

# Kua warea te Māori e te tarukino, e te whakapōauau

## Substance misuse and addiction in Māori

[www.bpac.org.nz](http://www.bpac.org.nz) keyword: substance-misuse

### Key concepts:

- It is estimated that substance misuse and other addictions are experienced by over one quarter of Māori in their lifetime
- Substance misuse disorders commonly co-exist with other mental health problems and co-addictions are also common
- Take advantage of any opportunity to discuss substance misuse and addiction and consider routine screening
- Ensure that issues are understood, and care is delivered, in a culturally appropriate manner
- Be aware of Māori providers of substance misuse and addiction services

He taru tawhiti  
*A weed from far away*

Te Rau Hinengaro, the New Zealand mental health survey (2006) revealed that substance misuse disorders (mainly alcohol and cannabis) are experienced by over one quarter (27%) of Māori in their lifetime, second only to anxiety disorders (31%).<sup>1</sup> Substance misuse disorders were the third\* leading cause of hospitalisations for mental health disorders among Māori males (82 per 100,000) between 2003 and 2005.<sup>2</sup>

Substance misuse disorders commonly co-exist with other mental health problems. Te Rau Hinengaro identified that 40% of those with a substance misuse disorder, also had an anxiety disorder and 29% had a co-existing mood disorder.<sup>1</sup> It has been reported that up to 95% of people receiving treatment for substance misuse, e.g. in community alcohol and other drug (AOD) units, have co-existing mental health disorders.<sup>3</sup>

Misuse of multiple substances and co-addictions are common.

Substance misuse is associated with:

- Other mental health disorders
- Chronic general health problems
- Accidental and intentional injury and death
- Violence
- Criminal offending
- Negative work, educational, social and financial consequences
- Risky sexual behaviour
- Adverse effects on foetal development
- Negative child and adolescent outcomes from parental substance misuse

Primary care is well placed to recognise and address substance misuse and addictions, and provide early intervention and general management.<sup>4</sup>

## Identifying and discussing substance misuse

Raising the subject of substance misuse and addiction with any patient presents challenges for many clinicians. Barriers may include the perceived sensitivity of the subject, fear of harming the therapeutic relationship, reluctance to document illicit drug use and time pressure. Discussion is dependent on the acuteness and complexity of the presenting complaint and the priority given to multiple other health issues for discussion.<sup>4</sup>

## Cultural fluency enhances communication

A lack of confidence in the area of cultural fluency can further complicate addressing addiction-related issues with Māori.

Cultural fluency is defined as appropriate application of respect, empathy, flexibility, patience, interest, curiosity, openness, a non-judgemental attitude, tolerance for ambiguity and sense of humour. It implies a cultural familiarity and enhances the communicators understanding of cultural context and the degree to which a message is received and understood.<sup>5</sup>

The key aspects of cultural fluency are acknowledging differing definitions of health and wellbeing, supporting choice of treatment approaches and presenting health care (and options) in a culturally responsive manner.

Cultural fluency goes beyond sensitivity, awareness and cultural safety. It can include, for example, understanding how or by whom decision making is made in a whānau, and considerations of how Māori values, beliefs and experiences might impact on the establishment and maintenance of a therapeutic relationship.

\* Schizophrenia and bipolar disorders were first and second respectively

## Framework for managing substance misuse and addiction

Māori are a priority population for identifying and managing substance misuse and other addictive behaviours. Primary care intervention is effective and important.

- Be aware that substance misuse and addictions are common problems
- Be alert for opportunities to discuss substance misuse and addiction and consider routine screening when time allows

- Be culturally aware
- Use direct, open questions
- Reassure that information will remain confidential
- Offer hope and support

A general framework for identifying and managing a substance misuse disorder is set out in Table 1. Treatment is usually shared between general practice and specialist care teams.

**Table 1:** Key treatment goals for substance misuse disorder (adapted from Todd, 2010)<sup>3</sup>

<b>Identification</b>	<ul style="list-style-type: none"> <li>▪ Problem identified through informal or formal screening or self-identification</li> <li>▪ Determine and liaise with appropriate services for patient</li> <li>▪ Ascertain specific needs and any barriers regarding initial contact with services</li> <li>▪ Ask about and consider cultural needs</li> <li>▪ Identify further sources of information needed</li> <li>▪ Involve whānau or other support people if possible</li> </ul>
<b>Early treatment</b>	<ul style="list-style-type: none"> <li>▪ Ask about and use culturally appropriate processes</li> <li>▪ Assess for co-existing substance misuse or mental health problems</li> <li>▪ Assess level of risk and manage any acute clinical needs</li> <li>▪ Engage and motivate patient to seek treatment</li> <li>▪ Establish the patient’s concept of what wellbeing means for them in order to set a treatment goal</li> <li>▪ Involve key supports and whānau</li> </ul>
<b>Middle treatment</b>	<ul style="list-style-type: none"> <li>▪ Active treatment of substance misuse and mental health problems e.g. therapies, medicines</li> <li>▪ Increase focus on steps to enhance wellbeing</li> <li>▪ Maintain engagement and motivation</li> <li>▪ Continue to involve key support people</li> </ul>
<b>Late treatment</b>	<ul style="list-style-type: none"> <li>▪ Maintain treatment gains, monitor adherence to treatment strategies and prevent relapse</li> <li>▪ Restore wellbeing</li> <li>▪ Increase self-management and autonomy (e.g. occupational and social skills) and begin transfer of engagement to whānau and social supports</li> </ul>
<b>Independence</b>	<ul style="list-style-type: none"> <li>▪ Self-motivation</li> <li>▪ Self-responsibility</li> <li>▪ Independence from specialist services</li> </ul>

## Characteristics of discussion about substance misuse

A recent study of GP consultations in New Zealand, revealed significant issues surrounding discussion about the misuse of alcohol and other drugs (AOD).

