



**Deputy Premier of Western Australia
Minister for Health; Tourism**

Our Ref: 25-43746

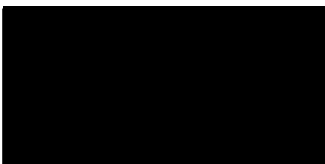
Mr Steve Irons MP
Chair
House of Representatives
Standing Committee on Health
PO Box 6021
Parliament House
CANBERRA ACT 2600

Dear Mr ^{Steve}Irons

Thank you for your letter of 4 December 2014 inviting the Western Australian Government to lodge a submission to the House of Representatives Standing Committee on Health *Inquiry into Hepatitis C in Australia*.

The Western Australian Government recognises that hepatitis C is a serious health issue in Western Australia, as it is nationally. As such, a submission to the Committee's inquiry will be made following the process outlined in your letter.

Yours sincerely



Dr Kim Hames MLA
**DEPUTY PREMIER
MINISTER FOR HEALTH**

Att:

- 5 FEB 2015

Submission to: Standing Committee on Health - Inquiry into Hepatitis C in Australia
Submitted by: Western Australian Government

Epidemiology of hepatitis C in Western Australia¹

- In Western Australia (WA) in 2013:
 - there were 122 newly acquired hepatitis C notifications and 983 unspecified hepatitis C notifications (total number of hepatitis C notifications = 1,105)²
 - the highest number and rate of newly acquired hepatitis C notifications occurred in the 20 to 29 year age group
 - while the highest number of unspecified hepatitis C notifications occurred in people aged 50 years or over, the highest rate of unspecified hepatitis C notifications was observed in the 30 to 34 year age group
 - the highest proportion of newly acquired (73.7%) and unspecified (63.9%) notifications were observed in males
 - among hepatitis C notifications that had place of acquisition recorded, 96% of newly acquired infections and 75% of unspecified infections were reported as having been acquired in WA
 - notification rates among Aboriginal people compared to non-Aboriginal people were more than 11-times higher (39.6 vs. 3.5/100,000 population) and almost seven-times higher (213.9 vs. 31.5/100,000 population) for newly acquired and unspecified hepatitis C respectively³
 - the newly acquired hepatitis C crude rate was more than double the national crude rate (5.0 vs. 2.2/100,000 population) while the unspecified hepatitis C crude rates were comparable (47.6 vs. 45.6/100,000 population).
- Trends in the number and age-standardised rates (ASRs) of newly acquired and unspecified hepatitis C in WA from 2004 to 2013 are shown in Figures 1 and 2 below.

¹ Communicable Disease Control Directorate, WA Department of Health, 2015. Unpublished data.

² 'Newly acquired' - evidence of infection having been acquired in the 24 months prior to diagnosis; 'unspecified' - infections of unknown duration.

³ Within WA, the term Aboriginal is used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of Western Australia. No disrespect is intended to the Torres Strait Islander community.

Figure 1: Number and ASR of newly acquired hepatitis C notifications, WA, 2004 to 2013

