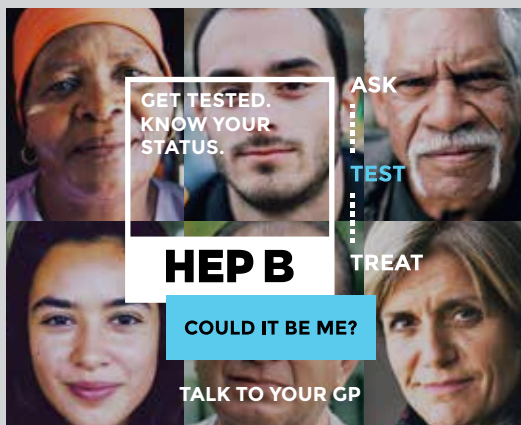


# NSW HEPATITIS B AND C STRATEGIES 2014-2020

## 2017 Annual Data report



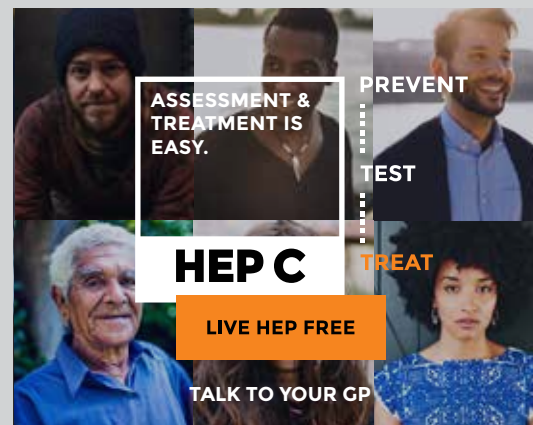
GET TESTED.  
KNOW YOUR  
STATUS.

ASK  
TEST  
TREAT

**HEP B**

COULD IT BE ME?  
TALK TO YOUR GP

A collage of four diverse people's faces. The text is overlaid on the images, with 'HEP B' in a large white box and 'COULD IT BE ME?' in a blue box.



ASSESSMENT &  
TREATMENT IS  
EASY.

PREVENT  
TEST  
TREAT

**HEP C**

LIVE HEP FREE  
TALK TO YOUR GP

A collage of four diverse people's faces. The text is overlaid on the images, with 'HEP C' in a large white box and 'LIVE HEP FREE' in an orange box.

## Policy Context

### Hepatitis C

The *NSW Hepatitis C Strategy 2014-2020* continues the NSW Government's commitment to reduce hepatitis C infections and improve the health outcomes of people living with hepatitis C.

The PBS listing of new hepatitis C treatments in 2016, during the life of the Strategy, has increased the focus on improving access to treatment in key settings, particularly for people who inject drugs.

The Ministry of Health has committed to the elimination of hepatitis C in NSW by 2028.

### Key Data

Hepatitis C (testing, treatment, prevention)		
	2017	Change since 2016
Number of tests for hepatitis C antibody	558,559	5.5% increase (529,651)
Progress towards elimination	23% of the estimated number of people with hepatitis C initiated treatment (at 31 December 2017)	9 percentage point increase (14% at 31 December 2016)
Number of residents receiving pharmacotherapy treatment	10,773	0.8% increase (10,687)
Number of units of injecting equipment distributed	13,558,302	4% decrease (14,044,567)
Number of people participating in the Opioid Treatment Program	20,681	2% increase (20,326)

### Key Messages

#### It is now possible to eliminate hepatitis C as a public health concern

The direct acting antiviral hepatitis C treatments (DAAs) are cost effective, safe, and highly effective with a cure rate of greater than 95 per cent. In March 2016, the new treatments were listed on the PBS. The scale up of the DAAs for hepatitis C is a system priority for NSW.

#### Accessing high quality hepatitis C treatment in primary care is required

Increased access in primary care will improve equity by allowing the public health system to focus on more complex people who inject drugs.

#### Strengthening treatment efforts for people who inject drugs is critical

A focus on key settings including prisons, drug and alcohol services, Needle and Syringe Programs and Aboriginal community controlled health services will improve access to treatment for people who inject drugs who are most vulnerable to infection.

**Access to sterile needle and syringes and opioid treatment programs continue to be important in the prevention of hepatitis C transmission.**

## Policy Context

### Hepatitis B

The *NSW Hepatitis B Strategy 2014-2020* continues the NSW Government's commitment to reduce hepatitis B infections and improve the health outcomes for people living with hepatitis B.

The hepatitis B Strategy strengthens our efforts across prevention, testing, treatment and monitoring, building on achievements and prioritising the additional activities required to reduce hepatitis B infections in NSW.

The range of key settings needed for action include antenatal care services, Aboriginal Community Controlled Health Services, general practice and primary care, and corrective services.

### Key Data

Hepatitis B (treatment, monitoring, and screening)				
			2017	Change since 2016
Number of tests for hepatitis B surface antigen			621,934	4.7% increase (593,778)
Residents dispensed with hepatitis B treatment			9,010	2.8% increase (8,767)
Number of viral load tests			15,117	1.3% decrease (15,316)
Hepatitis B vaccines	Proportion of infants in NSW who have received 3 doses of hepatitis B vaccine	12 months	94.6%	0.4 percentage point increase (94.2%)
		24 months	96.1%	0.3 percentage point increase (95.8%)
Proportion of women giving birth who are screened for hepatitis B			98.3% (in 2016)	0.5 percentage point decrease (98.8% in 2015)

### Key Messages

#### General Practice is critical to increasing access to monitoring and treatment for people with hepatitis B

The Ministry has enhanced funding to the five local health districts with the highest prevalence of hepatitis B to increase access to treatment and management in primary care.

#### Continued implementation of existing policies to prevent hepatitis B infections is required

- Increasing childhood hepatitis B vaccination coverage;
- Screening pregnant women for hepatitis B and ensuring all babies born to hepatitis B positive mothers receive immunoglobulin within 12 hours of birth;
- Reducing sharing of injecting equipment among people who inject drugs; and
- Providing hepatitis B vaccine for high risk groups at no cost

## Table of Contents

<b>HEPATITIS C .....</b>	<b>7</b>
<b>1. Hepatitis C notification data and hepatitis C infection .....</b>	<b>7</b>
1.1 How many diagnoses of hepatitis C are notified? .....	7
1.2 Which groups are being notified? .....	8
1.3 Where are notifications occurring? .....	12
<b>2. Testing for hepatitis C testing in NSW .....</b>	<b>14</b>
2.1 Is hepatitis C testing increasing in NSW? .....	14
<b>3. Hepatitis C treatment access.....</b>	<b>15</b>
3.1 How many people are accessing hepatitis C treatment? .....	15
<b>Prisoners are a priority population in the NSW Hepatitis C Strategy 2014-2020 .....</b>	<b>17</b>
<b>4. Maintain hepatitis C prevention investment .....</b>	<b>18</b>
4.1 Who is accessing the Needle and Syringe Program in NSW? .....	18
4.2 What proportion of people use other people’s used needles and syringes (receptive syringe sharing) in NSW? .....	18
4.3 How many units of injecting equipment are distributed by the Needle and Syringe Program in NSW? .....	19
4.4 How many people in NSW are receiving pharmacotherapy treatment? .....	20
<b>HEPATITIS B .....</b>	<b>22</b>
<b>5. Reduce hepatitis B infections.....</b>	<b>22</b>
5.1 How many diagnoses of hepatitis B are notified? .....	22
5.2 Which groups are being notified? .....	23
5.3 Where are notifications occurring? .....	26
<b>6. Increase testing for hepatitis B.....</b>	<b>27</b>
6.1 Is hepatitis B testing increasing in NSW? .....	27
<b>7. Improve access to hepatitis B treatment .....</b>	<b>28</b>
7.1 How many people in NSW are accessing hepatitis B treatment? .....	28
7.2 What percentage of people with chronic hepatitis B are receiving treatment in primary care? .....	29
<b>8. Improve management of hepatitis B .....</b>	<b>30</b>
8.1 How many people in NSW with chronic hepatitis B are having their condition monitored? .....	30
<b>9. Maintain hepatitis B prevention investment .....</b>	<b>33</b>
9.1 What proportion of infants in NSW are vaccinated for hepatitis B? .....	33
9.2 What proportion of women giving birth in NSW are screened for hepatitis B? .....	34
9.3 What proportion of neonates in NSW born to hepatitis B positive mothers receive hepatitis B immunoglobulin within 12 hours of birth? .....	35
9.3 How many doses of hepatitis B vaccine are distributed to GPs, Aboriginal Medical Services, Sexual Health Clinics and Justice Health? .....	36
<b>APPENDIX .....</b>	<b>37</b>

---

<b>Table 2: Number of hepatitis B and hepatitis C notifications by gender and age group, NSW, 2017.....</b>	<b>37</b>
<b>Table 3: Number of hepatitis B and hepatitis C notifications by local health district of residence, NSW, 2013-2017.....</b>	<b>38</b>
<b>Table 4: Number of units of injecting equipment distributed in NSW, by LHD in 2017.....</b>	<b>39</b>
<b>Table 5: Comparable NNEDC data - NSW respondents 2013-2017 .....</b>	<b>40</b>
<b>Figure 29: Number of public NSW NSP outlets by type, by LHD, 31 December 2017.....</b>	<b>40</b>
<b>Figure 30: Number of NSW residents dispensed hepatitis B treatment with lower hepatitis B prevalence, 1 January - 31 December 2017; 1 January - 31 December 2016 and 1 January - 31 December 2015 .....</b>	<b>41</b>
<b>Table 6: Number of NSW residents dispensed hepatitis B treatment by LHD of patient residence, by prescriber type, 1 January - 31 December 2017; 1 January - 31 December 2016 and 1 January - 31 December 2015.....</b>	<b>42</b>
<b>Table 7: Number of viral load tests provided to people with chronic hepatitis B (and not receiving treatment) via Medicare, 1 July 2015- 30 June 2016 and 1 July 2016- 30 June 2017.....</b>	<b>43</b>
<b>Table 8: Data Sources .....</b>	<b>44</b>

## Glossary of Terms

AMS	Aboriginal Medical Service
ADM	Automatic dispensing machine
HBV	Hepatitis B
HCV	Hepatitis C
CALD	Culturally and linguistically diverse
IDC	Internal dispensing chute
LHD	Local Health District
MSIC	Medically Supervised Injecting Centre
NNEDC	NSW Needle and Syringe Program Enhanced Data Collection
NSP	Needle and Syringe Program
NUAA	New South Wales Users and AIDS Association
NSW	New South Wales
OST	Opioid substitution treatment
OTP	Opioid Treatment Program
PFSHC	Publicly funded Sexual Health Clinic
PWID	People who inject drugs
RSS	Receptive syringe sharing

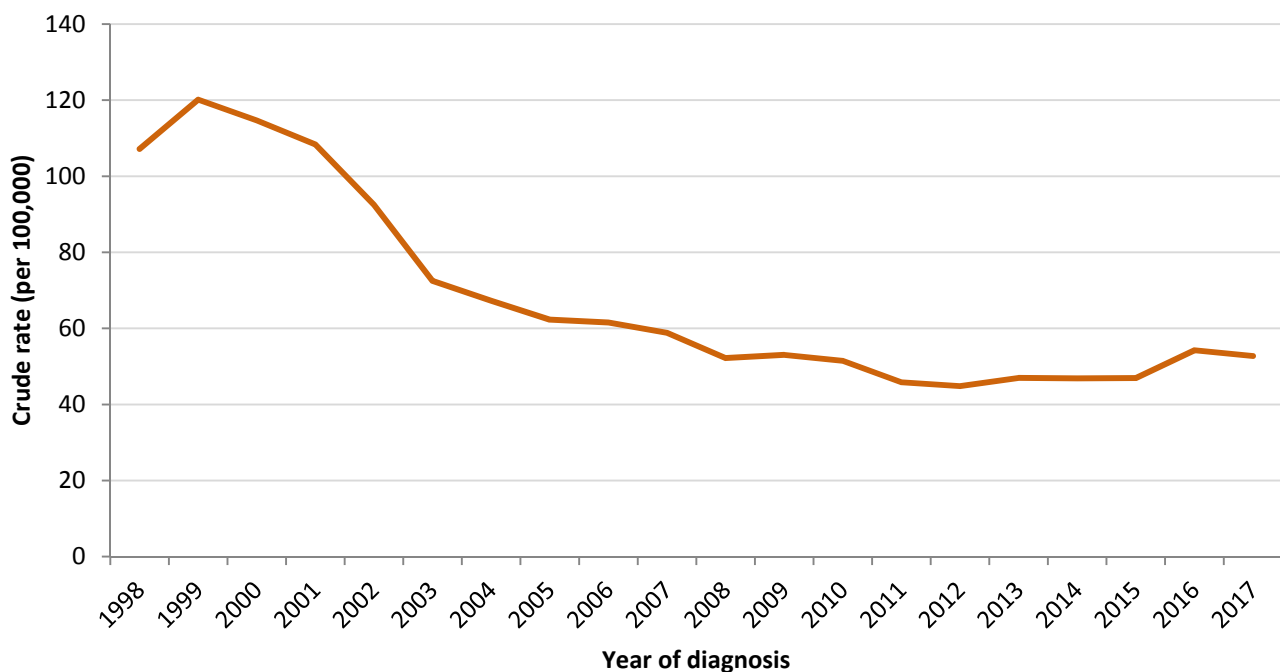
## Hepatitis C

### 1. Hepatitis C notification data and hepatitis C infection

Hepatitis C notification data provides limited information that can be used for assessing the epidemiological patterns of hepatitis C infection. This is because many infections are asymptomatic, so people who are infected may never be tested, or only tested many years after infection, and laboratory reports do not distinguish between infections acquired recently, or years before. Also, variations in notifications may reflect differences in testing patterns rather than differences in incidence of infection.

#### 1.1 How many diagnoses of hepatitis C are notified?

Figure 1: Hepatitis C notification rate, NSW, 1998-2017

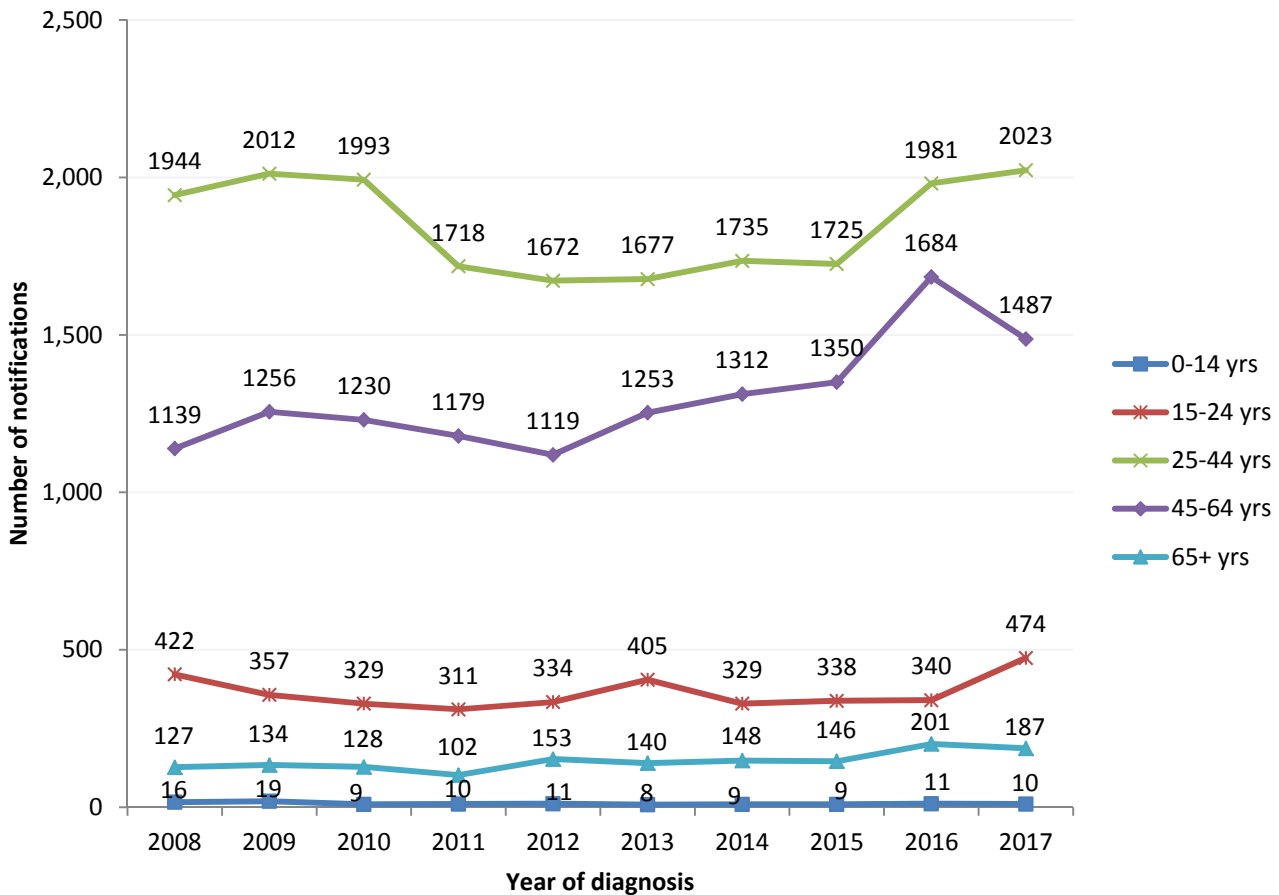


Data source: NCIMS and ABS population estimates (SAPHaRI), NSW Health; data extracted 12 Mar 2018

- The hepatitis C notification rate in NSW decreased slightly between 2016 and 2017 (54 vs 53 notifications per 100,000 population, respectively)
- In 2017, there were 4,170 hepatitis C notifications in NSW.
- There was an upswing in the number of hepatitis C notifications once new treatments for hepatitis C, called direct acting antivirals (DAAs), became available in Australia from March 2016.