Opportunities for discussion were not acted upon in one quarter of the consultations. When use of AOD was discussed, it was observed that both GPs and patients had a degree of discomfort, and changed the subject when it became too uncomfortable. GPs were often seen to talk down the importance of the

topic or suggest a change in substance intake, but not necessarily to the recommended safe levels.<sup>4</sup> Alcohol and tobacco were most commonly discussed and cannabis use was not discussed at all.<sup>4</sup>

AOD issues were generally raised by the patient or identified in the context of presenting symptoms or in screening for related symptoms. AOD was not the primary reason for presentation in any of the studied consultations.<sup>4</sup>

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## Harmful drinking and alcohol dependence

### Māori are more adversely affected by alcohol than other New Zealanders

Alcohol misuse affects all New Zealanders, however there are three identified population groups that suffer the most harm – young people, Pacific peoples and Māori.<sup>6</sup>

It is well established that the highest level of alcohol related harm occurs in young adults. As half the Māori population is aged under 24 years, they are especially affected.

Māori are more adversely affected by alcohol than non-Māori in New Zealand:

- 76% of Māori aged 18 years and over identify themselves as drinkers, and 36% as binge-drinkers<sup>7</sup>
- The prevalence of severe alcohol-related problems in Māori is more than twice that in non-Māori<sup>6</sup>
- Māori are more likely to experience harm from their own or other people's drinking<sup>8, 9</sup>
- Māori are four times more likely than non-Māori to die of an alcohol related condition<sup>8</sup>

The 2007/08 New Zealand Alcohol and Drug Use Survey found that although there was no significant difference between the number of Māori and non-Māori who drink (adjusted for age), Māori were significantly more likely to binge drink (i.e. consume a large amount of alcohol, three or more times a week).<sup>9</sup>

### Drinking culture and youth

New Zealanders generally accept, tolerate and often celebrate binge-drinking and being drunk. The normalisation of alcohol has seen it become an accepted part of culture and offering alcohol is regarded as part of being a good host. For some Māori youth, alcohol is increasingly being linked to their identity and what it means to be Māori.<sup>6</sup>

- 43% of Māori first consumed alcohol when aged 14 years or younger, significantly more than the total population (32%)<sup>9</sup>
- 45% of Māori aged 15 – 17 years reported getting drunk the most recent time they drank alcohol and 25% reported that they had planned to do so<sup>7</sup>
- The majority of Māori youth who drink believe that it is acceptable to get drunk in most situations<sup>7</sup>

### Involve whānau in reducing harms from alcohol

Whānau have an important influence on other whānau members when it comes to drinking. In a survey among Māori, 19% of parents thought it was acceptable for their teenagers to get drunk sometimes and 57% admitted that they or other parents/caregivers supplied alcohol to their teenagers.<sup>7</sup> Targeting parents and other whānau members and providing them with information on the harms of drinking and what they can do to keep their youth safe is important.

 Ask parents to:

- Encourage a delay in the onset of drinking
- Reconsider supplying alcohol to underage youth
- Supervise youth while drinking

### Receiving help for alcohol misuse


The 2007/08 New Zealand Alcohol and Drug Use Survey identified that approximately 1% of women and 2% of men had received help to reduce their level of alcohol consumption in the past year. Overall, Māori (2.4%) were significantly more likely than Europeans (0.9%) to have received help with their drinking.<sup>9</sup>

In addition to those who had received help, 1.2% of New Zealand adults wanted help in the past year to reduce their drinking, but did not receive it. Māori (2.4%) were twice as likely as non-Māori to have wanted help but not received it.<sup>9</sup>

Barriers to receiving help reported by Māori included:

- Psychosocial factors such as fear (34%), social pressure (27%) and lack of time (9%)
- Organisational barriers such as not knowing where to go (26%), not being able to get in touch with the service (10%), no appropriate service (8%), no local service (5%), appointment time unsuitable (5%), lack of transport (15%) or childcare (2%) and cost (3%).<sup>9</sup>

The results of this survey highlight that there is a proportion of people who want help with their drinking and for various reasons are not receiving it. There is an even greater proportion of people who need help but are yet to recognise that their drinking is a problem.

 Consider the barriers to receiving treatment and whether there are ways to assist people in overcoming these e.g. know what local services are available, especially Māori providers, and make an appointment for the patient with a suitable service. Addressing access issues may in turn reduce some of the personal barriers to receiving treatment.

