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MINISTRY OF HEALTH
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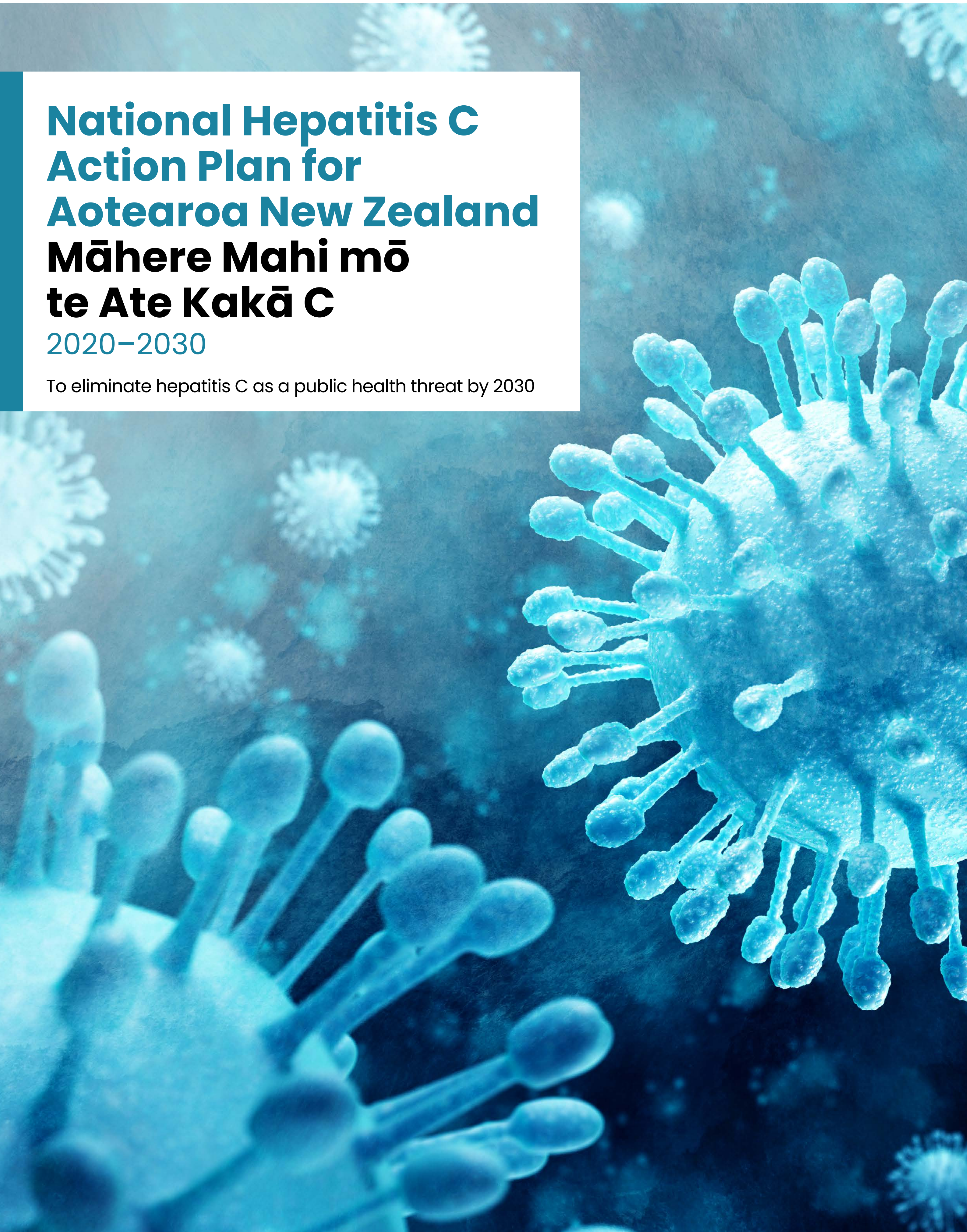

National Hepatitis C Action Plan for Aotearoa New Zealand
Māhere Mahi mō te Ate Kakā C
2020–2030

To eliminate hepatitis C as a public health threat by 2030

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We would like to particularly acknowledge members of the National Hepatitis C Action Plan Working Group who supported the collaborative development of the action plan, and the leadership provided by Professor Ed Gane, who chaired this group.

Mihi

Kimihia he oranga
kia ora ai te iwi!

E ngā mana, e ngā reo, e ngā karangatanga maha, tēnā koutou katoa!

Tēnā koutou i runga i ngā mate huhua o te wā, e hinga mai nei, e hinga atu rā. Moe mai rā koutou te maha o nāianei, te tini o nanahi, te mano o neherā. Haere rā koutou pērā i te rāngai maomao ka taka ki tua o Nukutaurua; e kore a muri e hokia. Ko koutou ki a koutou te hunga mate; ko tātau ki a tātau te hunga ora.

Tēnā anō tātou katoa.

Pursue health and wellbeing
so our people will thrive!

To our esteemed leaders, the voices of our people, and the various networks we have – we acknowledge each one of you.

We also acknowledge the loved ones we’ve lost. To the many we’ve lost today, the hundreds from yesterday, and the thousands we still remember from yesteryear – go, and find peace. Go now like a shoal of maomao fish passing beyond Nukutaurua reef; just like that shoal we know you will not return. Let the dead be with the dead, and the living with the living.

Greetings once more to us all.

Associate Minister's foreword

New Zealand has a unique opportunity to eliminate hepatitis C as a major public health threat within the next 10 years. With the availability of publicly funded, highly effective, direct-acting antiviral treatment, we have a real prospect of curing the 45,000 New Zealanders estimated to be living with chronic hepatitis C. We can also reduce liver cancer and the need for liver transplants.

This action plan has been developed for people with or at risk of hepatitis C infection and their families and whānau; health care providers; policy makers; funders; and health, justice and social service providers. Populations who have a high prevalence of hepatitis C and experience more of the long-term impact of infection are a key priority. This includes Māori, who are likely to have a higher prevalence of hepatitis C than other population groups and may be at higher risk of hepatitis C and the long-term complications of chronic infection.

Prevention and harm reduction is a critical focus area in the action plan. This area includes addressing discrimination against people who inject drugs and have hepatitis C and promoting approaches and activities that reduce stigma.

Increasing awareness and understanding of hepatitis C is also essential for the New Zealanders who may have hepatitis C but do not yet know it.

Timely access to high-quality services is another key aspect of the plan. This includes access to services that are culturally responsive and effective in treating hepatitis C.

It is crucial that we take an active approach to delivering on the action plan. That is why it is pleasing to see that implementation has already started on the first phase of work, and a cross-sector oversight group is being set up to guide and monitor progress.

With sector and public support, this action plan will contribute to the World Health Organization (WHO) goal of elimination of viral hepatitis as a public health threat, through activities under each focus area that will lead to short-term, medium-term and long-term outcomes.

The National Hepatitis C Action Plan Working Group, chaired by Professor Ed Gane, led development of this action plan, supported by the Ministry of Health. The working group took a collaborative approach that included seeking feedback from the wider health sector.

I would like to thank everyone who has contributed to the development of this plan, including those with lived experience of hepatitis C. I look forward to seeing the *National Hepatitis C Action Plan for Aotearoa New Zealand* implemented, and delivering the significant outcomes we expect it to achieve.

Hon Dr Ayesha Verrall
Associate Minister of Health

Professor Ed Gane's foreword

Infectious diseases have been the chief causes of death and disability throughout the history of humankind. During the last century, the morbidity and mortality associated with endemic diarrhoeal illnesses, smallpox, polio, measles and influenza has fallen dramatically, thanks to improvements in public health and vaccine development. Most recently we have witnessed a reduction in mortality from the biggest three killers, tuberculosis (TB), malaria and HIV, thanks to advances in prevention and antimicrobial therapy.

Unfortunately, this success has been offset by a staggering 60 percent increase in mortality from chronic hepatitis B and hepatitis C infections, which are responsible for more than one million deaths globally each year. The Global Burden of Disease Study (2018) has projected that viral hepatitis will kill more people than TB, malaria and HIV combined by 2040. In recognition of the significance of this health threat, the United Nations included combating viral hepatitis in its 2015 Sustainable Development Goals.

In May 2016, the 69th World Health Assembly unanimously endorsed the first Global Health Sector Strategy on Viral Hepatitis (WHO 2016), which calls for a world where viral hepatitis transmission is halted and everyone living with viral hepatitis has access to safe, affordable and effective prevention, care and treatment services. WHO has placed hepatitis B and C on its list of infectious diseases targeted for global eradication.

While eliminating hepatitis B will be achieved through universal neonatal vaccination programmes, there is no effective vaccine for hepatitis C. WHO's decision to include hepatitis C was due to the development of direct-acting antiviral therapies that provide a unique opportunity to cure everyone living with hepatitis C.

The WHO Global Health Sector Strategy on Viral Hepatitis provides the framework on which all countries can construct their national hepatitis C action plan. The major areas for focus in the plan include improved awareness and understanding of hepatitis C, improved prevention and harm reduction, increased testing and diagnosis, a national registry and improved community access to care.

An estimated 45,000 New Zealanders are living with hepatitis C infection, mostly infected in their teens or twenties. Untreated, many will develop cirrhosis and eventually life-threatening liver-related complications of liver cancer and liver failure. Hepatitis C is now the leading indication for liver transplantation in New Zealand, and is responsible for more than 200 deaths per annum, every one of which would have been prevented by earlier diagnosis and treatment. Effective treatment towards elimination will not only improve the life expectancy of people living with hepatitis C by almost 20 years and significantly improve their quality of life. It will also deliver cost savings to the system.

In February 2019, Maviret (a pangenotypic direct-acting antiviral treatment) was funded by PHARMAC without restriction in New Zealand. This simple, safe and effective regimen is ideally suited to community prescribing, and provides a unique opportunity to cure everyone living with hepatitis C in this country. However, to achieve hepatitis C elimination, all those living with hepatitis C need to be diagnosed and linked with care.

