
NSW Health

NSW Hepatitis B and Hepatitis C Annual Data Report

2022



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We acknowledge Aboriginal people as the Traditional Custodians of the lands and waters in which we all work, live and learn. We recognise the incredible richness, strength and resilience of the world's oldest living cultures, including cultural practices, languages and connection to Country



The artwork is called 'Baalee'. It is inspired by the original artwork of Aboriginal artist Tanya Taylor and designed by the National Aboriginal Design Agency. This artwork symbolises the Centre for Aboriginal Health working in partnership with Aboriginal people to support wholistic health and wellbeing and its role in the health system to build a culturally safe and responsive health service.

Hepatitis C

Hepatitis C Strategy 2022 – 2025

NSW Health released the [Hepatitis C Strategy 2022- 2025](#) which lays the foundation for achieving hepatitis C elimination in NSW by 2028. The Strategy focuses on four pillars: prevention, testing, treatment and stigma and discrimination. The goals of the Strategy are to prevent new infections through harm reduction, education and health promotion; increase access to testing for people at risk of infection; link newly acquired and existing infections into treatment and care and reduce stigma and discrimination as a barrier to prevention, testing and treatment. New targets were set to better track NSW progress towards elimination (*page 4*).

Data Summary (January – December 2022)

- The number of hepatitis C antibody tests decreased by 13% (471,137) compared to 2021 (540,884) and there was a 3% decrease in hepatitis C notifications (2,392). Despite this, the notification to test ratio increased for the first time since 2016. This may suggest that testing was appropriately targeted in key settings and towards population groups most at risk of infection.
- Overall, less people were treated in NSW (2,008) compared to 2021 (2,348) however the number of hepatitis C treatment initiations increased each quarter in 2022. Hepatitis C treatment numbers have not returned to pre-COVID levels and a closer focus on linkage into care is needed.
- There were 612 people treated within Justice Health settings and 44% identified as Aboriginal. 154 treatments (25%) were for confirmed re-infections indicating improved harm reduction and prevention education is required in prisons to prevent hepatitis C transmission.

Initiatives to increase hepatitis C activities in NSW

- The Centre for Population Health will continue to prioritise the implementation of Dried Blood Spot and Point of Care testing in key settings where priority populations interact. This includes custodial settings, mental health services, alcohol and other drug services and needle and syringe programs.
- The Centre of Population Health is working with Justice Health and the NSW Users and Aids Association (NUAA) to increase access to harm reduction education for people within custodial settings. Education will focus on how to prevent hepatitis C infections and treatment options available.
- The Hepatitis C Implementation Committee and Strategy Clinical Action Group will meet to guide the implementation of the Hepatitis C Strategy 2022 – 2025 and increase access to clinical care for people living with hepatitis C.

Hepatitis C Strategy Targets (2022 – 2025)

Due to data variability in 2020 and 2021 from the COVID-19 pandemic, the average of 2017-2021 has been used to calculate baseline data.

Prevent

Target	Baseline (years)	2025 Target	2022
60% reduction in the number of new hepatitis C infections	3,174 notifications (2017-2021)	1,270	2,289 (28% reduction)
20% or lower reported receptive syringe sharing among people who inject drugs	-	20%	17%
10% increase in the distribution of sterile needles and syringes for people who inject drugs	14,282,275 (2017-2021)	15,710,502	14,338,864 (stable)

Test

Target	Baseline (year)	2025 Target	2022
10% increase in the number of hepatitis C antibody tests	543,855 (2017-2021)	562,632	471,137
20% increase in the number of hepatitis C RNA tests with a focus on:	17,963	21,556	11,499
<i>Alcohol and Other Drugs (AOD)</i>	987	1,184	5,90
<i>Justice Health</i>	5,314	6,377	3,298
<i>Mental Health</i>	209	251	214

Treat

Target	Baseline (year)	2025 Target	2022
65% cumulative proportion of people living with - chronic hepatitis C who have initiated direct-acting antiviral treatment	-	65%	55%
50% reduction in hepatitis C attributable mortality	350 (2015)	175	This data will be available in future reports

Stigma and Discrimination

Target	Baseline (year)	2025 Target	2022
75% reduction in the reported experience of stigma and discrimination among people affected by hepatitis C	42% (2021)	11%	This data will be available in future reports
75% reduction in the reported experience of stigma and discrimination among people who inject drugs	79% (2021)	20%	As above
75% reduction in the reported incidence of stigma and discrimination towards people who inject drugs by healthcare workers	72% (2021)	18%	As above

Hepatitis B

Chronic hepatitis B is a significant public health concern and is a leading cause of liver cancer in Australia. Chronic hepatitis B is the most prevalent blood-borne viral infection in Australia and impacts an estimated 72,058 people in NSW. An estimated 77.6% (55,917) people living with chronic hepatitis B have been diagnosed and 30.7% (22,122) are engaged in care (treatment or monitoring)¹. It is recommended all people living with chronic hepatitis B should be engaged in care. NSW currently falls short of meeting this recommendation.

NSW Health is committed to eliminating hepatitis B as a public health concern by 2030, preventing hepatitis B infections and improving health outcomes for people living with chronic hepatitis B. NSW Health has identified priority populations with a higher prevalence or risk of hepatitis B, including people born overseas and Aboriginal and Torres Strait Islander people. New targets and strategic goals to reach this goal are reflected in the [NSW Hepatitis B Strategy 2023-2026](#).

Data Summary

- In 2022, hepatitis B notifications increased by 19.5% (2,056) compared to 2021 (1,720).
- Hepatitis B surface antigen testing decreased by 11.8% from 2021, and by 20.7% from the pre-pandemic testing peak in 2019
- The total number of residents dispensed with hepatitis B treatment increased to 11,397 compared to 11,052 in 2021.
- The proportion of children with at least three doses of hepatitis B vaccine at 12 months of age decreased (94.4%) compared to 2021 (95.3%).
- There was a decrease in the proportion of children fully vaccinated by 24 months of age (96.5%) compared to 2021 (96.8%).
- Screening for hepatitis B among women giving birth remained high and stable (99.3%).

Initiatives to increase hepatitis B activities in NSW

- The Centre for Population Health will work the Local Health Districts and the Hepatitis B Strategy Implementation Committee to implement the Hepatitis B 2023 – 2026 Strategy.
- The Centre for Population Health will meet with Local Health Districts quarterly to monitor hepatitis B activities, with a focus on maintaining high levels of neonatal vaccination and antenatal screening.
- The Centre for Population will work with the Royal Australian College of General Practitioners and the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine to deliver education seminars to general practitioners and increase the total number of S100 community prescribers.

¹ National Surveillance for Hepatitis B Indicators: Annual Report 2021. WHO Collaborating Centre for Viral Hepatitis, The Doherty Institute.

Glossary

ADM	Automatic dispensing machine
CDR	Communicable Diseases Register
CHB	Chronic hepatitis B
ERRCD	Electronic Recording and Reporting Controlled Drug System
HbsAg	Hepatitis B surface antigen
HBV	Hepatitis B virus
HBIG	Hepatitis B immune globulin
HCV	Hepatitis C virus
LHD	Local Health District
MSIC	Medically Supervised Injecting Centre
NCIMS	Notifiable Conditions Information Management System
NIP	National Immunisation Program
NNEDC	NSW Needle and Syringe Program Enhanced Data Collection
NSP	Needle and Syringe Program
NSW	New South Wales
NUAA	New South Wales Users and AIDS Association
OTP	Opioid Treatment Program
PBS	Pharmaceutical Benefits Scheme
PWID	People who inject drugs
RSS	Receptive syringe sharing
DBS	Dried Blood Spot
DAAs	Direct Acting Antivirals
PBS	Pharmaceutical Benefits Scheme
PHDAS	Pharmaceutical Drugs and Addiction System

In this report, Aboriginal and Torres Strait Islander people are referred to as Aboriginal people in recognition that Aboriginal people are the original inhabitants of NSW.

SHPN (CPH) 230366

Hepatitis C

1. Notifications

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.

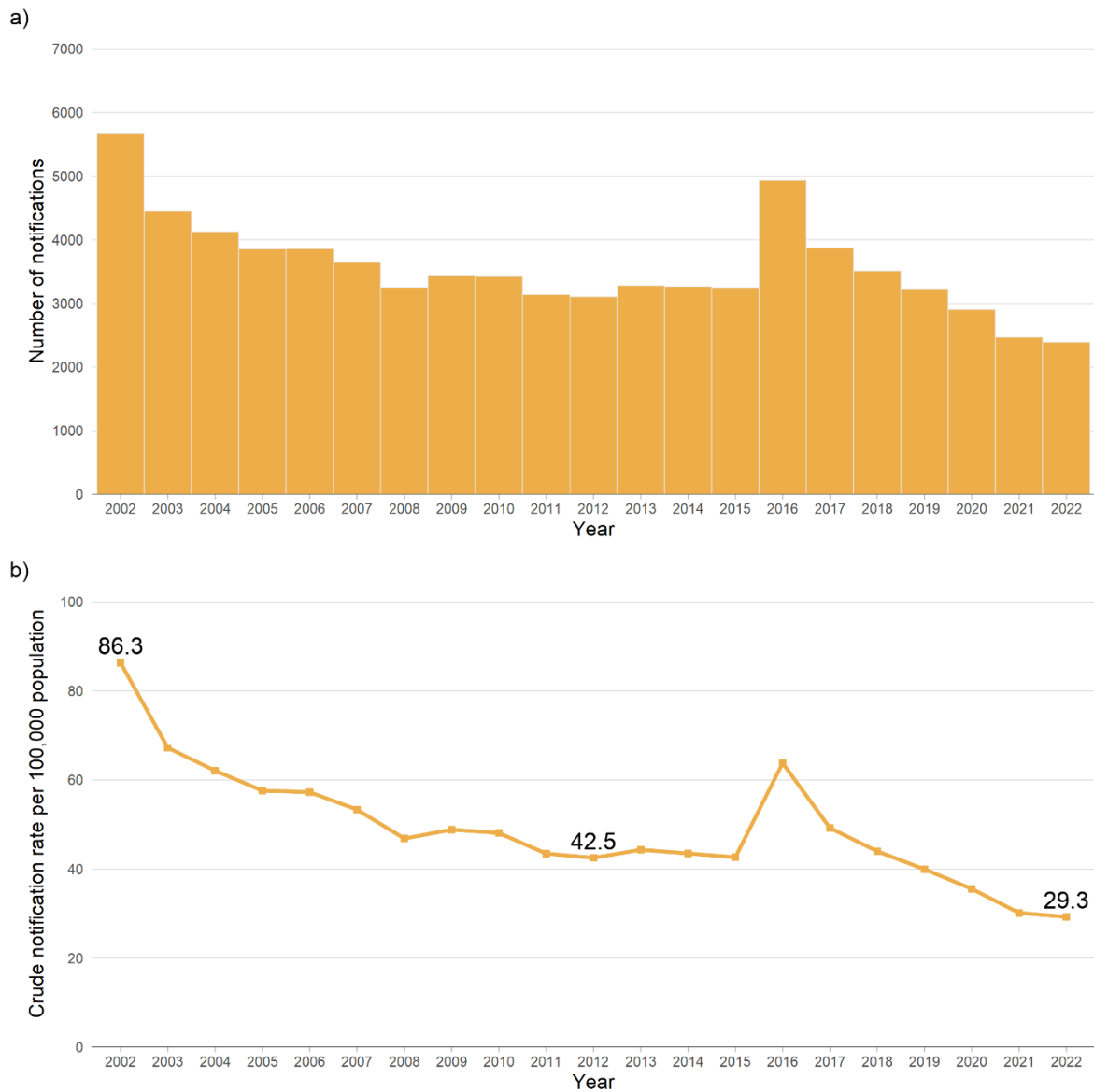
Hepatitis C RNA testing is recommended for all people who have a positive hepatitis C antibody test. Hepatitis C RNA is a marker of current infection. It is important to note that there may be multiple tests for each individual tested for hepatitis C. However, an individual with multiple positive hepatitis C tests will only generate one notification.

1.1 How many diagnoses of hepatitis C are notified?

Hepatitis C notification data changed in 2018/19 following two data activities:

- From 1 January 2016, laboratories have reported positive qualitative and quantitative hepatitis C RNA test results. Two retrospective NCIMS hepatitis C RNA data imports for the period 1 January 2016 to 31 December 2018 were conducted, one in 2018 and one in 2019. This had the effect of increasing hepatitis C notifications from 2016 to 2018.
- In 2019, a project was undertaken to identify and remove duplicates from the NSW NCIMS. This had the effect of reducing the number of hepatitis C notifications in previous years.

Figure 1: Number and rate of hepatitis C notifications, NSW, 2002-2022



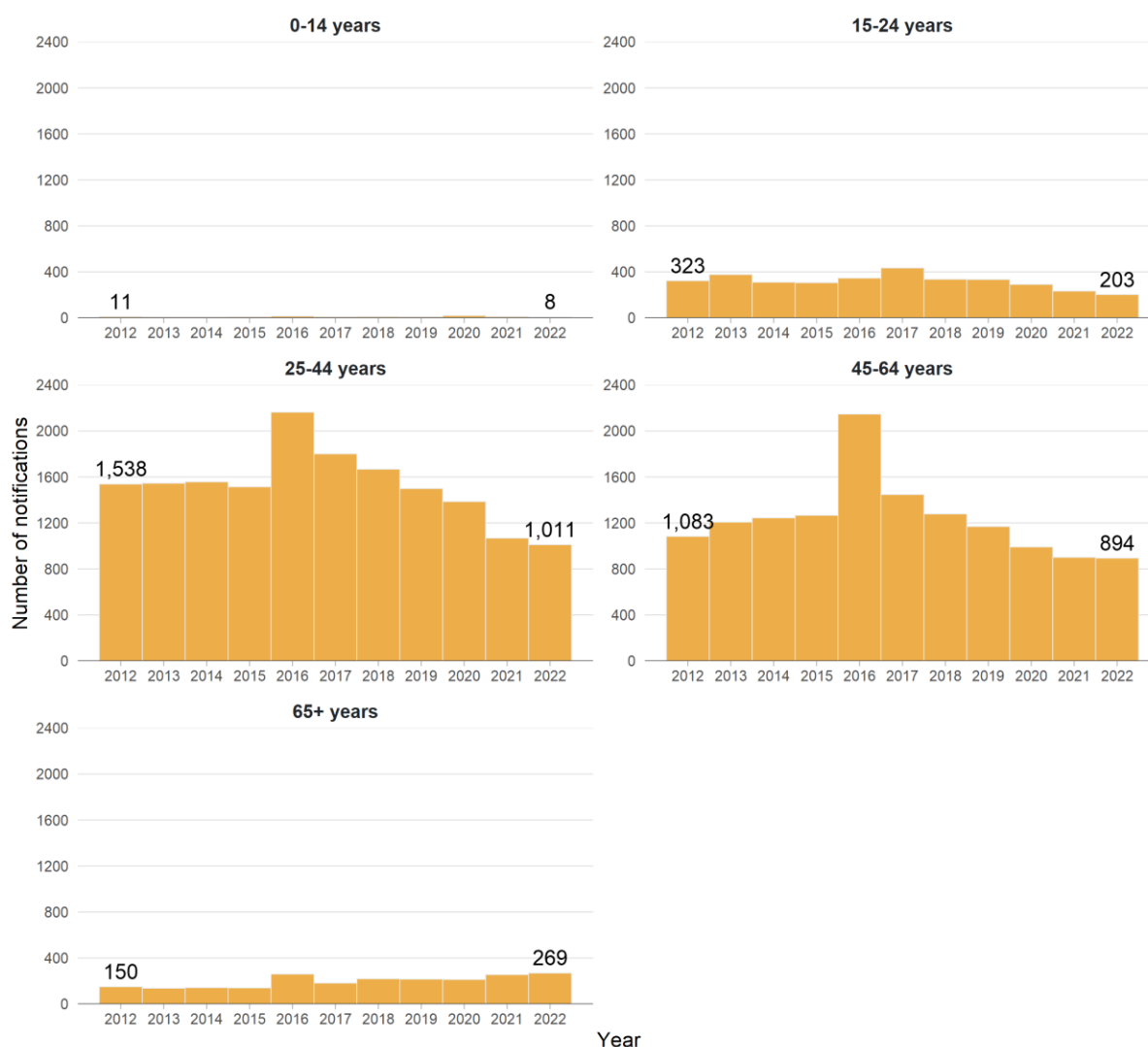
Data source: NCIMS, NSW Health and ABS population estimates (SAPHaRI); data extracted 27 February 2023. Note: Excludes non-NSW residents. Year of notification is based on calculated onset date.

In 2022:

- There were 2,392 hepatitis C notifications in NSW residents.
- The hepatitis C notification rate was 29.3 notifications per 100,000 population, which represents a 3.0% decrease compared with 2021 when the rate was 30.2 notifications per 100,000 population and a 40.6% decrease from 2017.
- The notification rate has declined each year since the sharp increase in 2016 when hepatitis C direct acting antivirals (DAAs) became listed on the PBS in Australia.

1.2 Which groups are being notified?

Figure 2: Number of hepatitis C notifications by age group, NSW, 2012-2022



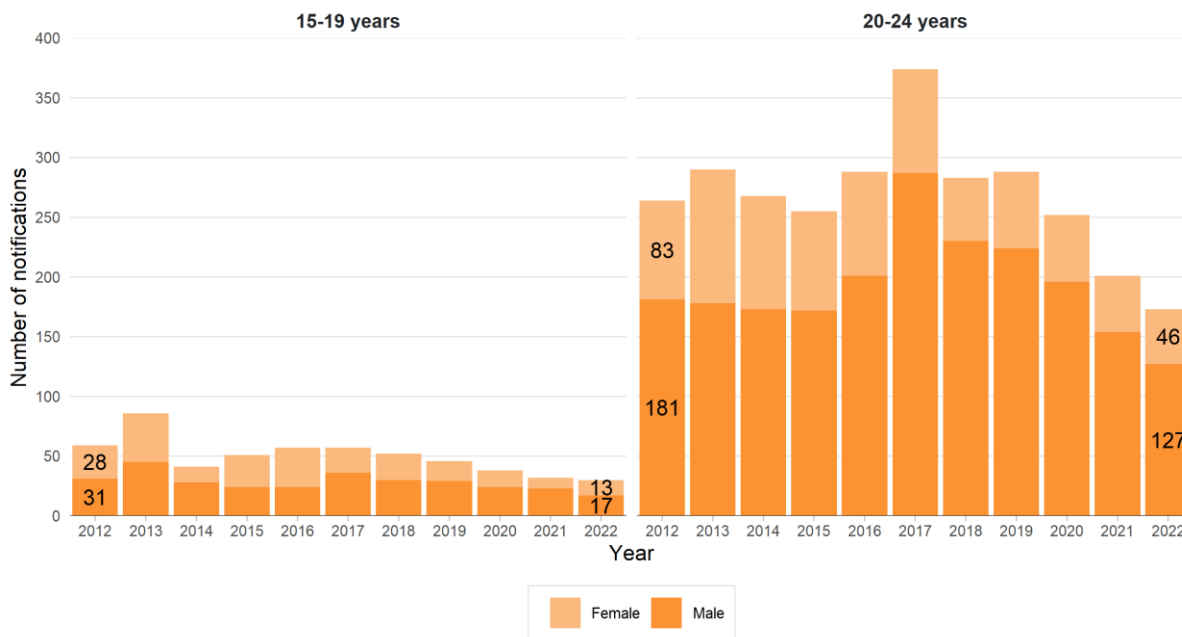
Data source: NCIMS, NSW Health; data extracted 27 February 2023. Note: Excludes non-NSW residents and persons whose age is not stated. Year of notification is based on calculated onset date.