### Managing alcohol misuse in general practice

The Alcohol Advisory Council of New Zealand (ALAC) has developed a three-year action plan to address alcohol misuse and alcohol related harm in Māori.

Primary care is well placed to contribute to the implementation of this action plan and to help address the disproportionate harm from alcohol affecting Māori.

The action plan recognises six key areas:

1. Creating effective partnerships
2. Initiating conversation about alcohol use and its effects
3. Providing quality information to parents/caregivers of young adults
4. Establishing better research
5. Working collaboratively
6. Supporting Māori communities to develop their own solutions

### Screen for alcohol misuse

Take every opportunity to ask about drinking. A simple two to three question screen may be used initially:<sup>10</sup>

Have you ever drunk more than you meant to in the last year?

Have you felt that you wanted to cut down on your drinking in the past year?


If yes, is this something you would like help with?

Answers to these questions should be recorded in the patient notes and used as a comparison for subsequent screening.

There are several more in-depth screening tools suitable for use in general practice to detect alcohol misuse.

The Alcohol Use Disorders Identification Test (AUDIT) is a well-validated ten question tool, covering alcohol consumption, drinking behaviour and alcohol-related problems. The aim of AUDIT is to identify hazardous or harmful drinking before dependency or serious harm occurs.

AUDIT-C is a briefer, three question version of the original test, which has similar validity to the full test in detecting heavy drinking and dependence.<sup>11</sup>

 See [www.bpac.org.nz](http://www.bpac.org.nz) keyword: **addiction-tools** for a copy of AUDIT and AUDIT-C.

AUDIT can also be accessed within the *bestpractice* Decision Support Depression module. An electronic version of the results is incorporated into the patient record.

AUDIT may be administered as an interview or as a self-report questionnaire. While a particular score is considered to be representative of overall drinking behaviour, it is important to look at the responses of each question. This will help identify patterns of use, inform possible strategies for intervention and indicate areas for further assessment. In general, AUDIT scores:<sup>12</sup>

- Between 8 and 15 indicate that advice and education materials on alcohol reduction is required

## Alcohol use is linked to use of other substances

The 2007/08 New Zealand Alcohol and Drug use survey found that using alcohol together with other drugs was relatively common. The most common combination was alcohol with tobacco (30%), followed by alcohol with cannabis (12%), pain killers, sedatives or antidepressants (10%), BZP party pills\* (6%) and ecstasy, amphetamine, heroin or cocaine (4%).<sup>9</sup>


One in five Māori used alcohol with cannabis in the past year, significantly more than the total population.<sup>9</sup>

Misuse of other substances with alcohol is most common in the 18–24 year age group, with prevalence decreasing above the age of 35 years.<sup>9</sup>

\*At the time of this survey, BZP party pills were able to be purchased legally

- Between 16 and 19 indicate that in addition to advice and information, brief counselling and continued monitoring is required
- Of 20 or above indicate that further diagnostic evaluation for alcohol dependence is required

Regardless of their score, if a patient does not respond to the initial intervention, they should be referred to the next level of care.<sup>12</sup>

 The WHO publication “The Alcohol Use Disorders Identification Test. Guidelines for use in primary care” provides additional information on interpreting the results of AUDIT. Available from: [http://whqlibdoc.who.int/hq/2001/who\\_msd\\_msb\\_01.6a.pdf](http://whqlibdoc.who.int/hq/2001/who_msd_msb_01.6a.pdf)

### A brief alcohol intervention

For patients who require a brief intervention for alcohol-related problems, the following method may be used:<sup>12</sup>

1. Present AUDIT screening results
2. Identify risks and discuss consequences
3. Provide medical advice about the harms of excessive alcohol consumption and information about safe drinking limits
4. Seek patient commitment to addressing the problem
5. Identify a goal – reduced drinking or abstinence
6. Follow up and re-administer AUDIT regularly to monitor alcohol use

Alternatively, some clinicians may be more familiar with the FRAMES approach to a brief intervention:<sup>13</sup>

1. **Feedback** – explain that alcohol use may be causing problems
2. **Responsibility** – encourage the patient to take responsibility for changing their behaviour
3. **Advice** – recommend a reduction in drinking or abstinence

4. **Menu of options** – provide information about services where they can receive help from
5. **Empathy** – acknowledge that the process may be difficult but will result in health gains
6. **Self-efficacy** – express praise for the patient’s willingness to consider a change

The methodology behind the FRAMES approach is to avoid confrontation and lead the patient towards making their own decisions.<sup>13</sup>

### Referral for possible alcohol dependency

Patients who have been identified with a possible alcohol dependency may be referred for specialist treatment. Many patients are reluctant or unwilling to seek treatment so following up with both the treatment provider and the patient to ensure that treatment has been commenced and is acceptable, is helpful. The GP has an opportunity to begin motivating patients to consider change.

