



**HASANZ**

HEALTH & SAFETY ASSOCIATION NZ

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**Legalising cannabis  
and the impact on  
impairment at work**

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# Executive summary

**The Health and Safety Association of New Zealand (HASANZ) is strongly encouraging Government to consider developing guidelines around cannabis as an impairment risk at work – should the substance be legalised following the October 17 referendum.**

While HASANZ has no position on the referendum itself, this paper sets out the potential impacts on New Zealand organisations and workers, and the need for greater awareness about impairment-related risks at work, if recreational cannabis is legalised.

Currently as it stands the Cannabis Legalisation and Control Bill and referendum information states that any healthy and safety at work issues relating to legalisation will be picked up by other legislation, namely the Health and Safety at Work Act (HSWA). This does not go far enough and risks leaving New Zealand organisations unclear about how to proceed in managing cannabis in a work environment.

If cannabis is legalised, additional resources will be required to support New Zealand organisations to educate, inform and support them to manage cannabis as a legal substance. A coherent position statement or guidance from the regulators, including WorkSafe NZ, will also be required. HASANZ wants to work closely with these agencies and Government to develop this guidance.

Let's be clear – cannabis is not a new substance in New Zealand. However, if the legal context around it is to change then organisations, in particular small to medium sized enterprises (SMEs) with fewer resources and support to draw on, will need simple, supportive and evidence-based guidance to support them to develop an impairment policy which fully considers cannabis as a legal substance.

Through international evidence and experience to date we know that the presence of a substance does not necessarily translate to impairment. This is particularly so with cannabis where current testing regimes are currently unable to measure the level of impairment in a person.

For this reason, many workplaces will be looking for guidance around what constitutes 'safe' levels of the presence of a substance, and how that applies in different contexts.

Impairment can be caused by a multitude of factors, and impairment caused by cannabis needs to be addressed in the workplace as part of a wider and comprehensive impairment policy.

Experience in Canada, which legalised recreational cannabis in 2018, shows those organisations which had a thorough impairment policy in place, and a supportive work culture, were more successful in managing cannabis as a legal substance.

Part of the development of any impairment approach considering cannabis as a legal substance will also need to consider the disproportional number of Māori, and males who are convicted of minor drug offences related to cannabis. This sits alongside the disproportionate number of Māori who are injured in the workplace. Consideration is needed to understand the cause and impact to improve their health and safety at work outcomes.

Regardless of the referendum result, cannabis will remain an impairment risk at work. This is a prime opportunity for the Government and the regulators, including WorkSafe NZ, to work with industry, HASANZ and health and safety sector groups to develop guidelines around cannabis as an impairment risk at work.

Without this work, organisations across New Zealand, in particular SMEs, risk taking an ad hoc and potentially inadequate approach to managing cannabis as an impairment risk.

# Background



## What is cannabis?

Cannabis is one of the most widely available illicit drugs in New Zealand. It comes from the *Cannabis sativa* plant and contains the active ingredient THC (tetrahydrocannabinol). The more THC in a plant, the stronger its effects when used as a drug.

## Current cannabis laws and penalties

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The Misuse of Drugs Act 1975 is the law which currently classifies non-medicinal Cannabis as a Class C controlled drug. The penalties associated with recreational cannabis range from a \$500 fine for possession to a 14-year jail term for its supply or manufacture.

The Misuse of Drugs Amendment Act 2019 came into force on 13 August 2019. One of the changes was to affirm the Police discretion to prosecute for possession and use of controlled drugs. It allows for discretion to consider whether a health approach is more beneficial than a criminal approach. The discretion emphasises the Government's health-based approach to personal drug use, and reinforces the Police focus on those who profit from drug dealing, and not those who use illicit drugs.

The Misuse of Drugs (Medicinal Cannabis) Regulations 2019 came into effect on 1 April 2020, enabling the Medicinal Cannabis Scheme to become operational. This means that medical practitioners are now able to prescribe medicinal cannabis products which have been approved under the Medicines Act 1981.

