

Population health

2022-2024 Needs Assessment
2022 Annual Review

In this document we have used the terms Aboriginal, Aboriginal person and Aboriginal people/s when referring to Aboriginal and Torres Strait Islander peoples. We chose Aboriginal because it is inclusive of different language groups and areas within the CESPHN region where this Needs Assessment will be used. There will be some instances where the terminology will be different to our preferred terms, as we use the terminology of the data set being used.

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Health status

Life expectancy

During 2017-19, life expectancy at birth for those living in the CESPHN region (84.7 years) was higher than both the NSW (82.8 years) and national average (82.9 years). Females in the CESPHN region had a higher life expectancy than males (86.8 years compared to 82.8 years).(1)

Table 1: Life expectancy by gender, 2017-2019

Region	Female	Male	Total
CESPHN	86.8	82.8	84.7
NSW	85.0	80.7	82.8
National	85.0	80.9	82.9

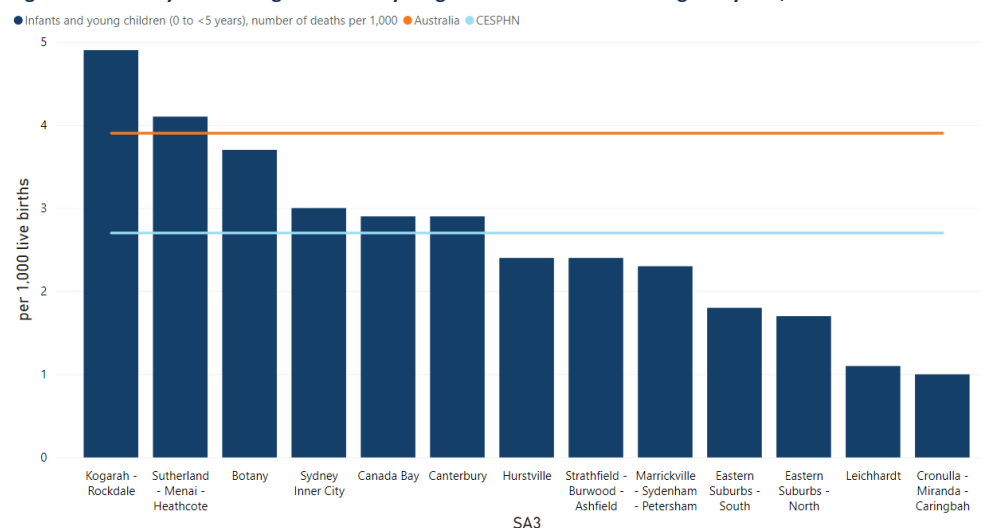
Source: AIHW 2019

Infant and young child mortality

The 2014-2016 mortality rate for infants and young children aged less than 5 years was lower in the CESPHN region (2.7 deaths per 1,000 live births) compared to the national rate (3.9 deaths per 1,000 live births).(2)

Kogarah-Rockdale (4.9 per 1,000 live births) and Sutherland-Menai-Heathcote (4.1 per 1,000 live births) had the highest mortality rates of infant and young children in the region.(2)

Figure 1: Mortality rate among infants and young children in the CESPHN region by SA3, 2014-2016



Source: AIHW 2018

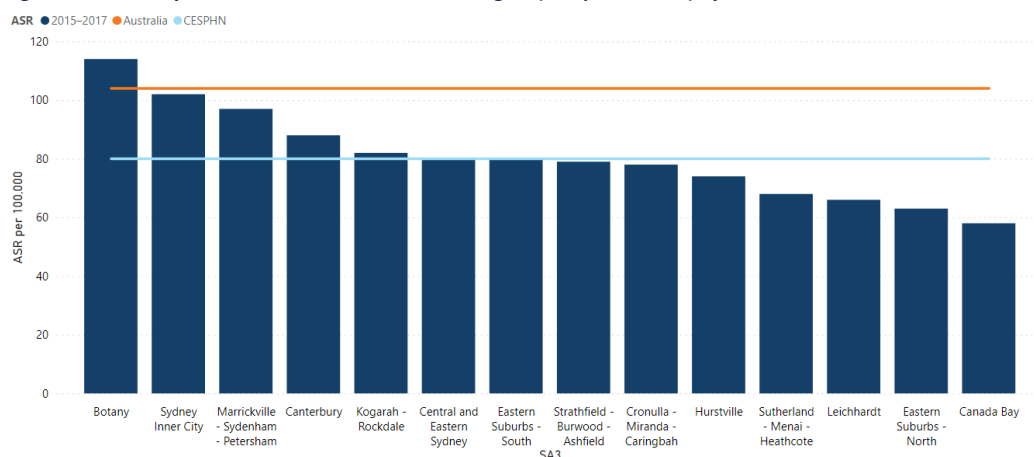
Potentially avoidable deaths

Potentially avoidable deaths are deaths below the age of 75 years from conditions that are potentially preventable through primary or hospital care.

In 2017-2019, the age-standardised rate (ASR) of potentially avoidable deaths in the CESP HN region (78.4 per 100,000 people) was lower than both the NSW (100.2 per 100,000) and national rates (104.2 per 100,000 people). The rate for males (103.7 per 100,000 people) was much higher than the rate for females (53.9 per 100,000 people) in the CESP HN region.(1)

In 2015-2017, Botany (114.3 per 100,000 people) had the highest rate of potentially avoidable deaths. Most SA3s have seen the same national downward trend in potentially avoidable deaths, except for Canterbury which has seen an increase over time.

Figure 2: Potentially avoidable deaths in the CESP HN region (ASR per 100,000) by SA3, 2015-2017



Source: AIHW 2019

Premature mortality

Premature mortality refers to deaths that occur among people aged under 75 years. In 2016-2020, premature mortality rates in the CESP HN region (188.5 per 100,000 people) were lower than both NSW (235.1 per 100,000 people) and national rates (236.1 per 100,000 people).(3)

The male rate (236.3 per 100,000 people) was much higher than the female rate (140.7 per 100,000 people) in the CESP HN region. Botany (226.4 per 100,000 people) had the highest rate of all SA3s for both genders.(3)

The three highest causes of premature mortality were from cancer (82.6 per 100,000), circulatory system diseases (32.4 per 100,000) and external causes (20.3 per 100,000). (3). Canterbury has higher premature mortality rates for circulatory disease (45.6 per 100,000), ischaemic heart disease (21.8 per 100,000) and cerebrovascular disease (7.0 per 100,000) than state and national rates.

