Fourth National Hepatitis C Strategy

2014 – 2017
1. Introduction

Hepatitis C continues to be a significant public health issue in Australia and is one of the most commonly reported notifiable diseases. In 2012, an estimated 230,000 people were living in Australia with chronic hepatitis C infection, including 58,000 with moderate to severe liver disease. While prevention remains the cornerstone of Australia’s response to hepatitis C, recent advances in antiviral treatments have the potential to significantly improve the rate of cure.

Chronic hepatitis C infection can result in progressive liver inflammation (viral hepatitis), which may progress to scarring (fibrosis and cirrhosis). If left untreated, inflammation can lead to mild, moderate, or serious liver disease and in some cases, liver cancer and liver failure (1). Hepatitis C is the leading cause of liver transplants and liver cancer in Australia.

The World Health Organisation estimates that there are around 150 million people living with chronic hepatitis C globally, with three to four million people becoming infected each year. In Australia, most new hepatitis C infections are related to sharing of contaminated injecting equipment and the population groups most affected are people who inject drugs, people in custodial settings and Aboriginal and Torres Strait Islander people.

Ground-breaking antiviral treatments for hepatitis C will become available in Australia during the life of this strategy. These treatments are less toxic, require less complex dosing, reduce treatment duration and have been shown to significantly improve cure rates. People with chronic hepatitis C infection with access to direct action antivirals will have a more than 90 per cent chance of being cured of hepatitis C. Those with cirrhosis or who have previously failed therapy can also expect treatment success (2,3,4,5).

The Fourth National Hepatitis C Strategy sets the direction for coordinated action over the next four years to achieve the targets of reducing the incidence of new hepatitis C infections by 50 per cent and increasing the number of people on treatment. The Strategy aligns with the Auckland Statement on viral hepatitis 2012 which was endorsed by Australian peak bodies, researchers and key organisations. The Auckland Statement focuses attention on viral hepatitis as an urgent health concern that needs immediate action to prevent new infections and stop the rising death toll from cirrhosis and liver cancer.

The Strategy’s priority actions include increasing access to NSPs and use of safe injecting equipment, promoting increased testing and high quality support at the time of diagnosis, shifting the focus of treatment to primary care settings, reducing stigma and discrimination and developing evidence-based public health responses.

Reducing the incidence of new hepatitis C infections by 50 per cent will require a continued focus on prevention activities. Surveillance data indicates that prevalence and incidence of hepatitis C is decreasing. This indicates that current prevention strategies are working and that these approaches, including Needle and Syringe Programs (NSPs) and peer education need to be continued and strengthened.

Achieving the target of increasing the number of people on treatment for hepatitis C demands a concerted effort to address barriers to treatment uptake. While new antivirals treatments are expected to increase demand, this alone will not be enough. The stigma and discrimination associated with hepatitis C and injecting drug use remain a key challenge in responding to
hepatitis C in Australia due to the impact on access to prevention, treatment, care and support. Improving the understanding of hepatitis C within the community is required to engender more supportive attitudes particularly within the media, amongst employers and across the health care sector. Increasing the role and capacity of the primary care sector to manage hepatitis C and provide services to most at risk populations is critical to ensuring Australia is well placed to harness the full potential of new treatments.
2. Hepatitis C in Australia

Hepatitis C is a significant public health problem and one of the most commonly reported notifiable diseases in Australia. Model-based estimates of hepatitis C in 2005 suggested that the seroprevalence of hepatitis C in Australia was approximately 1 per cent (6) with over 280,000 people estimated as having been exposed to the virus, 230,000 chronic infections and 6600–13,200 incident infections annually (6,7,8).

It is generally thought that hepatitis C incidence in Australia has decreased over the past five to ten years (9).

Approximately 90 per cent of newly acquired hepatitis C infections reported in Australia are attributed to unsafe injecting drug use practices (10). Within the population of people who inject drugs, those at particularly elevated risk of hepatitis C are female people who inject drugs, those with a history of incarceration, and Aboriginal and Torres Strait Islander peoples. This has been attributed to greater prevalence of injecting related risk behaviours in these groups, and barriers such as structural barriers that reduce their access to clean injecting equipment (11,12,13,14,15,16).

Among those with hepatitis C virus antibodies who do not report a history of injecting drug use, receiving blood products prior to 1990 and emigrating from a high-prevalence country are risk factors (17). Recently, sexual transmission of hepatitis C among HIV-positive men who have sex with men has also been reported (18,19).