The number of people being convicted of cannabis offences has been in steady decline since 2010 when 7,116 people were convicted until 2019 when there were only 2,753 convictions. What has not changed however are the disproportionate numbers of Māori being convicted and the disproportionate number of males. During 2010-2019 Māori were over-represented, with 43%-47% of all cannabis related convictions, when they only accounted for 16.5% of the population in 2018. This compares to Europeans who accounted for 51-56% of the convictions for the same period but represented 70% of the population. The number of males is also disproportionate ranging from 82-85% of the total convictions during the same period.

A longitudinal study of a Christchurch cohort found that an arrest and/or conviction for a cannabis related offence did not reduce the use of cannabis. Of those arrested and/or convicted, 95% either increased their use or continued with the same level of cannabis use subsequent to their arrest.

Otago University Faculty of Law Professor Andrew Geddis suggests that:

*"Criminalising drug taking to stop the problem of addiction is like making sex illegal for under 20-year-olds in order to prevent teenagers getting STDs."*

Geddis says the social harm done by stigmatising drug users as 'criminals' and burdening them with convictions that radically limit their future options is far greater than any benefit gained from reducing harmful drug taking.

## The referendum

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At the New Zealand Election in October 2020 voters will have the opportunity to vote on the Cannabis Legalisation and Control Referendum.

The proposed Cannabis Legalisation and Control Bill sets out a way for the Government to control and regulate cannabis. This regulatory model covers how people can produce, supply, or consume cannabis. The Bill's main purpose is to reduce cannabis-related harm to individuals, families/whanau and communities. The proposed Bill does not cover medicinal cannabis, hemp, driving while impaired or workplace health and safety issues as it is considered that these are covered by existing laws.

This is a non-binding referendum which means if more than 50% of voters vote yes, then the Government can introduce the Bill into parliament to become law. If more than 50% of voters vote no, then recreational use of cannabis will remain illegal under the existing law.

## What's missing?

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It is HASANZ's view that there is a gap in the Bill around the impact on work. For the Government to suggest in their Cannabis Legalisation and Control referendum information that any issues relating to health and safety at work, and driving while impaired are dealt with by other legislation, does not go far enough.

Health impacts work, and work impacts health. If cannabis use is seen as a health issue, then we need to understand its impact on work. Under the HSWA organisations have a requirement to protect workers from harm. Workers also have the responsibility to turn up fit for work and consider their own safety and ensure their actions do not harm the health and safety of others. Workers can currently ingest or inhale cannabis in their own time, the difference is that it will no longer be illegal if the Bill is enacted. Putting the risk firmly in the hands of workers and the organisations they work for.

However, many organisations may be unaware of this consequence, despite cannabis remaining an impairment risk whether it is a legal, or illegal substance. Even if they are aware of this, many organisations, particularly SMEs, will be unsure of the steps to manage the associated risks to the individual and the other workers around them.

The Canadian experience suggests that prior to legalisation there in 2018, many organisations did not have impairment policies, and where they did exist, they were typically not reviewed or evaluated to ensure that they are fit for purpose.

HASANZ believes that guidance is needed alongside the Bill to support organisations manage the legalisation of cannabis in a work context. This includes support to assist organisations to understand their responsibilities, and provide them with guidance on how to improve their performance in managing impairment-related risks. It is possible to work with larger organisations who have more resources to leverage off their supply chains to facilitate change in this area, to improve health and safety at work.

We cannot expect all organisations to recognise the impairment risks at work with cannabis as a legal substance, and act on it. This needs a collaborative approach across organisations. HASANZ and its members would welcome the opportunity to work with Government and the health and safety regulators, on this initiative.

## Drug use and work

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Under the current New Zealand legislation the use of recreational cannabis is illegal, so if a worker is found to have cannabis in their system it is a breach of the Misuse of Drugs Act 1975, which is a criminal offence and reason to be dismissed in many work environments. If convicted, the person will have the stigma of that conviction and will find it more difficult to get further work.