A coordinated national awareness campaign could improve the community's understanding of hepatitis C and reduce the stigma associated with it. By emphasising the lack of specific symptoms, the lifetime risk of complications if left untreated and the availability of a fully funded cure, an awareness campaign could encourage everyone at risk to get tested and treated, including those previously tested positive but lost to follow-up.

Almost all new infections of hepatitis C are in people who inject drugs. Prevention is through improving access for people who inject drugs to needle and syringe exchange programmes, opioid substitution treatment and rehabilitation programmes at community alcohol and other drug services across the country. Prioritising people who inject drugs for direct-acting antiviral therapy in community settings – treatment as prevention – will rapidly turn off the tap of new infections.

A coordinated national testing programme will be needed to identify the estimated 40 percent of people infected with hepatitis C but don't know it. To date, testing for hepatitis C has been targeted to people who disclose risk factors for prior hepatitis C exposure. Although ideal for people who actively inject drugs, populations attending needle exchange programmes and opioid substitution treatment centres, targeted testing has had limited success nationally, presumably because of the stigma associated with previous injecting drug use. Universal testing of adults has been adopted in many European countries and most recently in the US, but the cost-effectiveness and logistics of universal testing would need to be evaluated before it can be recommended here.

The PHARMAC laboratory lookback programme has identified many thousands of New Zealanders with chronic hepatitis C infection who had no record of treatment. A regional population health management approach is underway to follow up and offer treatment. A clinical registry could support and enable both the current lookback programme and any future national testing programme by preventing duplicate testing and facilitating linkage to community assessment and treatment for all new diagnosis.

Since March 2020, the COVID pandemic has become a significant threat to WHO hepatitis C global elimination goals, with lockdowns in most countries disrupting current access to prevention, testing and treatment in our community. However, this last 12 months has also heightened New Zealanders' appreciation of the importance of public health measures to both reduce morbidity and mortality and achieve country elimination from infectious diseases such as hepatitis C. The pandemic has expedited the roll-out of telemedicine and has also simplified testing, assessment and treatment pathways through acceptance of point-of-care testing and widened prescriber base. Increased community support for our homeless, mentally ill and people with substance use disorders has facilitated linkage to care for our most marginalised highest priority populations.

In summary, the recent funding of pangenotypic direct-acting antiviral treatment has provided New Zealand with a unique opportunity to eliminate hepatitis C before 2030, which would save many thousands of lives and significantly reduce the demand for liver transplantation in this country. This first National Hepatitis C Action Plan will focus on improving equitable health outcomes for all New Zealanders living with hepatitis C, and on advancing the health aspirations of Māori, consistent with the Treaty of Waitangi obligations. By doing so, this plan can ensure that New Zealand will achieve the WHO elimination targets and a future free of hepatitis C.

Professor Ed Gane
Deputy Director, New Zealand Liver Transplant Unit and Professor of Medicine, the University of Auckland

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Introduction

Hepatitis C is a blood-borne virus that causes inflammation of the liver. It is a significant public health issue in New Zealand. The rising burden of disease includes increasing illness and deaths from cirrhosis and liver cancer due to chronic hepatitis C.

In 2016, the World Health Organization (WHO) published the *Global Health Sector Strategy on Viral Hepatitis 2016–2021* (WHO 2016). This includes the overarching goal to eliminate viral hepatitis as a public health threat by 2030. WHO defines elimination as achieving a 90 percent reduction in new chronic infections and a 65 percent reduction in mortality.

The WHO's vision is 'a world where viral hepatitis transmission is halted and everyone living with viral hepatitis has access to safe, affordable and effective prevention, care and treatment services'. The strategy focuses mostly on hepatitis B and C, due to their high burden of disease.

New Zealand is one of 194 countries that adopted the WHO strategy in 2016. This national action plan for hepatitis C is New Zealand's response to the WHO call to action, and is part of our first step: to develop an overall viral hepatitis strategy.

New Zealand has a unique opportunity to eliminate hepatitis C as a major public health threat in the next 10 years. Significant factors have aligned in recent times to make this possible, including unrestricted access to publicly funded, highly effective, well-tolerated direct-acting antiviral (DAA) treatment and a groundswell of energy and activity from parts of the health sector and affected communities calling for the development of a national hepatitis C action plan for New Zealand.

> The real prospect of curing hepatitis C will make a huge difference for the 45,000 New Zealanders estimated to be living with chronic hepatitis C.

It is estimated approximately 35 to 40 percent of New Zealanders with chronic hepatitis C are undiagnosed because of a lack of awareness of previous risk of exposure and lack of symptoms. Without treatment, most will develop progressive liver damage. Hepatitis C is the leading cause of liver transplantation in New Zealand and the second leading cause of liver cancer (behind hepatitis B). Early treatment with DAAs prevents these complications and can be accessed in primary health care and other community settings, making treatment easier and more accessible.

As in many countries, where rates of viral hepatitis are higher in indigenous compared with non-indigenous peoples, and there is inequitable access to health services (Cunningham 2019), Māori are likely to be disproportionately affected by the hepatitis C virus. This action plan prioritises Māori on the basis of increased need and our Te Tiriti o Waitangi obligations to actively improve health outcomes for Māori and reflect Māori health aspirations. The action plan includes initiatives to improve awareness, testing and treatment of hepatitis C, and improve access to services for Māori.

WHO identified addressing discrimination against people who inject drugs and have hepatitis C as critical to the success of action plans. Reducing stigma was a key consideration when developing this action plan.

This plan will guide the health sector and services working in hepatitis prevention or treatment. It provides a framework for working towards the WHO's goal to eliminate viral hepatitis by 2030. It focuses limited resources on the priorities that will have the greatest impact on reducing inequities, improving Māori heath and improving outcomes for people with hepatitis C.

Although the focus of this action plan is hepatitis C, it is important to be aware of the other types of hepatitis in New Zealand, to ensure the development of current and future work is aligned. The Ministry of Health takes a holistic view of viral hepatitis through, for example, integrating hepatitis C initiatives with those for hepatitis B. This could include actions to combine testing for and the prevention of hepatitis B and C where practical.

The target audience for this action plan is people with or at risk of hepatitis C infection and their families and whānau; health care providers; policy makers; funders; and health, justice and social service providers.

The following sections outline guiding principles that ensure the action plan supports our Te Tiriti o Waitangi obligations; supports those living with, at risk of or cured of hepatitis C; uses national and international evidence; and includes the involvement of priority populations.

The sections also define priority groups, priority settings and the health and prevention system for hepatitis C in New Zealand.

The action plan has five focus areas, each of which includes activities that will contribute to achieving the outcomes we seek (with accompanying WHO targets) and, ultimately, to achieving our overarching goal: to eliminate viral hepatitis as a public health threat by 2030 (see the outcomes framework, Figure 1 in section 1). Appendix 1 provides a summary of the overall action plan including all the objectives and activities under each of the focus areas.

Stigma

People often experience stigma as the result of others' discriminatory behaviour or attitudes. This contributes to negative feelings such as shame, unworthiness, rejection and loneliness (Te Pou o Te Whakaaro Nui 2009).

Stigma has a long history in relation to infectious diseases; particularly HIV and, more recently, hepatitis C (Marinho and Barreira 2013). Stigma and discrimination are reinforced by the criminalisation of drug use in most countries. Together these factors can contribute to HIV and hepatitis C epidemics among people who inject drugs by preventing them from accessing lifesaving services for harm reduction as well as diagnosis, treatment and care (United Nations Office on Drugs and Crime et al 2017).

The National Hepatitis C Action Plan Working Group, chaired by Professor Ed Gane, led development of this action plan, supported by the Ministry of Health. The working group took a collaborative approach that included seeking feedback from the wider health sector.

The working group was made up of representatives from district health boards (DHBs), primary health organisations (PHOs), government agencies, laboratories, public health services, needle exchange services, community alcohol and other drug services, addiction services, consumer representatives, the hepatitis C health workforce (including hospital specialists, general practitioners and nurses), the Māori and Pacific workforce and other national and non-governmental organisations. See Appendix 2 for a list of working group members.

A project team within the Ministry of Health coordinated the development of the action plan, guided by advice from the working group, best available national and international evidence, best practice, WHO guidance and the knowledge of those living with, or cured of, hepatitis C.

A cross-agency governance group, with representatives from the Ministry of Health, PHARMAC and the Department of Corrections, provided project oversight.

This action plan should be read in conjunction with *Hepatitis C in Aotearoa New Zealand – A background document* (Ministry of Health 2020a). Developed as a resource to support the action plan, it contains information about hepatitis C infection in New Zealand and describes the current health and prevention system. It presents further evidence to support the focus areas and activities prioritised in the action plan and outlines the issues and gaps in the current system.

The Ministry of Health will phase delivery of the activities specified in this action plan. An implementation plan will provide a road map for the first phase of work, to be undertaken between 2021 and 2025.

A cross-sector oversight group will guide and monitor implementation. We will establish performance measures to track progress and assess the impact of activities. This will enable us to identify successes and areas for improvement as we work towards our elimination goal.

1.
Outcomes framework

The overarching goal of this action plan is to eliminate[1] viral hepatitis as a public health threat by 2030.

The outcomes framework in Figure 1 shows how this action plan will contribute to the WHO elimination goal through activities that will lead to short-term, medium-term and long-term outcomes. It outlines the strategic context within which the action plan sits in Aotearoa New Zealand, and the principles, priority groups, settings and focus areas for activities.

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[1] WHO has defined the elimination of viral hepatitis as a public health threat as achieving a 90 percent reduction in new chronic infections and a 65 percent reduction in mortality (WHO 2016).