Table 2: Premature mortality per 100,000 people by cause by SA3, 2014-2018

SA3	Cancer	Cerebrovascular disease	Circulatory disease	COPD	Diabetes	External causes	Ischaemic heart disease	Respiratory system disease	Road traffic	Suicide
Botany	96.8	7.0	39.7	13.0	7.0	23.7	19.5	18.9	3.1	8.5
Canada Bay	70.5	5.4	25.9	3.5	3.2	17.6	9.4	6.3	2.3	7.4
Canterbury	83.1	9.3	45.6	6.0	5.6	18.9	21.8	12.6	2.1	5.5
Cronulla - Miranda - Caringbah	79.6	6.1	27.7	3.3	3.9	21.2	13.1	8.1	..	9.0
Eastern Suburbs - North	69.8	5.3	21.6	2.7	1.7	18.8	10.3	6.4	2.1	8.4
Eastern Suburbs - South	86.2	8.6	36.1	6.3	3.2	22.5	16.5	11.0	1.2	8.8
Hurstville	82.0	6.6	29.2	4.9	5.6	16.0	12.5	11.2	1.8	7.1
Kogarah - Rockdale	86.9	7.8	33.6	5.5	7.3	17.8	14.1	9.7	1.8	6.6
Leichhardt	86.1	6.3	29.7	6.2	5.6	19.3	12.1	12.1	1.8	8.7
Marrickville - Sydenham - Petersham	85.7	8.8	40.2	6.1	9.7	22.9	14.5	13.7	1.7	9.8
Strathfield - Burwood - Ashfield	81.3	7.9	33.3	6.4	2.7	20.1	15.4	13.5	1.2	7.2
Sutherland - Menai - Heathcote	85.7	5.6	28.4	5.8	5.8	20.1	13.5	11.6	2.9	8.6
Sydney Inner City	87.9	7.2	35.8	11.0	3.9	30.1	16.3	16.2	0.9	11.6
CESPHN	82.6	7.1	32.4	6.0	4.6	21.3	14.5	11.3	1.6	8.4
NSW	97.7	8.1	41.7	10.2	7.0	27.2	19.6	16.7	3.8	11.1
Australia	97.1	7.8	42.3	9.7	6.8	30.3	21.4	15.9	4.3	12.6

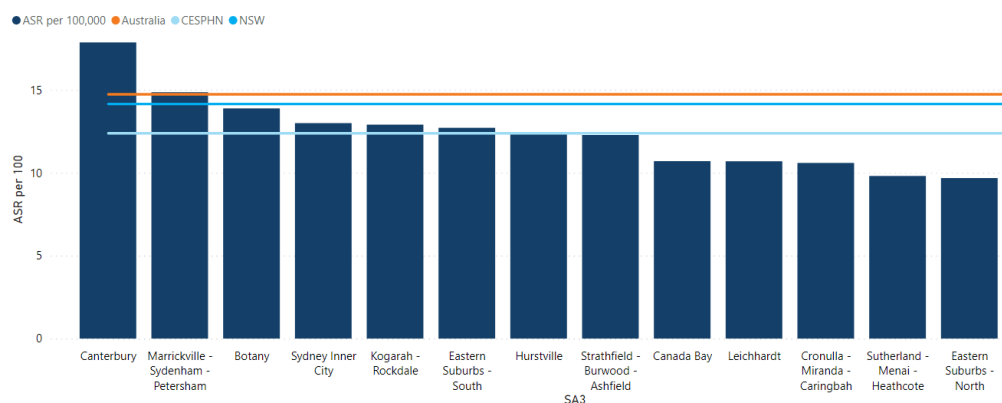
Source: PHIDU 2022

Self-assessed health status

In 2017-18, a lower percentage of people living in the CESPHN region (12.4%) reported fair or poor health compared to the NSW (14.1%) and national average (14.7%).(4)

While the CESPHN region is doing well in measures of health status, this is not uniform across all populations. PHIDU modelled estimates of self-reported health status from 2017-18 show Canterbury (17.9 per 100 people) had the highest rate of fair or poor self-assessed health in the region.(4)

Figure 3: Number of people aged 15 years and over with fair or poor self-assessed health in the CESP HN region (ASR per 100) by SA3, 2017-2018



Source: PHIDU 2021

Psychological distress

In 2017-2018, the rate of people experiencing high or very high psychological distress in the CESP HN region (10.4 ASR per 100 people) was lower than the NSW (12.4 ASR per 100) and national rate (12.9 ASR per 100).(4) Please refer to Mental Health report for further analysis.

Chronic disease

Cancer incidence

In 2018, there was a total of 7,453 new cases for all cancers in the CESP HN region. Incidence was higher in males (544.5 ASR per 100,000 males) than females (423.9 ASR per 100,000 females). In terms of number of cases, the 60–69-year age group had the highest number (1,967). However, the 80+ year age group had the highest rate (2,537.7 ASR per 100,000 persons).(5)

Table 4: Incidence of Cancer in the CESP HN region by age group, 2014-2018

Age group	Number of cases	ASR per 100,000
0-49	1,532	109.1
50-59	1,263	701.9
60-69	1,967	1440.9
70-79	1,873	2,189.5
80+	1,511	2,537.7

Source: Cancer Institute NSW 2022

Prostate cancer was the most common type of cancer in the CESP HN region (15.3% of all cases), whereas lung cancer contributed to the highest proportion of deaths (18.9% of cancer deaths) from 2014 to 2018.(5)

Table 5: Most common cancer types in the CESP HN region, 2014-2018

% of cases		% of deaths	
Prostate	15.3	Lung	18.9
Breast	13.6	Colon	7.2
Melanoma of skin	9.4	Pancreatic	7.0
Lung	8.2	Breast	6.6
Colon	7.1	Prostate	5.9

Source: Cancer Institute NSW 2022

Despite liver cancer having a lower incidence compared to other cancers, it is one of the fastest growing types of cancer in Australia – having seen a 378% increase between 1982 and 2019.(6) Liver cancer is linked to lifestyle risk factors such as excessive intake of alcohol, obesity, diabetes, and non-alcoholic fatty liver disease. It can also be caused by hepatitis B and hepatitis C. Please refer to the sexual health section for more information on viral hepatitis.

