS & Ager, JW 1989, 'The T-ACE questions: Practical prenatal detection of risk-drinking', *American Journal of Obstetrics and Gynecology*, vol 160, pp 863–71.

Figure II.9: TWEAK screening tool

T	**Tolerance**: how many drinks can you hold?
W	Have close friends or relatives **Worried** or complained about your drinking in the past year?
E	**Eye opener**: do you sometimes take a drink in the morning when you get up?
A	**Amnesia**: has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?
K(C)	Do you sometimes feel the need to **Cut** down on your drinking?

Scoring: (7-point scale)

Tolerance: 2 points are given if she reports she can drink more than five drinks without falling asleep or passing out

Worried: 2 points are given if she answers 'yes' to this question

Give 1 point for each 'yes' answer to the remaining questions:

Eye opener

Amnesia

Cut down

A total score of 2 or more indicates that the client may be drinking at risky levels, and further follow-up is required.

Source: Chan, AK, Pristach, EA, Welte, JW & Russell, M 1993, 'Use of the TWEAK test in screening for alcoholism/heavy drinking in three populations', *Alcoholism: Clinical and Experimental Research*, vol 17, no 6, pp 1188–92.

For further information on treating pregnant clients, see Chapter 5, 'Alcohol, pregnancy and breastfeeding' in this Tool Kit.

Assessment

Having screened for the client's pattern of alcohol use, and identified their possible risk, you should explore their drinking and any related health issues further by assessing their drinking, which will include taking a drinking history.

The purpose of assessing a client's drinking is to identify in more depth the nature and seriousness of their alcohol problems. If indicated by the AUDIT score (generally if 8 or more) in combination with the client's medical and mental health history, further in-depth assessment may be warranted.

Timely assessment can result in your identifying:

- general and mental health problems, ideally before they have become critical
- alcohol-related complications and other medical or mental health conditions, such as diabetes, heart disease, depression or anxiety
- risk of alcohol withdrawal and possible complications
- problems impacting on the client's family.

Taking a drinking history

When taking a drinking history it is important not to accept non-specific answers from the client, such as 'I am a social drinker' or 'I only drink a bit sometimes'. You need to have as much accurate information as possible to estimate the amount and frequency of your client's alcohol intake in standard drinks per day (each 24 hours).

Always record your client's drinking history and your subsequent interventions accurately in the client case notes.

When taking a drinking history, you should seek information about the client's:

- age when they first started drinking
- usual alcoholic beverage consumed (for example, wine, port, beer ('BB'), other)
- frequency of drinking (average daily intake, measured in number of standard drinks)
- duration of drinking periods (for example, every day from 4 pm to 7 pm, bingeing over several hours once or twice a month, or bingeing over several days' time)
- amount of last drink
- usual style of drinking (for example, sculling, sipping or drinking to acute intoxication).

People drink from a variety of containers, many of which are not the size of standard drink containers. So when taking a drinking history ask the client to describe to you the types and sizes of containers they drink alcohol from, and then estimate with them how many standard drinks this would hold, according to the type of alcohol they drink. For example, they might drink from a:

- large can (600 millilitres) of pre-mixed spirits
- jam glass (250 millilitres) of port
- long-neck bottle (750 millilitres) of home-brew beer
- coffee mug or milk carton holding 300 millilitres poured from a four-litre cask of wine.

An instructive way to educate clients about how many standard drinks they consume (while at the same time collecting information), is to fill their actual or similar type of containers with water or cordial, and then measure the amount they would consume in a measuring jug.

You can then help them to estimate how many standard drinks there would be in their container according to the type of alcohol they drink (see the 'Standard drinks' box in this chapter). This estimate will also help you to establish their average daily consumption and likely health risks.

Drinking history tools

Below are two useful tools to choose from for taking a drinking history. The first tool – the weekly intake history (Figure II.10) – is a simple record of the amount and type of alcohol your client has consumed in the last week; the second tool – the longer-term intake history (Figure II.11) – is a more comprehensive examination of your client's drinking behaviour over a longer period. Both tools require familiarity with standard drinks measured in grams, so you may need to refer to the information and figure under 'Standard drinks' in this chapter.

Figure II.10: Weekly intake history tool

If your client is able to understand and write in English ask them to fill in the form. If not, ask them the questions yourself or through their language interpreter.

Look at the form below and write the answers to the following questions in the first blank column:

- What day is it today? For example, Thursday.
- How many standard drinks are in each type of drink you drank today?
- How many drinks have you had all day today?

Record the number of standard drinks for each type of drink. If you did not have any beer today, put a dash in that square. If you had four cans or four stubbies of BB write the number of standard drinks this is equivalent to (for example six standard drinks), and if you drank a different type of drink, such as a bottle and a half of wine or eight jam glasses (150 millilitres/glass) of wine, write down, for example, 11 standard drinks.

Beverage	**Day of the week**						
	today	**_day**	**__day**	**__day**	**__day**	**__day**	**__day**
Beer (e.g. BB)							
Table wine (e.g. moselle,)							
Spirits (e.g. rum)							
Fortified wine (e.g. port,)							
Other							

Source: Adapted from Dawe, S, Loxton, N, Hides, L, Kavanagh, D & Mattick, R 2002, *Review of diagnostic screening instruments for alcohol and other drug use and other psychiatric disorders*, 2nd edn, Australian Government Department of Health and Ageing, Canberra.

Figure II.11: Longer-term intake history tool

Record recent drinking (last two weeks) starting from today (for example, Thursday, 2 March):

Alcohol type (e.g. beer, wine, port)	How much (grams per day)	How often	How long/ what age when began drinking	Usually drinks with friends, family, partner	How long was last period of abstinence

Then estimate and record:

Last drink	Date:	
	Time:	
	Amount:	
Changes in drinking pattern over last four weeks:		

Then ask:

What has your pattern of drinking been over the last three months (for example, five to six days after every pay day, on Fridays once every two or three weeks, every day or nearly every day)?

Record any other relevant information, such as:

- immediate or long-standing worries about drinking
- what is good and not so good about drinking
- what are the reasons they drink; what need does it fulfil
- do they want to reduce or stop drinking?

Source: de Crespigny, C, Talmet, J, Modystack, K, Cusack, L & Watkinson, J 2003 *Alcohol, tobacco and other drugs guidelines for nurses and midwives: Clinical guidelines*, Version 2, Flinders University & Drug and Alcohol Services Council, Adelaide, p. 182.

Other drugs and nutrition

As part of taking a drinking history it is also important to ask the client whether they use any other drugs, such as tobacco, prescribed, over-the-counter and herbal medicines, inhalants or illicit drugs. In particular, for each drug the client uses, you should find out:

- the name of the drug
- the dose/quantity used per day
- the method of use, for example, oral, inhaling, injection
- the reasons for use or why are they being taken.

When taking your client's drinking history it is also important to assess their nutritional status (see 'Nutritional disorders' in Chapter 4 of Part III: Physical effects of alcohol).

TESTING COGNITIVE FUNCTION

As part of their assessment, your client may need a clinical psychologist to test their cognition (problem solving and memory) using specially designed tests that are usually paper-based questionnaires.

You will need to consult a clinical psychologist who works with clients with alcohol problems. You will need to arrange for their testing, and after their diagnosis, facilitate appropriate follow-up support.

See Part IV: Resources and contacts.

Responding to your client's needs

Once you have assessed your client's drinking history and you have a clearer idea of their pattern of drinking and any related problems, you need to consider and respond to any needs they may have, such as help with health and social problems. As appropriate, work with the client to determine what they want to do about their drinking issues.

Assessing your client's readiness to change

Many of your Indigenous clients will be able to alter their drinking patterns, but it is important to remember that not all clients will be able to make significant behavioural change, particularly those with significant intellectual and memory impairment or mental health issues. These clients will need ongoing and intensive support to function well and not sustain further damage. However, many clients can make significant changes to reduce their risky drinking, and many will stop drinking altogether.

Adopting a relaxed, matter-of-fact approach to your client's level of motivation for change will enable you to create rapport, build trust and offer useful feedback about their current situation. It will

allow you to build their capacity gently by offering information and realistic strategies that can support them, whatever their decisions at the time.

Because this approach is non-threatening it can help reduce the client's sense of shame, apprehension and negative self-belief; and your confidence that things can improve because you believe in their ability to change can offer them hope. You can also reassure them that you are willing to support them now and whenever they feel they might be ready.

When trying to identify a client's level of motivation to reduce or stop their drinking you need to consider what impact their immediate environment might be having on their ability to change and maintain that change. For example, if they are living or associating with other risky drinkers, their drinking is likely to continue.

It may be difficult for your client to modify or stop their drinking without changing their environment too, at least for a while. This requires your careful consideration and coordination in collaboration with other key service providers, so the practical, family and social issues can be attended to if the client wishes to move (temporarily or permanently) into another setting.

Your client's response to your suggestions or advice on reducing or stopping their risky or high-risk drinking will be determined by their understanding of the issues, its importance for their overall health and quality of life from their perspective, and their capacity and readiness to make a behavioural change.

Identifying whether or not your client is ready and able to change, and modifying your advice accordingly, will help build and maintain their trust in you, and increase their willingness to come back to you even if they are unable to consider change at the time. This approach allows you to 'work with' your client rather than feeling you need to 'force' them to change.

Developing environmental awareness

It is important for healthcare providers to be aware of what is happening in the local Indigenous communities in which they work. By being 'in touch' with what is happening healthcare providers are well informed and develop important insights into the types of situations affecting their clients. This can help healthcare providers to give more responsive and appropriate care to their Indigenous clients.

Environmental awareness can assist healthcare providers and services to identify periods of risky or high-risk drinking in their local communities and to plan for and respond to possible emergencies involving clients and their families. It also improves understanding of what may be adversely affecting a particular client, and their family, at particular times.

For many young and older Indigenous Australians, harmful situations occur in their daily lives that cause severe stress and problems and adversely affect their health, safety and wellbeing. This in turn can seriously reduce their resilience and capacity to respond to advice and treatments offered by their healthcare provider for their various health conditions, including alcohol-related problems.

Some Indigenous clients may find it difficult to talk about their drinking or that of their family for reasons of maintaining family harmony.

Many people caught in the welfare/drinking or drug dependence cycle have a sense of hopelessness and feel powerless to change their situation. Through use of these guidelines, healthcare providers can learn from and respond to the community by showing concern and understanding. Having a 'yarn' with your Indigenous client to talk through issues affecting them and their community can relieve feelings of hopelessness and powerlessness, and assist to build community motivation to initiate change.

Healthcare providers should try to take time to regularly reflect on the local community by listening to and observing what is happening around them, such as times of cultural 'business'; other Indigenous people coming to the area from another community; a recent death and funeral; times of social disruption from loud music and disruptive behaviour in particular houses or places; excessive gambling or drinking among particular groups; episodes of family violence or other situations that impact on a particular client, and whether such problems occur at times when they or others have received a payment.

This exercise can also be useful for your Indigenous clients to engage in. You could ask your client not to drink for one weekend and to observe, listen to and reflect on what is happening in their community during this high-risk period. You can then engage them in a non- threatening discussion about what they saw or heard, and what they believe were the causes of particular situations and how these may affect them, their families and their community.

By engaging clients in these discussions, you may be able to raise their awareness of the unwanted social effects of risky and high-risk drinking, and begin to discuss with them their own drinking behaviours and motivation for reducing or stopping drinking.

Educating your client

Linking advice about your client's risky drinking behaviour with their particular alcohol-related medical diagnosis or health problem is more likely to persuade them to consider changing their drinking pattern or to stop drinking than if you only provide them with general information about drinking[12]. You should try to take any opportunity to actively educate your clients about the risks associated with their drinking. Teach them about recommended low-risk drinking levels best suited to their age, gender and health status.

Provide information to clients about the impact of alcohol on their health from risky and high-risk drinking when they present, for example, for planned and/or unplanned health check, medication review and emergency care. In particular, advise young people, pregnant women and frail or elderly clients who may be at particular risk about alcohol and its effects on them. These resources can also be useful for their families.

Education and information can be offered simply in a conversational manner, or as reading material or other useful resources, such as DVDs, videos or written or pictorial information. You may wish to offer (or refer) your clients and their families:

- easy-to-read, culturally appropriate information (videos and DVDs, on drinking issues
- information on how to stop or cut down drinking and how to get further help if needed
- resources to support choice of, and ways to undertake, self-help strategies
- information on how to reduce their risky or high-risk drinking
- information on how to reach and adhere to a decision not to drink or to reduce drinking, and how to prevent and deal with any relapse
- information and direct introduction to self-help groups in the community that will be able to help and support your client, including talking and healing circles.

Printed information and resources about alcohol and related issues are available in the various states and territories. They focus on helping drinkers and their families to understand about alcohol and its effects, low-risk, risky and high-risk drinking, and reducing or stopping drinking. Many Indigenous health services have adapted general alcohol and health education resources to suit their particular communities, with many producing information using their own local languages and images. There are also nationally

available resources. See Part IV: Resources and contacts for more information on obtaining these resources.

While educating and informing your Indigenous client, and their family, about alcohol, health and related issues you may find it useful to use phrases such as:

- 'This is what other people have found helpful ...'
- 'You are the best judge of information that can best assist you.'
- 'What do you think?'

Where appropriate for drinkers and family members, give information about prevention and management of intoxication, withdrawal and accidental overdose.

PROVIDING ADVICE

Generally clients respond well to advice about their alcohol-related problems if it is presented clearly, respectfully and without confrontation.

Using a client-centred approach

There are no hard and fast rules about whether clients with alcohol-related problems should be cared for in primary healthcare or specialist services.

Your decision to help Indigenous clients locally or refer them to other services or agencies will depend on:

- the client's understanding of their drinking and any related problems, what they might want to do about their situation, and what they feel is suitable and possible for them
- the severity of the client's drinking problem
- the client's general health and mental health status

- the location and accessibility of services
- whether or not the suggested or available services are considered culturally respectful and safe for the client.

Most of all, choice of service will be determined by the client's perceived needs and preferences and, for many, those of their family.

Effective healthcare providers are those who respect each client's own views on their drinking and particular alcohol problem, their understanding of any previous drinking interventions (types of treatments) they may have received, and who they feel can support them in setting realistic goals to help them reduce their drinking or stop drinking altogether.

Your relationship with a client is an essential part of reducing their alcohol-related problems, including long-term alcohol dependence. By building respectful relationships with the client and their family, and maintaining flexibility, you can help the client to overcome their fear, shame or other barriers to accessing treatment and community support.

Providing holistic care

Many clients who attend general practices, community clinics or hospitals for health problems – such as injury, acute and chronic diseases or mental health problems – also have drinking issues that are either directly or indirectly linked to their current health problems. It is therefore very important to use a systematic approach to identify and respond to their drinking and health problems in a way that takes care of the whole person (holistically), not just the current presenting problem.

Healthcare providers, especially in primary healthcare settings, are generally trusted and reliable sources of information and healthcare delivery. Indigenous clients generally expect to receive culturally appropriate, personalised and professional advice about changes

they can make to reduce or stop their risky drinking and manage their general health issues.

The aim of effective care for risky and high-risk drinkers is to improve their overall health and wellbeing as well as help them address their drinking problem. This involves helping them to recognise their alcohol-related problems and the relevant health implications, as well as providing them with appropriate information to make informed choices about the types of treatment available that may help them reduce or stop drinking alcohol. Where appropriate, this approach needs to include family and other community supports, depending on the individual client's personal wishes and situation.

THE GROG BOOK

For specific information about community approaches to addressing alcohol-related problems refer to Maggie Brady's *The grog book: Strengthening Indigenous community action on alcohol*, listed in Part IV: Resources and contacts.

Reducing risks and harms

As a healthcare provider you need to advise clients who drink at risky or high-risk levels about minimising the level of harm associated with such drinking patterns. The timing is critical, whether or not the client is ready to stop or reduce their drinking, as they are likely to remain at risk of harm, at least for a time.

Some strategies include advising them to:

- drink alcohol within lower-risk levels
- eat good food before drinking
- have at least one or two alcohol-free days a week
- avoid acute intoxication (getting very drunk)

- drink light beer (2 per cent or less pure alcohol/drink) instead of full-strength beer
- drink water, tea, fruit juice or sugar-free (diet) soft drinks in between alcoholic drinks
- drink in a safe place with trusted people
- ask friends or family to call an ambulance if ill, injured or overdose
- not mix alcohol with medicines or other drugs as this increases the risk of overdose and death (for example, alcohol and panadeine forte or sleeping pills, prescribed medicines, and illicit drugs such as heroin, cannabis or speed)
- have a healthier lifestyle – take 100-milligram thiamine tablets plus multivitamins and minerals; eat a good balanced diet with eggs, vegemite, rice, pasta, noodles, bush tucker, grain bread, cereals, fruit, vegetables, meat, fish and chicken; and exercise and sleep well
- not carry babies or young children while drinking
- engage in family activities, such as picnics, fishing, hunting, camping, nature walks, sports, hobbies and social activities that do not focus on drinking
- not go fishing or hunting, drive a car, motor bike, truck or boat or operate machinery, including household machines, when affected by alcohol
- not get into any car, truck or boat with a driver who has been drinking even if they seem sober or say they are safe to drive
- know about alcohol and its effects by having accurate information and health education resources
- make sure their family also knows and understands all these strategies.

Intervention options

There is a range of interventions that can help clients reduce or stop their drinking. People who are not alcohol dependent often respond well to brief intervention and support. However, people with more complex problems – including alcohol dependence or comorbidity (mental health or physical health problems in addition to their drinking) – require more intensive and longer lasting treatment and support to manage or stop their drinking.

You need to know what interventions may help your client based on the nature of their drinking problem and the care options they choose. The range of responses you may need to give include:

- advice, brief intervention and support
- immediate transfer for emergency care or specialist assessment
- admission to a hospital for medical and/or psychiatric assessment and treatment
- admission to a sobering-up unit or hospital for acute intoxication
- care in the home or other more suitable setting that is safe for managing uncomplicated withdrawal or other health problems
- referral to a specialist outpatient alcohol treatment service, for example, for prescribed medications or for cognitive behavioural or narrative therapy
- admission to a non-medical or medically supervised detoxification unit prior to treatment and/or referral to therapeutic community or other live-in rehabilitation service.

The interventions selected need to be targeted to each client's preferences, needs and particular problems. Generally, interventions can be divided into two groups: interventions for non-dependent clients and interventions for dependent clients.

The intervention strategies offered below (Table II.7) are known to be effective in the general Australian population. Indigenous healthcare providers and community members have also reported benefits for Indigenous clients from using these interventions.

Intervention and specific treatment and rehabilitation choices include:

- early and brief intervention
- planned detoxification
- psychosocial intervention
- relapse prevention.

The information in Table II.7 can assist you in identifying intervention strategies appropriate to the needs of clients, based on their AUDIT score.

Table II.7: Types of intervention strategies

Screen as non-dependent drinker (e.g. AUDIT score 8–12)	**Screen as dependent drinker (e.g. AUDIT score 13+)**	
Early and brief intervention	**Planned detoxification**	**Psychosocial intervention**
Discuss alcohol and related issues for both the drinker and their family members. Feedback (discuss the meaning of risky drinking, standard drinks and other relevant terms). Listen (acknowledge both positives and negatives of drinking). Advice (identify low risk levels of drinking and benefits from reduced drinking). Goal-setting (establish clear goals for the number of drinking days and amounts to consume on drinking days). Strategies (to reduce consumption, harm and legal consequences). This intervention is commonly called FLAGS Offer referral to community or self-help programs Offer invitation to return for further assistance	Encourage 100 milligrams (oral) daily thiamine (vitamin B1) and multivitamins Consider which detox program is most suitable, e.g. in-patient or out-patient, home or clinic Consider obtaining specialist advice	Encourage 100 milligrams daily thiamine (vitamin B1) and multivitamins Focus discussion around boosting capacity to change through problem recognition, establishing levels of concern and determining readiness for change. Provide referrals to alcohol and other drug service and other health specialists Consider referral to formal cognitive behavioural therapy program, either manual based or referral if available: Offer referral to community or self-help programs, for example Alcoholics Anonymous For complex problems, including disease and psychological comorbidities, offer referral for: specialist counselling (e.g. general, narrative, grief, loss) specialist shared care of physical or mental health disorders

Screen as dependent drinker (e.g. AUDIT score 13+)	
Recovery and Rehabilitation	Relapse prevention
Provide care which addresses a complex problem Refer to Specialist resources Consider providing a program in the community • prescribe anti-craving medications where suitable (naltrexone or acamprosate) • consider participation in shared-care arrangements • offer to provide regular follow-up for on-going monitoring	Normalising lapse and relapse Use motivational interviewing, reinforcing reasons for change Offer immediate referral to community or self-help programs Provide referrals to alcohol and other drug service and other health specialists if available, or provide manual-based cognitive behavioural therapy program, as for psychosocial intervention Provide a list of places to get help if required. Dependent drinker • prescribe anti-craving medications where suitable (naltrexone or acamprosate) • consider participation in shared-care arrangements • offer to provide regular follow-up for on-going monitoring

Source: Adapted from de Crespigny, C, Talmet, J, Modystack, K, Cusack, L & Watkinson, J 2003, *Alcohol, tobacco and other drugs guidelines for nurses and midwives: Clinical guidelines*, Version 2, Flinders University & Drug and Alcohol Services Council, Adelaide; Prochaska, J, DiClemente, C & Norcross, J 1992, 'In search of how people change: Applications to addictive behaviour', *American Psychologist*, vol 47, no 9, pp 1102-1114

FLAGS: Saunders JB., Dore G. & Young R 2001 Substance Misuse in: Bloch, S & Singh, B. (eds) Foundations of Clinical Psychiatry (2nd Ed) pp 269-309 Carlton, Victoria, Melbourne University Press.

Intervention for clients who are not alcohol dependent

Clients who drink at risky and high-risk levels but who are not alcohol dependent may respond to early and brief interventions, including being educated with factual alcohol information that is linked to their drinking and other health problems, for example, injury, diabetes, infection, high blood pressure, liver, pancreas or stomach problems, or heart condition. This is especially relevant to them if they understand there may be serious consequences if they continue their risky or high-risk drinking.

Clients who drink at risky or high-risk levels and are physically tolerant to alcohol, but not dependent on alcohol, can still experience withdrawal if they suddenly stop or reduce their drinking. This does not mean they are psychologically dependent, but can mean they are at risk of alcohol withdrawal complications. See Chapter 2, 'Emergencies' for advice on managing withdrawal.

Early and brief intervention

The terms 'early intervention' and 'brief intervention' are often used interchangeably; however, there are differences.

Early intervention is an intervention in a client's risky or high-risk drinking patterns at the earliest possible opportunity. Early intervention follows timely screening and assessment of alcohol and health problems, and involves providing advice about the risks and harms of the client's pattern of drinking; any relationship to, or consequences from, their drinking on their current and future physical and mental health; and what can be done now and in the future to help them stop or reduce their drinking.

It can involve education, counselling, brief intervention by general healthcare providers, or specialist care and support. It might aim to help the client with their social, psychological and alcohol-related medical problems. Overall, the goal is to prevent further risks

and harms, avoid or minimise any existing health problems and complications, and reduce future harm.

Talking with healthcare providers at a critical moment, such as when clients are in hospital or a clinic for an acute health problem, at an early stage in their risky drinking pattern, can be very effective in educating them and preventing further problems and complications occurring.[13]

The personal stories of Indigenous Australians who have given up drinking, as told in *Giving away the grog: Aboriginal accounts of drinking and not drinking*, support research findings.[14] Early intervention is known to be effective when the client understands they can reduce their drinking rather than having to stop drinking altogether, making it easier for them to accept and make behavioural changes.

Brief intervention is the short period of time needed to deliver an intervention such as low-risk drinking advice, information and education, and the context in which it is offered. Brief intervention can be applied in a variety of acute care, community and primary health settings and by a range of healthcare providers, such as hospital nurses, doctors, Aboriginal Health Workers, community nurses and midwives, general practitioners, social workers and counsellors.

Brief interventions can reduce the incidence of alcohol-related deaths among risky and high-risk drinkers by an estimated 23–26 per cent.[15]

Like early intervention, brief intervention can be very effective when applied at critical moments in the client's life, such as being admitted to hospital, possibly for an alcohol-related injury or illness, or another event that raises their awareness and need for help, such as a family crisis or employment, money or legal problem.

Brief intervention uses techniques, such as motivational interviewing, to help the client to weigh up the benefits and risks of

their drinking, to identify any problems and become ready to move towards change and to set goals and find ways to make changes in their risky drinking. Brief intervention can be undertaken in a few minutes for relatively simple alcohol-related problems through to several planned counselling sessions designed to help the client become ready for change, and to proceed to making the change. Brief intervention can be enhanced with additional resources, such as written and pictorial information and self-help manuals or drinking diaries, and community support strategies.

Healthcare providers can use brief intervention at any stage in a client's risky drinking history/experience (not just in the early stages). Brief intervention can include:

- information and simple advice about low-risk drinking or not drinking
- personalised advice based on the client's own presenting problems or medical test results
- a brief motivational interview that includes a discussion on practical ways to reduce or avoid drinking as relevant to the client's own situation, experience, motivation, capacity, family supports, and home environment[16]
- consultation with, or referral to, a specialist alcohol or other service, including mental health services.

Therefore, brief intervention is unlikely to help people:

- with signs and symptoms of serious physical illness related to or complicated by their high-risk drinking who need to be assessed and treated by an experienced physician and multidisciplinary team
- who are seriously alcohol dependent and need comprehensive general health and mental health care, and specialist assessment and treatment for their alcohol dependence, or

- who are powerless over their situation or have multiple family or other social problems requiring intensive counselling, specialist intervention, particular therapy and ongoing support.

Discussing alcohol and related issues

You can undertake discussions about alcohol and related issues at any time during contacts with your client and their family. The elements of effective intervention – feedback, listen, advice, goals and strategies – can be grouped under the commonly used acronym of FLAGS (see Table II.8).