An alcohol withdrawal regimen may be necessary for some patients if they are likely to experience moderate to severe symptoms when alcohol is stopped. This includes symptoms such as shaking, sweating, panic and anxiety that are apparent after a period of abstinence, e.g. overnight, or in people who drink to avoid these symptoms.<sup>13</sup> Community based withdrawal can be used successfully in the majority of cases.<sup>12</sup> In areas where specialist treatment is not available, patients may be managed in primary care, along with support from community-based organisations.<sup>12</sup>

Patients who do not require (or decline) a formal withdrawal process can be advised to slowly reduce their daily intake of alcohol over a period of days or weeks.<sup>13</sup> Abrupt cessation of alcohol without support or a withdrawal regimen is not recommended due to the risk of complications such as delirium tremens and seizures.<sup>13</sup>

### Medical assessment prior to referral

If a patient is to be referred for treatment of alcohol dependency (or if community withdrawal is to take place),

assess for the following:<sup>14</sup>

- Alcohol-related medical problems such as gastritis, gastrointestinal bleeding, liver disease, cardiomyopathy, pancreatitis, neurological impairment, electrolyte imbalances, nutritional deficiencies
- Use of other substances e.g. drugs, sedatives
- Unstable mental health conditions e.g. delirium, psychosis, severe depression, suicidal ideation



## A focus on alcohol withdrawal

An alcohol withdrawal regimen may be required for patients who are likely to suffer moderate to severe symptoms when alcohol is stopped. The patient must be both physically and psychologically ready for the withdrawal and prepared for the subsequent abstinence.

Withdrawal management can be done on an inpatient or outpatient basis.

Indications for inpatient detoxification include:

- Alcohol intake exceeding 150 g per day (equivalent to 15 standard drinks e.g. approximately two bottles of wine, 15 cans of regular strength beer or a 500 mL bottle of 37.5% spirits)
- Co-existing serious general medical or mental health conditions e.g. ischaemic heart disease, epilepsy, psychosis
- Severe symptoms anticipated e.g. past history of delirium tremens following withdrawal
- Previous failure of outpatient withdrawal
- Poor psychosocial support
- A living situation that encourages continued alcohol consumption

In areas where speciality services are not available, or if there is a shortage of space or personnel, GPs may be asked to assist in a community-based withdrawal. GPs should be cautious when assessing a patient who requests a community based withdrawal that does not

involve the local AOD service. They may have been advised to undergo inpatient withdrawal or may be drug seekers.

Community withdrawals can be safely carried out in cases where mild to moderate withdrawal is expected and adequate support/supervision is present.

The greatest risks are unforeseen complications and drinking reoccurring. Both of these risks can be monitored by daily observations and daily supply of medicine.

Remember that:

- It is not possible to safely withdraw patients with alcohol dependence who continue to use alcohol
- Medical treatment should always be accompanied by psychosocial support

## Management of withdrawal symptoms

Use of a benzodiazepine, such as diazepam, combined with supportive care can assist in reducing the severity of withdrawal symptoms.<sup>15</sup> During withdrawal, benzodiazepines serve as a substitute for alcohol and also reduce the incidence of delirium tremens and seizures.<sup>14</sup>

Benzodiazepines should not be continued for more than seven days due to their addictive potential. It is recommended that medicine is supplied by the GP or practice nurse to the patient on a daily basis.

There are several regimens that can be used, based on reducing the dose of diazepam over a five to seven day period. Regimens should be tailored to each patient's individual circumstances and likely severity of symptoms.

## Alcohol withdrawal syndrome

Alcohol enhances the inhibitory effect of gamma-aminobutyric acid (GABA) on neurons, lowering neuronal activity and increasing the excitatory response. Over time, chronic alcohol use leads to tolerance to this response and more alcohol is required to produce the same inhibitory effect. If alcohol is then removed acutely, the excitatory response remains, but without the suppressive GABA effect. This then leads to the signs and symptoms of alcohol withdrawal, caused by neuropsychiatric excitability and autonomic disturbance.<sup>14</sup>

Common signs and symptoms which may occur after reducing or stopping alcohol after chronic use include:<sup>14, 15</sup>

- Tremor of tongue, eyelids and extended hands
- Anxiety, agitation, confusion
- Sweating
- Palpitations
- Nausea, vomiting, diarrhoea, loss of appetite
- Insomnia
- Vivid dreams
- Craving for alcohol
- Headache

Rarer but more concerning symptoms include hallucinations, seizures and delirium tremens (DTs). DTs may present within two to four days of the last drink and are characterised by disorientation, persistent visual and auditory hallucinations, agitation, trembling and autonomic signs caused by activation of stress hormones (tachycardia, hypertension, fever).<sup>14</sup>

Withdrawal symptoms usually start to resolve within several hours, although may take up to four to six days.

An example regimen based on a five day treatment period is:

Treatment day	Dose instructions	Total dose
Day 1	10 mg, 4 times per day	40 mg
Day 2	10 mg, 4 times per day	40 mg
Day 3	5 mg, 4 times per day	20 mg
Day 4	5 mg, 2 times per day	10 mg
Day 5	5 mg, at night	5 mg

**Anticonvulsants** e.g. carbamazepine, are not traditionally used for alcohol withdrawal,<sup>15</sup> but may be considered by specialists in some situations.