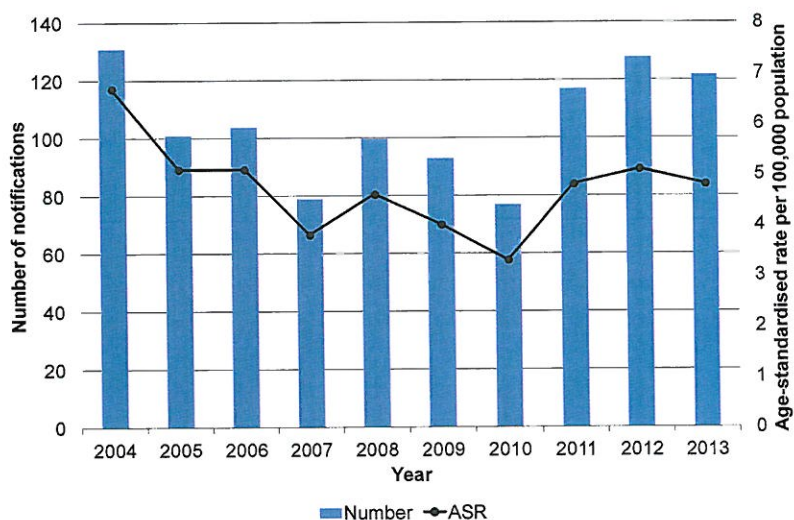
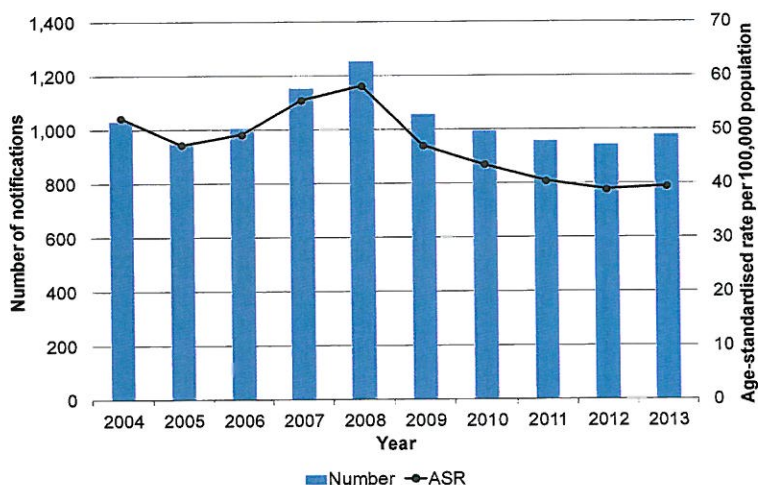


Figure 2: Number and ASR of unspecified hepatitis C notifications, WA, 2004 to 2013



Enhanced hepatitis C surveillance

In 2013, enhanced surveillance forms were sent to the diagnosing doctors of all newly acquired hepatitis C infections and a randomly selected one-third of unspecified hepatitis C infections in WA. Forms were completed for 74% (n=90/122) of newly acquired infections and 19% (n=186/983) of unspecified infections. A completed form was received for 36% (n=74/203) of Aboriginal, and 24% (n=200/850) of non-Aboriginal notifications.

Overall, having a history of risk factors was the most common reason for hepatitis C testing among both Aboriginal and non-Aboriginal people. A greater proportion of Aboriginal people were diagnosed with hepatitis C as part of voluntary prison entry testing while more non-Aboriginal people were diagnosed as a result of an abnormal liver test. Injecting drug use was the most common hepatitis C risk factor for both Aboriginal and non-Aboriginal people. Overall, when the data were analysed for those people with at least one risk factor identified, 67% reported injecting drug use. However, when the data were limited to those with 'yes' and 'no' responses to that question only, 87% of cases reported a history of injecting drug use. Aboriginal people were more likely than non-Aboriginal people to have a history of imprisonment as a risk factor for hepatitis C.

Testing

Hepatitis C testing data⁴

Since 2009, the WA Department of Health has received data on the number of tests undertaken for hepatitis C in WA from five of the seven pathology laboratories servicing the state. These laboratories provide de-identified aggregated data on a quarterly basis. Data includes age at time of testing, sex, region of residence and disease for which the test was conducted. Information on the patient's Aboriginality or result of the test is not provided. Tests from Christmas Island, Curtin, Leonora, Perth and Yongah Hill Immigration Detention Centres have been included in this data as tests conducted at these locations cannot be identified from the aggregated data provided by the laboratories.

In WA, the hepatitis C testing rate remained stable from 2009 to 2011 and increased 9% from 2011 to 2012 (51 to 56/1,000 population). This followed the introduction of routine screening of detainees at Christmas Island Detention Centre in 2012. The testing rate then remained stable to 2013. The hepatitis C notification rate decreased 10% from 2009 to 2011 (51 to 46/100,000 population) and increased 13% to 2013 (52/100,000 population). From 2009 to 2013, the hepatitis C test positivity rate fluctuated with an overall increase of 18% (0.55 to 0.65%). This indicates that the increase in notifications since 2011 may be partly due to increased disease transmission and/or better targeting of testing to groups with higher disease prevalence.

In 2013, the highest testing rate was observed in people aged 15 to 24 years (83/1,000 population) while the highest test positivity rate was observed in people aged 25 years or older (0.7%). The testing rate among females was 21% higher than the rate among males (60 vs. 49/1,000 population), while the positivity rate among males was almost three-times higher than the rate among females (1.0 vs. 0.4%). This implies that more testing needs to be done in males and greater case detection is likely.