Around 75 per cent of people exposed to hepatitis C develop chronic infection, defined as having the presence of hepatitis C virus in the bloodstream for longer than six months. The remaining 25 per cent will ‘spontaneously’ clear the infection, but will continue to have detectable antibodies (20). Clearance of the hepatitis C virus does not lead to immunity and hepatitis C re-infection can occur following re-exposure (21,22,23,24).
3. Achievements

2010 to 2013

- Reduction in hepatitis C prevalence among attendees of Needle Syringe Program services
- Maintenance of low levels of sharing of injecting equipment among people who inject drugs
- Improved understanding of the factors that contribute to sharing of injecting equipment
- Policy leadership by the National Aboriginal Community Controlled Health Organisation on provision of NSP services for Aboriginal and Torres Strait Islander people
- Progress in the development of models of care to increase the involvement of primary health care providers in treatment
4. Goal, indicators and targets

4.1 Goal

The goal of the Fourth National Hepatitis C Strategy is to reduce the transmission of, and morbidity and mortality caused by, hepatitis C, and to minimise the personal and social impact of the epidemic.

4.2 Objectives

The Fourth National Hepatitis C Strategy has five objectives which, in combination, support achievement of the Strategy’s goal:

1. Reduce the incidence of hepatitis C
2. Reduce the risk behaviours associated with the transmission of Hepatitis C
3. Increase access to appropriate management and care for people with chronic hepatitis C
4. Reduce burden of disease attributed to chronic hepatitis C
5. Eliminate the negative impact of stigma, discrimination, legal and human rights issues on people’s health

4.3 Targets

1. 50% decrease in the incidence of new hepatitis C infections
2. Increase the number of people receiving antiviral treatment each year

Targets are included for the first time in the National Hepatitis C Strategy, providing a common aspirational goal to focus the efforts of all partners in the response to hepatitis C.

Hepatitis C virus transmission continues to occur in Australia, with new infections continuing to be identified. Halving new infections will reduce the growing disease burden attributed to chronic hepatitis C.

Less than 2% of the 230,000 people estimated to have chronic hepatitis C are currently on treatment(6). While it is not appropriate for everyone who has chronic hepatitis C to be on treatment, achieving the goals of the strategy requires an increase in the proportion who do receive treatment. The focus of this strategy is on improving treatment uptake with a view to reviewing the target in light of advances in treatment options anticipated during the strategy’s lifetime.

4.4 Indicators

Indicators will be used to monitor the implementation of the strategy, report against progress in achieving targets and objectives, and inform changes in the response as required.
The indicators listed below can currently be reported on. There are limitations in the ability to measure progress against many of the objectives and targets, both in the robustness of the available indicators and in some cases the lack of available data or appropriate methodology.

There is no indicator currently available to measure progress in reducing the health impact of stigma, discrimination, legal and human rights. Revision of indicators is required in the measurement of treatment, and incidence measures for some of the priority populations, to monitor progress against target achievement. Further limitations and gaps are discussed in section 7.6.

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<tr>
<th>Objective</th>
<th>Indicator</th>
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<tr>
<td>Reduce the incidence of hepatitis C</td>
<td>Annual Incidence of hepatitis C in people who inject drugs</td>
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<tr>
<td>Reduce the risk behaviours associated with the transmission of Hepatitis C</td>
<td>Per-capita number of needles and syringes distributed in the previous calendar year</td>
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<td>Proportion of all injections by people who inject drugs in which a new needle and syringe was used in the previous calendar year</td>
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<td>Proportion of people who inject drugs reporting re-using another person’s used needle and syringe in the previous month</td>
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<tr>
<td>Increase access to appropriate management and care for people with</td>
<td>Proportion of people with chronic hepatitis C dispensed drugs for their infection through the Highly Specialised Drugs (s100) Program in the previous calendar year</td>
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<td>chronic hepatitis C</td>
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<td></td>
<td>Treatment uptake in people who inject drugs</td>
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<tr>
<td>Reduce burden of disease attributed to chronic hepatitis C</td>
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<tr>
<td>Eliminate the negative impact of stigma, discrimination, legal and</td>
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<td>human rights issues on people’s health</td>
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### 4.5 Implementation and Evaluation

The Fourth National Hepatitis C Strategy 2014–2017 sets high level directions for action over the next four years. An Implementation and Evaluation Plan will be developed in consultation with partners and will detail how priority actions will be implemented, including roles and responsibilities, timeframes and lines of accountability.
Australia’s world recognised partnership approach will remain central to our response to blood borne viruses and sexually transmissible infections. Undertaking the actions set out in this strategy by December 2017 requires Australian, state and territory governments; community organisations; service delivery organisations; professional bodies; and, research institutions to work together. In doing this, we need to ensure that infected and affected individuals and communities remain at the heart of our response and involved in activities as they are proposed, developed and implemented.