Overall, males in the CESP HN region have seen a faster increase in new liver cancer cases and in 2018 had a higher incidence rate (13.7 ASR per 100,000 males) compared to females (4.3 ASR per 100,000 females). Similarly, to all cancer data, number of cases was highest in persons aged 60-69 years and highest rate was in those aged 80+.(5)

Seven out of 13 LGAs in the CESP HN region have a higher liver cancer incidence rate compared to the NSW rate, with Randwick and Sydney LGAs having the highest rates (11.6 ASR per 100,000 people and 11.7 ASR per 100,000 people respectively).(5)

Table 6: Incidence of liver cancer in the CESP HN region by LGA, 2014-2018

LGA	ASR per 100,000
Botany Bay	9.3
Burwood	10.6
Canada Bay	8.7
Canterbury-Bankstown	11.0
Georges River	8.0
Inner West	8.2
Randwick	11.6
Rockdale	8.1
Strathfield	8.8
Sutherland Shire	7.5
Sydney	11.7
Waverley	4.4
Woollahra	4.7
NSW	8.5

Source: Cancer Institute NSW 2022

Cancer management

Cancer care in the CESP HN region is provided by Sydney Local Health District (SLHD), South East Sydney Local Health District (SESLHD) and St Vincent's Hospital Network (SVHN). In 2019, approximately 1,743 patients from these service providers completed an outpatient cancer clinic survey which identified that more than half of surveyed patients did not have a current or ongoing cancer management plan.(7) That same year CESP HN conducted a review that resulted in GPs identifying a lack of confidence in cancer management of patients due to access barriers to specialist communication. This is an important gap to address as research supports the need of general practices to be more involved at all stages of cancer care.(8)

Diabetes

In 2019, the prevalence for diabetes in the CESP HN region (9.1%) was less than the NSW percentage (11.1%). However, females in the region had a higher prevalence (9.7%) compared to the male rate (9.1%).(9) There were 70,850 National Diabetes Services Scheme (NDSS) (4.0% of the CESP HN population) in 2022. The majority of registrants have Type 2 diabetes (84.2%), followed by Type 1 (11.1%), gestational (3.7%), and other (1.0%).(10)

From 2013-2017, incidence of insulin-treated Type 1 diabetes was highest in Sutherland-Menai-Heathcote (12.3 per 100,000 people) and Type 2 diabetes was highest in Eastern Suburbs-North (9,333.9 per 100,000 people).(11)

The annual diabetes cycle of care is for patients with established diabetes and includes diabetes management and general health checks. In 2020-21, 4,544 patients in the CESP HN region received an annual diabetes cycle of care (0.27 per 100 people compared to 0.57 per 100 people nationally). Canterbury had the highest rate of people receiving this MBS item (0.49 per 100 people).(12)

Chronic kidney disease

In 2011-12, the modelled prevalence of chronic kidney disease (CKD) in the CESP HN region was 5.5% for persons aged 18-54 years. This was below both the NSW (5.6%) and national rate (6.1%).(13) However, it is important to note that Aboriginal and Torres Strait Islander people (here in referred to as Aboriginal people) are twice as likely to have CKD.(14) This can be evidenced in the rate of chronic kidney disease hospitalisations during 2016-17, where the rate for Aboriginal people (1,974.1 per 100,000 people) was more than double the non-Aboriginal rate (923.2 per 100,000 people).(15)

Other chronic diseases

2017-18 modelled prevalence estimates of other chronic conditions showed that rates in the CESP HN region were below both state and national rates for all conditions, except for osteoporosis.(4)

Table 7: Rate of people aged 18 years and over with selected chronic diseases, ASR per 100, by SA3, 2017-2018

SA3	Arthritis	Asthma	COPD	Circulatory disease	Osteoporosis
Botany	12.8	7.5	2.1	5.1	3.5
Canada Bay	12.4	7.2	1.6	4.5	4.8
Canterbury	14.5	7.8	2.0	5.0	5.4
Cronulla - Miranda - Caringbah	14.2	11.3	2.0	4.4	4.0
Eastern Suburbs - North	12.2	8.0	1.8	3.6	4.1
Eastern Suburbs - South	12.2	9.8	2.2	4.3	4.3
Hurstville	12.1	7.0	1.8	4.4	5.7
Kogarah - Rockdale	12.1	6.6	1.9	4.7	4.7
Leichhardt	11.3	8.6	2.3	4.4	4.4
Marrickville - Sydenham - Petersham	11.4	9.6	2.2	4.5	4.5
Strathfield - Burwood - Ashfield	11.7	7.3	2.0	4.5	5.1
Sutherland - Menai - Heathcote	14.4	10.8	2.1	4.8	4.0
Sydney Inner City	10.8	7.2	2.4	4.0	4.2
CESPHN	12.5	8.2	2.0	4.4	4.6
NSW	15.5	10.6	2.2	4.9	4.2
Australia	15.0	11.2	2.5	4.8	3.8

Source: PHIDU 2021

Potentially preventable hospitalisations

Potentially preventable hospitalisations (PPHs) are hospital admissions that could have potentially been prevented by timely and adequate health care in the community.

In 2017-18, there were 14,735 PPHs for chronic conditions, equivalent to 872 per 100,000 people. This was lower than the national rate of 1,233 per 100,000 people. The most common PPH was for congestive cardiac failure (179 per 100,000 people), with an average length of stay of 7.2 days.(16)

Table 8: PPHs for chronic conditions in the CESPHN region by condition, 2017-2018

PPH condition	PPH per 100,000 (ASR)	No. of PPH	Average length of stay (days)
Angina	109	1,809	1.8
Asthma	99	1,423	2.5
Bronchiectasis	18	312	6.8
COPD	166	2,835	6.4
Congestive cardiac failure	179	3,352	7.2
Diabetes complications	116	1,922	6.7
Hypertension	33	572	2.4
Iron deficiency anaemia	137	2,273	1.6
Nutritional deficiencies	3	58	n.p
Rheumatic heart disease	11	178	8.8
Total chronic	872	14,735	4.9

Source: AIHW 2019

Lifestyle risk factors

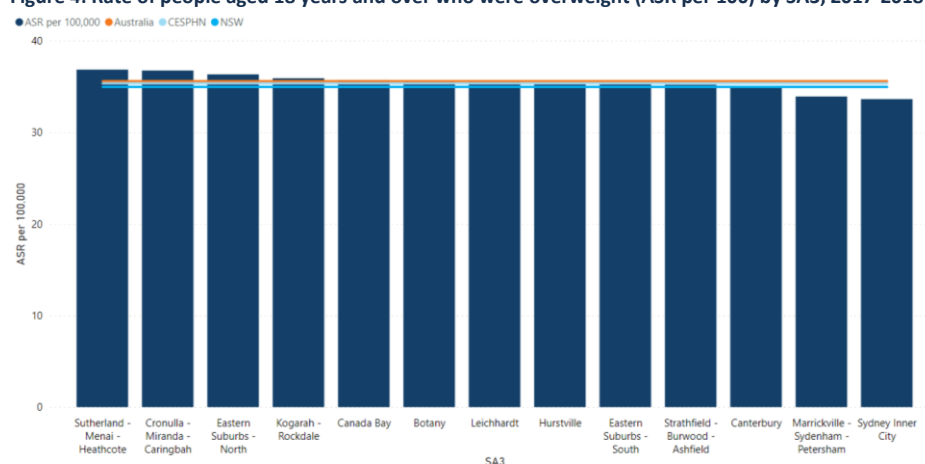
Overweight and obesity

Adults

2017-18 PHIDU modelled estimates demonstrate that the male population was more likely to be overweight (41.4%) compared to the female population (29.4%), while obesity rates were similar in both genders.(4)