## 1.2 Which groups are being notified?

Figure 2: Notifications of hepatitis C in NSW, by age group, 2008-2017



Data source: NCIMS, NSW Health; data extracted 12 Mar 2018

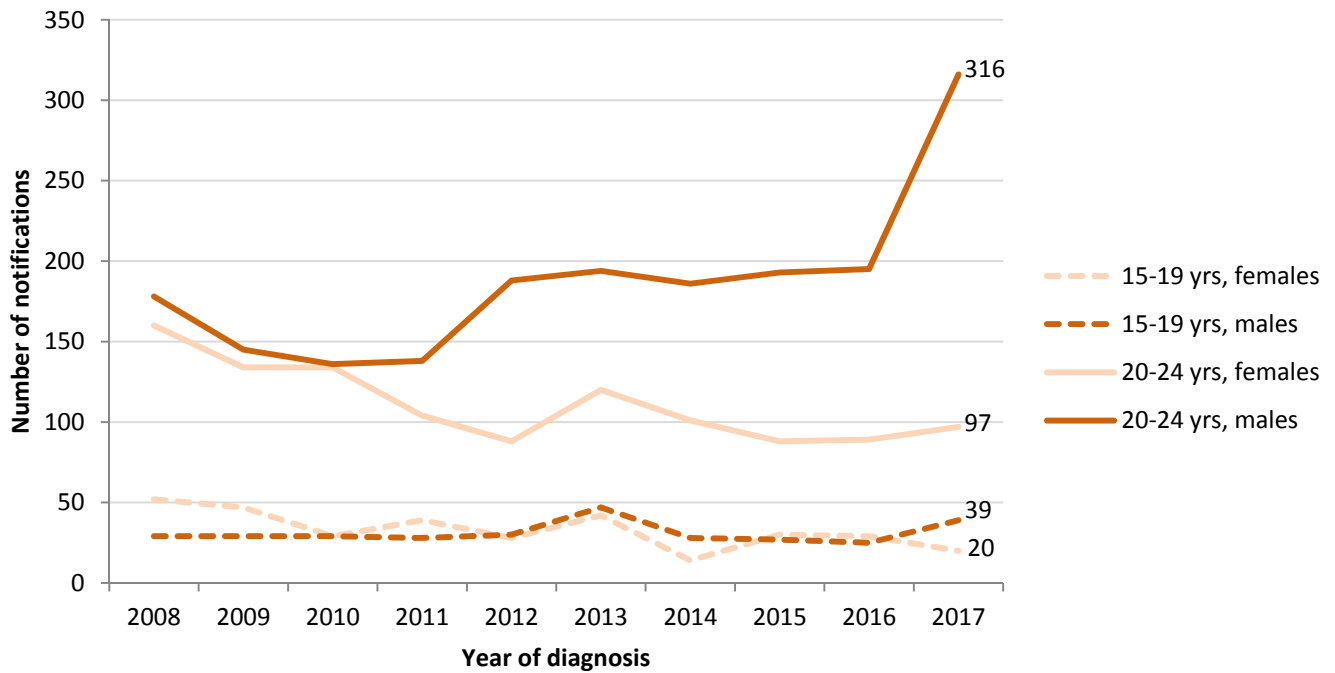
Note: Excludes persons whose age is unknown or not stated.

- In 2017, the largest number of hepatitis C notifications was amongst people aged 25-44 years; there was a 2 per cent increase in this age group compared with 2016.
- The largest proportional increase in hepatitis C notifications in 2017 occurred amongst those aged 15-24 years. There were 474 notifications in this age group in 2017, 39 per cent higher than in 2016. \*See **Figure 3** for more details about hepatitis C notifications amongst 15-24 year olds.
- Most of the increase amongst people aged 15-24 years occurred in Justice Health. Notifications in those aged 15-24 years from Justice Health rose from 109 notifications in 2016, to 213 in 2017. High numbers of notifications in custodial settings may be partly due to a higher proportion of people with risk factors for hepatitis C infection in the population, as well as targeted screening programs.

\*See **Figure 7** and **Appendix Tables 2 and 3** for Justice Health notification data.



**Figure 3: Notifications of hepatitis C in people aged between 15 and 24 years, by age group and gender, NSW, 2008-2017**



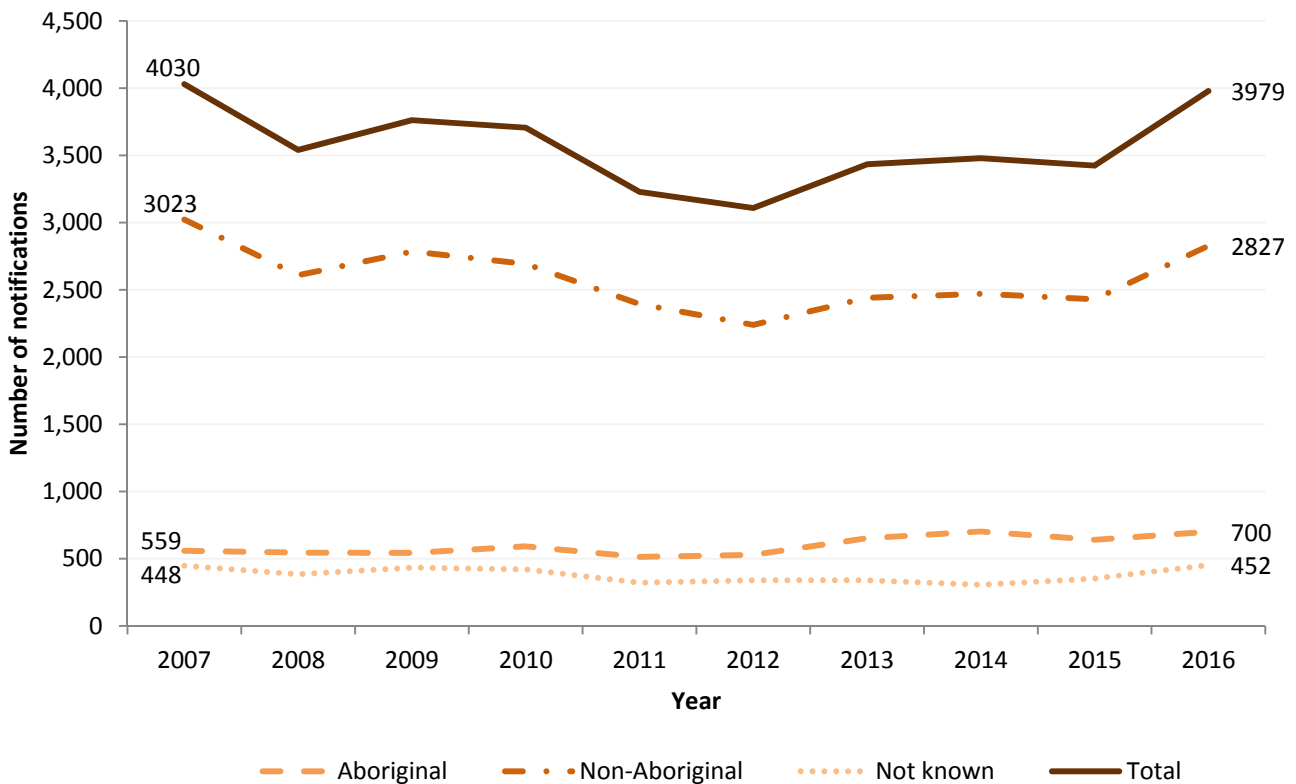
Data source: NCIMS, NSW Health; data extracted 12 Mar 2018

Note: Excludes transgender persons and persons whose age or sex is unknown or not state.

- In 2017, there was a marked increase in the number of hepatitis C notifications amongst males aged between 20 and 24 years. Notifications rose by 62 per cent in this group, from 195 in 2016 to 316 in 2017.
- Increases in hepatitis C notifications also occurred amongst females aged 20-24 years and males aged 15-19 years in 2017, but were relatively stable compared to the previous 5 years.
- Hepatitis C notifications decreased amongst females aged 15-19 years in 2017, but were also stable compared to the previous 5 years.
- Most of the increase amongst people aged 15-24 years occurred in Justice Health. Notifications in those aged 15-24 years from Justice Health rose from 109 notifications in 2016, to 213 in 2017. \*See **Appendix Tables 2 and 3** for Justice Health notifications data). High numbers of notifications in custodial settings may be partly due to a higher proportion of people with risk factors for hepatitis C infection in the population, as well as targeted screening programs and key performance indicators.

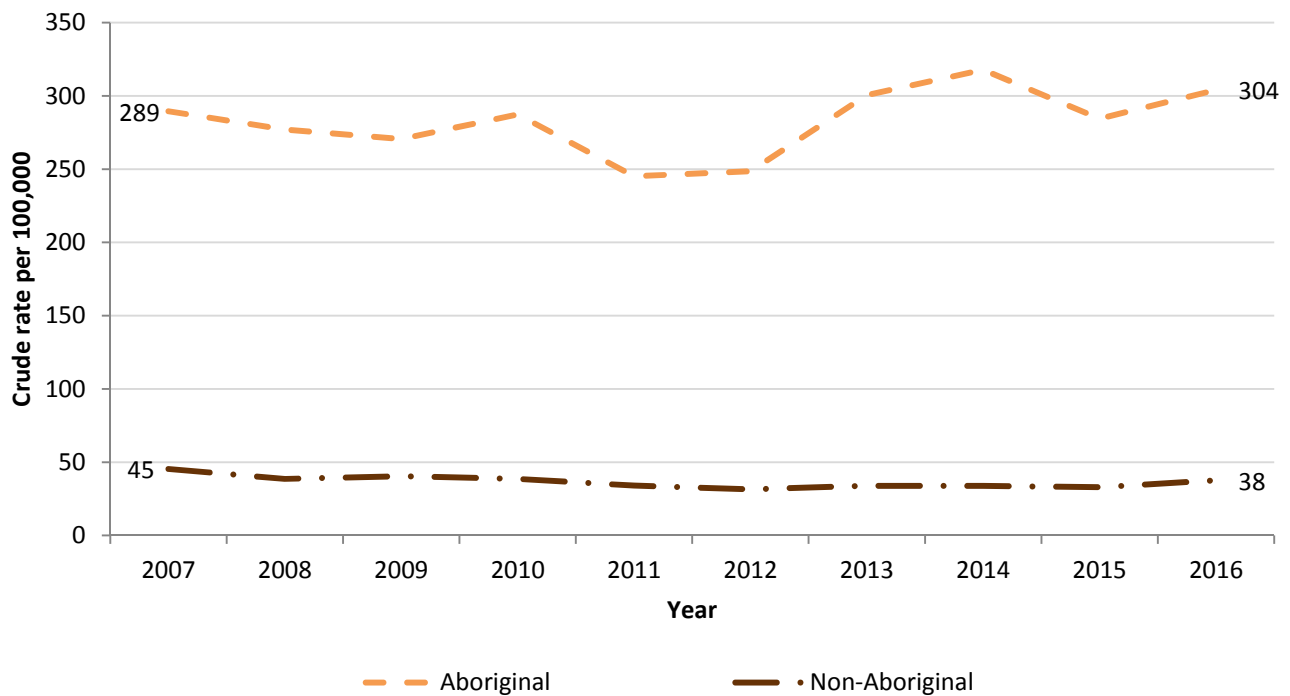
Note: Notifications of hepatitis C in young people may be an indicator of recently acquired infections as these are the ages when injecting drug behaviours often commence, and hepatitis C infection is more likely to be acquired soon after initiation. However, the number of hepatitis C infections that are detected (and subsequently notified) is dependent on the number of people in this age group who are tested.

Figure 4: Hepatitis C notifications in NSW, by Aboriginality, 2007-2016.



Data source: Communicable Diseases Register, NSW Ministry of Health (via SAPHaRI); data extracted 1 March 2018.

- From 2007 to 2016, 35,691 notifications for hepatitis C were recorded in the Communicable Diseases Register (CDR). Of these, 5,979 (17 per cent) were in Aboriginal people and 25,912 (73 per cent) were in non-Aboriginal people; Aboriginality was not known after data linkage for 4,156 notifications (11 per cent).
- Trends in the Aboriginal population are difficult to interpret due to the yearly variation in the number of people for whom Aboriginal status was not known, and the relatively high proportion of incomplete data compared to the proportion in Aboriginal people.

**Figure 5: Hepatitis C notification rate by Aboriginality, NSW, 2007-2016.**

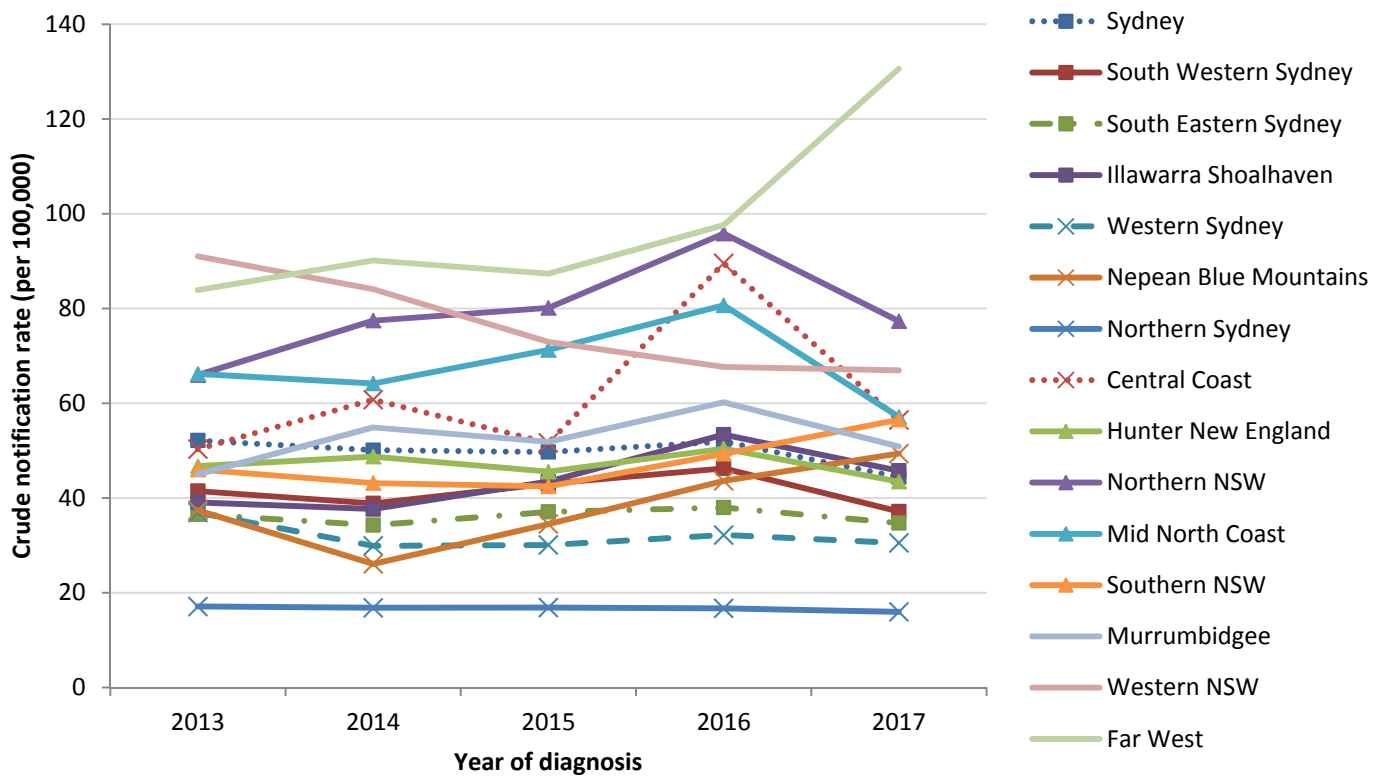
Data source: Communicable Diseases Register, NSW Ministry of Health (via SAPHaRI); data extracted 1 March 2018.

Note: Excludes records where Aboriginal status was not stated/not known.

- Amongst those whose Aboriginal status was known, the hepatitis C notification rate in Aboriginal people was 304 per 100,000 population in 2016, which is 8.1 times higher than the rate in non-Aboriginal people (38 per 100,000).
- Notification rates are influenced by variations in incidence of disease, screening rates and/or the number of people for whom Aboriginal status was not known (see Figure 4). Screening rates for hepatitis C may be higher in Aboriginal populations than in non-Aboriginal populations, contributing to higher rates of notification.

### 1.3 Where are notifications occurring?

Figure 6: Hepatitis C notification rate, by LHD of residence, NSW, 2013-2017



Data source: NCIMS, NSW Health; data extracted 12 Mar 2018

Note: Excludes non-NSW residents and persons whose place of residence in NSW was not known.

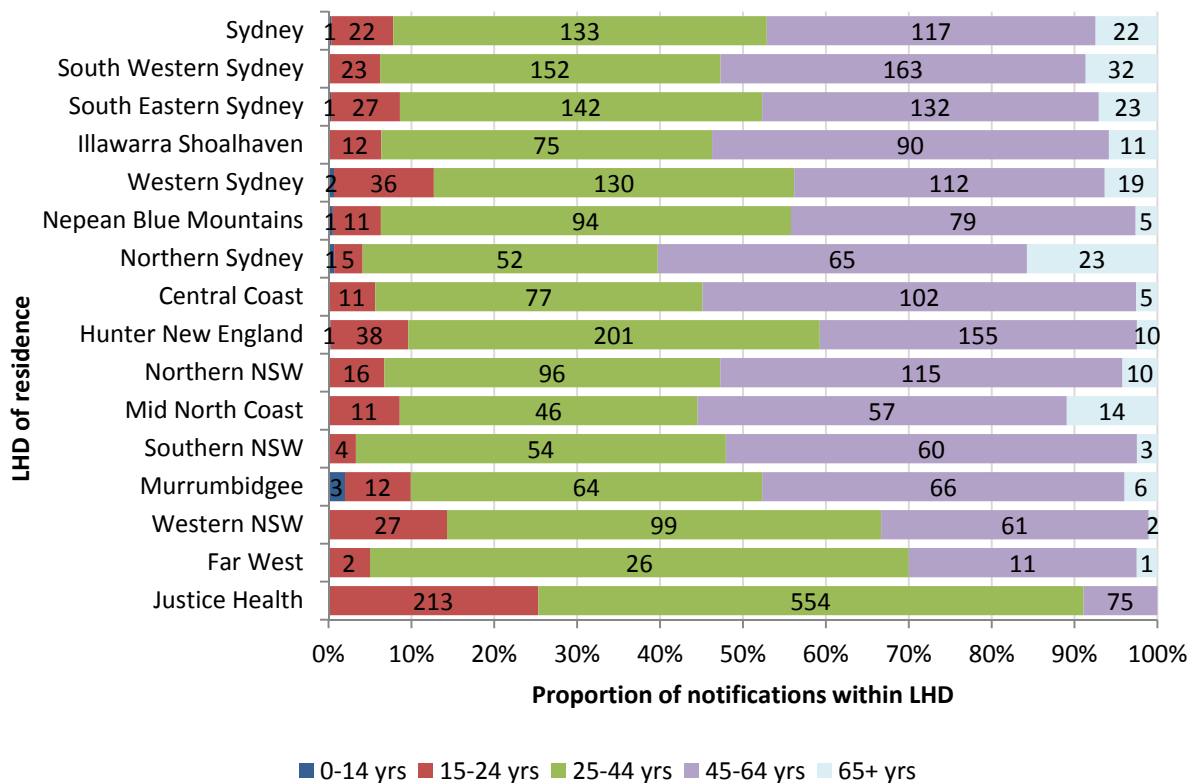
- Far West, Northern NSW and Western NSW LHDs had the highest hepatitis C notification rates in NSW in 2017.
- In 2017, the hepatitis C notification rate increased in Far West, Southern NSW and Nepean Blue Mountains LHDs (34 per cent, 15 per cent and 13 per cent respectively), while all other LHDs reported a decrease.

Note: Local changes in the notification rate can be difficult to interpret due to a range of factors. Because hepatitis C is often asymptomatic, people may be tested many years after infection and testing patterns vary across time and settings. Local health promotion campaigns and screening programs targeting at-risk populations can result in increased testing and better detection rates.