This strategy builds on its three predecessors, which have guided Australia’s response to hepatitis C between 1999 and 2013. It is one of five interrelated national strategies aiming to reduce the transmission and impact of BBVs and STIs. The other strategies are the:

- Seventh National HIV Strategy
- Fourth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy.
- Third National Sexually Transmissible Infections Strategy
- Second National Hepatitis B Strategy

The five national strategies share common structural elements, designed to support a coordinated effort in addressing common concerns. Much of the prevention, health care and community responses contained in the strategies are intrinsically linked through co-infections, commonalities in risk factors and shared responsibility for the clinical management of BBVs and STIs.
5. Guiding principles underpinning Australia’s response

**Human rights:** People with HIV, STIs and viral hepatitis have a right to participate fully in society, without experience of stigma or discrimination, and have the same rights to comprehensive and appropriate health care as other members of the community (including the right to the confidential and sensitive handling of personal and medical information).

**Access and equity:** Health and community care in Australia should be accessible to all based on need. The multiple dimensions of inequality should be addressed, whether related to geographic location, gender, sexuality, drug use, occupation, socioeconomic status, migration status, language or culture. Special attention needs to be given to working with Aboriginal and Torres Strait Islander peoples to close the gap between Aboriginal and Torres Strait Islander health status and that of other Australians (25).

**Health promotion:** The Ottawa Charter for Health Promotion provides the framework for effective HIV, STI and viral hepatitis health promotion action and facilitates the:
- active participation of affected communities and individuals to increase their influence over the determinants of their health; and
- formulation and application of law and public policy that support and encourage healthy behaviours and respect human rights.

**Prevention:** The transmission of HIV, STIs and viral hepatitis can be prevented by adopting and maintaining protective behaviours. Education and prevention programs, together with access to the means of prevention, are prerequisites for adopting and applying prevention measures.

**Harm reduction:** Harm reduction approaches underpin effective measures to prevent transmission of HIV and viral hepatitis, including needle and syringe programs and drug treatment programs.

**Shared responsibility:** Individuals and communities share responsibility to prevent themselves and others from becoming infected, and to inform efforts that address education and support needs. Governments and civil society organisations have a responsibility to provide the necessary information, resources and supportive environments for prevention.

**Partnership:** An effective partnership of governments, affected communities, researchers and health professionals is characterised by consultation, cooperative effort, respectful dialogue and joint action to achieve this strategy’s goal. This includes:
- recognition that those living with, and at risk of, infection are experts in their own experience and are therefore best placed to inform efforts that address their own education and support needs
- timely and quality research and surveillance to provide the necessary evidence base for action
- a skilled and supported workforce
- leadership from the Australian Government and the full cooperative efforts of all members of the partnership to implement the strategy’s agreed priority actions.
6. Priority populations

While hepatitis C is an issue for the whole of Australian society, targeting responses to priority populations is critical to maximise the impact and sustainability of our response. The communities affected by hepatitis C are not mutually exclusive, and members of one priority population may also be members of one or more other priority populations. It is acknowledged that some people may be at risk of hepatitis C but do not identify with a particular priority population, and that subgroups may exist within priority populations who are harder to reach or are less likely to be tested.

Priority populations identified in this Strategy are:

- People living with hepatitis C
- People who inject drugs
- People in custodial settings

The Appendix outlines the key reasons for priority population status and identifies specific subpopulations of higher prevalence and/or higher risk. It also notes the main barriers and facilitators to effective responses, specific to priority populations.
7. **Priority areas for action**

Hepatitis C transmission is preventable. In Australia, most hepatitis C transmission occurs through unsafe injecting drug use practices. Effective prevention interventions can reduce hepatitis C transmission and the subsequent impact of infection on both individuals and the community. A combination of strategies is required to successfully minimise hepatitis C transmission.

Timely hepatitis C testing allows identification of hepatitis C positive people as soon as possible after infection to ensure their disease is properly managed.

People with hepatitis C are at risk of progressive liver disease. People with hepatitis C also experience co-morbidities including requiring appropriate linkages to treatment and support. Similarly to HIV and hepatitis B, the management of chronic hepatitis C requires a shift in focus from tertiary care to community and primary health care settings.

The increase in demand for hepatitis C prevention, diagnosis, and treatment and support services has created challenges for the workforce. This demand will continue to increase as new therapies become more widely available and the collaborative engagement of the workforce in a multidisciplinary pathway to care for people with hepatitis C will become increasingly important.

