

Victorian hepatitis B plan

2022–30



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In this document, 'Aboriginal' refers to both
Aboriginal and Torres Strait Islander people.

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Acknowledgement of Aboriginal Victorians

We recognise the diversity of Aboriginal people living throughout Victoria. In this strategy we have used the term 'Aboriginal' to include all people of Aboriginal and Torres Strait Islander descent living in Victoria.

The Victorian Government proudly acknowledges Victoria's Aboriginal communities and the richness and depth of the world's oldest living culture and pays respect to Elders past and present. We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we live, work and play. We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches our society more broadly. We embrace self-determination and reconciliation, working towards equality of outcomes and ensuring an equitable voice.

Within Aboriginal Victorian communities, there is a rich landscape of cultural and spiritual diversity, with varied heritages and histories both pre- and post-invasion. We understand and acknowledge that people may have multiple and intersecting gender and sexuality identities including: young people, women, gay, bisexual and other men who have sex with men, trans and gender diverse people including Sistergirls and Brotherboys. We also acknowledge priority groups within the Aboriginal Victorian population who particularly experience poor

sexual and reproductive health outcomes. We recognise that these groups have a right to enjoy and have control over their own sexual and reproductive behaviours in line with cultural values, kinship practices and individual ethics, and may need support to access culturally inclusive reproductive health services and programs.

Victorian Aboriginal communities continue to lead with strength and resilience in the face of ongoing transgenerational trauma, systemic racism and the impacts of colonisation, dispossession and removal of families and Country. Cultural and social determinants of health affect Aboriginal Victorians' experiences of wellbeing, blood-borne viruses (BBV), sexually transmissible infections (STI) and reproductive health choices. In this context, wellbeing is not a narrow experience of the physical body, it is a cultural, emotional and spiritual experience. This wellbeing includes the right to be free from diseases that may interfere with sexual life.

To achieve these freedoms, we have established a continued willingness to work in partnership to address BBV and STI and to promote reproductive health. This partnership, defined by the hallmarks of the community-controlled and -led response, is best practice and improves quality-of-life and health outcomes for individuals, families and communities.

The Victorian Government notes that, in partnership with the First Peoples' Assembly of Victoria, Victoria is currently establishing a framework to begin treaty negotiations with Traditional

Owners and Aboriginal Victorians. Government will work to ensure relevant actions outlined in this strategy align with treaty negotiations and delivering future treaties in Victoria. This includes corresponding funding, implementation of actions and governance mechanisms. We are deeply committed to Aboriginal self-determination and to supporting Victoria's treaty process. We acknowledge that treaty will have wide-ranging impacts for the way we work with Traditional Owners and Aboriginal Victorians. We seek to create respectful and collaborative partnerships. We will develop policies and programs that respect Aboriginal self-determination and align with treaty aspirations.

We acknowledge that Victoria's treaty process will establish a framework for transferring decision-making power and resources to support self-determining Aboriginal communities to take control of matters that affect their lives. We commit to working proactively to support this work in line with the aspirations of Traditional Owners and Aboriginal Victorians.

As we work together to ensure Victorian Aboriginal communities continue to thrive, the government acknowledges the invaluable contributions of generations of Aboriginal warriors and matriarchs that have come before us, who have fought tirelessly for the rights of their people and communities towards Aboriginal self-determination. We are now honoured to be part of that vision.



Pictured: VHHITAL team: Aggie Geromanolis, Bernard Gardner and Isobelle Print

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About this plan

The *Victorian hepatitis B plan 2022–30* is one of seven plans that form the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*.

It builds on the objectives, focus areas and outcomes in the *Victorian hepatitis B strategy 2016–2020*. It outlines the priority actions implemented to date and includes new and refocused priority actions needed to meet our elimination agenda.

This plan aligns with the *Third national hepatitis B strategy 2018–2022*, which provides a framework for a high-quality and coordinated national response. The plan also aligns with and supports the *Victorian public health and wellbeing plan 2019–2023* and the *Victorian cancer plan 2020–2024*.

The hepatitis B plan was developed in consultation with people living with hepatitis B (HBV), clinicians, advocates, peer leaders, researchers and the broader blood-borne virus (BBV) and sexually transmissible infections (STI) sector. It reflects the Victorian Government's commitment to working together to achieve our shared vision of the virtual elimination of HBV as a public health concern by 2030.

Figure 1 shows where this plan fits within the Victorian sexual and reproductive health and viral hepatitis strategy.

The hepatitis B plan is supported by a strategy companion

document made up of an overview (which frames our approach and details our guiding principles, priority populations and settings) and a system enabler plan.

The system enabler plan acknowledges the enablers that make a significant contribution to achieving outcomes across Victoria's sexual and reproductive health and viral hepatitis response, specifically:

- reducing stigma, racism and discrimination
- strengthening workforce capacity
- fostering partnerships and collaboration
- strengthening and supporting data and research.

This approach aims to strengthen shared priority actions across the sexual and reproductive health system to address common system challenges faced by Victorians in having their sexual and reproductive health and care needs understood and met.

This will involve establishing and deepening partnerships outside the viral hepatitis model of care, such as with organisations in the mental health, housing, alcohol and other drug, and refugee health sectors. These partnerships

will help us develop pathways and programs tailored to our priority populations.

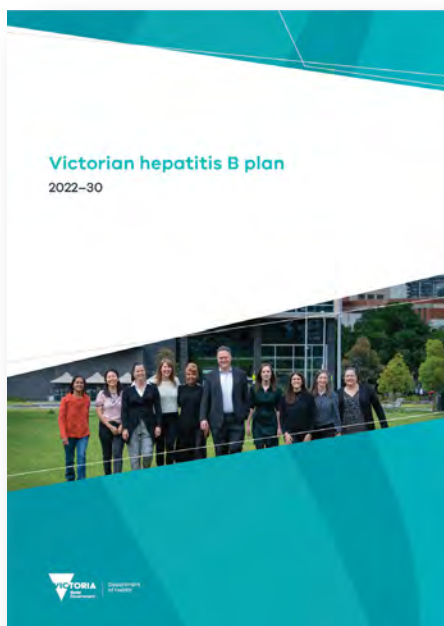
Our models of care must respond to intersectionality, diversity, increasing complexity, co-occurring needs and stigma, racism and discrimination as experienced by our priority populations.