It is important to note that there is substantial variation in population size between the LHDs. For LHDs with a smaller population, such as Far West NSW, a small change in the number of notifications can have a large impact on the annual rate.

A notification rate has not been calculated for Justice Health as the population (the denominator) fluctuates considerably and data are available only for the annual number of incarcerations, not the number of people incarcerated.

Figure 7: Notifications of hepatitis C, by LHD and age group, NSW, 2017



Data source: NCIMS, NSW Health; data extracted 12 March 2018

Note: Excludes non-NSW residents and persons whose age and/or place of residence in NSW was not known; data labels show number of notifications in age group for LHD.

- As in previous years, the highest number and highest proportion of hepatitis C notifications amongst 15-24 year olds in 2017 were reported by Justice Health.
- Of the 474 hepatitis C notifications in people aged 15-24 years in 2017, 213 (45 per cent) were from Justice Health.

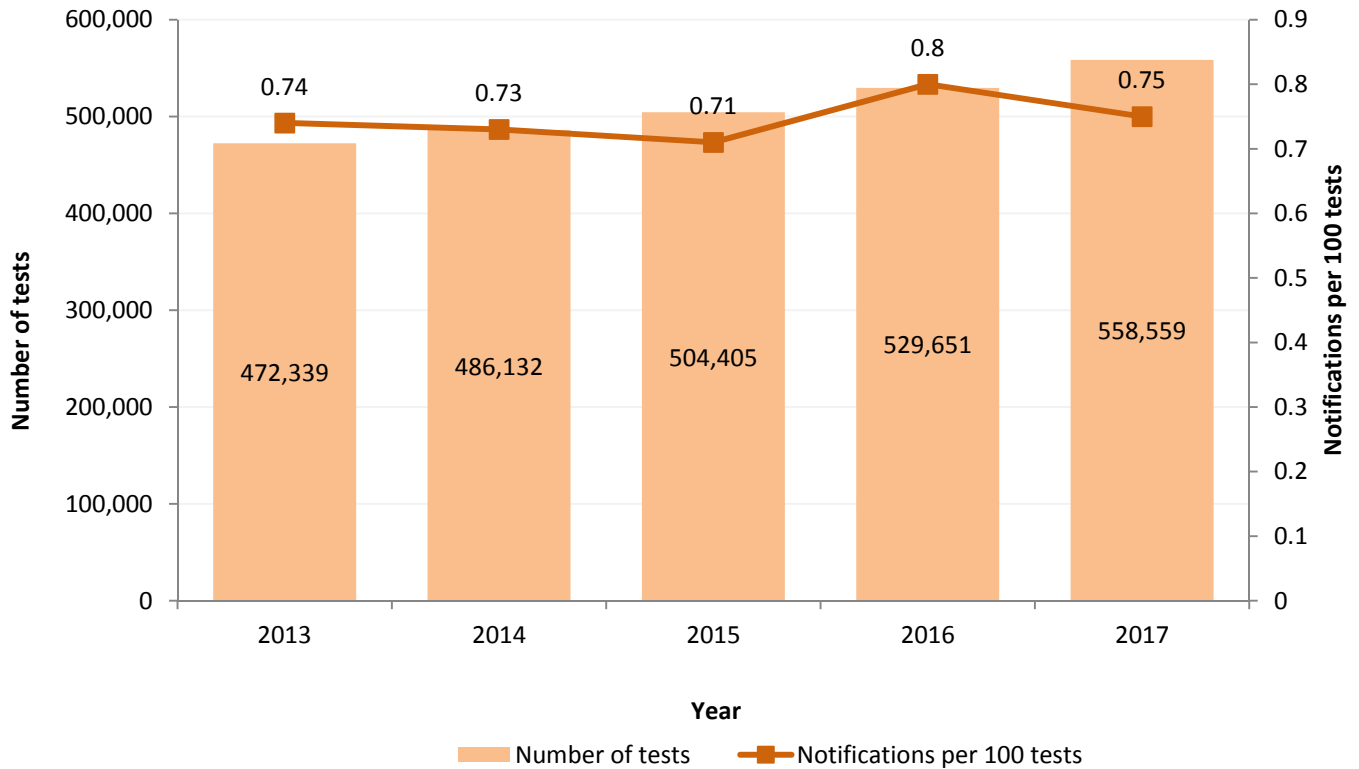
Note: Notifications of hepatitis C in young people are an indicator of newly acquired infections as this is when injecting drug behaviours often commence, and hepatitis C infection is more likely to be acquired soon after initiation. High numbers of notifications in custodial settings may be partly due to a higher proportion of people with risk factors for hepatitis C infection in the population, targeted screening programs, and the inclusion of people who have been previously diagnosed interstate or overseas.

Hepatitis C infections in children are usually acquired from their mother during pregnancy or birth.

## 2. Testing for hepatitis C testing in NSW

### 2.1 Is hepatitis C testing increasing in NSW?

Figure 8: Number of tests for hepatitis C antibody and notification to test ratio<sup>1</sup>, 2013-2017



Data sources: NSW denominator data project, NSW Health

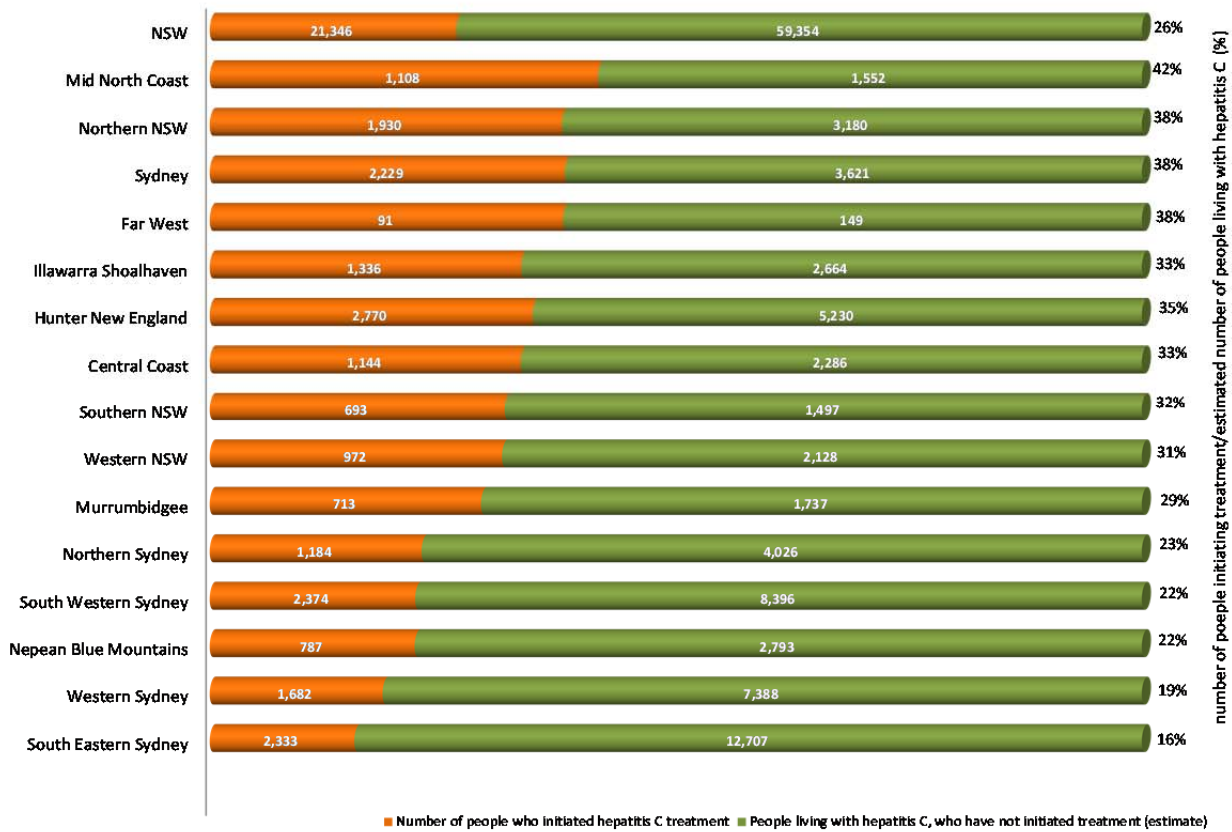
- The number of hepatitis C tests performed in NSW is continuing to increase gradually each year. In 2017, 558,559 tests for hepatitis C surface antigen were performed in 15 laboratories in NSW, a 5.5 per cent increase from 2016 (529,651 tests).
- The hepatitis C notification to test ratio in 2017 was 0.75, lower than in 2016, but stable compared to the previous five years.

<sup>1</sup> See **Appendix: Table 4** for more details about methodology

### 3. Hepatitis C treatment access

#### 3.1 How many people are accessing hepatitis C treatment?

Figure 9: Number of residents initiating hepatitis C treatment between 1 March 2016 and 31 December 2017 by LHD of patient residence, compared to the estimated number of people living with hepatitis C in 2016.



Data source: PBS data (treatment initiation); The Kirby Institute, 2017 Estimates and Projections of the Hepatitis C Virus Epidemic in NSW: Summary Report

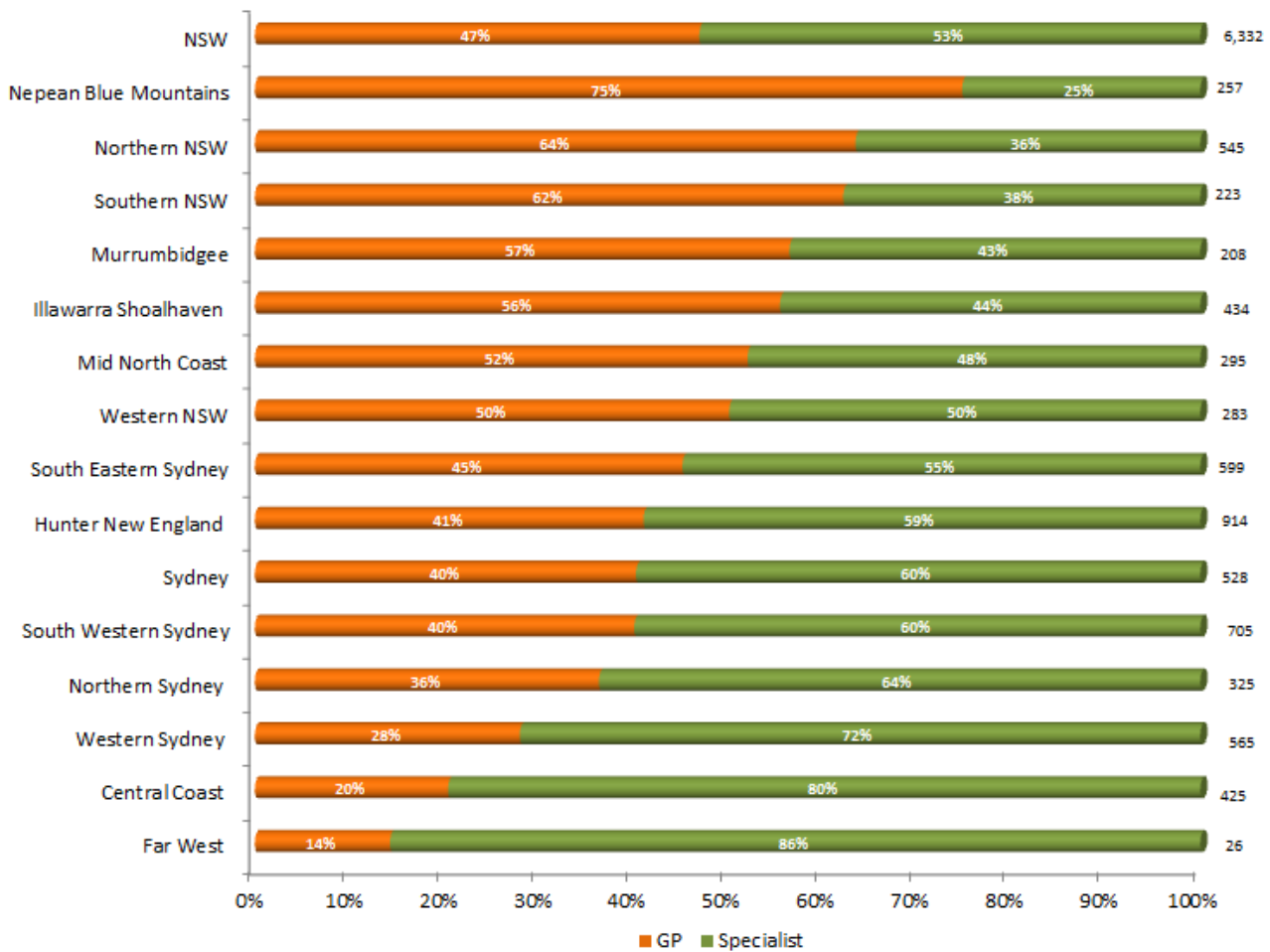
#### NSW has made progress towards hepatitis C elimination by 2028

From 1 January to 31 December 2017, 7,293 people initiated hepatitis C treatment in NSW.

#### Increased and sustained efforts are needed to meet the hepatitis C elimination target

As of December 2017, 26 per cent (21,346) of the estimated 80,700 people in NSW with hepatitis C have initiated treatment. Further efforts are needed by districts to actively find people with hepatitis C and link them to treatment services.

**Figure 10: Number of people in NSW dispensed hepatitis C treatment by LHD of patient residence, by prescriber type<sup>2</sup>, 1 January to 31 December 2017**



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data, 1 January to 31 December 2017

Note: The Figure identifies the number of NSW residents who initiated hepatitis C treatment by specialist or a GP by LHD of patient residence. Prescribers labelled as 'unknown' were excluded from the analysis.

### Access to hepatitis C treatment in general practice continues to increase

From 1 January to 31 December 2017, the proportion of NSW residents initiating hepatitis C treatment by a general practitioner (GP) was 47 per cent.

Note: The number and proportion stated in NSW includes people who initiated treatment at Justice Health Settings. The number and proportion of people initiating treatment across LHDs exclude Justice Health Settings.

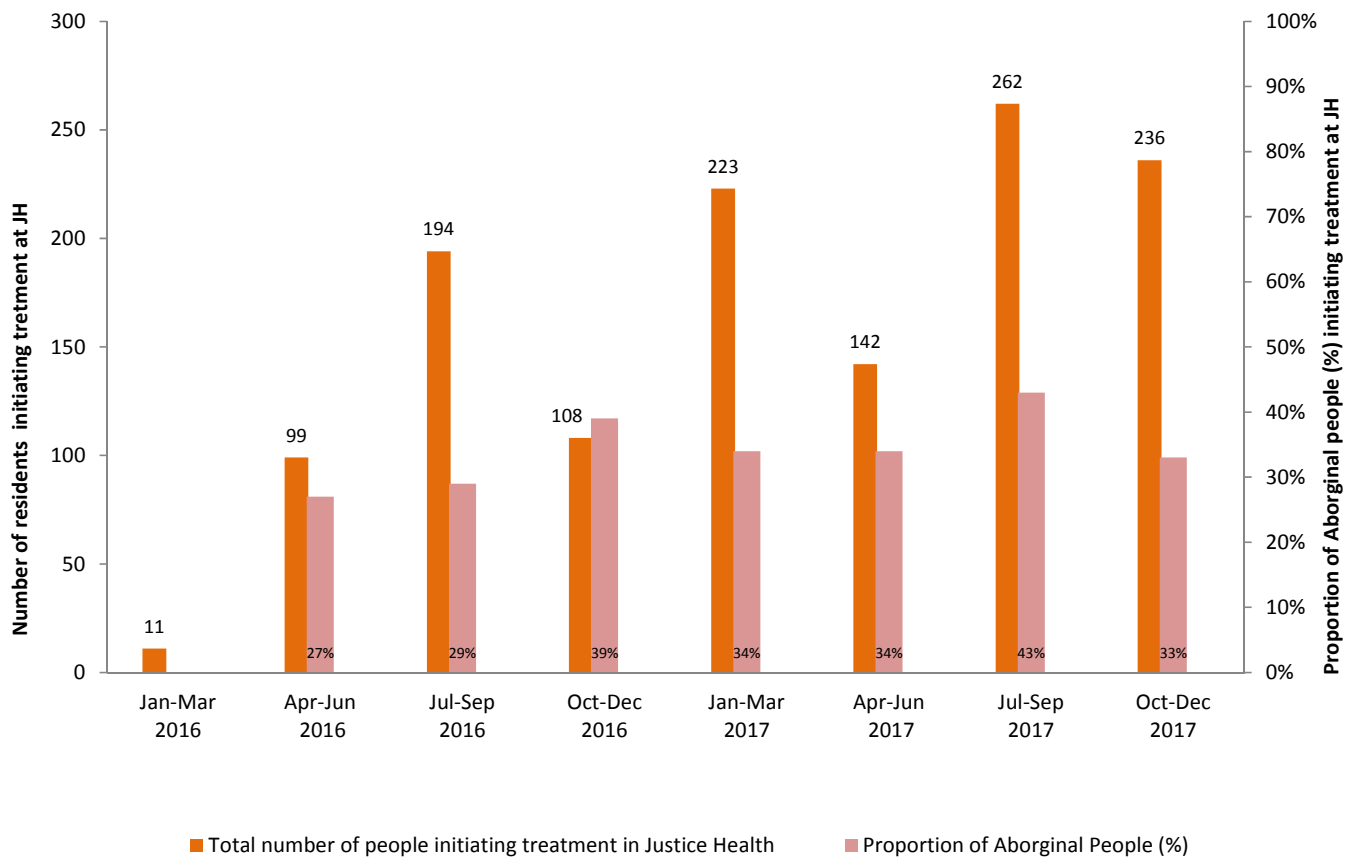
<sup>2</sup> The prescriber type is a derived field that indicates the specialty of the health professional providing the prescription. It is derived for each quarter based on the prescriber's registered specialties and the Medicare services they have provided that quarter. As a result, it may change over time and should be interpreted with this limitation noted.



## Prisoners are a priority population in the NSW Hepatitis C Strategy 2014-2020

Hepatitis C prevalence in NSW prisons is 20 to 30 times higher than in the wider community. Those with a history of injecting drug use are often marginalised in the community and find it difficult to access treatment. Justice Health has a unique opportunity to access and treat people with hepatitis C in custody.

**Figure 11: Number of people initiating treatment in Justice Health (1 January 2016 to 30 September 2017) including the number and proportion of people who identify as Aboriginal**



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data, 1 March 2016 and 31 December 2017 (number of people initiated on treatment) and NSW Health Hepatitis C Minimum Data Set (proportion of people initiated on treatment who are Aboriginal).

Between 1 March 2016 and 31 December 2017, 1,344 NSW residents initiated hepatitis C treatment in Justice Health settings.

Throughout 2016 and 2017, screening and treatment has been scaled up across all correctional centres state-wide.