### 7.1 Prevent

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<th><strong>Priority actions</strong></th>
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<tr>
<td>- Increase access and availability of sterile injecting equipment among people who inject drugs</td>
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<tr>
<td>- Continue to support increased access to opioid pharmacotherapy programs and other evidence based harm reduction and drug treatment programs</td>
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<tr>
<td>- Build knowledge and skills in priority populations, health care professionals and the community of hepatitis C transmission risks, testing and treatment</td>
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It is estimated that 90 per cent of new hepatitis C infections in Australia are caused by unsafe injecting drug use (26). The risk of acquiring hepatitis C is highest in the first year of injecting, highlighting the need to target activities to those who are new to injecting (13). The drug of choice is also changing, with the injection of methamphetamines and steroids creating new groups at risk of hepatitis C and thus new target groups.

Prevention of hepatitis C transmission requires a combination of harm reduction strategies with health promotion activities such as education and communication. Engagement with priority populations is necessary to ensure these strategies reach the priority populations adequately and are tailored to best meet the needs of these groups (27).
NSPs are cost-efficient and highly effective at reducing transmission of hepatitis C and other BBVs, such as HIV. It has been estimated that over the decade 2000 – 2009 NSPs have directly averted 97,000 new hepatitis C infections (28).

However, the Annual NSP survey shows that the rate of people reusing needles and syringes in the month prior to the survey has remained stable at 25-28% over the past 5 years, indicating the need to undertake more focused efforts to reduce the sharing of injecting equipment. Barriers to the access and safe use of injecting equipment in Australia include limited after-hours service availability, geographic access and stigma and discrimination towards people who inject drugs experience in accessing health services and some NSP services.

The involvement of peers in the distribution of NSP equipment is effective and cost-effective. Legislative barriers across all jurisdictions restrict these practices at present and must be addressed over the lifetime of this strategy.

NSPs also play an important role in providing education and health promotion to injecting drug users, including prevention education, and referral and linking to testing and clinical services. Strengthening peer networks to provide education programs and information on prevention is an effective way to increase accessibility to NSP services.

There is increasing evidence that OST and NSPs reduce infection prevalence amongst people who inject drugs (29). OST is a highly effective way to reduce hepatitis C transmission, as it decreases the need to inject drugs. Increasing use and access to OST in all settings is strongly supported.

However, it is important to note that the successes of OST and NSPs in achieving reductions in infections require many years of sustained intervention and need to be used in combination with other strategies to be effective (30).

Knowledge of hepatitis C transmission is low among the general population and those ‘at risk’ of injecting. Health promotion, education and awareness activities, which include up to date information about hepatitis C, transmission risk and prevention strategies (including NSPs) are essential.

Peer education has played an important role in reducing the risk of hepatitis C transmission in Australia. Peers are credible, trusted sources of information and can assist in reaching some hard to reach populations by overcoming some of the physical and socio-cultural barriers. With appropriate training and support, people with or at risk of hepatitis C are well placed to communicate prevention messages. Continued peer education and support by and for people who inject drugs is needed.

Aboriginal and Torres Strait Islander people are at particular risk of BBV transmission through injecting drug use. There is a significantly higher rate of diagnosis of hepatitis C among Aboriginal and Torres Strait Islander people who inject or have injected drugs, with the rate of hepatitis C infection among indigenous injecting drug use being between 3 and 13 times higher than non-indigenous IDU population (NCHECR). Rates of HIV infection are also increasing among indigenous people with inject drugs, with 22 per cent of new HIV infections among Aboriginal and Torres Strait Islander people are attributed to unsafe injecting drug use practices.
Specific efforts are required to improve health promotion activities and the use of harm reduction strategies. Some Aboriginal and Torres Strait Islander people who inject drugs experience additional barriers to accessing NSPs such as high levels of stigma and discrimination, socio-economic difficulties for people in rural and remote communities and the disproportionate rate of incarceration of Aboriginal and Torres Strait Islander people. There is also significant support for the use of peer education in these communities, with evidence that Aboriginal and Torres Strait Islander people prefer obtaining injecting equipment from known friends and others (31).

The prevalence of hepatitis C is disproportionately higher among people in custodial settings due primarily to a high rate of imprisonment for drug-related offences and unsafe injecting drug use in prisons. Prevention strategies in custodial settings should be multi-factorial and look at changes in organisations, systems and the environment which are needed to enable people to reduce risk behaviours and access services. Specific strategies include ensuring the consistent provision of bleach, prophylactics and lubricant, and enabling the sterilisation of barbering and tattooing equipment in order to strengthen hepatitis C and blood borne virus prevention and promote public health more generally. Continued support and expansion of these programs, and those that provide education and counselling and drug treatment, is supported.