**Antidepressants** e.g. SSRIs, are not indicated in the early stages of withdrawal but may be appropriate at a later stage.<sup>15</sup>

**Antiemetics** such as metoclopramide may be required for nausea in the first two to three days.

**Nutritional supplements** should be given, especially in under-nourished people. Thiamine deficiency is common in those with chronic alcohol use and can result in Wernicke's Encephalopathy. Thiamine hydrochloride (vitamin B1) tablets or a multivitamin containing thiamine and folate may be prescribed.

**Fluid** intake should be increased to prevent dehydration.<sup>15</sup>

**Complementary therapies** such as massage (e.g. mirimiri), acupuncture and herbal remedies (e.g. rongoā) may be helpful to some patients to assist coping with withdrawal symptoms.


### Monitor the patient daily

Ask the patient to attend the practice each day for observations that can be performed by the practice nurse.

Monitor pulse, temperature and blood pressure and observe for:

- Tremor
- Orientation
- Dehydration
- Decreased level of consciousness
- Evidence of continued drinking

The Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar) may be used to formally evaluate the severity of withdrawal symptoms.

 CIWA-Ar available from: <http://images2.clinicaltools.com/images/pdf/ciwa-ar.pdf>

### What to do if detoxification fails

If a person recommences drinking during their withdrawal, diazepam should be ceased immediately and the patient asked to consider trying again when they are feeling more prepared.

Scheduling a follow up appointment with the GP in a few days time is worthwhile as it allows the discussion of “what went wrong” and “what could be put in place next time to avoid this”?

Consider consulting the local AOD service for further advice if required.

### Avoiding relapse

It is important to ensure that following withdrawal, a relapse prevention programme is organised in conjunction with the patient’s support network of whānau and friends. Referral to a self help group e.g. Alcoholics Anonymous, should be considered.

Identify individual triggers that may contribute to relapse such as stress, anxiety, social phobia or depression.<sup>15</sup> Discuss ways these triggers can be managed to avoid drinking. The treatment of any underlying mental health problem, including co-existing addiction is an important safeguard against alcohol relapse.

### Medicines to assist in preventing relapse

Anti-craving medicines, such as naltrexone and acamprosate, may be prescribed as an adjunct to psychological support, to assist patients in their long-term withdrawal from alcohol and to reduce the severity of relapse if it does occur. Naltrexone is associated with reduced number of days to first drink, reduced number of drinking days and reduced amount of alcohol consumed per occasion.<sup>16</sup> There is less evidence for acamprosate but people taking this medicine have also shown success in maintaining abstinence.

An alcohol deterrent, such as Disulfiram, may be considered for highly motivated patients. This is a negative behavioural reinforcement.

Choice of an anti-craving or deterrent medicine depends on drug interactions, patient experience, likely adherence to dosing, potential adverse effects and cost.

**Naltrexone** is a narcotic antagonist. It is not fully understood how naltrexone works in alcoholism, but it exerts its effect through interruption of alcohol reward pathways. Naltrexone has been shown to support abstinence, reduce alcohol consumption and lessen craving in some people. It does not cause an alcohol aversion. Naltrexone is contraindicated in acute hepatitis or liver failure and liver function monitoring is usually recommended in long-term treatment. Naltrexone is available under Special Authority and is fully subsidised for up to 12 weeks. To be eligible the patient must be enrolled in an alcohol dependence treatment programme. The usual dose of naltrexone is 50 mg/day.<sup>16</sup>

**Acamprosate** is a psychoactive drug which decreases the desire for alcohol. It does not cause an alcohol aversion. Its mechanism of action is not fully understood but it acts on the brain’s glutamatergic pathways through NMDA receptor systems that are involved in alcohol dependence and withdrawal. Treatment is initiated as soon as possible after withdrawal has been completed and may be continued for up to one year, even if relapse occurs.<sup>15</sup> Acamprosate is generally well tolerated and may

be particularly useful in patients with hepatic impairment (for which naltrexone is contraindicated). Acamprosate is not subsidised and the approximate cost to the patient for one month's supply is \$300. The usual dose of acamprosate is two 333 mg tablets, three times per day (lower doses are recommended for patients with renal impairment).<sup>16</sup>

**Disulfiram** (Antabuse) reacts with alcohol by inhibiting the enzyme aldehyde dehydrogenase, causing an accumulation of acetaldehyde. This results in adverse symptoms such as flushing, palpitations, nausea, faintness and in some cases collapse and acts as a disincentive to alcohol consumption. In rare cases the consequences of combining disulfiram and alcohol may be fatal.<sup>15</sup> Disulfiram is best used in patients who appear to be motivated and

psychologically stable. Disulfiram can be commenced 24 hours after alcohol is ceased and may be continued for up to six months or longer if required. It is contraindicated in people with severe renal or hepatic impairment or ischaemic heart disease. It is not recommended in people with hypertension or diabetes. Disulfiram has been associated with severe (sometimes fatal) hepatitis or hepatic failure (even without a prior history of abnormal hepatic function) and onset of depression or psychosis - mental status should be monitored. In addition, patients should be educated to avoid "hidden" sources of alcohol such as mouthwash. Disulfiram is fully subsidised. The usual dose is 500 mg/day for one to two weeks, followed by an average maintenance dose of 250 mg/day (range 125 - 500 mg per day depending on adverse effects).<sup>16</sup>