Table II.8: FLAGS

Feedback	Results of screening: • raising awareness for client that they are drinking alcohol at risky and high-risk levels
Listen	Client concerns: • Have they been worried about their drinking? • Have they tried to cut down or stop drinking before?
Advice	Alcohol and health education, such as: • low-risk drinking levels for men, women, young people, older/frail people, pregnant women/girls, and for special conditions, for example, medications, driving, operating machinery • benefits of cutting down how much they drink • benefits of not drinking at all • details of peer and community support services
Goals	Encouraging the client to set their own goals, such as: • cutting down on how much they drink in any one session • cutting down on how often they drink during any one week • stopping drinking altogether • reducing harm to self and others through alcohol-related accidents
Strategies	From a client perspective, strategies might include: • how to cut down on drinking • how to stop drinking • dealing with cravings • dealing with pressure from others to drink • dealing with relapse • recognising and avoiding difficult situations • building self-esteem • managing other health concerns From a health professional perspective, strategies might include: • monitoring the client (even if referred to another service) • offering follow-up consultation and support
It is also important to explain that relapse may be part of your client's learning and journey of recovery, and should not be seen as failure to change.	

Source: Adapted from Saunders, Dore & Young 2001

Motivational interviewing

You, as a healthcare provider, can positively influence your Indigenous client's understanding and willingness to consider change, particularly if this occurs at a critical moment such as having an acute health or other alcohol-related problem. By linking the health problem to their drinking behaviour you can trigger and strengthen their motivation to reduce or change their drinking behaviour.

Effective information-sharing between you and your client is also important in engaging them in regular contact with you for follow-up and healthcare, and if it is needed and they are willing, seeking specialist assistance for treatment.

Motivational interviewing is a particularly useful counselling tool. It is particularly suitable for people who are ambivalent (have both positive and negative feelings) about their drinking. They may not yet recognise or consider their need to change (pre-contemplative) or be ready to consider change, and this technique can help stimulate ambivalence and therefore start to 'move' the client towards readiness for, and a growing commitment to, change.

The basic principles of motivational interviewing are:

1. Expressing empathy

- 'Empathy' comes from a Greek word meaning 'to feel with'.
- Acknowledge, respect and understand your client's worldview and perspective.
- Advise your client that having mixed thoughts and feelings (ambivalence) about drinking is normal.
- Do not label your client, for example, an 'alcoholic' or a 'drunk'. Avoid categorising people.

2. Working with mixed thoughts and feelings (ambivalence)

- Build on your client's own awareness of the consequences of their drinking. Give factual information when they raise concerns about the negative consequences of their drinking, for example, injury, arguments and fighting, not being a good parent or community role model, lost money, ill health, and hangovers at work.
- Help them recognise negative consequences that conflict with their valued and important goals, such as wanting to be a good parent or community role model, being healthy, and not fighting, and thus promote their willingness to consider change.
- Offer advice and feedback in ways that show respect and concern for your client's wishes and wellbeing.

3. Avoiding argument

- Do not argue with your client about their drinking and need for change.
- Focus on your client's own concerns and perceptions.
- Resistance by your client is a signal for you to change your interview strategies.

4. Rolling with resistance

- 'Going with the conversation' can help shift your client's perspectives about their situation.
- You can invite your client to consider new perspectives on their situation, but do not try to 'correct' their views or impose your views on them.
- Your client is the most valuable resource in finding their own strengths and solutions for their problems.

5. Supporting self-efficacy (belief in one's own personal capacity)

- A client's own belief in themselves, and sense of hope in their potential to change, are very important in developing and maintaining their motivation and readiness to change.
- Self-efficacy is not the same as self-esteem – it impacts on the client's beliefs about their own ability, confidence and potential to change (capacity).
- Your client is responsible for setting their own goals and carrying out their personal change.
- There is hope for people with alcohol-related problems to be helped by the range of options now available.

Source: Edwards, Marshall & Cook 1997; Jarvis, Tebbutt & Mattick 1995; Miller 1997; Miller & Rollnick 1991

Sample questions you can choose to boost your client's capacity to change

Listed here is a sample of the types of questions you can ask your client that may help to boost their capacity to change. The sample questions cover problem recognition, level or concern and readiness for change.

Questions for **problem recognition:**

- What are the benefits of drinking for you (for example, what is good about your drinking)?
- What makes you think you might have a drinking problem?
- What difficulties have you had from your drinking?
- How might your drinking have harmed you or other people?
- In what ways has drinking actually been a problem for you?
- Has your drinking ever stopped you from doing something else you wanted to do?

Questions for **level of concern**:

- How do you feel about your current drinking?
- How does this concern you?
- What worries you about your drinking?
- What is there about drinking that you or other people might see as a worry?
- What might happen to you because of your drinking?
- What do you think might happen to you if you keep drinking like this?

Questions regarding **readiness for change**:

- Are you thinking about changing your drinking today?
- Does this mean you will stop drinking?
- Does this mean you will drink less?

Following these discussions it may be appropriate to introduce the client to the "Lifestyle Guide for Better Health" in this tool kit.

BRIEF INTERVENTION AND SELF-MANAGEMENT

A useful resource that can support your intervention is *Alcohol – My lifestyle guide for better health and safer drinking* (the *Lifestyle guide*) (see Appendix for a sample Lifestyle Guide).

The *Lifestyle guide* is designed to focus on the client's actual pattern of drinking and any related health problems. With their agreement and commitment, it can act as a trigger to help them self-manage and reduce or stop drinking to improve their health.

Once you have identified and discussed with your client their particular drinking pattern and any related problems and key issues, you may suggest they use the *Lifestyle guide* as a resource. You should introduce the form to them, read through the guide with

them (which only takes a short time) and explain its aim and how to use it.

Ask your client for their ideas about what they feel they can reasonably do to reduce or stop their drinking. Once your client is ready, you should fill in the form with them and sign it. Each of you needs to keep a copy of the form.

Together you need to agree on a date and time for their next visit, at which time you will use the *Lifestyle guide* together to discuss their progress, consider any problems they may have experienced so far, refine their goals and continue, if and as agreed.

Intervention for clients who are alcohol dependent

It is important to help clients who are alcohol dependent to build their trust in you, and remain engaged. They need to attend your clinic for the care of their physical and mental health needs, support for their life issues, and any acute/immediate problems. You need to:

- make sure you are as flexible as you can be by seeing them when they ask you to
- be willing to discuss alcohol and its health and other effects openly and objectively without being judgmental
- ensure there is appropriate follow-up for their immediate problems, using any possible opportunity to support them, and encourage them to understand the ongoing problems associated with their drinking and dependence
- recommend that they stop drinking, and provide interventions, resources, referral and support for them to do so
- be aware of any local resources available that can help you, your client and their family to work together in stopping or reducing their drinking.

Ideally an alcohol-dependent client's progress through planned detoxification and withdrawal is followed by an individualised relapse prevention program comprising counselling, prescribed medications (if suitable) and access to a range of family- and community-based support services.

Developing a holistic care plan

An Indigenous client who is alcohol dependent requires holistic care that responds not only to their serious alcohol problem but also to their general health, mental health and social issues, such as housing, financial management, transport or child care. Many will require well-coordinated care and specialist referral to assist them in their recovery.

The client and their family need to be fully informed about the range of treatment options and services available, including any services that can support them in making well-informed decisions. Remember, you may need an interpreter to ensure this discussion is fully understood.

Planning involves liaising with other services to establish collaboration for referral, coordination of care and future follow-up. You need to know what particular treatments and programs services offer before considering which might best meet your client's needs. This will ensure that you refer your client to services most able to respond to their particular concerns, motivation and expectations of treatment for their drinking problem and management of their other health and social problems.

Planning also needs to take into account the client's capacity to undertake particular treatments. This may involve organising cognitive function testing of their memory and problem-solving abilities (brain function) and consideration of issues such as transport and work and family commitments.

Such planning is most effective when it involves you, as the healthcare provider, and your client working together. You should

also consult the client's family (if possible) and the key service providers and community groups best able to assist.

Planning for problems 'along the way'

Because of the nature and complexities associated with alcohol dependence your client may need crisis intervention or particular assistance 'along the way', even if they are receiving alcohol treatment. Such intervention may be needed to address issues such as acute depression or anxiety, alcohol intoxication or withdrawal, accidental overdose or a housing, family or legal crisis. You therefore need to plan for managing possible crises and incorporate contingency strategies in your overall care plan. This will need to include having harm reduction strategies in place that can help your client to prevent or reduce any risks of harm associated with their drinking and related issues.

Referring your client for treatment

If you have identified your client's drinking problem as serious and requiring specialist treatment, you need to know if they wish to seek treatment. If the client wants treatment, consider referring them to a relevant specialist Indigenous or non-Indigenous drug and alcohol service. You will need to discuss the referral fully with your client and include their family if appropriate. Remember, you may need an interpreter to ensure this discussion is fully understood.

If the client agrees to the referral, you need to plan with them how they might use the service and what arrangements will be needed for this to happen, such as time out of their work or training program, child care, payments for their house rental or mortgage, transport, clothing and other provisions. You will also need to ensure that there is uninterrupted provision of any prescribed medications they need for other health conditions such as high blood pressure, arthritis, diabetes or mental illness.

Selecting a suitable service for referral

In selecting a service, you and your client both need to be assured that:

- the service is culturally appropriate for them, as an Indigenous person, and their family
- the entry criteria will be appropriate for your client
- the types of treatments offered are suitable
- the necessary professional expertise and support can be provided
- the service can meet their particular needs, for example, as a young person, man or woman.

What your client needs to know

Your client needs to know what to expect from the specialist service while they are in treatment, and the ways their family can remain in close contact.

It is wise to talk directly with the doctor, counsellor, clinical psychologist or other specialists to get direct information that can help you and your client know what to expect in terms of likely modes of treatment and programs.

One way you can learn about the different modes of treatment and programs is to actually visit the services or, if this is not possible, talk by telephone, request photographs or videos, access websites or ask for a comprehensive information package. These strategies can help you to be more informed and to then inform your client.

Providing practical support to help your client learn about particular services is also useful. You could offer to put them in touch by telephone – perhaps your office phone – or arrange for the service to call them at home at a particular time. This will not only help ensure the client has direct access to information, but also boost

their confidence in taking up the referral by actually having this contact with the service provider.

Once the client has selected and agreed to take up the referral you need to either refer them formally or help them to refer themselves.

Follow-up

While your Indigenous client is engaged in their treatment program it is important that you follow up to ensure they are receiving the care you both anticipated. It may sometimes be necessary to advise the treating clinicians about particular issues or intervene. Also, when the client is ready to return home, it is important that the client and specialist treatment provider know that you are prepared to provide ongoing care and support.

Your offer to stay in contact and provide follow-up indicates to the client your concern for their health and wellbeing. This will play an important role in helping them to feel confident in keeping to their treatment program and that you will continue to support them, even if they do not complete the program.

When your client has returned from the treatment service they will need to come and see you soon after, whether or not they achieved their goal of recovery. This is so you can start monitoring their progress and overall health, and offer them the opportunity to talk about what it was like. This will provide you both a chance to consider what might work or not work in the future should they require alcohol treatment again. Continuing contact will improve the effectiveness of their treatment.

SEEK SPECIALIST TREATMENT FOR COMPLEX PROBLEMS

A client who has a serious alcohol problem as well as a mental health problem (comorbidity) may require immediate specialist treatment for their acute problems, as well as coordinated management of their drinking and mental health overall. If it is

not possible for you to provide this level of care on your own, seek expert advice to help you manage the client's situation.

See Chapter 4, 'Alcohol and mental health problems' in this Tool Kit for more information.

Refusing referral for treatment

If your client decides not to be referred for treatment to a specialist program you may be able to suggest an alternative program such as Alcoholics Anonymous or another community group. If they also refuse this option, they need to be well informed about the likely impact it may have on their alcohol problems and overall health and wellbeing.

If the client decides to forgo treatment, you should seek alternative ways to help them. It may be advisable for you to seek specialist advice and support so that you and relevant others in your local area can provide the care and support your client requires. The information in Part IV: Resources and contacts can assist you in seeking such advice.

Barriers to referral for treatment

It is very important to understand that there can be very real or perceived barriers influencing your Indigenous client's decision not to take up referral to a particular service. These may be practical and/or cultural barriers due to issues such as the location being far from home and country, travel difficulties, particular policies, attitudes and practices of staff, or environmental characteristics of the service.

Indigenous clients seeking treatment for alcohol dependence require culturally respectful services that can offer accessible, holistic care. Such services take into account the practical and cultural needs and issues of Indigenous clients including providing

'women only' and 'men only' facilities and same-gender staff for men and women, and are welcoming and supportive to families.

If such barriers are not recognised and addressed, they may prevent your client from receiving the treatment they need, and their health and wellbeing can be seriously affected. When you are seeking a possible treatment service to refer your client to, you can investigate whether the service is culturally respectful and confirm that, even if the location is a difficulty, the necessary support, resources and strategies are in place for your client and their family to access and engage in the service.

Relapse and returning to specialist alcohol services

Repeated treatment attempts to give up drinking and remain abstinent are common for any alcohol-dependent client. Relapse along the way to recovery is understood as 'expected' by specialist alcohol and drug treatment services. Specialist services will therefore have admission criteria that enable the client to engage in and return to treatment as many times as they need.

It is important that whatever your client's outcomes this time, and how many future attempts they make, you make yourself available to them 'along the way'.

For more information, see 'Lapse and relapse prevention' in this chapter.

Clinical advice and support

Whether you work in a remote, rural or metropolitan centre you can access professional telephone services that offer 24-hour specialist clinical alcohol and drug treatment advice and support. Always consider using this support if you need expert clinical advice and information to guide your decision making. See Part IV: Resources and contacts for more information.

It may also be useful to undertake an information search about what clinical advice is available in your service area. You could use

the *Local referral pathways* template provided in Part IV of these guidelines. The template can be used to record details of key local services and the relevant contacts for your everyday use.

Alcohol and other drug services

There is a range of Indigenous and non-Indigenous short- and long-term alcohol treatment services that may suit your alcohol-dependent client. These can include sobering-up services, specialist alcohol treatment services that provide for detoxification, counselling and psychological therapies, and rehabilitation services (see Part IV: Resources and contacts).

These services may be provided locally or in a regional area some distance away. They may be offered by a community outreach or health service, or a specialist alcohol treatment service with outpatient and inpatient (live-in) facilities for detoxification, medication therapy (pharmacotherapy), counselling, groups, psychological therapies and long-term rehabilitation. For information about the range of services in your area see Part IV: Resources and contacts.

Sobering-up unit (sometimes called 'detox centre')

Participation in these services is voluntary. They are short-stay facilities for people who are intoxicated and at risk. These facilities are provided to keep intoxicated people safe until sober. The length of stay is generally between four and 12 hours.

Sobering-up services only care for intoxicated people who are not at risk of conditions such as injury or acute physical or mental illness. Injured or ill clients are taken by ambulance or transported in other ways to the nearest hospital for medical assessment and treatment.

Some services are open 24 hours seven days a week and others for designated days and times only. Clients can self-refer or come

with friends, family, night patrol, mobile assistance service (MAPS), police or others.

Sobering-up staff (and MAPS workers) should have current first aid training, sobering-up training and relevant practical life experience to help them care for these clients safely. Staff are not there to assess, diagnose or treat any complications of intoxication or withdrawal or medical conditions of any kind, as they are generally not trained medical and nursing staff.

Clients requiring withdrawal management or a higher level of care should be admitted to a specialist medical detoxification service or hospital.

Planned detoxification (medically supervised withdrawal)

People who are alcohol dependent and wishing to enter treatment and rehabilitation first need to undergo planned detoxification (also known as withdrawal). Planned detoxification is a voluntary specialist service that can either offer a few days' respite from drinking or be the first stage of a comprehensive alcohol treatment and rehabilitation program.

Prior to undergoing planned detoxification, clients need a complete medical assessment. They may require ongoing treatment for any concurrent health problems, such as diabetes, liver disease, heart problems or mental health disorder, while undergoing their detoxification and any future rehabilitation program.

Many will require medications for their general health problems as well as their withdrawal. These medications will need to be carefully managed by trained doctors, nurses and health workers who can assess, observe, monitor, treat and offer regular and frequent support to the client and their family.

Depending on their likely safety or risks of complications, a client may undergo supervised detoxification at home or in another community setting, or in a hospital or specialist setting with access to specialist medical care.

Some specialist drug and alcohol services provide non-medical supervision of detoxification, while others offer medical supervision. This difference needs to be well understood by you and your client. Non-medical detoxification services do not have doctors, registered nurses or trained Indigenous healthcare providers to provide specialised treatment for withdrawal, while medically supervised detoxification services have medical staff as well as registered nurses and other trained staff to deliver medical treatment for this condition. Both services will refer or transfer their clients to acute hospital care should serious complications or other medical conditions require treatment.

It is important to know that the client may experience residual depression (feeling sad or in a low mood), have cravings for alcohol, feel physically unwell and/or experience sleep disturbance for several weeks after the acute withdrawal phase is over.

These symptoms require monitoring and, for some clients, treatment with prescribed medications. For more information about monitoring and treating the symptoms of withdrawal, see Chapter 2, 'Emergencies' in this tool kit.

DETOXIFICATION IS THE FIRST STAGE IN RECOVERY AND REHABILITATION

Detoxification is *not of itself a treatment or rehabilitation for alcohol dependence, but is the first stage towards treatment and recovery.*

Detoxification needs to be planned, and the client medically assessed, monitored, treated and supervised by medical staff and trained healthcare workers and nurses. Throughout the entire detoxification process, the client will also require ongoing emotional and social support from family members and other carers.

Your choice of service will therefore depend on your client's overall health status, any risk of medical and/or mental health

complications, possible state of intoxication at time of admission and potential for, or history of, withdrawal complications.

Community-based detoxification

Community-based detoxification should not be offered to clients unless there is a medically safe environment, supportive drug- and alcohol-free location and appropriate support from family and friends. These clients require daily specialised clinical supervision by a healthcare provider with specialist expertise.

The following conditions indicate appropriateness for community-based detoxification:

- the client has no signs of severe alcohol withdrawal
- the client has no previous history of severe alcohol withdrawal such as fits, hallucinations or delirium tremens
- the client has no other significant medical illnesses, such as pneumonia or pancreatitis; there is an increased risk of delirium tremens when these illnesses are present
- the client has no signs of suicidal thoughts or severe depression
- the client does not have easy access to alcohol or other drugs
- the client has supportive relatives or friends who do not drink or take drugs, and who can safely stay with the client during the acute alcohol withdrawal period, supervise medications and call for nursing and medical assistance if there are any complications.

You need to make sure that this method of withdrawal management is not going to be an unreasonable burden on the client's family, particularly children, parents and/or Elders.

Outpatient detoxification

Outpatient detoxification is very similar to community-based detoxification, with the exception that the client usually attends a

health clinic or specialist drug and alcohol service on a daily basis for ongoing assessment and monitoring and to collect alcohol withdrawal medications. If there is any risk of serious complications they need to be admitted as an inpatient.

The presence of family and friends around the clock is advisable but not as critical to outpatient care because the client's medication and wellbeing are closely monitored and supported by healthcare providers. Good support from other non-drinking family members and friends is preferred.

Outpatient detoxification may be suitable for clients who are at low risk of alcohol withdrawal and have family or other responsibilities that make it difficult for them to go to a specialist inpatient clinic.

Inpatient detoxification

Your client should undergo inpatient detoxification if they:

- have a history of severe alcohol withdrawal symptoms such as hallucinations, seizures (fits) or delirium tremens
- are at risk of, or are showing signs and symptoms of, alcohol withdrawal complications
- are experiencing other medical illnesses, such as injury, diabetes, pneumonia, chest infections and/or pancreatitis
- are experiencing suicidal thoughts, severe depression or episodes of any other major mental health disorder (for example, acute anxiety, schizophrenia or bipolar disorder)
- have a history of previous unsuccessful home-based and/or outpatient detoxification
- are homeless or live with other people who also have alcohol-related problems.

Once their detoxification is over, and the client feels able and ready, you can offer them counselling and support as well as referral to specialist rehabilitation and particular therapies and programs that can help them recover.

Residential rehabilitation programs

There are different types of rehabilitation programs, some of which are specifically for Indigenous clients and some for non-Indigenous clients but still available to Indigenous clients.

The types of programs offered by different services include therapeutic communities and 'regular' residential programs.

Therapeutic communities are abstinence based and use an approach that is holistic and designed to address the client's underlying psychological and other issues associated with their dependence. The therapeutic community is considered '*both the context and method in the treatment processes*'.[17]

The program aims to help the client address their alcohol dependence and develop new interests and life skills to prepare them to manage life and abstinence once they leave. Many have 'halfway houses' for clients as a bridge between residential treatment and re-entering their community.

Many therapeutic communities encourage their clients to attend Alcoholics Anonymous or Narcotics Anonymous while undertaking their formal treatment. This can assist them both during their treatment and once they have re-entered the community.

'Regular' residential programs offer a variety of programs, including counselling, 12-step programs, relaxation techniques, skills training and relapse prevention therapy that is more intensive than that generally offered in non-residential programs.[18]

It is generally considered that clients with alcohol or other drug dependence will have positive outcomes with intensive treatment in either a residential or non-residential treatment program, while those with high alcohol involvement will do better in a residential program. In particular, clients with low cognitive function as a result of drinking appear to benefit more from residential treatment, which may be enhanced by Alcoholics Anonymous attendance.[19]

For further information on assessment and clinical management of clients who are undergoing withdrawal, see Chapter 2, 'Emergencies' in this Tool Kit.

Social and community support

Social support is important in providing practical help as well as boosting the client's commitment to maintaining their treatment aims. This is particularly important with long-term dependent drinkers who may have lost connection with their sober friends and family who could support them. Joining Indigenous or non-Indigenous groups in the community, such as Alcoholics Anonymous or other community self-help groups, can be enormously helpful. In addition, you and other service providers in contact with your client can help them to re-build their social networks and engage in pleasurable activities with others that do not involve alcohol.[20]

When clients remain close to their family and community networks, it is important to support these connections by ensuring their family and others know you and your service are there to offer them guidance and referral to other services, community groups and resources that can inform and support them.

Lapse and relapse prevention

It is not at all unusual for clients to have a brief *lapse* (slip), such as drinking again once or twice or drinking more than they planned. It is important to prepare clients for the possibility of a lapse so that they do not lose confidence, and can regain their resolve to continue on with their goal, whether it is abstinence or reducing their drinking. In fact, learning how to prevent and manage lapses in the future is an important stepping stone to preventing relapse, and thus meeting their overall goal.

When a client regresses to their old pattern of drinking they are considered to have *relapsed*. They, and their family, need

reassurance that relapse is quite common for anyone trying to make significant changes, and that this does not have to mean failure and a permanent return to their old drinking behaviour and problems.

The client needs encouragement to see relapse as a learning experience, not a failure. Help them to review their original goals and motivation and to work out why relapse happened. They can then consider how they might prevent and better manage similar situations in the future.

The factors most frequently associated with relapse to alcohol use include:

- *Negative feelings* such as shame, fear, hopelessness, frustration, anger, depression and boredom. These negative feelings might also be the result of other factors such as intergenerational loss and grief, social isolation, ongoing poverty, diminished coping skills, and the negative effects of alcohol on the client's ability to function within their family and community.
- *Inadequate coping skills* when faced with high-risk situations, for example, the inability to keep saying 'no' to constant pressure to join others in sharing a drink.
- *Social isolation and family factors* such as personal conflict between members of the family and the community, problems with the boss or other work colleagues, unemployment and racism.
- *The significance*, meaning and use of alcohol in the client's life before they started treatment, for example, they may have drunk every night at the community club and miss sharing in fun and stories with other adults.
- *Continued cravings* for alcohol after finishing treatment.
- *Personal beliefs*, such as that alcohol dependence is a disease that the client cannot control ('It was meant to be').

Assessing relapse risk

There are a number of questions you can ask your client that can help you determine the likelihood of relapse. You could ask:

- Can you tell me what you think the main reason is for your drinking?
- Are there any other reasons you drink that you think are important?
- Are there any thoughts or feelings you have that make you want/crave a drink, and is this at any particular time or in any particular situation?
- Are there any particular times, events, people or things that happen to you that are likely to make you feel like having a drink?
- Are there any particular times, events, people or things that are likely to not make you feel like drinking?

The answers to these questions may enable you to determine whether you need to prescribe medications for alcohol cravings and/or what other type of therapy your client might benefit from. You will need to use your professional judgment to determine the relapse prevention strategies that are appropriate for your client. The choice will depend in large part on your assessment of the likelihood of relapse occurring.

Relapse prevention therapy

Relapse prevention therapy aims to help the client remain abstinent. It involves teaching them how to predict and deal with situations where their risk of relapse is high. It seems that relapse prevention therapy can be effective with a variety of clients in very different contexts including residential and non-residential treatment settings.

Relapse prevention therapy includes a variety of thinking and behavioural approaches that are designed to target each step

of the relapse process. These involve skills training, cognitive restructuring (changing thinking), and lifestyle balancing. Short-term and longer-term risks for relapse are considered and included in the program.

Relapse prevention strategies are usually implemented in conjunction with residential or non-residential treatments, counselling, social support, and (in some cases) medically supervised pharmacotherapy. Extended care for long-term recovery beyond alcohol treatment and rehabilitation may be necessary for clients with alcohol dependence. This is because alcohol dependence is a chronic relapsing condition and the likelihood of alcohol-related cognitive (problem-solving and memory) problems, other health conditions and, for many, difficult social situations.

Your assertive follow-up can greatly assist your Indigenous client in maintaining abstinence, engaging in health checks and treatments, and if relapsed, re-engaging in alcohol treatment. Your ongoing healthcare will be crucial in maximising their general health and wellbeing, as well as opportunities for assistance into the future.

Counselling

Many different types of counselling and skills training are available to help clients reduce or stop their drinking, and some specific therapies should only be offered by trained specialists, such as experienced psychologists, psychiatrists, specialist nurse practitioners, and Indigenous practitioners.