Aboriginal Victorians are a priority population in the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*. Recognising the unique needs of Aboriginal Victorians, the *Victorian Aboriginal sexual and reproductive health plan 2022–30* outlines priority actions needed to improve Aboriginal Victorians' wellbeing through reducing the transmission and impact of BBV and STI and improving sexual and reproductive health and viral hepatitis outcomes.

The Victorian Government will undertake a mid-point review in 2025–26 to assess progress against achieving the 2025 stepped targets and 2030 elimination targets. The mid-cycle progress report will be used to refresh and refocus priority actions and activities outlined in this plan and aligned plans under the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*.

Figure 1: Components of the *Victorian sexual and reproductive health and viral hepatitis strategy*

Victorian sexual and reproductive health and viral hepatitis strategy 2022-30



The indicators and monitoring framework currently in development will form the basis of understanding the impact of the strategy and each plan.

Introduction

The Victorian Government is committed to eliminating HBV as a public health concern by 2030. This is a bold, ambitious but entirely achievable goal.

Central to reaching our targets is continuing to strengthen and deepen our partnerships with people living with or affected by HBV. Researchers, clinicians, peer leaders and advocates will innovate and evolve our HBV model of care.

Liver cancer is the fastest increasing cause of cancer death in Australia. But most cases are preventable and linked to identifiable risk factors (AIHW 2019). These factors include chronic hepatitis B (CHB) and chronic hepatitis C. Together, these are the main cause of liver cancer in Australians, along with alcohol consumption, smoking and obesity (Hong et al. 2018; Whiteman et al. 2015). Liver cancer rates have increased by 230 per cent over the past 38 years (1982–2019). Between 47 and 63 per cent of primary liver cancer is the result of a CHB or hepatitis C infection (Cancer Council Victoria 2020).

New diagnoses of liver cancer in Victoria are increasing and are expected to double sometime between 2031 and 2035. Liver cancer deaths among Victorians are continuing to increase and are projected to increase further (Cancer Council Victoria 2021). Liver cancer is one of the top 10 contributors to the burden of cancer globally (Akinyemiju et al. 2017).

Without medical intervention, one in four people living with CHB infection will die from liver cirrhosis or liver cancer. The right treatment for CHB can reduce the risk of liver cancer by up to 75 per cent (Cancer Council Victoria, undated).

Most people living with CHB in Victoria and Australia were born overseas, particularly in the North-East and South-East Asia regions (MacLachlan et al. 2021). The Victorian HBV Serosurvey found a strong association between the proportion of residents born overseas in any local government area and HBV prevalence (Cowie et al. 2010). People born in high-prevalence countries now living in Australia have the same rates of infection as in their countries of birth (He et al. 2020).

Victoria provides free vaccination to a wide range of priority populations to prevent infection and to reduce new cases across the whole community.

We also provide hepatitis B immunoglobulin (HBIG) and vaccination within 12 hours of birth to babies born to women living with HBV. This is 95 per cent effective in preventing mother-to-child transmission. Further reduction in transmission is achieved by providing antiviral treatment during the third trimester of pregnancy for women with a high HBV viral load.

Stigma, racism and discrimination are critical barriers to effective responses for HBV. They can discourage people from accessing essential health care and medical treatment, including testing and treatment. By acknowledging, understanding and quantifying the impacts of prejudice on individuals, organisations and service systems, we can develop and tailor evidence-based responses to reduce and remove these negative effects.

In 2020, 26 per cent of Victorians surveyed said that they would behave negatively towards people living with or at risk of HBV. This was a smaller proportion than the 52 per cent in 2017 (Broady et al. 2020).

This plan provides a framework and rationale for a system-wide approach to improving health outcomes for people at risk of or living with HBV. It outlines how we will work towards a responsive, appropriate system of care across the continuum from prevention to testing, treatment and care.

Effectively responding to HBV requires that we continually deepen our understanding of social and cultural knowledge of affected communities (Bryant et al. 2021). People and communities living with or affected by HBV are diverse, underpinning contemporary Australian society. This intersectional diversity needs to be at the heart of our policy and programmatic responses to tailor health care that is accessible, safe and culturally appropriate.

|| Striving to make the health system more responsive and easier to navigate for people with viral hepatitis is essential. ||

Piergiorgio Moro,
Community Educator,
Multicultural Health
and Support Service



People living with or affected by HBV are a distinct group linked to specialised health needs within Australia's ageing population (Mao et al. 2019). As this population ages, service gaps become clearer, as do opportunities to evolve programs and services that will enable people to age well with HBV. Our efforts should be directed to understanding the long-term effects of living with HBV as the population of people living with viral hepatitis ages.

Only 24 per cent of Victorians living with HBV are currently engaged in regular care, and about 37 per cent of people with HBV have not been diagnosed (MacLachlan et al. 2021). This plan therefore focuses on evolving our model of care to improve our testing, diagnosis and treatment efforts.

Reaching our 2030 goal will require sustained system innovation and an expansion in our model of care. We will need to move from a risk-based to a universal testing approach. In doing so, we will remove potentially stigmatising and overly complex risk-based assessments.

To support this approach, our future model of care should include a focus on 'self-agency' to improve rates of antiviral treatment in line with patient-centred care, best practice and clinical indicators/guidelines. This is exciting work that will need to be co-designed and developed to ensure people are engaged and empowered to make an informed choice to either continue with active monitoring or to start treatment.

For the first time we have included targets for reducing HBV-attributable mortality as we move to intervene early to prevent progression to liver cancer. Monitoring liver health continues to be an important strategy to prevent further liver damage or liver cancer for people living with HBV.

We need to strengthen the Victorian system response by having a greater understanding of how to engage priority populations and support access to screening, prevention, vaccination, testing and treatment services. We need targeted and tailored engagement with communities to increase health literacy and to address and reduce stigma,

racism and discrimination. We need to continually promote and consistently build inclusive services so people can access the testing, treatment, care and support they need, when and where they need it.

Local Public Health Units (LPHUs) provide the capacity for a stronger, more responsive public health system delivered in partnership with local communities and services. The local place-based role and function can support efforts to strengthen the Victorian sexual health service system. This will enable a more responsive and coherent public health system response to the priorities identified in this plan.

By improving our data completeness, use of data insights, emerging evidence and surveillance, we can, in partnership with affected communities, develop targeted approaches that support health-seeking behaviours and increase people's awareness and understanding of how to manage HBV.