Access to health prevention information and health services is improved where supporting and enabling environments are created that are free of discrimination and stigma that can prevent priority populations from effectively accessing prevention, treatment and care services.

7.2 Test

**Priority actions**

- Increase testing of hepatitis C in priority populations
- Improve referral and access to high-quality support services at the time of diagnosis for people with or at risk of hepatitis C to initiate a pathway to care
- Assess the feasibility, accessibility and cost-effectiveness of the range of existing and emerging testing methods
- Implement targeted initiatives for priority populations and local health care services to promote awareness and increase testing

Hepatitis C is a slowly progressive disease that causes liver fibrosis, eventually going on to develop cirrhosis in 20 per cent of people and increased risk of liver failure, hepatocellular carcinoma and death (32). Early identification of chronic infection and linkage to appropriate management is necessary to reduce hepatitis C transmission, morbidity and mortality.

In Australia, approximately 80 per cent of people with hepatitis C infection have been diagnosed. However, it is estimated that 40,000–50,000 Australians remain unaware that they are chronically infected with hepatitis C (6).

Improving the identification of people with chronic hepatitis C requires supporting hepatitis C testing in multiple settings. Evidence shows that in clinics with large priority populations, systematic programs for comprehensive screening and diagnosis have high uptake of hepatitis C testing and assessment (33,34,35,36). In primary health care and OST settings,
interventions based on targeted case-finding, risk-based assessment, and motivational interviewing with case management can be effective in increasing testing (37,38,39,40).

Reviewing models of care used by alcohol and drug services to include hepatitis C testing may increase the uptake of treatment and identify clients that require additional management services. As people who inject drugs are less likely to access regular care, onsite access to vaccination and testing at these services would be advantageous.

Guidance on testing for hepatitis C is provided by the National Hepatitis C Testing Policy (41), and is based on an assessment of the present of risk factors for transmission. Testing guidelines for HIV and syphilis in men who have sex with men, and young people and chlamydia, support regular testing of individuals who continue to have exposure risk and testing after a high risk exposure (42). National guidance should be updated to include information on the frequency of hepatitis C testing for individuals who continue to have exposure risk.

Peer support programs offering hepatitis C education may be useful to enhance existing education activities and improve engagement in hepatitis C assessment and treatment (43,44). The role of peer educators and counsellors trained to undertake hepatitis C tests in helping to increase testing rates will be further explored. Such a service should be linked into peer-based drug user organisations, community health services and NSPs.

Development of improved testing technology, including point of care tests will assist in simplifying the testing process for individuals, including addressing improved access and acceptability for priority populations. Testing strategies and models will need to be developed and reviewed to allow new testing technologies to be included as they become available.

7.3 Management, Care, Support

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<td>• Improve awareness and knowledge in priority populations about treatment options</td>
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<td>• Implement strategies to encourage the involvement of health care professionals</td>
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<tr>
<td>in shared care models for people with hepatitis C</td>
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<tr>
<td>• Support appropriate models of care for primary health care, drug and alcohol</td>
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<tr>
<td>services, prison health services and community health services</td>
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<tr>
<td>• Implement strategies to encourage increased involvement of local health care</td>
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<td>networks to ensure better integration of services</td>
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Best practice management of Hepatitis C requires lifelong regular monitoring to detect progressive liver disease and complications of infection including liver cancer and to guide decisions regarding antiviral treatment. Many people with significant liver fibrosis would benefit from commencing treatment as soon as possible to ensure their liver disease does not progress to cirrhosis, to reduce the risk of hepatocellular carcinoma (liver cancer) or liver failure. However, we know that many people have disengaged from the health care sector and
are not receiving ongoing management. Furthermore, the estimated number of people receiving treatment for hepatitis C infection in Australia declined from a peak of 3397 in 2009 to 2360 in 2012 (6).

The management of hepatitis C is critically dependent on appropriate referral and linkage to assessment, treatment and support options. Hepatitis C care plans must address monitoring and treatment options, including anticipated changes in these options, and co-morbidities such as mental health conditions, bleeding disorders, and hepatitis B and HIV co-infection risks. People living with hepatitis C must receive information and education to support beneficial lifestyle choices, safe behaviours, and management choices.

Hepatitis C treatment will change markedly during the life of this strategy as highly effective and tolerable direct-acting antivirals become available. Treatment efficacy will be greatly improved, will involve single daily oral doses eventually removing the need for injections, and treatment duration will reduce substantially. This will increase demand for treatment from those living with hepatitis C and has implications for the health system which must adapt.