ALCOHOL-RELATED BRAIN INJURIES

Therapies aimed at helping people change their behaviour are unlikely to be suitable for clients who have serious alcohol-related brain injuries (sometimes called acquired brain injuries) such as frontal lobe dysfunction, dementia or Korsakoff's syndrome (see Part III: Physical effects of alcohol).

A clinical psychologist experienced in testing for alcohol-related brain injury can diagnose this in your client. See Part IV: Resources and contacts for specialist alcohol-related brain injury resources.

Common counselling strategies that most healthcare providers can use with Indigenous clients include:

- general counselling
- problem-solving skills training
- assertiveness skills training
- relaxation and stress management
- self-management.

General counselling

General counselling skills, such as asking the client to tell their drinking story and concerns, using active listening, checking for shared understanding, and showing empathy, are an important basis of the client–healthcare provider relationship. However, good counselling skills alone are rarely enough to change drinking behaviours in clients who are alcohol dependent or clients who regularly engage in high-risk drinking. In these instances, general counselling should be supported by more specific techniques such as assertiveness skills training or cognitive behavioural therapy, and possibly prescribed medications to manage alcohol cravings, while aiming for longer-term abstinence.

The counselling process aims to:

- provide a non-threatening and supportive environment in which your client can address sensitive issues and not feel ashamed
- build a trusting relationship in which you and your client cooperate in planning and implementing strategies to help your client reduce or stop their drinking; this mutual activity

provides a supportive framework in which your client can actively work towards their goals

- reduce your client's fear and distrust of treatment programs and encourage and support them to continue attending treatment and follow-up appointments.

Depending on your client's individual circumstances you may consider referring them to a narrative therapist, a grief and/or social and emotional wellbeing counsellor, or a cognitive behavioural therapist.

Narrative therapy

Narrative therapy is a specific approach to counselling and community work. It centres the client as the expert on their own life and views their problems as separate from the person themselves. Narrative therapy assumes that people have many skills, life experiences, capacities, competencies, beliefs, values, commitments and abilities that can help them reduce the influence of problems in their lives.

Indigenous healthcare providers and communities accept narrative therapy as a culturally respectful therapy option. If you are interested in learning more about narrative therapy, (see Part IV: Resources and contacts).

Grief and/or social and emotional wellbeing counselling

Grief and/or social and emotional wellbeing counselling can be effective in helping clients whose drinking is related to their deep feelings of loss of self, family, community and connection to country. Link-Up centres and social and emotional wellbeing counsellors are available in most states and territories (see Part IV: Resources and contacts for contact details).

Cognitive behavioural therapy

It is generally understood that while motivational interviewing (see 'Intervention for clients who are not alcohol dependent – Motivational interviewing' in this chapter) can be useful for people who are risky and *non-dependent* drinkers, alcohol-dependent people do less well with this technique.[21] Clients who are alcohol dependent may, however, respond to cognitive behavioural approaches.

Cognitive behavioural therapy is based on an understanding that the client has deficits in their ability to cope with life stresses and cues that influence them to continue to drink and/or relapse.

Cognitive behavioural therapy uses various treatment interventions to assist an alcohol-dependent client. These typically focus on the client's motivation and provide them with new knowledge about drinking as it relates to them, as well as challenging their existing beliefs and thinking about alcohol and related issues.

Some particular interventions include social skills training, cue exposure, behavioural couples and family therapy, and self-guided approaches.[22]

Problem-solving skills training

The basics of problem-solving skills do not take long to teach. However, it does require a commitment by both you and the client to undertake, practise and reinforce these skills, and for the client to practise these skills outside of the therapeutic setting.

The goals of problem-solving skills training are to teach the client to:

- identify when there is a problem
- think of a variety of possible solutions
- choose the most appropriate solution
- decide how and when to put their planned solution into action
- consider how effective their solution was

- go back to identifying the problem and proposed solutions and make changes if their original solution was unsuccessful.

Assertiveness skills training

Assertiveness skills training is often recommended for clients who have problems expressing their opinions and emotions and who feel pressured by people around them to drink at risky and high-risk levels. This type of therapy often involves working with a client to develop three skills –assertiveness, communication and drink refusal.

Assertiveness skills training may help your client to learn that they have the right to express their personal opinions and feelings and to request that other people change their behaviour if it is having a negative effect on them. The overall aim is to help your client develop feelings of hope, confidence, self-respect and respect for other people's rights to their personal opinions and feelings.

Communication skills training may help your client to tell other people how your client feels and what your client would like from other people in a way that reduces each person's shame, embarrassment and tension. You may need to use role-play or role-modelling in individual or group settings to help your client practise 'responses' to difficult situations.

Drink refusal skills training may help your client find ways to manage the social pressure they feel from other people to drink at risky and high-risk levels. This type of therapy involves your client learning and practicing ways of saying no to an offer of a drink or responding appropriately to pressure to drink. Your client may not feel comfortable saying 'I don't want a drink', but may find the following types of responses helpful because they take the pressure off them personally:

- 'I can't have a drink; my doctor has told me to cut down or the grog's gonna kill me.'

- 'I can't drink; it makes me sick with my medication.'
- 'Drinking hurts my baby.'
- 'My healthcare provider has asked me to use my *My lifestyle guide for better health and safer drinking* and I'll be seeing them this week.'

Relaxation and stress management

Making changes to long-term behaviour such as excessive drinking can be very stressful. Your client may find that keeping calm, relaxed and motivated to stop or reduce drinking is frustrating, anxiety producing, and hard work for them. Teaching relaxation and stress management skills involves first helping the client to identify the signs of stress, anxiety or tension. For example, do they feel any particular physical sensations such as a tightening in the chest, does their heart feel like its racing or does their head feel tight or ache?

The second step is teaching your client about the available techniques they can use to relax the body and mind when they feel tense or anxious. These might include hypnotherapy, breathing techniques, massage, meditation, mental imagery (such as imagining being in a safe and relaxed place) or participating in positive spiritual and cultural activities. Most of these therapies should be offered to clients by health or other practitioners with experience, training and qualifications in each therapy.

Remember, you may need to consider the cultural appropriateness of someone of your gender treating your Indigenous client – you may need to find someone of the opposite gender to undertake some aspects of this work.

However, a simple and inexpensive relaxation strategy that clients might enjoy, and that doesn't require you to have any particular experience or qualification, is encouraging them to spend time outdoors. You might suggest they go swimming, walking or fishing (but not while drunk or drinking) or spend time enjoying the natural

environment by focusing on sunsets, cloud formations or looking and listening to animals, insects and birds.

Happy story telling and playing music and singing together in family or friendship groups (where there is no drinking) can also be extremely relaxing and comforting.

Self-management

Self-management therapy requires the client to have good problem-solving skills. The goal of self-management therapy is to help your client set goals to reduce their drinking to low-risk levels. This therapy would not be appropriate for clients whose goal is to stop drinking completely, unless you clearly state that self-management strategies may be useful if there has been a relapse. The strategies involved in self-management include the client:

- Monitoring their drinking habits, which they can do by using a diary to record how much they drank, where they were when they drank, what time of the day it was, who they drank with and how they were feeling at the time.
- Setting personal limits on how many alcoholic drinks they have on any given day or drinking session.
- Controlling or slowing their rate of drinking. They could do this by avoiding being in 'buying rounds'; by sharing slabs of beer or casks of wine; by taking small sips of drinks and putting their own can, bottle or glass down between sips; and/or by having a mug of tea, sugar-free soft drink, water or fruit juice between alcoholic drinks.
- Identifying problem drinking situations and avoiding them if possible or using other strategies such as assertiveness and drink refusal skills.

Prescribed medicines to prevent cravings (pharmacotherapies)

Some clients can be prescribed medications to stop alcohol cravings and to reinforce their ability to remain abstinent. Clients who are trying to remain sober and abstinent have benefited more from a combination of psychological therapy and medications than from medications alone. You should, therefore, consider prescribed medicines as *part* of a comprehensive treatment plan.

It is not yet known how effective pharmacotherapies are with Indigenous clients. It is thought that they are worth consideration – provided the client is able to take them as prescribed and that other health problems do not preclude their use.

Care is needed when prescribing medications that require the client to remember to take them at certain doses and at regular intervals every day. You may need to judge whether they are able to manage this safely without placing an unreasonable burden on their family, particularly parents and/or Elders. They may require nursing or healthcare worker supervision and assistance.

Naltrexone

Naltrexone is an approved medication for controlling alcohol cravings; it can be prescribed by general practitioners and is covered under the Australian Government's Pharmaceutical Benefits Scheme.

Naltrexone is an anti-craving drug that reduces the chance of a serious relapse, but it is safe if the client drinks. It acts upon the brain's opiate receptors.

Naltrexone is *contraindicated* (not suitable) for clients who:

- have acute hepatitis or liver failure
- have a history of sensitivity to naltrexone

- are being treated for opioid dependence with medications such as methadone
- are at risk of using illicit heroin or other opioids, or
- are being treated for pain conditions requiring opioid pain relief such as codeine, fentanyl or morphine.

In addition, the safety of using naltrexone in pregnant or breastfeeding women or girls has not been established. It therefore should not be prescribed or administered to pregnant or breastfeeding women or girls or people under 18 years of age. See Chapter 5, 'Alcohol, pregnancy and breastfeeding' in this Tool Kit for more information about treating these clients.

NALTREXONE AND OPIOIDS

Before starting treatment with naltrexone the client should be free of opioid drugs; otherwise there is a risk of inducing opioid withdrawal symptoms. A urine screen should be performed on those clients suspected of opioid use to confirm their drug-free status.

The usual *treatment period* is three months, but six to 12 months may be necessary in some cases. Length of treatment should be decided on a case-by-case basis between the client and their doctor, based on side effects, history of relapse, social and family circumstances, and other individual factors.

Common *side effects* of naltrexone include nausea, headache, dizziness, anxiety, fatigue, insomnia and sleepiness. These symptoms usually subside after one or two weeks.

Treatment should begin after the symptoms of acute alcohol withdrawal have subsided, usually three to seven days after the client's last drink.

Education of the client and their family should include how the medication works, what side effects to expect and realistic expectations about reductions in cravings. Clients receiving naltrexone should carry a Revia® card or Medic Alert® at all times.

Arrange for a follow-up visit at least within one week, as early dropout is common, and then provide regular support and follow-up.

Closely monitor your client for signs of depression.

Acamprosate

Acamprosate (Campral®) is approved to be prescribed by general practitioners, and is covered under the Pharmaceutical Benefits Scheme.

Acamprosate enhances abstinence of alcohol-dependent people by reducing their craving for alcohol and is safe if the client drinks. It modulates glutamate function of the brain, which is responsible for some acute withdrawal symptoms.

Acamprosate needs to be taken three times every day. If your client is unable or unlikely to take multiple daily doses, the once-a-day regime for naltrexone may be more appropriate.

The usual *treatment period* is 12 months, but the client and their doctor should decide on the length of treatment on a case-by-case basis.

Side effects of acamprosate are generally mild and resolve themselves after the client's body has adjusted to the medicine. Diarrhoea is the most common side effect. Other infrequent side effects are nausea, vomiting, abdominal pain, rash, itch and erythema. In rare cases there have been reported changes in sexual urge or desires (libido) and blisters on the skin (bullous skin reactions).

Treatment should ideally begin within one week of the client's last drink, although within one month is acceptable. Acamprosate has

been shown to be safe during detoxification but it is preferable to start acamprosate once withdrawal has settled so withdrawal symptoms are not confused with medication side effects.

Education of the client and their family should include how the medication works, what side effects to expect, and realistic expectations about reductions in cravings. Explain that people typically do not feel any different on treatment, and that the drug only reaches desired levels in the brain after one or two weeks.

Arrange for a follow-up visit at least within one week, as early dropout is common, and then provide regular support and follow-up.

Contraindications

Acamprosate is *contraindicated* for clients with kidney insufficiency or severe liver failure (Childs Pugh classification C) or history of hypersensitivity to acamprosate. In addition, the safety of using acamprosate in pregnant or breastfeeding women or girls is unknown. It therefore should never be prescribed or administered to pregnant or breastfeeding women or girls or people under 18 years of age. See Chapter 5, 'Alcohol, pregnancy and breastfeeding' in this Tool Kit for more information about treating these clients.

Combination therapy

Some people do better with a combination of acamprosate and naltrexone than with either medication alone (Shand et al 2003 (See refs)], p 130).

Disulfiram

Due to the high rate of poor health in Indigenous clients, use of disulfiram (Antabuse®) is not recommended.

Safe medication management

It is not sufficient to simply give clients written pamphlets or computer printouts with their medications. Much of the information

pharmaceutical companies provide is complex, is written in very small print, and is difficult for people whose first language is not English or who have poor literacy and/or numeracy skills to understand. It is wise to seek guidance from Indigenous healthcare providers who know your client group, and who know about how best to draw or write down simple instructions that your client and their family will easily understand.

It is important that your client (and their family) is well informed and educated about any medications that are prescribed to help them through detoxification, and throughout the rest of their recovery. This may include medications to help them remain abstinent from alcohol, other medications for health problems (such as diabetes or heart disease) and incidental medications, such as antibiotics or pain relievers for common illnesses that may occur 'along the way' such as skin infection or bronchitis.

Make sure you take time to explain your client's medications to them, including how to safely manage them. You need to reassure yourself that they actually do understand the information and have the capacity and skills to manage.

As well as educating and supporting your client and their family in safe medication management, you also need to make sure that healthcare workers, drivers and community workers involved in supporting your client know how to safely handle, store, transport and deliver medications.

You need to regularly monitor your client's medications and their safe management by frequent review and observation of the effectiveness of the medications. A home visit is the best way to do this as you can also see whether or not their medicines are being stored and managed safely.

By collaborating with the local general practitioner, pharmacist, registered nurses and health workers, and any specialists you may be consulting, you can work as a team to maximise your client's wellbeing in relation to safe medication usage.

REGULARLY REVIEW PRODUCT INFORMATION

If your role includes prescribing and/or giving medications for alcohol dependence you should regularly review the product information in a reliable text such as the *Australian Medicines Handbook* (see Part IV: Resources and contacts).

Supporting families

Helping family members of a client with a drinking problem to manage effectively is a necessary and important aspect of working with your Indigenous clients with alcohol-related problems.

Family members such as grandmothers, grandfathers, mothers, fathers, aunties, uncles, teenagers and young children often have difficulty coping with the ongoing worry, physical, emotional and financial strain, and day-to-day stress of living with a family member's risky or high-risk drinking behaviour and related problems.

Family members need your support. They need access to quality information and education, counselling and practical skills in coping with a family member who is a problem drinker, and who may also have medical and/or mental health problems.

Family members are also highly vulnerable to serious medical and/or mental health problems. They will need ongoing support to meet their own needs, including getting their own health checks and treatments, getting to school or work, undertaking their daily chores, caring for babies and Elders, finding the resources they need and attending to other practical issues of daily living.

In particular, they need planned and emergency respite from the daily responsibility and impact of living with a problem drinker. They need this time out so that their own health and wellbeing can be maintained and so that they can attend to their own needs as well

as those of their other family members. They also need this time to attend to their cultural and community responsibilities.

How you can help families as a healthcare provider

You can provide support to your client's family members by:

- letting them know that you are interested in and available to families living with someone with a drinking problem
- going out of your way to ask them what their issues, worries and needs are
- inviting them to talk to you at any time about their issues and ask them what solutions they have thought of
- listening to them and reassuring them that there is hope for people who drink at risky and high-risks levels, including those who also have mental health problems, and that there are treatments, services and community supports that can help with recovery
- offering to refer them to peer support groups such as Al-Anon and Al-Ateen, specialist counselling and treatment services, community groups and other relevant services
- encouraging them to raise their hope by learning from other Indigenous Australians' personal stories about giving up problem drinking – you can offer to read stories with them, or lend them your copy of Maggie Brady's *Giving away the grog: Aboriginal accounts of drinking and not drinking* (see Part IV: Resources and contacts).
- informing them about practical and achievable ways to cope and look after themselves
- counselling them about practical and achievable ways they can use to cope better
- offering relevant and culturally appropriate information about how to access the range of community supports and services available for their family member who is a risky or high-risk

drinker, and how they might be able to seek assistance to help themselves

- teaching them about harm reduction and encouraging them to undergo first aid training
- helping them develop family management plans to prevent, recognise and manage risky situations
- giving them the local 24-hour telephone number to call for counselling and advice.[23]

Practical advice that can help family members

When working with family members of clients with alcohol-related problems, you can:

- Help them to reduce their stress by encouraging them to focus their attention and concerns away from the problem drinker and onto themselves and other family members such as children and teens.
- Encourage them not to feel ashamed or responsible for the drinker's problem.
- Ask them about their sources of strength and how they cope with problems, and encourage them to build on these strengths.
- Talk to them about how sharing their worries and pain with others can help them feel better, and can help to build a mutually supportive network for putting ideas and resources together.
- Encourage them to use the social supports within their extended family, community networks and local services.
- Discuss with them ways to address issues that prevent them from coping, such as demands or criticism from other people. You may need to work with other family and community members to do this.
- Help them feel they are able to do something, for example, they have the right and can learn new skills to resist pressure from the drinker, to resist criticism from the drinker or others, to get

support from family and friends, and to cope in different or new ways.

- Pass on practical strategies about keeping themselves and others safe when the client has been drinking.
- Have easy-to-understand information on hand to give to them about joining women's groups, men's groups, youth groups and talking circles as well as leisure, special interest, church, spiritual and sporting groups. There are also a number of self-help groups in many communities.
- Encourage information sharing about good ways of coping.
- Encourage them to use opportunities to talk within their own family about what other families are doing to solve problems.
- Consult trusted community mentors and Elders about the issues and ask them for advice about how best to manage a situation.[24]

A story of coordinating care in a semi-remote community

The case study below is a 'real life' story in a semi-remote area. It illustrates how Davey, an Indigenous worker, worked effectively with a diverse range of local service providers, as well as the client's family, to facilitate the delivery of culturally safe, holistic and *coordinated* care for his client. While the case study is based on this Indigenous client's mental health crisis, the strategies Davey used can also be applied to the care of an Indigenous client with serious alcohol dependence and related problems.

Davey's story – safe passage of care

ACKNOWLEDGMENTS: DAVEY MILLER, ABORIGINAL LIAISON OFFICER, CEDUNA KOONIBBA ABORIGINAL HEALTH SERVICE, AND NURSING STAFF FROM CEDUNA HEALTH SERVICE, EYRE REGION SOUTH AUSTRALIA.

Background: Indigenous clients of these services generally come from the local rural community, as well as many remote communities in northwest South Australia, central Australia and eastern regions of Western Australia. They come from diverse cultural, language and family groups.

Davey tells his story about a particular client scenario, the knowledge he used and approaches he took to understand and meet the immediate and longer-term needs of his client. His story offers a useful model for implementing a sound, well-coordinated, culturally inclusive and respectful approach to client care. Davey's story has been included in this resource with permission.

Situation: An Aboriginal man attempted suicide and was transferred to the Ceduna hospital from the transitional housing camp where he was staying for a while. Davey, as the Aboriginal Liaison Officer from the local Aboriginal health service, was contacted by hospital nursing staff. Over the next few days Davey worked with medical, nursing and hospital Aboriginal liaison staff to assess, plan and coordinate the client's immediate and after care, and follow-up. Although the client was experiencing a serious mental health crisis it was decided not to transfer him to city-based mental health services some eight hours away by road.

Liaison: Davey maintained daily contact with the client and the hospital team during the inpatient admission and also made contact with the client's sister in the local community and his other sister who lived in another community in Western Australia, the client's home country. Davey contacted and maintained communications with key local services while working with the hospital team in planning for the client's discharge and after care (see Figure II.12).

Davey says 'know your client' first. It is necessary to understand their needs from a holistic perspective. Only then can you identify and liaise with appropriate family and services to plan and provide effective coordination of services based on the client's needs, situation and priorities. This may involve working with a range of services and groups including local Aboriginal health and community services, general practitioners, Community Development Employment Program, community housing, Centrecare, travel services, community corrections and parole officers, local employer or education provider, mental health and drug and alcohol services, diabetes educator and so on.

Good communication and referral strategies, which encourage two-way information sharing between relevant professionals and key services while upholding client confidentiality, ensures greater capacity for all concerned to have a holistic understanding for needs assessment and problem solving, and for finding effective ways to meet a particular client's needs.

As the Aboriginal Liaison Officer, Davey was able to save a lot of time and effort for his client and the range of other services he communicated and worked with. He was able to foresee and avoid preventable problems including the family's distress, relapse and further risk of suicide attempts, poor or unsafe medication use, interrupted education, lost employment or income, hospital or prison readmissions, waste of precious human and fiscal resources and, most of all, further client distress.

The coordinated approach Davey used ensured that timely and effective referral and transfer from one service and region to another was possible. He also ensured there was 'hands on' support for his client and his client's family.

The client needed practical and professional help for his serious mental health problems. Once stabilised and safe to leave hospital he needed to be in his home country with his sister in Western Australia. This meant he had to travel several hundred kilometres by

train from rural/remote South Australia. His sister agreed for him to go home to her.

Davey assured the client's *safe passage of care* by:

- continually liaising with his client, and the local hospital and Aboriginal health service teams
- contacting and informing his client's sister living locally
- contacting and informing his client's other sister in Western Australia
- reconnecting his client with his sister, who was willing for him to come to her in Western Australia, and keeping her informed of all arrangements
- ensuring there were no parole requirements or warrants for arrest that would put his client at risk of violation by leaving the state
- ensuring his client had financial assistance so that he had sufficient money for food and basic daily living until settled with his sister in Western Australia
- ensuring his client had access to travel fare assistance to get to Western Australia by train
- talking with the local travel agent and ensuring his client's ticket was purchased and travel arrangements were in place
- ensuring his client had enough prescribed medications to cover him for the period of travel
- checking that his client was educated about and was provided with his medications before leaving hospital so he could manage his medications safely
- taking his client after hospital discharge to say goodbye to his sister in the local community and keeping her informed
- taking his client to the local train station and seeing him safely boarded; the trip was to take eight hours with a one-hour stop-over in Port Augusta

- informing his client's sister in Western Australia that her brother was on the train
- closely following-up his client's stop-over in Port Augusta (a high-risk time of about an hour where he might leave the train and not return) by contacting Port Augusta train station personnel and both of his sisters ahead of the estimated time of arrival in Port Augusta
- closely following up to ensure his client had left Port Augusta on the train as planned
- closely following up to ensure his client arrived safely with his sister in Western Australia, and informing his other sister in Ceduna
- informing the hospital, Aboriginal health services and other relevant services of the outcome.

Figure II.12 shows the common principles and 'checks' that can be applied to your client and their setting based on Davey's model.

Figure II.12: Davey's safe passage of care model

Source: As described to Charlotte de Crespigny by Davey Miller, Aboriginal Liaison Officer, Ceduna Koonibba Health Service, Ceduna, South Australia.

Summary: Davey's client had attempted suicide while in a transitional camp (having travelled from Western Australia) and was admitted to the local Ceduna hospital.

Davey helped his client through:

- effective needs assessment
- effective cross-cultural communication with his client and the client's family, as well as Indigenous and non-Indigenous healthcare providers involved
- a planned approach
- effective two-way consultation and coordination
- knowing his community well.

As Davey has shown, during the care planning process healthcare providers need to work with their client, the client's family and other healthcare providers to clarify the client's:

- own particular needs, experience and goals, taking into account priorities of clinical issues and immediate concerns
- other needs and concerns including general and mental health, family, work, financial, legal and housing issues.

SAFE PASSAGE OF CARE PLANS

Do you have in your workplace a clearly articulated care planning, follow-up and referral pathway or protocol? If not, developing one could be a useful activity to involve team members in. Consider some of the issues Davey highlighted. For example, are there any legal or 'cross-border/region' referral implications for your client?

The *Local referral pathways* template and contacts in Part IV: Resources and contacts can help you to identify and document safe passages of care for your clients.

4. ALCOHOL AND MENTAL HEALTH PROBLEMS

Fewer Indigenous Australians drink alcohol compared with the general Australian population, and many who do drink do so at low-risk levels. However, there are significant numbers who drink at risky and high-risk levels. Alcohol use at these levels is closely linked to mental health problems (alcohol and mental health comorbidity).

PROVIDING HOLISTIC CARE

In order to provide holistic care to your Indigenous clients (see Chapter 3, 'General care' in this Tool Kit), you should try not to feel constrained in offering information and early intervention to clients with mental health problems who drink. By being non-judgmental and building rapport with your client, you can find ways to give and gather useful clinical information, to reassure your client that you want to help them with their immediate and long-term problems and needs, and to give them practical assistance and referral.

Talk with local groups, such as Indigenous and non-Indigenous healthcare providers and community groups, and access local reports and media accounts, to find out the range of drinking and mental health problems currently having an impact on Indigenous people in the local community.
This will help you gain a good understanding of what may your clients and their families may be experiencing.

Factors influencing a combination of alcohol and mental health (comorbidity)

Excessive alcohol use always serves a purpose in the individual's life. In particular, alcohol may be used to reduce physical, mental

or emotional pain or negative symptoms of mental health problems such as depression, anxiety, hallucinations, agitation or panic. People may also use a range of other drugs to relieve their distress or unwanted moods, including other depressants such as diazepam or solvents (petrol or paint) and stimulants such as caffeine, tobacco and amphetamines (speed).

The positive effects of alcohol, such as the initial feeling of wellbeing, slower heart rate and sense of relaxation, may become the client's way of coping; their drinking may not necessarily be a conscious choice.

People at risk of developing a mental health disorder, particularly adolescents and youth, may develop symptoms of mental health problems before any drinking (or other drug) problems have emerged.

Excessive regular alcohol use or alcohol dependence and mental health problems can develop together in response to a number of risk factors that can be either internal or external to the person, or a combination of both.

Internal – biological factors can include:

- disruption in the chemicals in the brain used for neurotransmitter functioning (sending nerve messages across the brain and body)
- genetics
- individual personality.