Continuing to increase the number of primary care practitioners who can prescribe highly specialised (s100) HBV treatments will provide greater capacity to assess, manage, educate and monitor patients with chronic infection. An additional focus on improving referral pathways to specialist support and community engagement will support the successful implementation of this plan.



|| A necessary element of Victoria’s first hepatitis B strategy, which led to an increased understanding of hepatitis B among priority populations, was directly involving community organisations and people living with chronic hepatitis B: This must continue. Further, we are delighted to see that universal screening for hepatitis B is one of the key actions in this new strategy. This will make hepatitis B part of everyday conversation in the community and so reduce stigma and save lives. ||

Dr Sambath My, Priority Population
Lead, LiverWELL / Hepatitis Victoria

Pictured: LiverWELL team: Dr Sambath My,
Thi Ai Lien Nguyen, Li Ma, Alain Arvin Palinesy

Coronavirus (COVID-19) recovery and care

The disruption caused by COVID-19 in Victoria and the associated restrictions have created service system capacity constraints, including deferred and interrupted usual care.

Interruption and deferral of testing and treatment for viral hepatitis and more broadly for BBV and STI could have major public health impacts for individuals and the community.

HBV prevention, testing and treatment services were defined as essential services and so continued during the 2020 and 2021 COVID-19 restrictions.

COVID-19 has highlighted the need to apply an equity lens on recovery efforts. Intersectional population groups are over-represented in COVID-19 notifications, with 44 per cent of cases occurring in people born overseas (Victorian notification data, September 2021).

Data shows there have been substantial decreases in hepatitis

screening and HBV monitoring during the pandemic, with many communities affected by HBV also disproportionately affected by the pandemic. The number of hepatitis serology tests (includes HBV and hepatitis C) in Victoria declined by 25.3 per cent during April–December 2020 compared with April–December 2019. Testing numbers increased after the initial decline but have not yet returned to previous levels. They appear to be about 15 per cent lower than during 2019 (WHO & Doherty Institute 2021).

Monthly numbers of HBV monitoring (viral load while not on treatment) varied during the height of COVID-19 in Victoria. But, overall, we saw an 11.3 per cent decline in HBV monitoring during April–December 2020 compared with April–December 2019 (WHO & Doherty Institute 2021).

Treatment uptake was only minimally affected for HBV, possibly due to effective telehealth strategies that allowed

remote prescribing (WHO & Institute Doherty 2021). However, lower rates of diagnosis and management will likely have flow-on effects.

We will be in a sustained pandemic environment for some time. We will continually need to adapt our services and messaging to ensure individuals are accessing the care they need.

Although the pandemic has created challenges in maintaining engagement and uptake of testing and treatment services, we have seen many health innovations. These include new community engagement and home-based care models, telehealth and e-prescribing. Encouraging patients who have deferred or interrupted their HBV care to re-engage with treatment and screening services is a priority. Community-controlled, community health and primary care settings are well placed to address delays in HBV testing and care.

In response to our learnings from COVID-19, we will:

Re-engage people in testing, treatment and care

Build on understanding prevention, risk recognition, risk reduction, testing and contact tracing

Build on new and innovative models of care

Hepatitis B in Victoria

Hepatitis B is the most common blood-borne virus in Australia. It causes inflammation, cirrhosis, liver cancer and potential need for a liver transplant. If left untreated, chronic hepatitis B can lead to liver cancer. In Victoria, about 63,000 people are living with HBV, 37 per cent of whom are undiagnosed (MacLachlan et al. 2021).

Hepatitis B notification rates declined by 6 per cent between 2016 and 2019. We saw a further decline of 24 per cent between 2019 and 2020 from 27.3 to 20.8 cases per 100,000 respectively. There were 1,310 cases of hepatitis B notified in 2021, representing a rate of 21.2 cases per 100,000. This was the second lowest annual number and rate since notifiable conditions records began in Victoria. The number and rate of hepatitis B infections in 2021 was a 2 per cent increase compared with the lowest annual record of 2020.¹

Newly acquired cases accounted for 2 per cent of total cases. Half of the total cases were in the 20–39-year age group.

Notification rates continue to be highest in people from culturally diverse backgrounds. Of the cases where country of birth was reported, 8 per cent were among Australian-born and 92 per cent were among people born overseas. Among cases born overseas, the highest proportion of cases were born in China (30 per cent) and Vietnam (18 per cent).

Between 2016 and 2021, there were five newly acquired hepatitis B cases among the Aboriginal population, representing a rate three times higher than the non-Aboriginal population.

Notification data shows that 87 per cent of cases lived in metropolitan Melbourne and 9 per cent were in regional Victoria.

Notification rates for hepatitis B have been consistently higher among males than females, with 53 per cent of the total cases in males and 46 per cent in females. Males are at greater risk of exposure to hepatitis B and are more likely to become chronically infected after exposure. The disparity in notification rates reflects the underlying higher prevalence of infection in males.

Notification data on risk behaviour show that injecting drug use is reported in 28 per cent of newly acquired cases followed by sexual transmission (16 per cent).

Notification data show that hepatitis B cases are mostly diagnosed in general practice clinics.

HBV notification rates declined by

6%

from 2016-2019.

Followed by a further decline of

24%

from 2019-20.

1,310

notified cases of HBV in 2021, representing a rate of 21.2 cases per 100,000.

The rate of HBV infections in 2021 was a

2%

increase compared with the lowest annual record of 2020.

8%

of cases reported were among Australian-born.

30%

of overseas born were from China.

92%

were among people born overseas.

18%

of overseas born were from Vietnam.

Between 2016 and 2021, there were

five

newly acquired cases among the Aboriginal population.

These 5 cases representing a rate

3 times

higher than the non-Aboriginal population.

Data on risk behaviour show that injecting drug use is reported in

28%

of the total newly acquired cases.

Sexual transmission is reported in

16%

of the total newly acquired cases.

Victorian hepatitis B plan

Vision: Eliminate hepatitis B as a public health concern by 2030.

Goals

Victorians are supported to reduce their risk of acquiring hepatitis B.

Victorians living with hepatitis B know their status.

Victorians living with hepatitis B have access to best practice evidence-based treatment and care.

Stigma, racism and discrimination are not a barrier to hepatitis B prevention, testing, treatment and care.

Stepped targets for 2025²

Achieve and maintain childhood vaccination coverage of 95 per cent at birth, 12 and 24 months.