Figure 1: National Hepatitis C Action Plan Outcomes Framework

<table>
<tr><th colspan="121">National Hepatitis C Action Plan 2020 – 2030 Outcomes Framework</th></tr>
<tr><td rowspan="3">STRATEGIC CONTEXT</td><td colspan="30">WHO Global Health Sector Strategy on Viral Hepatitis 2016–2021</td><td colspan="60">United Nations Sustainable Development Goal 3:
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(WHO 2030 target: 90 percent of chronic hepatitis infections diagnosed)</td><td colspan="24">Increased treatment of chronic hepatitis C
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[2] Best practice indicates there is sterile equipment available to suit the needs of people who inject drugs; this may mean that a higher figure than the WHO target is needed in New Zealand.

1.1 Intended outcomes

In implementing this action plan, we want to achieve three significant long-term outcomes, as follows.

Reduction in the incidence of chronic hepatitis C

As in many other Western countries, the incidence of hepatitis C infection was highest in New Zealand during the 1960s, 1970s and 1980s, secondary to the rise in injecting drug use (Davis et al 2010). However, over the last two decades, the incidence of hepatitis C infection has dropped by more than 50 percent, reflecting both a reduction in injecting drug use and safer injecting practices (Department of Health, Canberra 2018). There is still work to do in New Zealand to reduce the incidence of chronic hepatitis C. This involves increasing access to effective harm reduction and prevention strategies and increasing our awareness and understanding of the virus in general and priority populations.

The WHO target for this long-term outcome is a 90 percent reduction in new chronic infections by 2030.

Reduction in mortality from hepatitis C

Worldwide, it is estimated that more than one million people die from complications of chronic hepatitis B or C each year (Thomas 2019). Hepatitis B and C viruses cause 80 percent of liver cancers in New Zealand and globally (Schauer et al 2020). Hepatitis C is now the leading indication for liver transplantation in New Zealand, and is responsible for more than 200 deaths per annum.

Unrestricted access to publicly funded, highly effective, well-tolerated DAA treatment will reduce the prevalence of hepatitis C. However, it is likely the number of hepatitis C-related liver cancers will continue to increase for at least the next 10 years, due to the large number of patients with established cirrhosis prior to treatment (Gane et al 2014).

To reduce mortality from hepatitis C, we need to increase diagnosis and treatment of chronic hepatitis C through improved surveillance and monitoring and increased linkage to care, and improved testing and screening approaches.

The WHO target for this long-term outcome is a 65 percent reduction in mortality by 2030.

Improved equity for incidence and mortality from hepatitis C for Māori

Māori are likely to be disproportionately affected by the hepatitis C virus. The distribution of hepatitis C by ethnicity in New Zealand is not known. Emerging data suggests that Māori have a higher prevalence of hepatitis C than other ethnic groups and are likely to have higher rates of long-term complications of hepatitis C than non-Māori, reflecting inequities in access to health care.

Māori are overrepresented in advanced liver cancer due to both hepatitis B and hepatitis C, making up 45 percent and 23 percent respectively (Schauer et al 2020).

Improving equity for incidence and mortality from hepatitis C for Māori involves increasing equity across all the WHO 2030 targets for Māori. This includes equitable outcomes in terms of diagnosis and treatment, and improved outcomes for Māori across all the areas of prevention, awareness, testing and screening, as well as increased integration of services and access to care.

1.2 Monitoring progress and the success of the plan

The Government is committed to working towards the WHO's impact targets for eliminating hepatitis C (see Appendix 3) (WHO 2016), and monitoring progress to ensure that we are improving Māori health and improving equity for groups who are disproportionately affected by hepatitis C.

The WHO impact targets are to reduce the:

- incidence (number of new cases) of chronic hepatitis C by 90 percent
- number of related deaths by 65 percent from a 2015 baseline.

Despite the availability of highly effective DAAs, the current low rates of diagnosis and treatment uptake are barriers to eliminating hepatitis C. To reduce mortality by 65 percent by 2030, the percentage of chronic hepatitis C diagnoses[3] must increase to 90 percent, and the percentage of people diagnosed who receive DAA therapy must increase to 80 percent.

The WHO 2030 service coverage targets for hepatitis C relate to screening blood transfusions (the target is for 100 percent of donations to be screened in a quality manner), the safety of injections inside and outside health facilities (the target is for >90 percent of injections to be administered with safety-engineered devices, inside and outside health facilities) and harm reduction (the target is for at least 300 needles and syringes per person who injects drugs per year).

This action plan does not cover blood transfusion screening or the safety of injections, as they are not current significant sources of hepatitis C infection in New Zealand. New Zealand has tested all blood donations for hepatitis C since 1992, and the quality of this testing is closely monitored. Hospitals now have standard precautions in place and provide safety-engineered needles and infusion devices to reduce the likelihood of transmission. These issues are monitored, and relevant interventions are implemented if required.

The Ministry of Health will develop a monitoring plan as part of its implementation of this action plan. This will include a plan to measure and monitor the progress and success of the action plan (see section 3).

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[3] Allowing for 1,000 new chronic infections each year (Gane et al 2014), an estimated 45,000 New Zealanders were living with chronic hepatitis C infection in 2019.

1.3 Strategic context

In New Zealand, the Ministry of Health sets strategy and policy for hepatitis C in collaboration with the health sector. This happens under key global and national strategies including the *New Zealand Health Strategy: Future direction* (Minister of Health 2016).

This action plan contributes to goal 3 of the United Nations Sustainable Development Goals: 'Ensure healthy lives and promote well-being for all at all ages'. It focuses mostly on hepatitis B and C due to their high burden of disease.[4] The plan is also a response to the call to action in the WHO Global Health Sector Strategy on Viral Hepatitis in that it adopts that strategy's high-level impact targets and relevant service coverage targets (see Appendix 3).

The statement: 'All New Zealanders live well, stay well, get well' is central to the New Zealand Health Strategy, and is echoed in this action plan's five focus areas. Three of the strategy's themes – people-powered, one team and a smart system – have also guided the development of this action plan, including its collaborative approach.

The action plan links to *He Korowai Oranga: Māori Health Strategy* (Ministry of Health 2014) through Te Tiriti o Waitangi. Under Te Tiriti, the health and disability sector has obligations to actively partner with Māori during the development and implementation of initiatives, and to ensure the action plan actively improves health outcomes for Māori and reflects Māori health aspirations.

Pae ora (healthy futures) is the overarching aim of He Korowai Oranga, and is underpinned by three interconnected elements: mauri ora, whānau ora and wai ora. To achieve the aim of pae ora there are four pathways to implement the strategy:

- supporting whānau, hapū, iwi and community development
- supporting Māori participation at all levels of the health and disability sector
- ensuring effective health service delivery
- working across sectors.

The action plan is also linked to He Korowai Oranga in its focus on equity and access to services that are affordable, acceptable, appropriate, culturally responsive and effective. The Māori health action plan *Whakamaua: Māori Health Action Plan 2020–2025* (Ministry of Health 2020c) sets the direction for Māori health advancement over the next five years and gives practical effect to He Korowai Oranga. It outlines a suite of objectives and priority areas and specifies tangible actions we can implement to achieve high-level outcomes to contribute to pae ora for Māori. The *National Hepatitis C Action Plan* includes activities that will contribute to priority areas in the Māori health plan, such as Māori health sector development.

Activities for Pacific peoples should include the principles set down in *'Ala Mo'ui: Pathways to Pacific Health and Wellbeing 2014–2018* (Ministry of Health 2014).

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[4] See https://sustainabledevelopment.un.org/sdg3. Target 3.3 states: 'By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases'.

These are: respecting Pacific cultures, valuing ‘āiga, kāiga, magafaoa, kōpū tangata, vuvale, fāmili and communities; quality health care; and working together (integration). Pacific peoples come from different Pacific nations; many were born in New Zealand. They have diverse traditions and worldviews, which we also need to take into account. *Ola Manuia: Pacific Health and Wellbeing Action Plan 2020–2025* (Ministry of Health 2020b) is the Ministry’s new Pacific health plan; it builds on the successes of *‘Ala Mo’ui*. The plan identifies priority areas and places where we can focus our resources, and specifies high-level actions that will contribute effectively to improved health and wellbeing for Pacific peoples. The *National Hepatitis C Action Plan* includes activities that will contribute to focus areas in Ola Manuia, such as community and health literacy.

For more information on other cross-government strategies, plans and programmes that relate to this action plan, see *Hepatitis C in Aotearoa New Zealand – A background document* (Ministry of Health 2020a).

1.4 Principles

The guiding principles set out in this section support the overarching development of this action plan and will support our achievement of the WHO elimination goals. These principles reflect our Te Tiriti obligations, and will help us ensure that the experiences of people living with or cured of hepatitis C, and of our priority populations, inform the action plan and the implementation to follow.

PRINCIPLES	
Te Tiriti o Waitangi	Under Te Tiriti o Waitangi the Ministry of Health, as steward and kaitiaki[5] of the health and disability system, has a responsibility to enable Māori to exercise their authority and enable the health system to achieve equity in terms of health and wellness for Māori. The action plan prioritises Māori on the basis of increased need and our Te Tiriti obligations to actively improve health outcomes for Māori and reflect Māori health aspirations.
Equity	In Aotearoa New Zealand, people experience differences in health that are not only avoidable but unfair and unjust. Equity recognises that different people with different levels of advantage require different approaches and resources to get equitable health outcomes.[6] The action plan is based on taking a national public health approach to achieve health equity and improve wellbeing for all people living with hepatitis C. One of the expected long term outcomes of the action plan is improved equity for incidence and mortality from hepatitis C for Māori.
Access to high-quality health services	People having timely access to high-quality services is a key aspect of the action plan. The principle refers to timely access to services that are affordable, acceptable, appropriate, culturally responsive and effective in treating hepatitis C.
Evidence-informed	Best available national and international evidence informed the action plan, as well as best practice and the knowledge of those with lived experiences, or cured of, hepatitis C.
Collaboration	A cross-sector working group developed the action plan. Work was carried out in a collaborative and integrated way, in partnership with consumers, service providers and clinical experts.
Meaningful involvement of priority groups	Priority groups have been involved in developing the action plan, and contributed to our understanding of best practice. The plan 'recognises everyone's health needs are different and that taking a one-size-fits-all approach to tackling health issues doesn't work'.
Informed by the lived experiences of people with hepatitis C	The lived experiences of people living with hepatitis C informed the action plan. Ongoing consumer participation and expertise are central to the plan's development and success.
Innovation	To take advantage of this new era of highly effective treatments, we have considered innovative approaches, including bold system changes.
Cost-effectiveness	We considered cost-effectiveness and efficient use of resources when developing and prioritising activities in the plan.