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## Cannabis misuse

### Cannabis use is prevalent among Māori

According to the 2007/08 New Zealand Alcohol and Drug Use survey, almost half of New Zealand adults have used cannabis at some point in their life.<sup>17</sup> Māori have significantly higher rates of cannabis use than the total population. One in four Māori had used cannabis in the past year, compared to the national average of one in seven.<sup>17</sup> Although the most common age for first trying cannabis was 15-17 years, Māori were significantly more likely than non-Māori to have been aged 14 years or younger when they first tried cannabis.<sup>17</sup>

Young people, particularly Māori, have been consistently identified as a high risk group with regard to cannabis-related harm. Cannabis use has been linked to truancy, poor academic performance, behavioural problems and a pattern of multiple substance misuse from adolescence to young adulthood.<sup>18</sup>

People with co-existing mental health disorders and those who also use other drugs have been identified as being at greater risk of cannabis related harm.<sup>18</sup>

### Effects of cannabis

There are three main forms of cannabis:

- Marijuana - dried leaves, flowering tops and stalks of the cannabis plant. The most common and least potent form of cannabis.
- Hashish - dried blocks of cannabis resin which produces a more intense effect than marijuana
- Hash oil - the thick oily liquid extracted from hashish and the most potent form of cannabis

The primary psychoactive ingredient in cannabis is THC (Delta-9 tetrahydrocannabinol). The most common way of using cannabis is by smoking it, which is associated with similar health risks to tobacco smoking.<sup>19</sup> Effects of cannabis use vary from relaxation and altered perception to more serious psychological sequelae (Table 1).

People with mental health disorders are especially vulnerable to the adverse effects of cannabis and are at risk of worsening their condition or illness.<sup>19</sup>

Concurrent use of cannabis significantly compounds the effect of alcohol.<sup>19</sup>

The use of cannabis has also been linked to decreased libido, irregular menstrual cycles in women and lower sperm counts in men.<sup>19</sup>

**Cannabis dependence and overdose**

Cannabis can induce dependence in a significant number of regular users. Sudden withdrawal may result in symptoms such as anxiety, appetite loss and gastrointestinal disturbance. Symptoms usually resolve within one week, although sleep disturbance may persist for several weeks.<sup>19</sup>

Acute toxicity from an overdose of cannabis is unlikely. It has been estimated that a lethal dose of cannabis is 40,000 times that of a usual intoxication dose.<sup>19</sup>

**Identifying patients that may be using cannabis**

All patients should be assessed for substance misuse periodically and routinely. It is recommended that patients

**Cannabis psychosis**

Cannabis use, particularly heavy and frequent use, has been associated with a condition known as “cannabis psychosis”, characterised by delusions, confusion, memory loss and hallucinations, lasting several days.<sup>19</sup>

Cannabis is also known to exacerbate pre-existing psychoses and bring forward latent psychoses, such as schizophrenia, depression and psychotic episodes.<sup>19</sup>

Use of cannabis by a person with an existing or previous mental illness, or a family history of mental illness is strongly advised against.

**Table 1:** Effects of cannabis use<sup>19</sup>

Level of use*	Common signs and symptoms
Small to moderate amounts	<ul style="list-style-type: none"> <li>▪ Relaxation</li> <li>▪ Loss of inhibition</li> <li>▪ Altered perceptions; heightened sense of sound and vision</li> <li>▪ Impaired coordination</li> <li>▪ Laughter</li> <li>▪ Increased appetite</li> </ul>
Moderate to high amounts	<ul style="list-style-type: none"> <li>▪ Confusion</li> <li>▪ Hallucinations</li> <li>▪ Paranoia</li> <li>▪ Loss of coordination</li> <li>▪ Restlessness</li> <li>▪ Depression</li> </ul>
Long-term/chronic use	<ul style="list-style-type: none"> <li>▪ Memory loss and altered brain function: impaired ability to learn and remember, especially short-term memory</li> <li>▪ Concentration: difficulty in concentrating for longer periods of time</li> <li>▪ Motivation: lack of motivation for sport, school and work, decreased energy levels</li> </ul>

\* It is difficult to quantify how much small, moderate and high amounts of cannabis are as it depends on the potency of the source plant and the tolerance of the user.

## Interactions between cannabis and other drugs and medicines

Interactions between cannabis and other drugs include:<sup>3</sup>

Medicine/drug	Adverse effects when combined with cannabis
Amphetamines, cocaine, other sympathomimetics	Additive hypertension and tachycardia, possible cardiotoxicity
Atropine, scopolamine, antihistamines, other anticholinergics	Additive tachycardia and drowsiness
Amitriptyline, amoxapine, desipramine, other tricyclic antidepressants	Additive tachycardia, hypertension, drowsiness
Benzodiazepines, alcohol, lithium	Additive drowsiness and CNS depression
Theophylline	Increased theophylline metabolism

There have been isolated reports of hypomania occurring with concurrent use of cannabis and fluoxetine or disulfiram.<sup>3</sup>

over the age of 14 years be assessed at least every three years.<sup>20</sup> Given the evidence of early use,<sup>17</sup> screening for cannabis use in Māori may need to begin at an earlier age.