External – social and environmental factors can include:

- poverty
- social disadvantage
- exposure to stressful life events (such as enduring poverty and loss of hope, chronic illness, loss and grief from multiple deaths of family and friends, no job or lost employment, racism, separation from family and country, sexual abuse or violence)

- exposure to another person's mental health disorders
- family and other relationship problems.[25]

In some cases, people with mental health problems may use alcohol or other drugs in an opportunistic manner. That is, they use a mood-altering substance that is accessible to them at the time, based on the cost and/or availability of substances and other environmental factors. People in this situation are particularly vulnerable to experiencing:

- serious alcohol/drug/medication interactions
- injury
- accidental overdose
- infection from injecting drugs with unclean needles, syringes, water tourniquets and other equipment
- other serious health and social problems
- victimisation by others.

Common alcohol and mental health comorbidities

Dr Chris Holmwood is an experienced drug and alcohol physician who has offered some advice for healthcare providers when caring for an Indigenous client with an alcohol and mental health problem (comorbidity). This information is in the Commonwealth publication, *Comorbidity of mental disorders and substance use: A brief guide for the primary health clinician*.[26]

The following information is derived from Dr Holmwood's advice.

Alcohol and depression

The depressant effect of alcohol can increase the severity of symptoms in a client with clinical depression.

Chronic heavy use of alcohol can induce a depression-like condition, and depression is a common symptom of alcohol dependence.

During or after alcohol withdrawal, depression-like symptoms may be experienced by the client. These symptoms may continue for several weeks or sometimes months of abstinence.

In many instances, depression or depression-like symptoms will resolve in time if the client stops drinking. If they do not resolve it indicates the presence of underlying depression.

Alcohol and anxiety disorders

There are a number of anxiety disorders, including general anxiety, panic, obsessive-compulsive disorder, social phobia and post-traumatic stress disorder.

Clients often use alcohol to self-medicate for symptoms of these anxiety disorders.

Prescribed medications such as tricyclic anti-depressants will increase the sedative effect of alcohol.

The combination of an anxiety disorder and regular excessive alcohol use or alcohol dependence will increase the negative effects of both problems for the client.

Treatment may include planned detoxification support, medication management for the anxiety and alcohol cravings, and behavioural-based psychological therapies.

Alcohol and psychosis

There are two major categories of psychotic illness: schizophrenia and bipolar disorder (sometimes called manic depression).

Alcohol tends to make the negative effects of schizophrenia worse, and the relapse rate for risky and high-risk drinkers is higher.

Alcohol can increase the sedative effects of many prescribed antipsychotic drugs, making driving, working in hazardous occupations or being near water especially dangerous for the client and other people around them.

Alcohol has also been found to contribute to clients not taking medication for treating schizophrenia.[27]

Clients with bipolar disorder who also drink are likely to drink at higher levels or relapse back to drinking, even when they have been abstinent, during periods of mania. This is because when manic they have a strong urge to engage in activities that are enjoyable and have a greatly increased confidence in their capacity to manage their situation.[28]

Screening for alcohol and mental health comorbidities

The Indigenous Risk Impact Screen (IRIS) was developed in Queensland by an expert group of Indigenous and non-Indigenous researchers.[29] It was developed in response and according to a number of recommendations from both national and Queensland state reports that identified alcohol and other drugs as both the known cause and symptom for health and environmental factors affecting the lives of Indigenous Australians.

Alcohol and other drug issues are also associated with mental health issues, including anxiety, depression and psychosis, as well as social functioning concerns, including family violence, inadequate nutrition and the like.[30] Therefore, in developing IRIS, mental health was included with alcohol and other drug use.

IRIS was designed to help in early identification of alcohol and drug problems and mental health risks. It is listed in the Royal Australasian College of Physicians and the Royal Australian and New Zealand College of Psychiatrists' 2005 *Alcohol policy: Using evidence for better outcomes*,[31] as a low-cost, reliable, easy-to-use and effective screening resource for Indigenous Australians.

IRIS is suitable for people who have self-identified as being from an Aboriginal or Torres Strait Islander background and are 18 years of age or older.

Do not use IRIS when you have identified that your client has:

- obvious alcohol or drug intoxication (alcohol intoxication will preferably be confirmed by breathalyser)
- acute physical or mental illness, or acute alcohol or drug withdrawal
- clear inability to understand English
- any other health risks that require immediate attention.

Ethical considerations in using IRIS

It is important to always remember to obtain your client's informed consent before you use the IRIS questionnaire, and that you keep your client safe from either self-harm or inappropriate disclosure of their personal information to others not approved of by them, other than service providers who are essential for their safe care.

Obtaining consent from clients

Clients always need to be able to make a free and informed choice about participating in screens such as IRIS. This can be achieved by explaining what the screen is used for in a way that they will understand (for example, 'I would like to ask you a few questions about your alcohol and drug use and mental health problems such as depression').

Keeping clients safe

Sometimes a client will give information that may indicate they are at risk of harming themselves or another person. It is always important to follow up on this information to determine whether they are in fact at risk. If you believe they are at risk, keep them safe, consult your team and follow your service's policies and procedures to determine effective action.

Administering IRIS

IRIS consists of a series of questions you ask your client (Figure II.13). Make sure you choose a suitable time for the IRIS interview

so you are not interrupted and a location in which your client feels safe and can speak openly. A private area that preserves their confidentiality is essential. They may want a trusted family member or friend to stay with them, and this should be welcomed and accommodated accordingly.

If appropriate, introduce IRIS within the context of your client's current problem and explain to them that IRIS is routinely offered to all clients. While giving IRIS, clarify any issues the client may be having difficulty with, including understanding any of the questions or concepts.

Figure II.13: Indigenous Risk Impact Screen

	Indigenous Risk Impact Screen (IRIS)	
Alcohol and drug risk		
1. In the last 6 months have you needed to drink or use more to get the effects you want?		
1. No _	2. Yes, a bit more _	3. Yes, a lot more _
2. When you have cut down or stopped drinking or using drugs in the past, have you experienced any symptoms, such as sweating, shaking, feeling sick in the tummy/vomiting, diarrhoea/runny gonna, feeling really down or worried, problems sleeping, aches and pains?		
1. Never _	2. Sometimes when I stop _	3. Yes, every time _
3. How often do you feel that you end up drinking or using drugs much more than you expected?		
1. Never/Hardly ever _	2. Once a month _	3. Once a fortnight _
4. Once a week _	5. More than once a week _	6. Most days/Every day _
4. Do you ever feel out of control with your drinking or drug use?		
1. Never/Hardly ever _	2. Sometimes _	3. Often _
4. Most days/Every day _		
5. How difficult would it be to stop cut down on your drinking or drug use?		
1. Not difficult at all _	2. Fairly easy _	3. Difficult _
4. I couldn't stop or cut down _		
6. What time of the day do you usually start drinking or using drugs?		
1. At night _	2. In the afternoon _	3. Sometime in the morning _
4. As soon as I wake up _		
7. How often do you find that your whole day has involved drinking or using drugs?		
1. Never/Hardly ever _	2. Sometimes _	3. Often _
4. Most days/Every day _		
Mental health and emotional wellbeing risk		

8. How often do you feel down in the dumps, sad or slack?		
1. Never/Hardly ever _	2. Sometimes _	3. Most days/Every day _
9. How often have you felt that life is hopeless?		
1. Never/Hardly ever _	2. Sometimes _	3. Most days/Every day _
10. How often do you feel nervous or scared?		
1. Never/Hardly ever _	2. Sometimes _	3. Most days/Every day _
11. Do you worry much?		
1. Never/Hardly ever _	2. Sometimes _	3. Most days/Every day _
12. How often do you feel restless and that you can't sit still?		
1. Never/Hardly ever _	2. Sometimes _	3. Most days/Every day _
13. Do past events in your family still affect your wellbeing today (such as being taken away from family)?		
1. Past events do not affect me today _	2. Sometimes _	3. Most days/every day _

Scoring IRIS

Add the endorsed scores from IRIS pertaining to each section: 'Alcohol and drug risk' and 'mental health and emotional wellbeing risk'. Compare your client's score to each of the risk cut-off scores in the table below and follow the procedures outlined.

Section	Tally	Risk cut-off	Procedure
Alcohol and drug risk	Add scores for questions 1–7 Score: _	8	Note whether the client has achieved the cut-off score and with consent proceed to brief intervention for alcohol and drug use.
Mental health and emotional wellbeing risk	Add scores for questions 8–13 Score: _	11	Note whether the client has achieved the cut-off score and with their consent proceed to brief intervention for mental health and emotional wellbeing.

Scenarios for using IRIS

After the IRIS screening, you and your client will need to make some choices about what to do next.

For example:

Scenario A: Following screening, your client meets the criteria for risk, yet does not wish to work on either their alcohol and/or other drug use or mental health issue, but instead on an entirely different issue.

Response: It is important to show that you respect your client's decision not to work on their alcohol and/or other drug use or mental health issue. However, you can still provide them with information, advice and referral to an appropriate service to explore and address their issues (whether the service is located onsite or outside your area). The major benefits of this action include:

- the screening instrument and brief intervention can enable you to target your response to the individual client's needs by establishing collaborative networks/partnerships that will ensure better use of resources
- you have identified a prospective client who has alcohol, other drug use or mental health issues and you may be able to establish a formal or informal follow-up process.

Scenario B: Your client may want to work on their mental health and not their alcohol and/or other drug issue, even though they have met the criteria for alcohol and drug risk.

Response: Again, this is an opportunity for you to offer a referral to an appropriate service to address their alcohol and/or other drug issue (whether the service is onsite or elsewhere). The benefits in this action are:

- Intervention enables provision of timely advice to clients and family members about the extent and nature of the risks to their wellbeing as well as any risks to them in

their environment, and the possibility of receiving suitable treatment/referral for their alcohol and/or other drug use problems.

- By building collaborative partnerships/relationships with other services you are not alone and therefore are better able to assess and address your client's issues appropriately. This approach to service delivery provides support for healthcare providers as the workload is shared and resources are shared, and the client can benefit greatly.
- You have established a relationship with the client and can help connect them with the services they need.

Scenario C: Your client may decide to work on their alcohol use.

Response: You can begin to work with your client to address their alcohol use.

- IRIS enables you to further appropriately identify your client's drinking issues and related needs.
- Provide timely advice to clients about the extent and nature of their alcohol and/or other drug problems and possible interventions and treatment pathways.

There is a range of other choices a client may make; what you need to remember is that IRIS is a screen only and they will need a full general and mental health assessment to actually identity their problems.

Assessing alcohol and mental health problems (comorbidity)

Having screened your client with IRIS and identified their likely drinking and/or other drug, and mental health problem, you need to assess them fully.

The key to detection and early intervention in drinking and mental health problems is timely assessment. Wherever you work, you will

need to undertake drinking (and drug use) and consider the need for a mental health assessments for clients in order to identify and address their particular needs. Common mental health problems are anxiety and depression, and these are often associated with risky or high-risk drinking, and other drug use.

Many people with these conditions respond well to early and brief intervention in general health settings.

Healthcare providers who have no specialist training in mental health problems should exercise caution when undertaking these assessments and should consult with specialist resources for assistance.

Some clients may require more in-depth clinical assessment, care planning and treatment, and so you may need to consult with and involve specialists either directly or by remote means. A collaborative approach allows healthcare providers to facilitate shared care for a client with drinking and mental health problems (comorbidity) through an integrated approach to appropriate treatment, monitoring and follow-up care.

Considerations for assessing and responding to comorbidity

Due to the high prevalence of complex health issues Indigenous people face, you will need to facilitate a complete and documented alcohol and mental health comorbidity assessment for many who attend your service.

Assessment of alcohol and mental health comorbidity can occur at any time during a client's presentation. In fact, it is often their (and their family's) incomplete understanding of the connection between drinking and mental health problems that has limited their progress thus far.

A comprehensive comorbidity assessment can be undertaken in one session or progressively over several visits, depending on the

immediate condition and needs of the client and the time you have available. A progressive assessment can be very useful as it can allow you to collect information in stages and in order of priority, give you time to build your client's trust, and help you to manage your busy time schedule.

An increase in mental health symptoms will often result in increased drinking (or drug use), and vice versa. When people experience alcohol and mental health comorbidity, even when they are managing well, there can be occasions when there is an exacerbation or worsening of their symptoms, whether or not they have been managing their treatment.

It is important to realise that while acute alcohol withdrawal may resolve in five to 12 days, there may be symptoms of depression, anxiety and sleep disorders for weeks and sometimes months, following this acute phase. These symptoms are likely to resolve with abstinence over time. During this time your client needs regular support, monitoring and treatment, including pharmacotherapy to stop cravings. The client needs you to tell them what is happening and what you can do to help them.

Drinking may mask a client's mental health problem, which may well become apparent during a period of alcohol abstinence. Support, mental health assessment and treatment, and alternative strategies need to be facilitated and monitored if the cycle of drinking and mental health problems is to be interrupted.

RAISING THE ISSUE WITH YOUR CLIENT

Clients may feel embarrassed or ashamed about their drinking, drug use or mental health problems. Choosing how best to 'raise the issue' and undertake the client's assessment requires sensitivity on your part, and needs to be done in a matter-of-fact, practical way that is non-judgmental.

Clients need to be reassured that assessing drinking and mental health problems is your usual practice, and that it is just as important as asking them about any physical illnesses.

In other words, 'normalise' your client's issues as much as possible.

When assessing your client for comorbidity you should consider the following:

- their general and mental health
- their level of alcohol consumption
- risk for intoxication and withdrawal
- issues (e.g. grief, social, family, financial, cultural) influencing their drinking behaviour or mental health, and which problem came first, the drinking problem or the mental health problem
- their mental state after intoxication has subsided and/or they have finished undergoing acute withdrawal
- whether they have had any mental health symptoms during long periods when they have not been drinking (abstinence).

Managing alcohol and mental health comorbidity

In helping your client to manage their drinking and mental health problems it is useful to adopt a long-term perspective. Their complex and serious problems are not likely to resolve quickly or easily. You need to:

- prepare to engage with your client in the long-term if their problems are complex, serious and/or likely to be long-lasting
- be flexible in your availability while still maintaining your professional approach (for example, your client may not be able to keep appointments on time or follow complex instructions easily, so being patient helps you both)

- offer repeat sessions and brief booster 'yarns' if and when the opportunities arise to keep the client hopeful and feeling supported
- establish whether they are ready and have the capacity to change their drinking and/or other behaviours relating to their mental health problems
- help them (and their family) to use harm reduction strategies to minimise risks and harms if they are not yet ready or able to change their drinking pattern
- help them to consider change, establish realistic goals for change and identify small steps that are more achievable and result in successes 'along the way'; this helps to build client confidence and sense of hope for change, as well as develop the skills for change, relapse prevention and management
- refer them for specialist treatment services if this is what they want and it is appropriate and accessible; if this is not possible, seek specialist advice for them to be assisted locally
- offer and facilitate support at home or in their community and involve their family as appropriate
- give them and their family members self-help information and 24-hour hotline numbers to call if they need help or wish to talk to a counsellor.

Assessing for risk of suicide or self-harm

People who are intoxicated from alcohol, or who are depressed or experiencing other mental health problems and have been drinking, are at significant risk of suicide or self-harm. The immediate risk needs urgent attention and must be included in the client's initial assessment, no matter how well you know your client or what you may believe to be their current situation. Seek expert advice immediately. (Refer to Section IV: Resources and contacts – Health organisations and information services – Suicide.)

A client's suicidal thoughts may be due to one or more reasons, such as:

- the actual mood-altering effects of alcohol during acute intoxication
- grief and trauma, including recent and past incidents, or the effects of intergenerational grief and trauma
- mental health problems
- family worries
- housing or money problems
- legal problems
- having been a victim of sexual or other assault or other crime, recently or in the past.

Warning signs can include:

- recent suicide, or death by other means, of a friend or relative
- previous attempts of suicide or self-harm
- often talking, writing songs or drawing images about death and dying
- giving away their most loved possessions, saying goodbye to people, and settling old debts and/or arguments
- changes to sleeping and eating patterns, for example, sleeping more or less or eating more or less
- not wanting to spend time with family, friends and community when this has been a source of enjoyment in the past
- noticeable mood changes, such as being very sad or quiet, or getting very angry, or being very happy and calm after a period of great sadness
- not caring about what happens to them or how they appear to others.[32]

If you determine that your Indigenous client is at risk of suicide or self-harm, you need to inform them about your concerns and tell

them that you are seeking immediate expert assistance on their behalf. Such assistance may include direct intervention, specialist advice and/or support, and possibly transfer and admission to an acute care hospital. (Refer to Part IV: Resources and contacts – Health organisations and information services – Suicide.)

A SUICIDE PREVENTION RESOURCE TO HELP YOU AND YOUR CLIENT

Refer to SQUARE (Suicide QUestions Answers and REsources), a suicide prevention resource for health professionals, which is available from the LIFE (Living Is For Everyone) website at www.livingisforeveryone.com.au.

5. ALCOHOL, PREGNANCY AND BREASTFEEDING

This chapter provides an overview of the health issues regarding alcohol consumption, pregnancy and breastfeeding. Alcohol can adversely affect women and babies during and after pregnancy. Although there needs to be more research into alcohol effects during pregnancy, there is sufficient information to guide health practitioners. The information in this chapter is provided to assist Indigenous and non-Indigenous healthcare providers in educating and caring for Indigenous women and girls who are, or may become, pregnant, and those who are breastfeeding.

More in-depth information can be found in the key resource *National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*.[33] See also Part IV: Resources and contacts – Health organisations and information services – Pregnancy.

Recommendations for healthcare providers

The Royal Australasian College of Physicians, Royal Australian and New Zealand College of Psychiatrists and Australian Medical Association all advise that abstinence from alcohol is the safest choice for any girl or woman who is, or may soon be, pregnant.[34]

The Royal Australasian College of Physicians and the Royal Australian and New Zealand College of Psychiatrists encourage healthcare providers to promote healthy behaviour during pregnancy in relation to alcohol by:

- educating all women of childbearing age, including girls and young women still at school, about low-risk drinking
- making screening for (or asking about) alcohol use a routine part of their role when caring for pregnant clients, or clients who may soon become pregnant

- providing effective case management for mothers and mothers-to-be who are at risk to help them trust and remain engaged with healthcare providers so that they can stop, or at least decrease, their drinking.[35]

The National Health and Medical Research Council's *Australian alcohol guidelines: Health risks and benefits* also advise that it is preferable for women not to drink any alcohol during pregnancy or while breastfeeding.[36] In addition, the *Australian alcohol guidelines* recommend that healthcare providers inform pregnant women and those who may soon be pregnant that:

- the risk to the developing baby is likely to be highest in the earlier stages of pregnancy before the woman is even aware that she is pregnant; that is, the time from conception to the first missed period
- if they choose to drink, they should have less than seven standard drinks over a week, with no more than two standard drinks (20 grams of alcohol; for example 200 millilitres of wine or 1½ cans of full-strength beer) on any one day; however, even then, this low amount of alcohol should be drunk over at least two hours
- they should never become intoxicated.[37]

The National Health and Medical Research Council also recommends that women who are breastfeeding not drink alcohol.[38] If breastfeeding women choose to drink alcohol they should have no more than two standard drinks (20 grams of alcohol) in 24 hours, and should never become intoxicated.[39]

There is now growing interest in the effects of the father's drinking levels on his baby's intellectual and physical development.[40] In the best interests of their babies and families, men who are or are likely to become fathers also need be advised not to drink, or to drink at low-risk levels.

The above recommendations are offered as cautionary measures while there remain gaps in our knowledge about the impact of alcohol during pregnancy.

EDUCATING FATHERS AND OTHER MEN

It is important that fathers and other men be educated about the risks associated with women drinking during pregnancy and how they can support their female partner, and any other female family members, during pregnancy and breastfeeding. In particular, fathers, brothers and uncles can best support women who are pregnant or breastfeeding by not drinking near them, or not drinking at all.

Supporting Indigenous mothers and babies

To increase the chance of good health outcomes for mother and baby, Indigenous women need to trust their healthcare providers and feel that they receive good advice and support. You can earn this trust by being available, approachable, non-judgmental and willing to care for and support your pregnant clients whether or not they choose to drink during pregnancy. This is the best way to maximise each woman's health, safety and wellbeing, as well as that of their developing babies.

Cultural considerations

Beliefs about pregnancy and childbirth among some groups of Indigenous people may differ from those of non-Indigenous people, including healthcare providers. For example, an Indigenous woman might believe that her pregnancy is connected to her traditional Dreamtime, and is therefore not linked to her sexual activity. Her belief can make any discussions about drinking alcohol during pregnancy difficult. Your health message to her about the risks of drinking during pregnancy and breastfeeding may need to take into account her belief that pregnancy may happen at any time. Therefore, for some groups of Indigenous women who hold such a belief, it may be useful to help them to consider choosing not to

drink any alcohol or only drink at very low-risk levels during their childbearing years.

It can also happen that an Indigenous client who is obviously pregnant does not acknowledge her pregnancy when asked by a healthcare provider, even though clinical observations indicate pregnancy is obvious. This may be because she has not yet identified her pregnancy as she has not yet experienced culturally relevant signs.

Such differing health beliefs can partially explain why relatively low numbers of Indigenous women and girls use maternity healthcare services during their pregnancies (prenatal care). Another factor may be that they have limited access to acceptable and culturally safe services depending on whether they live in metropolitan, rural and remote areas.[41]

Family members keeping mother and baby safe

Father, brothers, uncles and other family and community members have a role to play in keeping the mother and baby safe by choosing not to drink or, if drinking, consuming alcohol at low-risk levels. They also need to make sure they are not drunk when they are with or near a pregnant woman or a mother with her baby.

If a client becomes intoxicated while caring for her baby or young child, she and her baby may not only be at serious risk of harm and/or injury while she is holding her baby, but she may also be at risk of becoming involved in violence or other high-risk situations if she is near others who have been drinking. If this is happening, family members who have not been drinking need to care for her and her baby to ensure that they are both kept safe.

Sleeping arrangements

Some clients may share the same sleeping space (such as a bed, lounge or floor) with their babies. If a mother is intoxicated, she may accidentally smother her baby or may be unable to protect her baby

from falling. She needs to be advised to have a 'safety plan' for when she does drink alcohol that includes not sleeping in the same bed and/or having another trusted family member (or friend) who has not been drinking care for the baby (including when it sleeps) until she is sober and able to manage safely herself.[42]

Mental health problems

Pregnancy and the period following the birth of a baby can be a highly emotional and stressful time for many women and girls. Drinking may be a way some mothers and pregnant women respond to mental health problems such as depression or acute anxiety. Your Indigenous clients may need additional support for ongoing depression or postnatal depression (depression following the birth of a child, sometimes called the 'baby blues'), or postnatal anxiety disorders. This is especially concerning for women who have:

- experienced sexual abuse or other abuse as a child
- limited access to emotional and practical supports, for example, a small or no extended family, single parenthood, or relationship problems with their partner
- experienced family separations
- experienced other significant losses and grief issues
- had labour and delivery complications
- had problems with their baby's health.[43]

Linking women and girls to Indigenous health services and birthing programs early in their pregnancy, or as soon as possible, is often crucial to providing them with the culturally appropriate support they need if and when mental health issues emerge.

A father may feel isolated from his female partner and baby, and also experience depression or anxiety. Acknowledging that parenting and a change in family relationships can be stressful for fathers as well as mothers can be the first step in their recovery from depression. Linking them with Indigenous health services and local support groups, and/or being available for counselling or an informal 'yarn', are all important elements that can assist recovery.

INCLUSIVE CARE

Wherever possible, the client's partner, friend or family member should be welcomed and included throughout her pregnancy care, unless she indicates otherwise.

Sharing the care

Indigenous and non-Indigenous healthcare providers need to work in harmony with one another to provide culturally appropriate and effective healthcare to Indigenous women and girls who are pregnant and breastfeeding. Knowing each other and the services that are provided, and engaging in effective communication, ensures good working partnerships can be forged.

Importantly, local Indigenous community-controlled health services can offer culturally relevant information and advice to non-Indigenous services about how best to engage and care for Indigenous clients and their families. Developing strong links and working in partnership with Indigenous birthing and maternal and child health programs, such as the 'Strong Mothers, Strong Babies, Strong Culture' program, the 'Mums and Babies' program and grannies groups, can be extremely beneficial.

Shared care may involve a number of different services, depending on the health and social needs of the client and her family. For any shared care arrangements to be effective there needs to be timely and reliable communication between the service providers involved. Service providers may include the local Indigenous healthcare provider, general practitioner, hospital prenatal clinic, specialist alcohol treatment service, diabetes team and/or family and community service. It is also particularly important to provide, within the boundaries of confidentiality, clear summary reports regarding a client's particular health needs when referring or transferring her to another service for treatment, including any treatment required for her alcohol consumption. The receiving

healthcare service needs essential information so they can review her situation before she is admitted or receives further prenatal or postnatal care.

Sharing care of pregnant clients might include:

- ensuring they receive medically supervised alcohol withdrawal treatment in a hospital setting
- providing treatment for drinking and mental health problems (comorbidity), including anxiety disorders, depression, or other conditions
- offering guidance and support throughout pregnancy and breastfeeding to minimise health and other risks.

Alcohol consumption and pregnancy

It is well recognised that drinking alcohol during pregnancy can pose serious risks to the developing baby as well as to the mother.

While more research is needed,[44] current data show that within the general Australian population the number of babies born affected by their mothers' alcohol consumption during pregnancy is relatively few. However, the risk is twice as high among Indigenous Australian and North American populations compared with non-Indigenous Australians and North Americans. [45]

It is therefore important for all Indigenous girls and women to be well educated about the toxic (poisonous) effects of alcohol on their own bodies as well on their developing babies. It is essential that Indigenous women and girls not be shamed or made to feel guilty if they do drink, at whatever level, during pregnancy.

Health effects on mother and baby

Serious medical problems that your Indigenous client may experience if she has been drinking during her pregnancy include:

- complications such as miscarriage, stillbirth and premature birth
- excessive vomiting
- dehydration
- poor nutrition
- high blood pressure (hypertension)
- injuries due to intoxication
- hypoglycaemia (low blood sugar)
- gestational diabetes (diabetes that develops during pregnancy)
- reduced immune system functions
- alcohol withdrawal during or soon after labour.