Achieve and maintain 100 per cent uptake of HBIG and birth dose vaccine for all infants born to women with chronic hepatitis B, and access to antiviral therapy in the third trimester of pregnancy for women with high hepatitis B viral load.

Reduce the number of newly acquired hepatitis B infections by 50 per cent, with a focus on priority populations.

Increase the proportion of people living with chronic hepatitis B who are diagnosed to 75 per cent.³

Increase the total proportion of people living with chronic hepatitis B receiving care to 55 per cent. For people living with chronic hepatitis B and eligible for treatment, increase the proportion receiving antiviral treatment to 21 per cent.

Reduce hepatitis B attributable mortality by 30 per cent (compared with 2017).

Reduce the reported experiences of stigma, racism and discrimination among people living with or affected by hepatitis B in health and social support settings to less than 10 per cent.

Focus areas

- Increase prevention
- Increase testing
- Increase treatment
- System enablers
 - Reduce stigma, racism and discrimination
 - Strengthen workforce capacity
 - Foster partnerships and collaboration
 - Strengthen and support data and research

Priority populations

Priority populations are based on social and cultural determinants of health, behavioural risk factors, medical/biological factors or conditions, epidemiological burden of disease, health service access and geographical factors.

People not eligible for Medicare may be at increased risk for BBV, STI and reproductive health issues. They may be part of one or more priority population groups.

The specific priority populations for this plan are:

- culturally diverse people
- people living with hepatitis B including children
- Aboriginal people
- pregnant women with hepatitis B and their children
- unvaccinated adults at higher risk of infection.⁶

Mid-point review

The Victorian Government will undertake a mid-point review in 2025–26 to assess progress against achieving the 2025 stepped targets and 2030 elimination targets. The findings of the mid-cycle progress report will be used to refresh and refocus priority actions and activities outlined in this plan and aligned plans under the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*.

Targets for 2030⁴

Achieve and maintain childhood vaccination coverage of 95 per cent at birth, 12 and 24 months.

Achieve and maintain 100 per cent uptake of HBIg and birth dose vaccine for all infants born to women with chronic hepatitis B, and access to antiviral therapy in the third trimester of pregnancy for women with high hepatitis B viral load.

Reduce the number of newly acquired hepatitis B infections by 90 per cent, with a focus on priority populations.

Increase the proportion of people living with chronic hepatitis B who are diagnosed to 90 per cent.⁵

Increase the total proportion of people living with chronic hepatitis B receiving care to 90 per cent. For people living with chronic hepatitis B and eligible for treatment, increase the proportion receiving antiviral treatment to 27 per cent.

Reduce hepatitis B-attributable mortality by 35 per cent (compared with 2017).

Reduce the reported experiences of stigma, racism and discrimination among people living with or affected by hepatitis B in health and social support settings to less than 10 per cent.

Eliminate mother-to-child transmission of hepatitis B.

This plan aims to reduce the burden of hepatitis B on Victorians and reduce the rising rates of liver cancer.

Prevent

HBV is a vaccine-preventable infection. Prevention is a baseline component of the Victorian HBV elimination approach.

We have been vaccinating infants in Australia since 2000. This has significantly reduced local transmission and the associated personal and health impacts on individuals and families (Romero et al. 2020). Most cases of HBV are acquired at birth or in early childhood when there has been inadequate access to vaccination, such as in people from culturally diverse backgrounds (Kirby Institute 2018).

Australian studies have shown gaps in the care of pregnant women with HBV. Issues include (Giles et al. 2013; Guirgis et al. 2009; Le et al. 2017; Markey et al. 2019; Schultz et al. 2008; Shen et al. 2019):

- poor referral to specialist care and viral load testing for pregnant women with CHB
- incomplete vaccination and post-vaccination testing for children born to mothers with CHB.

A study led by the Doherty Institute shows there continues to be individual challenges and system-level barriers in accessing and providing HBV care during pregnancy in Victoria. The study identified opportunities to improve the delivery of care for pregnant women including:

- diagnosing mothers with CHB
- communication among healthcare services to increase continuity of care
- HBV birth dose and HBIg delivery and uptake
- post-birth follow-up
- education and support for women with CHB (Yussf et al. 2021).

Pregnancy is an opportunity to provide ongoing engagement in care for women with HBV and their families. It is a chance to get them tested, vaccinated and engaged in monitoring to prevent liver cancer. We need to consider standardised protocols for CHB in caring for women with HBV during

pregnancy to ensure no Victorian child is born with HBV. Mother-to-child transmission of HBV is preventable. This engagement in care during pregnancy will help prevent mother-to-child transmission of HBV.

Victoria is proud of its infant HBV vaccination programs as it continues to deliver high vaccination coverage.

In September 2021, 95 per cent of Victorian children aged 12 to 15 months had received the recommended number of HBV vaccines (95 per cent also for Aboriginal children) (Australian Government 2021). Data are not available for children from culturally diverse and refugee backgrounds, nor are estimates of coverage of maternal antiviral treatment, infant birth dose vaccination or HBIg data for children born to mothers with HBV.

Increasing and strengthening earlier intervention and prevention activities through vaccination and targeted screening will greatly reduce onward transmission of HBV through a generational phase out of the virus. Promoting and delivering HBV vaccination to more at-risk Victorians through the Victorian Government's funded vaccination program, together with the national vaccination program for infants and improved system level responses to care for women with HBV during pregnancy are all critical prevention efforts as we work towards eliminating HBV as a public health concern.

We need to maintain prevention investment and efforts to improve the health literacy of priority populations around safe sexual

practices and use of injecting equipment. By working in partnership with communities and stakeholders to improve and innovate our approaches to harm reduction we can support people living with or at risk of HBV to have the knowledge, skills and awareness of issues needed to minimise the risk of transmission.