In 2022:

- The largest number of hepatitis C notifications continued to occur among people aged 25-44 years.
- The largest decreases compared to 2021, were in the 15–24 years and 25-44 years, with a 13.2% and 5.3% reduction respectively. Since 2017, notifications of hepatitis C have decreased in 15-24 years, 25-44 years and 45-64 years, with 53.2%, 43.9% and 38.2% reductions respectively.
- Hepatitis C notifications increased by 5.5% among people aged 65+ years compared to 2021 and 47.8% compared to 2017.
- Notifications remained relatively stable in people aged 0–14 years compared to 2021. Hepatitis C infections in children are usually acquired through mother-to-child transmission during pregnancy or birth.²

² Benova L, Mohamoud YA, Calvert C et al (2014) Vertical transmission of hepatitis C virus: systematic review and meta-analysis. Clin Infect Dis 59(6): 765-73.

Figure 3: Number of hepatitis C notifications in people aged between 15 and 24 years, by age group and gender, NSW, 2012-2022



Data source: NCIMS, NSW Health; data extracted 27 February 2023. Note: Excludes non-NSW residents, transgender persons (due to small numbers), and persons whose age or sex is not stated. Year of notification is based on calculated onset date.

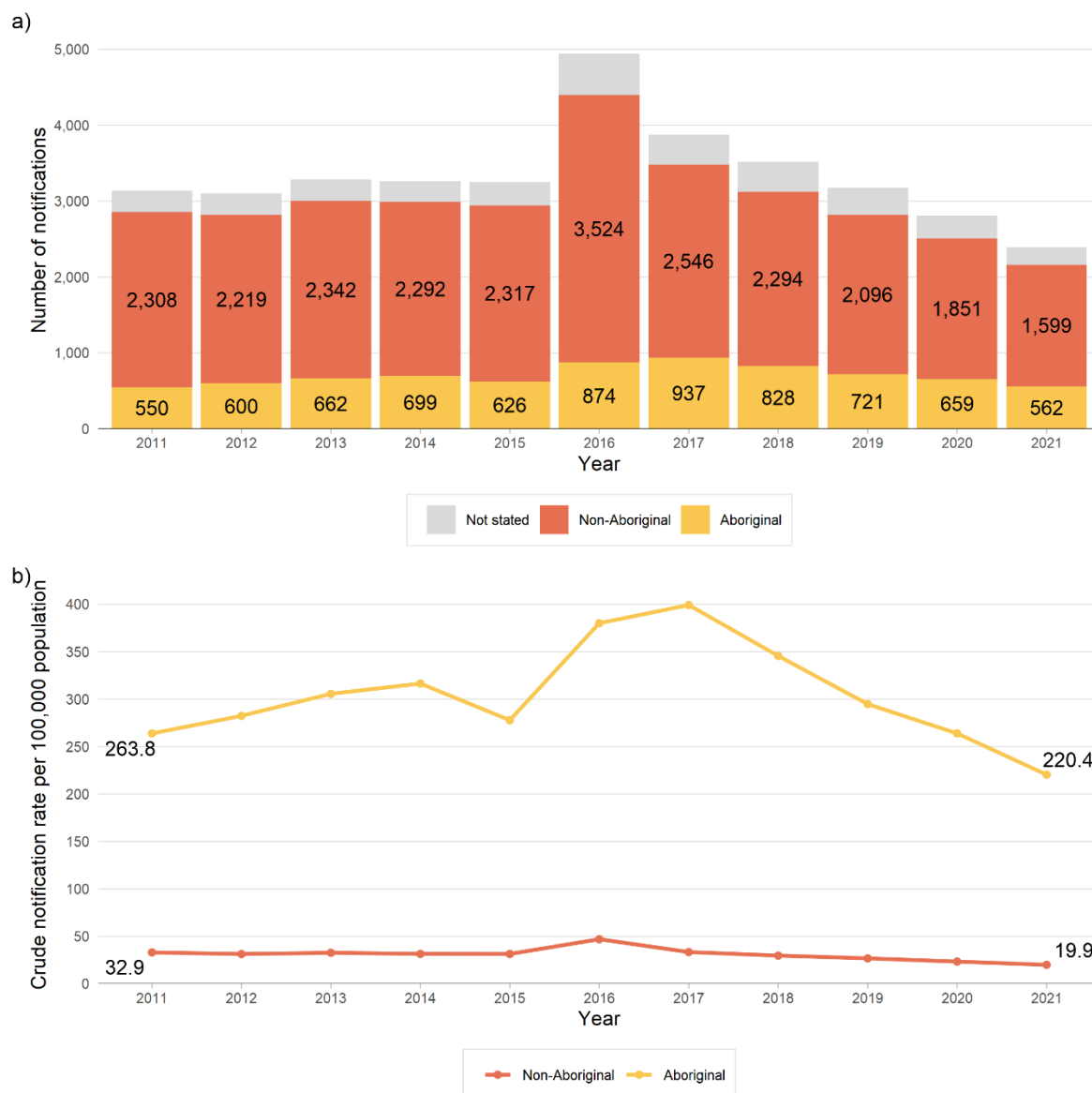
In 2022:

- The number of hepatitis C notifications continued to decline among males aged 20 to 24 years, with an 18.1% decrease compared with 2021. The number of hepatitis C notifications among females in the same age range decreased by 2.1%.
- Among males and females aged 15-19 years, the number of notifications remained small and declined by 26.1% and increased 44.4% respectively compared to 2021.

The decline in notifications among 15-24 years is important, as it is the best surrogate for new infections. Since 2017 a progressive decline in notifications has been observed and supports evidence consistent with declining population-level hepatitis C incidence.

Note: 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: Number and rate of hepatitis C notifications by Aboriginal status, NSW, 2011-2021



Data source: CDR, NSW Health (SAPHaRI); data extracted 27 February 2023. Note: Excludes non-NSW residents. At the time of report, data available until 2021. See appendix for further details on the CDR.

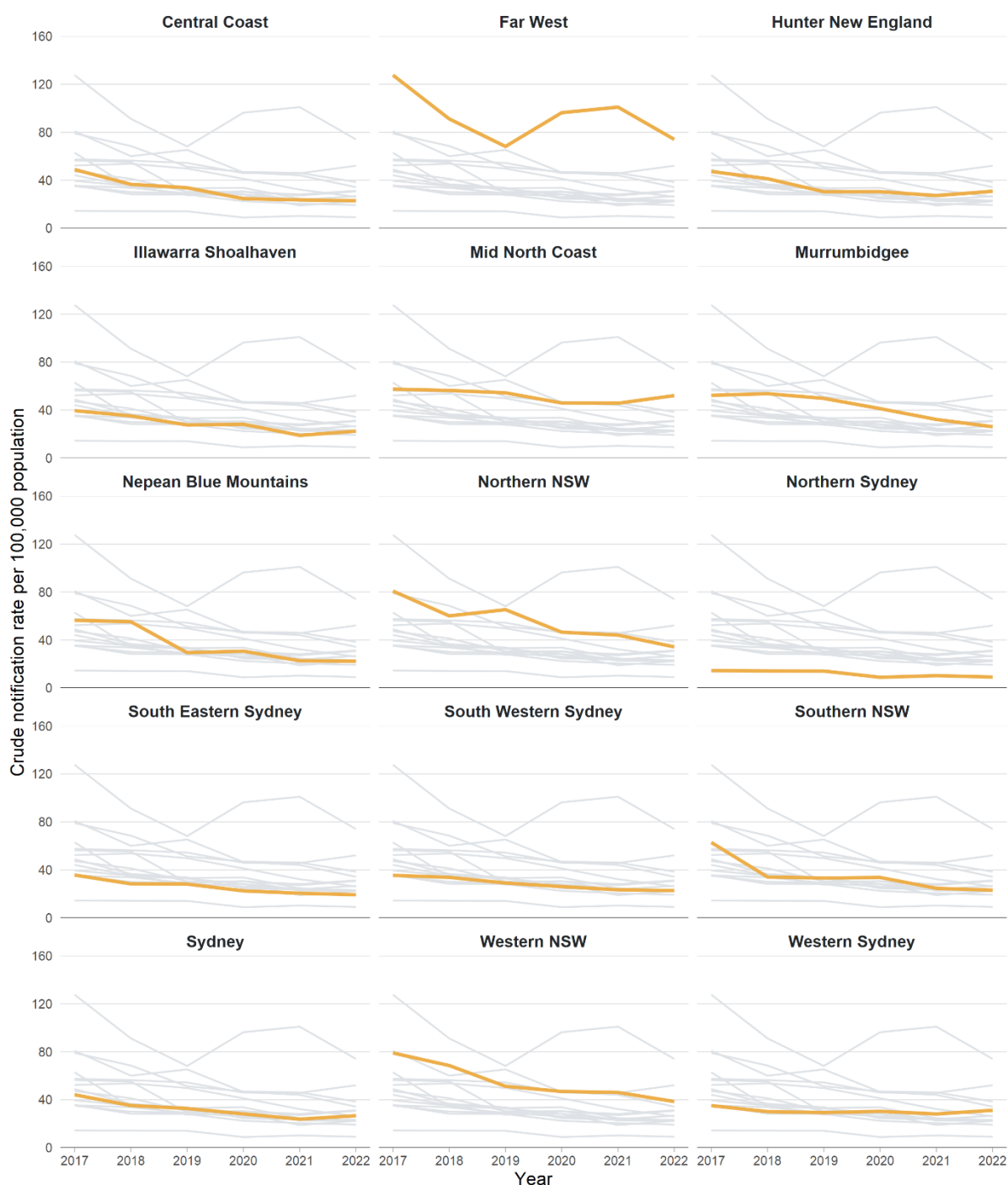
- From 2011 to 2021, 36,774 notifications for hepatitis C were recorded in the Communicable Diseases Register (CDR). Of these, 7,718 (21.0%) were in Aboriginal people and 25,388 (69.0%) were in non-Aboriginal people. Aboriginal status was not stated for 3,668 notifications (10%).
- Where Aboriginal status was known, the hepatitis C notification rate in Aboriginal people was 220.4 per 100,000 population in 2021, which is 11.1 times higher than the rate in non-Aboriginal people (19.9 per 100,000 population).

Trends in the Aboriginal population can be difficult to interpret due to demographic factors, such as birth, deaths and migration and non-demographic factors, such as whether a person identifies as Aboriginal or for whom Aboriginal status was not known.³ Notification rates can also be influenced by variation in the incidence of disease, such as targeted screening programs.

³ Australian Bureau of Statistics. Understanding change in counts of Aboriginal and Torres Strait Islander Australians: Census [Internet]. Canberra; 2023. Available from: <https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/understanding-change-counts-aboriginal-and-torres-strait-islander-australians-census/2021>

1.3 Where are notifications occurring?

Figure 5: Hepatitis C notification rate by Local Health District of residence, NSW, 2017-2022



Data source: NCIMS, NSW Health and ABS population estimates (SAPHaRI); data extracted 27 February 2023. Note: Excludes non-NSW residents and persons whose place of residence in NSW was not stated. Year of notification is based on calculated onset date.

In 2022:

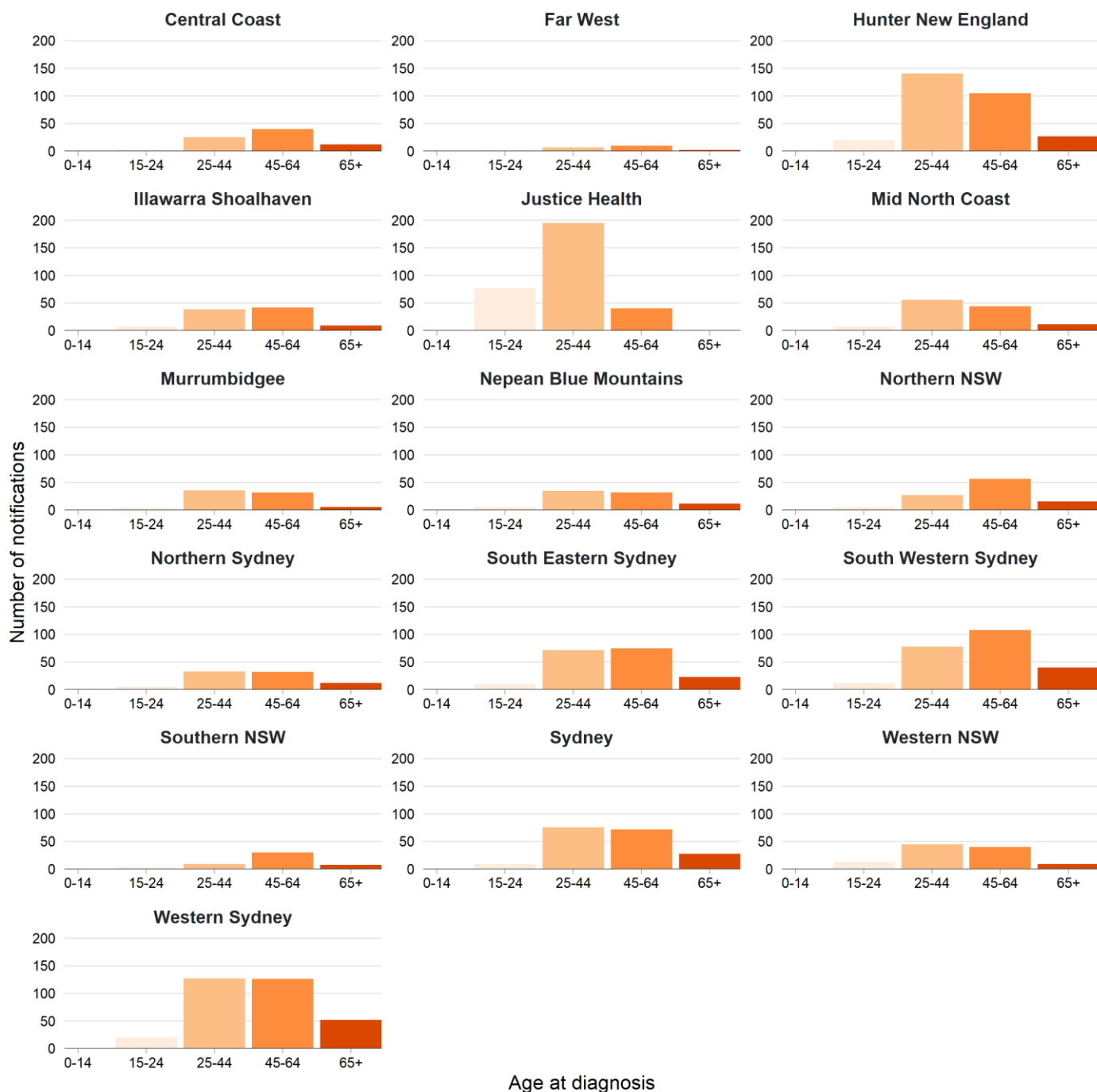
- Far West, Mid North Coast and Western NSW LHDs had the highest hepatitis C notification rates in NSW, with 74.1, 52.1 and 38.5 notifications per 100,000 population respectively.
- Compared with 2021, hepatitis C notification rates decreased in most LHDs, the largest declines occurred in Far West and Northern NSW LHDs, by 26.7% and 22.3% respectively.
- Compared with 2021, hepatitis C notification rates increased in Western Sydney, Sydney, Hunter New England, Mid North Coast and Illawarra Shoalhaven LHDs between 10.8 to 18.8%.

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

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

Notification rates have not been calculated for Justice Health as the denominator (total population) fluctuates considerably and data are available only for the annual number of incarcerations, not the number of people incarcerated.

Figure 6: Notifications of hepatitis C by age group and Local Health District of residence, NSW, 2022



Data source: NCIMS, NSW Health; data extracted 27 February 2023. Note: Excludes non-NSW residents and persons whose place of residence in NSW was not stated. Year of notification is based on calculated onset date.

In 2022:

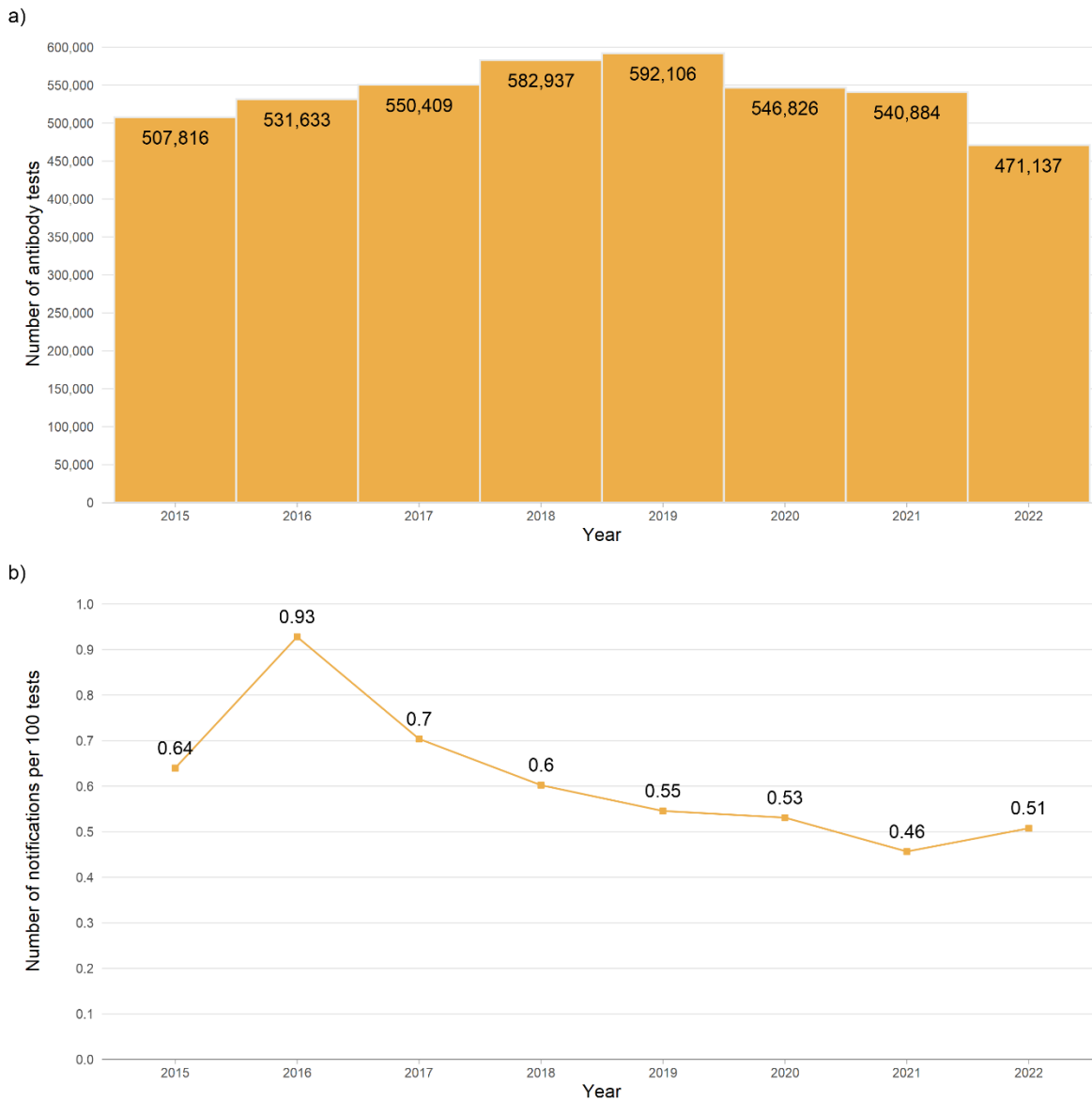
- As in previous years, of the 203 hepatitis C notifications in people aged 15-24 years, the largest number and proportion were reported by Justice Health (77 notifications, 37.9%).
- Of the 1,001 hepatitis C notifications in people aged 25-44 years, 195 notifications (19.5%) were from Justice Health, followed by Hunter New England (141, 14.1%) and Western Sydney (127, 12.7%).