Note: In 2017, the Hepatitis in Prisons Elimination (HIPE) Program commenced in NSW prisons. The HIPE initiative involves broad screening, concurrent treatment with new DAA, and the ongoing review of new admissions at targeted correctional centres with stable populations. The virtual elimination of hepatitis C has been achieved in three correctional centres in NSW, including the Compulsory Drug Treatment Program, Emu Plains and Berrima. The HIPE program will be scaled up to 12 prisons in 2018/19.

## 4. Maintain hepatitis C prevention investment

Access to sterile injecting equipment and drug treatment programs are proven, cost-effective ways to prevent hepatitis C transmission. A continued harm reduction approach, combined with other complementary prevention strategies, is central to prevention efforts in NSW.

The NSW Needle and Syringe Program needs to be flexible and targeted, ensuring that sterile injecting equipment is readily available in the areas of highest need and for those most at risk of infection.

### 4.1 Who is accessing the Needle and Syringe Program in NSW?

The proportion of priority populations accessing the NSW NSP has remained relatively stable between 2016 and 2017. Among people participating in the NNEDC in 2017:

- 20 per cent identified as Aboriginal or as both Aboriginal and Torres Strait Islander
- 6 per cent reported that their parents spoke a language other than English at home
- 11 per cent reported being in prison in the past year
- 6 per cent were aged less than 25 years

Data source: NSW Needle and Syringe Program Enhanced Data Collection 2017.

### 4.2 What proportion of people use other people's used needles and syringes (receptive syringe sharing) in NSW?

Among respondents in the 2017 NSW NSP Enhanced Data Collection (NNEDC), reports of receptive syringe sharing (RSS) in the previous month remained at stable 19.9%.

Note: The NNEDC provides an annual snapshot of NSW client demographic and drug use behaviour. In 2017 all 15 LHDs participated at 50 sites, with 3,607 clients completing the survey. Please note that this data does not provide an accurate reflection of the population across NSW nor comparisons between local health districts. The survey is a snapshot only, with 50 of the 337 primary and secondary outlets surveyed in 2017. The NSW NSP also includes automatic dispensing machines and pharmacies that are not captured as part of the survey.

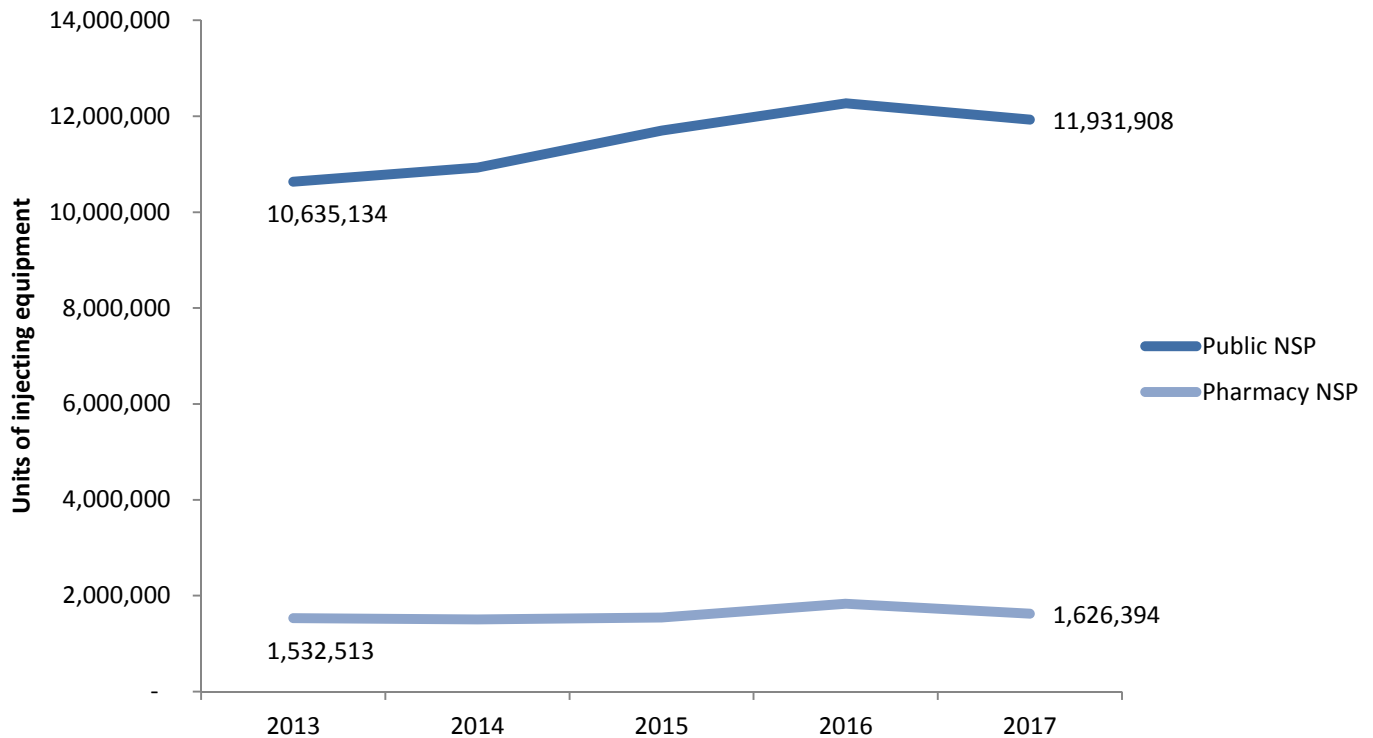
Respondents who identified as bisexual were significantly more likely to have reported recent RSS, compared to respondents who identified as heterosexual (29% vs 17% respectively), as were those who reported injecting daily or more frequently, compared to those who reported injecting less than daily (23% vs 16% respectively). People who reported being imprisoned in the previous 12 months were also significantly more likely to report RSS compared to those who did not report imprisonment in the previous year (27% vs 19% respectively), as were people who reported experiencing homelessness in the previous 12 months, compared to people who had not experienced homelessness (27% vs 18% respectively).

Respondents who reported being in receipt of Centrelink benefits in the previous 12 months were significantly less likely to report RSS, compared to those who did not report receiving Centrelink benefits (18% vs 23% respectively), as were those who were prescribed OST in the previous 12 months compared to those who were not prescribed OST (14% vs 22% respectively). People who reported living with, or being diagnosed with, a mental health problem were also significantly less likely to report recent RSS, compared to respondents who did not report a mental health issue (17% vs 21% respectively)

\*RSS data from previous NNEDC surveys is at **Appendix: Table 4**

### 4.3 How many units of injecting equipment are distributed by the Needle and Syringe Program in NSW?

Figure 12: The total number of units of injecting equipment distributed in NSW by the public NSP and the Pharmacy NSP Fitpack<sup>®</sup> scheme, 2013-2017



Data source: Public NSP - NSW Health NSP Minimum Data Set. Pharmacy NSP - NSW Health Pharmacy Data (Pharmacy NSP Fitpack<sup>®</sup> scheme).

- As of 2017, the public NSW NSP had 30 primary outlets, 316 secondary outlets, 178 automatic dispensing machines (ADMs) and 77 internal dispensing chutes (IDCs).
- The number of units of injecting equipment distributed in NSW has decreased in 2017 compared to 2016.
- 13,558,302 unit of injecting equipment were distributed in NSW. Compared to the same period in 2016:
  - 4 per cent (503,165) less units were distributed overall in NSW
  - 1 per cent (9,522) less units were distributed by Public NSP

Note: The total includes additional units ordered from The Pharmacy Guild of Australia (NSW Branch) by individual pharmacies, but not allocated to an LHD.

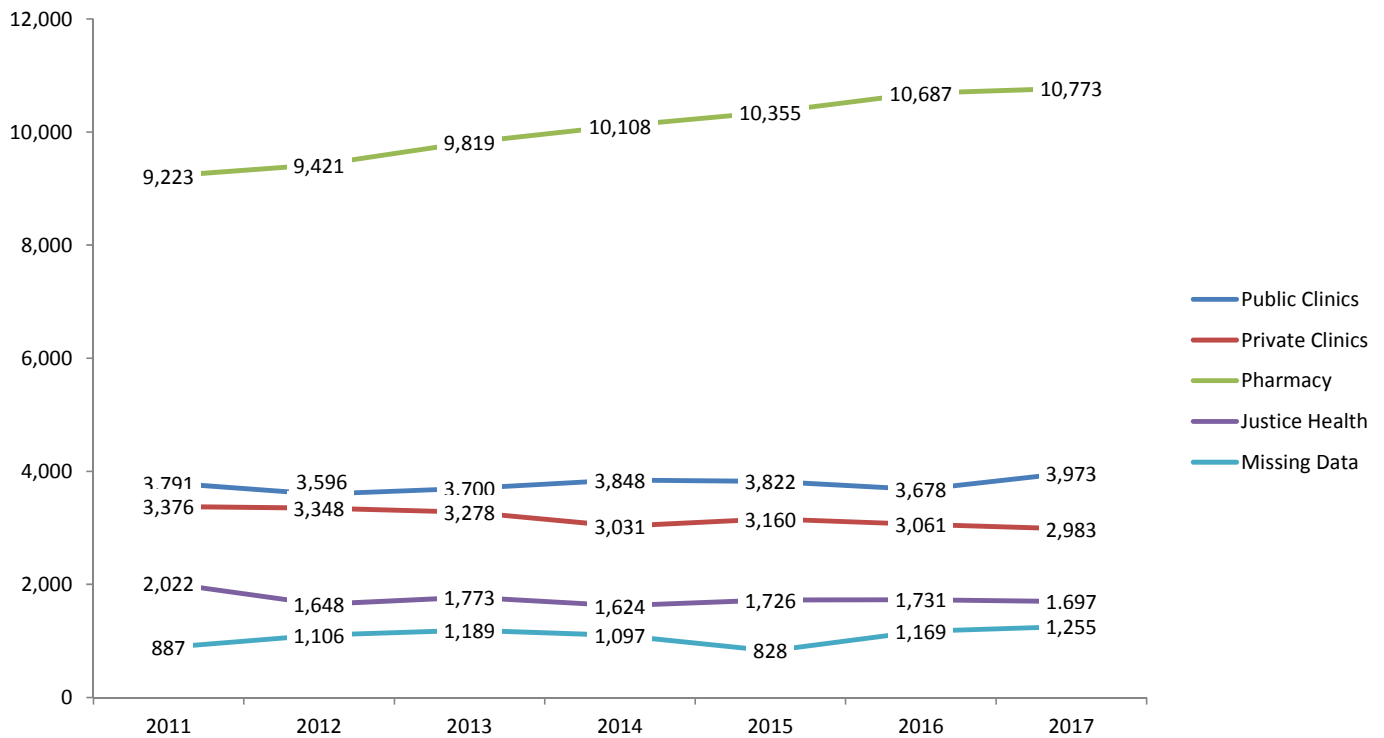
The number of units of injecting equipment distributed by LHD is at **Appendix: Figure 29**

The type and number of NSP outlets by LHD is at **Appendix: Figure 30**

#### 4.4 How many people in NSW are receiving pharmacotherapy treatment?

It is essential that the Needle and Syringe Program is complemented by other initiatives such as drug and alcohol treatment programs like opioid substitution therapy, that reduce injecting risk behaviour.

**Figure 13: Number of people participating in the Opioid Treatment Program, by dosing point, at 30 June, 2013 – 2017**



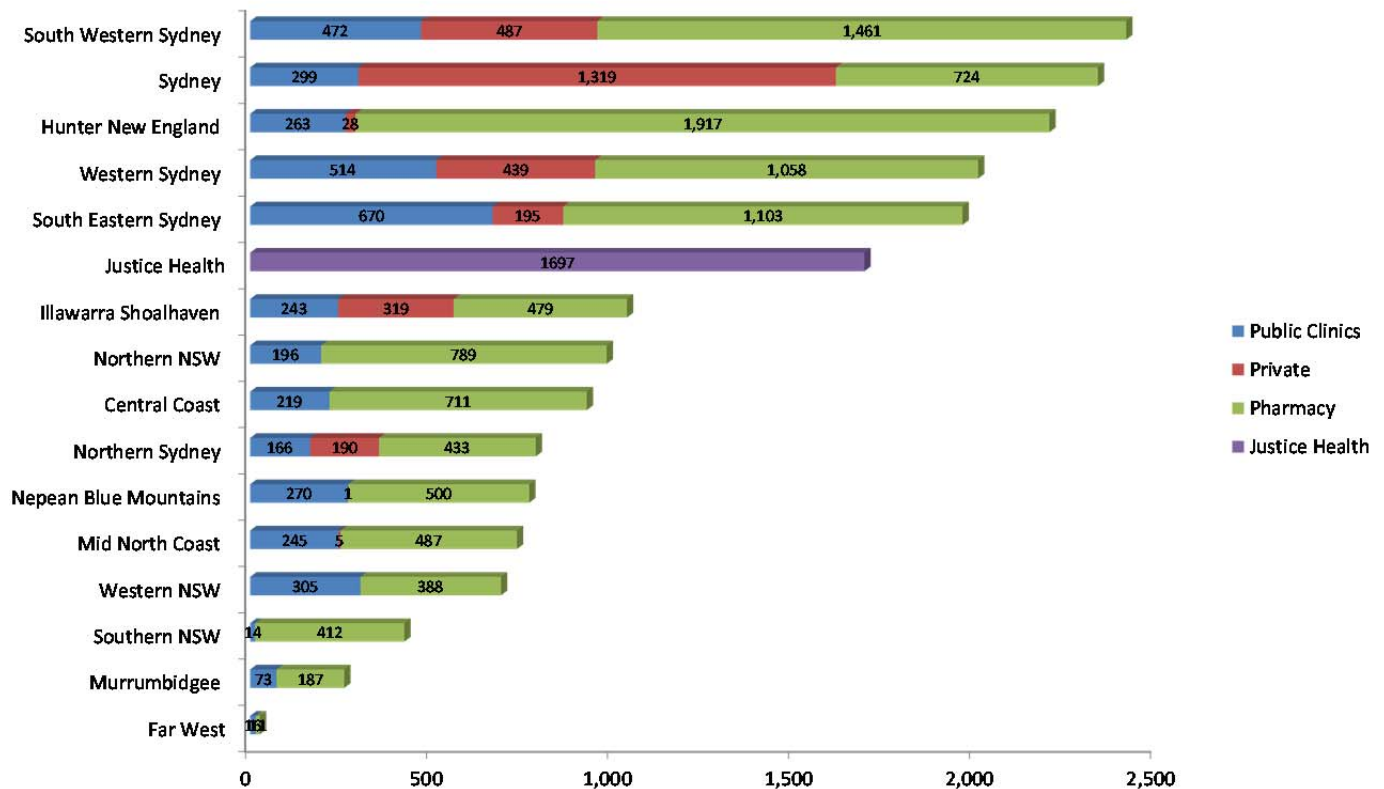
Data source: Pharmaceutical Drugs and Addiction System (PHDAS), NSW Health up to Sep 2017; Electronic Recording and Reporting Controlled Drug System (ERRCD), NSW Health from Oct 2017

- In 2017, 20,681 people received pharmacotherapy treatment in various dosing points.
- Between 30 June 2013 and 30 June 2017, community pharmacy dosing was consistently the most common dosing point in each time period. In 2017, over 52 per cent of clients (10,773) received treatment at a community pharmacy; 19 per cent of clients (3,973) received treatment at a public clinic; and 14 per cent of clients (2,983) received treatment at a private clinic.

Note: Specialist clinics (public or private) are usually the most appropriate dispensing points for clients who require greater monitoring due to high risk drug use or medical/psychiatric conditions. For stable clients who require less monitoring, treatment is available through general practitioners and community pharmacy dosing. Clients who achieve stability in public clinics can transition to the community setting, which may be more convenient for them. Conversely, a patient undergoing a period of instability may return to a specialist public clinic for treatment.

A key outcome of the increased investment in the OTP is enhanced accessibility to opioid treatment for vulnerable populations. It is intended that non-complex OTP patients will be able to be inducted onto the program in primary care settings with the aim of increasing treatment provision through GPs (previously most patients were initiated in public OTP clinics). New web-based opioid treatment training for prescribers, particularly guidance specific to buprenorphine, is anticipated to increase prescriber numbers which will have a flow-on effect for patients.

Figure 14: Number of people participating in the Opioid Treatment Program, by dosing point, by LHD, at 30 June 2017



Data source: Pharmaceutical Drugs and Addiction System (PHDAS), NSW Health up to Sep 2017; Electronic Recording and Reporting Controlled Drug System (ERRCD), NSW Health from Oct 2017

- The highest number of people receiving Opioid Agonist Treatment occurs in South Western Sydney, Sydney, Hunter New England, Western Sydney, South Eastern Sydney, and Justice Health.
- The highest number of people treated in public clinics occurs in South Eastern Sydney, Western Sydney, and South Western Sydney.
- The highest number of people treated in private clinics occurs in Sydney, South Western Sydney, Western Sydney and Illawarra Shoalhaven.
- The highest number of people treated in community pharmacies occurs in Hunter New England, South Western Sydney, South Eastern Sydney and Western Sydney.

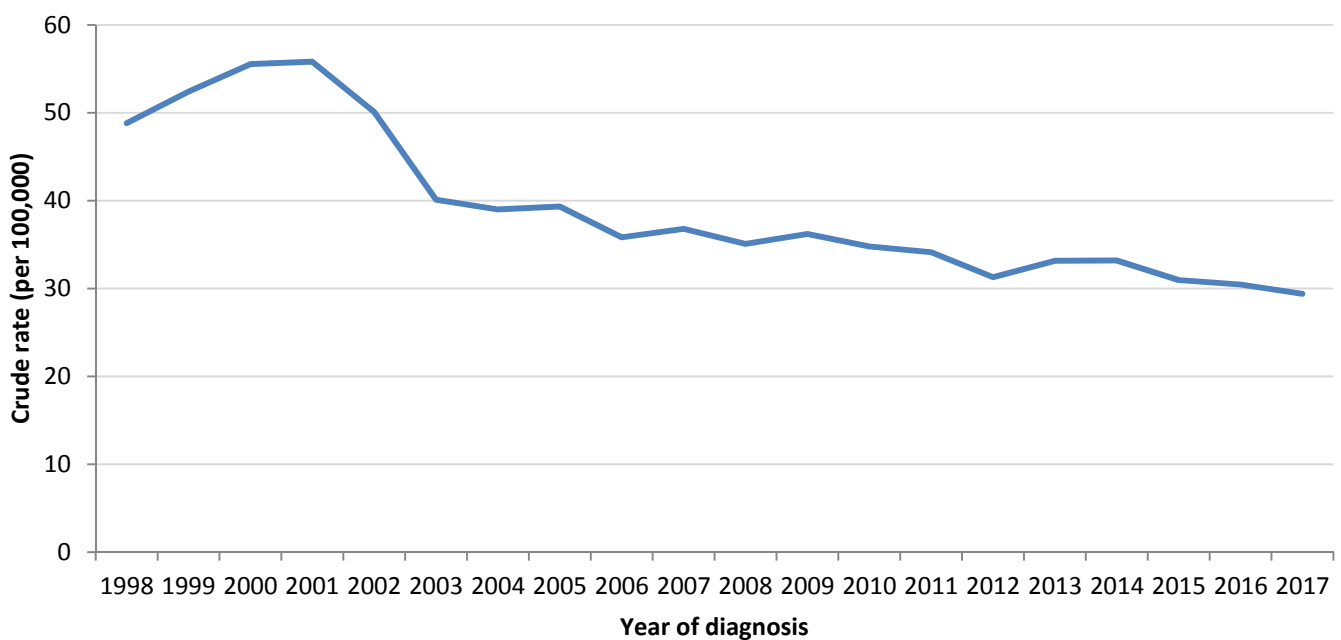
## Hepatitis B

### 5. Reduce hepatitis B infections

Hepatitis B notifications data provides limited information that can be used for assessing the epidemiological patterns of hepatitis B infections. This is because many infections are asymptomatic, and so people who are infected may never be tested, or only tested many years after infection, and laboratory reports do not distinguish between infections acquired recently, or years before. Furthermore, variations in notifications may reflect differences in testing patterns rather than differences in incidence of infection.