An average of two or more standard drinks (20 grams of alcohol or more) a day has been linked with an increased risk of spontaneous abortion, low birth weight, and possibly behavioural and learning difficulties.[46]

The developing baby (foetus) or newborn may also have significant health problems if the mother has been drinking during pregnancy. These can include:

- slow growth and development
- heart, kidney and liver defects
- breathing troubles during delivery and at the time of birth
- alcohol intoxication
- alcohol withdrawal shortly after birth.

The harmful effects of drinking alcohol during pregnancy on the developing baby are dose-related, that is, they are dependent on how much alcohol the mother consumes during her pregnancy. These problems range from mild to very serious. The extent of alcohol-related harm may not become evident until the baby is older.

Foetal alcohol spectrum disorders

There are four known disorders that are associated with a developing baby's exposure to alcohol during pregnancy. These have been grouped into what is known as foetal alcohol spectrum disorders.[47] The three less severe, and more difficult to diagnose, disorders are:

- foetal alcohol effects
- foetal alcohol-related birth disorders
- alcohol-related neurodevelopment disorder.

The fourth disorder, foetal alcohol syndrome, is the most serious alcohol-related disorder. Babies born with this syndrome have particular abnormal physical features and experience any of a range of health and developmental problems, including:

- significant learning difficulties
- intellectual disability
- poor eyesight and/or hearing
- poor coordination and motor (movement) skills
- defects of the face and bones
- heart, kidney and liver defects
- slow physical growth after birth.

No blood or laboratory test is currently available that can assist in the diagnosis of foetal alcohol spectrum disorders. Diagnosis therefore relies on a specialist's assessment of the young child's growth and development, any characteristic facial features, central nervous system function (including intellectual ability), and confirmation that the mother did actually drink alcohol during her pregnancy.[48]

Alcohol consumption and breastfeeding

If a woman or girl who is breastfeeding drinks alcohol, the alcohol is carried in her bloodstream into her breast milk and therefore to the baby as it feeds. Any significant amounts of alcohol in the mother's breast milk can cause serious health problems for the baby because a baby's liver is small and cannot effectively break down (metabolise) alcohol.

Even relatively low levels of alcohol consumption amongst breastfeeding mothers can:

- reduce the amount of breast milk they produce
- cause irritability in the baby
- make the baby too sleepy to feed, leading to poor nutrition
- create sleep disturbances for the baby.[49]

It has been suggested by some healthcare professionals that a baby's exposure to alcohol may directly affect the way their brain develops in their first year, and possibly affect later general growth and development.

There is also a risk of injury and harm to mother and baby if the mother is intoxicated while breastfeeding. She may fall or trip, or accidentally drop or smother the baby.

DRINKING ALCOHOL WHILE BREASTFEEDING

Breastfeeding mothers who wish to drink should express and store their alcohol-free breast milk for the next feed. A healthy woman who weighs more than 60 kilograms and who consumes one standard drink (10 grams of alcohol) over one hour will need one alcohol-free hour before her breast milk no longer carries alcohol. Other helpful advice for breastfeeding women who wish to drink alcohol includes:

- drink extra water
- drink as little alcohol as possible, and choose light beers or other low-alcohol drinks
- eat non-salty foods before and while drinking alcohol.[50]

Alcohol intoxication and pregnancy

If your client is pregnant, her intoxication presents a serious risk to her safety and to that of her developing baby. She is at immediate risk of overdose, vomiting and choking, miscarriage or premature labour.

The progress of her pregnancy and wellbeing of the developing baby should be assessed immediately, preferably by a midwife in consultation with the medical/obstetric team. She must be closely observed and nursed in a safe environment. She should not be placed on a bed or chair where she could fall and injure herself or her developing baby.

Clinical guidelines issued by the NSW Department of Health[51] suggest healthcare providers caring for a pregnant client who is intoxicated should:

- Assess as they would for any other woman.
- If possible, undertake an initial assessment of the foetus by listening to the foetal heartbeat using a stethoscope (auscultation).
- If available, use a cardiotocograph (CTG) for electronic foetal monitoring, and follow up with an ultrasound (ultrasonic imaging) as appropriate.
- Consider admission to a hospital. However, if this is not possible, continue close observation and support in a safe place with trained nursing and other health staff. The decision to admit her to hospital will depend on her situation, for example:

- How far away is she from the nearest hospital?
- What is her general health status?
- How far along is she in her pregnancy (stage of gestation)?
- Does she have other children or family members who are dependent on her (for example, is she the only and/or primary carer of children under the age of 16 or a parent who has a significant health problem)?
- Is she at serious risk from physical or mental illness, injury, poor nutrition, dehydration or infection, domestic/family violence or premature labour?

If your service cannot assess and care for the client, she should be transferred immediately to a major medical centre that can. She needs a trusted female relative or friend to accompany her, and/or her partner if she wishes. She will also require close and frequent follow-up and support.

See Chapter 2, 'Emergencies' in this Tool Kit for more information on caring for clients who are intoxicated.

POLICIES AND PROTOCOLS: PREGNANT CLIENTS AFFECTED BY ALCOHOL

A pregnant client who is affected by alcohol (or other drugs) may present in crisis to a clinic or emergency service. She may be either intoxicated or in withdrawal, and may be experiencing mental health problems, such as depression or anxiety. She may have an injury, infection or illness such as diabetes or kidney disease. She may have come to escape homelessness or violence.

Each healthcare service needs to have clear policies and clinical protocols to assess and respond to such situations so these clients can be effectively cared for immediately as well as in the longer term. Having clear policies and protocols will help to support good

practices at the time and ensure effective follow-up. The protocols should direct that the woman's general practitioner or medical officer and midwife are to be notified immediately, as well as offer clear guidelines on assessment, stabilisation, medical, nursing and psychological management and support.

Alcohol withdrawal and pregnancy

A pregnant woman or girl who is alcohol dependent or a regular excessive drinker is at risk of alcohol withdrawal at any time during her pregnancy if she stops drinking suddenly or significantly reduces the amount of alcohol she drinks. She may undergo alcohol withdrawal during labour or shortly after the baby is born, depending on the time she had her last drink.

The baby is also at risk of alcohol withdrawal. This may start approximately 24 to 48 hours after birth if the mother is intoxicated or withdrawing during labour and delivery, depending on the time of her last drink.

Caring for a pregnant client in withdrawal

A pregnant client may start withdrawal six or more hours after her last drink.

Ideally the baby will be delivered in a hospital where both the mother and baby can receive special medical care. The mother needs careful monitoring using the Clinical Institute Withdrawal Assessment for Alcohol Scale – Revised (CIWA-Ar) (see Chapter 2, 'Emergencies' in this Tool Kit) and supportive nursing care to reduce her and her baby's risk of complications.

Guidelines for treating a pregnant client who is at risk of withdrawal include the following:

- If she begins withdrawing, she needs immediate specialist medical and nursing care in a well-equipped hospital.

- She needs to be observed and monitored closely for onset and progression of alcohol withdrawal, and medically treated to prevent and/or manage complications, during labour and after the baby is born.
- She will require medical intervention and nursing care for alcohol withdrawal for at least five days after delivery.
- It is important to inform the receiving clinical team and document her most recent blood alcohol concentration, time of last drink and CIWA-Ar score, and any known previous history of withdrawal complications including fits, thiamine deficiency, Wernicke's encephalopathy or delirium tremens.

See Chapter 2, 'Emergencies' in this Tool Kit for further information on monitoring and treating clients who are experiencing alcohol withdrawal and Chapter 3, 'General care' for specific screening and assessment tools, including tools designed for use with pregnant clients.

Caring for a newborn in withdrawal

Withdrawal in a newborn occurs because the flow of alcohol from the mother's bloodstream stops suddenly after delivery and a baby's liver is not mature enough to metabolise alcohol at the same rate as the mother's (the equivalent of one standard drink per hour).

When you are concerned that a pregnant client may be alcohol dependent or a regular excessive drinker, it is important to closely monitor the newborn baby for the onset of alcohol withdrawal. Signs and symptoms of alcohol withdrawal in a newborn baby include:

- tremor
- irritability (crankiness)
- seizures (fits)
- bloated stomach
- vomiting.

You should seek emergency medical treatment and/or evacuation of the newborn immediately if there are any signs or symptoms of alcohol withdrawal present.

An expert unit should undertake an assessment for foetal alcohol spectrum disorders. See Part IV: Resources and contacts – Health organisations and information services – Pregnancy.

Medication and pregnancy

Some clients may require prescribed medications in their pregnancy or while breast feeding. This may be for physical illness or pain relief. Caution is always required, therefore close monitoring and support is required from the prescribing doctor, pharmacist and health team.

Pain management during pregnancy

There may be a number of reasons for pain during pregnancy including acute illness or injury and this will require carefully prescribed pain relief.

Women are also likely to require pain relief during labour and delivery.

Before administering opioids to a pregnant client for pain management during pregnancy or labour, you should first determine if she has been regularly taking any prescribed opioid medications. These include methadone, Panadeine Forte®, morphine or codeine; over-the-counter drugs such as Panadeine®, Veganin® or Nurofen Plus®; or illicit opioids such as heroin. A client who has been taking such medications is likely to be tolerant to opioids and therefore require additional opioid medication, combinations of particular medications, or alternative prescribed medications and/or non-medical pain relief.[52]

If a pregnant woman has been taking prescribed or over-the-counter opioids regularly during pregnancy she may undergo opioid

withdrawal. Withdrawal generally begins within a few hours of stopping or significantly reducing use of the drugs, such as during labour and early after the baby is born. The client therefore needs to be assessed for her risk of withdrawal and receive appropriate medical care accordingly. Seek specialist alcohol and drug medical advice.

NALTREXONE AND BUPRENORPHINE

If a pregnant woman has been taking naltrexone or buprenorphine during her pregnancy, seek specialist alcohol and drug medical advice as *the safety of these drugs during pregnancy and breastfeeding is unknown.*

Caution for medication for treating alcohol dependence during pregnancy and breast feeding

The information provided in this section is specific advice from the 2006 *Australian Medicines Handbook*.[53]

Acamprosate

There is no clinical evidence available for the use of this anti-alcohol craving drug in women who are pregnant and breastfeeding.

Avoid using acamprosate in women or girls who are pregnant or breastfeeding.

Disulfiram

The safety of using this drug has not been established in pregnant or breastfeeding women; avoid using disulfiram.

Naltrexone

There is little evidence to suggest that naltrexone is safe to use in breastfeeding women; consequently its use in this situation cannot be recommended.

Avoid using naltrexone, if possible, for pregnant women and seek specialist advice from your state or territory pregnancy drug information centre (see Part IV: Resources and contacts – Health organisations and information services – Pregnancy).

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PART III: PHYSICAL EFFECTS OF ALCOHOL

1. INTRODUCTION

This part of the Guidelines provides information to help healthcare providers, and their clients and their clients' families, understand the effects of alcohol on physical health in the short and long term. It covers the following topics:

- understanding the impact of alcohol on health
- effects of alcohol on organ systems
- alcohol and cancer
- alcohol and systemic disorders
- alcohol and infectious diseases
- indirect physical consequences of alcohol consumption.

Much of the information in this part is relevant to any person and is not specific to Indigenous Australians.

More in-depth clinically relevant information and advice on delivering healthcare to people at risk from drinking alcohol is provided in Part II: Clinical management of alcohol problems – Tool Kit.

2. UNDERSTANDING THE IMPACT OF ALCOHOL ON HEALTH

Pure alcohol (ethanol) is a depressant chemical that alters and slows down normal brain function (the central nervous system) and affects the whole body.

Assessing the benefits and risks

The National Health and Medical Research Council produced the *Australian alcohol guidelines: Health risks and benefits (2001)* to help people make informed decisions about not drinking, drinking at low-risk levels, and safety and health.[1]

According to the *Australian alcohol guidelines*, generally people who consume small amounts of alcohol (two standard drinks per day for healthy adult men and one standard drink per day for healthy adult women) *may* experience some specific health benefits, such as reduced heart problems (cardiovascular disease), compared with those who do not drink. However, this does not mean that non-drinkers will have better health overall if they start drinking. The personal, social and health costs of consuming alcohol far outweigh any overall benefits gained by low-risk drinking.

Particular caution is needed in applying data about possible benefits of low-risk drinking to the Indigenous Australian population. It is unlikely that low-risk drinking has any health benefits for Indigenous Australians, who generally have poor health at younger ages, including heart disease, and consequently a much lower life expectancy than non-Indigenous Australians.

The National Alcohol Indicators Project has reported that in Australia few young lives are ever saved by alcohol consumption and that any benefits of low-risk drinking are largely limited to people aged 45 years and older (mostly women). Up to four older people's lives (aged 45 years and older) need to be extended to balance out the

loss of one younger person's life (aged 15–34 years) from alcohol use.[2]

Furthermore, the Australian Institute of Health and Welfare (2002) reported that in 2001:

- an estimated 3,000 deaths in Australia were due to alcohol consumption at risky and high-risk levels
- there were three times as many alcohol-related deaths for men (2,300) compared with women (730)
- for men, the top three causes of death relating to risky and high-risk alcohol consumption were alcoholic liver cirrhosis (500 deaths), road crash injuries[3] (320 deaths) and suicide (200 deaths)
- for women, the top three causes were alcoholic liver cirrhosis (140 deaths), haemorrhagic stroke (90 deaths) and road crash injuries (60 deaths).[4]

Similarly, in terms of the costs to individuals, their families, their communities and the Australian society as a whole, hospital admissions (often reported as 'separations') data collected for 2003–04 indicated that within the general Australian population, drinking at risky and high-risk levels causing both short-term and long-term physical harm was directly linked to:

- 18,992 public hospital and 14,435 private hospital admissions for mental and behavioural disorders
- 4,059 public hospital and 377 private hospital admissions for alcoholic liver disease
- 627 public hospital and 29 private hospital admissions for toxic effects of alcohol.[5]

An in-depth analysis was conducted of Australian Bureau of Statistics data on hospital admissions involving the primary and *any* other concurrent diagnoses (comorbidities of alcohol, drug, mental illness and physical illnesses or injury) of Indigenous clients

in rural and metropolitan South Australia from 1995 and 2000. Researchers found there were significant rates of diagnoses of primary or additional mental health disorders, with alcohol or other drug involvement, in nearly 80 per cent of all admissions. Alcohol accounted for nearly 50 per cent. Most had a further diagnosis of injury, diabetes and/or kidney or heart disease.[6]

Measuring alcohol in the body

The amount of alcohol in a person's body is measured in terms of the concentration of alcohol in their blood. Blood alcohol concentration (BAC) can be accurately measured through blood or breath testing – both will give the same result.

However, the more alcohol consumed in a session, the longer it takes for the BAC to return to zero. For example, after a heavy drinking session the previous night a person's BAC may still be over 0.05 the next morning. Even after their BAC returns to zero, the person's judgment and performance may continue to be impaired for some time from the continuing effects on brain function and hangover.[7]

Processing of alcohol in the body

Alcohol is swallowed as a fluid. Depending on the type of beverage consumed – for example, wine, spirits or beer – the concentration of alcohol per volume of fluid varies in strength (see Figure II.5: Standard drinks in Part II, Chapter 3: 'General care'). Figure III.1 shows how alcohol is carried through the bloodstream to all parts of the body.

Absorption

After being swallowed, a small amount of alcohol is broken down (metabolised) by enzymes in the gut. However, most alcohol is absorbed directly into the bloodstream, some from the stomach wall and some from the first few centimetres of the small intestine.

The rate of absorption varies from person to person and also from time to time for the same person.

Food in the gut slows down the rate of absorption. The temperature of the drink and its alcohol concentration also influence the rate of absorption. However, even with these conditions alcohol is still absorbed relatively quickly after several minutes of consumption.

Metabolism

Blood alcohol levels fall slowly over time after drinking has stopped as the liver gradually breaks down (metabolises) the alcohol.

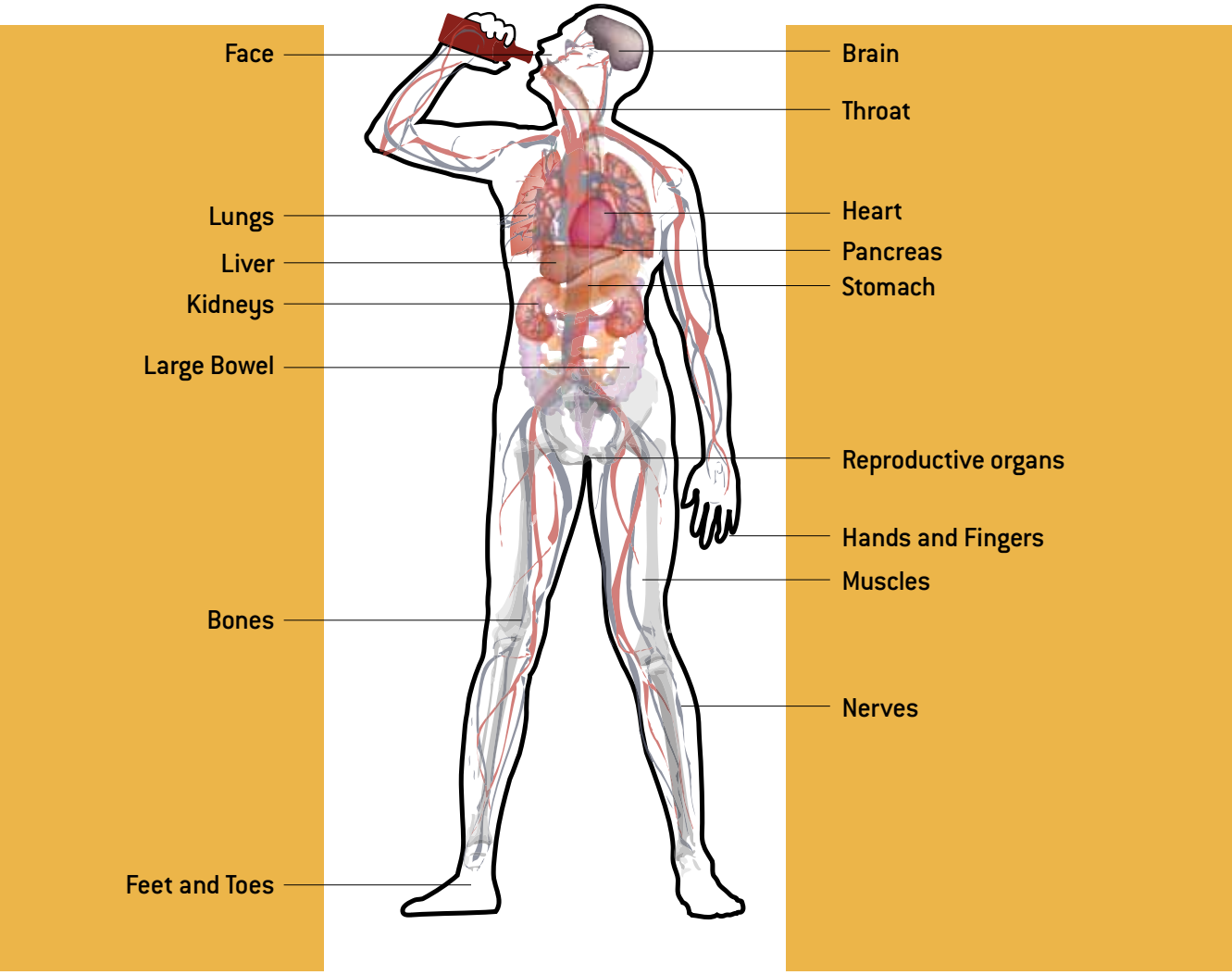
It generally takes the liver of a healthy adult man or woman about one hour to clear one standard drink (10 grams of alcohol), although this varies from person to person.

When alcohol is broken down (both in the gut and liver) acetaldehyde is formed. This is then further broken down into water and acetic acid, and then finally to carbon dioxide.

Men generally have larger livers than women, but women have greater metabolising activity. This means that, on average, men and women clear alcohol from the bloodstream at about the same rate.

However, if a man and a woman consume the same amount of alcohol in the same time period (for example, one hour), the woman will usually have a higher BAC than the man and therefore be at greater risk of accident or injury. This is because women are generally 10–15 per cent smaller and have a higher percentage of body fat and therefore lower water volume than men, resulting in a higher concentration of alcohol in their bloodstream.

Figure III.1: Alcohol in the bloodstream



Excretion (leaving the body)

A small amount – up to 5 per cent – of alcohol is excreted in a person's sweat, breath, faeces and urine; the remaining 95 per cent is metabolised by the liver. The end products are carbon dioxide (CO_2), which is exhaled through the breath, and water.[8]

TIME ALCOHOL TAKES TO LEAVE THE BODY

A healthy adult liver breaks down alcohol at a rate of about one standard drink (10 grams of pure alcohol) in one hour. For example, if someone drinks five cans of full-strength beer (7½ standard drinks) it will take about 7½ hours for the alcohol to be metabolised to a zero BAC reading.

Drinking coffee or water, having a shower, breathing fresh air or vomiting *does not* help the liver to work faster to get rid of alcohol. *None* of these actions will help an intoxicated person sober up any faster.

3. EFFECTS OF ALCOHOL ON ORGAN SYSTEMS

Alcohol is rapidly absorbed into the bloodstream when swallowed and its effects on the systems of the body are evident within minutes. The brain, pancreas, liver and heart are all at particular risk from regular drinking in excess of low-risk levels. The physical effects of alcohol on these organs may go unnoticed or untreated until the person is very ill, even when there has been serious damage.

PICTURES OF REAL ORGANS AFFECTED BY ALCOHOL

During the authors' consultations with a range of rural, remote and city-based Indigenous healthcare providers and community members, they were asked for pictures of real organs affected by alcohol to be included in this resource. As well, research has shown that some people can become confused if visual images do not reflect reality.[9] The authors decided, therefore, to present photographic images of actual organs rather than drawings.

It is important, however, to check within your community as to the appropriateness of using such images to inform and educate Indigenous clients and their families.

Figures III.2, III.3 and III.4 show the healthy and sick liver, brain and heart respectively.

Brain

Alcohol affects almost all cells and systems in the body, but the most obvious and immediate effects are on the brain. It inhibits many of the brain's functions, dampening the arousal centres.

The initial effects of alcohol on the brain are to reduce tension or inhibitions, making the person feel more relaxed, confident and excited. As the person drinks more, the alcohol increasingly affects the motor and sensory centres in the brain and the brain starts to react more slowly to external stimuli. This is why the risk of injury, poisoning and overdose increases rapidly with rising blood alcohol levels (for more detailed information about helping someone acutely affected by alcohol, see Part II: Clinical management of alcohol problems – Tool Kit).

The adverse effects of alcohol on brain function include:

- altered mood or mood swings
- short-term memory loss, which can become permanent
- poor problem-solving ability
- inability to learn new skills
- blackouts
- dizziness
- seizures (fits/convulsions)
- hallucinations
- dementia.

With increasing alcohol concentrations in the body, movement and coordination rapidly become more difficult. Speech, thinking and the senses are affected, and without the cognitive or verbal capacity to solve problems and resolve conflicts there is an increased potential for serious communication problems and physical violence.[10]

Alcohol (and acetaldehyde from alcohol metabolism) in the bloodstream also adversely affects the centre in the brain that controls vomiting, placing the person at risk of choking if they are lying on their back or unconscious.

If the alcohol concentration in the blood reaches a sufficiently high level it causes unconsciousness; the person will eventually stop breathing and may die. This is alcohol overdose.

RISK OF ALCOHOL OVERDOSE INCREASES WITH USE OF OTHER DRUGS

The danger of alcohol overdose increases if the drinker has also used other drugs, especially depressants such as heroin, codeine, morphine and/or sedatives (benzodiazepines), with alcohol.

It is known that a high proportion of people who die from heroin overdose also had a high blood alcohol concentration. For example, researchers found that alcohol was detected in 45 per cent of heroin-related deaths.[11]

Alcohol also affects the brain's ability to regulate the hormone production necessary to maintain fluid balance and kidney function, which leads to dehydration, headaches and possibly kidney disease.

The immediate and short-term effects on the brain are often less apparent in people who drink regularly at a consistent level. Some regular drinkers acquire a degree of tolerance that enables them to drink large amounts with relatively little obvious effect in the short term. This tolerance has two elements:

- metabolic – the liver becomes faster and more efficient at breaking down alcohol
- functional – the person learns to cope with and compensate for the deficits induced by alcohol. This ability to compensate tends to be associated with, and therefore intoxication happens more easily in, familiar drinking environments.

Despite this tolerance, the long-term effects on health remain damaging, particularly as the drinkers who have greater tolerance

for alcohol are those who also tend to have higher blood alcohol levels more frequently. The long-term effects of alcohol are largely related to the level of drinking over time.

Stroke

Stroke is the third largest cause of death in Australia and a major cause of disability. A blocked blood vessel in the brain (ischaemic stroke) is responsible for approximately 80 per cent of all strokes; the other 20 per cent are caused by rupture of a blood vessel, which causes bleeding into the brain or over the surface of the brain (haemorrhagic stroke).

Alcohol consumption influences stroke risk in a number of ways. For example, it:

- increases the risk of high blood pressure, which is a major risk factor for stroke
- increases the risk (in high-risk drinkers) of fatty deposits building up on the walls of blood vessels, causing narrowing (atherosclerosis); loosening of these fatty deposits most commonly causes ischaemic stroke
- has a complex effect on the clotting of blood, which seems to increase the risk of haemorrhagic stroke in high-risk drinkers.

A comprehensive meta-analysis of studies looking at the relationship between stroke and alcohol consumption[12] found that heavy drinking (at risky and high-risk levels) was clearly associated with increased risk of stroke, particularly in women. There is substantial evidence that up to two drinks a day for healthy men and one for healthy women does not increase the risk of ischaemic stroke, although it is unclear whether there is actually any protective effect. There is some evidence that even moderate alcohol consumption may increase the risk of haemorrhagic stroke.[13]

A number of other studies have found similar results: A clear increase in stroke risk for high-risk drinkers and no clear evidence that alcohol protects against stroke in light or moderate drinkers[14]. However, a large United States study found that the risk of dying from stroke was reduced in men who drank between one and four drinks daily and in women who drank one to three drinks daily.[15] This protective effect was later confirmed by a case-control study.[16]

As well as a link between long-term high-risk drinking and stroke[17], there is a link between stroke and recent heavy drinking, particularly drinking to intoxication.[18] There is also evidence linking high-risk drinking with stroke in younger adults.