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[5] Kaitiaki is the Māori word for guardian.

[6] This is the Ministry's official working definition of equity. See Hepatitis C in Aotearoa New Zealand – A background document (Ministry of Health 2020a) for the full Ministry of Health equity statement.

1.5 Priority groups

Priority groups are those living with hepatitis C or who are at high risk of developing chronic hepatitis C and the serious long-term complications of infection (see *Hepatitis C in Aotearoa New Zealand – A background document* (Ministry of Health 2020a)). In New Zealand this includes people who currently inject drugs, and others living with hepatitis C.

Māori are a priority group because firstly, Māori are likely to have a higher prevalence of hepatitis C infection than non-Māori and, secondly, Māori living with hepatitis C have higher rates of long-term complications than non-Māori because of underdiagnosis of hepatitis C and inequities in access to treatment. Finally, Māori who develop complications of hepatitis C, including hepatocellular carcinoma, have poorer outcomes compared to non-Māori with the same complications because of reduced access to health services and lower enrolment in surveillance programmes, resulting in late symptomatic diagnosis when therapeutic options are very limited.

We need more information on the exact prevalence of hepatitis C in the general population and in high-risk groups, including by ethnicity and age, and information on co-infection with HIV. There is an emphasis on priority groups throughout the action plan and they will continue to be represented in our decision-making as we implement the specified activities.

▶ 1.5.1 People who inject drugs

As well as being a major risk factor for hepatitis C, people who inject drugs are more vulnerable than the general population. Reasons include current and previous injecting, disengagement from health services, lower education and socioeconomic status, and higher prison rates among this population (Lang et al 2013).

▶ 1.5.2 Māori

While the exact distribution of disease by ethnicity in New Zealand is not known, emerging data suggests that Māori have a higher prevalence of hepatitis C than other population groups.[7]

Māori may be at higher risk of hepatitis C and the long-term complications of chronic infection. In addition, historically, Māori have had reduced access to health care and prevention initiatives. In response to these factors, this action plan prioritises Māori based on increased need and through our Te Tiriti o Waitangi obligations to actively improve health outcomes for Māori and reflect Māori health aspirations. The action plan also supports decision-making that is consistent with Te Tiriti.

▶ 1.5.3 People living with hepatitis C

'People living with hepatitis C' includes people who have hepatitis C but who are not represented in the priority groups above. It may include people who have injected in the past, whether this was sporadic or a one-off time. It also includes those who have hepatitis C from another risk factor.[8] This group is a priority as many people may not know they are or have been at risk, and so may be hard for health services to identify, test and treat. This group is at risk of developing the long-term complications of hepatitis C infection.

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[7] See Hepatitis C in Aotearoa New Zealand – A background document (Ministry of Health 2020a) for a summary of the emerging data.

[8] See Hepatitis C in Aotearoa New Zealand – A background document (Ministry of Health 2020a) for more information about risk factors for hepatitis C.

1.6 Priority settings

The priority settings for this action plan are needle exchanges, prisons, primary and community care services, and alcohol and other drug services.

Priority settings are key places where activities such as awareness raising, prevention, testing and treatment can effectively and efficiently take place. They are also sites where micro-elimination (see the Glossary in *Hepatitis C in Aotearoa New Zealand – A background document* (Ministry of Health 2020a)) efforts can operate.

The current prevalence of hepatitis C in the prison population is not known, but it is assumed that people in prisons in New Zealand have higher rates of hepatitis C infection compared with the general population, as reported in most other countries. This is due to misuse of drugs being a key reason for incarceration. Sharing non-sterile tattooing equipment in prison is a significant risk factor.

Clients using community alcohol and other drug services have a number of health and disability issues (including co-existing mental health illness) and poorer socioeconomic status compared with the general population. There is some evidence that clients using opioid substitution treatment have higher rates of hepatitis C than those attending needle exchange services, because they tend to be older and have been injecting drugs longer (O'Connor et al 2016).

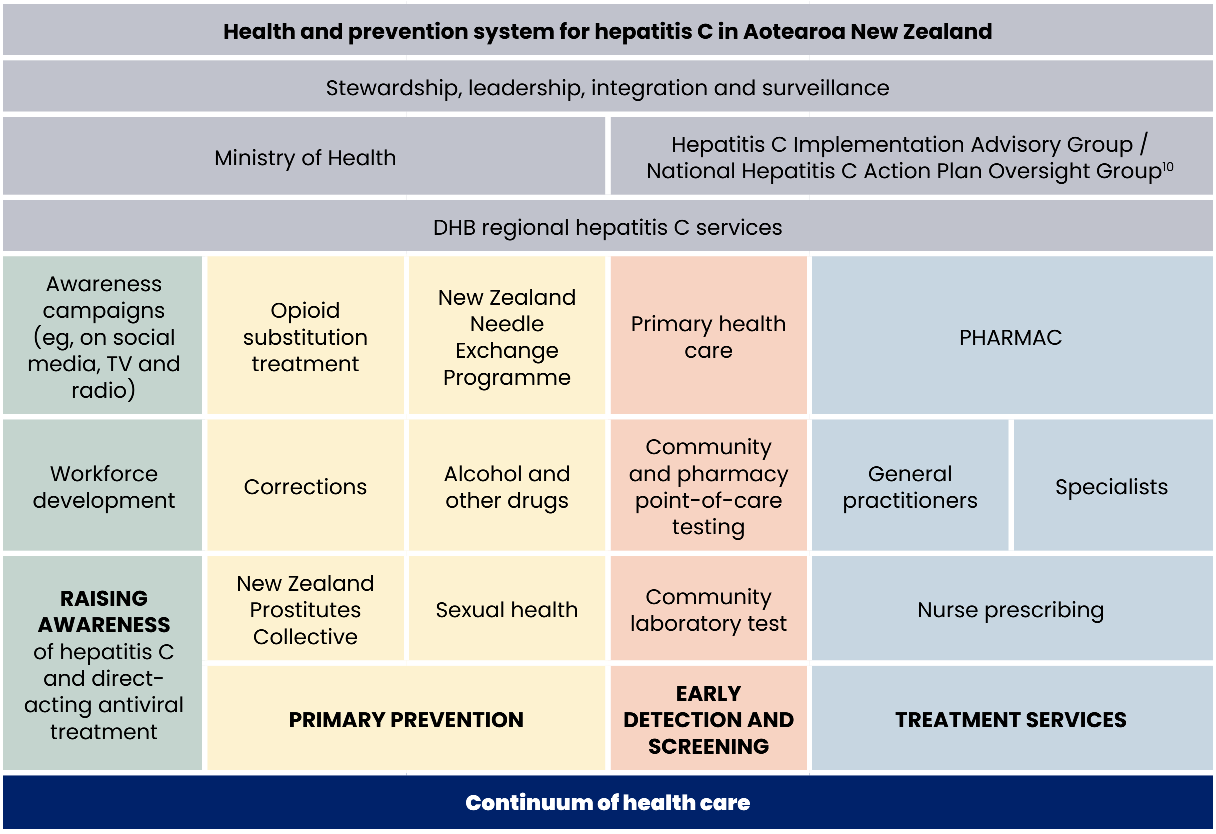
1.7 Health and prevention system for hepatitis C in New Zealand

If we want to equitably eliminate hepatitis C as a public health threat, we need to understand the structure and function of the health and prevention system.

Figure 2 shows the current state of the system in 2020. The focus areas in section 3 outline changes that will help us move closer to a system that can eliminate hepatitis C as a public health threat. This work is taking place in a climate of health system reform. A health and disability system review[9] is under way to identify opportunities to improve the performance, structure and sustainability of the health system and to help ensure that it is well placed to respond to the future needs of all New Zealanders.

See *Hepatitis C in Aotearoa New Zealand – A background document* (Ministry of Health 2020a), which provides information about hepatitis C infection and epidemiology in New Zealand and the health and prevention system.

Figure 2: Health and prevention system for hepatitis C in Aotearoa New Zealand



<table>
<tr><td colspan="6">Health and prevention system for hepatitis C in Aotearoa New Zealand</td></tr>
<tr><td colspan="6">Stewardship, leadership, integration and surveillance</td></tr>
<tr><td colspan="3">Ministry of Health</td><td colspan="3">Hepatitis C Implementation Advisory Group / National Hepatitis C Action Plan Oversight Group[10]</td></tr>
<tr><td colspan="6">DHB regional hepatitis C services</td></tr>
<tr><td>Awareness campaigns (eg, on social media, TV and radio)</td><td>Opioid substitution treatment</td><td>New Zealand Needle Exchange Programme</td><td>Primary health care</td><td colspan="2">PHARMAC</td></tr>
<tr><td>Workforce development</td><td>Corrections</td><td>Alcohol and other drugs</td><td>Community and pharmacy point-of-care testing</td><td>General practitioners</td><td>Specialists</td></tr>
<tr><td rowspan="2">RAISING AWARENESS of hepatitis C and direct-acting antiviral treatment</td><td>New Zealand Prostitutes Collective</td><td>Sexual health</td><td>Community laboratory test</td><td colspan="2">Nurse prescribing</td></tr>
<tr><td colspan="2">PRIMARY PREVENTION</td><td>EARLY DETECTION AND SCREENING</td><td colspan="2">TREATMENT SERVICES</td></tr>
<tr><td colspan="6">Continuum of health care</td></tr>
</table>

Note: Many services go across the continuum of health care. For the purposes of the figure, services are allocated to the part of the continuum that relates to their main function in relation to hepatitis C.