Under the proposed Bill, the use of recreational cannabis for people 20 years or older will be legal. The proposed Bill does not protect those under the age of 20, who are potentially one of the most vulnerable groups.

Experience from Canada has shown an increase in people reporting cannabis use in most age groups since legalisation in October 2018.

Figure 1: Cannabis use: Changes in Canada from 2018 to 2019

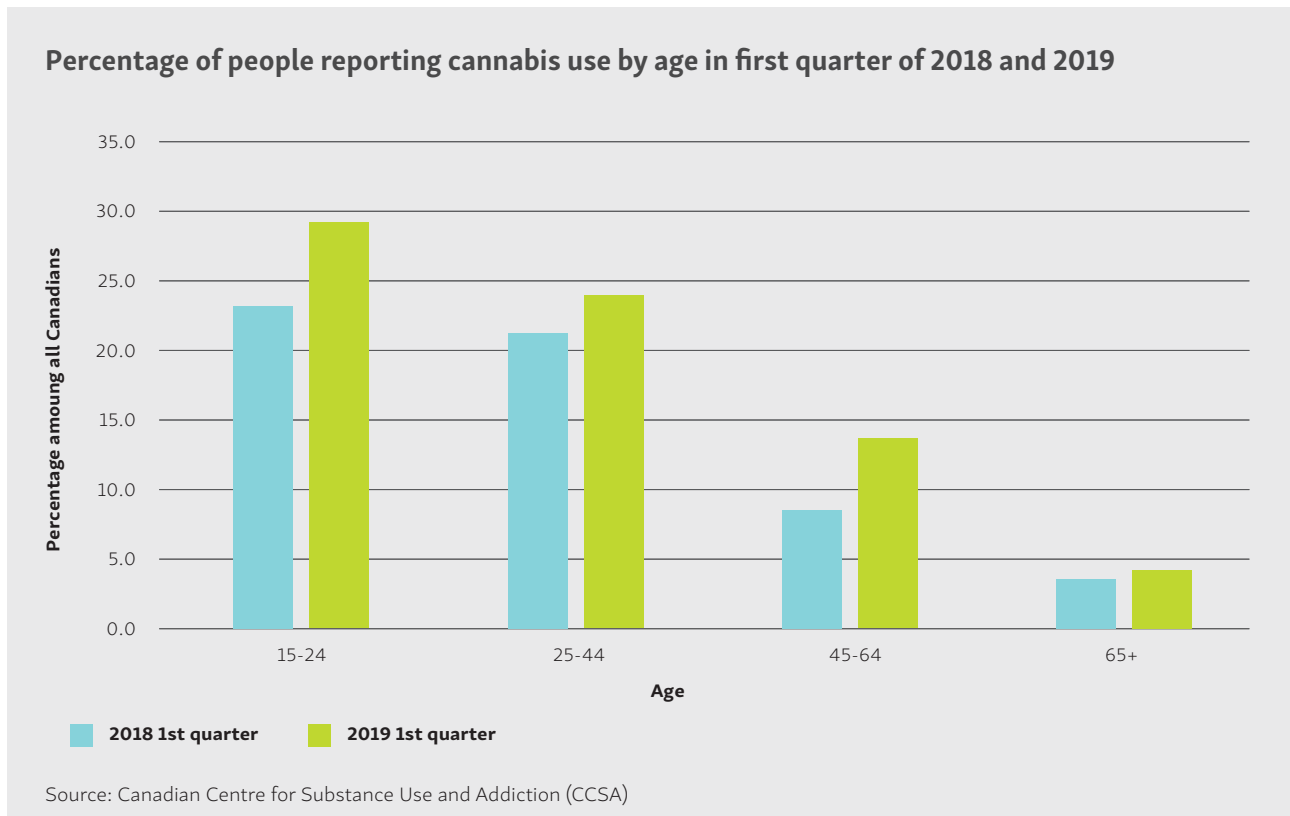
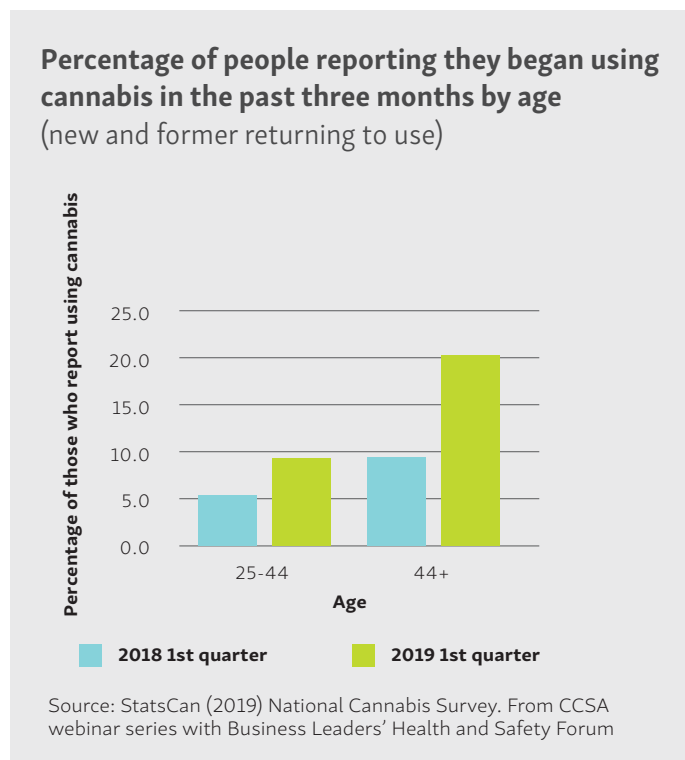