Access to testing

The WA Department of Corrective Services notes on their website that:

'The prison health service is one of the biggest single notifiers of hepatitis in Western Australia. This is because of the high number of offenders who take part in injecting drug use before they are sent to prison.

For many offenders, prison is the first time they have had the opportunity to be screened for hepatitis and, many who test positive have no idea they are carrying the disease.'⁵

While it is not possible to routinely establish the total number of hepatitis C notifications received per annum from the Department of Corrective Services, as previously mentioned, enhanced surveillance data indicates that a greater proportion of Aboriginal people than non-Aboriginal people were diagnosed with hepatitis C as part of voluntary prison entry testing.

This is further substantiated by an unpublished 2013 WA Department of Health report which found that between 2010 and 2012, there were 324 blood-borne virus (BBV) notifications in Aboriginal

⁴ Communicable Disease Control Directorate, WA Department of Health, 2015. Unpublished data.

⁵ Government of Western Australia, Department of Corrective Services, 2013, viewed 13 January 2015, <https://www.correctiveservices.wa.gov.au/rehabilitation-services/health-care/default.aspx>.

people in metropolitan Perth, of which 93% were hepatitis C notifications.⁶ The diagnostic facility from which the BBV notifications were received is shown in the table below.

Table 1: BBV notifications in metropolitan Perth Aboriginal people, by diagnostic facility, WA, 2010 to 2012.

Diagnostic facility	Number BBV Notifications	% BBV notifications
Corrective services	158	48.8
General practice	90	27.8
Public hospital	58	17.9
Sexual health service	3	0.9
Other	15	4.6
Total	324	100.0

Corrective services notified almost half (49%) of the total number of BBV notifications (Table 1). The highest notifying general practice was an Aboriginal Community Controlled health service in the city area (n = 20), followed by an outer metropolitan branch of this service (n = 6) and a mobile outreach health service (n = 6). In the 'Other' category, 11 notifications came from drug and alcohol services.

This implies that Aboriginal people who are imprisoned are indeed taking imprisonment as an opportunity to be tested, and that that testing could perhaps be made more accessible for this target group through other services. This needs to occur in the context of using testing as an opportunity to provide health promoting information, and having established care pathways within these services for those who return a positive diagnosis.

For other at-risk groups, particularly people who inject drugs, a health clinic has been established at the needle and syringe exchange operated by the WA Substance User's Association, as a means of providing access to testing for clients who may not otherwise access health services. The clinic also provides an outreach service to other needle and syringe programs in the metropolitan area. Such services need to be expanded to non-metropolitan areas, as at-risk groups in these areas in particular may not want to disclose injecting drug use to their mainstream health provider.

The *Fourth National Hepatitis C Strategy 2014–2017* estimated that 40,000 to 50,000 Australians are unaware that they are chronically infected with hepatitis C.⁷ An undiagnosed reservoir of infection increases the likelihood of onward transmission. Strategies to increase community awareness of hepatitis C may encourage this group to seek testing, but need to be implemented in such a way that does not increase stigma and discrimination.

The *National Hepatitis C Testing Policy 2012* notes that a small number of people may request a hepatitis C test not want to disclose risk factors. In this circumstance, testing should still be offered.⁸ The *National Hepatitis C Testing Policy 2012* needs to be more widely promoted to health professionals.

Further strategies need to be developed to detect hepatitis C without necessarily requiring the disclosure of risk factors. For example, in the United States, the Centers for Disease Control and Prevention (CDC) are currently promoting hepatitis C testing to people born from 1945-1965 as the

⁶ Communicable Disease Control Directorate, WA Department of Health, 2013. *Blood-Borne Virus (BBV) and Sexually Transmitted Infection (STI) notifications and health service utilisation by Aboriginal people in metropolitan Perth, WA, 2010-2012*. Unpublished report.

⁷ Commonwealth of Australia, 2014. *Fourth National Hepatitis C Strategy 2014–2017*, viewed 13 January 2015, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-hepc>.

⁸ Commonwealth of Australia, 2012. *National Hepatitis C Testing Policy 2012*, viewed 13 January 2015, <http://testingportal.ashm.org.au/hcv>.

majority of people with hepatitis C in the United States were born between these years.⁹ This means that health professionals can offer testing (or patients can request testing) based on age, not risk factors.