These advances should be accompanied by information and education for the priority populations. People must be given the opportunity to re-link in with the health sector, and take advantage of these new treatments as appropriate. Community based organisations and peer groups have an important role.

Models of care should adapt to take advantage of the opportunities offered by these treatment advances. As treatment duration decreases and drug tolerances improve, transitioning treatment from specialist tertiary based facilities to more involvement of primary care health professionals will become important. State and territory governments and clinical research centres, in partnership, have been developing models of care based on shared care across specialist facilities and primary health care. Increased involvement of health care professionals, particularly primary health care organisations and practitioners, in the refinement, implementation and delivery of these models of care is needed. Community prescriber programs for hepatitis C, an important component of expanding treatment under shared care models, are likely to be implemented in the life of this Strategy.

Local health care networks provide an opportunity to improve the integration of all services necessary for appropriate hepatitis C management, providing a smoother pathway for people living with hepatitis C. These networks can also assist in targeting service delivery to hepatitis C priority populations.

Improvements in accessibility for priority populations and increased demand generated by these treatments may be partially addressed by expanding options for hepatitis C diagnosis and management to include sites such as drug treatment services and NSPs. Programs most successful in treating hepatitis C among people who inject drugs have often been built upon existing medical infrastructures for drug user health (e.g. community health centres, OST clinics, general practitioners) (45). When barriers are systematically addressed within a supportive environment, HCV assessment and treatment among people who inject drugs can be very successful (ag,ah,ai,at,au).

Aboriginal and Torres Strait Islander peoples have a higher rate of hepatitis C, and lower rates of treatment than non-Indigenous Australians. Specific efforts are required to improve management and treatment in these communities. Models developed to increase the
involvement of primary health care providers and other services should include Aboriginal community controlled health services (ACCHSs) and other specific Aboriginal services.

There is a growing number of people with HIV and hepatitis C co-infection. Around 30% of those who had recently acquired hepatitis C were also HIV positive, and 15% of new hepatitis C infections were attributed to male-to-male sexual activity (48,49). Co-infection with HIV and hepatitis complicates care and ongoing monitoring is critical. Models of care for hepatitis C should continue to consider how all aspects of care and support can be incorporated. In addition to primary and specialist health care, drug and alcohol services and community health services have an important role to play.

Studies conducted among samples of people who inject drugs indicate that over time, people using injecting drugs are getting older. Older people who inject drugs experience health conditions not experienced by people of the same age who do not use drugs, and older people who inject drugs report considerable difficulties in accessing health and welfare services (50). The increasing number of older people who inject drugs has particular needs that will need to be addressed by treatment, support and care services.

Custodial settings have the potential to be a focal point for hepatitis C testing, education and treatment. While hepatitis C treatment services are available for prisoners in some custodial settings, they are not consistently available nationally. Continuity of care for people in custodial settings can be challenging as hepatitis C treatment for prisoners requires coordination between justice and health systems.

### 7.4 Workforce

**Priority actions**

- Work together with state and territory governments and community organisations to increase awareness and understanding of hepatitis C, reduce stigma and discrimination and improve access to services.
- Increase primary health care engagement in hepatitis C testing, management and treatment.
- Enhance the capacity of education and service providers to engage with people with or at risk of hepatitis C infection and provide targeted education and health promotion interventions.

The availability of care for people living with hepatitis C must be expanded to meet the increased demand. The number of people wanting to access specialised liver clinics is expected to rise due to the availability of new treatments. Identifying new approaches and improving the pathway to care is essential to improving the access of people living with hepatitis C to management, including treatment.

An effective pathway to care will rely significantly on the increasing engagement of health care professionals, particularly primary care practitioners. Increased awareness, knowledge and confidence with hepatitis C services are essential. Professional education and continuing development programs should support these developments by improving awareness of testing,
monitoring, managing and treating hepatitis C. To support this, the focus on continuing development must also be increased among health care professionals, community-based organisations and peer based programs.

As those most at risk of and living with hepatitis C, people who inject or have injected drugs can play a role in workforce education, particularly in relation to addressing the stigma and discrimination barriers to accessing treatment, care and support.

Mainstream hepatitis C treatment services are not readily accessed by people with hepatitis C from priority populations. People with hepatitis C from culturally and linguistically diverse backgrounds, Aboriginal and Torres Strait Islander peoples, and young people have special needs in relation to accessing hepatitis C treatment and care. As such, clinical, prevention and community services and organisations that support people with hepatitis C need to be able to deliver appropriate services to people with hepatitis C.