#### 5.1 How many diagnoses of hepatitis B are notified?

Figure 15: Hepatitis B notification rate, NSW, 1998-2017

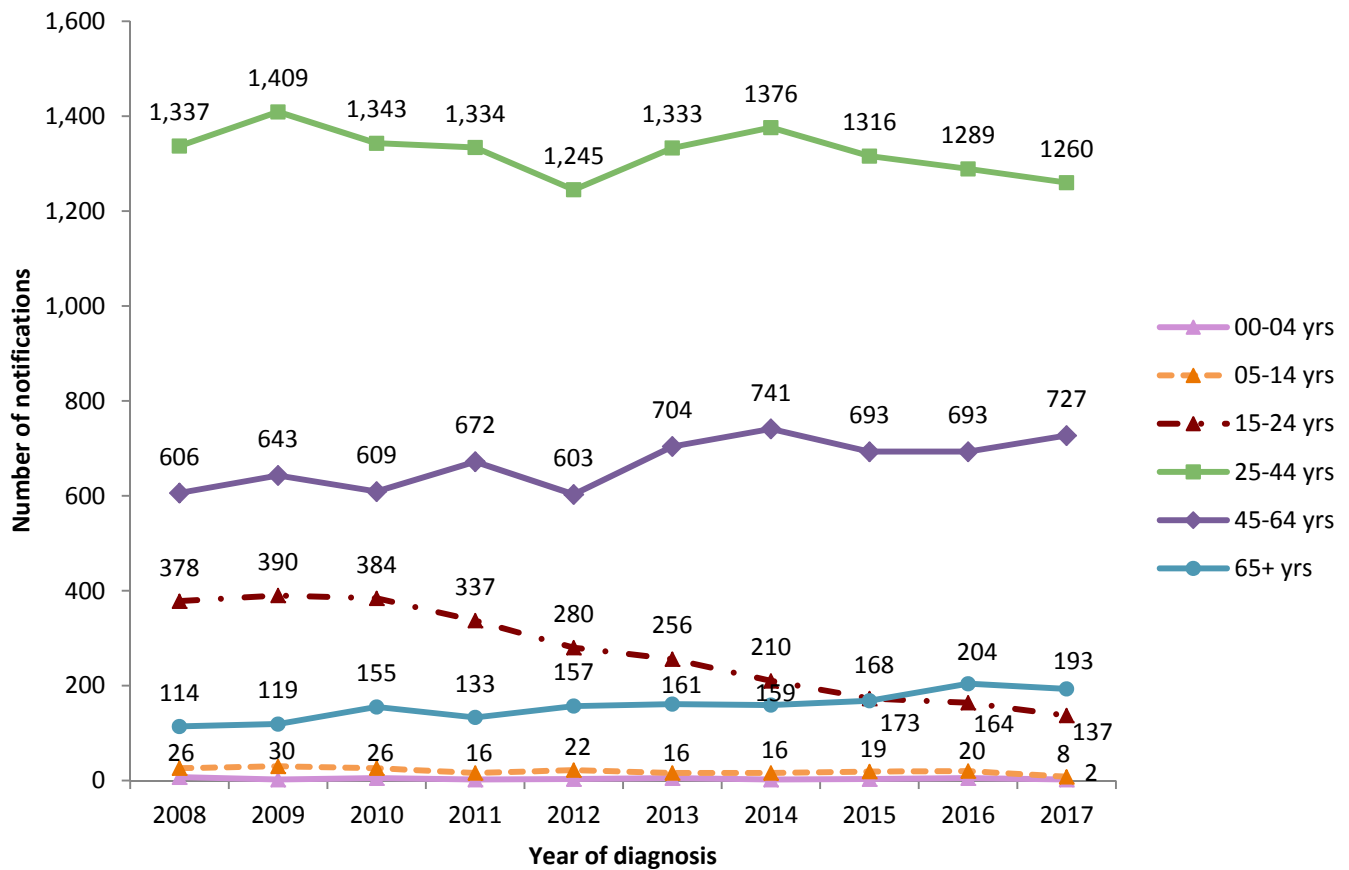


Data source: NCIMS, NSW Health; data extracted 27 Feb 2018

- The hepatitis B notification rate has continued to decline gradually in NSW, with 29 notifications per 100,000 population in 2017.
- There were 2,328 hepatitis notifications in NSW in 2017.

## 5.2 Which groups are being notified?

Figure 16: Hepatitis B notifications in NSW by age group and year of diagnosis, 2008-2017

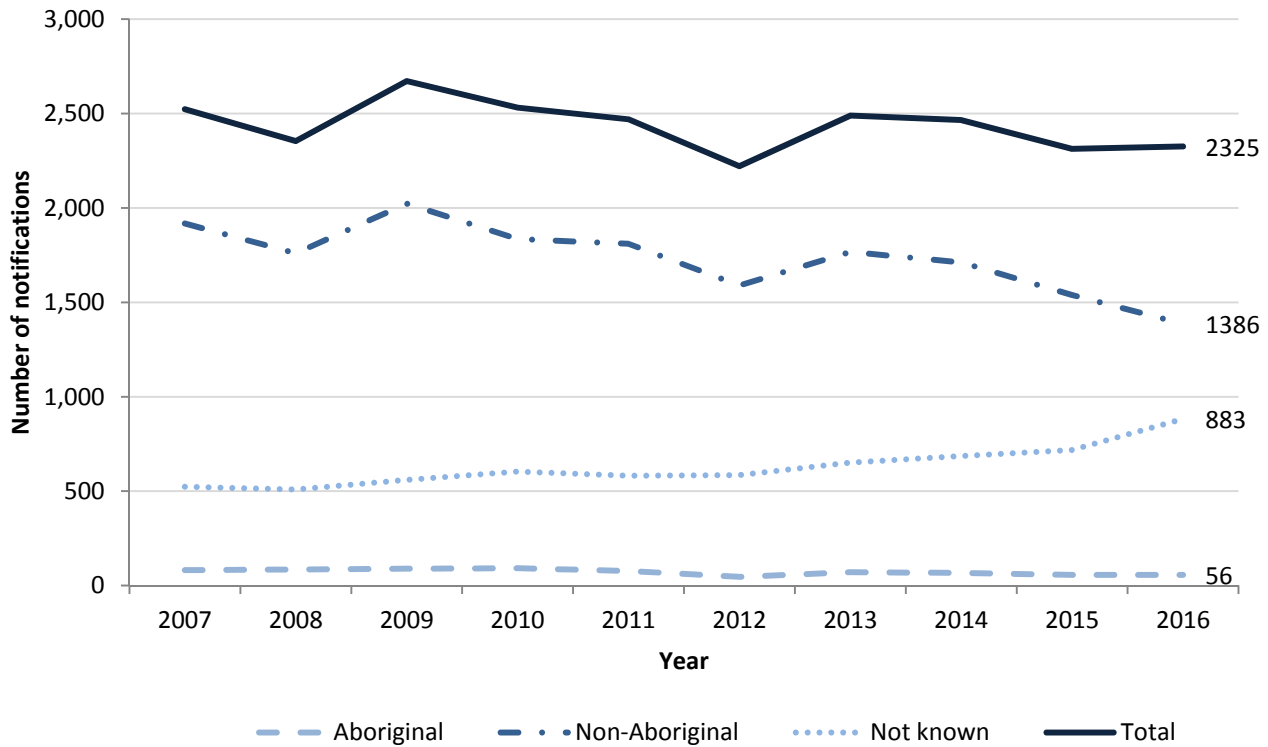


Data source: NCIMS, NSW Health; data extracted 27 Feb 2018

Note: Excludes persons whose age is unknown or not stated.

- The pattern of hepatitis B notifications by age group remains consistent with recent years.
- Of those people newly diagnosed with hepatitis B in 2017, 2 (<1 per cent) were 0-4 years, 8 (<1 per cent) were 5-14 years, 137 (6 per cent) were 15-24 years, 1,260 (54 per cent) were 25-44 years, 727 (31 per cent) were 45-64 years and 193 (8 per cent) were 65 years and over.
- Notifications of hepatitis B in young people aged 15-24 years have continued to decline, which may be related to the catch-up immunisation program for adolescents, which was introduced as a school-based program in 2004, and to universal routine immunisation of infants which commenced in NSW in May 2000.

Figure 17: Hepatitis B notifications in NSW, by Aboriginality, 2007-2016.

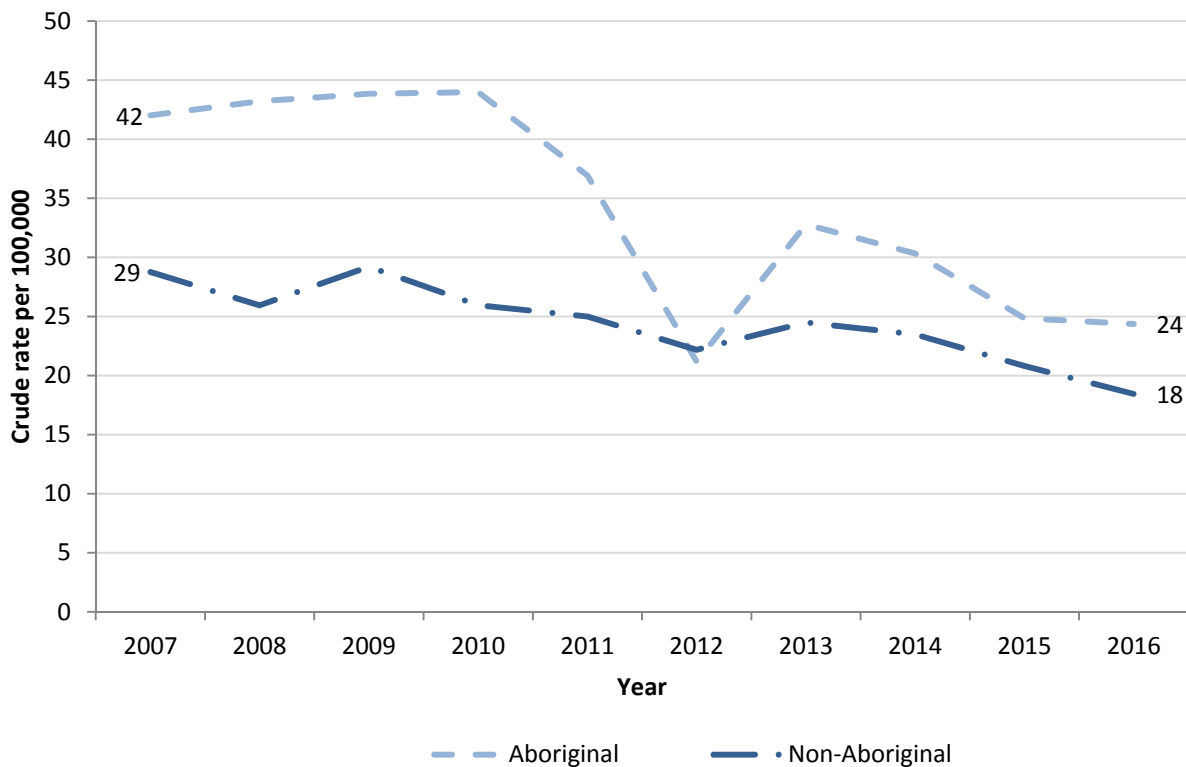


Data source: Communicable Diseases Register, NSW Ministry of Health (via SAPHaRI); data extracted 1 March 2018.

- From 2007 to 2016, 24,362 notifications for hepatitis B were recorded in the Communicable Diseases Register (CDR). Of these, 721 (3.0 per cent) were in Aboriginal people and 17,340 (71 per cent) were in non-Aboriginal people; Aboriginality was not known after data linkage for 6,301 notifications (26 per cent).
- Trends in the Aboriginal population are difficult to interpret due to variation in the yearly number of people for whom Aboriginal status was not known, and the high proportion of incomplete data compared to the proportion in Aboriginal people.



Figure 18: Hepatitis B notification rate by Aboriginality, NSW, 2007-2016.

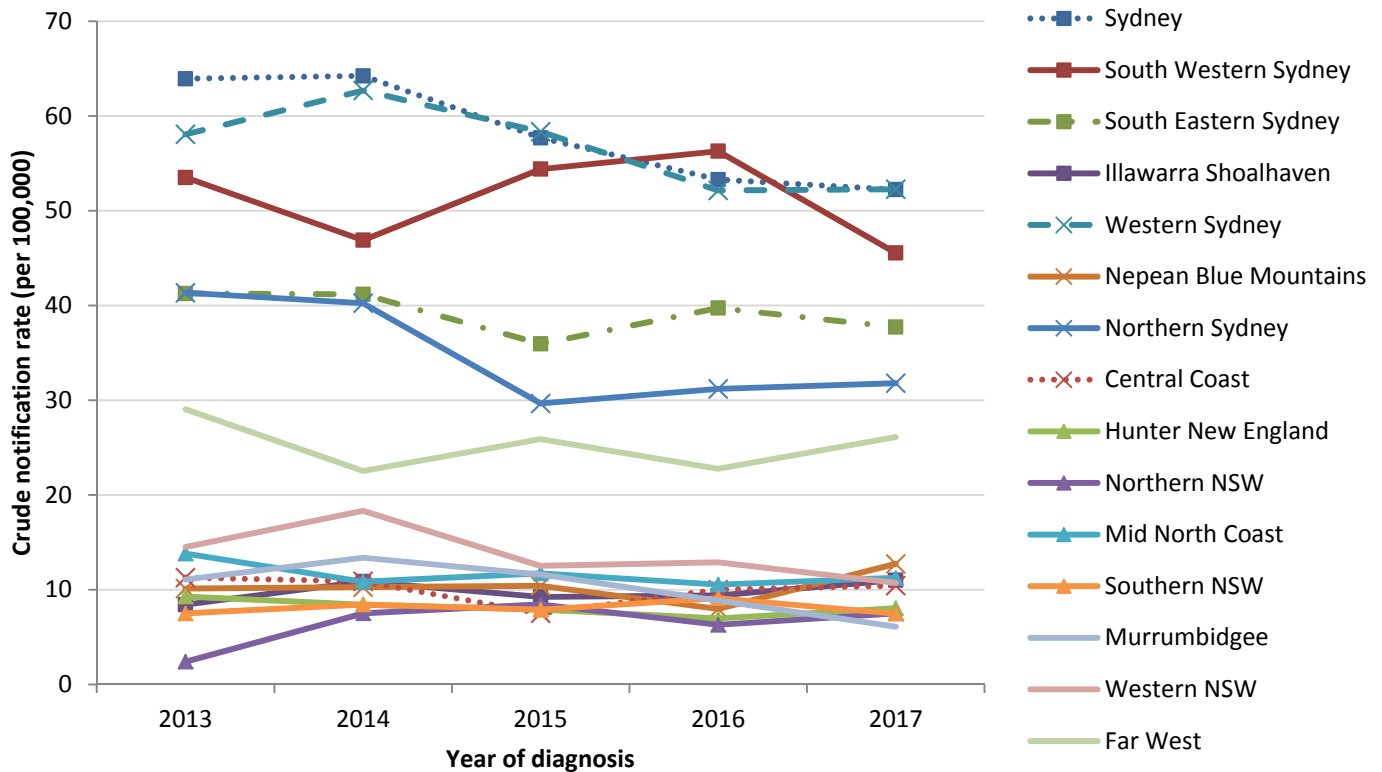


Data source: Communicable Diseases Register, NSW Ministry of Health (via SAPHaRI); data extracted 1 March 2018.  
 Note: Excludes records where Aboriginal status was not stated/not known.

- Amongst those whose Aboriginal status was known, the hepatitis B notification rate in Aboriginal people was 24 per 100,000 population in 2016, 1.3 times higher than the rate in non-Aboriginal people (18 per 100,000).
- Notification rates are influenced by variations in incidence of disease, screening rates and/or the number of people for whom Aboriginal status was not known (see Figure 17).

### 5.3 Where are notifications occurring?

Figure 19: Hepatitis B notification rate, by LHD of residence, NSW, 2013-2017



Data source: NCIMS, NSW Health; data extracted 27 Feb 2018

Note: Excludes persons whose place of residence in NSW was not known; notifications from Justice Health excluded.

- Western Sydney, Sydney and South Western Sydney Local Health Districts (LHDs) reported the highest rates of hepatitis B notification in NSW in 2017 (52, 52 and 46 per 100,000 respectively). South Eastern Sydney and Northern Sydney LHDs also had high rates of hepatitis B notification compared to regional and remote LHDs. These rates are most likely a reflection of migrant settlement patterns of people who acquired infection at birth overseas and targeted testing in these areas.
- Of the non-metropolitan LHDs, Far West had the highest hepatitis B notification rate (26 per 100,000 Population, n=8).

Note: Local changes in the notification rate can be difficult to interpret due to a range of factors, particularly changes in migrant settlement patterns of people who acquired infection at birth overseas. Because hepatitis B is often asymptomatic, people may be tested many years after infection and testing patterns vary across time and settings. Local health promotion campaigns and screening programs targeting at-risk populations can result in increased testing and better detection rates.