While in Australia the epidemiology of hepatitis C in terms of age groups may not entirely lend itself to such an approach, creative strategies to overcome barriers to testing need to be developed. Some strategies to increase testing are suggested in the *Fourth National Hepatitis C Strategy 2014–2017*, for example it is stated that the ‘role of peer educators and counsellors trained to undertake hepatitis C tests in helping to increase testing rates will be further explored’. At this stage, it is not clear what the plan is for implementing this exploration and the proposed priority actions for testing. However, it is likely that an effective mechanism to increase the testing and diagnosis of hepatitis C would be a patient demand-driven model. Informed health consumers who seek to know their status are could influence the behaviour of general practitioners.

⁹ Centers for Disease Control and Prevention 2013, *Know More Hepatitis*, accessed 15 January 2015, <http://www.cdc.gov/knowmorehepatitis/>.

Treatment access

In WA, hepatitis C treatment access is limited and primarily provided through clinics at the three metropolitan area hospitals. With the recent opening of a fourth metropolitan hospital, some hepatitis treatment services will be transferred to this site. In three non-metropolitan regional areas (Kimberley, Great Southern and South West), Regional Hepatitis Nurse positions are supported by the Department of Health, while a further two regions (Midwest and Goldfields) are participating in a pharmaceutical company supported trial of nurse-led models of hepatitis C care. Patients in other regional areas are supported to access treatment through the Patient Assisted Travel Scheme (PATS) or in some instances through Telehealth. The Department also supports a nursing position at government metropolitan drug and alcohol treatment agency, and through that project a hepatitis C treatment service has been established at that facility.

The number of patients treated in 2012, and the waiting list times (as at March 2014) for the existing three metropolitan sites are shown in Table 2 below (information in this table was sourced from the *Structures and Resources in the Management of Hepatitis C: Final Report*¹⁰).

Table 2: Number of patients treated and waiting list times – WA metropolitan tertiary hepatitis treatment centres

Service	Number of patients treated 2012	Waiting list time to first appointment as at March 2014
Royal Perth Hospital	100	18 months
Sir Charles Gairdner Hospital	80	4-6 months
Fremantle Hospital	100	3 months

Notes:

In 2012, Royal Perth Hospital held back treatment for patients who preferred to wait for the availability of anticipated new treatments, so treated a lower than usual number of patients that year.

The *Fourth National Hepatitis C Strategy 2014–2017* includes by 2017 to ‘increase the number of people receiving antiviral treatment by 50 per cent each year’ as an aspirational target. An objective included in the strategy is to ‘increase access to appropriate management and care for people with chronic hepatitis C’. Related priority actions in the strategy include:

- support and implement appropriate models of care for primary healthcare, drug and alcohol services, health services in custodial settings, Aboriginal community-controlled health services and community health services
- implement strategies to increase the involvement of primary healthcare professionals in the management of people with hepatitis C.

In WA, workforce development for general practitioners (GPs) and other health care professionals is provided through an on-line learning program funded by the Department of Health and delivered by Edith Cowan University. GPs who complete a module on the advanced management of hepatitis C and successfully undertake an assessment can apply to become registered prescribers of hepatitis C treatments, although treatment must still be initiated by a specialist physician. As new hepatitis C treatments are emerging, it is likely that there will be a greater role for primary care in the delivery of hepatitis C treatment, and this sector needs to be prepared for this. GP-initiated treatment, supported by approved Section 100 prescriber status by the Pharmaceutical Benefits Scheme, is essential to improved access to hepatitis treatment.

¹⁰ Systems and Intervention Research Centre for Health. *Structures and Resources in the Management of Hepatitis C: Final Report March 2014*. Systems and Intervention Research Centre for Health, Edith Cowan University, 2014, viewed 15 January 2015, <http://www.healthnetworks.health.wa.gov.au/docs/Report-Structures-Resources-Management-HepatitisC.pdf>.

As well as this, settings other than general practice through which treatment services can be provided need to be further developed to increase treatment access. For example, the above-mentioned hepatitis C treatment service that has been established through a drug and alcohol treatment agency is nurse-led, with a specialist hepatologist attending for one session per month. Over four years, 24 clients have been successfully treated, and a number of clients are also currently on treatment or being assessed for treatment. A small number of clients either did not complete treatment or did not respond to treatment. While these numbers are relatively small, this is a group of patients that may not have otherwise accessed 'mainstream' treatment services, but by co-locating the clinic within another health service that they do access (i.e. a drug treatment agency) they have had the opportunity to undertake treatment, improving the health outcomes for the individuals and averting health care costs associated with future likely morbidity.