Note: 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.

2. Tests

2.1 Is hepatitis C testing increasing?

Figure 7: Number of tests for hepatitis C antibody and notification to test ratio⁴, NSW, 2015-2022



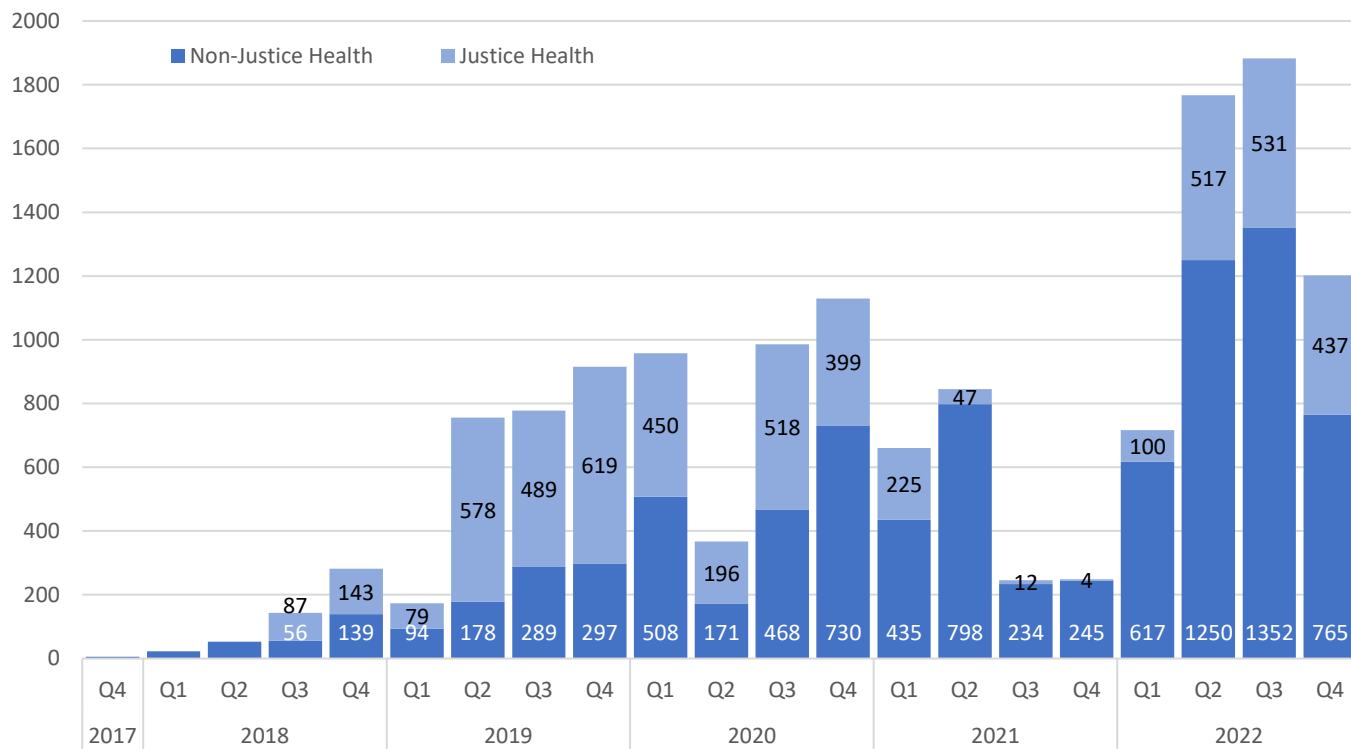
Data sources: NSW denominator data project, NSW Health; data extracted 20 February 2023.

In 2022:

- Fifteen laboratories in NSW performed 471,137 hepatitis C antibody tests.
- Testing decreased 12.9% from 2021 and 20.4% from the COVID-19 pre-pandemic testing peak in 2019.
- The notification to test ratio increased to 0.51, which may suggest testing was appropriately targeted in 2022.

Note: The number of hepatitis C DBS tests completed in NSW between 2017 and 2022 is not included in Figure 7 due to the DBS test being in a pilot phase where results are not linked to the NSW denominator data project.

Figure 8: Number of hepatitis C dried blood spot (DBS) tests completed in NSW in Justice Health settings and non-Justice Health settings⁵ between 1 October 2017 and December 2022



Data sources: Dried Blood Spot (DBS) Testing Pilot, NSW Health

In 2022:

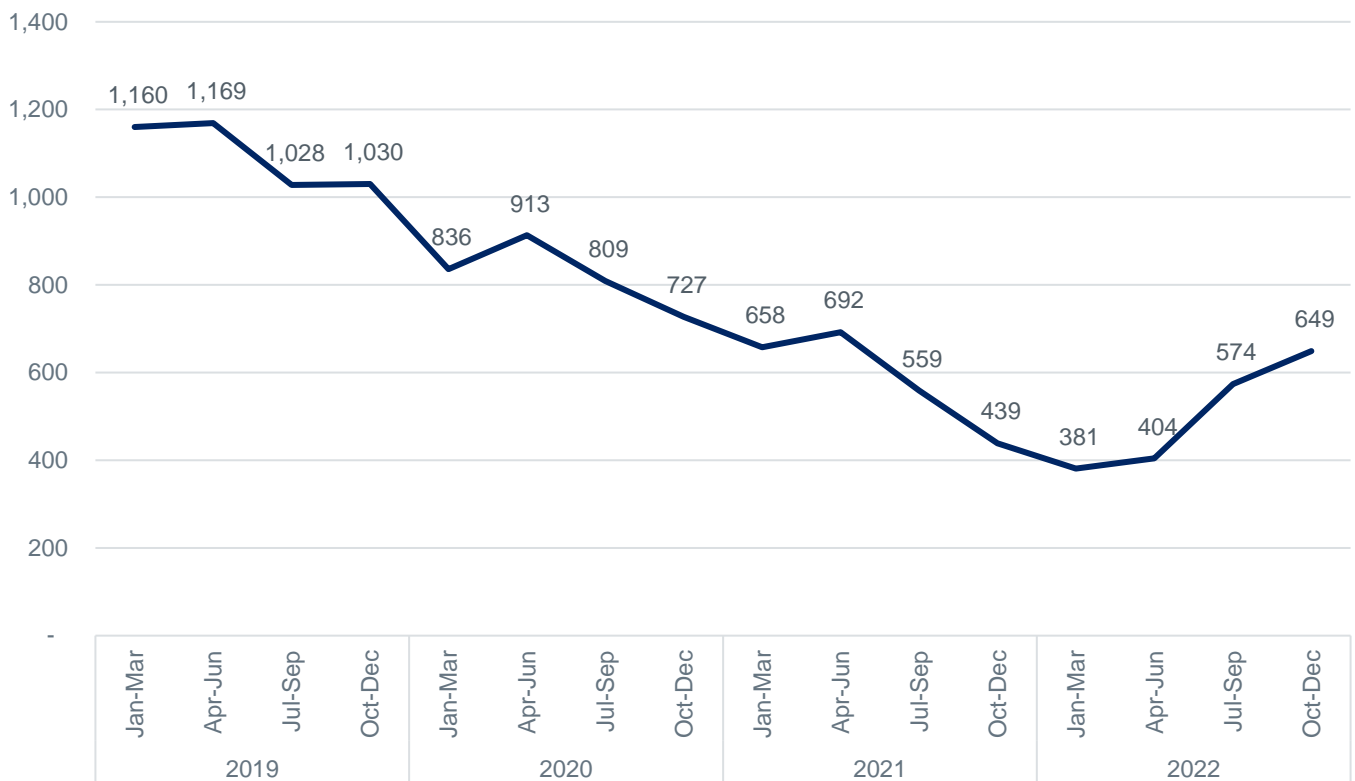
- There were 3,984 hepatitis C DBS⁵ RNA tests completed in non-Justice Health settings and 1,585 tests completed in Justice Health settings.
- There was a significant increase in the number of DBS tests completed in 2022 compared to 2021, likely due to easing COVID-19 restrictions.
- There were 473 DBS tests that were reactive for hepatitis C in 2022 (8% reactivity) and 1,560 DBS tests that were reactive for hepatitis C since October 2017 (11% reactivity).

⁵ **Dried Blood Spot** (DBS) was established in 2017 and is an innovative finger stick test for HIV and hepatitis C that is accessed by eligible people online or via a settings-based approach. The NSW DBS Self-Sampling Testing Pilot Program aims to increase testing among high-risk populations who experience barriers to testing through conventional services. In September 2019, the pilot was expanded to improve access by at-risk populations. As part of the update, participants can be tested for hepatitis C without an HIV test. People eligible for a hepatitis C test can still opt-in for an HIV test. See **Appendix: Table 4 and 5** for more information.

3. Treat

3.1 How many people are accessing hepatitis C treatment?

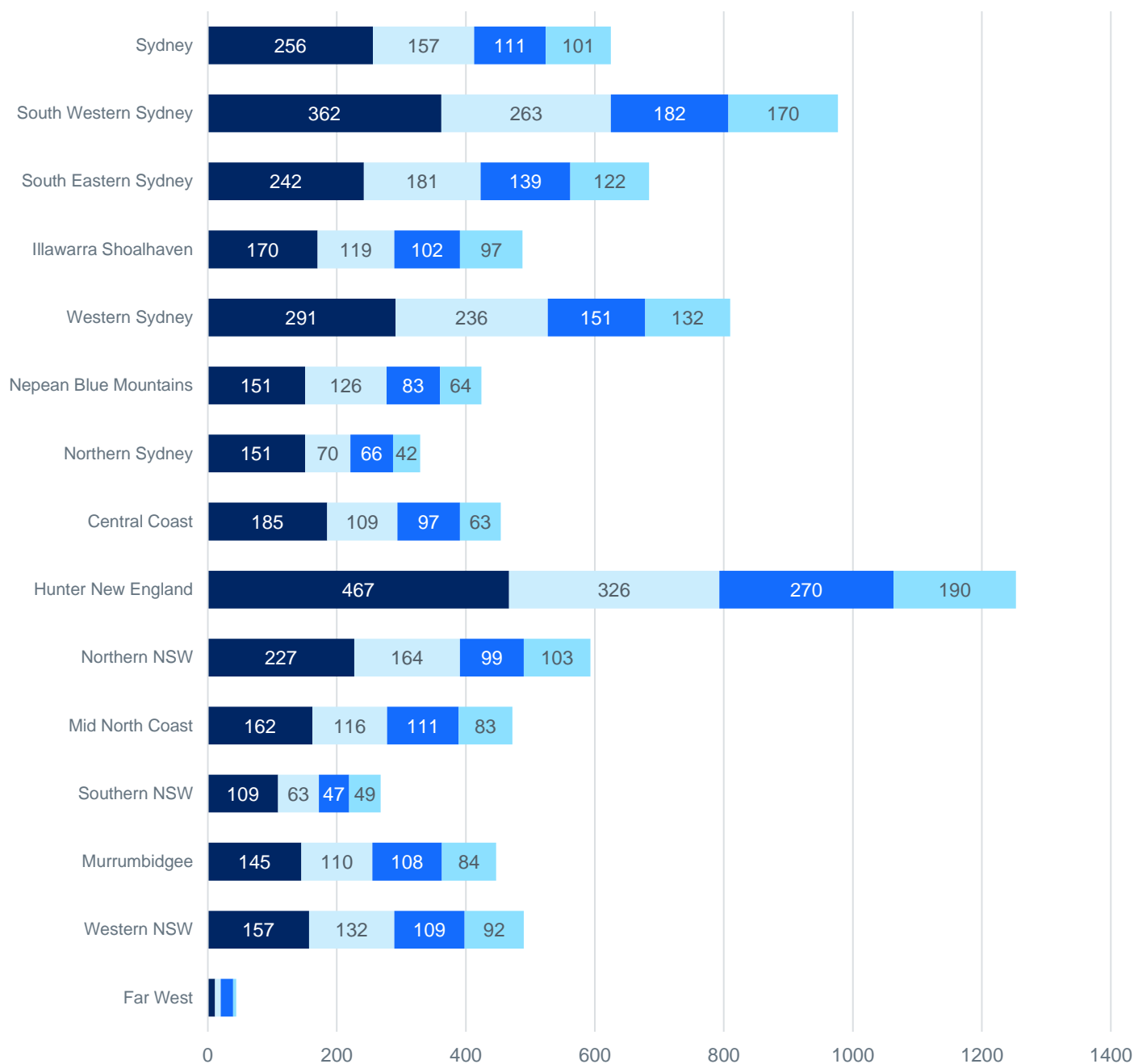
Figure 9: Number of residents initiating hepatitis C treatment in NSW by quarter, 1 January 2019 - 31 December 2022



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data

- Since January 2019, 12,028 people have initiated hepatitis C treatment in NSW. In 2022, the number of people initiating hepatitis C treatment has started to increase following a COVID-19 pandemic linked decline in 2021.
- There were less people treated in 2022 (2,008) compared to 2021 (2,348).
- Between October and December 2022, 649 people in NSW initiated hepatitis C treatment. This is the largest quarterly uptake since June 2021.
- Sustained efforts are needed by all LHDs to actively find people with hepatitis C and link them to treatment.

Figure 10: Number of residents initiating hepatitis C treatment in NSW by Local Health District by year, 1 January 2019 - 31 December 2022



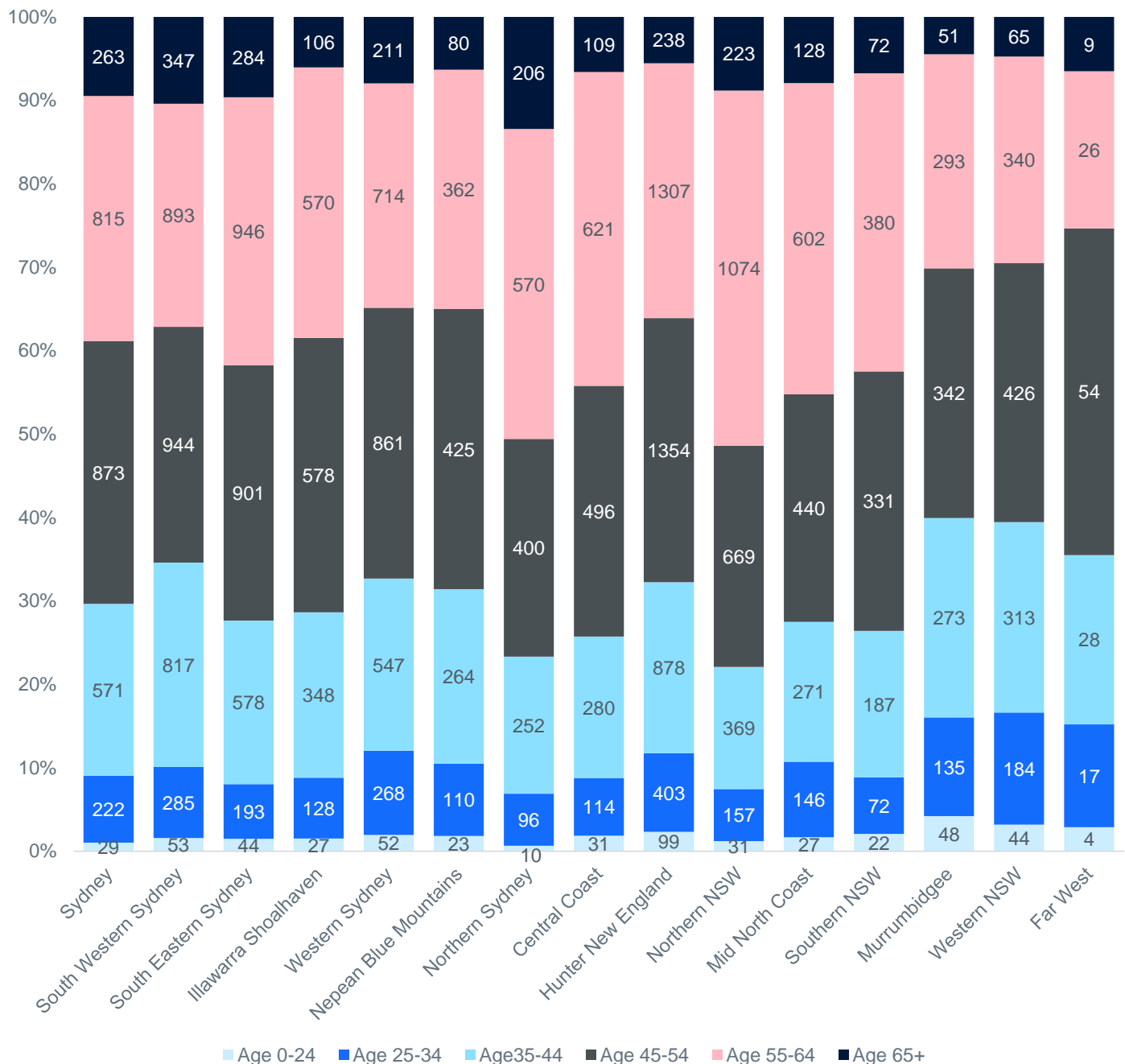
	Far West	Western NSW	Murrumbidgee	Southern NSW	Mid North Coast	Northern NSW	Hunter New England	Central Coast	Northern Sydney	Nepean Blue Mountains	Western Sydney	Illawarra Shoalhaven	South Eastern Sydney	South Western Sydney	Sydney
■ 2019	11	157	145	109	162	227	467	185	151	151	291	170	242	362	256
■ 2020	9	132	110	63	116	164	326	109	70	126	236	119	181	263	157
■ 2021	19	109	108	47	111	99	270	97	66	83	151	102	139	182	111
■ 2022	5	92	84	49	83	103	190	63	42	64	132	97	122	170	101

Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data
 Note: The number and proportion of people initiating treatment across LHDs exclude Justice Health Settings.