Four SA3s had rates above the state (35.0%) and national (35.6%) rates – Sutherland-Menai-Heathcote (36.8%), Cronulla-Miranda-Caringbah (36.8%), Eastern Suburbs-North (36.3%) and Kogarah-Rockdale (35.9%).(4)

Figure 4: Rate of people aged 18 years and over who were overweight (ASR per 100) by SA3, 2017-2018



Source: PHIDU 2021

Obesity rates in CESP HN SA3s were all below the state (30.9%) and national (31.3%) rates. Sutherland-Menai-Heathcote had the highest rate (29.0%).(4)

Children

Between 2017-18, the estimated rate of children (2-17 years) in the CESP HN region considered overweight was 16.9%, which was similar to the state (17.0%) and national rate (16.7%). Overweight rates were similar across SA3s. However, rates for obese children in CESP HN (4.9%) was much lower than state (7.4%) and national rates (8.2%). Eastern Suburbs – South (6.9%) had the highest rate of obese children.(4)

Healthy behaviours

Adults

Overall, the CESP HN population practices healthier behaviours compared to the rest of the state and country. SA3s with the highest and lowest percentages (respectively) for the following behaviours were:

- Adequate fruit intake – Eastern Suburbs – North (59.1%) and Marrickville – Sydenham – Petersham (48.8%).
- Current smokers – Canterbury (15.3%) and Leichhardt (8.7%).
- Low, very low or no exercise in past week – Canterbury (74.3%) and Eastern Suburbs – North (49.7%).
- More than two standard alcoholic drinks per day – Eastern Suburbs – North (20.3%) and Canterbury (7.8%).(4)

Table 9: Health behaviour rates of people aged 18 years and over by SA3 (ASR per 100), 2017-2018

SA3	Adequate fruit intake	Current smokers	Low, very low or no exercise	More than two alcoholic drinks per day
Botany	52.0	14.5	68.9	11.4
Canada Bay	54.6	10.0	60.6	14.2
Canterbury	56.8	15.3	74.3	7.8
Cronulla - Miranda - Caringbah	54.8	11.7	59.0	19.5
Eastern Suburbs - North	59.1	9.0	49.7	20.3
Eastern Suburbs - South	55.8	12.1	60.7	14.9
Hurstville	52.5	12.4	65.6	12.1
Kogarah - Rockdale	54.0	13.7	68.4	10.3
Leichhardt	50.5	8.7	55.6	18.5
Marrickville - Sydenham - Petersham	48.8	14.2	61.3	14.7
Strathfield - Burwood - Ashfield	53.7	13.1	65.0	10.2
Sutherland - Menai - Heathcote	53.2	9.3	61.5	19.0
Sydney Inner City	50.3	13.5	58.1	15.3
CESP HN	53.7	12.3	62.0	14.3
NSW	52.5	14.4	65.3	15.5
Australia	51.3	15.1	66.1	16.1

Source: PHIDU 2021

Children

Only 23% of primary school children and 23% of secondary school adolescents met recommended daily physical activity in NSW. Girls were generally less active than boys. Cultural background appeared to be a factor affecting physical activity level. Primary school children from Middle Eastern or Asian cultural backgrounds and secondary school adolescents from Asian cultural backgrounds were the least active groups.(17)

Preventive health

Immunisation

Childhood coverage

As at October 2022, fully immunised rates in the CESP HN region were above state and national rates for 1-year-olds and 2-year-olds, while 5-year-olds were below both rates. (18)

The Aboriginal and Torres Strait Islander fully immunised rate for the 5 year age group was above the national 95% target. (18)

Table 10: Fully immunised rates, by region and age group, as at June 2022

Children	1-year-olds			2-year-olds			5-year-olds		
	CESPHN	NSW	National	CESPHN	NSW	National	CESPHN	NSW	National
All	94.9	94.3	94.2	93.5	92.4	92.6	92.3	94.3	95.4
Aboriginal	92.8	93.6	91.5	91.0	92.0	90.1	95.2	97.3	96.5

Source: Department of Health 2022

As at June 2022, the SA3s with the lowest fully immunised rates were:

- Canterbury for the 1- year -old age group
- Canterbury and Kogarah - Rockdale for the 2-year-old age group
- Sydney Inner City for the 5-year-old age group. (18)

There are a multitude of reasons for lower immunisation rates in these SA3s, including: lack of follow-up with a GP motivated by reduction in welfare payment, transient populations, and transmission errors from practice software to the Australian Immunisation Register (AIR).

Table 11: Fully immunised children rates in the CESPHN region by age group and SA3, as at June 2022

SA3	1-year-olds	2-year-olds	5-year-olds
Botany	95.9	92.5	91.8
Canada Bay	95.6	93.8	91.6
Canterbury	92.2	90.8	93.4
Cronulla - Miranda - Caringbah	95.1	92.8	94.7
Eastern Suburbs - North	92.9	90.9	90.3
Eastern Suburbs - South	95.2	92.4	90.2
Hurstville	94.3	92.7	93.8
Kogarah - Rockdale	95.1	90.8	93.4
Leichhardt	96.4	94.1	92.9
Marrickville - Sydenham - Petersham	96.3	94.8	93.2
Strathfield - Burwood - Ashfield	95.2	92.8	92.0
Sutherland - Menai - Heathcote	96.1	95.4	95.5
Sydney Inner City	95.5	91.7	87.1

Source: Department of Health 2022

Adolescent coverage

NSW Health works in partnership with schools to deliver the NSW School Vaccination Program to offer vaccines recommended for adolescents under the National Immunisation Program (NIP).

Human papillomavirus (HPV) vaccination is recommended for people aged 12 to 13 years to prevent HPV, a common virus spread through sexual contact that can result in genital warts and various cancers. In 2019, the HPV immunised rates (first dose) for females and males in the CESPHN region were higher than the NSW rates.(15)

Quadrivalent Meningococcal ACWY (4vMenCV) vaccine protects against four serogroups of Meningococcal: A, C, W and Y. In 2017, the NSW government funded the addition of 4vMenCV to the School Vaccination program for students in years 11 and 12. In 2019, this vaccination was added to the NIP, now given to students in year 10.