Figure III.2: Brain

Healthy brain

© LeRoy Riddick, MD, University of South AlabamaUnhealthy brain

Unhealthy brain

© University of Alabama at Birmingham, Department of Pathology

Source: Pathology Education Instructional Resource Digital Library, University of Alabama at Birmingham, http://peir.path.uab.edu.

Pancreas

The pancreas produces enzymes that aid in the digestion of carbohydrates, fats and proteins. These enzymes, which regulate metabolism, are released into ducts by *exocrine cells* (the term *exocrine* means to release externally, into ducts).

The pancreas also produces hormones needed to regulate glucose (blood sugar) in the bloodstream. These hormones include *insulin*, which is needed to lower glucose levels by moving it into cells, and *glucagon*, which raises glucose levels in the blood.

The pancreas also produces other hormones, such as gastrin (to regulate acid secretion) and somatostatin (to regulate insulin, glucagon and other hormones). These hormones are produced in clusters of cells spread throughout the pancreas which are called the *islets of Langerhans.*

Alcohol consumption is one of the two main causes of pancreatitis; the other is gall stones. The loss of or reduced insulin production caused by a damaged pancreas can lead to Type II diabetes (diabetes mellitus).

It is important to advise an Indigenous client with a damaged pancreas not to drink alcohol *at all* as even very small amounts are known to cause a recurrence of pancreatitis that can be life threatening.

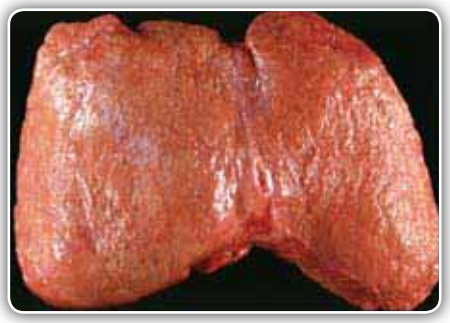
Liver

The liver is responsible for breaking down (metabolising) alcohol. Regular exposure to alcohol and its toxic effects on liver metabolism reduces liver clearance of other carcinogens (substances that can promote cancer) from the system.

Figure III.3: Liver

Healthy liver

Getting sick liver



Sick liver

Source: Pathology Education Instructional Resource Digital Library, University of Alabama at Birmingham, http://peir.path.uab.edu

Cirrhosis of the liver and chronic hepatitis

In Australia, alcohol consumption is the most common cause of cirrhosis of the liver, which is the most common cause of illness and death related to high-risk alcohol consumption. There is good evidence that drinking alcohol at high-risk levels over many years can cause cirrhosis in the absence of other causes. One study found that the risk of developing cirrhosis in medically fit non-Indigenous men was associated with consumption over many years of more than 16 standard drinks per day.[19] Other studies have found that considerably lower levels (risky drinking) of alcohol may cause cirrhosis.[20] Cirrhosis is known to be associated with liver cancer. Once cirrhosis occurs, abstinence from alcohol is essential to prevent progression to end-stage liver disease and death.

For people with hepatitis C, those who drink alcohol at risky or high-risk levels have poorer health outcomes. Lighter drinking is associated with fewer problems, but it is not known what level of consumption can be acceptably low risk as no safe threshold has yet been found. At the same time, there is no evidence to indicate that total abstinence is necessary; however, caution is required in advising Indigenous clients with hepatitis C that they can drink even at very low levels, as they generally have far worse overall health than non-Indigenous people with hepatitis C and therefore need to be advised not to drink alcohol.

Given the impact of alcohol on the liver, you should advise your Indigenous clients with hepatitis B or C, or any other serious condition affecting their liver, to avoid drinking alcohol. In some cases, medical advice may permit occasional light consumption.

Heart

Consuming large amounts of alcohol, either in one session or regularly, can damage the structure and function of the heart. In high-risk drinkers and people dependent on alcohol, this damage manifests itself in conditions such as cardiac arrhythmia,

weakening of the heart muscle (cardiomyopathy), congestive heart failure and sudden death.

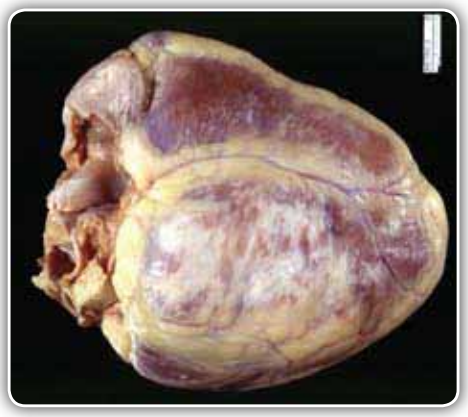
Alcoholic binges are associated with disturbance of the heart rhythm. This is sometimes called the 'holiday heart' syndrome, where people develop palpitations after drinking excessively over short periods of time (bingeing), such as for two or three days in a row.

Figure III.4: Heart

Healthy heart

© LeRoy Riddick, MD, University of South Alabama

Sick heart



© Dr Peter Anderson, University of Alabama at Birmingham, Department of Pathology

Source: Pathology Education Instructional Resource Digital Library, University of Alabama at Birmingham, http://peir.path.uab.edu.

Heart and circulation

One or two standard drinks (10 to 20 grams of alcohol) can affect heart rate, blood pressure, the contraction of the heart muscle and its efficiency in pumping blood, and the blood flow throughout the body.[21] While these effects generally are not considered to be clinically important, the overall effects of alcohol on blood flow may have some unfavourable implications for people with cardiovascular (heart) disease.

Alcohol causes the blood vessels near the skin to open up so that the blood flow through them increases. This is what causes a flushed face in response to drinking, but it also causes the body to lose heat more rapidly, which can be dangerous in the cold due to the risk of hypothermia.

A major concern in relation to high-risk drinking and heart health is ischaemic heart disease. This is when there is not enough blood supply to the heart muscle because of atherosclerosis in the arteries that supply that muscle – the coronary arteries. Atherosclerosis occurs when the heart arteries have become narrowed or blocked by fatty deposits on their walls; it is this that causes angina and heart attack.

Most studies measure the effects of alcohol according to the *amount* of alcohol people drink over time. Clear indications have emerged recently that the *pattern as well as the amount* of alcohol consumed is important in assessing the risks and any possible benefits of alcohol. Essentially, research suggests that low to moderate regular drinking, particularly with meals, can offer some protection against heart disease and heart attack for people of middle age and older, while heavy drinking (both episodic and long term) markedly increases the risk of heart attack.[22] The evidence supports four main conclusions regarding alcohol and heart disease:

1 *Alcohol appears to provide some protection against heart disease (both illness and death) for non-Indigenous Australian men and women from middle age onwards. Most if not all of the benefit is achieved with one to two standard drinks per day for men, and less than one standard drink per day for women. This has not been confirmed in the Indigenous Australian population.*

The protective effect of low levels of alcohol has been demonstrated in a large number of studies over three decades.[23] Only a relatively few studies fail to confirm it.[24] A recent meta-analysis confirms these levels and the protective effect, but shows that there are harmful effects in relation to coronary heart disease that begin at five standard drinks per day for women and over 11 standard drinks per day for men.[25] It is important to remember that other harmful effects on the body outweigh any protective effect on the heart at very much lower levels of drinking than this.

2 *In countries where the risk of heart disease is high, the protective effect of alcohol against heart disease may be limited to certain population subgroups.*

Any protective effects of alcohol on the heart will be of primary importance in the age groups in which heart disease is a major cause of death. In the general Australian population, heart disease begins at the age of about 40 to 45 years in men and 45 to 50 years in women. Most of the current evidence comes from epidemiological studies involving middle-aged or older people in stable social situations. However, these studies *cannot* be assumed to be relevant to Indigenous Australians, who experience poorer social situations and a much higher incidence of underlying heart disease at much younger ages than non-Indigenous Australians.

In relation to the general population, it is not yet known whether low-risk drinking at a young age prevents the onset of cardiovascular disease in later life. Heart disease is rare before the age of 40 years, except in very uncommon instances where heart

attacks at a young age run in a family. Any short-term benefit of alcohol (such as reducing the risk of clot formation in the arteries supplying blood to the heart) is of no benefit to the vast majority of young adults.

It is unknown at present whether or not the long-term benefits of alcohol in lowering certain blood fats are of advantage to young adults in reducing their future risk of heart disease at older ages. Any potential benefits of alcohol need to be weighed against increased risk of other outcomes,[26] and again it *cannot* be assumed that findings translate to other social groups or to younger drinkers, and in particular to Indigenous groups.

3 *Most of the protective effect appears to arise from the alcohol itself, not from other components in the beverage. If specific drinks, such as red wine, do confer additional benefit, this effect is small.*

4 *The pattern of drinking is important in determining the risks and benefits of alcohol in relation to heart disease.*

A number of studies suggest that the benefits of alcohol consumption flow from a relatively consistent pattern of drinking,[27] and that binge drinking may actually increase the risk of heart attack.[28]

Small amounts of alcohol may be particularly helpful if consumed with meals because this reduces the high level of blood lipids found after eating.[29]

Alcohol also has the effect of thinning the blood, but this effect is only present for a period of hours or days after the person has been drinking.[30] A number of mechanisms are involved in producing these effects, so there is a complex relationship between the dose of alcohol and the effect.

Regular high risk drinking and short-term binge drinking increase the risk of heart attack in the short and long term. This increased

risk has been seen with beer bingeing (defined as six or more bottles per session).[31]

Caution is required when considering risks of alcohol and heart disease to Indigenous clients as Indigenous Australians have not been specifically studied in relation to patterns of alcohol consumption and heart disease.

Three important issues should be noted:

- Many Indigenous clients from a young age have poorer overall health than non-Indigenous clients. Their particular health issues must be considered in relation to alcohol use and any possible benefits to their health.
- Heart disease is uncommon in young non-Indigenous clients, but is a risk factor for young Indigenous clients. It is *not* recommended that any young or older Indigenous clients try to reduce their heart disease risk by drinking alcohol, particularly given the high incidence among these groups of accident and injury related to risky drinking.
- Indigenous clients considering reducing their heart disease risk through low-risk drinking might consider other ways of improving their heart health *without* alcohol, such as by stopping their cigarette smoking, increasing their rate of exercise, improving their diet or taking small quantities of aspirin (if prescribed by their doctor). A combination of these approaches achieves better results than any one on its own.[32]

BINGE DRINKING AND BLOOD PRESSURE

Binge drinking a lot of alcohol in a few hours, over two days (such as a weekend), or over longer periods can lead to a sudden irregular rhythm of the heart, and this can then lead to shortness of breath, changes in blood pressure, and sometimes sudden death.

The risk of high blood pressure increases with increased levels of risky drinking. Importantly, reducing risky drinking may reduce blood pressure.

High blood pressure is a causal factor of heart disease and stroke.

High blood pressure (hypertension)

More than 80 population-based studies have been published on alcohol consumption and its impact on blood pressure. However, none studied Indigenous Australians in particular. Research has shown that at higher levels of drinking (three or more standard drinks per day), that blood pressure increases in direct proportion to the amount of alcohol consumed and high blood pressure is more common among people who drink at higher levels.[33]

High risk drinkers (five to six standard drinks per day) who substantially decrease their drinking (to one to two standard drinks per day) over a period of one to six months can achieve a sustained fall in blood pressure.

Heavier drinkers tend to not comply well with their prescribed medication regimes to lower their blood pressure,[34] and people with high blood pressure who drink are far less likely to achieve satisfactory blood pressure control even with regular follow-up.[35]

Among men drinking three or more standard drinks per day, one in five cases of hypertension are due to alcohol; in women drinking two or more standard drinks per day, one in three cases of hypertension are due to alcohol. The effect of high-risk drinking in raising blood pressure may be an important factor contributing to the increased risk of stroke in heavier drinkers.[36] With low-level drinking (less than three drinks per day) the research shows far less consistent findings. Some studies show an association between low-risk drinking and raised blood pressure, while others suggest a decrease in high blood pressure with low-level drinking. A meta-analysis of 11 studies suggested that such a decrease in risk

may only occur in women,[37] but other reports have found decreased risk in both men and women depending on which age, race and gender subgroup was studied (none, however, were Indigenous Australians). Such inconsistencies indicate unknown factors and further research is required.

The pattern of drinking is likely to be important. One study of people who drank at low-risk levels showed their blood pressure was more likely to be influenced by the frequency of their drinking rather than the amount of alcohol they consumed.[38] A study comparing weekend and daily drinkers, all drinking between 21 and 50 standard drinks (210 to 500 grams alcohol) per week, found that blood pressure was raised by a similar amount in both groups.[39] But while this raised blood pressure was sustained in the group who drank every day, the weekend drinkers' blood pressure fluctuated in response to their drinking pattern.[40]

RHEUMATIC FEVER AND RHEUMATIC HEART DISEASE

Many Indigenous clients are at greater risk of developing heart complications associated with drinking alcohol because of their high incidence of rheumatic fever and rheumatic heart disease, particularly in Central Australia and the Northern Territory.

Acute rheumatic fever often affects children and young adults and is known to be frequently misdiagnosed and left untreated. It can be difficult to treat due to the intensive nature of treatment needed (monthly penicillin injections for at least five years after the last episode). Repeated episodes of acute rheumatic fever can cause permanent damage to the heart valves (rheumatic heart disease).[41]

Peripheral vascular disease

Because a low level of alcohol consumption by healthy adults appears to protect against heart disease from atherosclerosis, it

could be assumed that it also protects against peripheral vascular disease. Early research failed to show any protective effect of alcohol in relation to peripheral vascular disease; however, two recent large studies suggest that such an effect may exist. One showed that people who consumed seven or more US standard drinks (equivalent to ten or more Australian standard drinks) over a week reduced their risk of peripheral vascular disease by about 25 per cent.[42] The other study suggested that the protective effect occurred by increasing high-density lipoprotein levels, a well-established effect on blood lipids.[43]

4. ALCOHOL AND CANCER

People who regularly drink at risky or high-risk levels increase their long-term risk of developing a range of cancers. Their risk is dramatically increased if they also smoke tobacco.

Cancers of the lips, mouth, throat, larynx and oesophagus

There is strong evidence that alcohol has a role in causing cancers of the lips, mouth, throat, larynx and oesophagus,[44] most probably through the direct contact between alcohol and the cells of these areas. Alcohol damages or destroys cells, and the large numbers of replacement cells formed may include some cancerous cells.[45] At the same time, bacteria in the mouth can break down alcohol to form acetaldehyde, which can have similar damaging effects on the lining cells of the mouth, throat and oesophagus.[46] The risk of these cancers is *dramatically increased* in high-risk drinkers who also smoke.

The type of alcoholic drink may be important. One study showed that damage to cells in the mouth increased in direct proportion to alcohol concentration.[47] Another study found that cancers of the throat and oesophagus were associated with 'moderate' (risky) drinking of beer and spirits, but not of wine.[48] This result may, however, simply reflect a lower risk when alcohol is accompanied by a meal.

Cancers of the stomach, pancreas and liver

For each of these organs, high-risk drinking is clearly associated with inflammatory changes. It appears this may precipitate development of cancer, particularly in the presence of other cancer-causing factors.

In the case of the stomach and pancreas, there is clear evidence that alcohol causes inflammation (gastritis and pancreatitis), but

the link with cancer, while probable, is less well documented and understood.[49]

The link is well established in the case of liver cancer.[50] On the basis of the consistent association between alcohol intake and liver cancer and the presence of biologically plausible mechanisms, the International Agency for Research on Cancer concluded that alcohol causes liver cancer.[51] However, another review concluded that there was limited evidence of a causal association.[52] Cirrhosis of the liver is a well-documented result of chronic high-risk drinking and is known to be associated with cancer. Alcohol may also increase the risk of cancer in other digestive organs by reducing the liver's ability to clear other carcinogens from the system.[53]

Bowel cancer

A number of reviews have concluded that there is a clear association between the amount of alcohol consumed and risk of bowel cancer (cancer of the colon or rectum), but there is insufficient evidence to show that alcohol actually causes bowel cancer.[54]

Recent studies suggest that alcohol may act as an important risk factor for bowel cancer when combined with tobacco smoking and poor diet,[55] particularly low folate intake.[56]

Breast cancer

In Australia, 10,000 women are diagnosed with breast cancer annually and one in 11 will be diagnosed with the disease by the age of 74 years.[57] Any factor that may increase breast cancer risk is therefore of considerable concern, even if its contribution to risk is small.

Increased risk of breast cancer has been associated with alcohol use in most epidemiological studies, with the association identified in many countries and many cultures.[58] Most reviewers conclude

that there is a linear association between alcohol intake and risk of breast cancer, such that the risk rises steadily with the level of intake.[59]

One comprehensive review found a moderately strong and consistent dose–response association between alcohol intake and breast cancer.[60] The reviewers estimated the risk of breast cancer to be 35 percent higher in women who consume three to four standard drinks of alcohol a day, and 67 percent higher with more than four drinks a day, compared with women who drink little or no alcohol.

The temporal (over time) relationship between alcohol intake and breast cancer is important.[61] Some evidence suggests that the strongest association is with alcohol use in later years and that decreasing alcohol consumption in the middle years – or later – may help to reduce the risk of breast cancer.[62]

Researchers have suggested several different mechanisms whereby alcohol might cause breast cancer, including hormonal influences and the level of acetaldehyde circulating in the body as a result of alcohol metabolism,[63] but there is no definite evidence or consensus on this point.

While there appears to be a modest association between alcohol consumption and increased risk of breast cancer, further studies are needed to clarify and confirm this association. Importantly, risks are not yet known for Indigenous Australian women in particular.

5. ALCOHOL AND SYSTEMIC DISORDERS

Alcohol is associated with a number of disorders of the body's systems, including endocrine, blood, nutritional and musculoskeletal disorders.

Endocrine disorders

The endocrine system is a collection of glands that produce hormones that regulate the body's growth, metabolism, and sexual development and function. The hormones are released from particular glands into the bloodstream and transported to tissues and organs throughout the body.

Diabetes

The rate of diabetes is six times higher among Indigenous Australians than for the general population and it is estimated that diabetes affects between 10 and 30 per cent of the Indigenous population. Diabetes and related complications can also occur at a much earlier age in Indigenous Australian populations.[64]

Clients with diabetes should be advised not to drink alcohol and should be encouraged to have regular health checks. In particular, their kidney function should be monitored, as diabetes is a major factor in end-stage kidney failure.

Metformin is a medication prescribed to manage Type II diabetes that should be avoided if your client has an ongoing pattern of binge drinking or heavy alcohol consumption, heart disease, respiratory problems, liver or kidney disease, or severe infection or trauma. This is because of metformin is associated with an increased risk of lactic acidosis, which can lead to death.[65]

Some research has suggested that mild to moderate alcohol consumption is associated with a decreased risk of Type II diabetes,[66] while other studies have found no association.[67] In studies reporting a beneficial effect, the quantity of alcohol

associated with the effect has ranged widely from two standard drinks (20 grams of alcohol) over a week to six standard drinks (60 grams of alcohol) a day. Some studies have reported an increased incidence of Type II diabetes with consumption of large quantities of alcohol.[68]

While the relationship between alcohol and diabetes is as yet unclear, Indigenous clients are clearly at risk. An analysis of South Australian hospital admissions between 1995 and 2000 showed that 25.3 per cent of Indigenous clients diagnosed with an alcohol, drug and/or mental health disorder *were also* diagnosed with an endocrine or metabolic disorder.[69]

Alcohol-induced pseudo-Cushing's syndrome

Alcohol-induced pseudo-Cushing's syndrome is a term used to describe high-risk drinkers who present with a clinical picture similar to that seen in Cushing's syndrome, that is, obesity with thin legs, redness of the face, 'moon face', bruising, striae (stretch marks), muscle wasting and high blood pressure.[70]

Biochemical abnormalities include elevated urinary and plasma cortisol (the latter failing to suppress dexamethasone, a corticosteroid), reduced circadian rhythm of cortisol, and normal or suppressed adrenocorticotrophic hormone (ATCH). The biochemical abnormities rapidly return to normal with abstinence from alcohol. The mechanisms for this disorder are poorly understood.[71]

Male hypogonadism

Alcohol can cause a lowering of plasma testosterone concentration through a direct toxic effect on the testes, where testosterone is synthesised. This effect occurs independently to liver diseases and may be related to the total amount of alcohol consumed during a man's lifetime.[72]

Blood disorders

People who are alcohol dependent or engage in high-risk drinking are more likely to develop blood disorders, including bleeding and clotting disorders, associated with the toxic effects of alcohol and poor absorption of essential vitamins and minerals due to inflammation of the lining of the stomach and intestine. Common blood disorders (or conditions) in high-risk drinkers include anaemia, macrocytosis and neutropenia.

Anaemia is a condition where there are not enough red blood cells and/or not enough haemoglobin in the red blood cells. Haemoglobin contains the iron necessary to carry oxygen around the body to all tissues and cells. Anaemia is a common condition in heavy drinkers and may be caused by:

- vitamin B12 and/or folate deficiency
- chronic blood loss from, for example, gastric ulcer, liver disease or chronic infections
- direct toxic effects of alcohol on the bone marrow (where new blood cells are formed).

Macrocytosis is a condition where red blood cells become enlarged. It may be an indicator of excessive alcohol use, and/or vitamin B12 and/or folate deficiency. Left untreated, a vitamin B12 deficiency can lead to 'pins and needles' or loss of feeling in the fingers, hands, lower legs and feet (peripheral neuropathy).[73]

Neutropenia is a condition where there are a low number of neutrophils – one of the three types of white blood cells – in the blood. Neutrophils help fight infections and are vital for the proper functioning of the body's immune system. This condition is associated with vitamin B12 and/or folate deficiency.

Nutritional disorders

Many Indigenous clients suffer from poor nutrition. The condition is worsened by regularly drinking alcohol at risky and high-risk levels as alcohol interferes with the body's ability to digest and absorb nutrients. Importantly, this causes low daily levels of the vitamin B group, leading to thiamine (vitamin B1) deficiency. The body's ability to use vitamins and nutrients is further compromised if the client is also a smoker.

Indigenous clients can have difficulty accessing or affording fresh fruit and vegetables, whole-grain cereals, breads, rice, pasta and other good foods that are low in sugar and fat. Advise your clients to try to avoid fried foods and salty snacks, particularly as these increase thirst and may inadvertently lead to excessive alcohol consumption.

Thiamine (vitamin B1) deficiency

Thiamine (vitamin B1) deficiency can occur in anyone who is severely malnourished. It can also occur in anyone who regularly drinks alcohol at risky and high-risk levels, even if they do not drink every day. People most at risk are men who regularly drink eight standard drinks (80 grams of alcohol) or more a day and women who regularly drink six standard drinks (60 grams of alcohol) or more a day. Thiamine deficiency is a *major risk factor* for short-term memory loss and brain damage.

Clients who drink at high-risk levels and those who are alcohol dependent should be supported in taking 100-milligram thiamine tablets daily while they continue to drink and for at least three months after they stop drinking. They also require a diet high in fibre which contains thiamine and folate, such as daily consumption of whole-grain cereals and breads, eggs and dark green vegetables.

Thiamine deficiency can lead to an acute and serious disorder called Wernicke's encephalopathy and later to Korsakoff's syndrome.[74]

Australia has a significant incidence of Wernicke's encephalopathy and its longer-term complication, Korsakoff's syndrome – with prevalence and consequences highest among Indigenous clients.

People with Wernicke's encephalopathy or Korsakoff's syndrome frequently have other health problems, including diabetes, kidney and liver disease, and peripheral neuropathy.

Wernicke's encephalopathy

Symptoms of Wernicke's encephalopathy are:

- acute disorientation and confusion
- poor balance and ataxia (lack of muscle control of arms and legs)
- nystagmus (rapid involuntary movements of one or both eyes, which move from side to side, up and down, or around in circles).
- neuropathy (person has altered sensation with 'pins and needles' or loss of feeling, for instance in their feet, lower legs, fingers and hands)
- very poor short term memory, concentration, judgment and 'flat' mood (may also happen with intoxication and withdrawal).

Clients suspected of having Wernicke's encephalopathy require immediate thiamine replacement and medical attention. Left untreated, this condition is likely to lead to major disabilities from Korsakoff's syndrome.

Korsakoff's syndrome

Symptoms of Korsakoff's syndrome include:

- loss of memories prior to or since experiencing Wernicke's encephalopathy
- long-term memory loss that is specific to a particular type of memory (for example, someone who worked as an artist may not remember how to paint) or more generalised (for example,

cannot recall events and people in a particular time period (retrograde amnesia)).

- significantly reduced ability to learn new information (for example, can recall information from 20 years ago but not information given in the last few minutes (anterograde amnesia))
- confusion between imagined and real memories and frequently guessing answers (using false memories and confabulation to try and make sense of what has happened).
- very poor balance and ataxia.

Musculoskeletal disorders

The musculoskeletal system encompasses the bones and muscles of the body. Alcohol consumption is associated with a number of musculoskeletal disorders, including osteoporosis, skeletal muscle myopathy and gout.

Osteoporosis

People who drink at high-risk levels have an increased risk of osteoporosis and increased frequency of fractures and avascular necrosis.[75] These bone changes may occur as a direct result of high-risk levels of alcohol use or from other disorders associated with high-risk drinking, such as poor nutrition (particularly calcium and vitamin D deficiencies), pancreatitis, liver disease or endocrine dysfunction. Current research suggests that alcohol-induced bone disorders occur independently of nutritional status; however, there may be a link between liver dysfunction and bone disorders.[76]

The reduced bone density in high-risk drinkers is thought to be caused by impairment of new bone formation and increased bone re-absorptionThe effects of alcohol on bone metabolism appear to be reversible with abstinence.