Between 1 March 2016 and 31 December 2022:

- 55% (34,574) of the estimated 63,053 people in NSW living with hepatitis C have initiated treatment.
- LHDs are implementing locally tailored strategies to increase testing and treatment, including in alcohol and other drug services, mental health and general practice.

Figure 11: Number of people in NSW initiated hepatitis C treatment by age group and Local Health District of residence, March 2016 - 31 December 2022

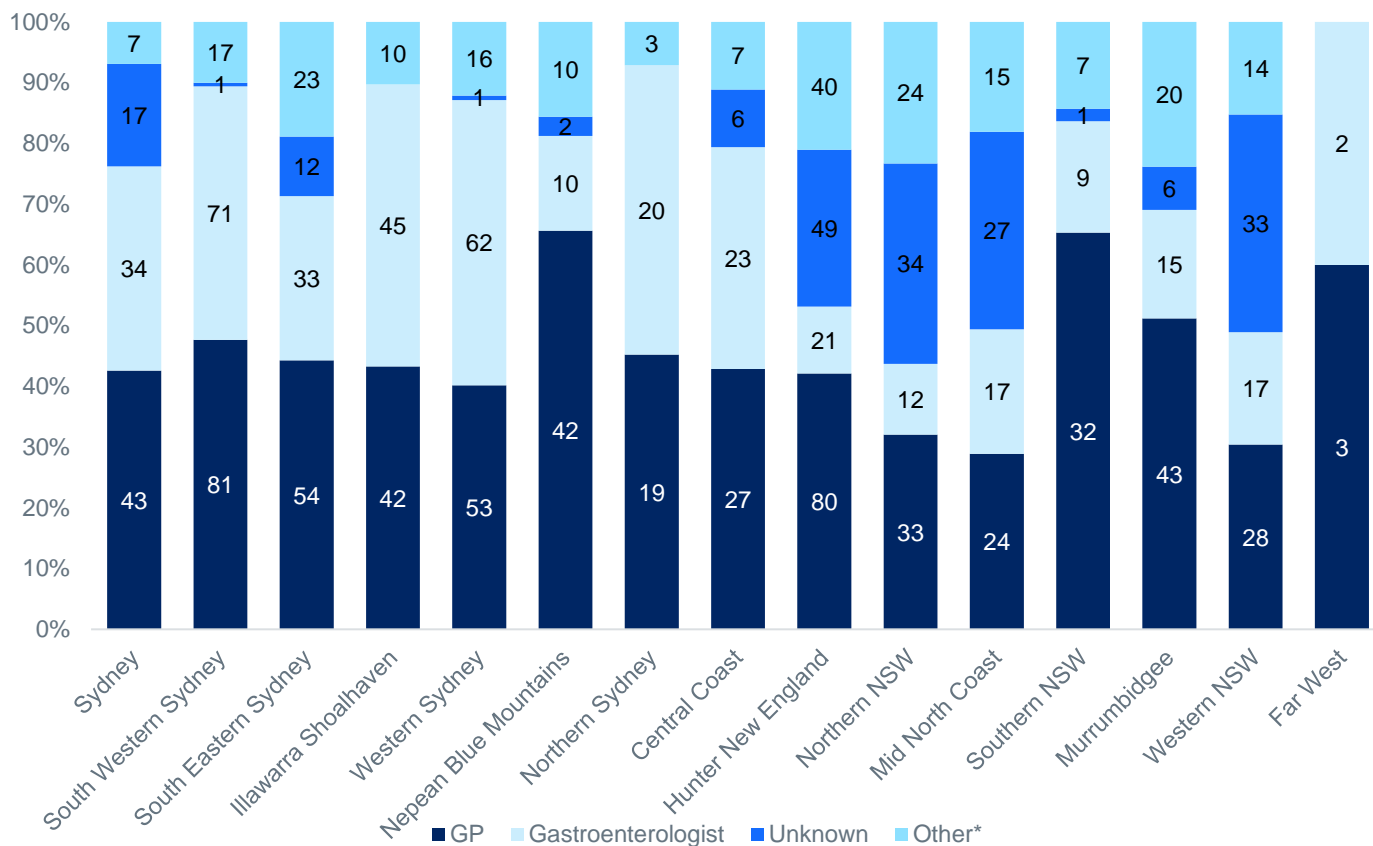


Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data.
 Note: The number and proportion of people initiating treatment across LHDs exclude Justice Health Settings.

Between 1 March 2016 and 31 December 2022:

- Among those who initiated hepatitis C treatment in NSW, 66% (19,839) were male and 34% (10,210) were female.
- The largest number of residents initiating hepatitis C treatment were from age groups 55 to 64 years followed by 45 to 54 years and 35 to 44 years.
- There were more people aged 65+ initiating treatment in Sydney, South Western Sydney, South Eastern Sydney, Western Sydney, Northern Sydney, Hunter New England and Northern NSW LHDs.

Figure 12: Number of people in NSW initiated hepatitis C treatment by Local Health District of residence, by prescriber type⁶, 1 January - 31 December 2022



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Programme data.

Note: The Figure identifies the number of NSW residents who initiated hepatitis C treatment by specialist or a GP by LHD of patient residence. *'Other' includes non-vocationally registered GPs and all prescriber speciality areas, except gastroenterologists. The number and proportion of people initiating treatment across LHDs exclude Justice Health Settings. NSW Health continues to work with the PBS to increase accuracy of prescriber type data.

From 1 January to 31 December 2022:

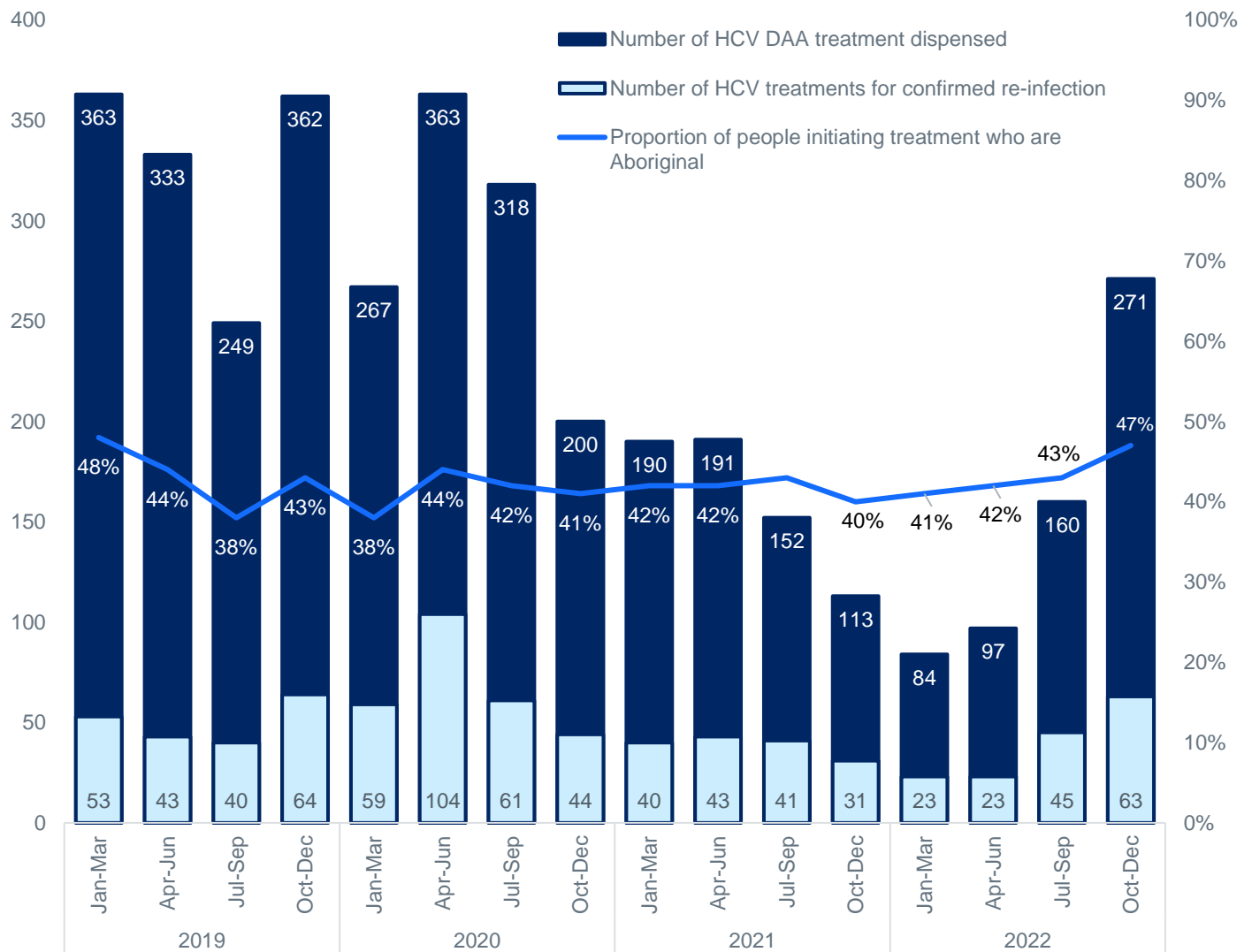
- The proportion of NSW residents initiating hepatitis C treatment prescribed by a general practitioner (GP) was 43%.

⁶ 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. Other includes non-vocationally registered GP, pathology, immunology and allergy, public health medicine, surgery, psychiatry, respiratory and sleep medicine, dermatology, college trainee, pediatric medicine, medical oncology, ophthalmology, palliative medicine, nephrology, geriatric medicine, nurse practitioner, and hematology specialists.

3.2 People in custodial settings

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 13: Number of people initiating treatment in Justice Health, including the number of people confirmed re-infection and proportion of people who identify as Aboriginal, 1 January 2019 - 31 December 2022



Data source: Data were from Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data between 1 March 2016 and 31 December 2022 (number of people initiated on treatment) and NSW Health Hepatitis C Minimum Data Set (proportion of people initiated on treatment who are Aboriginal). From 1 July 2018 to 31 December 2021, data were reported by Justice Health.

Between 1 March 2016 and 31 December 2022:

- 5,945 NSW residents initiated hepatitis C treatment in Justice Health settings.
- In 2022, a total of 612 NSW residents initiated hepatitis C treatment through Justice Health; 44% of people treated in prison settings identified as Aboriginal.
- 154 (25%) of hepatitis C treatment initiations in Justice Health settings were for confirmed re-infections.

4. Prevent

Needle and Syringe Programs (NSPs) are evidence based, cost-effective ways to prevent hepatitis C transmission. A harm reduction approach, combined with other complementary prevention strategies, is central to prevention efforts in NSW.

The NSW NSP is flexible, targeted and ensures that sterile injecting equipment is readily available in the areas of highest need and accessible to those most at risk of infection.

4.1 Who is accessing the NSP?

The proportion of priority populations accessing the NSW NSP has remained relatively stable between 2016 and 2022. Among people participating in the NSW NSP Enhanced Data Collection (NNEDC) in 2022:

- 19 per cent identified as Aboriginal
- 22 per cent had experienced homelessness in the past year
- 9 per cent reported being imprisoned in the past year
- 20 per cent reported experiencing at least one mental health issue in the past year

Note: The NNEDC provides an annual snapshot of NSW NSP client demographic and drug use behaviour. In 2022 all 15 LHDs participated across 43 sites. Please note this data does not provide an accurate reflection of the population across NSW or does it provide comparisons between LHDs. The survey is a snapshot only. The NSW NSP also includes automatic dispensing machines and pharmacies that are not captured in the survey. The type and number of NSP outlets by LHD is at **Appendix: Figure 28**.

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

Among respondents in the 2022 NNEDC, prevalence of receptive syringe sharing (RSS) in the past month was 17% (compared to 18% in the previous year). Factors associated with an increased risk of RSS included recent homelessness, imprisonment in the previous 12 months and daily or more frequent injection. One in four respondents (21%) reported currently being prescribed opioid agonist treatment (OAT), however this was not associated with decreased RSS.

4.3 How many units of injecting equipment are distributed by the NSP?

There are 29 primary outlets, 254 secondary outlets, and 274 Automatic Dispensing Machines (ADMs) in NSW. The number of units of injecting equipment distributed in NSW in 2022 was 14,338,864. This was a 1.9% increase in the units of injecting equipment distributed compared to 2021 (14,073,134).

Units dispensed in 2022 included:

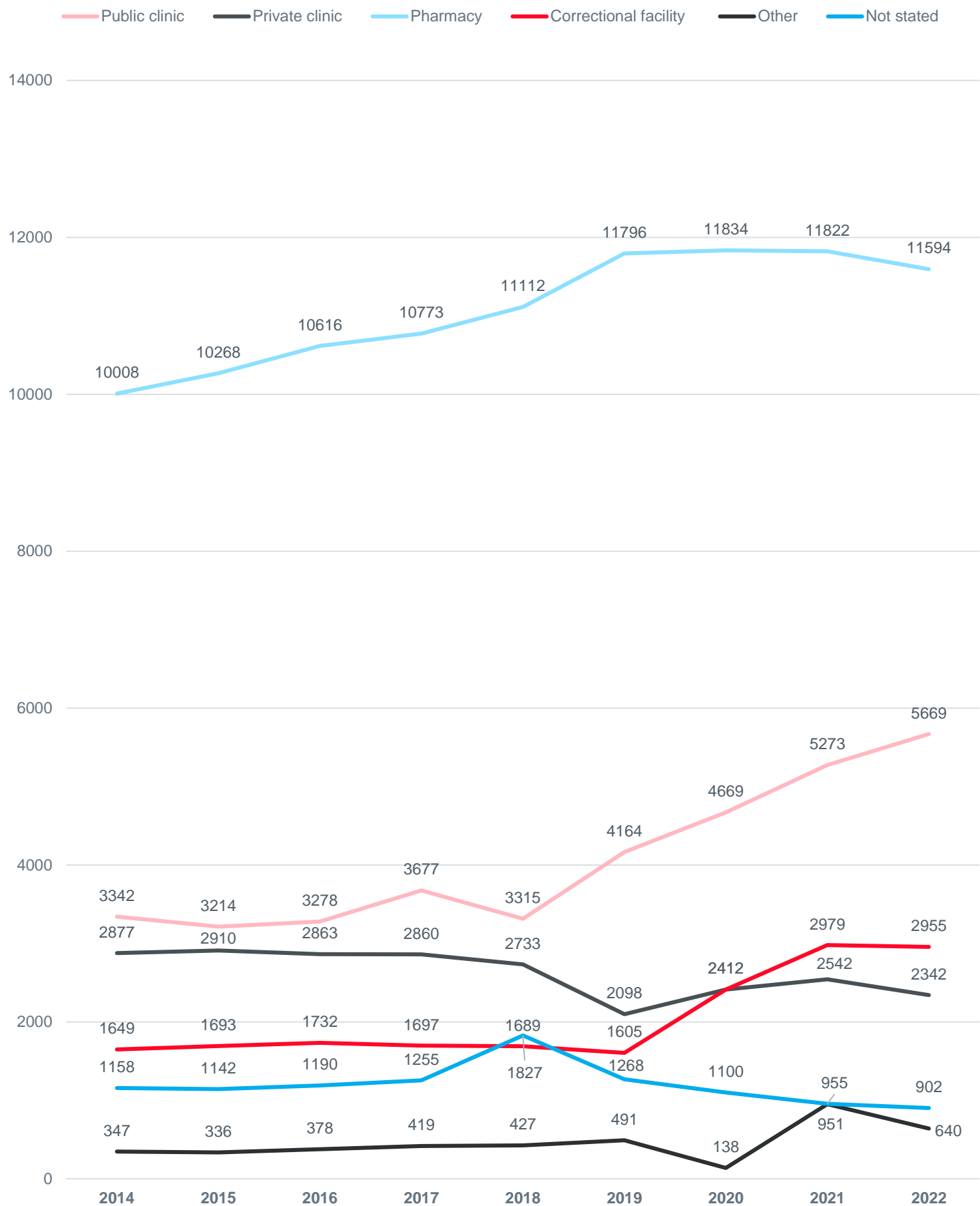
- 13,025,211 units dispensed at public outlets
- 1,313,653 units dispensed at NSW pharmacies

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: Table 6**.

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

It is essential that the NSW NSP is complemented by other initiatives such as drug and alcohol treatment programs that reduce injecting risk behaviour. Refer to Figures 14 and 15.

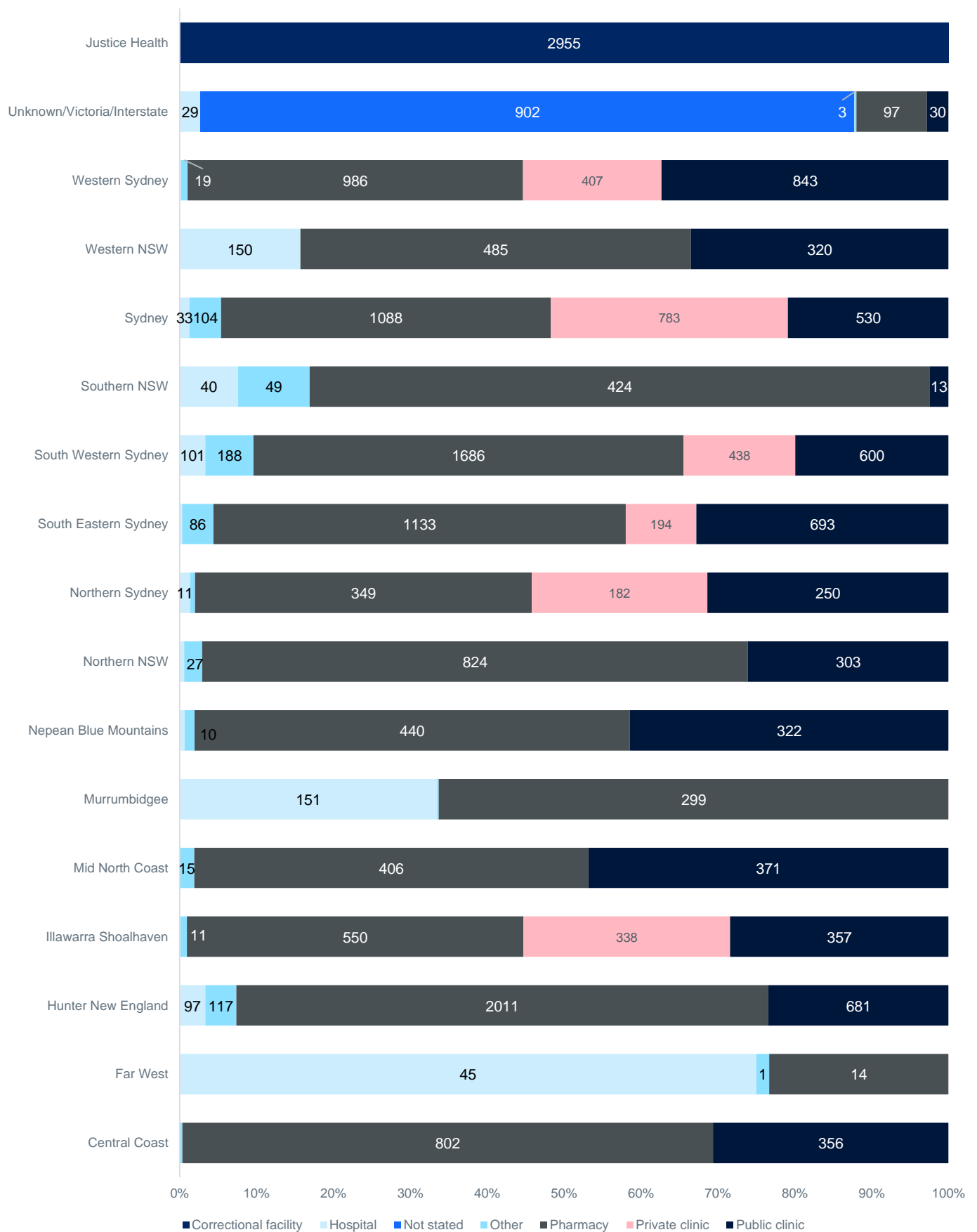
Figure 14 Number of people participating in the NSW Opioid Treatment Program (OTP), by dosing point, at 30 June 2014 – 2022



- In 2022, on a snapshot day of the program, 24,783 clients had active authorities for opioid pharmacotherapy treatment in various dosing settings (NOPSAD 2022).
- Between 30 June 2014 and 30 June 2022, community pharmacy dosing was consistently the most common dosing point.
- In 2022, over 47% of clients (11,594) received treatment at a community pharmacy; 23% of clients (5,669) received treatment at a public clinic; 12% of clients (2,955) received treatment at a correctional facility; and 9% of clients (2,342) received treatment at a private clinic. "Hospital" (681) accounts for those clients who attend a hospital to receive treatment, "Other" (902) accounts for clients dosed in community health settings, and "Not Stated" (955) accounts for clients that may have moved dosing point, but the data has not been updated with the Pharmaceutical Regulatory Unit.