### Screening for cannabis use

Include questions about cannabis and other substance misuse within the context of a general health review. This may help to “normalise” the issue and lessen both doctor and patient discomfort. Careful listening, accurate understanding of the patient’s concerns and a non-judgemental attitude are key to establishing trust and empathy.


A simple two to three question screening tool may be used to ask about substance misuse. This could be combined with the alcohol screening questions (see Page 23).

Have you ever used drugs more than you meant to in the last year?

Have you felt that you wanted to cut down on your drug use in the past year?

If yes, is this something you would like help with?

The **Cannabis Use Disorders Identification Test–Revised (CUDIT–R)** is a more formal screening tool that may be used to identify problem use of cannabis. This tool has been developed by New Zealand researchers, based on the well-validated AUDIT tool for alcohol screening.<sup>21</sup> CUDIT–R is an eight item questionnaire with a maximum possible score of 32. Scores of 8 or more may indicate hazardous cannabis use. Scores of 12 or more indicate a possible cannabis misuse disorder, for which further intervention may be required.

 A copy of CUDIT-R is available from [www.bpac.org.nz](http://www.bpac.org.nz) keyword: **addiction-tools**

### Managing problem use of cannabis

If screening has identified a possible cannabis misuse disorder, the next step is to decide whether brief

intervention or referral to specialist services is necessary, depending on the magnitude of the problem and the patient's wishes.

Brief intervention may include:

- A discussion about the harms associated with cannabis use, both in general and in relation to the individual circumstances of the patient
- An agreement that cannabis use is ceased or reduced
- Provision of educational material and web-based resources
- Arranged follow up to ensure that action has taken place

Cannabis is an illegal drug with a well recognised potential for causing harm, and any use should be discouraged. However in reality some people will continue to use this drug. In these situations, people should be advised about the health impacts and recommended to limit intake to occasional use only.<sup>19</sup>

If a patient's use of cannabis is creating significant medical, mental health or social problems, or if brief intervention has failed, refer to (or seek advice from) a specialist addiction service.

 Contact details of local alcohol and other drug counselling and treatment services is available by phoning the Alcohol Drug Helpline (0800 787 797) or visiting [www.addictionshelp.org.nz/Services/Home](http://www.addictionshelp.org.nz/Services/Home)

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## Problem gambling

### **Māori are at increased risk of problem gambling**

Problem gambling is a significant social and health issue in New Zealand, with Māori and Pacific peoples disproportionately affected by gambling harm.<sup>22</sup>

The 2006/07 New Zealand Health Survey identified that 1.7% of the New Zealand adult population were classified as problem or moderate-risk gamblers. This represents one in 58 adults, most commonly in the 35–44 year old age group.<sup>22</sup>

After adjusting for differences in age, Māori were approximately four times more likely to be problem gamblers than people in the total population.<sup>22</sup> Those who were problem gamblers were nearly four times more likely to be current smokers, five times more likely to have hazardous drinking behaviours and also had higher rates of anxiety and depression.<sup>22</sup>

Sociodemographic factors found to be significantly associated with problem gambling include:<sup>22</sup>

- Being aged 35-44 years
- Being of Māori or Pacific ethnicity
- Having fewer educational qualifications
- Living in more socioeconomically deprived areas (Deprivation quintiles 4 and 5)

### **Identifying and managing problem gambling in general practice**

Problem gambling is a behavioural addiction which can be identified, understood and managed in a similar way to substance misuse.

Due to issues such as shame and stigma, people who have a problem with gambling will not always reveal this information to their GP or other primary healthcare provider.<sup>24</sup> Be alert to conversational “red flags” which may

arise in the course of a consultation, such as discussion surrounding:<sup>22</sup>

- Loss of control – betting more than can be afforded
- Escalating behaviour – needing to gamble with more money to get the same feeling of excitement
- Chasing – returning to try to win back losses
- Borrowing – borrowing money or selling items to get money to gamble
- Lying – about how much money is spent on gambling, how often gambling is taking place
- Problem recognition – feeling that there might be a problem with gambling
- Criticism – other people criticising gambling
- Feelings of guilt – feeling guilty about gambling
- Negative effects on health – e.g. stress, anxiety, headaches, sleep disturbance
- Financial problems – for the individual or household

### Screening for gambling

Consider routine screening for problem gambling, especially in at risk populations (e.g. Māori, Pacific, age under 50 years, presence of depression, substance misuse). Many people with a gambling problem do not seek help until they reach a crisis point, preferring to try to cope by themselves. Early intervention may help to alleviate the pressure of dealing with a gambling problem alone and prevent it from escalating into a more serious problem.<sup>26</sup>

A simple two to three question screen is:<sup>27</sup>

Have you ever felt the need to bet more and more money?

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


If yes, is this something you would like help with?