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[9] See https://systemreview.health.govt.nz/

[10] The National Hepatitis C Action Plan Oversight Group has replaced the Hepatitis C Implementation Advisory Group; it will guide and monitor implementation of the action plan.

2.

Action plan focus areas and activities

The activities outlined in this plan are grouped into five focus areas that will contribute to the overarching goal to eliminate viral hepatitis as a public health threat by 2030:

- awareness and understanding
- prevention and harm reduction
- testing and screening
- surveillance and monitoring
- integration and access to care.

The activities expand on what we are already doing well; we have designed them to address remaining barriers, gaps, inequities and fragmentation in the parts of the health sector treating and preventing hepatitis C. The focus is on preventing new hepatitis C infection for those at high risk and improving care for those already infected with hepatitis C. Activities also include improve awareness, testing and access to DAA therapy in the community.

An important consideration when developing activities was the need to include Māori as equal partners in decision-making and enable Māori to participate in developing and delivering services and interventions. Another consideration was to include activities that specifically address inequities in the health sector.

Sector experts developed evidence-informed and best-practice activities in the five focus areas that are most likely to contribute to the plan's outcomes, targets and overarching goal.

Where needed, the sector experts prioritised activities, using the following considerations and questions.

- Is the activity based on evidence-informed examples of where it has worked in other places?
- Does it promote improvements in health equity?
- Does it improve Māori health aspirations?
- Will it be acceptable to people with hepatitis C, and to the health sector?
- Will it be effective in reaching and having a positive impact on people's health outcomes?
- Will it be cost-effective and an efficient use of resources?
- Is it based on concrete and tangible actions that can be delivered by key groups?
- Does it align with the WHO targets and recommendations?

The *Hepatitis C Infection in Aotearoa New Zealand – A background document* (Ministry of Health 2020a) resource document provides more information about each focus area, including a summary of the current issues and gaps.

2.1 Focus area 1: Awareness and understanding

2.1.1 Why this is important

Improving awareness and understanding of hepatitis C is an essential component of a multifaceted approach to eliminating hepatitis C in New Zealand. Internationally, WHO has highlighted the need for global public health campaigns that raise awareness and understanding of health issues and mobilise support for action (WHO 2015). It has also emphasised the importance of raising awareness of viral hepatitis among policy makers and health care providers (WHO 2015).

> It is estimated approximately 35 to 40 percent of New Zealanders with chronic hepatitis C are undiagnosed because of a lack of awareness of previous risk of exposure and lack of symptoms. Without treatment, most will develop progressive liver damage.

Our efforts to improve awareness and understanding need to be informed by the lived experiences of people with hepatitis C and service providers. We need to develop them in a such a way that we endeavour not to increase stigma for people with hepatitis C. Māori-led decision-making and Māori world views should inform campaigns that support Māori health aspirations.

We also need to ensure activities promote equity. We can do this by:

- taking care that culturally appropriate approaches, co-design and co-decision-making inform our work, including for Māori, Pacific, Asian and culturally and linguistically diverse communities and recent migrants[11]
- undertaking audience research
- involving the sector
- making sure evidence informs our approaches.

This focus area includes activities that aim to raise awareness of hepatitis C in the general population and priority populations, increase knowledge and awareness in health care providers, and increase the consistency and availability of promotional activities and resources.

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[11] To be granted acceptable standard of health (ASH), visa/residency applicants with a positive hepatitis C antibody test must provide evidence that they have been cured (that is, that they have been hepatitis C RNA negative for at least six months after direct-acting antiviral treatment) and must not be cirrhotic (on biopsy or Fibroscan).(Ed Gane. 2021)

2.1.2 Focus area activities

FOCUS AREA 1: AWARENESS AND UNDERSTANDING	
Objectives	**Activities**
Objective 1.1: Raise awareness of hepatitis C in New Zealand in the general population and priority populations[12]	- Develop a centrally coordinated and driven national awareness campaign with consistent messaging (tailored to regional populations) with a call to action to get tested.
	- Develop awareness sub-campaigns using national messages tailor-made for priority populations and other groups that may need different messaging.[13]
	- Develop a programme of direct communications and actions for people who have been diagnosed with hepatitis C.
	- Develop national hepatitis C resources for the public to increase and provide ongoing awareness and understanding of hepatitis C, including who to contact details.
	- Investigate tattooing as a risk factor for hepatitis C in New Zealand.
	- Deliver annual events and promotional activities to raise awareness on World Hepatitis Day, 28 July, that are centrally coordinated and driven.
	- Strengthen, resource and support the role of consumer-led input to raise awareness and eliminate hepatitis C.
Objective 1.2: Increase knowledge and awareness in health care providers of hepatitis C services	- Develop a national awareness campaign and communications programme for health care providers.[14]
	- Develop and promote national training and education programmes[15] (continuing medical education-accredited) with tailor-made additional modules for specific providers ensuring education includes how services should be accessible and acceptable for Māori.
	- Develop hepatitis C champions across the sector, including clinical leads and community workers, ensuring there are Māori champions linked to Māori providers and communities.
	- Develop a hepatitis C clinical advice and support network for health practitioners in DHB regions made up of local champions, general practitioners (GPs), registered nurses, nurse practitioners, addiction providers and needle exchange peer workers, ensuring networks include members with knowledge and expertise in Māori health and culturally and linguistically diverse backgrounds.
Objective 1.3: Increase the consistency and availability of hepatitis C promotional activities and resources	- Develop a single repository of current and future hepatitis C resources and promote the national suite of hepatitis C resources.

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[12] People who inject drugs, Māori and other people living with hepatitis C (including those who have previously injected drugs).

[13] Such as men who have sex with men with HIV, those having chemsex (defined as using drugs to enhance sex) and those using performance and image-enhancing drugs who may not identify with people who inject drugs.

[14] Relevant health care providers include primary health care providers, Māori health service providers, mental health and addiction services, needle exchange service providers, prison and probation staff and any other government or non-governmental organisations and iwi providers that have identified or requested this training.

[15] Includes prevention and harm reduction as well as testing, diagnosis, treatment and management.

2.2 Focus area 2: Prevention and harm reduction

▶ 2.2.1 Why this is important

This area focuses on improved prevention and harm reduction[16] for people in New Zealand who are at increased risk of hepatitis C; primarily people who inject drugs.

> One of the most effective ways we can reduce the incidence of hepatitis C is to reduce rates of infection in people who inject drugs.

Harm reduction underpins effective measures to prevent transmission of hepatitis C by reducing exposure to the virus for people who inject drugs. In New Zealand, primary harm reduction strategies are needle and syringe exchange services via the needle exchange programme, opioid substitution treatment and community alcohol and drug services.

In this focus area, too, services need to be responsive to Māori values and beliefs, in settings and services that have been designed with Māori-led decision-making and that are acceptable to and improve access for Māori.

This focus area includes activities that aim to increase access to harm reduction strategies and prevention of hepatitis C transmission; educate health care providers on harm reduction and prevention; reduce stigma and discrimination for people with hepatitis C who inject drugs; and increase the integration and coordination of prevention, harm reduction and treatment services.

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[16] The National Drug Policy describes the idea of harm minimisation in relation to drug and alcohol misuse as encompassing prevention of alcohol and other drug (AOD) misuse, as well as a reduction of harm, for example, to an individual's health, and the social and economic harms to individuals, families, communities and society. One of the three pillars of the policy is problem limitation, which aims to reduce the harm of AOD use and includes the needle exchange programme and clinical AOD services (Inter-Agency Committee on Drugs 2015).

2.2.2 Focus area activities

FOCUS AREA 2: PREVENTION AND HARM REDUCTION	
Objectives	**Activities**
Objective 2.1: Increase access to harm reduction strategies and prevention of hepatitis C transmission	• Increase and upscale distribution of free injecting equipment using strategies that meet current international best practice, ensuring services are responsive to Māori values and beliefs and take place in settings that are acceptable to and improve access for Māori. • Provide evidence-based, culturally appropriate, harm-reduction educational messages and resources. Ensure harm reduction messaging for people who inject drugs includes information on safer injecting and the importance of preventing infection and/or reinfection from hepatitis C and other blood-borne viruses (BBV). • Offer people who inject drugs testing for other BBVs (HIV and hepatitis B), and provide hepatitis B vaccination if warranted. • Investigate the need for and feasibility of seroprevalence surveys at needle exchange programme sites to establish a baseline and to monitor efforts to eliminate hepatitis C.
Objective 2.2: Educate health care providers on harm reduction and prevention of hepatitis C	• Provide information about key harm reduction messages for health care workers (eg, prescribers, nurses, peer workers). • Produce a range of easily accessible, targeted and culturally appropriate multimedia resources on testing, treatment and harm reduction with consistent messaging, for health care providers to use and distribute. • Educate and expand the scope of the peer workforce, including by engaging at-risk populations in relation to being tested and treated and providing support through a nationally consistent process, supported by local champions, including Māori peer workers in rural areas with a high Māori population.
Objective 2.3: Reduce stigma and discrimination for people with hepatitis C who inject drugs	• Investigate evidence-based ways to reduce stigma and discrimination for people who inject drugs and have hepatitis C, including addressing cultural differences, as well as stigma for Māori communities.
Objective 2.4: Increase the integration and coordination of hepatitis C-related prevention, harm reduction and treatment services	• Make harm reduction services available, accessible and acceptable to all who need them to help reduce hepatitis C transmission ensuring harm reduction services are designed and provided in ways that are responsive to Māori. • Investigate the feasibility of implementing a system of unique identifiers for each client in the New Zealand Needle Exchange Programme. • Improve linkages between primary health care, alcohol and other drug (AOD) services, mental health services, New Zealand Aids Foundation (NZAF), New Zealand Prostitutes' Collective (NZPC), sexual health services, Māori health providers, other community services and the New Zealand Needle Exchange Programme. • Develop an integrated model of health care at needle exchange services and other locations (eg, NZPC, NZAF) for people who inject drugs, to assess injecting-related injuries, wound dressing, blood pressure and general health checks, to enhance people's engagement with BBV testing and treatment services.