Note: In 2019, a new formulation of buprenorphine was introduced in NSW known as depot buprenorphine. It is administered as a long-acting subcutaneous injection, either weekly or monthly depending on the medication dosage. To date, depot buprenorphine has been administered from specialist opioid treatment clinics, but it is now also available from general practitioners. It is anticipated that there will be increasing take-up of the new formulation over time.

Figure 15: Number of people participating in the NSW Opioid Treatment Program (OTP), by dosing point, by Local Health District, at 30 June 2022



Data source: Pharmaceutical Drugs and Addiction System (PHDAS), NSW Health up to June 2022; Electronic Recording and Reporting Controlled Drug System (ERRCD), NSW Health from October 2022.

- The highest number of people participating in the OTP was in South Western Sydney, Justice Health, Hunter New England, Sydney, Western Sydney and South Eastern Sydney LHDs.
- The highest number of people participating in the OTP through public clinics occurred in Western Sydney, South Eastern Sydney, Hunter New England, South Western Sydney, and Sydney LHDs.
- The highest number of people participating in the OTP through private clinics occurred in Sydney, South Western Sydney and Western Sydney LHDs.
- The highest number of people participating in the OTP through community pharmacies occurred in Hunter New England, South Western Sydney, South Eastern Sydney, Sydney and Western Sydney.
- Hospital dosing is usually provided as either an inpatient or outpatient service. In regional and remote LHDs like Far West, Western and Murrumbidgee, hospital dosing may be provided where no viable alternative for supervised administration is available.
- The large proportion of Not Stated dosing points for clients is due to delays in records not being updated with the Pharmaceutical Regulatory Unit, usually because prescribers do not always notify the Pharmaceutical Regulatory Unit when they change the supervised administration location of their clients.

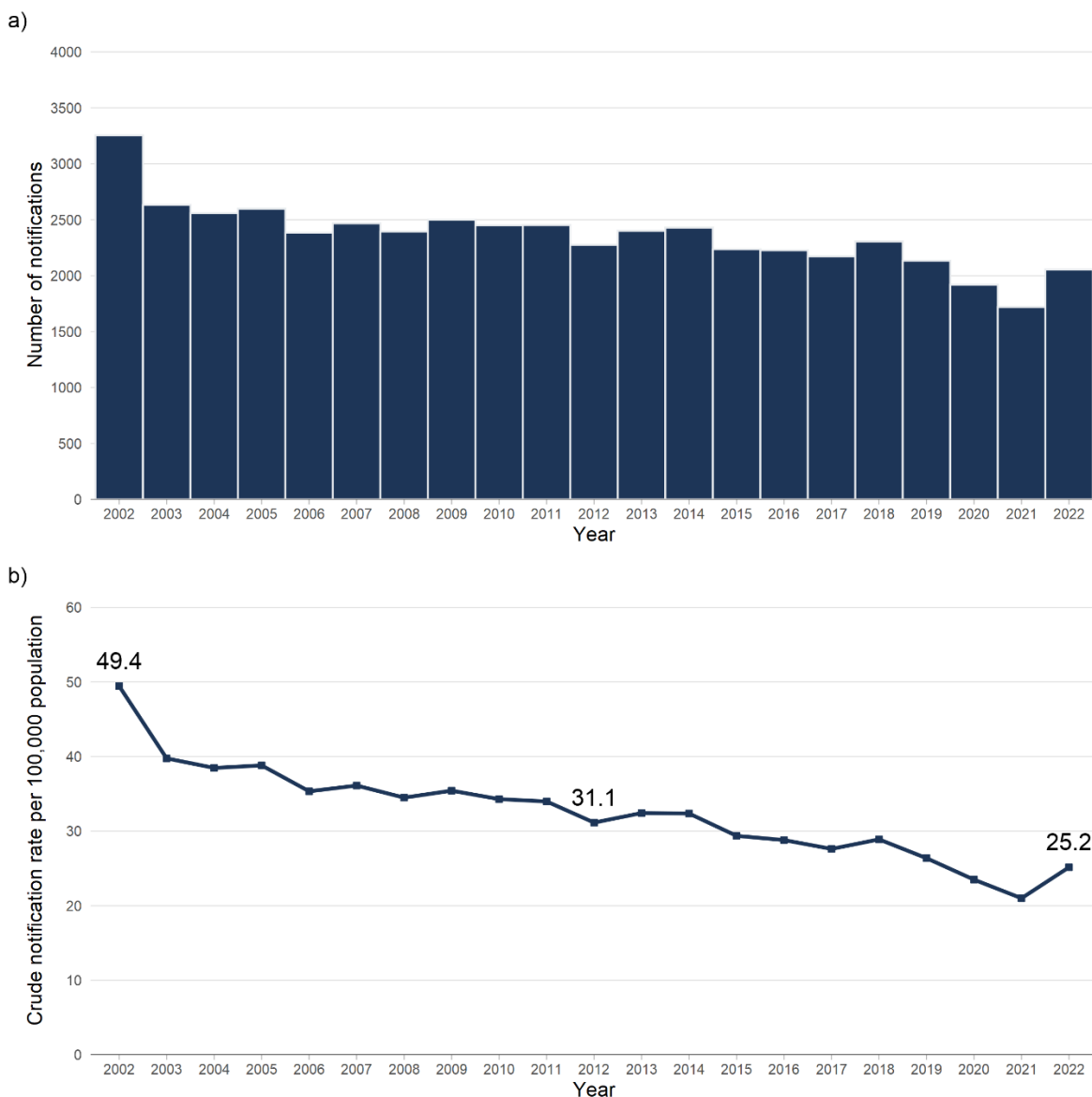
Hepatitis B

5. Notifications

Hepatitis B notification data provide limited information about the epidemiology of hepatitis B infection. This is because many infections are asymptomatic. As a result, people who are infected may never be tested, or only tested many years after infection. Laboratory reports do not distinguish between infections acquired recently and those acquired many years ago. Furthermore, variations in the number of notifications may reflect differences in testing patterns over time rather than changes in the incidence of infection.

5.1 How many diagnoses of hepatitis B are notified?

Figure 16: Number and rate of hepatitis B notifications, NSW, 2002-2022



Data source: NCIMS, NSW Health and ABS population estimates (SAPHaRI); data extracted 27 February 2023. Note: Excludes non-NSW residents. Year of notification is based on calculated onset date.

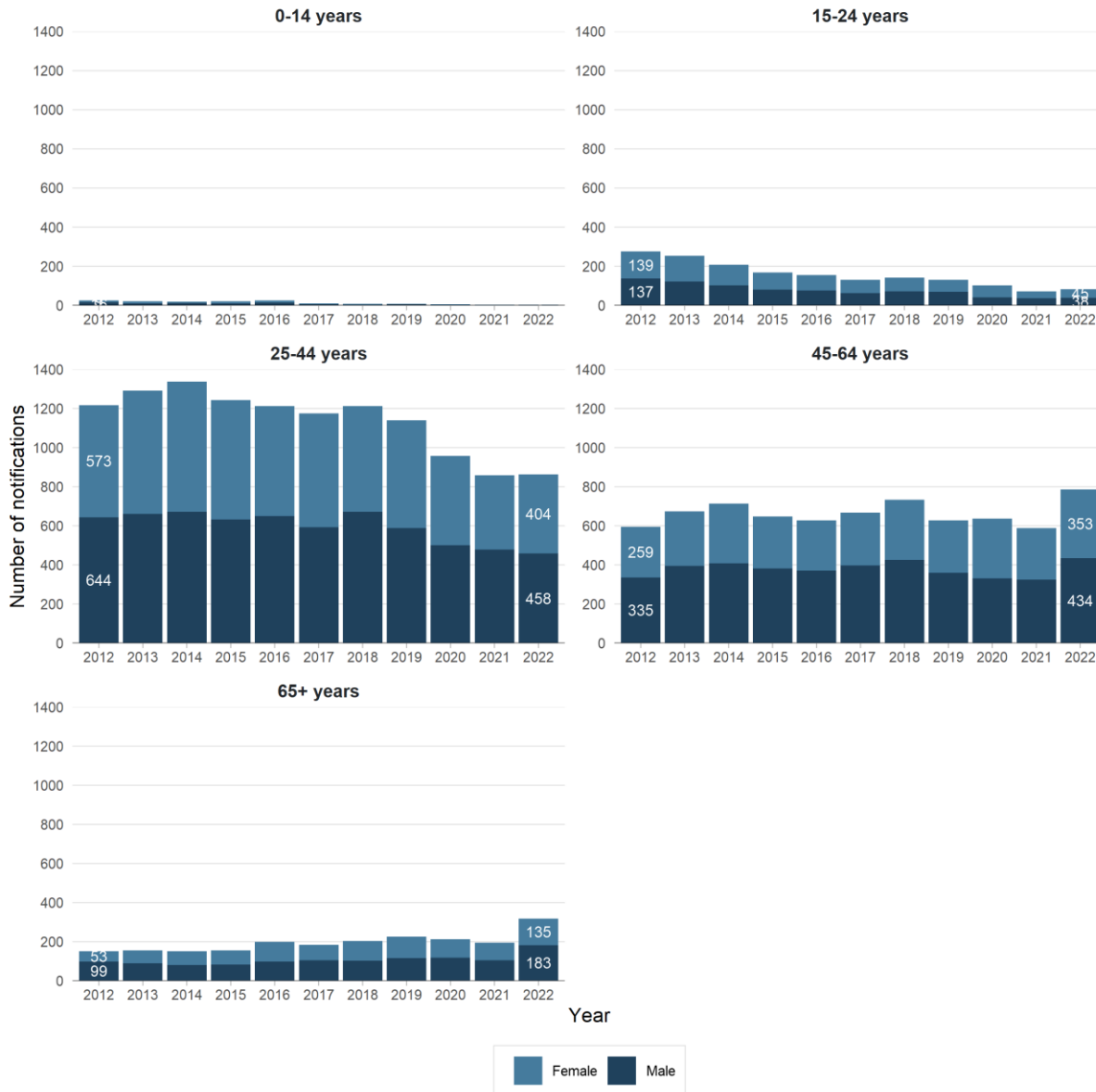
In 2022:

- There were 2,056 hepatitis B notifications in NSW residents.

- The hepatitis B notification rate has declined in NSW since 2002. In 2022, there was a 19.8% increase compared to the previous year, with 25.2 notifications per 100,000 population compared to 21.0 notifications per 100,000 population in 2021, which may reflect the opening of Australia’s international border post the COVID-19 pandemic.

5.2 Which groups are being notified?

Figure 17: Hepatitis B notifications in NSW by age group and year of diagnosis, 2012-2022

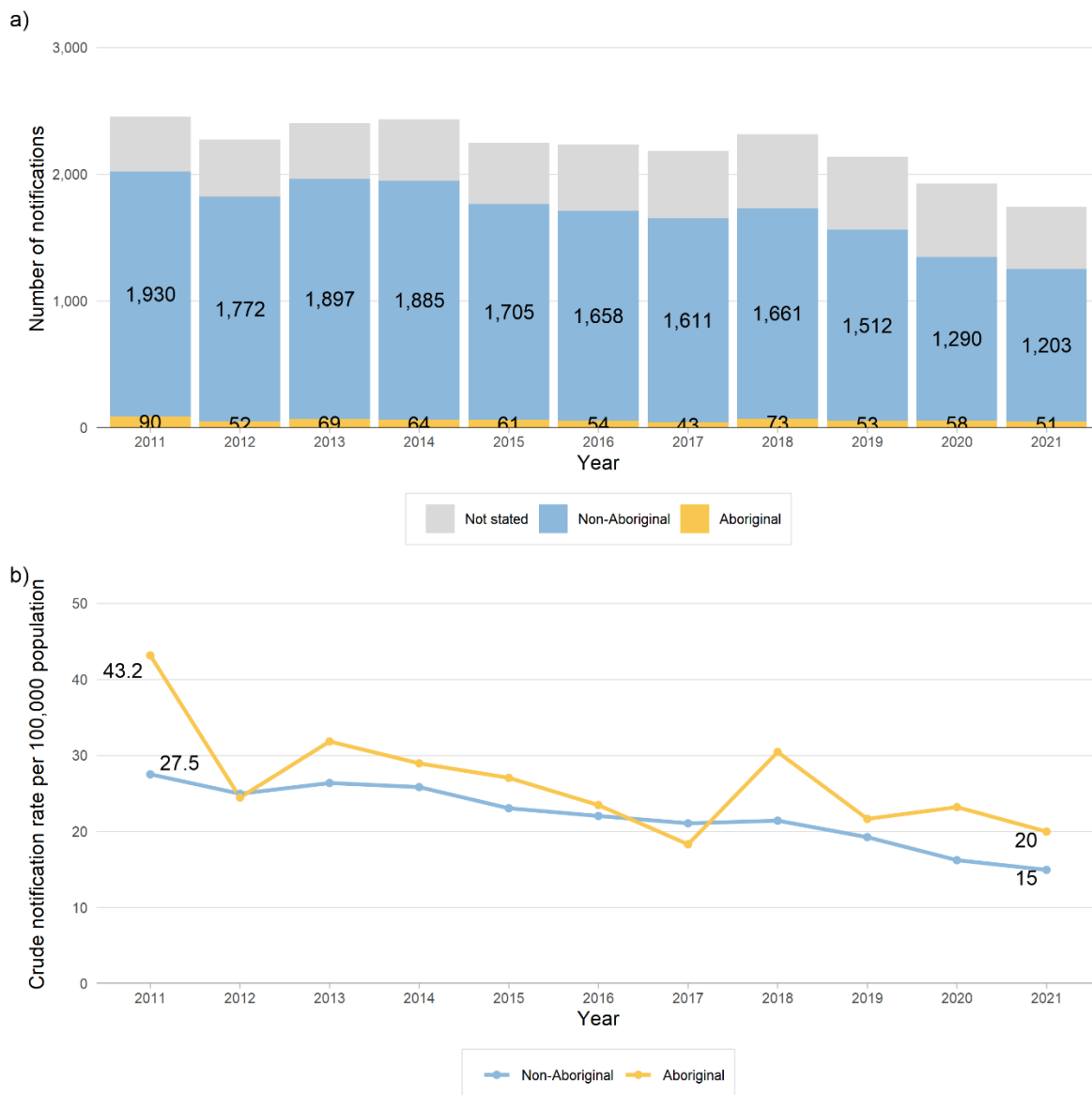


Data source: NCIMS, NSW Health; data extracted 27 February 2023. Note: Excludes non-NSW residents and persons whose age is not stated. Year of notification is based on calculated onset date.

In 2022:

- The largest number of hepatitis B notifications continued to occur among people aged 25–44 years. Notifications in this age group remained stable compared to 2021.
- Compared to 2021, notifications increased among people aged 65+ years, 45-64 years and 15-24 years by 62.2%, 34.0% and 16.9% respectively.
- A very small number of hepatitis B notifications continued to occur among people aged 0–14 years with four notifications received in 2022, one less than in 2021.

Figure 18: Hepatitis B notifications and rate by Aboriginal status, NSW, 2001-2021



Data source: Communicable Diseases Register, NSW Ministry of Health (via SAPHaRI); data extracted 27 February 2023. Note: Excludes non-NSW residents. At the time of report, data available until 2021.

- From 2011 to 2021, 24,358 notifications for hepatitis B were recorded in the Communicable Diseases Register (CDR). Of these, 668 (2.7%) were in Aboriginal people and 18,124 (74.4%) were in non-Aboriginal people. Aboriginal status was not stated for 5,566 notifications (22.9%).
- Where Aboriginal status was known, the hepatitis B notification rate in Aboriginal people was 20.0 per 100,000 population in 2021, which is 1.33 times higher than the rate in non-Aboriginal people (15 per 100,000 population).

Trends in the Aboriginal population can be difficult to interpret due to demographic factors, such as birth, deaths and migration and non-demographic factors, such as whether a person identifies as Aboriginal or for whom Aboriginal status was not known.⁷ Notification rates can also be influenced by variation in the incidence of disease, such as targeted screening programs.

⁷ Australian Bureau of Statistics. Understanding change in counts of Aboriginal and Torres Strait Islander Australians: Census [Internet]. Canberra; 2023. Available from: <https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/understanding-change-counts-aboriginal-and-torres-strait-islander-australians-census/2021>

5.3 Where are notifications occurring?

Figure 19: Hepatitis B notification rate, by Local Health District of residence, NSW, 2017-2022



Data source: NCIMS, NSW Health and ABS population estimates (SAPHaRI); data extracted 27 February 2023. Note: Excludes non-NSW residents and persons whose place of residence in NSW was not stated. Year of notification is based on calculated onset date.