High-risk drinkers are therefore at risk of bone fractures. Symptoms and complaints of back pain indicative of osteoporosis and possible vertebral collapse should not be overlooked and need to be treated. Post-menopausal women may be particularly susceptible to the effects of alcohol on their bones.

Skeletal muscle myopathy

Acute myopathy, produced by alcohol poisoning, is a relatively rare condition.[77] Symptoms are severe pain, tenderness, swelling, and weakness of skeletal muscles.

Its most severe form, acute rhabdomyolysis, is associated with myoglobinuria, kidney damage and hyperkalemia (raised potassium levels).

Chronic alcoholic myopathy occurs in up to 60 per cent of people with long-standing, serious alcohol problems and can be overlooked as being the result of poor nutrition.

Women are more susceptible than men to this disorder, as with alcohol-related liver disease and brain damage. Individuals typically present with muscle weakness, pain and abnormal gait, and show evidence of atrophy (muscle wasting) and loss of muscle fibre in the shoulder and pelvic girdle region. The weakness and atrophy tend to improve with abstinence or substantial reduction in alcohol consumption.[78]

Gout

Gout is one of the most common forms of arthritis (joint inflammation) that appears as an acute attack, often coming on overnight. Within 12 to 24 hours there is severe pain and swelling in the affected joint. The skin over the joint may be red and shiny.

Gout usually affects only one or two joints at a time, most often the feet and ankles, and there can be episodic painful swelling. People

with gout have high uric levels and the inflammation is produced by deposition of uric acid in the joints.

There are several causes of gout:

- high alcohol intake
- higher than normal levels of uric acid, which may be an inherited condition
- obesity
- high intake of food containing purines
- some of the drugs used to treat high blood pressure
- less commonly, long-standing kidney disease that results in high blood levels of uric acid.[79]

High-risk drinking over long periods of time can stimulate a latent tendency towards gout or make established gout worse.[80]

6. ALCOHOL AND INFECTIOUS DISEASES

High-risk drinking is associated with increased illness and death related to infectious diseases. The specific effect of alcohol on the immune system is still unclear. A few researchers have suggested that alcohol may interfere with the normal functions of the immune system (for example, T-cells), thus impairing the body's response to bacteria, viruses and other pathogens.[81] Little is currently known about how risky and high-risk drinking affect the function of the peripheral immune system, or how alcohol might affect the immune function of the central nervous system.

Immunisation and vaccination

Indigenous clients generally have a lowered immune resistance to, and higher risk factors for, infectious diseases due to their overall poor health. Harmful alcohol use can significantly increase vulnerability to, and risks associated with, many infectious diseases.

Most people use the terms 'vaccination' and 'immunisation' interchangeably, but their meanings are not exactly the same:

- *Vaccination* means receiving a vaccine in order to stimulate the body's immune response to particular bacteria, viruses or other pathogens.
- *Immunisation* means the body, having received a vaccine, becoming immune to the particular infection that the vaccine was designed to prevent.

Immunisation stimulates the body's natural defence mechanism – the immune response – to build resistance to specific infections.

All forms of immunisation work in the same way. When a person is vaccinated their immune system responds as if they had been exposed to the particular infection that the vaccine was designed to prevent (for example, measles). When a person comes in contact

with that infection in the future, their immune system will respond quickly enough to prevent them from developing the disease.

In general, the normal immune response begins working approximately two weeks after vaccination. This means protection from an infection will not occur immediately after vaccination.

Immunisation protects people against a range of infections that cause serious complications and, in some cases, death.

The diseases listed below can be prevented by routine childhood immunisation and are included in the National Immunisation Program Schedule (NIPS):

- chickenpox (varicella)
- diphtheria
- haemophilus influenzae (type b) (Hib)
- hepatitis A
- hepatitis B
- measles
- meningococcal C
- mumps
- pneumococcal
- polio (poliomyelitis)
- rubella
- tetanus
- whooping cough (pertussis).

In adulthood, these diseases and those listed below can also be prevented by immunisation and are funded under the Immunise Australia Program:

- influenza (flu)
- Q fever

Vaccines contain either:

- a very small dose of a live, but weakened, form of a virus
- a very small dose of killed bacteria or virus, or small parts of bacteria, or
- a small dose of a modified toxin produced by bacteria.

Vaccines may also contain either a small amount of preservative or a small amount of an antibiotic to preserve the vaccine.

Most vaccinations need to be given several times to build long-lasting protection. For example, a child who has been given only one or two doses of diphtheria-tetanus-pertussis vaccine (DTPa) is only partially protected against diphtheria, whooping cough (pertussis) and tetanus, and may become sick if exposed to these diseases. Some vaccines may also contain a small amount of an aluminium salt, which helps produce a better immune response.

The protective effect of immunisations is not necessarily for a lifetime. Some, like tetanus vaccine, can last up to 30 years, after which the person needs a booster dose. Some immunisations, such as whooping cough (pertussis), give protection for about five years after a full course.

Even when all the doses of a vaccine have been given, not everyone is protected against the disease. Measles, mumps, rubella, tetanus, polio and Hib vaccines protect more than 95 per cent of children who have completed the course. One dose of meningococcal C vaccine at 12 months protects over 90 per cent of children. Three doses of whooping cough (pertussis) vaccine protects about 85 per cent of children who have been immunised and will reduce the severity of the disease in the other 15 per cent if they do catch whooping cough. Booster doses are needed because immunity decreases over time.

All of the above information is particularly important for Indigenous clients, and particularly those who drink alcohol and are at risk of infection through poor health, poor nutrition, exposure to risky

environments, and injury. Young Indigenous clients of any age should be reviewed for their vaccination status and need for various immunisations.

Respiratory disease

Indigenous clients are susceptible to many respiratory diseases. Streptococcus pneumoniae causes pneumonia, septicaemia, meningitis and middle ear infections, particularly in young children and the elderly.[82]

Some Indigenous communities in Australia have the highest rates of pneumococcal infection in the world. In some areas, hospitalisation rates for respiratory disease are 20 times those for the overall population.[83]

Alcohol alters the natural balance of bacteria in the nose, throat and breathing tubes to the lungs (oropharyngeal microflora), increasing the risk of inhaling mucous (aspiration) and interrupting the ways in which the lungs can get rid of bacteria and other micro-organisms.

Indigenous clients aged 15 years and over who regularly drink at risky or high-risk levels or who have a chronic illness should have:

- annual vaccination against influenza
- vaccination against pneumococcal infections, then revaccination five years after the first dose and again at 50 years or 10 years after the first revaccination, whichever comes later.[84]

As a general rule, respiratory diseases should be treated early and aggressively.

7. INDIRECT PHYSICAL CONSEQUENCES OF ALCOHOL CONSUMPTION

A person who consumes alcohol is more likely to suffer accidents and injuries and the effects of adverse drug interactions. You need to consider the relationship between alcohol and injury, and between alcohol and use of medicines, when assessing the health and wellbeing of your Indigenous clients.

Alcohol-related accidents

Alcohol is known to alter normal brain function and this affects the person's judgment, coordination and reaction times, such as when driving vehicles like boats, cars, four-wheel drives, bicycles and trucks.

All states and territories in Australia have a 0.05 BAC limit for fully licensed drivers of cars and motorcycles. Conditional licence holders, such as learner or probationary (P plate) drivers, are required to have a zero BAC limit if they are driving. Drivers of heavy vehicles or public transport (such as small or large buses) and people responsible for transporting dangerous goods must have a BAC limit of less than 0.02 or zero, depending on the state or territory in which they are driving. In some states people can also be charged with driving under the influence (DUI) if they are under the legal BAC limit but clearly cannot control their vehicle. This includes riding bicycles or animals and driving a vehicle being drawn (pulled) by an animal.[85]

ROAD USE LAWS AND ALCOHOL

Check with your state or territory road transport authority for drink-driving and road safety laws in your area.

Alcohol-related injuries

Intoxication of clients, or others they are with, can increase the likelihood of injury or death from accidents, violence and/or self-harm. Combining alcohol with water activities, such as fishing, boating or swimming, is a major risk. A recent analysis of alcohol and water safety indicated that alcohol consumption contributed to 21 per cent of overall drowning deaths in Australia and 15 per cent of suicides.[86]

Alcohol-related injuries can occur when people are:

- drinking while engaging in activities such as swimming, hunting, fishing, driving or boating
- burnt from rolling into fires, overturned cooking equipment or boiled kettles/billy cans
- involved in violence and fights
- unstable on their feet and fall when walking, or bump into solid objects such as doors or walls
- suffering from unstable diabetes or other conditions, or taking prescribed medicines (this is especially relevant for frail or older people)
- inexperienced at managing intoxication, for example, first-time drinkers or young people
- influenced by other people in engaging in risky drinking and other behaviours.

Young people who drink to intoxication are often at serious risk of alcohol-related injuries. They may lack the experience of identifying and managing risks while drinking and under the intoxicating effects of alcohol. They may feel pressured into risky behaviour by others, such as using other drugs (poly-drug use) while drinking or getting into vehicles with a drunk driver.

The level of risk of injury, violence and suicide associated with drinking to intoxication is influenced by:

- how much a person drinks in a session (level of intoxication)
- how fast they drink
- why they drink
- where they drink
- who they drink with
- what they do during drinking and after drinking stops.

TWO REAL LIFE STORIES

DRINKING, BLOOD ALCOHOL CONCENTRATION AND ACCIDENTS

Consider the different levels of intoxication, setting and activities in these two real-life stories that happened in Australia between July 2000 and June 2001.

BAC 0.10 – A man drowned when fishing at a waterhole. He had drunk a significant but unknown amount of alcohol and had taken sleeping pills.

BAC 0.28 – A man drowned in a river in uncertain circumstances, probably because he fell in while intoxicated. He had been sitting next to the river drinking wine for several hours and had been so drunk he could not stand up when last seen.[87]

Accidental drug overdose

Accidental drug overdose is a serious risk, as are adverse drug interactions and serious side effects.

Prescribed and over-the-counter medicines, as well as herbal and bush medicines, can be dangerous if used with alcohol. This is particularly so for depressants such as sedatives (Valium®, Serepax® or Mogadon®), painkillers (codeine, morphine or methadone), some cough mixtures and illicit heroin. Heart tablets,

some antibiotics and other drugs can interact with alcohol and cause drowsiness or other serious complications. A person can experience slowed breathing and suppression of the gag and cough reflexes, leaving them at risk of choking, inhaling vomit or stopping breathing.

Some medicines also contain alcohol. If a person takes these medicines in addition to alcoholic drinks, their level of intoxication, and associated BAC, may be higher than they may realise or expect. This can lead to increased risk of accidents and injury or, if driving, an illegal breathalyser reading.

In addition to the immediate risks and complications of using alcohol with various medicines, there are long-term consequences. Because the liver breaks down both alcohol and medicines it can become overworked and damaged. The risk of cirrhosis and liver failure is increased further if the liver has already been damaged from high-risk drinking and/or infections, such as hepatitis B or C.

MEDICINES AND ALCOHOL

Ask your Indigenous client to tell you about the prescription and over-the-counter medicines, bush medicines and herbal medicines they use and why they use them. For example, ask whether they use combination painkillers such as paracetamol with codeine (brands such as Panadeine®, Chemist's Own Brand®), Veganin® for headaches or other pain; cold and flu tablets; cough mixtures with codeine and anti-histamines for lung problems; anti-inflammatory and codeine tablets for relief from muscle or bone pain (Neurofen® Plus); antihistamines and other medicines for hay fever; or St John's wort for depression (feeling blue) when already taking a prescribed anti-depressant medicine. Importantly, ask them how often they use these medicines and whether they also drink alcohol, even if only sometimes.

Ensure your client understands any instructions they need for taking and storing their medicines safely. Also make sure they understand any alcohol warnings on the labels of their medicines, including prescription, over-the-counter and herbal medicines, so that they do not drink while taking these medicines.

Advise your client that the best place to buy any over-the-counter medicine is from the pharmacy/chemist shop, so they can be assured of receiving professional, reliable advice and support for their medicine usage. Encourage them to ask their pharmacist/chemist whether it is safe to drink alcohol while taking their particular medicines each time they pick up their prescriptions or buy over-the-counter medicines.

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aged British menî *British Medical Journal*, vol 310, no 6979, pp 560ñ4; Stampfer, MJ, Colditz, GA, Willett, WC, Manson, JE, Arky, RA, Hennekens, CH & Speizer, FE 1988, ëA prospective study of moderate alcohol drinking and risk of diabetes in womenî, *American Journal of Epidemiology*, vol 128, no 3, pp 549ñ58.

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71 Edwards, G, Marshall, EJ & Cook, C 2003, *The treatment of drinking problems: A guide for the helping professions*, 4th edn, Cambridge University Press, New York.

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74 Martin, P, Singleton, C, Hiller-Sturmhofel, S 2003, ëThe role of thiamine deficiency in alcoholic brain diseaseî, *Alcohol Research & Health*, vol 27, no 3, pp 134ñ42; Lishman, W 1987, *Organic psychiatry*, 2nd edn, Blackwell Scientific Publications, Oxford; Charness, M 1993, ëBrain lesions in alcoholicsî, *Alcoholism: Clinical and Experimental Research*, vol 17, pp 2ñ11.

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76 Spencer H, Rubio N, Rubio E, Indeika M, Seitam A 1986 Chronic alcoholism: Frequently overlooked cause of osteoporosis in men. Am J Med **80:**393ñ397

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83 Ibid.

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85 Drug and Alcohol Services South Australia 2005, *Alcohol and driving*, accessed 6 February 2006, www.dassa.sa.gov.au/site/page.cfm?u=121.

86 Driscoll, T, Steenkamp, M & Harrison, JE 2003, *Alcohol and water safety, National alcohol strategy 2001 to 2003ñ04*, Occasional paper, Australian Government Department of Health and Ageing, Canberra.

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PART IV: RESOURCES AND CONTACTS

Local referral pathways – making your listing

This section provides a simple template for recording the contact details of services that help you support the health and wellbeing of your Indigenous clients. The template includes a list of some key contacts, but because it is not a comprehensive list, blank spaces have been left for you to add other service types or contacts that are relevant to your local setting.

Service type	Contact names, for example: • Workers • Organisation	Contact details, for example: • Phone • Fax • Email
Emergency/crisis general health care		
Emergency/crisis mental health care		
Emergency housing		
Aboriginal Health Service/Aboriginal Medical Service		
Aboriginal Family Violence/Domestic Violence (DV) Services		
Aboriginal legal rights		
Aged care		
AIDS Council		
Alcohol, tobacco and other drugs information		
Alcohol support groups		
Carers Association of Australia		
Dental care		
Diabetes		
Disability		
Division of General Practice		
Education		
Employment and training/CDEP		
Financial assistance/counselling		
Gambling		
Guardianship Board		

Health – baby and child		
Health – men's		
Health – women's		
Health – youth/adolescent		
Hepatitis C Council		
Housing (permanent)		
Infectious Disease Unit		
Legal		
Link-Up		
Mental health		
Mental health – grief and loss counselling		
Mental health – social and emotional wellbeing		
Mobile assistance patrol		
Public Advocate		
Public Trustee		
Rehabilitation		
Sexual health		
Sobering-up unit		
Transitional camps		
Women's shelter		

Source: Adapted from Patterson 2000, *Good practice in multi-agency linkages: Report on coordinated service responses for homeless people with complex needs*, Department of Human Services, Linkages and Protocols for Homeless People Advisory Group, Adelaide.

Health organisations and information services

This section lists contact details of health organisations and reliable information services that may help you to identify your own local services, as well as the titles of resources that may assist you in understanding and working with your Indigenous clients and their families in regard to alcohol (and other drug) related issues.

Also provided are contact details for organisations that can assist you with training and workforce development. These include professional services that can send you resources to give to your clients, their families and community members.

Please note that the resources and contacts listed in this section are provided as a guide only and should not be considered a comprehensive list. All contact details were verified as correct at the time of publication, but readers should note that contact details may be subject to change.

Aboriginal and Torres Strait Islander health information service

Australian Indigenous HealthInfo Net

www.healthinfonet.ecu.edu.au

Aboriginal and Torres Strait Islander peak health organisations

Aboriginal Health and Medical Research Council of New South Wales (AHMRC)

Phone: 02 9212 4777
Fax: 02 9212 7211
www.ahmrc.org.au

Aboriginal Health Council of South Australia (AHCSA)

Phone: 08 8132 6700
Fax: 08 8132 6799
www.ahcsa.org.au

Aboriginal Health Council of Western Australia (AHCWA)

Phone: 08 9227 1631
Fax: 08 9228 1099
www.ahcwa.org

Tasmanian Aboriginal Health Service (TAHS)

Phone: 03 6231 3527
Fax: 03 6231 1348

Aboriginal Medical Services Alliance – Northern Territory (AMSANT)

Phone: 08 8981 8433
Fax: 08 8981 4825
www.amsant.com.au

Queensland Aboriginal and Islander Health Council (QAIHC)

Phone: 07 3360 8444
Fax: 07 3257 7455
www.qaihc.com.au

Victorian Aboriginal Community Controlled Health Organisation (VACCHO)

Phone: 03 9419 3350
Fax: 03 9417 3871
www.vaccho.org.au

Accommodation: temporary

Aboriginal Hostels Ltd (Central Office)

Phone: 02 6212 2001
Fax: 02 6212 2022
www.ahl.gov.au

Alcohol and mental health problems (comorbidity)

Hard copies of the following resources can be ordered free of charge from the Department of Health and Ageing:
www.alcohol.gov.au
Email: nmm@nationalmailing.com.au
National free call Monday to Friday, 8 am to 6 pm EST: 1800 020 103
Order publications on extension 8654
Quote hardcopy publication numbers

Publications for clients

Proudfoot, H, Teeson, M & Dillon, P 2005, *Feeling good? Answering your questions about alcohol, drugs and mental health*, National Drug and Alcohol Research Centre & Mental Health Services Conference Inc. of Australia and New Zealand, Canberra.

Hardcopy publication order number: ID53

Publications for health professionals

McCabe, D & Holmwood, C 2003, *Comorbidity of mental disorders and substance use in general practice*, Primary Mental Health Care Australian Resource Centre, Australian Government Department of Health and Ageing, Canberra.

Hardcopy publication order number: ID24

Holmwood, C 2003, *Comorbidity of mental disorders and substance use: A brief guide for the primary health clinician*, Primary Mental

Health Care Australian Resource Centre, Australian Government Department of Health and Ageing, Canberra.

Hardcopy publication order number: ID22

Care plan package

Australian Integrated Mental Health Initiative, Northern Territory (AIMhi NT)

An Indigenous Australian mental health package developed through the Top End Mental Health Service for remote communities. Resources include mental health assessment tools, fact sheets, flipcharts and animated stories.

Many of the resources are available to download from the Auseinet website www.auseinet.com or contact:

Dr Tricia Nagel
Top End Mental Health Service
PO Box 40596
Casuarina NT 0811
Email: trish.nagel@nt.gov.au

Information service and resources

Auseinet: Australian Network for Promotion, Prevention and Early Intervention for Mental Health

Phone: 08 8201 7670
Fax: 08 8201 7673
Email: auseinet@flinders.edu.au
www.auseinet.com

Alcohol-related brain injury

Information service

arbias inc. – Specialists in alcohol and substance related brain injury

Phone: 03 8388 1222
Fax: 03 9387 9925
Email: arbias@arbias.com.au
www.arbias.org.au

Publications

arbias inc. 2005, *Alcohol related brain injury: Looking forward*, arbias inc., Melbourne.

Sedunary, C 1997, *Our health our way: Information about acquired brain injury for the Victorian Koori community*, arbias inc., Melbourne.

PDF versions of both publications are available to download free of charge from www.arbias.org.au.

Community development

Publication

Brady, M 2005, *The grog book: Strengthening indigenous community action on alcohol*, revised edition, Australian Government Department of Health and Ageing, Canberra.

Copies can be ordered free of charge from the Department of Health and Ageing:
www.alcohol.gov.au
Email: nmm@nationalmailing.com.au
National free call Monday to Friday, 8 am to 6 pm EST: 1800 020 103
Order publications on extension 8654
Quote publication order number AG42

Community health promotion resources

Many of these organisations and services offer free or low-cost resources, such as flipcharts, magnets, pamphlets, posters and videos, that have been designed especially for Aboriginal communities.

Aboriginal Drug and Alcohol Council (SA) Inc. (Adelaide)

Phone: 08 8362 0395
Fax: 08 8362 0327
Email: adac@adac.org.au
www.adac.org.au

Australian Government Department of Health and Ageing alcohol website

www.alcohol.gov.au

Australian Government Department of Health and Ageing National Drug Strategy Resources Catalogue

Email: nmm@nationalmailing.com.au
National free call Monday to Friday, 8 am to 6 pm EST: 1800 020 103
Order publications on extension 8654
Quote publication order number AG43

Community Drug Action (NSW)

Phone: 02 9424 5946

Fax: 02 9424 5757

Email: drugaction@doh.health.nsw.gov.au
www.communitybuilders.nsw.gov.au/drugs_action

Koori DrugInfo

Phone: 1300 858 584
Fax: 03 9328 3008
Email: druginfo@adf.org.au
www.kooridruginfo.adf.org.au

Strong Spirit, Strong Mind: Aboriginal ways to reduce harm from alcohol and other drugs – Western Australia Drug and Alcohol Office (DAO)

Head Office: 08 9370 0333
Fax: 08 9272 6605
www.dao.health.wa.gov.au

Counselling

Social and emotional wellbeing

Link-Up centres and social and emotional wellbeing counsellors are available in most states and territories.

Link-Up services

National free call: 1800 624 332

A 'Bringing Them Home' map that shows the Australia-wide locations of these services is available from the Office for Aboriginal and Torres Strait Islander Health (OATSIH):
Phone: 02 6289 5291
Fax: 02 6289 4603
Email: oatsih.enquiries@health.gov.au

You can also check the following website for your state or territory OATSIH and nearest Aboriginal and/or Torres Islander health service contact details:
www.health.gov.au/internet/wcms/publishing.nsf/Content/Indigenous+Health-1lp

Indigenous Psychological Services (Perth)

National free call: 1800 098 550

Phone: 08 9362 2036

Fax: 08 9362 5546

www.indigenouspsychservices.com.au

Narrative therapy services or training

Dulwich Centre (Adelaide)
Phone: 08 8223 3966
Fax: 08 8232 4441
www.dulwichcentre.com.au

Training videos

Strong Spirit, Strong Mind: Aboriginal ways to reduce harm from alcohol and other drugs: Culturally secure counselling

Strong Spirit, Strong Mind: Aboriginal ways to reduce harm from alcohol and other drugs: Working with the story telling board

Available from: Western Australia Drug and Alcohol Office (DAO)
Head Office: 08 9370 0333
Fax: 08 9272 6605
www.dao.health.wa.gov.au

Cultural respect and communication

Publications

Australian Health Ministers' Advisory Council Standing Committee on Aboriginal and Torres Strait Islander Health Working Party 2004, *Cultural respect framework for Aboriginal and Torres Strait Islander health*, Department of Health South Australia, Adelaide.

Cass, A, Lowell, A, Christie, M, Snelling, P, Flack, M, Marrnganyin, B & Brown, I 2002, 'Sharing the true stories: Improving communication

between Aboriginal patients and healthcare workers', *Medical Journal of Australia*, vol 176, no 10, pp 466–70.

Eckerman, A, Dowd, T, Chong, E, Nixon, L, Gray, R & Johnson, S 2005, *Binan Goonj: Bridging cultures in Aboriginal health*, 2nd edn, Churchill Livingstone, Sydney.

Franks, C & Curr, B 1996, *Keeping company: An inter-cultural conversation*, Centre for Indigenous Development Education and Research, University of Wollongong.

Trudgen, R 2000, *Why warriors lie down and die: Towards an understanding of why the Aboriginal people of Arnhem Land face the greatest crisis in health and education since European contact. Djambatj Mala*, Aboriginal Resource and Development Services Inc., Darwin.

Australian author and specialist in languages Diana Eades has written and contributed to various books on Aboriginal English. These should be available through university bookshops.

Drug and alcohol research centres

National Centre for Education and Training on Addiction (NCETA)
Flinders University

Phone: 08 8201 7535
Fax: 08 8201 7550
www.nceta.flinders.edu.au

National Drug and Alcohol Research Centre (NDARC)
University of New South Wales

Phone: 02 9385 0333
Fax: 02 9385 0222
www.ndarc.med.unsw.edu.au

National Drug Research Institute (NDRI)
Curtin University of Technology

Phone: 08 9266 1600
Fax: 08 9266 1611
www.ndri.curtin.edu.au

Turning Point: Alcohol and Drug Centre

Phone: 03 8413 8413
Fax: 03 9416 3420
www.turningpoint.org.au

Medicines and pharmacotherapies

Publications

Australian Medicines Handbook (AMH)

The *AMH* is a joint project of the Royal Australian College of General Practitioners, the Pharmaceutical Society of Australia and the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists.

The *AMH* is updated in January and July each year and can be purchased as a book or CD-ROM, online or downloaded onto a pocket personal computer. Prices vary with choice of medium and student discounts are available.

The *AMH* is available from Australian Medicines Handbook Pty Ltd
Phone: 08 8303 6977
Fax: 08 8303 6980
www.amh.hcn.net.au

Central Australian Division of Primary Health Care Inc. 2005, *CARPA medicines book for Aboriginal Health Workers*, 1st edn, Central Australian Division of Primary Health Care Inc., Alice Springs.

Available to purchase for $25.00 plus postage

Phone: 08 8950 4800
Fax: 08 8952 3536
www.carpa.org.au

Gowing, LR 2005, *Pharmacotherapies for relapse prevention on alcohol dependence*, DASSA Monograph No. 17, Drug and Alcohol Services South Australia, Adelaide.

Available only as a PDF document; download free of charge from www.dassa.sa.gov.au/webdata/resources/files/Monograph_17.pdf

Information service

National Prescribing Service (NPS), Therapeutic Advice and Information Service (TAIS)

Phone: 1300 138 677
Fax: 03 9459 4546
Email: tais@nps.org.au
www.nps.org.au

Pregnancy

Publications

NSW Department of Health 2006, *National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, Ministerial Council on Drug Strategy Cost Shared Funding Model, Commonwealth of Australia, Sydney.