Nurse led models can also operate successfully in community settings. As mentioned above, in three non-metropolitan regional areas a nurse supported hepatitis C shared care program operates. A recent evaluation of this program found that the waiting time to start treatment and support services available to patients undergoing hepatitis C treatment in regions with a nurse-supported shared care hepatitis C program, seemed to be as good, if not better, than in than service provided through metropolitan treatment centres.¹¹ The majority of patients who participated in the evaluation expressed high levels of satisfaction with the services available and preferred to access treatment locally. The evaluation recommended that the feasibility of nurse-supported hepatitis C shared care services in other regions needed to be investigated.

There is no reason why such a nurse supported program could not operate in other regions, nor in settings other than general practice (as demonstrated, in drug and alcohol services, or trialled in other settings, for example, in needle and syringe exchanges or through other community based agencies providing services to people with hepatitis C). However, funding for establishing such services is a barrier that needs to be overcome, particularly if the objective of increasing access to appropriate management and care for people with chronic hepatitis C is to be achieved. It is estimated that an additional \$1.7M per annum is required to provide a state-wide nurse-supported hepatitis shared care program in WA. Increasing the already very low number of patients treated would generate significant long-term health-care cost-savings, meaning this model would ultimately pay for itself.

The National Centre in HIV Epidemiology and Clinical Research (now the Kirby Institute) undertook an analysis of the impact of increasing hepatitis C treatment uptake in Australia.¹² The analysis considered different scenarios where treatment rates were increased or decreased. For WA, if treatment rates are increased over the next five years from approximately 391 cases (the average number of hepatitis cases treated per year in WA) to 658, 861, and 1,318 cases per year (increased treatment scenarios 1, 2, and 3), it was estimated that there would be 298-950 fewer new hepatitis C cases, 79-143 fewer new cases of liver failure, 38-69 fewer new cases of hepatocellular carcinoma, 13-23 fewer cases receiving liver transplants, and 65-117 fewer liver-related deaths over the 30-year period relative to the current treatment scenario.

Obviously, there are substantial future health care cost savings to be made if cases of liver failure, hepatocellular carcinoma and liver failure are averted. As well as health care cost savings and improved quality of life for people with hepatitis C, an additional benefit of treatment is that is can

¹¹ WA Centre for Health Promotion Research. 2014. *Evaluation of the WA Regional Nurse-supported Hepatitis C Shared Care Program*. Perth: Curtin University.

¹² National Centre in HIV Epidemiology and Clinical Research. 2010. *Epidemiological and economic impact of potential increased hepatitis C treatment uptake in Australia 2010*. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney.

have a preventative function. Mathematical modelling studies have suggested that even small increases in hepatitis C treatment uptake could lead to substantial reductions in HCV prevalence, particularly if treatment is targeted to people who are current injecting drug users.¹³

Hepatitis C treatment is rapidly evolving, with direct acting antiviral agents now available that do not require that interferon be included as part of the treatment regimen. New treatments require a shorter course of treatment, are highly effective, and have fewer side effects than treatment involving interferon. However, the cost of these new treatments may be a barrier to making them more accessible. Sofosbuvir (Solvadi) is one such treatment that was recently (July 2014) rejected by the Pharmaceutical Benefits Advisory Committee (PBAC) for listing on the Pharmaceutical Benefits Scheme on the basis that it was not considered to be cost effective.¹⁴ It is hoped that this barrier can be overcome when further new treatments are considered (or reconsidered) for listing, particularly as some people with hepatitis C are understood to be delaying treatment until the new treatments become available. For some, further delaying treatment may have a detrimental and possibly irreversible effect on their health.

Prevention

The introduction to the *Fourth National Hepatitis C Strategy 2014–2017* states (p1) that:

‘In Australia, most new hepatitis C infections are related to the sharing of injecting equipment. As long as new infections of hepatitis C continue to occur, prevention efforts must be strengthened and remain targeted towards people who inject drugs.’

The strategy further states (p15) that the principal prevention tool for hepatitis C in Australia is the needle and syringe program (NSP), and identifies as a priority action for prevention the need to ‘increase availability, access to and use of sterile injecting equipment among people who inject drugs’.