Table 12: Percentage of first dose adolescent vaccination coverage rates by school year, 2019

LHD	HPV Female (Year 7) (%)	HPV Male (Year 7) (%)	4vMenCV (Year 10) (%)
SLHD	90	86	79
SESLHD	88	85	79
NSW	85	82	75

Source: HealthStats NSW 2022

Potentially preventable hospitalisations

Total vaccine preventable PPHs in the CESPHN region have increased from 121 per 100,000 people in 2013-14 to 355 per 100,000 people in 2017-18. Since 2014-15, the total vaccine preventable PPH rates in the CESPHN region have been consistently above the national rates.(16)

Pneumonia and influenza contributed to 61% of the total vaccine preventable PPHs in 2017-18. Since 2016-17, rates in the CESP HN region for pneumonia and influenza have exceeded national rates.(16)

Table 13: Age-standardised rate of vaccine-preventable PPHs per 100,000 people, 2013-14 to 2017-18

Category	Region	2013-14	2014-15	2015-16	2016-17	2017-18
Pneumonia and influenza	CESPHN	35	79	74	116	212
	National	49	81	92	109	207
Other vaccine preventable conditions	CESPHN	86	107	134	137	145
	National	80	95	107	105	108
Total vaccine preventable	CESPHN	121	185	208	251	355
	National	128	175	199	213	313

Source: AIHW 2019

Marrickville-Sydenham-Petersham had the highest rate of pneumonia and influenza PPHs (303 per 100,000 people), followed by Canterbury (249 per 100,000 people).(16)

Hurstville had the highest rate of other vaccine preventable PPHs (265 per 100,000 people), followed by Kogarah-Rockdale (204 per 100,000 people).(16)

Table 14: Age-standardised rate (ASR) of vaccine-preventable PPHs per 100,000 people, by SA3, 2017-18

Region	Pneumonia and influenza		Other vaccine-preventable conditions	
	ASR	No. of PPH	ASR	No. of PPH
Botany	235	121	167	83
Canada Bay	208	229	83	82
Canterbury	249	387	179	261
Cronulla - Miranda - Caringbah	171	287	99	131
Eastern Suburbs - North	198	334	82	123
Eastern Suburbs - South	197	326	125	191
Hurstville	177	305	265	386
Kogarah - Rockdale	230	411	204	330
Leichhardt	217	126	40	26
Marrickville - Sydenham - Petersham	303	171	131	75
Strathfield - Burwood - Ashfield	212	385	152	253
Sutherland - Menai - Heathcote	181	234	66	77
Sydney Inner City	245	401	187	359
CESPHN	212	3,706	145	2,372
National	207	57,198	108	28,329

Source: AIHW 2019

Screening

In 2019-20, the CESPHN region was below NSW and national rates for bowel cancer screening, whereas for breast screening the CESPHN region was above the NSW rate, but below the national rate. Between 2018-2020, cervical screening participation in the CESPHN region was below both the NSW and national rates. (19)

Canterbury had the lowest bowel cancer screening rate (34.4%), Sydney Inner City the lowest breast screening rate (40.0%) and Kogarah – Rockdale the lowest cervical screening rate (47.2%). (19)

Table 15: Percentage of screening participation by cancer type and SA3, 2019-2020

SA3	Bowel (%)	Breast (%)
Botany	36.1	n.p
Canada Bay	42.2	45.6
Canterbury	34.4	41.4
Cronulla – Miranda – Caringbah	44.1	50.0
Eastern Suburbs – North	34.9	40.7
Eastern Suburbs – South	38.3	50.4
Hurstville	40.6	45.8
Kogarah – Rockdale	37.5	45.3
Leichhardt	42.2	51.0
Marrickville – Sydenham – Petersham	38.7	46.1
Strathfield – Burwood – Ashfield	38.7	42.5
Sutherland – Menai – Heathcote	45.9	52.2
Sydney Inner City	35.8	40.0
CESPHN	38.9	45.5
NSW	41.6	43.7
National	43.8	47.7

Source: AIHW 2022

Table 16: Percentage of cervical screening participation by SA3, 2018-2021

SA3	Cervical (%)
Botany	n.p.
Canada Bay	57.3
Canterbury	50.4
Cronulla – Miranda – Caringbah	57.6
Eastern Suburbs – North	63.9
Eastern Suburbs – South	58.0
Hurstville	51.8
Kogarah – Rockdale	47.2
Leichhardt	64.5
Marrickville – Sydenham – Petersham	56.9
Strathfield – Burwood – Ashfield	52.3
Sutherland – Menai – Heathcote	60.4
Sydney Inner City	48.8
CESPHN	54.5
NSW	60.6
National	62.4

Source: AIHW 2022

There is variation in breast screening rates among Aboriginal people and culturally and linguistically diverse (CALD) women compared to all women rates in the CESP HN region. In 2020-2021, CALD women had the lowest rate, followed by Aboriginal women and then all women.(5)

Table 17: Percentage of breast screening participation by population group, CESP HN region, 2020-21

Population group	Breast (%)
Aboriginal	33.4
Culturally and linguistically diverse	28.3
All women	37.1

Source: Cancer Institute NSW 2022

Although there is no local level data, studies show that Aboriginal women are more likely to have significantly higher incidence and mortality rates of cervical cancer due to disparities in screening participation and later stage presentation.(20)

Maternal and child health

Conception and pregnancy

Antenatal care

Routine antenatal care, particularly in the first trimester (before 14 weeks), is known to have better child and maternal health outcomes as it provides opportunities for mothers to receive effective health interventions and address necessary lifestyle modifications (e.g. smoking during pregnancy).(21)

In 2020, the percentage of mothers who had an antenatal visit before 14 weeks was lower in the CESPHN region for both all mothers (66.1%) and Aboriginal mothers (59.3%) compared to the respective NSW rates (80.0% and 76.3%). Data is from both NSW public and private hospitals.(15)

Table 18: Percentage of mothers with first antenatal visits before 14 weeks by LHD, 2020

Region	All mothers (%)	Aboriginal mothers (%)
Sydney LHD	56.2	49.3
South Eastern Sydney LHD	73.4	66.7
CESPHN	66.1	59.3
NSW	80.0	76.3

Source: HealthStats NSW 2022

It is important to note that although there is no regional data available for antenatal visits before 14 weeks for mothers born in non-English speaking countries, both Sydney (SLHD) and South Eastern Sydney LHD (SESLHD) have a large percentage (36.5% in SLHD and 23.8% in SESLHD) of mothers from Asia, Middle East and Africa. A mother’s cultural background and experiences (e.g., migration status) can contribute to perinatal outcomes.(22)

The Australian Pregnancy Care Guidelines recommend 10 antenatal care visits for first-time mothers with uncomplicated pregnancies and seven for subsequent uncomplicated pregnancies. In 2020, CESPHN had a higher percentage (97.2%) of mothers attending five or more antenatal care visits compared to the national rate (94.2%).