2.3 Focus area 3: Testing and screening

2.3.1 Why this is important

> The WHO global health sector strategy on viral hepatitis (WHO 2016) states that early diagnosis and linking to treatment and care, is a key 'intervention for impact' for viral hepatitis.

A priority group for testing is people who currently inject or previously injected drugs. In New Zealand, hepatitis C testing takes place in a range of primary, secondary and other community settings. However, some health care providers may find it challenging to ask people about past intravenous drug use (WHO 2017b); there are some indications that providers do not always follow guidelines for testing. We need to undertake work to strengthen national laboratory systems to ensure that they provide high-quality and timely diagnosis and reporting and reliable diagnostics.

Modelling using estimated data for the New Zealand population has suggested that we will need to treat more than 7 percent of people with chronic hepatitis C each year to meet the WHO target to eliminate hepatitis C.[17] Between February and December 2019, 3,362 New Zealanders were treated with Maviret; however, numbers of those treated have been dropping since that time. This is likely in part due to services being impacted by COVID-19. To meet the treatment numbers required to achieve elimination, health service providers need to more effectively identify people who need treatment, and better link people to health services and treatment.

We need to plan and deliver testing strategies in partnership with Māori, so they are acceptable to Māori and increase access to testing and treatment.

This focus area includes activities that aim to improve our understanding of the epidemiology of hepatitis C infection in New Zealand, improve testing and help us develop an approach for targeted testing of at-risk populations.

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[17] Presentation from Dr Homie Razavi to the Ministry of Health, July 2018. See https://www.youtube.com/watch?v=MPD-xNH6HZk

2.3.2 Focus area activities

FOCUS AREA 3: TESTING AND SCREENING	
Objectives	**Activities**
Objective 3.1: Improve our understanding of the epidemiology of hepatitis C infection in New Zealand	• Explore ways to improve our understanding of the epidemiology[18] of hepatitis C in New Zealand (and identify those previously diagnosed), including by ethnicity, through further analysis of hepatitis C laboratory lookback testing and modelling data.[19]
Objective 3.2: Improve current testing for hepatitis C	• Develop a more consistent national approach to testing for hepatitis C (using lessons learnt from current proof-of-concepts and pilots and the data collated through activities specified in objective 3.1). • Develop standardised laboratory ordering policies and procedures and reporting for hepatitis C.
Objective 3.3: Develop an approach for targeted testing of the New Zealand adult population at high risk of hepatitis C infection, to increase access to testing, diagnosis and treatment	• Implement an integrated, nationally consistent roll-out of hepatitis C testing across the New Zealand Needle Exchange Programme, including at mobile and other community sites, and wider access to nurse-led clinics with linkage to treatment and follow-up, developing strategies to ensure testing is acceptable to and appropriate for Māori. • Implement strategies to ensure a consistent approach to offering hepatitis C testing and treatment at services attended by those at high risk of hepatitis C, including strategies that aim to improve Māori health development and efforts to achieve equitable health outcomes. • Investigate opportunities to work with Whānau Ora commissioning agencies and service providers, kaupapa Māori health, or on marae, to develop initiatives to increase hepatitis C testing for Māori communities.
Objective 3.4: Develop and evaluate current and new potential approaches to testing strategies based on a current stocktake of proof of concepts and pilots	• Investigate the appropriateness and design of a feasibility study of universal testing of the general population in a single geographical area of New Zealand. • Further refine the cost-effectiveness model[20] of universal versus targeted testing for increased diagnosis of hepatitis C in New Zealand. • Promote nationally consistent strategies to combine hepatitis C and B testing for Māori and Pacific peoples.

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[18] Such activities must ensure that providers meet the Health Information Privacy Code when dealing with people's health information, and ensure that kaitiaki of Māori data is accounted for.

[19] This activity looks at the epidemiology of those tested, so will not provide a population-level view. See objective 3.4, which outlines a general population approach.

[20] This cost-effectiveness model was developed by Dr Homie Razavi.

2.4 Focus area 4: Surveillance and monitoring

2.4.1 Why this is important

> We will need surveillance and monitoring mechanisms to be in place to track and report on our progress against the WHO 2030 target to eliminate hepatitis C.

Data needs to be collected in consistent and timely ways, to support service improvements and enable regional, national and international comparisons.

When developing any future surveillance system for hepatitis C, we will need to consider the standardised storage and management of diagnostic and clinical data, and how this could be linked with care planning and treatment outcomes. This includes looking at how the data collected could be used for analysis of trends and to monitor treatment outcomes and reinfection.

A robust and functional hepatitis C register that enables monitoring, surveillance and linkage to care was identified as a key part to eliminating hepatitis C in New Zealand. Currently, New Zealand has no single national registry of cases of hepatitis C.[21] Ideally, such a registry would:

- enable surveillance and monitoring of disease incidence and prevalence
- link all diagnosed cases of hepatitis C (acute or chronic) to treatment.

Reporting on the number of patients that have been treated with new DAAs is available to the Ministry of Health and PHARMAC through the pharmaceutical data warehouse, but this is not a registry. The Ministry of Health is considering investigating the development and implementation of a regional or local pilot of a 'virtual' registry. This would involve looking at ways of combining the functions of surveillance and monitoring with linkage of diagnosed cases to treatment, based on a test-treat-cure approach.

Any surveillance and monitoring work needs to achieve equitable outcomes for Māori in terms of linkage to treatment for hepatitis C, and to ensure kaitiaki of Māori data is accounted for.

This focus area includes activities that aim to improve the surveillance and monitoring of hepatitis C and investigate ways of increasing the linkage of diagnosed cases with treatment.

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[21] The Hepatitis Foundation of New Zealand has a cloud-based registry for community-based hepatitis B monitoring that was used for a hepatitis C pilot and linked patients to care.

2.4.2 Focus area activities

FOCUS AREA 4: SURVEILLANCE AND MONITORING	
Objectives	**Activities**
Objective 4.1: Improve the surveillance and monitoring of hepatitis C	• Develop a surveillance system that will inform our progress towards elimination and risk factors. Work includes exploring the expansion of a national clinical data repository[22] for the collection of data for other diseases such as hepatitis C.
	• Investigate the development of a direct laboratory notification process in collaboration with the Institute of Environmental Science and Research, the New Zealand Microbiology Network and infectious diseases physicians.
	• Establish an oversight group to guide and monitor implementation of the National Hepatitis C Action Plan.
	• Develop a monitoring plan and indicators for 2021–2025 and undertake regular reporting on progress towards the elimination goal.
Objective 4.2: Increase the linkage of diagnosed cases of hepatitis C with treatment	• Explore the use of existing mechanisms, such as lessons learned from reporting currently used for syphilis and gonorrhoea, to collect more detailed data about linkage to care.
	• Investigate the development and implementation of a regional or local pilot of a 'virtual' registry[23] drawing on existing data streams, possibly including notifications, laboratory, primary and secondary health care data, and treatment data from PHARMAC and the Ministry of Health including achieving equitable outcomes for Māori in terms of linkage to treatment for hepatitis C.
	• Evaluate the pilot to inform the development of a national registry and to improve the quality of data and data collection processes.

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[22] For example, Eclair is a national clinical data repository (CDR) which was initially set up to receive all COVID-19 test reports from laboratories across the country. Sysmex New Zealand's Eclair CDR is a proven and trusted solution for the standardised storage, management and display of diagnostic and clinical data by DHBs and private pathology laboratory providers across New Zealand and overseas.

[23] The 'virtual' clinical registry refers to the proposal being developed by the Ministry of Health which involves investigating ways of combining the functions of surveillance and monitoring with linkage of diagnosed cases to treatment.

2.5 Focus area 5: Integration and access to care

2.5.1 Why this is important

> Improving access and uptake of hepatitis C treatments involves supporting broad access to funded treatments and supporting the workforce to work more effectively in the community.

Although the current prevalence of hepatitis C in the New Zealand prison population is not known, reviews of prevalence studies over a 10-year period have found that prisoners in most countries have higher prevalence of hepatitis C infection than the general population. Investigating ways of improving access to hepatitis C testing, treatment and prevention services in the New Zealand corrections system is an important part of this focus area.

In terms of implementing a more integrated service model across the sector, ongoing relationships between primary and secondary health care are crucial. Strengthened relationships will help us to ensure patients are better served in the primary and community care settings, with specialist clinician support when necessary. This focus area includes building the capacity and capability of primary health care and community-based providers.
It also aims to investigate ways of widening prescribing to include nurses and pharmacists and reducing other barriers to people's access to hepatitis C treatments in the community.

2.5.2 Focus area activities

FOCUS AREA 5: INTEGRATION AND ACCESS TO CARE

Objectives	**Activities**
Objective 5.1: Improve access to and uptake of hepatitis C treatments	• Support the implementation of available treatments for hepatitis C, including supporting resources and information for prescribers, pharmacies and other health professionals.
	• Support the broad coverage of pharmacies registered to provide hepatitis C treatments.[24]
	• Monitor and report on uptake of hepatitis C treatments and report by ethnicity and other demographic information.

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[24] Pharmacies receive a professional fee for service and are first required to register as a Maviret AbbVie Care Pharmacy. Registration includes completing Maviret Quality Use of Medicines training.