There is still significant work to do, particularly for priority populations such as people and communities from high-prevalence countries and for Aboriginal Victorians, who continue to be disproportionately affected by HBV. We need to ensure priority populations are supported to receive timely and culturally appropriate services. Embedded stigma, racism and discrimination within the health system must be addressed.

|| We continue to make steady progress in reducing the number of Victorians with undiagnosed hepatitis B, however far too many Victorians with hepatitis B are being diagnosed with late-stage liver cancer. We urgently need to implement culturally safe and patient-centred screening and early detection initiatives, as well as improve surveillance and follow-up treatment. The alignment between the Victorian Cancer Plan and activity under the hepatitis strategies affirms the Department's commitment to improving liver cancer outcomes for all Victorians. Prevention Division, Cancer Council Victoria. ||

Kate Broun, Head of Screening,
Early Detection and Immunisation,
Cancer Council Victoria



Key achievements in prevention (2016–20)

The Victorian Government offers free HBV vaccinations to priority populations to prevent the transmission of HBV. The 2017–18 Victorian State Budget addressed this, with a funding commitment to expand the HBV vaccination program to vaccinate 10,000

more at-risk Victorians. Vaccine-ordering data shows that HBV vaccine orders (doses) increased between 2017 (12,562) and 2018 (26,870). Orders stabilised in 2019 (19,373), 2020 (20,096) and 2021 (17,118) across all at-risk groups.

To support the expanded vaccination program, the department funded LiverWELL (formerly Hepatitis Victoria) to deliver a Hepatitis B community mobilisation project to promote awareness of HBV prevention (including immunisation), testing, treatment and care in people from culturally diverse communities.

The key part of the program was education to people newly arrived in Victoria who were receiving English language tuition through the Adult Migrant English Program (AMEP). Through established links with AMEP providers, LiverWELL delivered 71 education sessions across metropolitan and regional Victoria between November 2018 and November 2019. More than 2,000 students took part in the education sessions. Between 2018 and 2019, LiverWELL also gave out 2,000 GP intervention cards (Hep B 1, 2, 3) to the AMEP students and their families to encourage them to test for HBV. LiverWELL also created audio files in nine priority languages to support culturally diverse communities.

COVID-19 lockdowns interrupted the AMEP sessions between 2019 and

2021. LiverWELL ran 10 face-to-face sessions with 316 participants between 2020 and 2021. In response to the Victorian COVID-19 lockdowns, sessions were offered online, which were popular. With the easing of restrictions and schools returning to face-to-face learning, LiverWELL has offered the choice of delivering sessions in person or online to make them more accessible.

La Trobe University evaluated the education part of the project in 2019. The results showed extensive engagement with local communities and relevant organisations to extend reach and impact. Many students did not know their HBV status, but nearly all said they intended to be tested for HBV and to talk to family and friends about what they had learnt. This evaluation shows the projects' success in reaching priority populations.

LiverWELL also leads the 'Stigma reduction for people living with viral hepatitis' initiative. This program aims to reduce the stigma and discrimination that people living with viral hepatitis can face, particularly in the health system.

Multicultural Health and Support Service delivered community education sessions and peer education programs for communities from high-prevalence countries to increase HBV awareness and reduce stigma associated with the disease.

Victorians are supported to reduce their risk of acquiring hepatitis B

By 2030:

Victorians know how to prevent HBV and are supported to do so.

There is an overall and ongoing reduction in new cases of HBV in Victoria.

Vaccination coverage among Victorian children is as high as possible.

People in priority populations are vaccinated against HBV.

“ The Victorian Government has made the commitment to eliminate hepatitis B as a public health concern by 2030. We need to continue to strive for equity in our response to viral hepatitis, and ensure Victorians affected by hepatitis B are involved in designing the response to maximise the opportunities in the next decade to reach this goal. ”

Professor Benjamin Cowie, Director, WHO Collaborating Centre for Viral Hepatitis, Doherty Institute



Pictured: Doherty team: L-R: Dr Ann Wilson, Lien Tran, Dr Nicole Allard, Amelia Savage, Nafisa Yussf, Prof Benjamin Cowie, Jennifer MacLachlan, Nicole Romero, Mielle Abott, Nicole Matthews

Priority actions – prevention

Increase knowledge, health literacy and awareness of HBV with a focus on harm reduction among priority populations

- Develop and implement co-designed and targeted prevention and education programs that focus on reducing transmission risks
- Foster capacity building and collaborations in priority settings to support community engagement and mobilisation
- Support and strengthen peer-led community initiatives to improve understanding of transmission risks
- Use digital platforms and tools to deliver targeted prevention and education programs where appropriate
- Build on the system response to COVID-19 and undertake assertive community engagement to promote access to prevention for priority populations

Increase HBV vaccination in priority populations

- Deliver and monitor infant HBV vaccinations under the National Immunisation Program, with attention to timely vaccination for Aboriginal children
- Ensure consistent and timely HBV birth dose vaccination
- Deliver and monitor HBV adult vaccination programs for priority populations
- Promote awareness of the importance of HBV vaccination and increase uptake through community mobilisation
- Advocate to the Commonwealth to expand the National Immunisation Program to include free HBV vaccinations for priority populations

Prevent cancers related to viral infections (aligned to action in the *Victorian cancer plan 2020–2024*)

- Increase understanding among priority populations of the impact of viral hepatitis on liver health, with a focus on cancer
- Develop prevention capacity and capability in primary care for liver cancer prevention
- Develop liver cancer prevention approaches to increase literacy and awareness of viral hepatitis screening among the community and workforce

Increase access to prevention and uptake of harm reduction initiatives for priority populations

- Support increased access to prevention tools such as condoms, and harm reduction tools such as sterile injecting equipment and naloxone through peer distribution in partnership with priority populations
- Facilitate the sharing of successful prevention approaches and initiatives and support the adaptation of successful approaches to other priority populations and settings including custodial settings
- Continue to improve and strengthen access to harm reduction tools and programs in custodial and other key settings

Test

Although primary prevention of CHB can occur through immunisation, secondary prevention in those living with HBV is vital to stopping other negative disease effects.

The risk of liver cancer can be greatly reduced with the right diagnosis and treatment and care (Backus et al. 2018; European Association for the Study of the Liver 2017; 2018).

A large proportion of people living with CHB in Victoria are people born in high-prevalence countries, who may be undiagnosed and unaware of their health risk. Late diagnosis of HBV is a missed opportunity to reduce deaths associated with the virus. Working with communities to increase health literacy, challenging stigma and promoting confidential and inclusive services will improve access to testing, treatment and care (Communicable Diseases Network of Australia 2020).

Victoria has shown a clear increase in testing over recent years. However, this trend did not continue in 2020 because of the impact of COVID-19 lockdowns and related restrictions.

Despite the overall increase in testing, diagnosis, treatment and care over time, access to care has increased little over the life of the previous strategy (2016–2020). This clearly shows that extra focus and effort is needed to improve our cascade of care and to meet our elimination targets. We need to consider changing HBV screening from a complex risk-based approach to a more streamlined universal testing approach as the best practice model of care.