Despite this, there are several SA3s that were below the CESPHN rate (97.2%), including: Canterbury, Cronulla – Miranda – Caringbah, Hurstville, Kogarah – Rockdale, Sutherland – Menai – Heathcote.(21) Several of these SA3s are known to have diverse population groups. Identifying as an Aboriginal person, having a CALD background, migrant status (e.g., asylum seekers, refugees), and difficulty with reading and speaking the English language can lower access rates to antenatal visits.(22)

Table 19: Percentage of all mothers who attended 5 or more antenatal care visits by SA3, 2020

Region	%
Botany	97.8
Canada Bay	97.2
Canterbury	96.4
Cronulla – Miranda – Caringbah	96.7
Eastern Suburbs – North	97.6
Eastern Suburbs – South	97.5
Hurstville	96.3
Kogarah – Rockdale	97.0
Leichhardt	97.6
Marrickville – Sydenham – Petersham	97.2
Strathfield – Burwood – Ashfield	98.1
Sutherland – Menai – Heathcote	96.9
Sydney Inner City	97.7
CESPHN	97.2
National	94.2

Source: AIHW 2020

CESPHN’s Antenatal Shared Care (ANSC) Program partners with local hospitals to co-ordinate three ANSC programs – RPA Women and Babies/Canterbury (RPA/Canterbury), The Royal Hospital for Women (RHW) and St George/Sutherland (STGS). These programs aim to improve maternal and child wellbeing by supporting clinicians in the provision of integrated antenatal and postnatal care, particularly in areas and demographics of need. As at October 2022, there were 997 GPs registered and actively participating in a program. GPs are registered in a single local hospital or with multiple local hospitals.

Table 20: GP registrations in the CESPHN region by ANSC program, as of October 2022

ANSC program	No. GPs registered	No. of births with ANSC as model of care (2021)	Proportion of total hospital births with ANSC as model of care (2021) (%)
Royal Hospital for Women	480	4203	50.1
RPA Women and Babies and Canterbury Hospital	715	455	8
St George and Sutherland Hospital	394	3976	5.8

Source: CESPHN database 2022

Smoking during pregnancy

Smoking during pregnancy is associated with poorer perinatal health outcomes, including low birthweight, pre-term birth and perinatal death.(23) The CESPHN rate is below the NSW rate for all mothers and Aboriginal mothers. However, disparity between these two groups are significant, with Aboriginal mothers having a much higher rate of smoking during pregnancy.(15)

Table 21: Percentage of mothers smoking during pregnancy, all mothers and Aboriginal mothers, 2020

Region	All mothers (%)	Aboriginal (%)
CESPHN	3.0	34.4
NSW	8.6	41.7

Source: HealthStats NSW 2022

Diabetes in pregnancy

Diabetes in pregnancy increases the risk of adverse outcomes for the mother and baby. It is important to identify and assess a woman’s risk of diabetes in pregnancy early.(22)

From 2015 to 2020, the prevalence of mothers with diabetes (pre-existing and gestational) in the CESPHN region has seen a steep rise. A number of factors are likely to have affected this trend including the introduction of new diagnostic guidelines and increasing risk factors in the population.(15)

Table 22: Prevalence of diabetes in pregnancy (pre-existing and gestational), 2015 and 2020

Region	2015	2020
CESPHN	9.0	14.0
NSW	9.8	14.7

Source: HealthStats NSW 2022

In 2020, the rate of maternal diabetes for Aboriginal mothers (14.4%) was lower than all mothers rate (14.7%) in NSW. However, it is important to note that this may be due to under-detection and/or under-reporting.(15)

Canterbury and St George Hospital have both reported high rates of gestational diabetes and late presentation of pregnant women residing in surrounding areas to health professionals. Both hospitals service areas with high percentages of socioeconomically disadvantaged, as well as culturally and linguistically diverse persons, which is a risk factor for gestational diabetes.(24)

Overweight and obesity in pregnancy

Obesity is an increasingly important challenge in pregnancy. Its impact begins prior to conception (e.g. reducing fertility) and increases risks for negative health outcomes throughout a woman’s pregnancy.(25) In 2020, 31.2% of mothers in SLHD were overweight or obese and 28.6% in SESLHD. This was lower than the NSW rate of 41.1%.(15)

Birth and development

Low birth weight

Low birth weight is an important predictor of newborn wellbeing and survival and can also be an indicator of poor health in pregnancy. In 2020, the percentage of low birth weights for the CESPHN region was slightly below the NSW rate for all children and above for Aboriginal children. (15)

Table 23: Percentage of low-birth weight, 2019

Region	All children (%)	Aboriginal children (%)
CESPHN	4.3	5
NSW	4.7	8.4

Source: HealthStats NSW 2022

Breastfeeding

Breastfeeding promotes healthy growth and development and protects children against infectious diseases or poor health conditions later in life. (1) Rate of breastfeeding at discharge after birth in SLHD is lower than the NSW rate, whereas SESLHD is higher. However, it is well documented that exclusive breastfeeding rates decline significantly with time. (21)

Table 24: Percentage of women fully breastfeeding at discharge, 2020

LHD	%
Sydney	65.8
South Eastern Sydney	73.6
NSW	69.1

Source: NSW Mothers and Babies 2020

Vulnerable children

Increasing evidence demonstrates that early childhood experiences impact an individual's health and wellbeing throughout their lifespan. Children who are exposed to vulnerability and live with socioeconomic disadvantage are more likely to experience poorer health outcomes. Measures for vulnerability range from mothers smoking during pregnancy to parents interacting with the justice system.

There is a number of vulnerable children within the CESP HN region, with the largest vulnerability group being young children aged 0 to 5 years. (26)

Table 25: Number of vulnerable children by LHD, 2018

Vulnerability group	SLHD	SESLHD
Young children (0 to 5 years)	14,823	14,747
Children aged under 15 and affected by mental illness	10,344	10,782
Children and young people aged 15 to 18 and affected by mental illness	2,587	3,167
Total	27,754	28,696

Source: TFM 2018

LGAs with the highest percentage of vulnerable children are (26):

- 0 to 5 years: Canterbury-Bankstown (26%), Bayside (24%), Georges River (24%).
- Children aged under 15 years and affected by mental illness: Inner West (12%), Randwick (11%), Bayside (10%), Sydney (10%), Burwood (10%).