7.5 Removing barriers

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<tr>
<td>• Explore the development of a national hepatitis C public education campaign</td>
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<tr>
<td>• Support the implementation and expansion of post-release prevention programs for priority populations in custodial settings</td>
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<tr>
<td>• Identify and work to address legal barriers to evidence-based prevention activities across jurisdictions</td>
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An enabling policy and legal environment that addresses criminalisation, stigma, and discrimination and human rights issues will help to increase access to services and improve the health and lives of people with hepatitis C.

People from affected communities require protection from multiple forms of discrimination (51), not only because they may be thought to be living with a blood borne virus, but also because of the stigma they may suffer because of their vulnerable status (52). The report by the NSW Anti-Discrimination Board into hepatitis C discrimination noted the serious, ongoing impact of discrimination in the lives of many, and the very close association of hepatitis C with injecting drug use.

People living with and at risk of hepatitis C experience discrimination within the health care system, in employment and social networks (53,54,55,56). Discrimination is a barrier to accessing information, prevention, support, testing, treatment and care (56,57,58). Development of education and awareness activities to dispel the myths and misconceptions around hepatitis C, to reduce the prevalence of discriminatory attitudes and behaviour, will be explored.

Although individuals from all cultural and socio-economic groups in Australian society use illicit drugs, drug related illness and death are disproportionately higher among people living in poverty, Aboriginal and Torres Strait Islander people and those from culturally and linguistically diverse backgrounds.
Research examining hepatitis C related discrimination has demonstrated that poor attitudes towards people with a history of injecting drug use creates barriers to accessing critical health and social services (59). In particular, concerns about having to identify as a person who injects drugs and resultant stigma and discrimination have been identified as common barriers to accessing NSPs (55). While the position of injecting drug use remains so highly stigmatised, there is a need to provide users with a range of options to accessing injecting equipment to respect and facilitate people’s preferences for access.

In some settings, most notably custodial settings, aspects of social disadvantage are clearly compounded with Aboriginal and Torres Strait Islander people demonstrating a significantly higher rate of incarceration, where the prevalence of hepatitis C is disproportionately high due to a high rate of imprisonment for drug related offences, and unsafe injecting drug use in prisons. Up to two thirds of female inmates are hepatitis C infected, compared to one third of their male counterparts, and 43 per cent of Aboriginal and Torres Strait Islander prison detainees screened are infected with hepatitis C, compared with 33 per cent of non-indigenous detainees (60).

Partnerships with drug and alcohol and NSP services which engage prisons post-release, particularly for Aboriginal and Torres Strait Islander peoples, should be supported to increase access to testing, treatment and management of people with hepatitis C.

A whole-of-government response is required to maximise efforts to prevent transmission of BBVs, including HIV and hepatitis C, to enable the human rights of people who inject drugs. Promoting cross-sectional links is required to ensure consistent approaches and coordinated responses between justice (police, Attorneys-General, custodial staff and management) and health agencies (government, medical profession, and community sector).

### 7.6 Surveillance, monitoring, research and evaluation

#### Priority actions

- Improve our understanding of the burden of disease attributable to hepatitis C and the associated risk factors
- Develop appropriate evidence-based public health responses and evaluate the impact of these programs on the increasing incidence of morbidity and mortality due to hepatitis C
- Strengthen the hepatitis C component of the National BBV & STI Surveillance and Monitoring Plan
- Promote balance in research to take account of social, behavioural, epidemiological and clinical research to better inform all aspects of the response
- Evaluate health promotion, testing, treatment, care, support and education and awareness programs and activities to ensure they are effective

Information from research and surveillance is vital to improve our understanding of the hepatitis C epidemic and to design appropriate evidence-based responses to it. Increasing the amount and quality of data available for hepatitis C will be necessary to inform the Australian response to hepatitis C into the future.
7.6.1 Surveillance and monitoring

Information from research and surveillance is vital to our ability to understand the hepatitis C epidemic and design responses to it. Existing hepatitis C surveillance systems need to be improved to provide accurate data to inform the planning and delivery of prevention and disease management options. This work will be progressed through strengthening of the National BBV and STI Surveillance and Monitoring Plan.

Specifically, several gaps have been identified in the ability to measure the implementation and success of this strategy against the objectives and targets.

Importantly, several indicators rely on denominator data derived from modelling which has significant limitations. To allow more reliable measures of incidence, access to new injecting equipment, and treatment coverage, these estimates require updating.

Indicators for treatment of hepatitis C would benefit from review and updating during the life of the strategy as treatments and management change.

There is a gap in the ability to report reliably on disease related mortality and morbidity attributed to chronic hepatitis C infection. There is a need to consider and develop an appropriate indicator, which may involve considering stage of diagnosis or mortality measures.