In 2022:

- Western Sydney, Sydney and South Western Sydney LHDs reported the highest notification rates of hepatitis B in NSW in 2022 at 43.5, 43.1 and 42.9 notifications per 100,000 population respectively. Northern Sydney and South Eastern Sydney LHDs also had high notification rates of hepatitis B compared to regional and remote LHDs. These rates likely reflect migrant settlement patterns among people who acquired their infection at birth overseas and targeted testing in these areas.
- Among non-metropolitan LHDs, small numbers of notifications mean that rates may vary considerably year to year and changes should be interpreted with caution. In 2022, Far West had the highest notification rate among non-metropolitan LHDs with 24.7 notifications per 100,000 population; however, reflecting a total of only seven notifications received in 2022.
- The largest decreases in notification rates occurred in Southern NSW, Nepean Blue Mountains and Central Coast LHDs, with decreases of 38.0%, 25.0% and 21.2% respectively.

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 their infection at birth overseas. As hepatitis B is often asymptomatic, people may be tested many years after infection and testing patterns can vary across time and settings. Local health promotion campaigns and screening programs targeting at-risk populations can also result in increased testing and better detection rates.

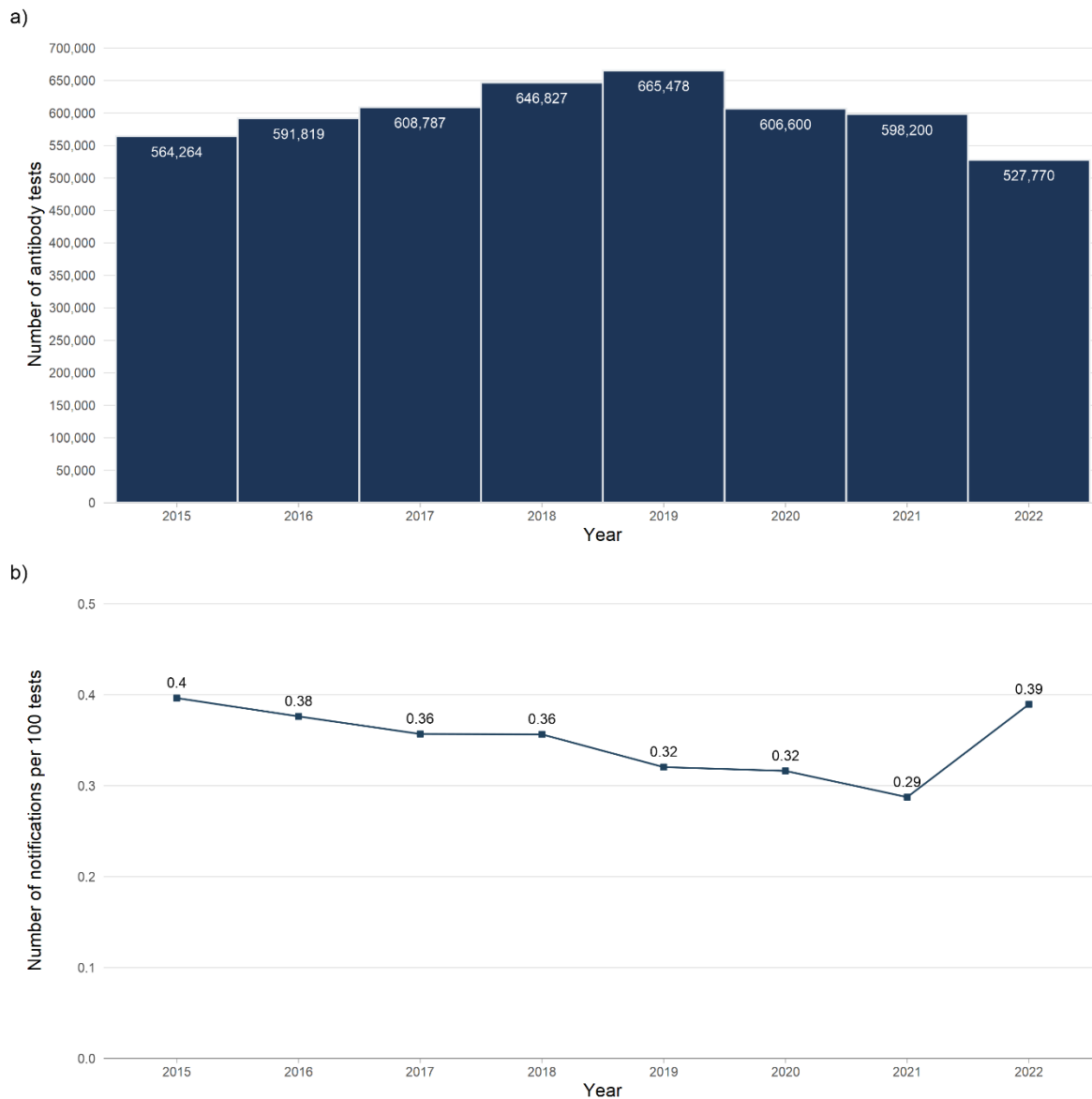
There is substantial variation in population size between LHDs. For LHDs with a smaller population, such as Far West, a small change in the number of notifications can have a large impact on the annual rate.

Notification rates have not been calculated for Justice Health as the denominator (total population) fluctuates considerably and data are available only for the annual number of incarcerations, not the number of people incarcerated.

6. Tests

6.1 Is hepatitis B testing increasing?

Figure 20: Number of tests for hepatitis B surface antigen and notification to test ratio⁸, 2015-2022



Data sources: NSW denominator data project, NSW Health; data extracted 20 February 2023.

In 2022:

- Fifteen laboratories in NSW performed 527,770 hepatitis B surface antigen tests.
- Testing decreased 11.8% from 2021 and 20.7% from the COVID-19 pre-pandemic testing peak in 2019.
- The notification to test ratio increased to 0.39, which may suggest testing was better targeted throughout the year.

⁸See **Appendix: Table 2** for more details about methodology.

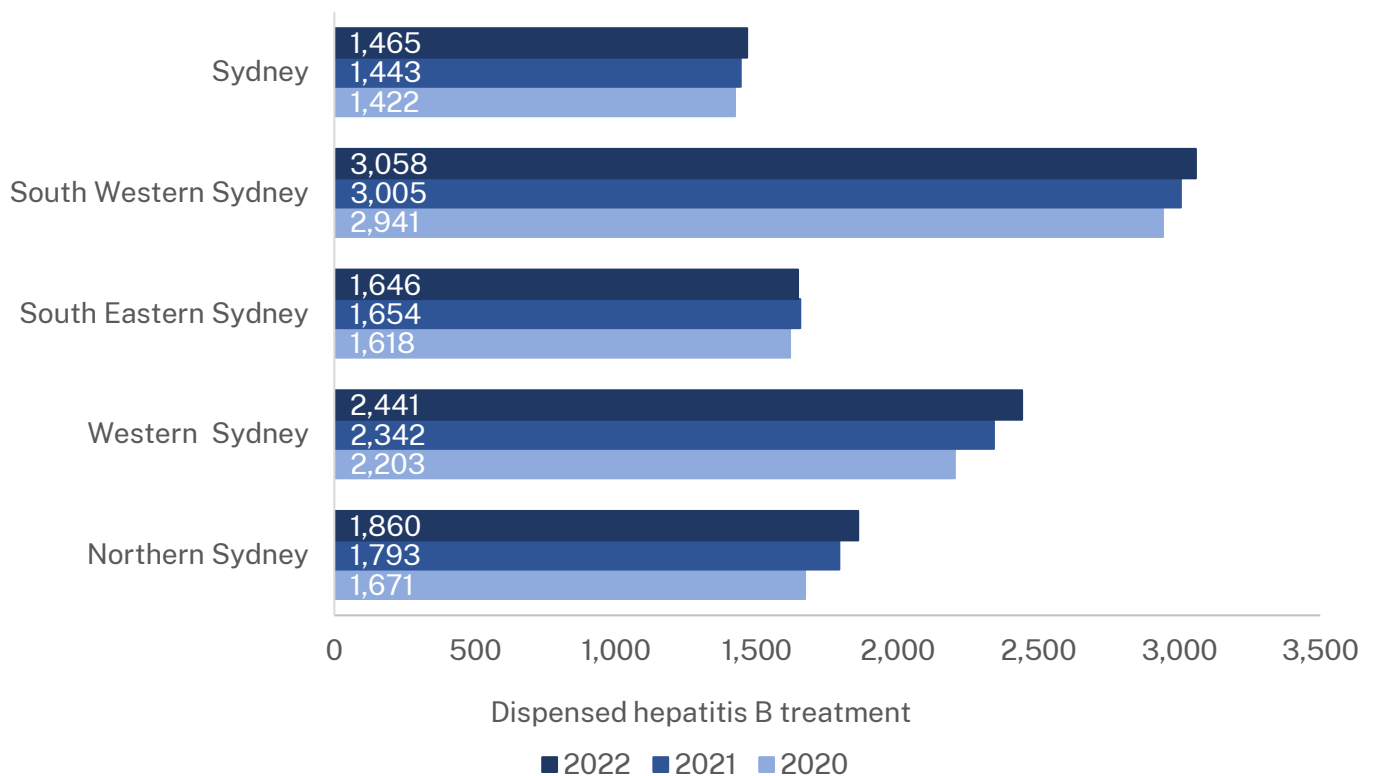
7. Treat

In 2021 there were an estimated 72,058 people living with chronic hepatitis B (CHB) in NSW⁹.

Effective treatment of hepatitis B infection is achieved through continued viral suppression. The NSW Hepatitis B Strategy 2023-2026 has a target to increase the proportion of people living with CHB who receive antiviral treatment to 20%. In 2021, NSW treatment uptake was 15.1%. Antiviral treatment uptake in NSW has increased over time.

7.1 How many people in NSW are accessing treatment?

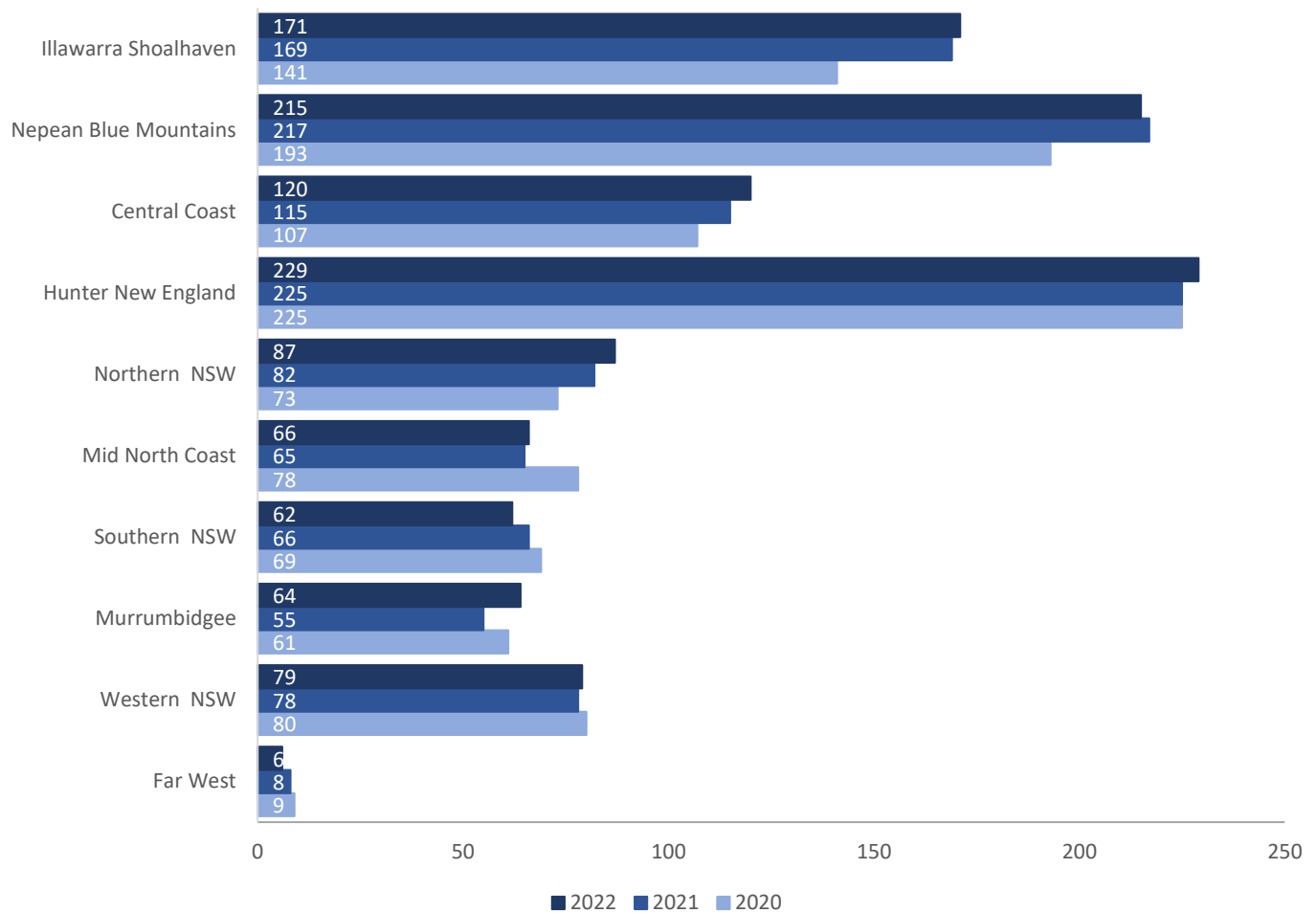
Figure 21: Number of NSW residents dispensed hepatitis B treatment in the five Local Health Districts with the highest prevalence of hepatitis B, 1 January 2020 - 31 December 2022



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data,

⁹ National Surveillance for Hepatitis B Indicators: Annual Report 2021. WHO Collaborating Centre for Viral Hepatitis, The Doherty Institute.

Figure 22: Number of NSW residents dispensed hepatitis B treatment in the ten Local Health Districts with lower prevalence of hepatitis B, 1 January 2020 - 31 December 2022



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data,
 Note: Figure 21 and 22 incorporates residents who were dispensed treatment in Justice Health settings. The number of patients dispensed via LHDs may add to a figure greater than the overall unique patients as some patients receive treatment from more than one LHDs within a year. Due to boundary changes or movements in and or out of NSW, the overall unique number of individuals presented in the above graph may differ slightly from previous reports.

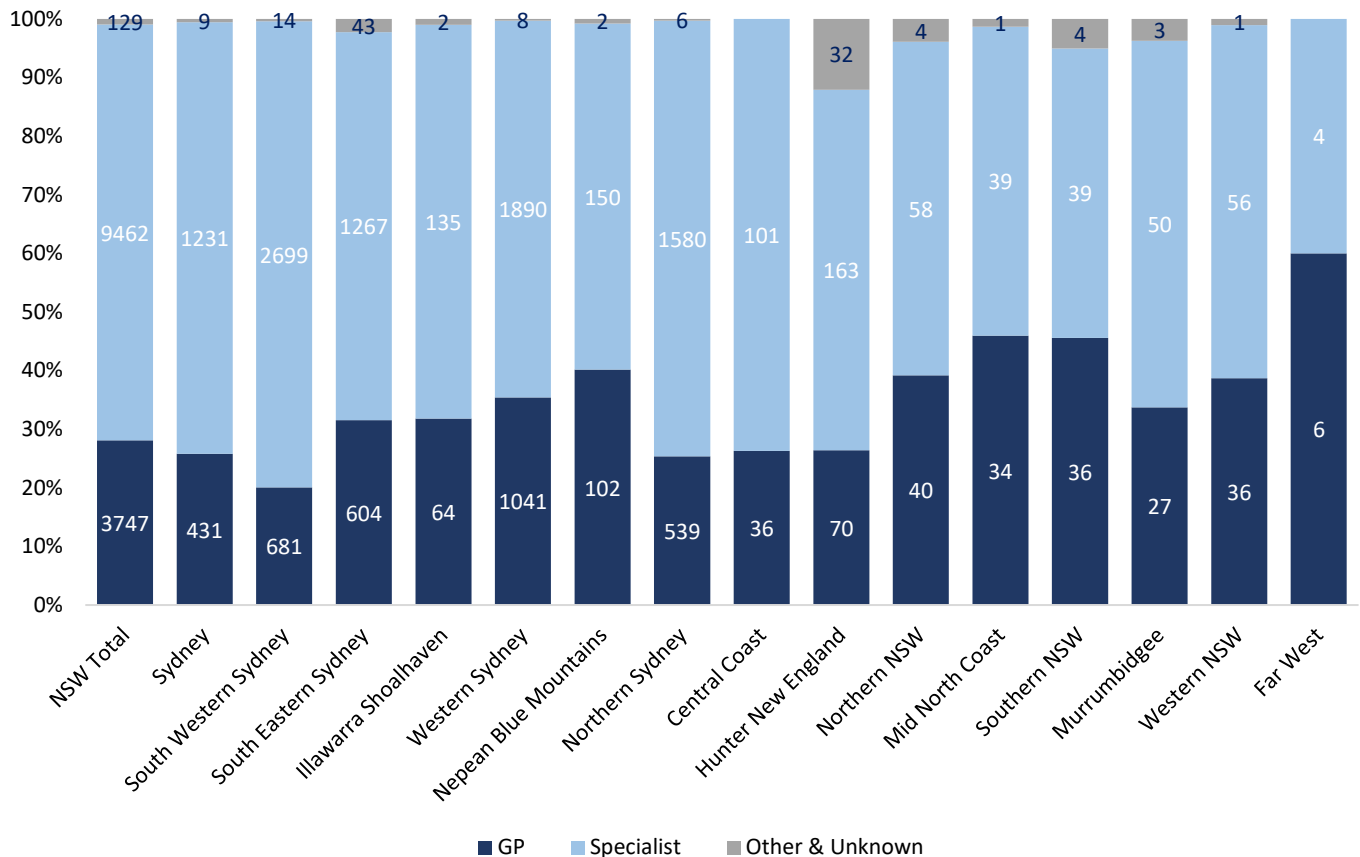
Between 1 January to 31 December 2022:

- A total of 11,397 individual NSW residents were dispensed hepatitis B treatment, which is 16% of the estimated number of people living in NSW with CHB in 2021 (72,058).
- A total of 10,470 residents in the five LHDs with the highest prevalence of hepatitis B were dispensed treatment. This accounted for 91% of the total number of residents dispensed treatment across NSW. This is an increase of 2.3% compared to 2021 (10,237) and a 6.2% increase between January and December 2020 (9,855).
- A total of 1,099 NSW residents in the ten LHDs with lower prevalence of hepatitis B were dispensed treatment. This accounted for 9% of the total number of residents dispensed treatment across NSW¹⁰. This is an increase of 2% compared to the same period in 2021 (1,080) and a 6% increase compared to 2020 (1,036).
- A total of 34 NSW residents were dispensed hepatitis B treatment in Justice Health settings compared to 32 in 2021 and 35 in 2020.

¹⁰ Overall, 11,569 NSW residents (unique number) were dispensed treatment between 1 January and 31 December 2021.

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

Figure 23: Number of NSW residents dispensed hepatitis B treatment in the Local Health Districts by prescriber type, 1 January - 31 December 2022



Data source: Pharmaceutical Benefits Schedule Highly Specialised Drugs Program data.