- Children and young people aged 15 to 18 years and affected by mental illness: Sydney (16%), Randwick (15%), Inner West (13%).

Childhood development

The Australian Early Development Census (AEDC) measures developmental vulnerability through five domains: 1) physical health and wellbeing, 2) social competency, 3) emotional maturity, 4) communication skills and general knowledge, and 5) language and cognitive skills. These domains are important as they measure progress on a child's developmental journey (e.g., on track or at risk) and predict likelihood of good health, education, and social outcomes.

In 2021, the SA3s with the highest developmental vulnerability in one or more domains and that were above the NSW rate (21.2%) were Canterbury (24.7%), Strathfield – Burwood – Ashfield (22.4%) and Eastern Suburbs - South (19.7%). AEDC data shows that some SA3s have seen an increase in language vulnerability, mainly Canterbury, Kogarah – Rockdale, Strathfield - Burwood - Ashfield and Hurstville.(27)

Sexual health

Sexually transmissible infections (STIs)

As at November 2021, the CESPHE region continues to have the highest rates of chlamydia, gonorrhoea, and infectious syphilis notifications in NSW. In 2021, the region made up 35% of chlamydia, 53% of gonorrhoea and 56% of infectious syphilis NSW notifications.(28)

Table 26: Number of chlamydia, gonorrhoea, and syphilis notifications in the CESPHE region by LHD, as at November 2021

LHD	Chlamydia	Gonorrhoea	Syphilis
Sydney	3,129	1,846	408
South Eastern Sydney	4,212	2,570	711

Source: NSW Health 2021

Overall, chlamydia infections decreased from 2020 to 2021 in SESLHD by 8.8% (from a rate of 579 per 100,000 to 528.3 per 100,000) and by 10.3% in SLHD (from a rate of 579.5 per 100,000 to 519.8 per 100,000). (29)

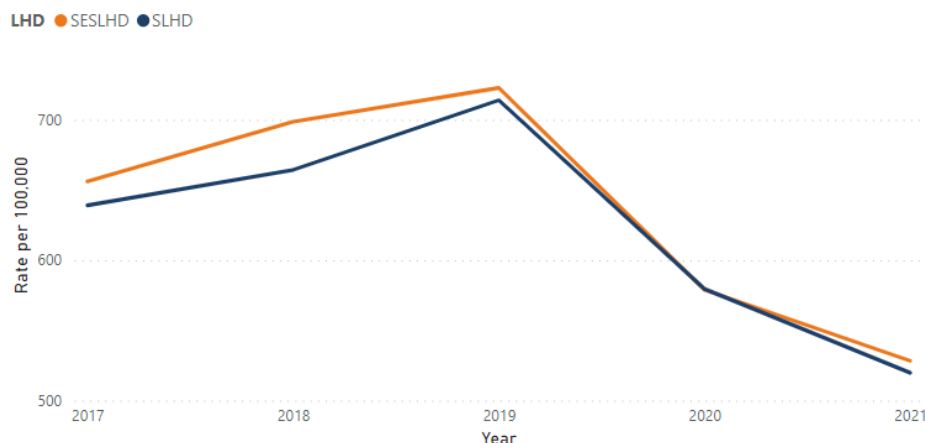
Age groups

- Across NSW, decreases in chlamydia notification rates for 2021 occurred in almost all age groups.(29) The largest declines between 2020 and 2021 were recorded in people aged between 20-29 years (9% and 7% decrease in the 25-29 year and 20-24 year age groups, respectively. These age groups also had the highest chlamydia notification rates in NSW.(29)

Gender

- Chlamydia infections decreased from 2020 to 2021 in males (2.5% in SLHD and 0.7% in SESLHD) and females (24.6% in SLHD and 22.1% in SESLHD).(29)

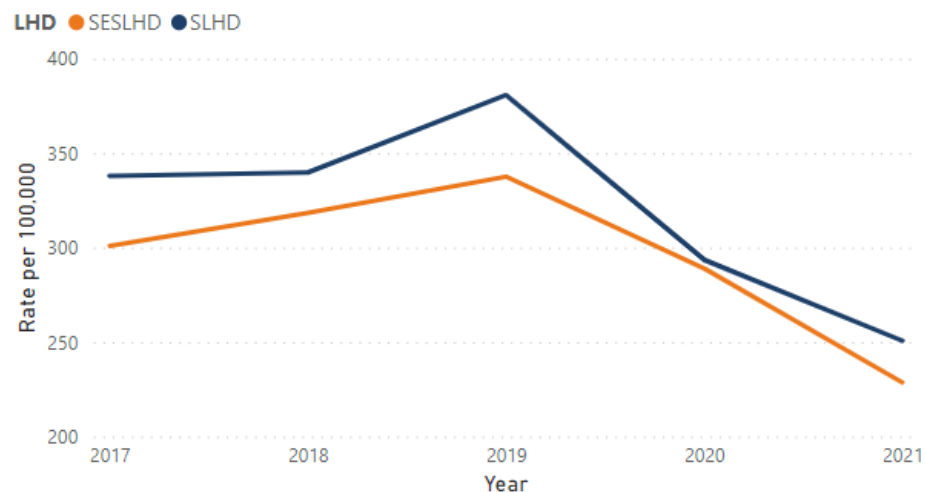
Figure 5: Chlamydia notification rates per 100,000 people by LHD, 2017 to 2021



Source: NSW Health 2021

- Gonorrhoea infections decreased from 2020 to 2021 in SESLHD by 20.9% (from a rate of 289 per 100,000 to 228.7 per 100,000) and by 14.6% in SLHD (from a rate of 293.6 per 100,000 to 250.7 per 100,000).
- Gonorrhoea infections decreased from 2020 to 2021 in males (13.6% in SLHD and 20% in SESLHD) and females (21.5% in SLHD and 25% in SESLHD).(29)