Figure 2: New cannabis use: Changes in Canada from 2018 to 2019.



It has been important to also note the increase in use in the 45-64 age range in cannabis use reported among Canadians since legalisation, which was not predicted. This provides some insight for New Zealand organisations as they navigate how to manage cannabis as a potentially legal substance.

Possibly more important is those workers who may start using cannabis if the substance is legalised. We can see this has had a surprising impact in one particular age bracket.

## Focusing on impairment

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The same drug can impact different people in different ways. Measuring the presence of a drug using drug testing is one measure that can be used to confirm whether a substance has been used, but it does not consider whether the person is impaired, or to what level they are impaired and whether they are safe to carry out required tasks.

Impairment can be caused by a multitude of factors including but not limited to alcohol, illicit or prescription drugs, fatigue, stress, anxiety, poor levels of health and wellbeing, the work environment, and distraction. Because of this, cannabis should be treated like other causes of impairment, regardless of its legal status, and included in the wider context of impairment and risk within the workplace.

Put simply, manage the risk of impairment, not the substance.

Impairment is not defined in the HSWA, however the World Health Organisation defines impairment in the context of the health experience, as “*any loss or abnormality of psychological, physiological or anatomical structure or function – temporary or permanent.*” Examples of impaired behaviour include changes in memory, concentration, sleep, motor function, light sensitivity, behaviour, or mood. These examples of impaired behaviour, and others where relevant, should be detailed in an organisation’s impairment policy to ensure there is a shared understanding by all parties, as it relates to risk.

When impairment has been identified by an organisation as a risk there is an expectation that the risk will be managed in a way that is proportionate to the task being undertaken, and the level of risk identified.

High-risk environments are likely to have a zero or low tolerance to impairment whilst lower risk environments might be more tolerant. Many high-risk organisations or businesses with high-risk environments will already have well thought out impairment plans in place. However, there are many other organisations who have a proportion of their workforce involved in high-risk activities throughout the working day who may not have considered the impact of cannabis as a legal substance as part of their impairment policy.

For example New Zealand currently has nearly 33,000 people employed in the road freight industry (2% of the workforce), with trucks accounting for 92% of New Zealand’s total freight by weight. In addition, we have many other people who drive as part of their job – taxis,

buses, boats, planes, trains, forklifts and mums and dads driving to and from work and as part of their required work tasks. The Land Transport Act 1998 and the Land Transport Amendment Act 2009 deal with driving, and the latter considers both presence of qualifying drugs and driving impairment if the person fails the compulsory impairment test. However, have these organisations who require their workers to drive as part of their daily work considered how they will manage the risk of impairment as part of a strategic policy?