Note: Figure 23 incorporates residents who were dispensed treatment in Justice Health settings. The number of patients dispensed in LHDs by prescriber may add to a figure greater than the overall unique patients as some patients receive treatment from more than one type of prescriber within a year. Due to boundary changes or movements in and or out of NSW, the overall unique number of individuals presented in the above graph may differ slightly from previous reports.

Between 1 January to 31 December 2022:

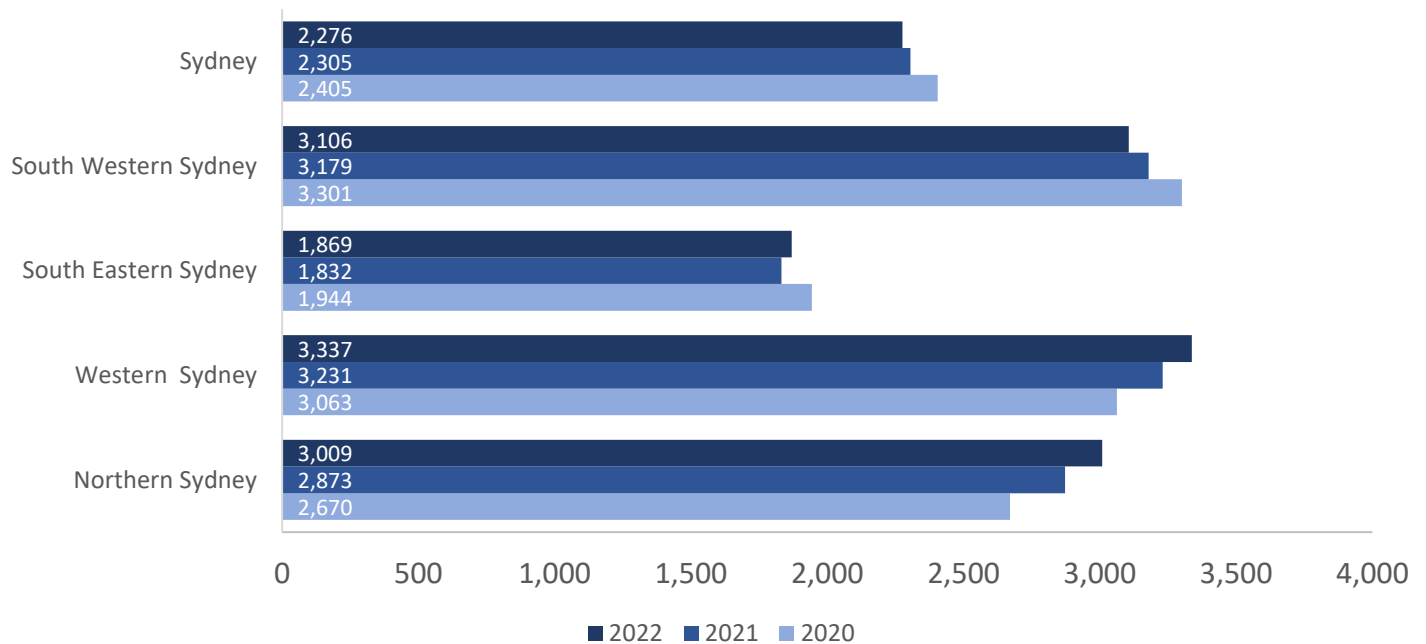
- 28% of NSW residents were prescribed hepatitis B treatment by a GP indicating an increase compared to 2021 (26%) and 2020 (25%).

8. Management

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

Chronic hepatitis B (CHB) requires lifelong management and monitoring. Six to twelve monthly clinical assessments (including viral load and liver function tests) are required¹¹. The frequency of monitoring varies according to the phase of infection, the extent of liver damage present, and the presence of other complicating factors such as co-infections, immunosuppression, and other causes of liver disease.

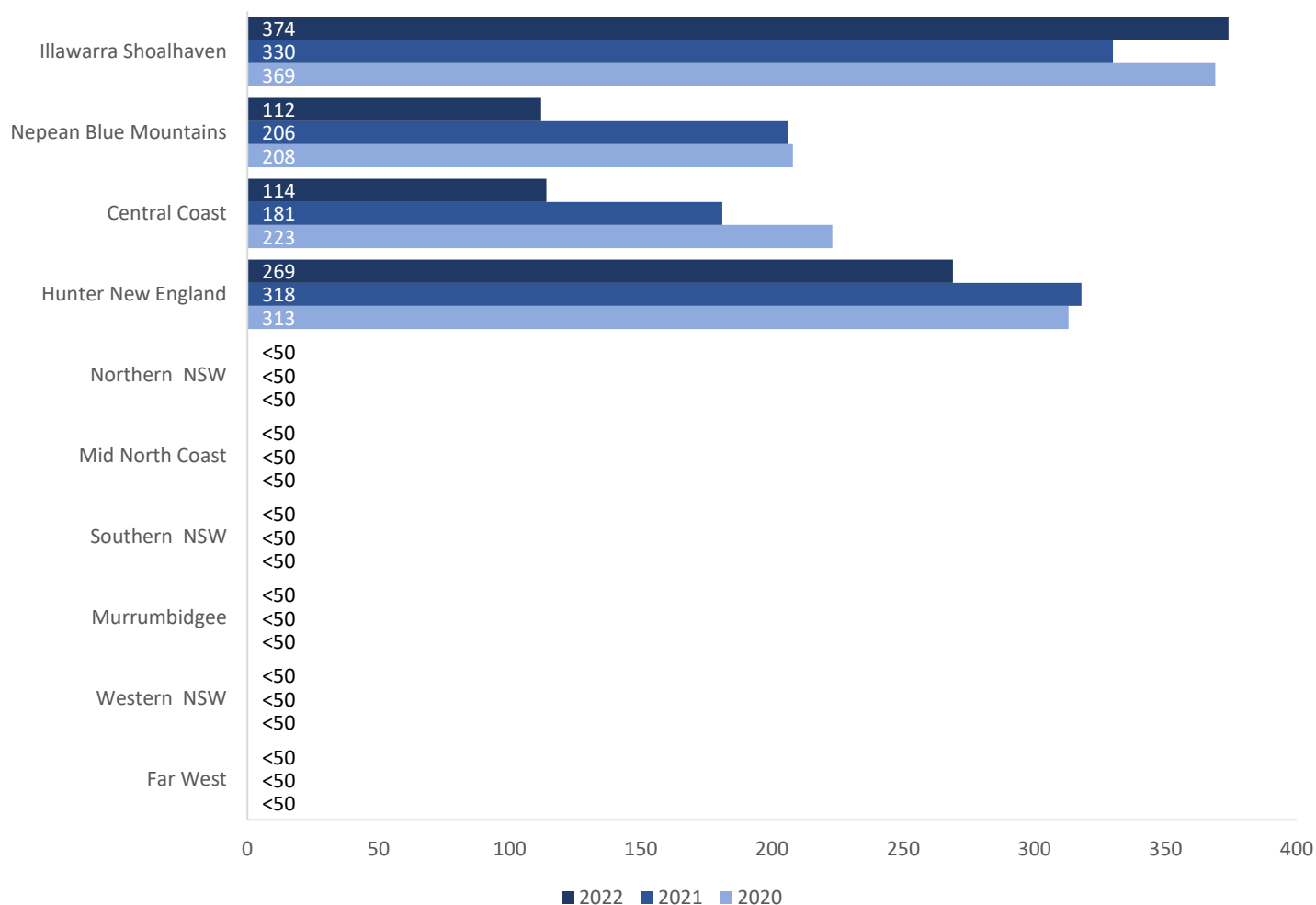
Figure 24: Number of people in the five Local Health Districts with the highest prevalence of hepatitis B with CHB and not receiving treatment who had a viral load test via Medicare, 1 January 2020 – 31 December 2022



Data source: Medicare Benefits Schedule, Department of Services Australia

¹¹ Hepatitis B viral load testing under the Medicare Benefits Schedule (MBS) is used as a surrogate for guideline-based monitoring of people living with CHB who are not receiving treatment. Annual viral load testing is covered 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.

Figure 25: Number of people in the ten Local Health Districts with lower prevalence of hepatitis B with CHB and not receiving treatment who had a viral load test via Medicare, 1 January 2020 – 31 December 2022



Data source: Medicare Benefits Schedule, Department of Services Australia

Note: Data is based on patient enrolment postcode and date of service (DOS). An annual hepatitis B viral load test (MBS item 69482) for people not on treatment is covered 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. It 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. The number of people in care is probably further underestimated using this indicator, as not all doctors who are monitoring people with chronic hepatitis B order an annual viral load test.

Between 1 January 2022 and 31 December 2022:

- In the five LHDs with the highest prevalence of hepatitis B, a total of 13,597 people with CHB not receiving treatment had an annual MBS viral load test. This remained stable compared to the same period in 2021 (13,420) and in 2020 (13,383).
- In the ten LHDs with lower prevalence of hepatitis B, a total of 1,452 people with CHB not receiving treatment had an MBS viral load test. This is 10% of the total tests (15,049) completed in NSW. Where the total number of people tested was less than 50 people, the exact testing number is not available.
- Overall, in NSW, a total of 15,049 people with CHB not receiving treatment had an annual MBS viral load test in 2022. This was stable compared to 2021 (14,854) and in 2020 (14,911).

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

Figure 26: Number of people with hepatitis B not receiving treatment in NSW who had an annual MBS viral load test (item 69482) by type of practitioner ordering the test, 1 January – 31 December 2022



Data source: Medicare Benefits Schedule, Department of Services Australia.

Note: Data suppression applied where values are <50. As a result, not all LHDs will be represented in Figure 26. Data is based on patient enrolment postcode and date of service (DOS). An annual hepatitis B viral load test (MBS item 69482) for people not on treatment is covered 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. It 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.

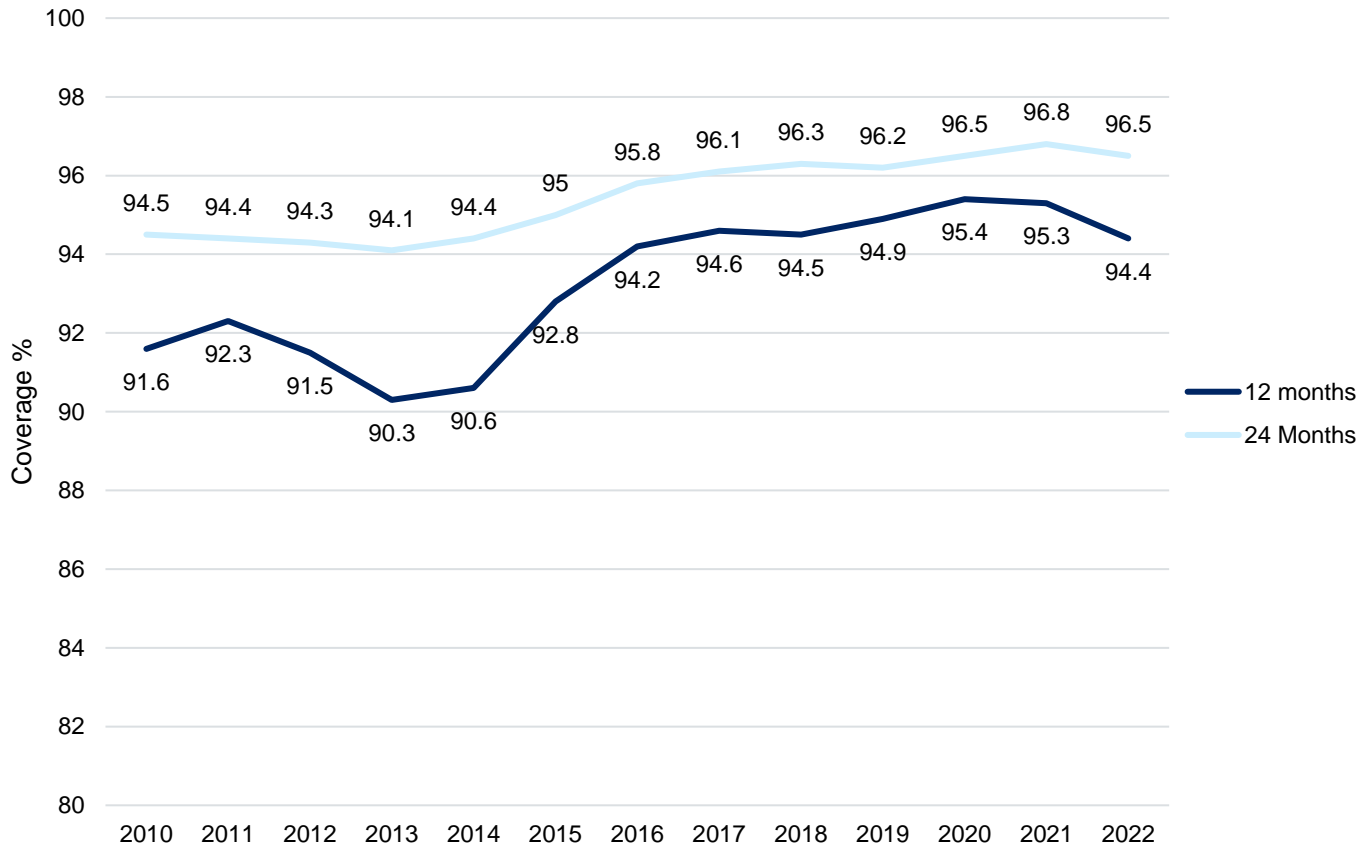
Between 1 January and 31 December 2022:

- 42% (6,384) of people with CHB not on treatment who received an MBS viral load test had their test requested by a GP, and 58% (8,665) had their test requested by a specialist.
- The proportion of viral load tests requested by a GP in 2022 increased slightly compared to the same period in 2021 (41%) and in 2020 (40%), respectively.

9. Prevent

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

Figure 27: Proportion of infants in NSW who have received 3 doses of hepatitis B vaccine (measured at 12 and 24 months of age) 2010-2022



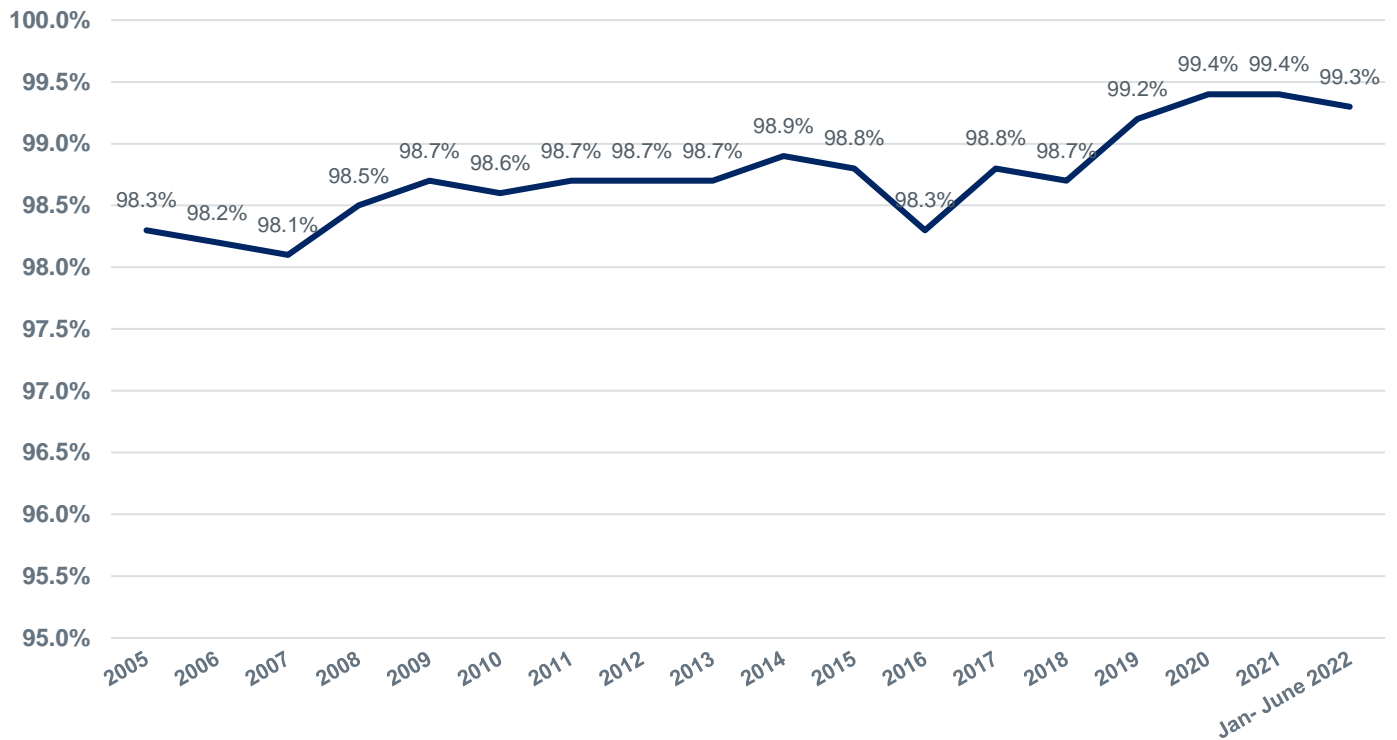
Data source: Australian Immunisation Register, Services Australia

- Hepatitis B vaccine is offered at birth, 6 weeks, 4 months and 6 months of age. Children fully vaccinated with at least three doses measured at 12 months of age in 2022 was 94.4%, compared to 95.3% in 2021.
- In 2022, 96.5% of all children in NSW were fully vaccinated against hepatitis B by 24 months of age compared to 96.8 in 2021. These rates are higher than at 12 months of age, indicating that delayed vaccination as well as underreporting¹² influence reported vaccination rates.
- Hepatitis B vaccination coverage at 12 months and 24 months of age has increased since 2014.