We need to simplify our testing policy to:

- reach people who don't know their risk
- encourage clinicians to test
- reduce stigma and discrimination linked to questioning people about risk factors.

This approach would help integrate routine HBV screening into primary care, allow people living undiagnosed with HBV to understand their condition and to support them to access potentially life-saving treatment (Allard et al. 2021).

Lack of knowledge about HBV is a major barrier to testing in primary care (Xiao et al. 2020b). Moving to a universal testing approach could simplify this process. Keys to addressing and improving inequities and driving better health results are:

- ensuring our workforce has the required knowledge, capability and supports

- engaging the community in the testing process
- promoting proven practice advances and technologies
- expanding multidisciplinary models of care, including nurse- and peer-led models.

It is critical that workforce education continues to raise awareness of HBV to increase testing and treatment, particularly as part of routine primary care.

In 2020 approximately 63 per cent of people living with HBV in Victoria were diagnosed (MacLachlan et al. 2021). This plan outlines priority actions to increase access to testing for priority populations through collaborative community and primary care partnerships. Interventions to support the scale-up of primary care responses to HBV in geographical areas with high prevalence of HBV or an existing lack of services (for example, increasing HBV s100 prescribers) will be increasingly important as we aim to improve the Victorian HBV cascade of care.

Working with Primary Health Networks (PHNs) and other key stakeholders such as local hepatitis organisations, professional associations, Aboriginal Community Controlled Organisations and multicultural health services to prioritise HBV elimination, using data to enhance access to testing and management at the local level, will be key to achieving our 2030 elimination goal.

This plan will include a greater understanding of how to engage people at risk of or living with HBV and support access to testing and treatment. Identifying the stigma, racism and discrimination barriers that prevent uptake of testing and treatment will remain a focus.

The HBV cascade of care involves multiple steps: screening, diagnosis, links to care, assessment of liver disease stage and treatment eligibility, then treatment and/or monitoring, including surveillance for hepatocellular carcinoma. Laboratory blood tests are needed at every step of the care pathway, including blood tests for HBV serology, quantitative HBV DNA level by polymerase chain reaction and liver function tests (Xiao et al. 2020a). New testing technologies such as point-of-care tests (e.g. the Cepheid Xpert HBV Viral Load assay) will play an increasingly important role in efforts to eliminate viral hepatitis as a public health concern by 2030.

Principles of informed consent for testing underpin the plan's priority actions and activities. These are outlined in the *National hepatitis B testing policy 2020*. This means that the person being tested agrees to be tested based on:

- understanding the testing procedures
- knowing the reasons for testing
- being able to assess the personal effects of potential test results.

The person requesting the test should use their clinical judgement in getting informed consent (ASHM 2020).

Key achievements in testing (2016–20)

The St Vincent's Hospital Victorian Viral Hepatitis Education Program developed the Hepatitis B Story in partnership with the Melbourne Primary Care Network.

The department, the Australasian Society for HIV Medicine and Sexual Health (ASHM) and Cancer Council Victoria supported this work. Developed and produced in collaboration with consumers, the resource describes CHB in plain English, alongside culturally appropriate and engaging illustrations. This enables consumers to make informed choices about testing and engage in their health care.

It also encourages health professionals to use the teach-back method. This is where the consumer is asked to explain, in their own words, the information given by the

health professional. If the consumer cannot recall or has a different understanding of the information, the health professional can explain the concept again. Using this method with people with CHB has increased their knowledge of CHB, with the Hepatitis B Story supporting the intervention.

It was first developed as a patient booklet that is available online and in hard copy in a range of languages. Languages include English, Vietnamese, Mandarin, Karen, Dari, Burmese, Arabic and Tagalog. There is also a clinician's guide.

The resource is also available as an interactive online talking book available in a range of languages including Urdu, Thai, Khmer and Hindi.

LiverWELL undertook a Hepatitis B community mobilisation project in 2017 to educate newly arrived communities and promote testing and vaccination. More details on this program are in the prevention section.

In June 2019 Cancer Council Victoria, in partnership with the Centre for Culture, Ethnicity and Health and St Vincent's Hospital Melbourne, created new resources to encourage people to get tested for HBV and hepatitis C and to get treatment and care. The campaign focused on members of Victoria's Chinese, Thai and Filipino communities to support them to test for HBV and hepatitis C as a step to preventing liver cancer.