The Australian Needle and Syringe Program Survey currently provides valuable annual estimations of point prevalence to monitor changes over time in patterns of HCV (and HIV) antibody prevalence and risk behaviours among NSP clients. There is significant benefit in improving annual incidence measures of HCV through prioritising testing and reporting on HCV-RNA as part of this programme.

An important gap identified across all 5 strategies, is the ability to monitor the impact of stigma, discrimination, legal and human rights. Options need to be explored to develop an indicator that informs activities and strategies in a meaningful way.

7.6.2 Research and evaluation

There is a broad range of research areas contributing to reducing the transmission and impact of hepatitis C, including virology, epidemiology, clinical research, and social and behavioural research. Collaboration between these research areas and those at risk of and living with hepatitis C can expand our understanding of the epidemic. Antiviral resistance must also be monitored and researched in the new direct action antivirals.

Even with the advent of new therapies, a vaccine for hepatitis C is of critical importance to prevent hepatitis C transmission and to enhance current prevention strategies. Research in this area, including research into means of implementing vaccine delivery and issues such as acceptability and likelihood of uptake by those most affected, will be an essential element to significantly reducing the transmission of hepatitis C.

Future research should be linked to the needs of affected communities, particularly people who inject or have injected illicit drugs. Evidence effects change, so it is important to gather evidence that shows how effective prevention, diagnosis, treatment, care and support can be delivered in different settings.
Monitoring and evaluating the implementation of the priority actions, and the supporting indicators and Implementation Plan, will ensure we are progressing towards, and remain focused on, reaching the targets outlined in this strategy.

A significant number of activities and programs have been undertaken under previous hepatitis C strategies and by state and territory governments, peak and community organisations and research centres across all six priority action areas. The national scale-up of activities and interventions with evidence for effectiveness and feasibility are recommended to be undertaken during the life of this strategy. This will be done using proven scale-up methodologies and with monitoring and evaluation mechanisms developed and in place.
Acknowledgements

The Fourth National Hepatitis C Strategy 2014-2017 was developed through a broad and inclusive consultation process with contributions from governments, community organisations, researchers and expert health professionals. Thanks go to all those involved in developing this strategy.
References


# Appendix - Priority Populations

<table>
<thead>
<tr>
<th>Priority Population</th>
<th>Reasons for Priority Status</th>
<th>Factors Affecting Effective Response</th>
<th>High Priority Subpopulation Groups</th>
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</table>
| People with hepatitis C     | An estimated 230 000 people in Australia living with chronic hepatitis C\(^1\). Undiagnosed, chronic hepatitis C can lead to progressive liver disease and associated morbidity and treatment complications. | - The stigma and discrimination associated with hepatitis C infection and injecting drug use may impact many aspects of life including decisions about accessing health services.  
- People exposed to hepatitis C through injecting drug use who no longer inject drugs may not recognise their exposure risk and may have undiagnosed hepatitis C  
- For people with co-morbidities, one treatment regimen may exacerbate another disorder | People who inject or have injected drugs  
Older people who inject or have injected drugs  
People with hepatitis C with co-morbidities  
People with undiagnosed hepatitis C                                                                 |

\(^1\) Kirby Institute. *HIV, viral hepatitis and sexually transmissible infections in Australia Annual Surveillance Report 2013*. Kirby Institute, University of New South Wales, Sydney, NSW.
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| People who inject drugs             | Highest priority population at risk of hepatitis C infection. Approx. 90% of new and 80% of existing hepatitis C infections attributable to injecting drug use | • Stigma associated with injecting drug use  
• Concerns about admitting to illegal injecting drug use  
• Access to harm reduction services and injecting equipment and peer education | • People in custodial settings who inject drugs  
• Aboriginal and Torres Strait Islander people who inject drugs  
• People at risk of hepatitis C infection as new or potential injectors  
• Women who inject drugs |
| People in custodial settings        | The prevalence of hepatitis C infection among male inmates is estimated to be 35–47%, and 50–70% in women. Increased risk due to systemic behaviours such as use of non-sterile injecting equipment, and sharing of tattooing and piercing equipment and other blood-to-blood contact. | • Access to harm reduction services and equipment can be limited  
• There is no systematic surveillance for hepatitis C in custodial settings.  
• Low rates of hepatitis C testing uptake among prisoners at reception and limited uptake of best practice testing algorithms have the potential to contribute to transmissions and act as barriers to appropriate care.  
• Access to treatment is difficult, and exit screening for hepatitis C is not as high as entry screening in people in custodial settings | • Prisoners who inject drugs  
• Aboriginal and Torres Strait Islander people in custodial settings  
• Women in custodial settings |