FOCUS AREA 5: INTEGRATION AND ACCESS TO CARE	
Objectives	**Activities**
Objective 5.2: Improve access to and uptake of hepatitis C testing and treatment services in prisons	• Establish the prevalence of hepatitis C in New Zealand prisons.
	• Investigate how to increase access to hepatitis C testing, treatment and prevention services in the New Zealand corrections system.
	• Improve access to hepatitis C clinics in prisons providing education, testing, assessment and treatment.
	• Investigate the feasibility of an opt-off approach to offering hepatitis C testing in New Zealand.
	• Increase follow-up offers of hepatitis C tests and timely access to further re-testing.
	• Investigate how to improve the availability and promotion of hepatitis C information, including health TV and other resources tailored for prisons including resources related to tattooing in prison.
	• Improve prevention and harm reduction for people in prisons and transitioning into the community.
	• Undertake micro-elimination pilots at corrections facilities and promote hepatitis C awareness, education and testing, including through rural probation services.
Objective 5.3: Increase the integration and coordination of hepatitis C services across the sector	• Continue to support hepatitis C coordinators in each DHB region to strengthen the delivery of consistent approaches around the country and to share innovation and best practice learning.
	• Establish a series of annual regional workshops and symposiums to encourage collaboration and sharing innovative and successful approaches, including improving mainstream services' responsiveness to Māori health development and supporting kaupapa Māori approaches.
	• Strengthen the ongoing relationships between primary and secondary health care to support the implementation of a more integrated service model across the sector.
Objective 5.4: Reduce barriers to access to hepatitis C treatments in the community	• Investigate the feasibility of widening prescribing to include nurses and pharmacists.
	• Undertake research to increase understanding about barriers to health care and awareness for Māori in regard to hepatitis C.
	• Increase the capability and capacity of primary health care services to treat more patients in the community.
	• Promote information about financial support that is available to improve access to hepatitis C treatments in the community, such as the Work and Income Special Needs Grant, and the Community Services Card, which enables people with hepatitis C to access free or cheaper GP visits. Promote these forms of assistance to Māori communities through Māori health and community services.
	• Investigate the feasibility of a primary health care subsidy to pay for consultations for people newly diagnosed with chronic hepatitis C.

3.

Implementing the planned activities

We will deliver the activities set out in this action plan in a phased way. An implementation plan will be completed in 2021 to provide a road map for the first phase of work, to be undertaken from 2021 to 2025.

Not all activities in the action plan will be implemented during phase one. A prioritisation process was carried out to identify critical activities for initial delivery.

We will establish performance measures to track our progress and assess the impact of these activities. This will enable us to identify successes and areas for improvement as we work towards our elimination goal. A cross-sector oversight group will guide and monitor implementation.

The implementation plan will be a working document; we will update it on a regular basis to reflect our progress and achievements and any changes and additions.

We will assign timeframes and milestones for each of the activities in this plan, specifying the order and timing in which we will implement activities.

The implementation plan will describe how best to develop activities so that they are more likely to improve Māori health and reduce inequities; for example, by using co-design processes and partnering with Māori communities.

3.1 Responsible groups and other stakeholders

The implementation plan will assign lead agencies responsible for ensuring delivery of each activity, and partner agencies and key stakeholders to support implementation. The plan will ensure that the responsible groups and organisations have the appropriate level of accountability or mandate to make or oversee the changes, or to influence the work required. The lead agency will be responsible for coordinating and supporting the activity, and for monitoring and reporting against quality measures of success.

It is important to note that no funding responsibilities are automatically associated with being a lead agency.

3.2 Measuring the success of the action plan

As part of implementation, we will develop a monitoring plan to measure and monitor the progress and success of the action plan.

The monitoring plan will specify a small number of indicators, to measure whether improvements are:

- attributable to the action plan
- central to showing the success of the action plan
- cost-effective to measure
- SMART (specific, measurable, attributable, realistic and time-bound).

Once we have captured baseline data, the indicators will help us to measure progress of the activities in each focus area. This includes the ability to assess the effectiveness of different approaches to raising awareness, testing and treatment uptake being delivered across the country. Monitoring the indicators will determine whether New Zealand is improving outcomes, meeting the WHO targets and eliminating hepatitis C as a public health threat.[25] We will develop indicators to ensure that we are addressing Māori health and enhancing equity.

The monitoring plan will include details of who is responsible for collecting, collating and analysing the data, and the mechanisms for reporting back. We will consider a Māori-led governance model for this group. We will need to ensure that this group continually adjusts and improves implementation activities if needed; for example, if equity is not being enhanced.

We will use other means, such as improving the commissioning cycle and contract management (including monitoring service delivery and outcomes) to ensure we are appropriately commissioning and designing services and programmes; implementing activities in a quality manner; and achieving the best outcomes for priority groups and communities.

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[25] We may have to adapt some of the WHO targets to the New Zealand situation; for example, the New Zealand Needle Exchange Programme has identified that 300 syringes per person who injects drugs may not be enough for the New Zealand situation; this will need further analysis before we confirm the target.

3.3 Prioritisation

We carried out an initial prioritisation process to inform development of the implementation plan.

This involved the working group and the project team reviewing each activity in the action plan to assess how well they meet the following criteria:

- the quality of supporting evidence for the activity
- how well the activity promotes improvements to health equity and Māori health aspirations
- whether it is acceptable to people with hepatitis C and the wider community
- whether it is effective in reaching and having a positive impact on people's health outcomes
- whether it is cost-effective and an efficient use of resources.

We invited feedback on prioritisation during the sector review process we undertook on an early draft of this action plan.

We will also give consideration to the formal use of the Health Equity Assessment Tool (HEAT).[26]

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[26] See https://www.health.govt.nz/publication/health-equity-assessment-tool-users-guide

Appendix 1:

National Hepatitis C Action Plan for Aotearoa New Zealand 2020 – 2030 Focus Area Activities

▶ **Overall goal:** elimination of Hepatitis C as a major public health threat by 2030

FOCUS AREA 1: AWARENESS AND UNDERSTANDING

Objectives	Activities
Objective 1.1: Raise awareness of hepatitis C in New Zealand in the general population and priority populations.	• Develop a centrally coordinated and driven national awareness campaign with consistent messaging (tailored to regional populations) with a call to action to get tested. • Develop awareness sub-campaigns using national messages tailor-made for priority populations and other groups that may need different messaging. • Develop a programme of direct communications and actions for people who have been diagnosed with hepatitis C. • Develop national hepatitis C resources for the public to increase and provide ongoing awareness and understanding of hepatitis C, including who to contact details. • Investigate tattooing as a risk factor for hepatitis C in New Zealand. • Deliver annual events and promotional activities to raise awareness on World Hepatitis Day 28 July that are centrally coordinated and driven. • Strengthen, resource and support the role of consumer-led input to raise awareness and eliminate hepatitis C.
Objective 1.2: Increase knowledge and awareness in health care providers of hepatitis C services.	• Develop a national awareness campaign and communications programme for health care providers. • Develop and promote national training and education programmes (continuing medical education-accredited) with tailor-made additional modules for specific providers ensuring education includes how services should be accessible and acceptable for Māori. • Develop hepatitis C champions across the sector, including clinical leads and community workers, ensuring there are Māori champions linked to Māori providers and communities. • Develop a hepatitis C clinical advice and support network for health practitioners in DHB regions made up of local champions, general practitioners (GPs), registered nurses, nurse practitioners, addiction providers, and needle exchange peer workers, ensuring networks include members with knowledge and expertise in Māori health and culturally and linguistically diverse backgrounds.
Objective 1.3: Increase the consistency and availability of hepatitis C promotional activities and resources.	• Develop a single repository of current and future hepatitis C resources and promote the national suite of hepatitis C resources.

FOCUS AREA 2: PREVENTION AND HARM REDUCTION

Objectives	Activities
Objective 2.1: Increase access to harm reduction strategies and prevention of hepatitis C transmission.	• Increase the distribution of free injecting equipment using strategies that meet current international best practice, ensuring services are responsive to Māori values and beliefs and take place in settings that are acceptable to and improve access for Māori. • Provide evidence-based, culturally appropriate, harm-reduction educational messages and resources. Ensure harm reduction messaging for people who inject drugs includes information on safer injecting and the importance of preventing infection and/or reinfection from hepatitis C and other BBV. • Offer people who inject drugs testing for other BBVs (HIV and hepatitis B), and provide hepatitis B vaccination if warranted. • Investigate the need for and feasibility of seroprevalence surveys at needle exchange programme sites to establish a baseline and to monitor efforts to eliminate hepatitis C.
Objective 2.2: Educate health care providers on harm reduction and prevention of hepatitis C.	• Provide information about key harm reduction messages for health care workers (eg, prescribers, nurses, peer workers). • Produce a range of easily accessible, targeted and culturally appropriate multimedia resources on testing, treatment and harm reduction with consistent messaging, for health care providers to use and distribute. • Educate and expand the scope of the peer workforce, including by engaging at-risk populations in relation to being tested and treated and providing support through a nationally consistent process, supported by local champions, including Māori peer workers in rural areas with a high Māori population.
Objective 2.3: Reduce stigma and discrimination for people with hepatitis C who inject drugs.	• Investigate evidence-based ways to reduce stigma and discrimination for people who inject drugs and have hepatitis C including addressing cultural differences as well as stigma for Māori communities.
Objective 2.4: Increase the integration and coordination of hepatitis C-related prevention, harm reduction and treatment services.	• Make harm reduction services available accessible and acceptable to all who need them to help reduce hepatitis C transmission ensuring harm reduction services are designed and provided in ways that are responsive to Māori. • Investigate the feasibility of implementing a system of unique identifiers for each client in the New Zealand Needle Exchange Programme. • Improve linkages between primary health care, alcohol and other drug (AOD) services, mental health services, New Zealand Aids Foundation (NZAF), New Zealand Prostitutes' Collective (NZPC), sexual health services, Māori health providers, other community services and the New Zealand Needle Exchange Programme. • Develop an integrated model of health care at needle exchange services and other locations (eg, NZPC, NZAF) for people who inject drugs, to assess injecting-related injuries, wound dressing, blood pressure and general health checks, to enhance people's engagement with BBV testing and treatment services.