Victorians with hepatitis B know their status

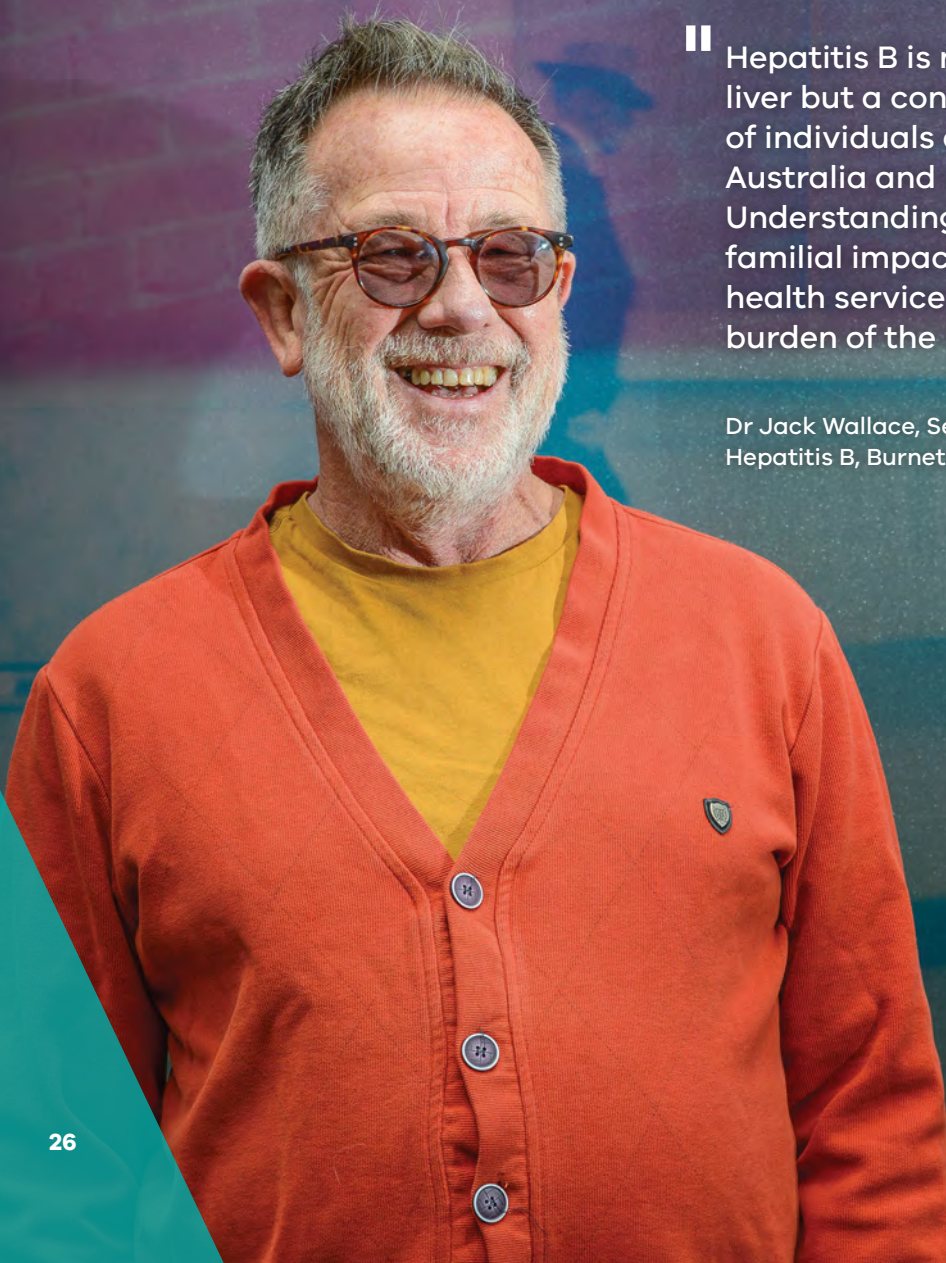
By 2030:

Victorians living with HBV are aware of their status, are diagnosed early and are supported to do so

Testing for priority populations happens across community and primary care settings, particularly in areas of high HBV prevalence.

Victorians understand the need to be tested for HBV if they are not vaccinated.

Testing services are targeted to meet the needs of priority populations.



“ Hepatitis B is not only an infection of the liver but a condition that affect the lives of individuals and their families, both in Australia and in their countries of birth. Understanding the social, cultural and familial impact of hepatitis B supports health service access and reduces the burden of the infection. ”

Dr Jack Wallace, Senior Research Officer,
Hepatitis B, Burnet Institute

Priority actions – testing

Increase access to guideline-based testing for priority populations

- Work with key sector organisations to develop, implement and evaluate testing messages that are tailored for priority populations
- Collaborate with priority populations to co-design strategies that build awareness of HBV testing
- Collaborate with PHNs to target HBV elimination programs
- Enhance the focus of hepatitis testing and management in existing PHN practice support services implemented in partnership with key stakeholders
- Ensure strong links are in place to ensure comprehensive BBV testing
- Support innovative models of HBV testing, new diagnostic technologies and models of care (nurse and peer-led)
- Integrate HBV testing and patient management into routine primary health care

Build system capacity to support universal testing in primary care

- Work with the Commonwealth to accelerate efforts to develop a universal screening approach for HBV testing rather than the current risk-based screening approach
- Support implementation of universal HBV testing that offers every Victorian adult the opportunity to know their HBV status through a cost-effective, consent-based and non-stigmatising approach

Improve collaborations with identified key services to include HBV screening

- Establish partnerships with key stakeholders to build awareness of and capacity to include HBV screening in relevant sector programs
- Engage Commonwealth migration and resettlement services to ensure HBV-related information on screening, vaccination and chronic disease management for refugees and people seeking asylum is provided consistently

Increase testing in areas of high HBV prevalence and among priority populations, using data to inform system refinement

- Identify and address geographic, economic and other structural and cultural barriers to testing to facilitate access and early diagnosis
- Develop innovative community designed and targeted HBV testing approaches
- Support the scale-up of primary care responses to HBV in geographical areas with a high prevalence of HBV or an existing lack of services (such as regional and rural areas)
- Develop easily understood, plain-language culturally appropriate information and appropriate approaches to ensure people at risk of HBV know they should get tested and how to do so

Improve the detection of advanced liver disease

- Build awareness of HBV testing across primary and community care, allied health and antenatal care settings (aligned to activity in the *Victorian cancer plan 2020–2024*)

Treat and care

Although there is no cure and the research community continues to explore all possibilities, highly effective antiviral treatments are available to manage HBV. These are available through the Pharmaceutical Benefits Scheme. Treatment reduces liver cancer risk by up to 70 per cent within five years (Papatheodoridis et al. 2015).

Changes to the Pharmaceutical Benefits Scheme on 1 April 2020 allow authorised nurse practitioners to prescribe HBV treatments under the s100 program. This is an important reform because it improves access to treatment for intersectional populations such as:

- people living in regional and rural areas
- people experiencing homelessness
- people in custodial settings.

This plan will focus efforts on building the capability of the primary care workforce and services to test, treat and manage people living with HBV.

Data from the *Viral Hepatitis Mapping Project: national report 2020* shows there is inconsistency in hepatitis care and treatment uptake across Victorian PHNs and at the local level. In 2020 the mapping project showed that of all people living with CHB in Victoria, only 11 per cent were getting treated and only 24.5 per cent were engaged in care (either receiving treatment or monitoring) (MacLachlan et al. 2021). We need to continue to

ensure people diagnosed with CHB people get the right care to reduce morbidity, mortality and transmission.

Liver cancer incidence in Australia varies widely according to region. Overall in Australia, 18.7 per cent of the Statistical Area 2 (SA2s), which are areas within a PHN, have a liver cancer rate that is above the national average. North Western Melbourne PHN (NWMPHN) had the highest liver cancer rate in Australia, and 83.8 per cent of SA2s in NWMPHN had above average liver cancer rates. NWMPHN also has an above average prevalence of CHB. There is a link between liver cancer and CHB. The population distribution of people living with CHB influences this link, given that people born overseas in countries with high prevalence often live in particular regions of capital cities such as Inner Melbourne (MacLachlan et al. 2021).