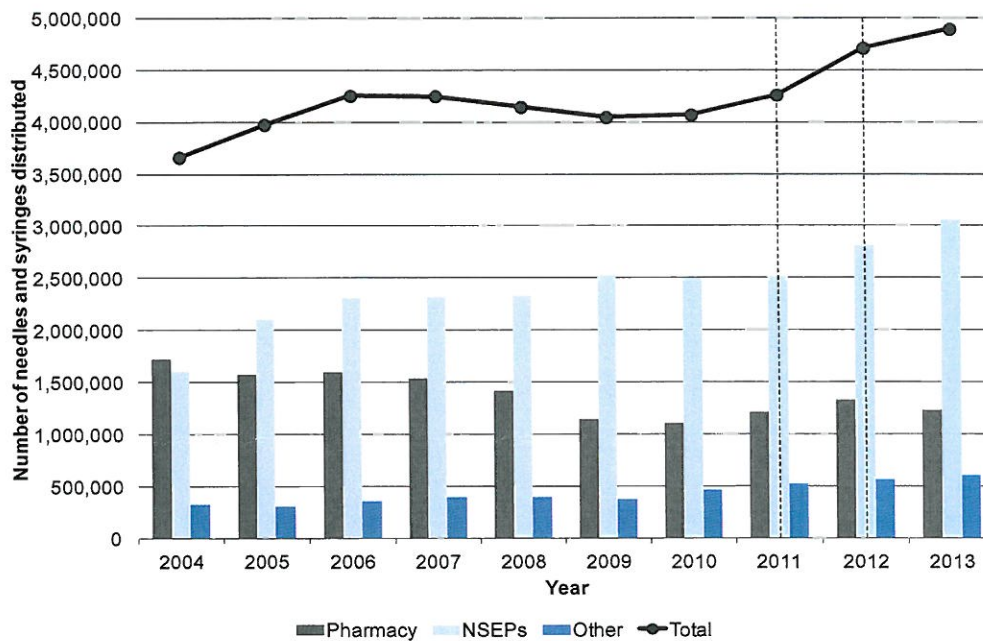
Figure 3 below shows the number of needles and syringes distributed in WA from 2004–2013 by outlet type. The *WA Poisons Act 1964* authorises approved organisations to provide sterile injecting equipment to people who inject drugs. The types of NSPs operating in WA are categorised as follows:

- fixed-site and mobile needle and syringe exchange programs (NSEPs) that supply free sterile needles and syringes upon the return of used items (for some NSEPs, if the items are not returned, a cost recovery charge applies)
- pharmacy-based NSPs that operate on a retail basis, primarily selling pre-packaged needles and syringes in various kits (a small number of pharmacies also hold a *Poisons Act* approval to sell ‘loose’ needles and syringes)
- other health services that provide NSPs including hospitals, Public Health Units, community health centres, nursing posts and other health related agencies (some health services provide needles and syringes via a vending machine).

¹³ Grebely, J., Matthews, G. V., Lloyd, A. R., & Dore, G. J. (2013). Elimination of hepatitis C virus infection among people who inject drugs through treatment as prevention: feasibility and future requirements. *Clinical infectious diseases*, 57(7), 1014-1020.

¹⁴ Australian Government Department of Health, The Pharmaceutical Benefits Scheme. Recommendations made by the PBAC – July 2014, viewed 15 January 2015, <http://www.pbs.gov.au/info/industry/listing/elements/pbac-meetings/pbac-outcomes/2014-07>.

Figure 3: Number of needles and syringes distributed by outlet type, WA, 2004 to 2013



Notes: Midwest CDST (Community Drug Service Team) changed from NSP to NSEP September 2011.
WAAC (WA AIDS Council) Fremantle changed from mobile service to fixed site service October 2011.
Palmerston Mandurah fixed site service commenced replacing WAAC mobile service in Mandurah.
WASUA (WA Substance Users Association) Bunbury changed from mobile service to fixed site service April 2012.

Figure 3 shows that the number of needles and syringes distributed in WA increased by over 1.2 million, from 3,660,587 in 2004 to 4,891,387 in 2013. This represented a 34% increase over the ten-year period. Distribution increased 10% from 2011 (4,259,514) to 2012 (4,709,970), the largest annual increase in the ten-year period. Distribution increased a further 4% from 2012 to 2013. These increases from 2011 may in part be attributable to the enhancement and expansion of hours of operation of some services as noted in Figure 3.