FOCUS AREA 3: TESTING AND SCREENING

Objectives	Activities
Objective 3.1: Improve our understanding of the epidemiology of hepatitis C infection in New Zealand.	• Explore ways to improve our understanding of the epidemiology of hepatitis C in New Zealand (and identify those previously diagnosed), including by ethnicity, through further analysis of hepatitis C laboratory lookback, testing and modelling data.
Objective 3.2: Improve current testing for hepatitis C.	• Develop a more consistent national approach to testing for hepatitis C (using lessons learnt from current proof-of-concepts and pilots, and the data collated through activities specified in objective 3.1). • Develop standardised laboratory ordering policies and procedures, and reporting for hepatitis C.
Objective 3.3: Develop an approach for targeted testing of the New Zealand adult population at high-risk of hepatitis C infection, to increase access to testing, diagnosis and treatment.	• Implement an integrated, nationally consistent roll-out of hepatitis C testing across the New Zealand Needle Exchange Programme, including at mobile and other community sites and wider access to nurse-led clinics with linkage to treatment and follow-up, developing strategies to ensure testing is acceptable to and appropriate for Māori. • Implement strategies to ensure a consistent approach to offering hepatitis C testing and treatment at services attended by those at high risk of hepatitis C including, strategies that aim to improve Māori health development and efforts to achieve equitable health outcomes. • Investigate opportunities to work with Whānau Ora commissioning agencies and service providers, kaupapa Māori health, or on marae, to develop initiatives to increase hepatitis C testing for Māori communities.
Objective 3.4: Develop and evaluate current and new potential approaches to testing strategies based on a current stocktake of proof of concepts and pilots.	• Investigate the appropriateness and design of a feasibility study of universal testing of the general population in a single geographical area of New Zealand. • Further refine the cost-effectiveness model[27] of universal versus targeted testing for increased diagnosis of hepatitis C in New Zealand. • Promote nationally consistent strategies to combine hepatitis C and B testing for Māori and Pacific peoples.

FOCUS AREA 4: SURVEILLANCE AND MONITORING

Objectives	Activities
Objective 4.1: Improve surveillance and monitoring of hepatitis C.	• Develop a surveillance system that will inform our progress towards elimination and risk factors. Work includes exploring the expansion of a national clinical data repository for the collection of data for other diseases such as hepatitis C. • Investigate the development of a direct laboratory notification process in collaboration with the Institute of Environmental Science and Research, the New Zealand Microbiology Network and infectious diseases physicians. • Establish an oversight group to guide and monitor implementation of the National Hepatitis C Action Plan. • Develop a monitoring plan and indicators for 2021–2025 and undertake regular reporting on progress towards the elimination goal.
Objective 4.2: Increase the linkage of diagnosed cases of hepatitis C with treatment.	• Explore the use of existing mechanisms, such as reviewing lessons learned from reporting currently used for syphilis and gonorrhoea, to collect more detailed data about linkage to care. • Investigate the development and implementation of a regional or local pilot of a 'virtual' registry drawing on existing data streams, possibly including notifications, laboratory, primary and secondary health care data, and treatment data from PHARMAC and the Ministry of Health including achieving equitable outcomes for Māori in terms of linkage to treatment for hepatitis C. • Evaluate the pilot to inform the development of a national registry and to improve the quality of data and data collection processes.

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[27] This model was developed by Dr Homie Razavi

FOCUS AREA 5: INTEGRATION AND ACCESS TO CARE	
Objectives	**Activities**
Objective 5.1: Improve access to and uptake of hepatitis C treatments.	• Support the implementation of available treatments for hepatitis C including supporting resources and information for prescribers, pharmacies and other health professionals. • Support the broad coverage of pharmacies registered to provide hepatitis C treatments. • Monitor and report on uptake of hepatitis C treatments and report by ethnicity and other demographic information.
Objective 5.2: Improve access to and uptake of hepatitis C testing and treatment services in prisons.	• Establish the prevalence of hepatitis C in New Zealand prisons. • Investigate how to increase access to hepatitis C testing, treatment and prevention services in the New Zealand corrections system. • Improve access to hepatitis C clinics in prisons providing education, testing, assessment and treatment. • Investigate the feasibility of an opt-off approach to offering hepatitis C testing in New Zealand. • Increase follow-up offers of hepatitis C tests and timely access to further re-testing. • Investigate how to improve the availability and promotion of hepatitis C information, including use of health TV and other resources tailored for prisons including resources related to tattooing in prison. • Improve prevention and harm reduction for people in prisons and transitioning into the community. • Undertake micro-elimination pilots at corrections facilities and probation services and promote hepatitis C awareness, education and testing, including through rural probation services.
Objective 5.3: Increase the integration and coordination of hepatitis C services across the sector.	• Continue to support hepatitis C coordinators in each DHB region to strengthen the delivery of consistent approaches around the country, and to share innovation and best practice learning. • Establish a series of annual regional workshops and symposiums to encourage collaboration and sharing of innovative and successful approaches, including improving mainstream services' responsiveness to Māori health development and supporting kaupapa Māori approaches. • Strengthen the ongoing relationships between primary and secondary health care to support the implementation of a more integrated service model across the sector.
Objective 5.4: Reduce barriers to access to hepatitis C treatments in the community.	• Investigate the feasibility of widening prescribing to include nurses and pharmacists. • Undertake research to increase understanding about any barriers to health care and awareness for Māori in regard to hepatitis C. • Increase the capability and capacity of primary care services to treat more patients in the community including access to nurse-led clinics. • Promote information about financial support that is available to improve access to hepatitis C treatments in the community, such as the Work and Income Special Needs Grant, and the Community Services Card, which enables people with hepatitis C to access free or cheaper GP visits. Promote these forms of assistance to Māori communities through Māori health and community services. Investigate the feasibility of a primary health care subsidy to pay for consultations for people newly diagnosed with chronic hepatitis C.

Appendix 2:

Working group members

Member	Area of representation	Role and organisation
Raine Berry	**New Zealand Needle Exchange Programme**	Programme practice leader, Needle Exchange Programme
Sarah Blair	**Community alcohol and drug addiction services**	Addiction medicine specialist, Capital & Coast DHB
Dr Cheryl Brunton	**Public health**	Medical officer of health, Community and public health, Canterbury DHB
Josephine Davis	**Māori workforce**	Nurse director, Manaia PHO
Professor Tim Dare	**Ethics and privacy**	Professor of philosophy, University of Auckland
Jo de Lisle	**Hepatitis C coordinators in DHB regions**	Project manager, HealthShare Ltd
Dr Tony Farrell	**Royal New Zealand College of General Practitioners**	GP, Mount Medical Centre, Mount Maunganui
Professor Ed Gane (Chair)	**Hospital specialists**	Professor of Medicine, University of Auckland; Deputy director, New Zealand Liver Transplant Unit
Lisa Gestro	**DHB planning and funding**	General manager, planning and funding, Southern DHB
Hazel Heal	**Hep C Action Aotearoa**	Consumer representative
Belinda Heaphy	**Hepatitis C nurses**	Nelson Marlborough PHO
Dr Helen Liley	**PHO Clinical Leaders Network**	Clinical director, primary options for acute care, East Health Services
Dr Caroline McElnay	**Ministry of Health**	Director of Public Health, Population Health and Prevention
Dr Rebecca O'Connell	**Ministry of Health**	Public health physician
Derek Perkins	**Department of Corrections**	Regional clinical director, Lower North
Fuimoana Karl PulotoEndemann	**Pacific health advisor**	Registered nurse, Christchurch
Darren Quirk	**Health Promotion Agency**	Marketing team lead
Hemaima Reihana	**Māori workforce**	Nurse director, Te Tai Tokerau PHO
Rachel Stace	**Hep C Action Aotearoa**	Consumer representative
Matthew Tyson	**PHARMAC**	Therapeutic group manager, PHARMAC
Dr Arlo Upton	**New Zealand Microbiology Network**	Clinical microbiologist and lead clinical pathologist, Southern Community Laboratories
Dr Jeffrey Wong	**Gastroenterologists**	Gastroenterologist, Hutt Valley DHB

Thanks also goes to Dr Homie Razavi and Professor Greg Dores for their expert advice.

Appendix 3:

World Health Organization viral hepatitis 2030 targets

OVERARCHING GOAL OF THE HEPATITIS C ACTION PLAN		
WHO goal: To eliminate viral hepatitis as a major public health threat by 2030[28]		
WHO impact targets		
Target area	**Incidence:** New cases of chronic viral hepatitis B and C infections	**Mortality:** Viral hepatitis B and C deaths
2030 target	90 percent reduction	65 percent reduction

WHO service coverage targets for hepatitis C	
Target area	**2030 target**
Blood safety	100 percent of donations screened in a quality-assured manner
Safe injections: percentage of injections administered with safety-engineered devices in and out of health facilities	90 percent
Harm reduction: number of sterile needles and syringes provided per person who injects drugs per year	300
Viral hepatitis B and C diagnosis	90 percent of chronic hepatitis infections diagnosed
Viral hepatitis B and C treatment	80 percent of eligible persons with chronic hepatitis C virus infection are treated 80 percent of eligible persons with chronic hepatitis B virus infection are treated

Source: WHO 2016.

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[28] WHO has defined the elimination of viral hepatitis as a public health threat as achieving a 90 percent reduction in new chronic infections and a 65 percent reduction in mortality (WHO 2016).

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