Given the proportion of people living with HBV in Victoria, it is essential that we continue to increase the number of primary care practitioners who can prescribe s100 HBV treatments. By doing so, we aim to increase access points for people to manage and monitor their liver health in their local communities.

Health and social support services play a vital role in meeting the needs of people living with or affected by HBV by offering innovative and integrated approaches to prevention, testing and treatment programs. Patient-centred locally delivered models of care are crucial for people with CHB to support ongoing engagement in monitoring, treatment, care and support.

Strengthening the integration of primary care and community health services as part of the statewide model of care will help build local capacity and access to approaches that prevent or intervene earlier. As part of strengthening coordination of care, this plan offers guidance on strengthening referral pathways to specialist and community support to promote improved health outcomes.

Key achievements in treatment and care (2016–20)

The Victorian HIV and Hepatitis Integrated Training and Learning program is delivered and managed through a consortium comprising the North Western Melbourne PHN, ASHM, Alfred Health and the Doherty Institute. Funded by the department, the program trains primary healthcare providers in managing BBV

and STI. Between 2016 and 2021 the number of general practitioners accredited to prescribe s100 HBV medicines increased from less than 10 to 62. Increasing the number of prescribers allows us to increase access to people living with HBV to have their treatment and care managed in local primary and community care.

Data from the *Viral Hepatitis Mapping Project: national report 2020* shows that at the end of 2020 in Victoria, the proportion of people living with CHB who had a viral test in the preceding five years was 43.7 per cent. This is higher than the national average. But only 14.7 of people living with CHB had a regular viral load test (MacLachlan et al. 2021). This is despite Australian guidelines recommending that all people living with CHB should receive a viral load test at least annually as part of their management plan.

In 2018 LiverWELL introduced a free interactive app that helps people optimise their liver health. Designed with input from end users and health professionals, the app helps people living with viral hepatitis and other liver conditions. This self-management tool helps people improve their liver health, navigate the steps involved in ongoing care, and stay engaged with health professionals. Since its release the app has received two awards. In September 2018

it was awarded a GOV Design Award from DrivenXDesign for innovation and excellence. In July 2019 it was awarded the prestigious Bronze Quill award from the International Association of Business Communicators for audio-visual excellence.

Justice Health has set up the statewide Hepatitis Program, funded by the Department of Justice and Community Safety and delivered by St Vincent's Hospital Melbourne. This program offers a network of hepatitis clinics across the Victorian custodial facilities to ensure people in prison are assessed and treated for CHB and chronic hepatitis C. On release, people who have been managed under the program are provided with a management plan and a referral to a community provider.

Victorians with hepatitis B have access to best practice evidence-based treatment and care

By 2030:

Victorians living with HBV receive the treatment and care they need.

Treatment and chronic disease services meet the needs of priority populations through a process of co-design with communities and integrated pathways between community, primary and specialist care services.

Deaths related to CHB (including liver cancer) are reduced because of improved screening and chronic disease management models.

Victorians living with HBV access treatment and care in local primary and community health care health settings.

Victorians are aware of the long-term effects of untreated CHB infection (including liver cancer) and know how to get appropriate treatment and support.

“ We must increase the number of people living with hepatitis B who are aware of their diagnosis and are linked into long-term care – treatment and monitoring can reduce the impact of liver cancer. ”

Professor Alex Thompson,
Director of Gastroenterology,
St Vincent’s Hospital Melbourne



Priority actions – treatment and care

Increase access to timely, appropriate HBV treatment, care and support services and programs

- Build awareness of HBV treatment and support options among priority populations
- Engage priority populations through community mobilisation to increase access to HBV testing, treatment and care
- Develop primary care and community health workforce capacity to treat and manage people who do not need specialist care
- Develop clear and coordinated shared care pathways with specialist services to improve outcomes for people who need specialist care
- Develop innovative models of treatment and care and communicate the benefit of ongoing care in terms of health outcomes
- Improve delivery of comprehensive and integrated HBV antenatal treatment and neonatal care for women with HBV and their infants
- Improve links to care for all people living with HBV, especially women with HBV during pregnancy, and ensure women and their infants have access to appropriate care to prevent mother-to-child transmission of CHB
- Ensure all infants born to women with CHB are provided HBIg in a timely manner
- Collaborate with key services/sectors and community stakeholders to promote treatment engagement
- Support and strengthen community- and peer-led initiatives to improve treatment uptake and engagement in care
- Increase the capacity of social support settings to refer and support people with HBV and ensure they are linked into care
- Improve links to care for all people living with HBV within aged care services and programs, considering the long-term consequences of living with HBV as they age

Improve the early detection and management of liver cancer

- Increase monitoring of liver cancer through patient management software/systems to improve engagement in treatment and care (aligned to activity in the *Victorian cancer plan 2020–2024*)

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Endnotes

- 1 The decline in disease notifications seen in 2020 and 2021 should be interpreted with caution. They are likely to under-represent true disease incidence. Disease reductions are likely to be strongly influenced by the ongoing COVID-19 pandemic, resulting in changes in sexual behaviours, health care access, health seeking and testing practices and interstate and international travel restrictions.
- 2 Data used to set targets is based on mapping and methodology undertaken by the Doherty Institute/WHO Collaborating Centre for Viral Hepatitis, using Victorian data from the National Surveillance for Hepatitis B indicators: Measuring the progress towards the targets of the national hepatitis B strategy annual reports.
- 3 Please note: Recent estimates suggest that in 2020, 63 per cent of Victorians living with HBV had been diagnosed (MacLachlan et al. 2021). To achieve a target of 90 per cent of people living with HBV diagnosed by 2030, a target of 75 per cent of Victorians living with HBV having been diagnosed by 2025 is required. This will require a major increase in access to diagnosis for people living with HBV in Victoria. While this target is lower than the 80 per cent proportion diagnosed by 2022 target in the Third national hepatitis B strategy, the proportion of people diagnosed in Victoria is below the national average, and the 80 per cent target is unlikely to be achieved nationally by 2022. By committing to an aspirational but achievable interim target for 2025, Victoria is committing to achieving the 2030 global hepatitis elimination goal of 90 per cent diagnosed.
- 4 See endnote 2.
- 5 See endnote 3.
- 6 Refer to the **Immunisation handbook** <<https://immunisationhandbook.health.gov.au/vaccine-preventable-diseases/hepatitis-b>>.