As an example internationally, since recreational cannabis was legalised in Colorado, USA, cannabis-related traffic deaths increased by 151%, from 55 in 2013 to 138 in 2017. *National Highway Traffic Safety Administration 2006-2017.*

However other, less recent examples, show slightly different results. The *Journal of Safety Research* studied the prevalence of cannabis among drivers involved in fatal crashes in the USA following the introduction of medical marijuana laws. This study considered the time period between 1992-2009 and found that the increased prevalence of cannabis was only detected in a minority of states, and any observed increases were a one-time change in prevalence levels rather than upward trends.

## A model impairment policy

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If the way forward is by organisations developing robust, comprehensive impairment policies, then this must be done in the spirit of participation and engagement and consultation to ensure that the policy is fit for purpose.

This will ensure that risks are understood by all parties, and controls can be put in place to manage the risks. The process will also assist with training and education of how different substances or sources of impairment play out in individuals.

So, what is a model impairment policy? Experience from Canada, in particular the CCSA who have worked extensively with organisations following the legalisation of cannabis there in 2018, pinpoint some key characteristics which should be included in an impairment policy.

Meister and Barker from the CCSA identify the importance of developing a robust impairment policy covering all forms of impairment, which balances the needs of the organisation and the individual. They also suggest the careful use of language promoting the use of the term ‘substance use’ instead of substance abuse or misuse, as the term is less likely to cause stigma or discrimination.



Advice from Canada also suggests it is more helpful to focus on the change(s) observed in workers, and starting a conversation by saying something similar to:

*'I have noticed a change in ...'*

Meister and Barker also recommend that a mutual understanding is achieved within the organisation as to why an impairment policy is important and the best ways to manage it. They also point out that review and evaluation of the policy needs to be built into the process to ensure that it is fit for purpose over time.

*The Review of Workplace Substance Use Policies in Canada: Strengths, Gaps and Key Considerations 2018* recommends using ten pillars in developing a robust and comprehensive impairment policy and ensure a balance between the needs of the individual and the organisation. These are detailed in the table on the next page.

Canada's Institute of Work and Health in Toronto has carried out research both prior to legalisation, and in the first 6-9 months post legalisation. While there was little change in before and at-work use of cannabis in that period, they did report that the number of workers reporting their organisation had a formal policy on

substance use in the workplace rose from 63% to 79% in that same period.

This clearly demonstrates the uptake in impairment policies in the immediate months following legalisation in Canada – something we could expect here in New Zealand if the right support is provided by government, health and safety organisations and the regulators.

According to the CCSA, initial research from Canada suggests that those organisations with a strong and supportive work culture prior to legalisation of cannabis were more likely to have success in implementing their impairment policy. For those with people in safety-sensitive or high-risk roles such as police officers or pilots, many organisations developed strict standards regarding cannabis and impairment.

When considering cannabis as an impairment risk as part of a wider policy, thought should also be given to how the substance is consumed. This is not only due to the different impacts it can have as to whether it is inhaled or digested, but also given many New Zealand workplaces and public spaces are now smoke-free, which may impact when someone can smoke cannabis before, at or after work.