¹² Children overdue for immunisation: a question of coverage or reporting? An audit of the Australian Immunisation Register. *Aust NZ J Public Health* 2019; 43:214-20

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

Figure 28: Proportion of women giving birth in a public or private hospital in NSW who are screened for hepatitis B January 2005 – June 2022

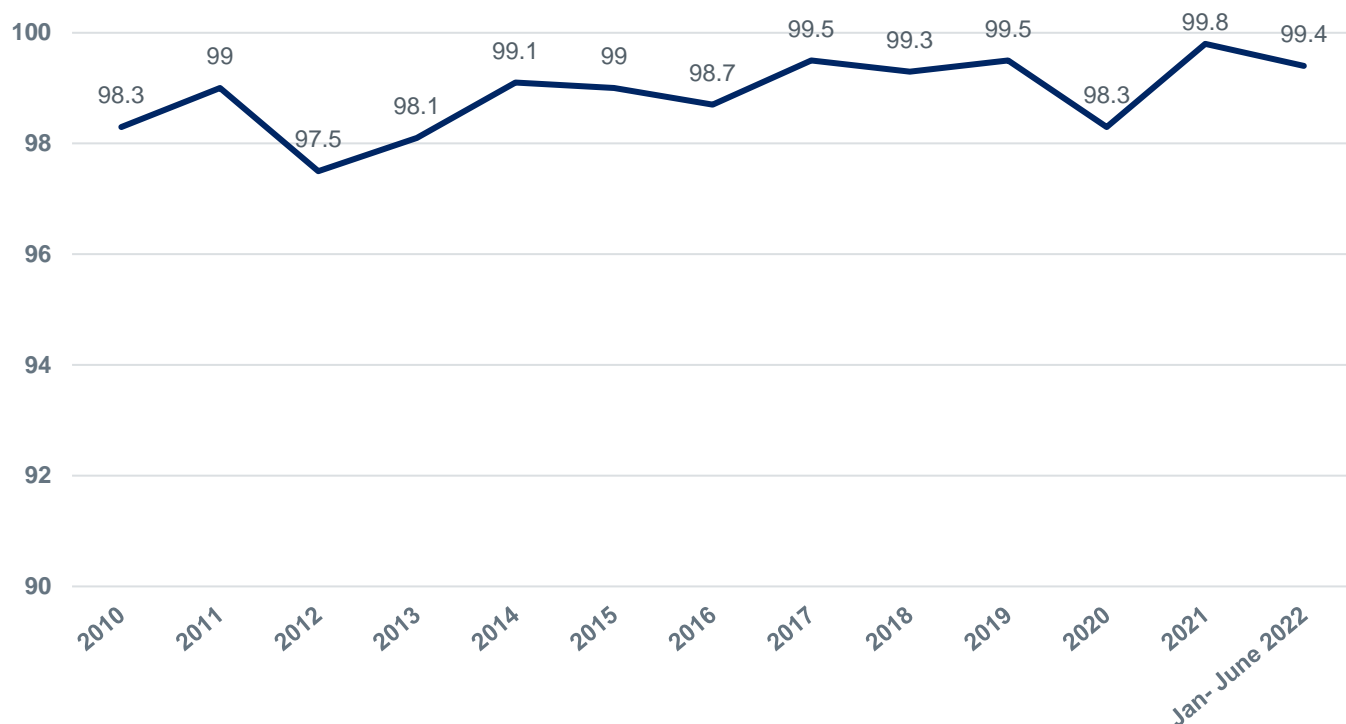


Data source: Neonatal Hepatitis B Vaccination Program Database, NSW Health

- The proportion of women giving birth in a public or private hospital in NSW screened for hepatitis B in 2021 was 99.4%. Reported screening rates from January to June 2022, (the most recent period for which data are available) indicated a slight decrease compared to 2021 at 99.3%.
- Screening rates may be underestimated due to missing data as pathology results that become available only after the time of antenatal booking are not always entered into e-Maternity.

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

Figure 29: Proportion of neonates in NSW born to hepatitis B positive mothers who received hepatitis B immunoglobulin within 12 hours of birth, January 2010 – June 2022



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

Table 1: Neonatal hepatitis B immunoglobulin administration (HBIG), January 2014 – June 2022.

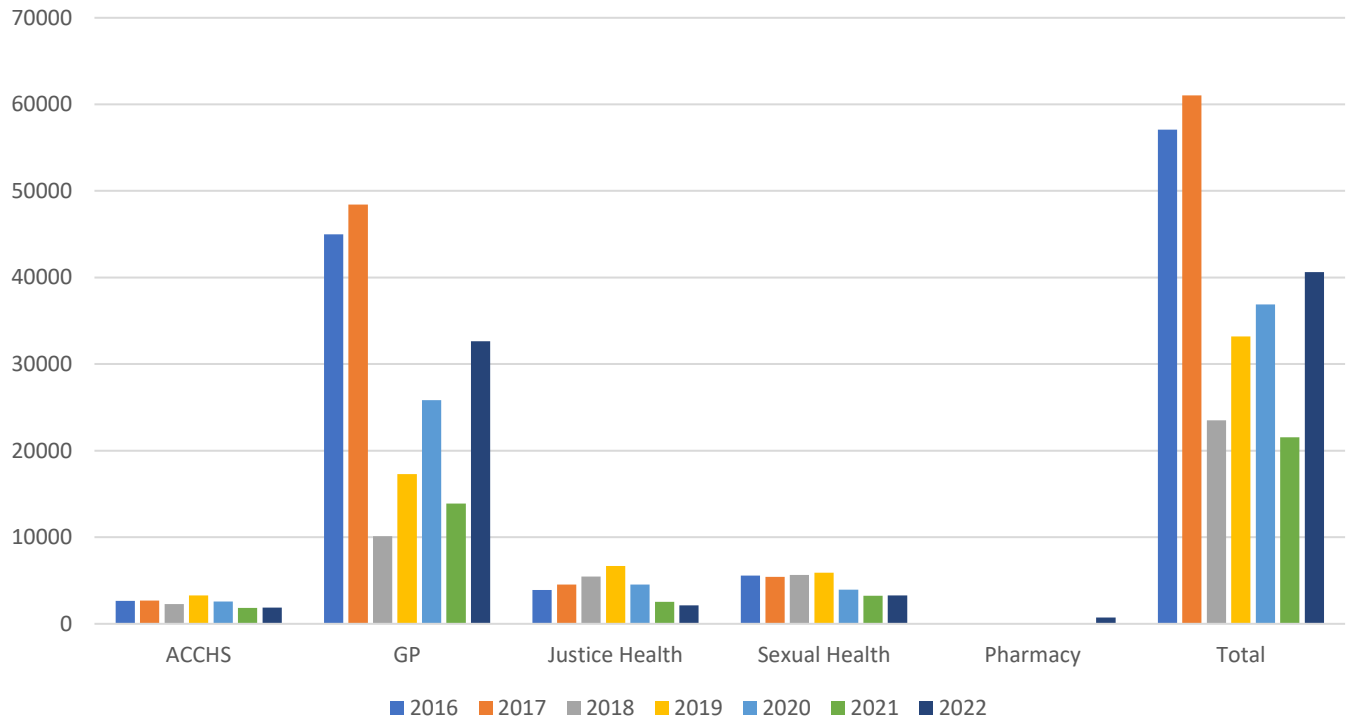
Year	No. neonates born to HbsAg+ mothers	No. neonates born to HbsAg+ mothers who received HBIG	No. neonates born to HbsAg+ mothers who received HBIG within 12 hours of birth (%)
2014	739	737	732 (99.1%)
2015	677	673	670 (99.0%)
2016	696	689	687 (98.7%)
2017	642	642	639 (99.5%)
2018	551	551	547 (99.3%)
2019	547	547	544 (99.5%)
2020	461	457	453 (98.3%)
2021	440	440	439 (99.8%)
January - June 2022	168	168	167 (99.4%)

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 received HBIG within 12 hours of birth was 99.8% in 2021 and 99.4% from January to June in 2022 (the most recent period for which data are available). Any incidents of neonates born to HBsAg+ mothers who do not receive HBIG within 12 hours of birth are reported and managed in the incident management system (IMS+).

9.4 How many doses of hepatitis B vaccine are distributed to Aboriginal Community Controlled Health Services, GPs, Justice Health, Sexual Health Clinics and Pharmacy's?

Figure 30: Number of adult doses of hepatitis B vaccine distributed to health care providers through the NSW Vaccine Centre 2016-2022



Data source: NSW Vaccine Centre Database

- NSW Health purchases adult formulation hepatitis B vaccine for immunisation of at-risk groups.
- The total number of doses of adult hepatitis B vaccine purchased by NSW Health and distributed to health care providers in NSW for at-risk groups increased from 21,536 doses in 2021 to 40,639 doses in 2022.
- In 2021, 13,904 hepatitis B vaccines were distributed to GPs. In 2022, this increased to 32,629 vaccines distributed. The increase in vaccine distribution is likely to be related to the resumption of face-to-face consultations in primary care following pandemic disruptions.
- In November 2022, NSW endorsed pharmacist immunisers to administer National Immunisation Program (NIP) and state funded vaccines. This included the administration of hepatitis B vaccines to at-risk populations. In 2022, a total of 710 hepatitis B vaccines were distributed to pharmacist immunisers.

Appendix

Table 2: Number of hepatitis B and hepatitis C notifications by gender and age group, NSW, 2022

Age Group (years)	Hepatitis B				Hepatitis C (excluding Justice Health)				Hepatitis C (Justice Health only)			
	Male	Female	Other / Not stated	Total	Male	Female	Other / Not stated	Total	Male	Female	Other / Not stated	Total
00-04	0	2	0	2	4	3	0	7	0	0	0	0
05-09	0	1	0	1	0	0	0	0	0	0	0	0
10-14	1	0	0	1	0	1	0	1	0	0	0	0
15-19	7	14	0	21	9	11	0	20	8	2	0	10
20-24	31	31	0	62	70	36	0	106	57	10	0	67
25-29	62	59	0	121	117	43	0	160	62	6	0	68
30-34	131	106	0	237	141	69	0	210	38	9	0	47
35-39	143	125	1	269	132	64	0	196	42	4	0	46
40-44	122	114	0	236	184	65	1	250	32	2	0	34
45-49	117	94	1	212	138	55	0	193	18	2	0	20
50-54	104	92	0	196	141	71	1	213	12	1	0	13
55-59	112	71	0	183	147	75	1	223	5	1	0	6
60-64	101	96	0	197	136	89	0	225	1	0	0	1
65-69	80	69	0	149	91	37	0	128	1	0	0	1
70-74	57	28	0	85	40	36	0	76	0	0	0	0
75-79	22	20	0	42	21	15	0	36	0	0	0	0
80-84	15	7	0	22	6	5	0	11	0	0	0	0
85+	9	11	0	20	5	12	0	17	0	0	0	0
Not stated	0	0	0	0	1	1	4	6	0	0	1	1
Total	1,114	940	2	2,056	1,383	688	7	2,078	276	37	1	314

Data source: NCIMS, NSW Health; data extracted 27 February 2023.

Note: Excludes non-NSW residents. Year of notification is based on calculated onset date. Data are provisional and subject to change.

Table 3: Number of hepatitis B and hepatitis C notifications by LHD of residence, NSW, 2017-2022

Local Health District	Hepatitis B						Hepatitis C					
	2017	2018	2019	2020	2021	2022	2017	2018	2019	2020	2021	2022
Central Coast	33	27	33	23	24	19	166	125	116	85	82	80
Far West	6	4	5	7	7	7	38	27	20	28	29	21
Hunter New England	74	74	60	60	64	56	434	382	284	287	258	294
Illawarra Shoalhaven	41	43	36	39	28	43	162	146	116	120	81	97
Justice Health	21	43	51	35	23	25	501	579	659	587	399	314
Mid North Coast	24	17	15	15	20	24	126	125	122	104	104	119
Murrumbidgee	19	31	31	26	31	31	155	160	149	124	97	79
Nepean Blue Mountains	46	55	50	39	44	33	210	208	112	118	87	86
Northern NSW	21	22	14	18	18	24	243	182	199	143	136	106
Northern Sydney	277	291	341	272	237	278	134	133	134	85	98	87
NSW not otherwise specified	9	3	1	5	4	6	33	31	11	16	17	19
South Eastern Sydney	344	351	298	285	218	259	332	267	268	216	194	180
South Western Sydney	410	406	367	330	360	452	350	341	299	273	245	240
Southern NSW	15	14	18	20	24	15	130	71	70	72	53	50
Sydney	321	339	306	277	259	299	297	241	228	198	166	185
Western NSW	27	38	25	23	28	30	220	192	144	132	130	109
Western Sydney	485	548	482	445	331	455	343	301	300	316	294	326
Total	2,173	2,306	2,133	1,919	1,720	2,056	3,874	3,511	3,231	2,904	2,470	2,392

Data source: NCIMS, NSW Health; data extracted 27 February 2023.

Note: Excludes non-NSW residents. Year of notification is based on calculated onset date. Data are provisional and subject to change.

Table 4: Number of hepatitis C DBS registrations by LHD and quarter from 1 January to 31 December 2022

Local Health District	Q1 2022	Q2 2022	Q3 2022	Q4 2022	2022 Total
Central Coast	3	62	21	6	92
Far West			3		3
Hunter New England	9	128	65	9	211
Illawarra Shoalhaven	8	99	29	14	150
Justice Health	114	517	595	672	1898
Mid North Coast	48	63	57	46	214
Murrumbidgee	4	6	45	4	59
Nepean Blue Mountains	83	129	73	77	362
Northern NSW	104	110	129	80	423
Northern Sydney	49	94	60	58	261
South Eastern Sydney*	133	195	436	183	947
South Western Sydney	126	236	201	215	778
Southern NSW	2	5	7	8	22
Sydney	89	110	211	152	562
Western NSW	22	12	28	7	69
Western Sydney	92	102	46	24	264

* South Eastern Sydney LHD results may include some data generated by the St Vincent's Health Network.

Table 5: Number of hepatitis C DBS tests by LHD and quarter from 1 January to 31 December 2022

Local Health District	Q1 2022	Q2 2022	Q3 2022	Q4 2022	2022 Total
Central Coast	2	49	27	3	81
Far West	1		3		4
Hunter New England	4	122	53	8	187
Illawarra Shoalhaven	9	91	29	14	143
Justice Health	100	517	531	437	1585
Mid North Coast	47	56	58	47	208
Murrumbidgee	4	2	41	5	52
Nepean Blue Mountains	45	149	74	71	339
Northern NSW	98	92	150	60	400
Northern Sydney	36	95	50	55	236
South Eastern Sydney	112	156	405	172	845
South Western Sydney	119	224	191	150	684
Southern NSW		3	7	8	18
Sydney	64	87	197	150	498
Western NSW	15	11	28	8	62
Western Sydney	61	113	39	14	227

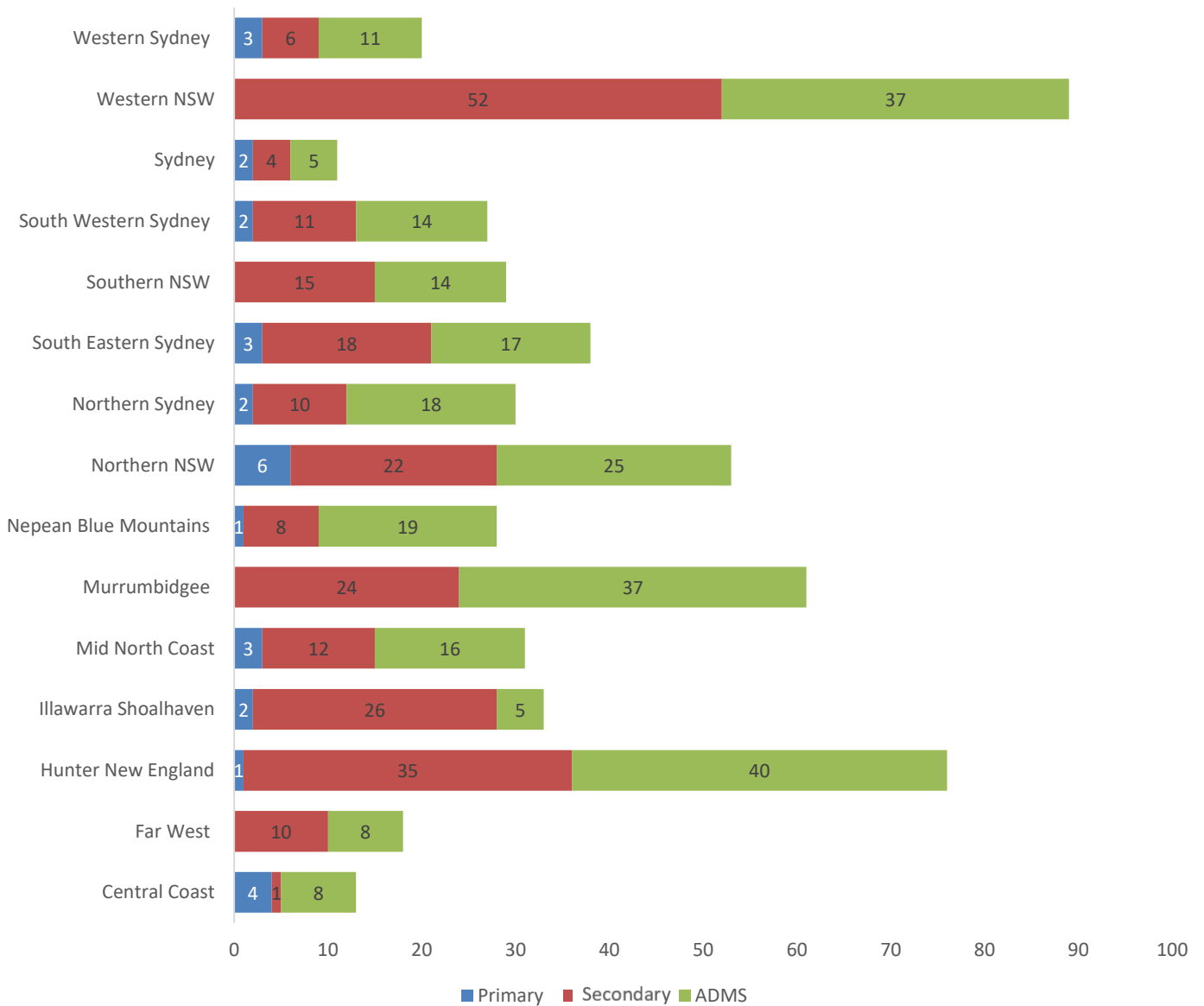
* South Eastern Sydney LHD results may include some data generated by the St Vincent's Health Network.

Table 6: Number of units of injecting equipment distributed by LHD in 1 January – 31 December 2022

Local Health District	Public	Pharmacy
Hunter New England	2,079,776	301,500
Sydney	1,470,396	275,516
South Western Sydney	1,167,465	359,299
Western Sydney	931,308	106,113
South Eastern Sydney	1,143,868	131,142
Western NSW	847,810	3,754
Illawarra Shoalhaven	714,340	32,950
Central Coast	683,997	14,359
Nepean Blue Mountains	679,322	17,816
Northern NSW	547,500	1,818
Murrumbidgee	452,585	8,800
Mid North Coast	510,608	34,023
Northern Sydney	488,661	18,355
Southern NSW	259,730	8,208
Far West	125,695	0
Total	12,103,061	1,313,653
Number of units of injecting equipment distributed by NGOs 1 January – 31 December 2022		
NUAA	640,129	-
ACON	282,021	-
Uniting MSIC	33,639	-
Total	955,789	-

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

Figure 31: Number and proportion of public NSW NSP outlets by type, by Local Health District, 31 June 2021



Data source: LHD NSP Services. Data extracted 31 June 2021.

- As of June 2021, there are 29 primary outlets, 254 secondary outlets, and 274 ADMs in NSW.

Table 7: 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 an Enhanced Reporting of Aboriginality (ERA) variable created using a weight of evidence for each person to correct for the under reporting of Aboriginality on administrative health data. Record linkage was carried out by the Centre for Health Record Linkage (www.cherel.org.au), NSW Ministry of Health. Data are currently available to the end of 2021.</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>