### Insights from Ngā Ringa Ringa Tūmanako: Hands of Hope – the Māori gambling helpline<sup>23</sup>

In addition to its main service, Gambling Helpline New Zealand provides a subsidiary service specifically for Māori affected by gambling, staffed by Māori counsellors. The counsellors say that Māori contacting the Gambling Helpline have several factors in common. Many grew up to view gambling as a normal part of life, it was viewed as a “fun thing” that adults did. When gambling became a problem, it was difficult to stop as they were being encouraged by the rest of the whānau to keep gambling and they felt alone and alienated. On the other hand, Māori with whānau who did not gamble felt unable to talk about their gambling problems and seek support due to overwhelming feelings of shame.

For many, gambling began with betting on horses and playing housie but now a significant proportion of problem gambling stems from the use of pokie machines (non-casino gambling machines). Māori women in particular often speak about the social aspect of gambling. They meet their friends at the pokie machines and this, along with the hope of a big win, provides a temporary escape from their normal life. However this may soon be followed by feelings of remorse and fear when money is lost that is needed for food and rent. Interestingly, the largest concentration of pokie machines is in low socioeconomic areas where there is a higher than average Māori population.

The Eight Gambling Screen is more comprehensive self-administered screening test which can help to identify early signs of problem gambling. This is an eight item questionnaire, with four or more “yes” answers indicating that gambling may be a problem. It was developed for use by New Zealand GPs and validated in New Zealand in a variety of primary and secondary care settings.

 A copy of the Eight Gambling Screen is available from: [www.bpac.org.nz](http://www.bpac.org.nz) keyword: **addiction-tools**

### Managing problem gambling

The extent of an identified gambling problem guides further management.

If the patient has indicated that they are a regular gambler, but it is not currently affecting their wellbeing, intervention may include:<sup>26</sup>


- A discussion about how gambling can easily get out of control
- An agreement to reduce the level of gambling or maintain it at a responsible level
- Encouragement to seek support from whānau
- Flag the patient’s notes to follow-up discussion at the next appointment

If the patient is a regular gambler and it appears to be causing them harm, but they are not ready to acknowledge this, intervention may include:<sup>26</sup>

- A discussion about controlling gambling and harm minimisation
- Investigation of possible mental health issues and other substance use
- Provision of educational materials and direction to web-based resources
- Encourage use of gambling helpline services (see below for details)
- Flag the patient’s notes for follow up and reassessment


### Whānau of problem gamblers are affected too

Problem gambling significantly affects the health and wellbeing of not only the person gambling, but also their whānau and friends. In a study of over 1500 general practice patients in New Zealand, just under one-fifth (18%) had been negatively affected by another’s gambling behaviour.<sup>25</sup> Some of these patients indicated that they would like support or help from their GP to deal with this. Those who were affected by another’s gambling, were also significantly more likely to be affected by depression.<sup>25</sup>

 When screening for problem gambling, consider that people other than the person gambling may require support and treatment.

If the patient acknowledges a problem with gambling that is causing them harm, intervention may include:<sup>26</sup>

- Positive affirmation for acknowledging that help is needed
- Discussion about referral options (including Māori providers) and what best suits the patient’s needs
- Make an appointment for the patient if possible
- Consider if any further treatment is required e.g. treatment for depression or anxiety
- Make an appointment for follow up

 The Gambling Helpline Service is a 24 hour freephone service, offering immediate support for people with gambling problems and their families. The service may be accessed anonymously if required. The helpline offers specific services for Māori, Pacific and youth, as well as an online chat room and forum and support by email and text.

Ph: **0800 654 655**

Web: [www.gamblingproblem.co.nz](http://www.gamblingproblem.co.nz)

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## Resources

Addictions Treatment directory:

A directory containing regional data of all addiction treatment and advice services in New Zealand. This database is searchable by region, type of addiction service, category (e.g. Kaupapa Māori) and type (e.g. one-on-one, group counselling)

Web: [www.addictionshelp.org.nz/Services/Home](http://www.addictionshelp.org.nz/Services/Home)

## Help lines:

Alcohol Drug helpline

Ph: 0800 787 797 (10am -10pm)

Web: [www.alcoholdrughelp.co.nz](http://www.alcoholdrughelp.co.nz)

Gambling Helpline New Zealand

Ph: 0800 654 655

Web: [www.gamblingproblem.co.nz](http://www.gamblingproblem.co.nz)

## Educational resources:

Alcohol Advisory Council of New Zealand (ALAC)

Resources, information, guidelines

Web: [www.alac.org.nz](http://www.alac.org.nz)

Alcohol and Drug Association New Zealand (ADANZ)

Alcohol and other drug information (management of addictions treatment directory and alcohol drug helpline)

Web: [www.adanz.org.nz](http://www.adanz.org.nz)

Foundation for Alcohol and Drug education (FADE)

Resources and education

Web: [www.fade.org.nz](http://www.fade.org.nz)

Matua Raki

National addiction workforce development programme

Web: [www.matuaraki.org.nz](http://www.matuaraki.org.nz)

New Zealand Drug Foundation

Education and resources

Web: [www.nzdf.org.nz](http://www.nzdf.org.nz)

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