In 2004, 47% of needles and syringes distributed in WA were sold through pharmacies while NSEPs accounted for 44% and other services accounted for 9%. Since 2004, the proportion of needles and syringes distributed by pharmacies has decreased, and in 2013 pharmacies accounted for only 25% of all needles and syringes distributed in WA. Conversely, the proportion of needles and syringes distributed by NSEPs has steadily increased, with these programs accounting for 62% of all needles and syringes distributed in WA in 2013. This indicates increasing reliance on needles and syringes funded through public health sources (rather than on a user-pays basis).

In WA in 2013, the crude rate of needle and syringe distribution was 1.98 per capita. The crude rate of needle and syringe distribution in the Metropolitan area remained relatively stable at around 2.0 needles and syringe per capita per year over the period 2004-2103, while the rate in the non-Metropolitan area increased from 1.3 needles and syringes per capita in 2004 to 2.0 needles and syringe per capita in 2013. In 2013, for the first time in the previous ten-year period, the non-Metropolitan rate matched the Metropolitan rate (2.0 per capita).¹⁵ These per capita rates are comparable with 2013 rates calculated nationally: 1.6 for major cities, 1.9 for regional/remote areas, and 1.7 Australia-wide.¹⁶

¹⁵ Communicable Disease Control Directorate, WA Department of Health, 2015. Unpublished data.

¹⁶ Iversen, J. *NSP in urban, regional and remote Australia – distribution models and viral hepatitis prevention coverage*. Paper presented at the Australasian Viral Hepatitis Conference, Alice Springs, September 2014.

Despite these increases in needle and syringe distribution, the number and age-standardised rate of newly acquired hepatitis C infections in WA was higher in 2011, 2012 and 2013 than it was in 2010 (as shown in Figure 1).

Data from the *Australian NSP Survey National Data Report 2009–2013* shows that for WA participants in this annual survey, the proportion reporting that they had reused another person's needle and syringe in the last month was similar in 2013 (19%) as compared to 2009 (21%), indicating that significant rates of needle sharing persist.¹⁷

The *Fourth National Hepatitis C Strategy 2014–2017* includes by 2017, to 'reduce the incidence of new hepatitis C infections by 50 per cent as an 'aspirational target'. Objectives in the strategy include to 'reduce the incidence of hepatitis C' and 'to reduce the risk behaviours associated with the transmission of hepatitis C'.

Mathematical modelling suggests that (nationally) a doubling of needle and syringe distribution is needed to half the incidence rate of hepatitis C.¹⁸ If current rates of injecting drug use continue, without additional funding support to increase needle and syringe distribution, it is unlikely that any impact will be made on hepatitis C incidence.

Figure 3 shows the potential impact that establishing new and/or enhanced needle and syringe outlets can have on distribution. In regional areas in WA, enhanced outlets are required to not only increase access to services, but also to increase the range of injecting equipment that can be made available. While these services can be operated relatively cost efficiently (for example, by co-locating with other services), consumables costs obviously increase with increased distribution, and costs are increased by statutory requirements to pay regional workers additional district allowances.

There is evidence that investment in needle and syringe programs generates a substantial return on investment in terms of long term savings to the health care system generated by averting hepatitis C (and HIV) infections. The report *Return on investment 2: evaluating the cost-effectiveness of needle and syringe programs in Australia 2009* estimated that over the decade 2000-2009 needle and syringe programs directly averted 96,667 new hepatitis C infections (and 32,050 new HIV infections).¹⁹ Further, this study estimated that for 'every one dollar invested in NSPs, more than four dollars were returned (additional to the investment) in healthcare cost-savings in the short-term (ten years) if only direct costs are included; greater returns are expected over longer time horizons'.

Needle and syringe programs operate in WA (as they do in other jurisdictions) alongside programs intended to reduce both the supply of drugs and the demand for drugs, in accordance with the *National Drug Strategy 2010-2015*.²⁰

In addition to NSP as the primary pillar of hepatitis C prevention efforts, the WA Government also invests in a range of other initiatives, including:

- support for HepatitisWA, a non-government organisation that provides education for individuals, the general community and health professionals

¹⁷ Iversen, J. and Maher, L. *Australian Needle and Syringe Program National Data Report 2008-2013*. The Kirby Institute, University of New South Wales, 2014.