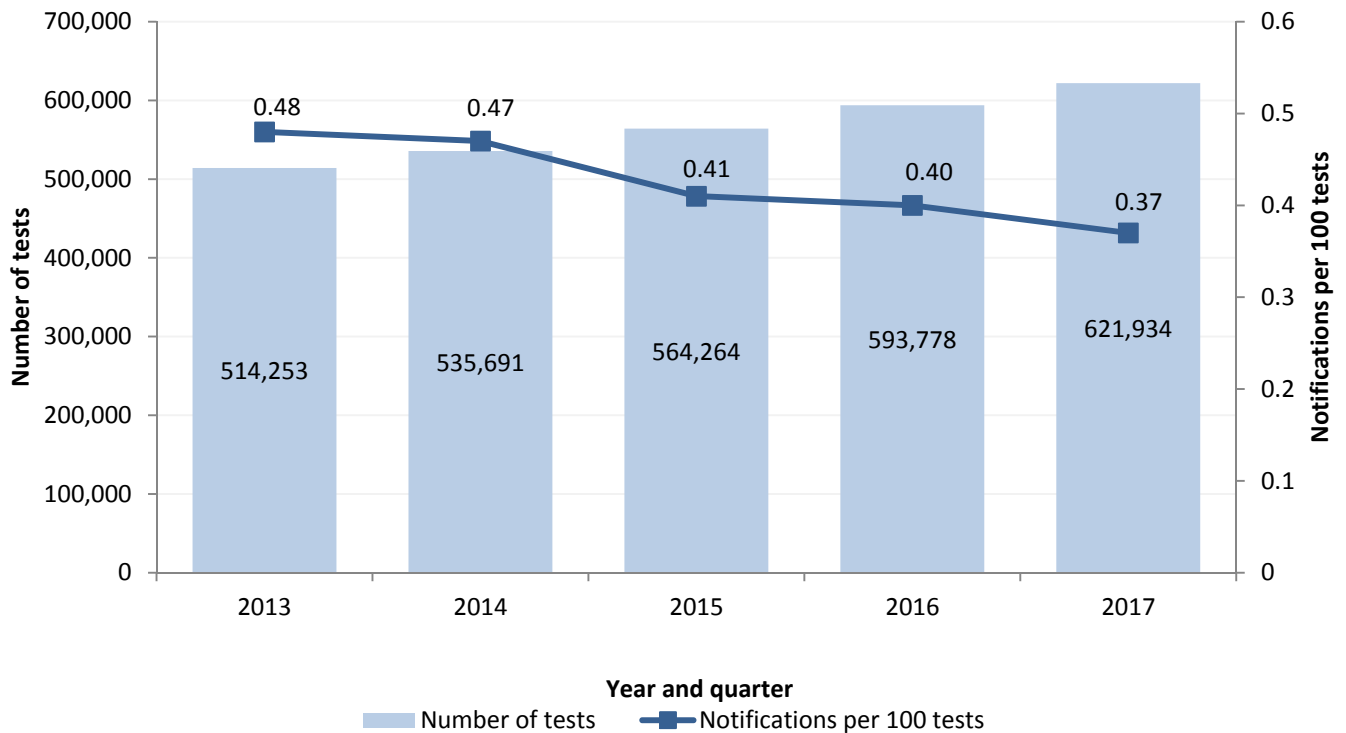
There is substantial variation in population size between the LHDs. For LHDs with a smaller population, such as Far West NSW, a small change in the number of notifications can have a large impact on the annual rate.

A notification rate has not been calculated for Justice Health as the population (the denominator) fluctuates considerably and data are available only for the annual number of incarcerations, not the number of people incarcerated.

## 6. Increase testing for hepatitis B

### 6.1 Is hepatitis B testing increasing in NSW?

Figure 20: Number of tests for hepatitis B surface antigen and notification to test ratio<sup>3</sup>, 2013-2017



Data source: NSW denominator data project, Health Protection NSW, NSW Health

- The number of hepatitis B tests performed in NSW is continuing to increase gradually each year. In 2017, 621,934 tests for hepatitis B surface antigen were performed in 15 laboratories in NSW, a 4.7 per cent increase from 2016 (593,778 tests).
- Although the number of hepatitis B tests performed in NSW is continuing to increase gradually each year, the notification to test ratio is declining. In 2017, the hepatitis B notification to test ratio was 0.37. This suggests that there is increased testing amongst a broader population that is at lower risk, or repeat testing of those already known to have hepatitis B.

<sup>3</sup> See **Appendix: Table 4** for more details about methodology

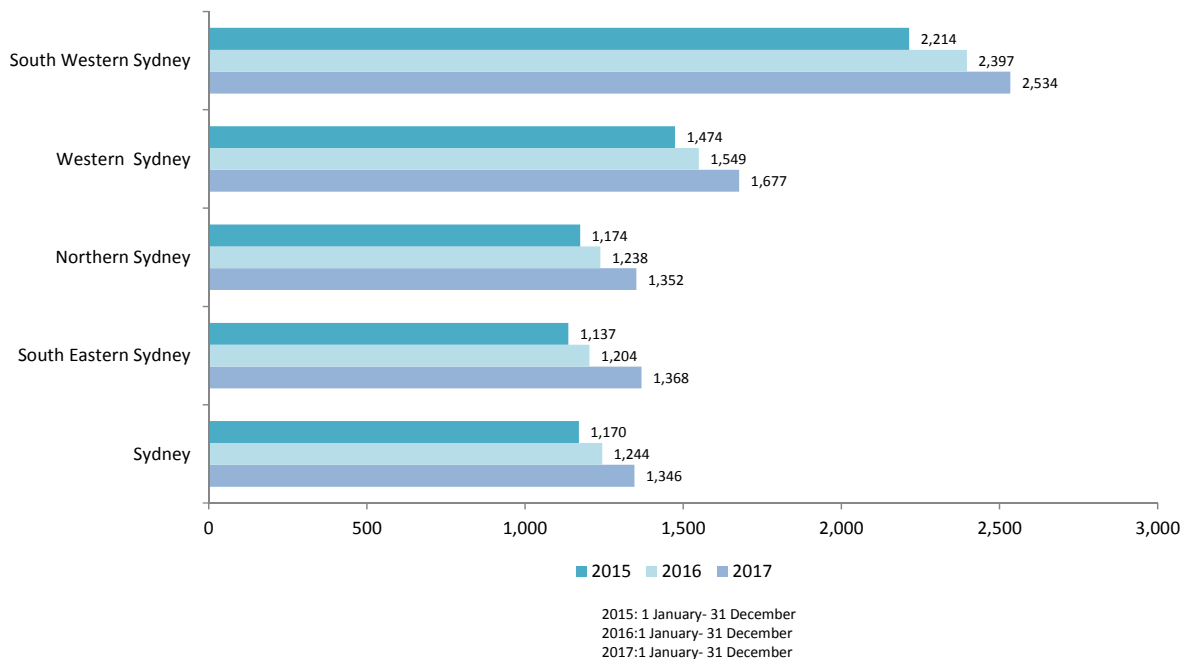
## 7. Improve access to hepatitis B treatment

The estimated prevalence of people living with chronic hepatitis B in NSW is 83,812<sup>4</sup>.

Up to 1 in 4 people with chronic hepatitis B will die from liver cancer or liver failure unless they receive appropriate monitoring and treatment. Not all people living with hepatitis B require treatment; it is estimated that 8-25 per cent of cases require treatment. The National Hepatitis B Strategy set a treatment target of 15 per cent by 2017. No state or territory reached the national target. Uptake was highest in NSW (9.6 per cent) followed by Victoria (7.9 per cent).

### 7.1 How many people in NSW are accessing hepatitis B treatment?

**Figure 21: Number of NSW residents<sup>5</sup> dispensed hepatitis B treatment in the five LHDs with the highest prevalence of hepatitis B, 1 January - 31 December 2017; 1 January - 31 December 2016 and 1 January - 31 December 2015**



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data, 1 January 2015 to 31 December 2017

Note: Figure 21 incorporates residents who were dispensed treatment in Justice Health settings.

Between 1 January and 31 December 2017:

- 8,277 NSW residents were dispensed hepatitis B treatment in the five LHDs with the highest prevalence of hepatitis B, 92 per cent of the hepatitis B treatment dispensed in NSW<sup>6</sup>. This is an 8 per cent increase compared to 2016 (7,632), and a 15 per cent increase compared to 2015 (7,169).
- 20 NSW residents were dispensed hepatitis B treatment in Justice Health settings compared to 13 in 2016 and 7 in 2015.

Data for all other local health districts is at **Appendix: Figure 30**

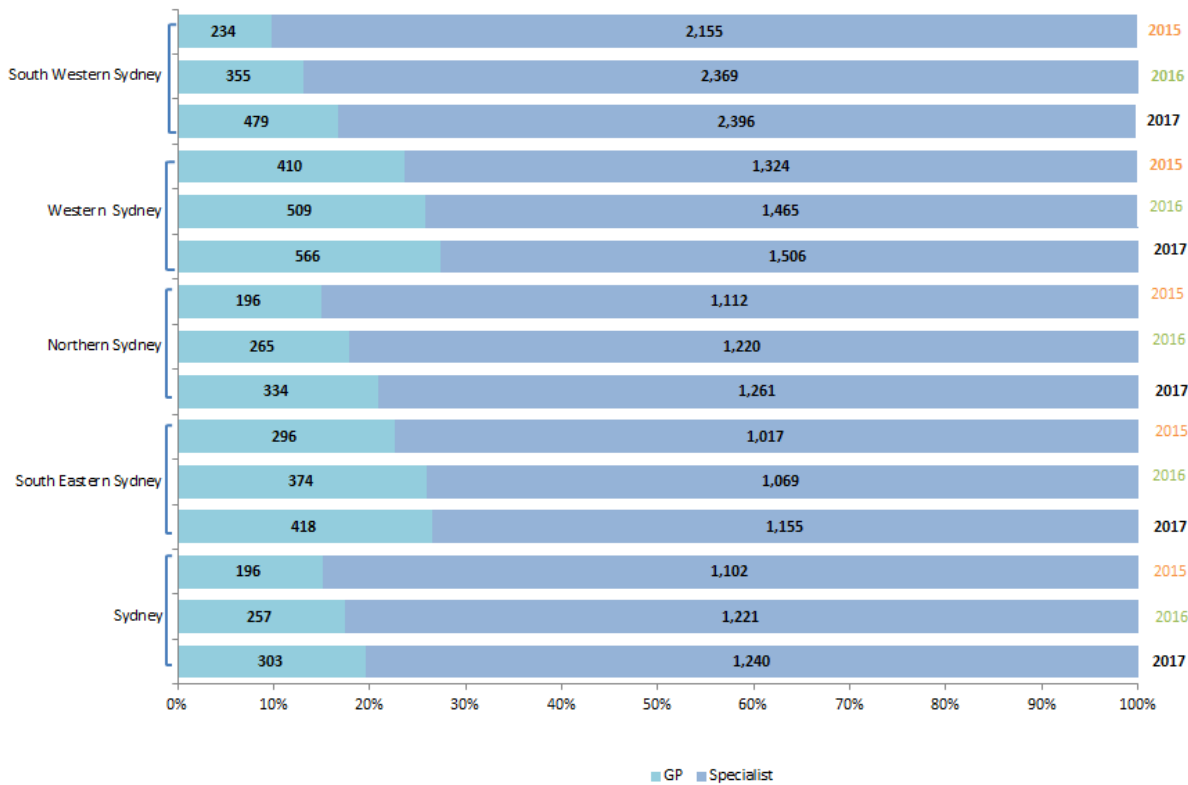
<sup>4</sup> Hepatitis B Mapping Project: Estimates of chronic hepatitis B diagnosis, monitoring and treatment by Medicare Local 2014-15 – National Report. Published by the Australasian Society for HIV Medicine.

<sup>5</sup> Figure 1 incorporates residents who were dispensed treatment in Justice Health settings.

<sup>6</sup> Overall, 9,010 NSW residents were dispensed treatment during 1 January to 31 December 2017.

## 7.2 What percentage of people with chronic hepatitis B are receiving treatment in primary care?

Figure 22: Number of NSW residents dispensed hepatitis B treatment in the five LHDs with the highest prevalence, by prescriber type, 1 January – 31 December 2016 and 1 January – 31 December 2017



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data, 1 January 2015 to 31 December 2017

Note: Figure 22 incorporates residents who were dispensed treatment in Justice Health settings.

Between 1 January to 31 December 2017:

22 per cent of NSW residents in the five LHDs with the highest prevalence of hepatitis B receiving hepatitis B treatment were prescribed by a GP. This is an increase of five percentage points compared to 2015 and two percentage points compared to 2016.

Note: Figure 22 includes residents who were dispensed treatment in Justice Health settings.

Data for all other local health districts is at **Appendix: Table 5**

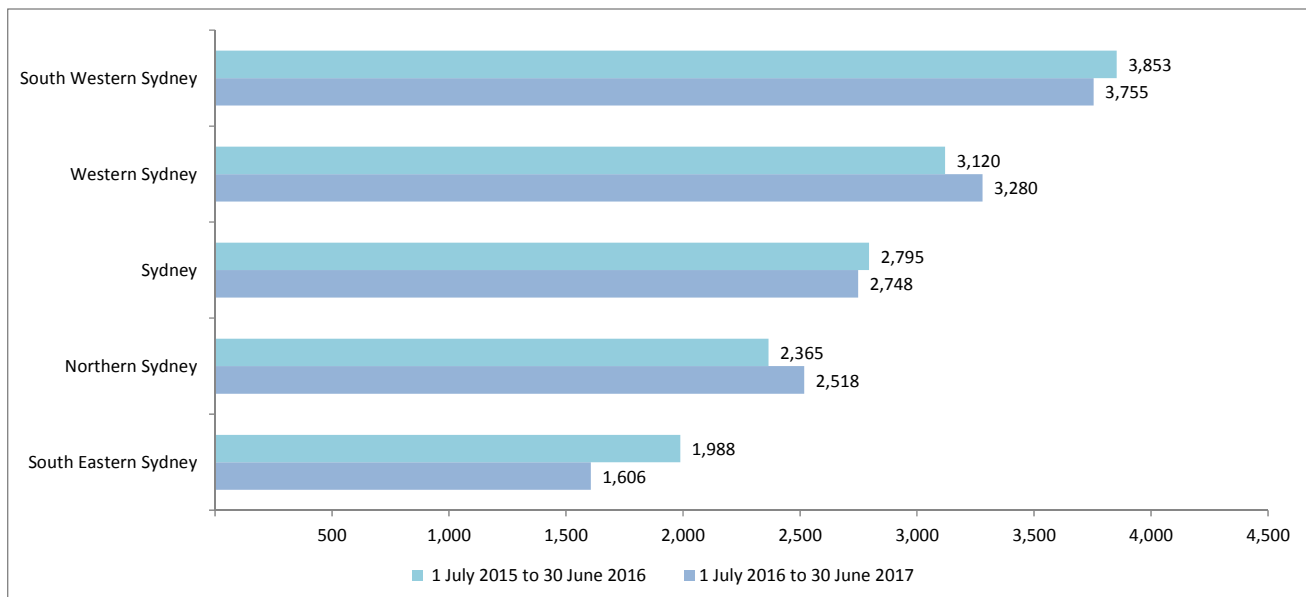
## 8. Improve management of hepatitis B

### 8.1 How many people in NSW with chronic hepatitis B are having their condition monitored?

Not all people with chronic hepatitis B need treatment but they all require regular (six to twelve monthly) monitoring. Everyone living with chronic hepatitis B should be receiving ongoing care, incorporating either yearly off-treatment monitoring (including a DNA viral load test) or antiviral treatment. People who are on antiviral treatment are also monitored via a hepatitis B viral load test, in order to provide recommendations for their treatment plan.<sup>7 8</sup>

The frequency of monitoring varies according to the phase of infection, the extent of liver damage present, whether the person is receiving treatment, and the presence of other complicating factors such as co-infections, immunosuppression and other causes of liver disease.

**Figure 23: Number of viral load tests provided to people with chronic hepatitis B (and not receiving treatment) via Medicare in the five LHDs with the highest prevalence of hepatitis B, 1 July 2015 – 30 June 2016 and 1 July 2016 – 30 June 2017 (annual test)**



Data source: Medicare Benefits Schedule, Department of Human Services

Note: Data beyond June 2017 was not available at the time of reporting.

Between 1 July 2016- 30 June 2017:

- 13,907 viral load tests were provided to people with chronic hepatitis B (and not receiving treatment) via Medicare in the five LHDs. This is 92 per cent of the total tests (15,117) provided in NSW.
- The number of tests remained stable when compared to the same period in 2015-16 (14,121).
- The highest number of viral load tests provided to people with hepatitis B (and not receiving treatment) in NSW occurred in: South Western Sydney, Western Sydney, Sydney, Northern Sydney and South Eastern Sydney. This geographic spread is consistent with the districts that have higher notification rates of hepatitis B.

<sup>7</sup> HBV viral load testing under the Medicare Benefits Schedule (MBS) is used as a surrogate for guideline-based monitoring of people living with chronic hepatitis B who are not receiving treatment. Viral load testing is covered annually under MBS (item 69482) in line with the recommended guidelines. Those who are receiving antiviral therapy are monitored via a different MBS item (69483) for their viral load tests.

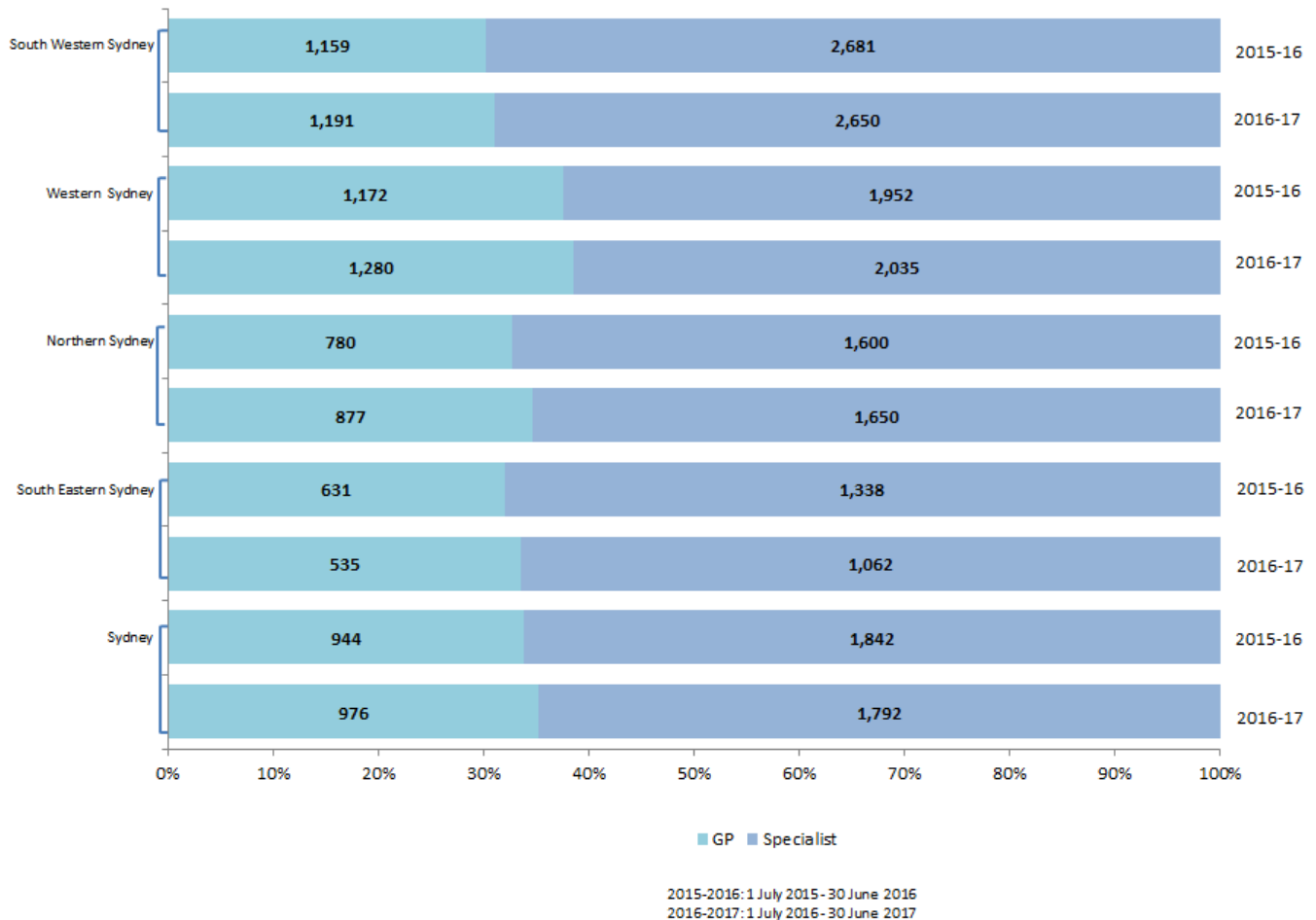
<sup>8</sup> Hepatitis B Mapping Project: Estimates of chronic hepatitis B diagnosis, monitoring and treatment by Medicare Local, 2014/15 – National Report. Published by the Australasian Society for HIV Medicine (ASHM)

Note: Data beyond June 2017 was not available at the time of reporting. Data is based on patient enrolment postcode and Date of Processing (DOP). Hepatitis B viral load tests (MBS item 69482) are covered annually under Medicare, so this data indicates the number of people tested. This data excludes tests not ordered under Medicare and therefore is an underestimate of the number of people being monitored.