PDF version is available to download free of charge from: www.health.nsw.gov.au/pubs/2006/pdf/ncg_druguse.pdf

Western, J 2006, *Fetal alcohol spectrum disorders: A guide for midwives*, Drug and Alcohol Services South Australia, Adelaide.

Booklet with CD-ROM available to purchase from the Alcohol and Drug Information Service (ADIS) South Australia

Phone: 1300 131 340
Fax: 08 8363 8666
www.dassa.sa.gov.au

Pregnancy drug information services

Australian Capital Territory

Canberra Hospital
Phone: 02 6244 2222

New South Wales

MotherSafe
Royal Hospital for Women
Phone: 02 9382 6539
Outside Sydney: 1800 647 848

Northern Territory

Royal Darwin Hospital
Phone: 08 8922 8888

Queensland

Queensland Drug Information Centre
Phone: 07 3636 7098
Email: Queensland_Drug_Information_Centre@health.qld.gov.au

South Australia

Women's and Children's Hospital
Phone: 08 8161 7000

Tasmania

Royal Hobart Hospital
Phone: 03 6222 8308

Victoria

Royal Women's Hospital
Phone: 03 9344 2000
Email: drug.information@rwh.org.au

Western Australia

Kind Edward Memorial Hospital for Women
Phone: 08 9340 2222

Screening and brief intervention tools

Paper-based tools (such as books and flipcharts)

Indigenous Risk Impact Screen (IRIS) and brief intervention

An Indigenous Australian screening tool for alcohol and mental health problems, developed by Coralie Ober and Carla Schlesinger, in conjunction with Queensland Health (Brisbane)
Phone: 07 3237 5655
www.health.qld.gov.au/atods/programs/iris_project.asp

Brady, M & Hunter, E 2003, *Talking about alcohol with Aboriginal and Torres Strait Islander patients: A brief intervention tool for health professionals*, 2nd edn, Australian Government Department of Health and Ageing, Canberra.

Copies are available free of charge from the Department of Health and Ageing
www.alcohol.gov.au
Email: nmm@nationalmailing.com.au
National free call Monday to Friday, from 8 am to 6 pm EST: 1800 020 103
Order publications on extension 8654
Quote publication flipchart order number: AG25

Brady, M 1995, *Giving away the grog: Aboriginal accounts of drinking and not drinking*, Australian Government Department of Health and Ageing, Canberra.

Copies are available free of charge from the Department of Health and Ageing
www.alcohol.gov.au
Email: nmm@nationalmailing.com.au
National free call Monday to Friday, from 8 am to 6 pm EST: 1800 020 103
Order publications on extension 8654
Quote publication number: ATSI43

Computer-based tools

The grog kit: An interactive CD for health practitioners

An Indigenous Australian CD-ROM developed by Ernest Hunter and Helen Travers in 2005, through the National Health Information Touchscreen Development Program, University of Queensland

Available free of charge

Phone: 07 4050 3646
Fax: 07 4051 4322
Email: info@hitnet.com.au

www.hitnet.com.au

The drink-less program

Computerised AUDIT screening tool, handy advice card and supporting pamphlets for health professionals, reception staff and clients can be downloaded free of charge or printed materials (complete kit $60.00 plus $10.00 postage) can be purchased

Phone: 02 9515 8650
Fax: 02 9515 8970
www.cs.nsw.gov.au/drugahol/drinkless

State and territory alcohol and drug information services

Australian Capital Territory

24-hour telephone service for health professionals and community members
Community Health Helpline
Phone: 02 6207 9977

New South Wales

24-hour telephone service for health professionals
NSW Drug and Alcohol Specialist Advisory Service (DASAS)
Phone: 1800 023 687 Outside Sydney
Phone: 02 9361 8006 Sydney

24-hour telephone service for community members
Alcohol and Drug Information Service (ADIS)
Phone: 1800 422 599 Outside Sydney
Phone: 02 9361 8000 Sydney

Northern Territory

24-hour telephone service for health professionals
Drug and Alcohol Clinical Advisory Service (DACAS)
Phone: 1800 111 092

24-hour telephone service for community members
Alcohol and Drug Information Service (ADIS)
Phone: 1800 131 350

Queensland

24-hour telephone service for health professionals and community members
Alcohol and Drug Information Service (ADIS)
Phone: 1800 177 833 Outside Brisbane
Phone: 07 3236 2414 Brisbane

South Australia

24-hour telephone service for health professionals and community members
Alcohol and Drug Information Service (ADIS)
Phone: 1300 131 340

Tasmania

24-hour telephone service for health professionals
Drug and Alcohol Clinical Advisory Service (DACAS)
Phone: 1800 630 093

24-hour telephone service for community members
Alcohol and Drug Information Service (ADIS)
Phone: 1800 811 994 Outside Hobart
Phone: 03 6233 6722 Hobart

Victoria

24-hour telephone service for health professionals
Drug and Alcohol Clinical Advisory Service (DACAS)
Phone: 1800 812 804 Outside Melbourne
Phone: 03 9416 3611 Melbourne

24-hour telephone service for community members
DirectLine
Phone: 1800 888 236

Western Australia

24-hour telephone service for health professionals and community members
Alcohol and Drug Information Service (ADIS)
Phone: 1800 198 024 Outside Perth
Phone: 08 9442 5000 Perth

Suicide

Publication

Ministerial Council for Suicide Prevention 2005, *Aboriginal people working together to prevent suicide and self harm*, Ministerial Council for Suicide Prevention, Department of Health and Ageing, Perth.

PDF version is available to download free of charge from www.mcsp.org.au

Information service and resources

Lifeline's Just Ask: rural mental health information service
Phone: 1300 131 114 (9am to 5pm Eastern Standard Time)
Email: justask@lifeline.org.au
www.justask.org.au

Important note: This is not a counselling service; call 131 114 for Lifeline's 24-hour telephone counselling service.

Translator services

Aboriginal Interpreter Services (for Indigenous Australian languages spoken in the Northern Territory)

Darwin office: 08 8999 8353
Alice Springs office: 08 8951 5576
www.dlghs.nt.gov.au/ais

Kimberley Interpreting Service (for Indigenous Australian languages spoken in the Kimberley Region)

Phone: 08 9192 3981
www.kimberleyinterpreting.org.au

Australian Government Translating and Interpreting Service

National 24-hour service: 131 450 local call cost
www.immi.gov.au/living-in-australia/help-with-english/help_with_translating/index.htm

Workforce Development

Australian Indigenous Health Promotion Knowledge Network

Phone: 02 9036 7113
www.indigenoushealth.med.usyd.edu.au

Council for Aboriginal Alcohol Program Services Inc. (Northern Territory)

Phone: 08 8922 4800
Fax: 08 8922 4832
www.caaps.org.au

Diploma of Narrative Approaches for Aboriginal People (Adelaide)

Nunkuwarrin Yunti: Working Together
Phone: 08 8223 5217
Fax: 08 8232 0949
www.nunku.org.au

Gnibi – College of Indigenous Australian Peoples, Southern Cross University

National free call: 1800 816 676
Phone: 02 6620 3955
Fax: 02 6620 3438
www.scu.edu.au/schools/gnibi

Indigenous Psychological Services (Perth)

Phone: 08 9362 2036
Fax: 08 9362 5546
www.indigenouspsychservices.com.au

Indigenous Risk Impact Screen (IRIS) and brief intervention (Brisbane)

Phone: 07 3238 4065
www.health.qld.gov.au/atods/programs/iris_project.asp

Koori Health

Koori Human Services Unit, Department of Human Services, Victoria
Phone: 03 9096 7032
www.health.vic.gov.au/koori

Strong Spirit, Strong Mind: Aboriginal ways of reducing harm from alcohol and other drugs (Perth)

Western Australia Drug and Alcohol Office (DAO)
Head Office: 08 9370 0333
Fax: 08 9272 6605
www.dao.health.wa.gov.au

Turning Point: Alcohol and Drug Centre (Melbourne)

Phone: 03 8413 8413

Fax: 03 9416 3420
www.turningpoint.org.au

Glossary

abstinence – Not drinking (refraining from) any alcohol or engaging in other drug use. This lifestyle decision may be based on health, personal, social, religious, moral, legal or other reasons (National Drug Strategy Unit 2003).

alcohol – In these guidelines, alcohol refers specifically to the range of drinks (beverages) designed for human consumption that contain the depressant drug ethyl alcohol or ethanol (NHMRC 2001).

alcoholic diabetes – see diabetes -

alcoholic hallucinosis – An acute mental syndrome characterised by vivid auditory hallucinations which can occur shortly after stopping or reducing alcohol consumption.

anaphylactic shock or **anaphylaxis** – A sudden, severe and potentially life-threatening allergic reaction to food, stings, bites or medicines.

aspiration – Inhalation of fluid or other matter into the lungs.

ataxia – The word ataxia means without coordination. People with ataxia have problems with coordination because parts of the nervous system that control movement and balance are affected. Ataxia may affect the fingers, hands, arms, legs, body, speech, and eye movements

atherosclerosis – When the heart arteries have become narrowed or blocked by fatty deposits on their walls; it is this that causes angina and heart attack.

binge – Refers to either occasional sessions of heavy drinking by a person who is not alcohol dependent, or a 'bender' lasting days or weeks by a person who is alcohol dependent (NHMRC 2001).

blood alcohol concentration (BAC) – The amount of alcohol contained in a person's blood, which is expressed as grams of alcohol per 100 millilitres of blood (NHMRC 2001). It is also known as blood alcohol level (BAL).

The terms positive BAC and negative (zero) BAC are often used by law enforcement agencies to describe the presence or absence of alcohol in a person's bloodstream. Positive BAC is used to describe a person who has exceeded the legal amount of alcohol allowed when operating a vehicle or machinery.

For the purposes of these guidelines, a positive BAC means any recorded amount of alcohol concentration in the blood, and negative BAC means no alcohol in the blood.

cardiac arrhythmia – An abnormality in the heart's electrical system that causes the heart to beat irregularly, too slowly or too quickly. When this happens the pumping action of the heart may be affected. People with arrhythmias may experience palpitations, heart racing, dizziness, shortness of breath, fatigue or fainting. Some people seem to have no symptoms. (MainLine Health USA, www.mainlinehealth.org/mlh/centprog/heart/article_2289.asp, accessed 24 December 2006.)

cardiomyopathy – Weakening of the heart muscle.

cardiovascular – To do with the heart (cardio) and the blood vessels (vascular) (NHMRC 2001).

cirrhosis – A chronic disease affecting the liver. The liver is the largest organ in the body and is located in the upper right side of the abdomen, below the ribs. When chronic diseases cause the liver to become permanently injured and scarred, the condition is called cirrhosis. The scar tissue that forms in cirrhosis harms the structure of the liver, blocking the flow of blood through the organ. The loss of normal liver tissue slows the processing of nutrients, hormones, drugs and toxins by the liver. The production of essential proteins and other substances made by the liver is also slowed.

(American Gastroenterological Association, www.gastro.org/wmspage.cfm?parm1=681, accessed 9 January 2007.)

cognition – Mental functions and processes, including thinking, problem solving, planning, memory recall, perception and recognition, judgment and language (NHMRC 2001).

cognitive dysfunction – Difficulties in memory, problem solving and learning new things.

comorbidity – The presence of two or more health conditions or illnesses at the same time. For example, a person with an alcohol and mental health comorbidity may have a diagnosis of alcohol dependence and depression. A person with multiple comorbidities might have regular excessive alcohol use, anxiety, diabetes, high blood pressure and heart disease.

contraindication – A specific situation in which a drug, procedure or surgery should not be used because it may be harmful to the patient.

cultural awareness – Having knowledge and understanding of a different culture's history, values, belief systems, experiences and lifestyles. Developing awareness does not mean becoming an 'expert' of another culture, but rather involves appreciating the potential for cultural differences, accepting that differences exist, and understanding those differences. It also involves personal self-reflection about one's own culture, biases and tendency to stereotype (Thomson 2005).

cultural respect – The recognition, protection and continued advancement of the inherent rights, cultures and traditions of Aboriginal and Torres Strait Islander peoples (Australian Health Ministers' Advisory Council Standing Committee on Aboriginal and Torres Strait Islander Health Working Party 2004).

delirium tremens (the DTs) – A disorder involving sudden and severe mental changes (psychosis) or neurological changes (including seizures) caused by abruptly stopping the use of alcohol.

Rapid pulse rate, elevated blood pressure and a high temperature also may be present. Symptoms occur because of the toxic effects of alcohol on the brain and nervous system, and may be severe and progress rapidly. Symptoms most commonly occur within 72 hours after the last drink, but may occur up to 7 to 10 days after the last drink. Delirium tremens (and alcohol withdrawal in general) can be fatal. (Medline Plus 2005, www.nlm.nih.gov/medlineplus/ency/article/000766.htm, accessed 19 December 2006.)

dependence – A phenomenon with biological, psychological and social elements, whereby a person gives priority to using a particular drug (for example, alcohol) over other behaviours that were once much more important to the person. Dependence is not an all or none phenomenon, but exists in degrees along a continuum (NHMRC 2001).

depressant – A medicine, drug or other agent that slows the activity of the central nervous system (brain) and vital organs of the body. Depressants acting on the central nervous system include general anaesthetics, opiates, alcohol, sedatives and hypnotics

detoxification or detox–The physiological process by which a person dependent on alcohol stops drinking and the body removes toxic substances. Ideally, detoxification should be supervised by nursing or other healthcare staff to minimise symptoms and risk of harm. This process may or may not involve the administration of prescribed medication. Detoxification is a treatment stage prior to abstinence-based rehabilitation.

diabetes – The term diabetes mellitus describes a metabolic disorder of multiple causes. It is characterized by chronic high blood glucose levels (hyperglycaemia) and disturbances of carbohydrate, fat and protein metabolism. These result from defects in insulin secretion, insulin action, or both. The effects of diabetes mellitus include long-term damage, dysfunction and failure of various organs.

diabetic coma – See **ketoacidosis**.

foetal alcohol spectrum disorders –An umbrella term used to describe a continuum of permanent physical and intellectual birth-defect syndromes caused by the mother's consumption of alcohol during pregnancy. It may also be referred to as fetal alcohol spectrum disorders, which is the American English spelling (Chudley et al 2005).

foetal alcohol syndrome – A relatively uncommon cluster of mainly facial abnormalities and poor physical and intellectual development observed in children born to women who drank heavily during their pregnancy. This may also be referred to as fetal alcohol syndrome, which is the American English spelling (NHMRC 2001).

gastritis – Gastritis is an inflammation (swelling) of the lining of the stomach.

haemorrhagic stroke – A stroke caused by bleeding either into the brain (intracerebral haemorrhage) or over the surface of the brain (subarachnoid haemorrhage) (NHMRC 2001).

healthcare provider – In the context of these guidelines, healthcare provider refers to a person who is appropriately trained, is formally recognised and practices within a designated healthcare role such as a doctor, registered nurse, pharmacist or Aboriginal Health Worker.

hepatic encephalopathy – When toxic substances pass from the liver into the blood, damaging the central nervous system and brain cells.

high risk [drinking] – Defines a level of drinking at which there is considerable risk of short- and/or long-term physical harm, and above which risks to health and wellbeing continue to increase rapidly (NHMRC 2001).

For healthy adult men:

- Short-term high risk: 11 or more standard drinks on any one day
- Long-term high risk: on average seven or more standard drinks per day, or 43 or more standard drinks per week.

For healthy adult women (who are not pregnant or not soon to become pregnant):

- Short-term high risk: seven or more standard drinks on any one day
- Long-term high risk: on average five or more standard drinks per day, or 20 or more standard drinks per week.

hypertension – High blood pressure (NHMRC 2001).

hyperglycaemia –When there is too much sugar in the blood because the body is not producing or getting enough insulin or when the body cannot use insulin properly. It is also known as high blood sugar. Stress and illness can cause hyperglycaemia in clients with diabetes (Diabetes Australia 2003a).

hypoglycaemia –When there is not enough sugar in the blood because the body is producing or getting too much insulin or not enough sugar (glucose). It is also known as low blood sugar. Skipping meals and drinking alcohol without food can cause hypoglycaemia in clients with diabetes (Diabetes Australia 2003b).

hypothermia – When the body's control mechanisms fail to maintain a normal body temperature. Signs and symptoms that may develop include gradual loss of mental and physical abilities. Severe hypothermia can lead to death. (Mayo Clinic.Com www.mayoclinic.com/health/hypothermia/DS00333, accessed 8 January 2007.)

hypoxia – The term cerebral hypoxia is lack of oxygen supply to the cerebral hemispheres (the outer portion of the brain). It is often used to refer to a lack of oxygen supply to the entire brain.

Indigenous Australians – All Australian Aboriginal and Torres Strait Islander peoples. They were the first inhabitants of the Australian continent and its nearby islands, and are referred to as the traditional owners of the land.

intoxication – There is no consistent or formally agreed definition of intoxication; however, it is usually taken to refer to an elevated blood alcohol concentration such that a person cannot function within their normal range of physical and intellectual abilities. It is a subjective state that involves the experience of a substantial effect of alcohol on mood, thoughts and physical movement (NHMRC 2001).

ischaemia – An inadequate flow of blood to a part of the body due to blockage or constriction of the blood vessels that supply it (NHMRC 2001).

ischaemic stroke – A stroke caused by blockage of a blood vessel in the brain (NHMRC 2001).

ketoacidosis (also known as diabetic coma) – Diabetic ketoacidosis is a complication of diabetes. It is caused by the build-up of by-products of fat breakdown, called ketones. This occurs when glucose is not available as a fuel source for the body, and fat is used instead.

kinship – In Indigenous Australian culture, kinship is far broader than biological or matrimonial family and relationship ties, such as parents and children, aunts and uncles. Kinship relationships are also based on shared cultural concepts of country, family and community.

Korsakoff's syndrome (also known as Korsakoff's psychosis or amnesic-confabulatory syndrome) – A condition often seen in people who have been alcohol dependent, characterised by a

loss of short-term memory and an inability to learn new skills. The cause of the condition can often be traced to a deficiency of B complex vitamins, especially thiamine and B12. The heart, vascular and nervous system are involved. Symptoms include amnesia, confabulation, attention deficit, disorientation, and vision impairment. The main features are impairments in acquiring new information or establishing new memories, and in retrieving previous memories. Korsakoff's syndrome represents the chronic (long-term) phase of Wernicke-Korsakoff syndrome. (National Institute for Alcohol Abuse and Alcoholism, etoh.niaaa.nih.gov/dbtw-wpd/exec/dbtwpcgi.exe, accessed 19 December 2006.)

long-term risk [to health] – Refers to the long-term harmful effects from drinking at risky and high-risk levels on a regular basis, for example on most days of the week. Long-term risks of harm include alcohol-related brain damage, pancreatitis, cirrhosis of the liver, nerve damage, lowered immune system function and susceptibility to infection, blood disorders, heart disease and cancers, and mental health problems including anxiety, depression and sleep disorders.

low risk [drinking] – A level of drinking at which there is only a minimal risk of harm. At this level, there may be health benefits for some of the population (NHMRC 2001).

For healthy adult men:

- Short-term low risk: up to six standard drinks on any one day, and no more than three days per week
- Long-term low risk: on average four standard drinks per day, or up to 28 standard drinks per week.

For healthy adult women (who are not pregnant or not soon to become pregnant):

- Short-term low risk: up to four standard drinks on any one day, and no more than three days per week
- Long-term low risk: on average two standard drinks per day, or up to 14 standard drinks per week.

nystagmus – Rapid involuntary rhythmic eye movement; it is a clinical sign of Wernicke's encephalopathy.

ophthalmoplegia – Paralysis of one or both eyes; it is a clinical sign of Wernicke's encephalopathy.

opioid – Possessing some properties characteristic of opiate narcotics but not derived from opium. Examples are fentanyl and methadone.

pancreatitis – Acute inflammation of the pancreas. The two main causes are alcohol consumption and gall stones.

paroxysmal sweats – One-off or recurring 'sudden attacks' of symptoms such as sweating (perspiration) under the arms or on the forehead, face and palms of hands. (Medline Plus' Medical Dictionary online, www.uwo.ca/pathol/glossary.html#P, accessed 8 January 2007.)

pattern of drinking – Refers to aspects of drinking behaviour other than the level of drinking, and includes when and where drinking takes place, the number and characteristics of drinking occasions, activities associated with drinking, personal characteristics of the drinker and drinking companions, the types of drinks consumed, and the drinking norms and behaviours that comprise a 'drinking culture' (NHMRC 2001).

peripheral neuropathy – Failure of the nerves that carry information to and from the brain and spinal cord and the extremities (hands and feet). This produces pain, loss of sensation, and possible inability to control muscles. The term can be broken down as follows: 'neuro' meaning nerves, 'pathy' meaning abnormal, and 'peripheral' meaning nerves beyond the brain and spinal cord.

Risk factors for peripheral neuropathy include diabetes, heavy alcohol use and exposure to certain chemicals and drugs. Some people have a family history of (or hereditary predisposition for) the condition.

peripheral vascular disease – A disease of the blood vessels (atherosclerosis) causing narrowing of the arteries in the leg (NHMRC 2001).

relapse – The recurrence of harmful alcohol or drug use after a period of significant improvement. Relapse is common among people who have been alcohol- or drug dependent during the period they are attempting to stop their alcohol or drug use.

kidney disease – Relates to impaired function of the kidneys, which may be acute or chronic and lead to kidney failure. The kidneys, a pair of bean-shaped organs, are located at the bottom of the ribcage in the right and left sides of the back. The kidneys control the quantity and quality of fluids of the body and produce hormones and vitamins that direct cell activities in many organs; for example, the hormone renin helps control blood pressure. When the kidneys are not working properly, waste products and fluid can build up to dangerous levels, creating a life-threatening situation. (Lab Tests Online. http://www.labtestsonline.org/understanding/conditions/kidney.html, accessed 1 January 2007.)

risk factor – Anything that increases a person's chance of developing a particular disease or condition. Smoking, high blood pressure and old age, for example, are all risk factors for stroke (NHMRC 2001).

risky [drinking] – A level of drinking at which risk of harm is significantly increased beyond any possible health benefits (NHMRC 2001).

For healthy adult men:

- Short-term risky: seven to10 standard drinks on any one day
- Long-term risky: on average five to six standard drinks per day, or between 29 and 42 standard drinks per week.

For healthy adult women (who are not pregnant or not soon to become pregnant):

- Short-term risky: five to six standard drinks on any one day
- Long-term risky: on average three to four standard drinks per day, or between 15 and 28 standard drinks per week.

sensorium – The area of the brain considered responsible for receiving and integrating sensations from the outside world. It represents the entire sensory and intellectual apparatus of the body (*New Collins Concise English Dictionary*, Australian Edition, 1983, p 1050).

short-term risk [to health] – Refers to intoxication and the immediate unwanted or dangerous effects from drinking a large amount of alcohol in a single session (such as in a single day). Short-term risks of harm include injury or death from accidents or violence, vomiting and choking, difficulty in perceiving and managing the physical environment, impaired communication, poor problem-solving ability, memory loss, alcohol poisoning (overdose), and suicide or self-harm.

standard drink – A drink containing 10 grams of pure alcohol (equivalent to 12.5 millilitres of alcohol) (NHMRC 2001).

stimulant – (also known as psycho-stimulant) - Stimulants are drugs that increase brain activity, increasing the person's level of alertness, wakefulness, energy and physical activity, and decreases their appetite. These include prescribed medications, other drugs such as caffeine and nicotine, and illicit drugs such as amphetamines, methamphetamines and cocaine.

stroke – Sudden and unexpected damage to brain cells that causes symptoms in the parts of the body controlled by those cells. It can affect thinking, movement, speech and/or the senses. It occurs when the blood supply to part of the brain is suddenly disrupted, either through blockage of an artery in the brain from a blood clot (ischaemic stroke) or bleeding into the brain (haemorrhagic stroke) (NHMRC 2001).

tolerance – Relates to a person's capacity to become intoxicated. When a person drinks alcohol for the first time, the amount of alcohol required to make them feel intoxicated is small. Once they drink regularly they require more alcohol to reach their early experience of intoxication because their brain and liver develop tolerance to the intoxicating effects of alcohol. Having adapted to the presence of alcohol, the liver produces more of the enzymes needed to break down (metabolise) alcohol more efficiently and faster. This explains why an alcohol-tolerant person will seem less intoxicated than a first or occasional drinker who has drunk the same amount of alcohol. In addition, as the person becomes a more experienced drinker, they learn to manage and compensate for the acute effects of alcohol. An experienced drinker's speech, physical movements and ability to pay attention may appear normal even when they have a high blood alcohol concentration.

Wernicke's encephalopathy – A serious and acute degenerative brain disorder caused by a lack of thiamine (vitamin B1). It may result from alcohol abuse, dietary deficiencies, prolonged vomiting, eating disorders or the effects of chemotherapy. Symptoms include mental confusion, visual impairment, stupor, coma, hypothermia, hypotension and ataxia. *Korsakoff's syndrome* – a memory disorder – also results from a deficiency of thiamine, and is associated with alcohol dependence.

Although Wernicke's and Korsakoff's may appear to be two different disorders, they are generally considered to be different stages of the same disorder, which is called *Wernicke-Korsakoff syndrome*. Wernicke's encephalopathy represents the acute phase of the disorder, and Korsakoff's syndrome represents the chronic phase. (National Institute of Neurological Disorders and Stroke, www.ninds.nih.gov/about_ninds/addresses.htm, accessed 7 January 2007.)

Glossary

AIHW	Australian Institute of Health and Welfare
AUDIT	Alcohol Use Disorders Identification Test
BAC	blood alcohol concentration
CIWA-Ar	Clinical Institute Withdrawal Assessment of Alcohol Scale – Revised
IM	intramuscular
IV	intravenous
NHMRC	National Health and Medical Research Council

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Note: *Indicates references quoted in the literature review commissioned by the NHMRC to form the primary evidence base for these Guidelines.

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