Figure 3: Pillars for a comprehensive impairment policy

What to include	What could that look like
<b>Purpose</b>	Statement of the purpose and objectives and scope of the programme or policy.
<b>Definitions</b>	Definition of impairment. Definition of what the employer considers to be impairment (e.g. fatigue, alcohol, drugs, stress etc.)
<b>Coverage and confidentiality</b>	Statement of who is covered by the policy and/or programme. Statement of the employee’s rights to confidentially.
<b>Medicinal usage</b>	A mechanism for employees’ to confidentially report when they have been prescribed a medication that may cause impairment. Statement regarding if either medical/therapeutic or non-medical substances are allowed on the premises, or under what situations they would be allowed.
<b>Prevention and education</b>	That arrangements have been made for employee education (e.g. a general awareness regarding disability due to substance dependence). That arrangements have been made for educating and training employees, supervisors, and others in identifying impaired behavior and what steps will be taken. Research shows education and prevention has a stronger impact on reducing substance use at work than any other means.
<b>Observation and investigation</b>	Managers and supervisors have the tools they need to observe to identify possible impairment. Procedures for how to address impairment if it’s observed.
<b>Support for substance use disorders and return to work</b>	Provisions for assisting those with disability due to substance dependence. Processes for return to work/remain at work planning.
<b>Testing</b>	Statement of under what circumstances substance testing will be conducted, as well as the criteria for testing and interpretation of test results.
<b>Justice and culture</b>	Provision for a hierarchy of disciplinary actions. Be clear about what constitutes non-compliance with the policy in the workplace. Ensure the policy meets all legal requirements.
<b>Review and evaluation</b>	Make sure the policy is reviewed, makes sense for your organisation and is meeting the needs of employees and employers.

Source: *Focusing on what matters, Managing cannabis impairment risks at work*. Business Leaders’ Health and Safety Forum 2020



## Long-term impacts

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The effects of cannabis use on people's inhibitory control, habits, routines, and behaviour have been studied in various settings, from seven hours after use, to 20 days after use. A number of studies have shown impaired attention, longer reaction times, and delayed time to complete tasks compared to controls. In one study, investigators examined focus and attention capacities in cannabis users right before work and immediately after work at the beginning and the end of a work week. Compared to controls, cannabis users had impaired attention and information processing both at the beginning and end of the work week, correlating with duration and quantum of cannabis use. This confirms that even with abstinence, some deficits remain. For those people who start to use cannabis in their teenage years, these impacts can be long term.

These factors are important to consider when putting together an impairment policy and approach for an organisation. Particularly the inclusion of education around substance use as part of that policy to help workers understand the potential for significant cognitive decline impacting memory, attention, ability to learn and impulse control. For those in high-risk roles this is even more important, as those cognitive skills are all key factors in learning and following safety processes and procedures.

## The science behind the substance

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Despite the fact that studies have shown the effects of cannabis on engagement and that residual impairment is both unpredictable and non-linear, we are still lacking research, both in New Zealand and internationally on the use of cannabis and its possible effects on the workplace.

This is partly due to the lack of ability to test for impairment, rather than the presence of a substance, particularly cannabis.

Unlike some other substances, research has shown that inter-person variability in oral THC absorption is considerable, which contributes to the unpredictability of the drug and adverse outcomes.

Cannabis attaches to the fatty tissues in the body and therefore these non-psychoactive metabolites can be detected for days and even weeks depending upon the metabolism and other factors such as potency, frequency, weight etc.

To add to that, other complexities with cannabis exist in that some cannabis users mix their cannabis with tobacco to improve the burn, while others choose to use bombs or pipes or ingest it as an edible. Orally ingested edibles have a slower rate of absorption compared with inhalable cannabis. This can cause drug accumulation when users take additional doses because they have not achieved the desired effects as quickly as expected.

In Canada it has also been identified that the use of edibles has increased the likelihood of accidental ingestion (particularly with children) when the user is unaware that the edibles contain THC. There has also been a reported increase in admissions to emergency departments in the United States according to Volkow and Baler in the *Annals of Internal Medicine*.

The full range of potentially beneficial and adverse health consequences of using cannabis, in both short-term periods or over the long-term, are not yet fully understood. Research is needed to consider the THC content, route of administration, doses consumed, gender, age, body mass index and the medical conditions for which cannabis might be prescribed.

## Testing – detection vs impairment

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There are several methods to test for cannabis use in the workplace, however none of them are currently able to measure impairment levels. The key methods to test are:

- » Urine
- » Oral fluid (OF)
- » Blood
- » Hair testing

No one test is better than another. However, a method that tests for recent consumption is more likely to identify someone who is impaired. In this case OF is able to test for more recent use of cannabis, and although some regard this as a weakness of OF, it is a better indicator of likely impairment as a result of smoking cannabis, than a urine test.