¹⁸ Kwon, J.A., Iversen, J., Maher, L., Law, M.G., Wilson, D.P., 2009. The impact of needle and syringe programs on HIV and HCV transmissions in injecting drug users in Australia: a model-based analysis *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 51(4), 462-469.

¹⁹ *Return on investment 2: evaluating the cost-effectiveness of needle and syringe programs in Australia*. Sydney, Australia: The Kirby Institute, The University of New South Wales; 2009.

²⁰ Ministerial Council on Drug Strategy 2011, *National Drug Strategy 2010–2015 - A framework for action on alcohol, tobacco and other drugs*, viewed 14 January 2015, <http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/nds2015>

- support for the WA Substance Users Association, a peer-based drug user organisation that provides peer education and a range of health services (including NSEP) for people who inject drugs
- workforce development for NSP providers (including pharmacies) through an online package and face-to-face training events (see http://www.public.health.wa.gov.au/3/1756/3/workforce_development_and_training.pm)
- workforce development for general practitioners, nurses and other health professionals through an on-line package (see <http://hepatitis.ecu.edu.au/>) and face-to-face events
- workforce development for the Aboriginal health sector
- education for the general community through the Healthy WA website, and the publication of information resources (including resources in a range of languages other than English).

NSP and other hepatitis C prevention initiatives could all be scaled up if dedicated funding was allocated to states and territories by the Australian Government to support the implementation of the *Fourth National Hepatitis C Strategy 2014–2017*. There was an announcement in April 2014 of a 'New Prevention Programme for Blood Borne Viruses and Sexually Transmissible Infections', including \$5.1 million for needle and syringe programmes, particularly in rural and regional areas.²¹ However, at the time of writing this submission, it was not clear how this funding would be rolled out. While this funding would be a start, additional funding needs to be allocated to states and territories if there is serious intention to reduce the incidence of hepatitis C. Particular focus needs to be given to addressing the alarming rates of newly acquired infections amongst Aboriginal people.

Further consideration also needs to be given to implementing sanctioned needle and syringe programs in correctional settings. A national survey of prison entrants found that 51% of those with a history of injecting drug use tested positive for hepatitis C antibody.²² Despite the best efforts of correctional services to prevent illicit drugs from entering the prison system, injecting drug use still occurs in prisons. With no access to sterile injecting equipment, and an already existing high prevalence of hepatitis C amongst inmates, injecting drugs in prison is an extremely high risk activity for hepatitis C transmission. Given the high rates of imprisonment of Aboriginal people in WA, this also presents additional vulnerabilities for this group.²³

The previous *Third National Hepatitis C Strategy 2010–2013* noted that there was international evidence demonstrating the effectiveness of prison NSPs. In light of this, and the demonstrated efficacy of NSPs in community settings, that strategy proposed that: 'it is appropriate throughout the life of this strategy for state and territory governments to identify opportunities for trialling this in Australian custodial settings'.²⁴ No such trials occurred during the life of that strategy.

While the *Fourth National Hepatitis C Strategy 2014–2017* identifies people in custodial settings as a priority target group, no specific prevention activities are detailed for this group. Despite this, action needs to be taken to ensure that people in custodial settings who inject drugs have access to the same means of prevention as people in the wider community who inject drugs have access to.

²¹ Australian Government Department of Health, 2014, National Strategies for blood-borne viruses and sexually transmissible infections, 2014, accessed 15 January 2015, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-national-strategies-2010>.

²² Butler, T, Lim D, & Callander D. National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey Report 2004, 2007, and 2010. Kirby Institute (University of New South Wales) and National Drug Research Institute (Curtin University). 2011.

²³ According to the Department of Corrective Services Weekly Offender Statistics Report as at 26 June 2014, 39.6% of the WA adult prisoner population was Aboriginal (http://www.correctiveservices.wa.gov.au/_files/about-us/statistics-publications/statistics/2014/cnt140626.pdf viewed 22 January 2015).

²⁴ Commonwealth of Australia, 2010. *Third National Hepatitis C Strategy 2010–2013*, viewed 15 January 2015, [https://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-national-strategies-2010-hcv/\\$File/hcv.pdf](https://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-national-strategies-2010-hcv/$File/hcv.pdf).