Data for all the other local health districts is at **Appendix: Table 6**

## 8.2 How are people in NSW with chronic hepatitis B having their condition monitored?

**Figure 24: Number of viral load tests (MBS item 69482) provided to people with hepatitis B (and not receiving treatment) requested by general practitioners and specialists via Medicare in the five LHDs with the highest prevalence of hepatitis B, 1 July 2015 – 30 June 2016 and 1 July 2016 – 30 June 2017 (annual test)**



Data source: Medicare Benefits Schedule, Department of Human Services

Between 1 July 2016 to 30 June 2017:

- 35 per cent (5,400) of viral load tests were requested by GPs and 65 per cent (9,839) were requested by specialists. The percentages remained stable when compared to the same period in 2015 - 2016.

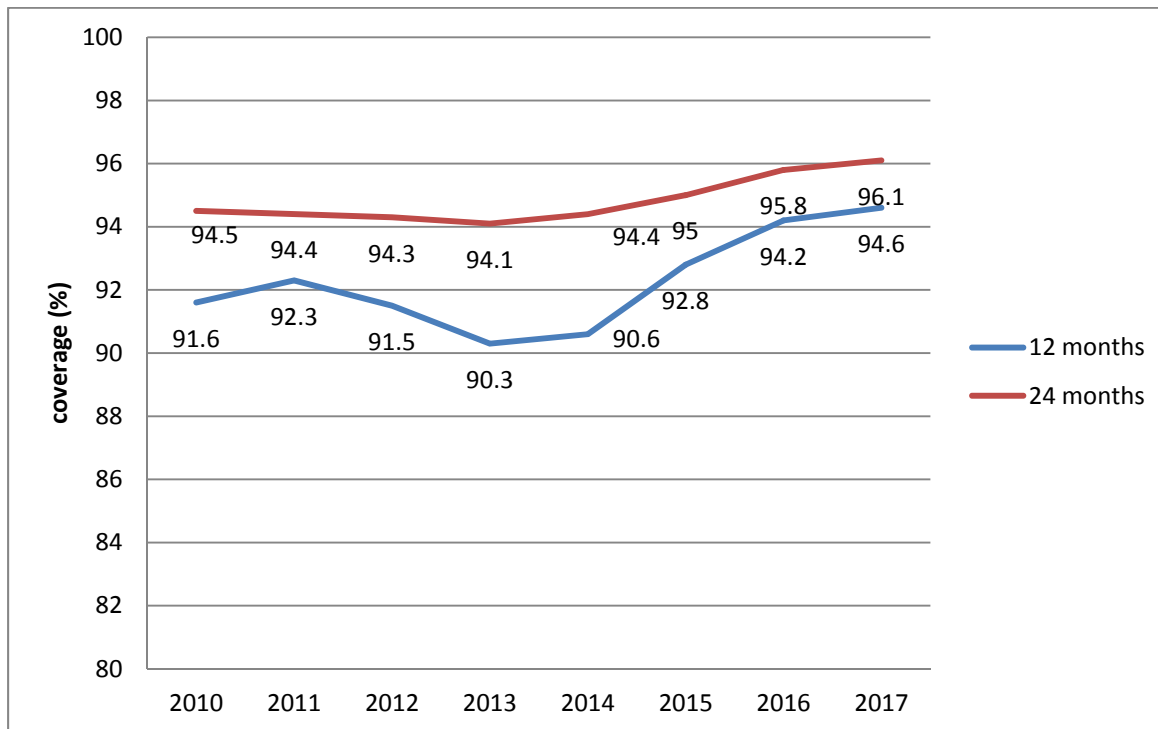
Note: Data is based on patient enrolment postcode and Date of Service (DOS). Hepatitis B viral load tests (MBS item 69482) are covered annually under Medicare, so this data indicates the number of people tested. This data excludes tests not ordered under Medicare and therefore is an underestimate of the number of people being monitored.



## 9. Maintain hepatitis B prevention investment

### 9.1 What proportion of infants in NSW are vaccinated for hepatitis B?

Figure 25: Proportion of infants in NSW who have received 3 doses of hepatitis B vaccine (measured at 12 and 24 months of age) 2010-2017

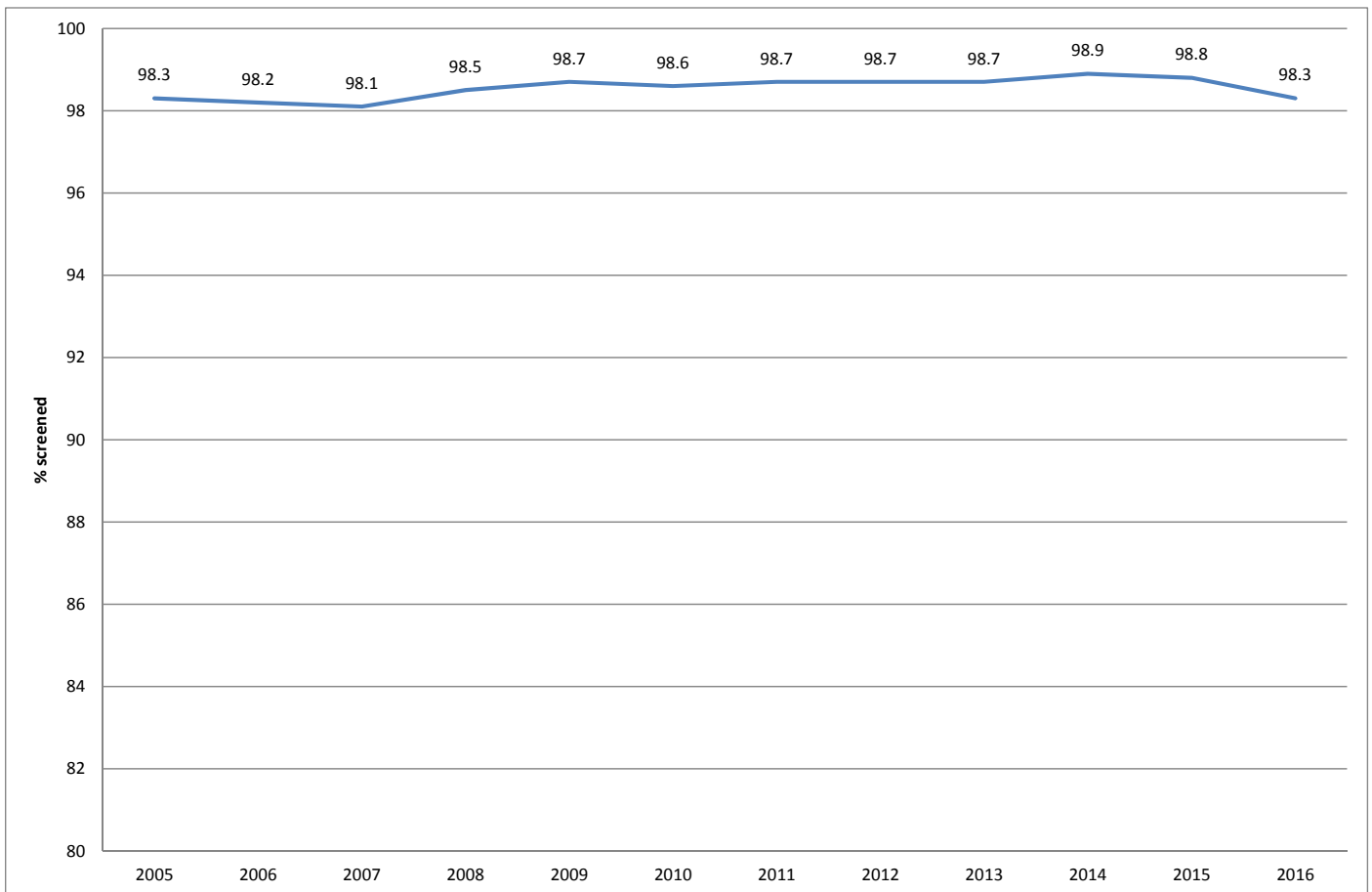


Data source: Australian Immunisation Register, Australian Government Department of Human Services

- Hepatitis B vaccine is due at birth, 6 weeks, 4 months and 6 months of age. Coverage for the 6-week, 4-month and 6-month doses measured at 12 months in 2017 was 94.6 per cent. Coverage for Aboriginal children was 94.9 per cent.
- Coverage at 24 months in 2017 was 96.1 per cent, and for Aboriginal children was 98 per cent. These rates are higher than at 12 months, indicating that delayed vaccination as well as underreporting influence vaccination rates.

## 9.2 What proportion of women giving birth in NSW are screened for hepatitis B?

Figure 26: Proportion of women giving birth in a public or private hospitals in NSW who are screened for hepatitis B 2005-2017

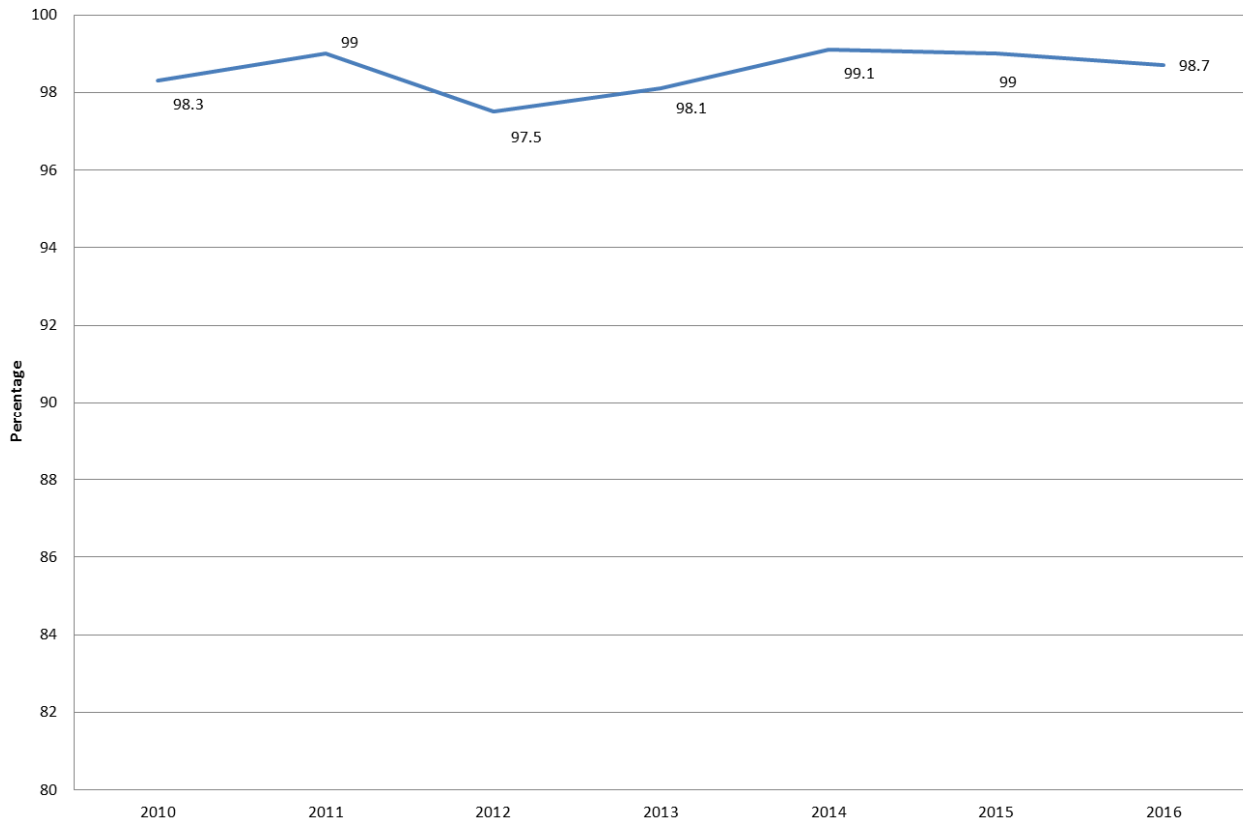


Data source: Neonatal Hepatitis B Vaccination Program Database, NSW Health

- The proportion of mothers giving birth in a public or private hospital in NSW screened for hepatitis B was 98.3 per cent in 2016 (the latest year for which data is available).
- The decrease in reported screening in 2016 was due to a reporting problem in South Western Sydney LHD, which has since been rectified.

### 9.3 What proportion of neonates in NSW born to hepatitis B positive mothers receive hepatitis B immunoglobulin within 12 hours of birth?

Figure 27: Proportion of neonates in NSW born to hepatitis B positive mothers who received hepatitis B immunoglobulin within 12 hours of birth



Data source: Neonatal Hepatitis B Vaccination Program Database, NSW Health

Table 1: Neonatal hepatitis B immunoglobulin administration (2009 - 2016)

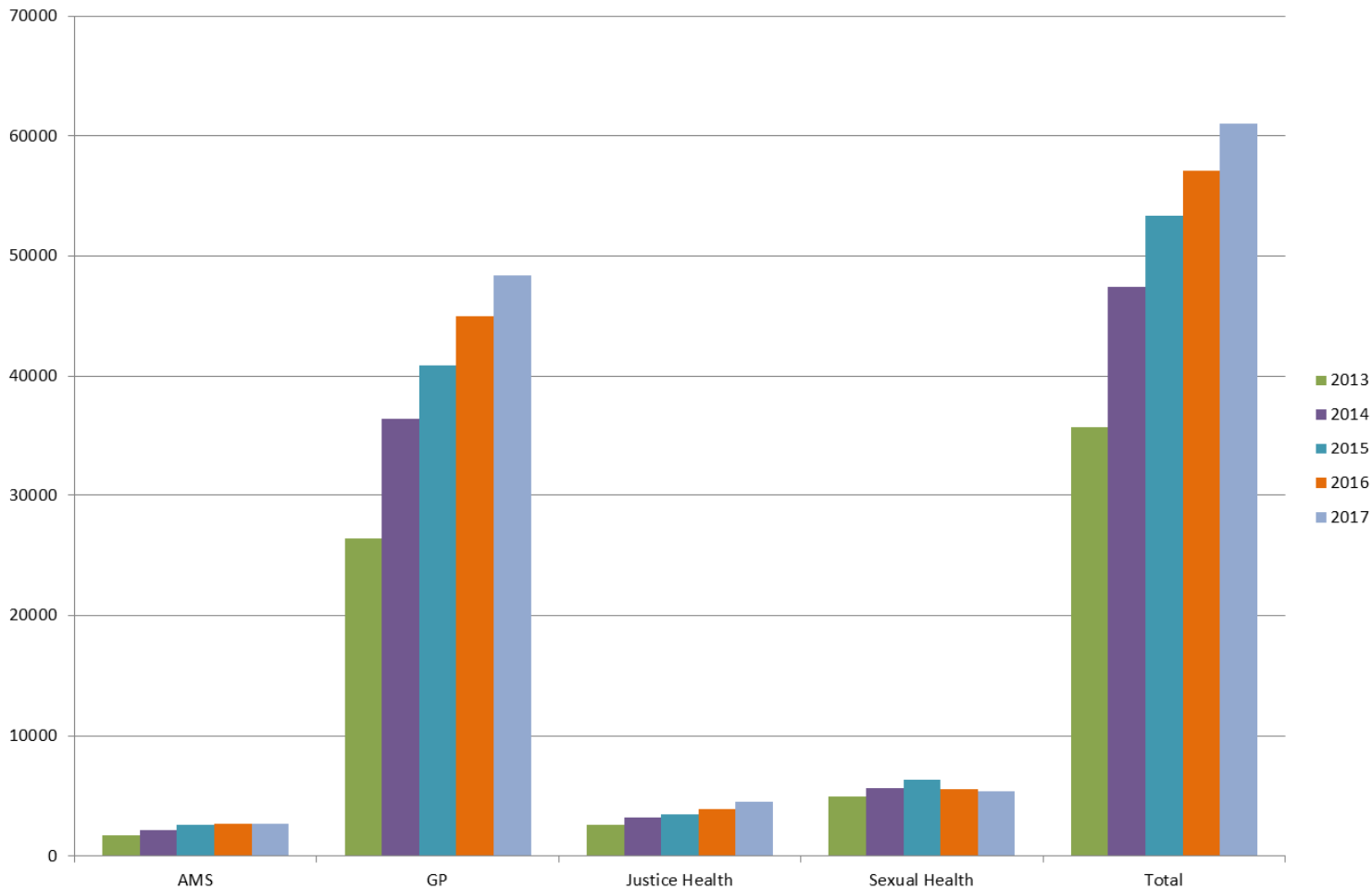
Year	No. neonates born to HBsAg+ mothers	No. neonates born to HBsAg+ mothers who received HBIG	No. neonates born to HBsAg+ mothers who received HBIG within 12 hours of birth (%)
2009	736	731	725 (98.5%)
2010	664	660	653 (98.3%)
2011	702	699	695 (99.0%)
2012	757	744	735 (97.1%)
2013	696	690	683 (98.1%)
2014	739	737	732 (99.1%)
2015	677	673	670 (99.0%)
2016	696	689	687 (98.7%)

Data source: NSW neonatal hepatitis B vaccination data collection (NSW hospitals and public health units)

The proportion of babies born to mothers living with hepatitis B who receive hepatitis B immunoglobulin (HBIG) within 12 hours of birth was 98.7 per cent in 2016 ( the most current data available)

### 9.3 How many doses of hepatitis B vaccine are distributed to GPs, Aboriginal Medical Services, Sexual Health Clinics and Justice Health?