Both methods; urine and OFs are susceptible to cheating. Urine testing may also be unable to identify that someone has smoked cannabis in the previous four hours – precisely the time frame which is most relevant for identifying likely impairment.

Law enforcement in Canada do use Standardised Field Sobriety Tests (SFSTs) which are universal tests to detect impairment by using oral fluid screening and finger to nose testing. These require very specific training and are only used to detect impairment where a criminal case may apply – for instance an impaired driver on the road. At this stage these tests have not been introduced in a workplace setting in Canada.

In Canadian workplaces testing isn't widely used, apart from in safety-sensitive industries. This is largely due to the Human Rights legislation in place there. However, where a workplace does test, the CCSA says

*"each time testing is used it's almost always based on an observation (of impairment) first. There are usually certain things people can look for on a basic level to identify potential impairment...an observation of some sort of behavioural, or physical, or social or productivity change in the employee."*

Some consideration should be given to how an organisation will train and support its managers and workers in what to look for regarding impairment. This isn't just in the case of cannabis, but in all other forms of impairment. Having managers and workers who can look for signs of impairment, or observe changes in behaviour can go a long way in an organisation's successful management of impairment as a risk.

The purpose of an effective drug and alcohol policy, and impairment policy is to build a deterrent to any substance use, but in a respectful and non-invasive manner. Being fit for work is the key to a healthy and safe workplace.

A good impairment policy will also cover what procedures are in place if a worker is impaired, or tests positive for a substance. This shouldn't strictly be a policing process, but rather one that considers support for those with substance use issues, and ensuring there is a just and fair culture in place, including setting out exactly what constitutes non-compliance. This is illustrated in *figure 3*.

The employer has a legitimate right to try and eliminate the risk that the employees might come to work impaired by drugs or alcohol such that they could pose a risk to health and safety. Beyond that, the employer has no right to dictate what drugs or alcohol its employees take in their own time. That would be unjust and unreasonable to do so.

Therefore, while testing, the methods an organisation may choose to use, and when it chooses to test should form part of their impairment policy – it must go much further than that to be effective.

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## Review and final thoughts

Provision has been made in the Cannabis Legalisation and Control Bill for a review within five years of enactment. What is to be measured and how it is to be measured needs to be determined prior to the Bill becoming law. HASANZ believes the impact on work should be a key part of this review.

In Canada, a planned review of their legalisation of recreational cannabis use is planned three years after implementation, in 2021. This is a short timeframe to be able to be able to identify changes and trends.

Regardless of whether the Cannabis Legalisation and Control Bill is enacted or not, further research on the full range of potentially beneficial and adverse health consequences of cannabis use, and their impact on work needs to be undertaken.

The presence of a substance does not necessarily correlate with impairment. Impairment can be caused by a multitude of factors, and impairment caused by cannabis needs to be addressed in the workplace as part of comprehensive impairment policy.

It is not sufficient for the Government to state that workplace health and safety and driving while impaired are dealt with by other legislation. This does not translate into impairment being managed as a risk, and necessary and appropriate controls being developed and monitored. Additional resource will need to be provided to educate, inform and promote managing impairment related risks, such as legalised cannabis.

Guidelines should be developed by the regulators, including WorkSafe NZ, and relevant government agencies, which could be supported by working with HASANZ and distributed directly and through health and safety sector groups. The sector groups can collaborate and adjust the information for relevant industries and coordinate to ensure information is disseminated, understood and acted upon at both organisational and industry levels.

**HASANZ has an important role in working collaboratively across government agencies, organisations, and individuals on the HASANZ register with appropriate validated skills, to achieve improved outcomes related to impairment risks in the workplace.**

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The Health and Safety Association of NZ (HASANZ) is a not-for-profit umbrella organisation that represents 14 associations made up of people that work in occupational health and safety.