Figure 28: Number of adult doses of hepatitis B vaccine distributed to health care providers through the NSW Vaccine Centre



Data source: NSW Vaccine Centre Database

- NSW Health purchases adult formulation hepatitis B vaccine for vaccination of at-risk groups. The total number of doses of adult hepatitis B vaccine distributed to health care providers in NSW has increased steadily over the last five years, almost doubling between 2013 and 2017. The increase is most marked for doses distributed to GPs, but has also increased to Aboriginal medical services and Justice Health. Numbers of doses distributed have been steady to Sexual Health Services.
- During 2017, 61 051 doses of adult formulation hepatitis B vaccine were distributed to GPs, Aboriginal medical services (AMS), sexual health clinics and Justice Health for vaccination of individuals at elevated risk of hepatitis B infection. Some of the increase in GP doses in 2017 may represent catch-up vaccination of 10-19 year olds under the Commonwealth's No Jab No Pay program who may not be from at-risk groups.

## Appendix

Table 2: Number of hepatitis B and hepatitis C notifications by gender and age group, NSW, 2017

Age group (yrs)	Hepatitis B				Hepatitis C (excluding Justice Health)				Hepatitis C (from Justice Health)			
	Male	Female	Other/ un-known	Total	Male	Female	Other/ un-known	Total	Male	Female	Other/ un-known	Total
<b>TOTAL</b>	<b>1244</b>	<b>1077</b>	<b>7</b>	<b>2328</b>	<b>2181</b>	<b>1141</b>	<b>6</b>	<b>3328</b>	<b>770</b>	<b>72</b>	<b>0</b>	<b>842</b>
0-4	0	2	0	2	2	4	0	6	0	0	0	0
5-9	1	1	0	2	0	0	0	0	0	0	0	0
10-14	5	1	0	6	1	3	0	4	0	0	0	0
15-19	17	8	0	25	20	20	0	40	19	0	0	19
20-24	51	61	0	112	138	81	2	221	178	16	0	194
25-29	154	161	1	316	194	126	1	321	186	12	0	198
30-34	188	210	1	399	242	141	1	384	149	16	0	165
35-39	154	168	2	324	242	136	1	379	104	18	0	122
40-44	134	85	2	221	259	119	0	378	66	3	0	69
45-49	130	82	0	212	283	116	1	400	37	3	0	40
50-54	109	86	0	195	269	128	0	397	17	3	0	20
55-59	107	66	0	173	230	111	0	341	11	1	0	12
60-64	85	62	0	147	179	88	0	267	3	0	0	3
65-69	55	34	0	89	67	31	0	98	0	0	0	0
70-74	25	24	1	50	24	12	0	36	0	0	0	0
75-79	20	13	0	33	14	13	0	27	0	0	0	0
80-84	6	5	0	11	11	8	0	19	0	0	0	0
85 and over	2	8	0	10	4	3	0	7	0	0	0	0
Missing	1	0	0	1	2	1	0	3	0	0	0	0

Data source: NCIMS, NSW Health; data extracted 27 Feb 2018.

Note: Data are provisional and subject to change

Table 3: Number of hepatitis B and hepatitis C notifications by local health district of residence, NSW, 2013-2017

Local Health Districts	Hepatitis B					Hepatitis C				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
<b>TOTAL</b>	<b>2475</b>	<b>2504</b>	<b>2372</b>	<b>2375</b>	<b>2328</b>	<b>3491</b>	<b>3535</b>	<b>3581</b>	<b>4217</b>	<b>4170</b>
Central Coast	38	36	25	34	36	165	201	172	304	195
Far West	9	7	8	7	8	26	28	27	30	40
Hunter New England	84	76	72	65	75	418	440	415	465	404
Illawarra Shoalhaven	35	43	37	38	45	153	150	176	217	187
Justice Health	14	8	21	25	29	262	338	320	472	842
Mid North Coast	29	23	25	23	25	139	137	152	176	127
Murrumbidgee	33	39	34	26	18	130	160	152	177	150
Nepean Blue Mountains	36	37	38	30	50	133	94	126	164	190
Northern NSW	7	22	25	19	23	193	228	237	290	237
Northern Sydney	363	359	269	284	291	152	151	153	153	146
Other/unknown	30	25	32	25	28	39	44	35	45	61
South Eastern Sydney	359	363	321	363	352	319	303	331	346	323
South Western Sydney	484	432	511	544	451	376	360	404	447	370
Southern NSW	15	17	16	19	16	92	87	86	104	121
Sydney	385	397	361	341	342	315	309	311	332	293
Western NSW	40	51	35	36	30	251	234	204	189	187
Western Sydney	514	569	542	496	509	328	271	280	306	297

Data source: NCIMS, NSW Health; data extracted 27 Feb 2018.

Note: Data are provisional and subject to change.

Table 4: Number of units of injecting equipment distributed in NSW, by LHD in 2017

LHD	Public	Pharmacy
HNE	2,390,813	391,598
SYD	1,388,691	264,327
SWS	901,586	367,351
WS	1,039,468	86,228
WNSW	851,453	13,122
SES	629,942	216,438
CC	781,333	12,085
IS	714,922	39,055
NBM	548,109	59,809
NNSW	534,668	45,006
MNC	495,388	50,356
M	531,074	9,300
NS	382,027	62,341
SNSW	175,631	9,378
FW	80,920	
<b>Total</b>	<b>11,446,025</b>	<b>1,626,394</b>
<b>Injecting units distributed by NGOs</b>		
NUAA	395,042	
ACON	285,320	
MSIC	40,665	
<b>Total</b>	<b>721,027</b>	

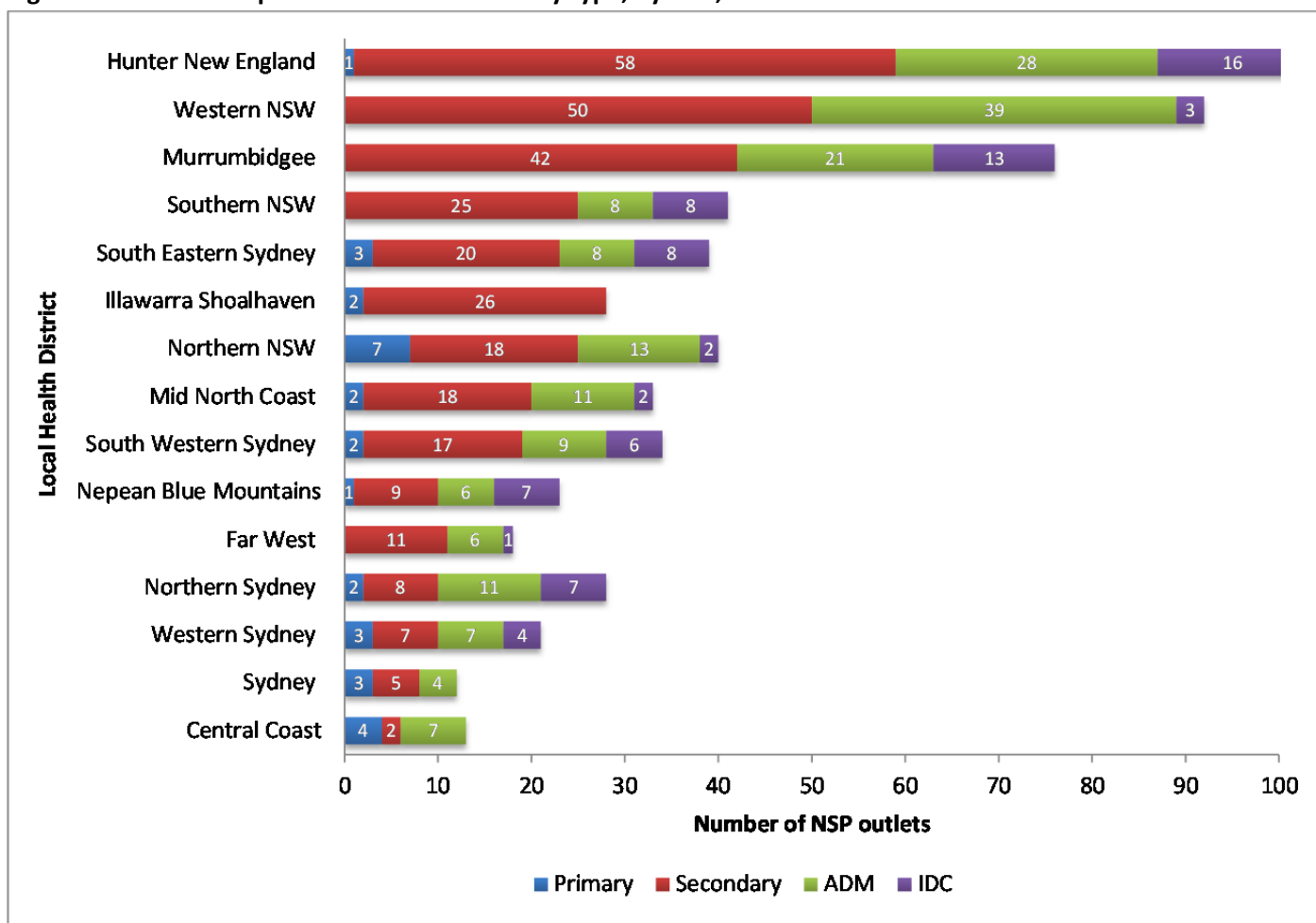
Data source: Public NSP - NSW Health NSP Minimum Data Set

**Table 5: Comparable NNEDC data - NSW respondents 2013-2017**  
**RSS among NSW respondents who reported injection in previous month**

NNEDC NSW year	N <sup>o</sup> RSS	%	Total N
2013	554	22%	2,508
2014	366	14%	2,605
2015	339	16%	2,073
2016	454	20%	2,292
2017	500	20%	2,530

Data Source: NNEDC Annual Report, Kirby Institute

**Figure 29: Number of public NSW NSP outlets by type, by LHD, 31 December 2017**

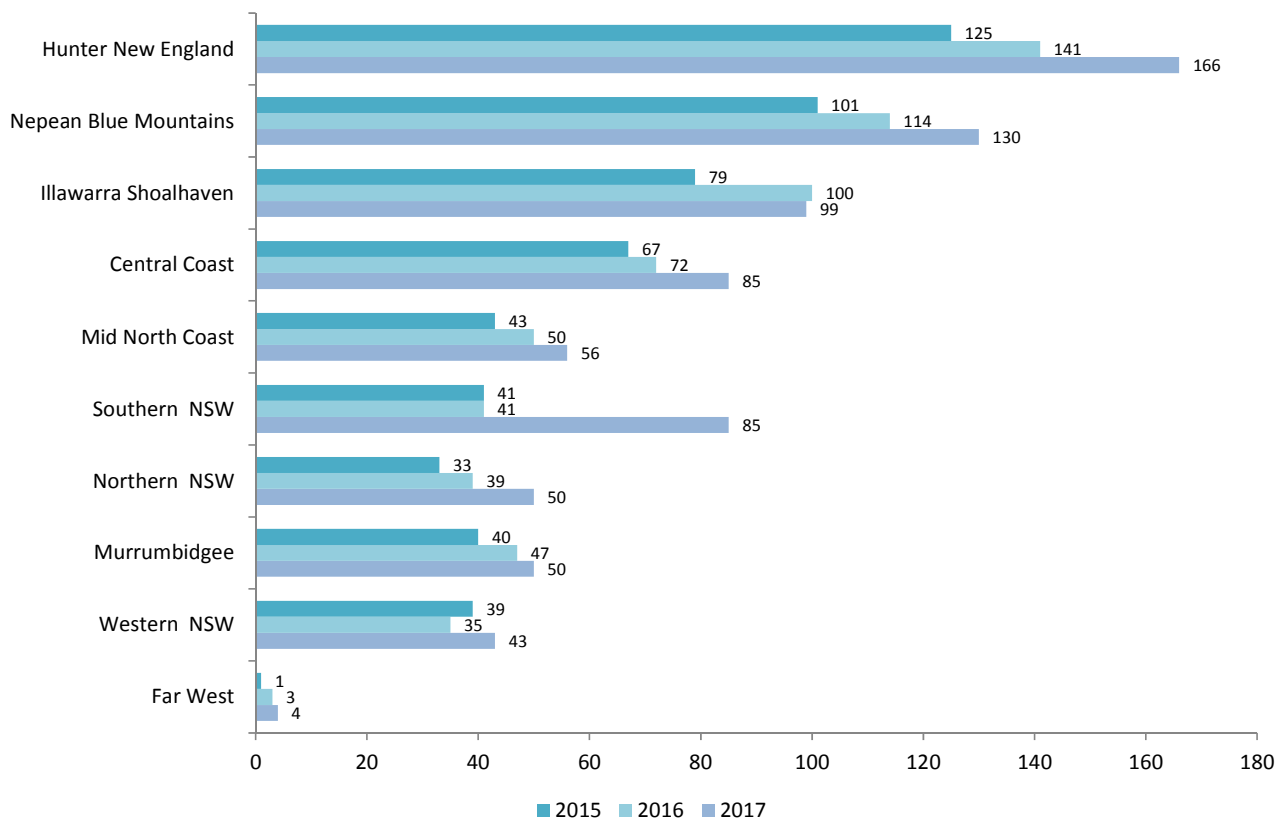


Data source: Local Health District NSP Services

As of December 2017, the public NSW NSP had 30 primary outlets, 316 secondary outlets, 178 automatic dispensing machines (ADMs) and 77 internal dispensing chutes (IDCs).



**Figure 30: Number of NSW residents dispensed hepatitis B treatment with lower hepatitis B prevalence, 1 January - 31 December 2017; 1 January - 31 December 2016 and 1 January - 31 December 2015**



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data, 1 January 2015 to 31 December 2017

Between 1 January to 31 December 2017:

- 768 residents were dispensed hepatitis B treatment in Hunter New England, Nepean Blue Mountains, Illawarra Shoalhaven, Central Coast, Mid North Coast, Northern NSW Southern NSW, Murrumbidgee, Western NSW and Far West, 8 per cent of the hepatitis B treatment dispensed in NSW<sup>9</sup>.
- The number of people being dispensed hepatitis B treatment increased by 6 per cent when compared to the same period in 2016 (1,135) and 35 per cent when compared to the same period in 2015 (569).
- 10 NSW residents were dispensed hepatitis B treatment in Justice Health settings; which is higher than the same period in 2016 (8) and 2015 (6).

Note: Figure 30 includes residents who were dispensed treatment in Justice Health settings.

<sup>9</sup> Overall, 9,010 NSW residents were dispensed treatment during 1 January - 31 December 2017

**Table 6: Number of NSW residents dispensed hepatitis B treatment by LHD of patient residence, by prescriber type, 1 January - 31 December 2017; 1 January - 31 December 2016 and 1 January - 31 December 2015**

Local Health Districts	GP			Specialist		
	2015	2016	2017	2015	2016	2017
Hunter New England	23	41	44	120	209	146
Nepean Blue Mountains	38	72	60	76	124	94
Illawarra Shoalhaven	6	15	19	76	158	94
Northern NSW	5	10	21	32	61	36
Central Coast	7	14	22	65	65	73
Mid North Coast	5	6	14	42	51	52
Southern NSW	17	19	32	36	32	27
Murrumbidgee	11	16	23	31	40	41
Western NSW	12	14	14	32	31	36
Far West	1	2	2	0	1	2

Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data, 1 January 2016 to 31 December 2017

Between 1 January to 31 December 2017:

- Of the residents dispensed hepatitis B treatment in the ten LHDs with lower prevalence, 23 per cent were prescribed by a GP, which increased by 4 percentage points when compared to 2016 (19 per cent).
- The number of NSW residents dispensed with hepatitis B treatment prescribed by a GP increased or was maintained in all lower prevalence districts, with the exception of one district, compared to the same period in 2016.

Note: Table 5 includes residents who were dispensed treatment in Justice Health settings.

**Table 7: Number of viral load tests provided to people with chronic hepatitis B (and not receiving treatment) via Medicare, 1 July 2015- 30 June 2016 and 1 July 2016- 30 June 2017**

Local Health District	1 July 2015-30 June 2016	1 July 2016-30 June 2017
Illawarra Shoalhaven	173	70
Nepean Blue Mountains	150	195
Central Coast	166	179
Hunter New England	261	312
Northern NSW	<50	
Mid North Coast	<50	130
Southern NSW	<50	<50
Murrumbidgee	<50	<50
Western NSW	<50	<50
Far West	<50	<50

Data source: Medicare Benefits Schedule, Department of Human Services

Between 1 July 2016 and 30 June 2017:

- 1,210 viral load tests were provided to people with chronic hepatitis B (and not receiving treatment) via Medicare. This is 8 per cent of the total tests (15,117) provided in NSW.
- The number of tests increased by 1 per cent when compared to the same period in 2015-16 (1,195).

Note: Data beyond June 2017 was not available at the time of reporting Data is based on patient enrolment postcode and Date of Processing (DOP). Hepatitis B viral load tests (MBS item 69482) are covered annually under Medicare, so this data indicates the number of people tested. This data excludes tests not ordered under Medicare and therefore is an underestimate of the number of people being monitored.

The figure includes viral load tests performed by a registered provider for tests that qualify for Medicare Benefit for which a claim has been processed by Medicare Australia. The figure does not include services provided by hospital doctors to public patients in public hospitals and services that qualify for a benefit under the Department of Veterans' Affairs National Treatment Account.

Table 8: Data Sources

Name	Custodian	Description
NSW Notifiable Conditions Information Management System (NCIMS)	Health Protection NSW, NSW Health	<p>NCIMS contains records of all people notified to NSW Health with a notifiable condition under the NSW <i>Public Health Act 2010</i>. Notification data may not reflect the true incidence of hepatitis B and C infections as they only represent a proportion of notifiable diseases in the population, however they are useful for monitoring trends over time.</p> <p>Notifications are for individual people with hepatitis C or B and subsequent notifications (in the one year or in later years) for the same infection in the same individual are not counted.</p>
Communicable Diseases Register (CDR)	Health Protection NSW, NSW Health	<p>The CDR contains de-identified records from NCIMS, linked to emergency department, hospitalisation and deaths data, and includes the Enhanced Reporting of Aboriginality (ERA) variable. Record linkage was carried out by the Centre for Health Record Linkage (<a href="http://www.cherel.org.au">www.cherel.org.au</a>), NSW Ministry of Health. Data are currently available to the end of 2016.</p>
NSW Health denominator data project	Health Protection NSW, NSW Health	<p>Monthly aggregated testing data for selected notifiable conditions from 15 NSW public and private laboratories. These laboratories account for more than 90% of the total notifications for the selected conditions in NSW. Information from laboratories does not provide any indication on whether there are repeat tests for the same individual.</p> <p>The notification to test ratio has been calculated by dividing the number of notifications to NSW Health by the total number of tests performed by the participating laboratories, and multiplying by 100. Notifications are for individual people with hepatitis C/B reported from all laboratories and subsequent notifications (in the one year or in later years) for the same infection in the same individual are not counted. However, the testing data are for individual tests reported from participating laboratories and may include multiple specimens per individual. As such, the notification to test ratio may be an underestimate of the percentage of people tested who were positive for the condition.</p>