Figure 6: Gonorrhoea notification rate per 100,000 people by LHD, 2017-2021

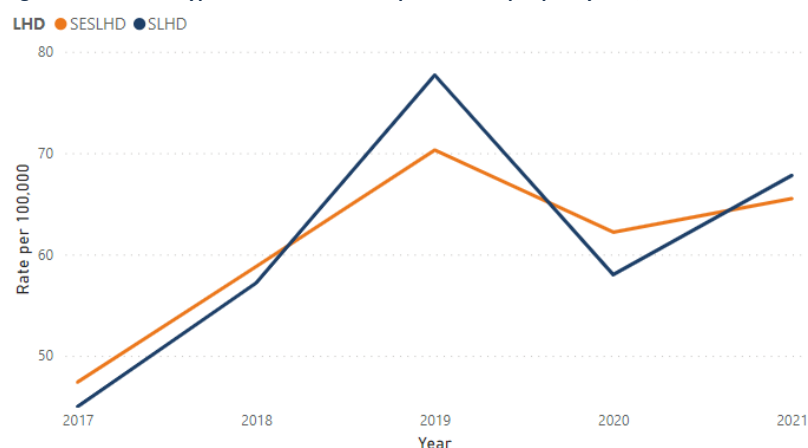


Source: NSW Health 2021

- Overall, infectious syphilis rates have increased in both SESLHD and SLHD between 2020-21 (5.3% and 16.9% respectively).(29)
- In males across NSW, the highest infectious syphilis rates are in SLHD and SESLHD. Since 2017, rates in male residents of these two LHDs have increased 50% and 38% respectively.(29)
- Although the relative number of infectious syphilis numbers are low among females, there has been a continued increase in the number of notifications in women of reproductive age (15-45 years) in NSW. In 2021, there were 19 women diagnosed with infectious syphilis who were pregnant (16.4%), this reflects an increase from 13.6% of women of reproductive age with infectious syphilis in 2020.(29)

- In the last five years, there have been nine cases of congenital syphilis among NSW residents. Two cases (22%) occurred in 2021. Among the nine cases since 2017, eight occurred in metropolitan Sydney (80%). Two congenital syphilis cases were in the Aboriginal population in NSW from 2017-2021.(29)

Figure 7: Infectious syphilis notification rate per 100,000 people by LHD, 2017-2021



Source: NSW Health 2021

HIV

In 2021, the number of newly diagnosed human immunodeficiency virus (HIV) cases (n=178) in NSW decreased by 43% compared to the average for the last five years. Additionally, 26% of cases showed that infection occurred in the 12-months preceding diagnosis – a 55% reduction in the last five years.(30) However, rates for newly diagnosed HIV notification in the CESPHN region remained the highest in NSW, making up 48.6% of all notifications in the state.(30)

Of the 178 NSW cases, 76% occurred among MSM. In this group 42% were Australian born and 58% overseas born. (30) Overseas born, particularly CALD MSM, remain a priority population despite there being a 9% decrease in late diagnosis, compared to the 34% decline for Australian born MSM from 2016 to 2020. Declines in HIV notifications in inner Sydney, where approximately ≥20% gay-identified men live, were larger compared to those living in outer suburban areas.(30)

The number of HIV tests in publicly funded sexual health clinics decreased by 12% compared to the same period in 2020. This is likely due to the impact of COVID-19 in reducing casual sex activity, decreasing attendance at clinics, and increasing use of telehealth and other online services.(30)

The life expectancy of people living with HIV (PLHIV) has increased substantially in Australia since 1986, predominantly due to the availability of combination antiretroviral therapy.(31) Despite increased longevity, older PLHIV also experience an increased burden of non-communicable age-associated comorbidities.(31) This has created a need for a shift in focus for how the health sector addresses the health and health service needs of this ageing population.(32)

Hepatitis B

The prevalence of hepatitis B in the CESP HN region is third highest (1.33%) in Australia. Nine SA3s had a chronic hepatitis B (CHB) prevalence rate above the national average (0.86%) with the highest rate being in Hurstville (1.99%).(33)

The highest absolute numbers of people living with CHB are in Sydney Inner City (4,150), Strathfield Burwood-Ashfield (3,186) and Hurstville (2,841).

The average proportion of people living with CHB receiving recommended monitoring and care in CESP HN is 26.1%, which is lower than other Sydney metro PHNs. Cohorts more likely to have hepatitis B are people from CALD backgrounds, particularly those born in countries with moderate to high rates.

Table 27: Prevalence of CHB and percentage receiving care and treatment by SA3, 2020

SA3	CHB prevalence (%)	CHB treatment (%)	CHB care (%)
Botany	1.4	10.1	18.4
Canada Bay	1.5	12.1	24.5
Canterbury	1.7	17.8	40.0
Cronulla – Miranda – Caringbah	0.6	11.1	20.7
Eastern Suburbs – North	0.7	8.4	17.3
Eastern Suburbs – South	1.2	6.6	12.9
Hurstville	2.0	20.4	39.7
Kogarah – Rockdale	1.5	16.2	30.9
Leichardt	0.7	8.1	17.3
Marrickville – Sydenham – Petersham	1.1	17.4	34.6
Strathfield – Burwood – Ashfield	1.8	13.3	29.3
Sutherland – Menai – Heathcote	0.6	10.7	21.4
Sydney Inner City	1.6	7.0	15.9

Source: National Viral Hepatitis Mapping Project 2021

Hepatitis C

CESP HN’s prevalence (0.91%) of chronic hepatitis C (CHC) is above the national average (0.78%). However, the proportion of people receiving CHC treatment (39.6%) is on par with the national average (39.5%).(33) Treatment of hepatitis C is crucial for the prevention of liver cancer.

The burden of CHC is highest in Sydney Inner City (2.4%), Marrickville-Sydenham-Petersham (1.3%), Leichardt (1.2%) and Eastern Suburbs-South (1.1%). The highest absolute numbers of people living with CHC are in Sydney Inner City (5,253), Eastern Suburbs-South (1,663) and Strathfield-Burwood-Ashfield (1,056). Of these areas, Sydney Inner City has the lowest treatment rate at 33.4%.

Table 28: Prevalence of CHC and percentage receiving treatment by SA3, 2016-2020

SA3	CHC prevalence (%)	CHC treatment (%)
Botany	0.6	64.0
Canada Bay	0.4	45.5
Canterbury	0.8	42.0
Cronulla – Miranda – Caringbah	0.4	58.4
Eastern Suburbs – North	0.6	43.1
Eastern Suburbs – South	1.1	36.0
Hurstville	0.5	42.6
Kogarah – Rockdale	0.6	41.4
Leichardt	1.2	42.0
Marrickville – Sydenham – Petersham	1.3	45.1
Strathfield – Burwood – Ashfield	0.7	39.5
Sutherland – Menai – Heathcote	0.3	58.6
Sydney Inner City	2.4	33.4

Source: National Viral Hepatitis Mapping Project 2021

While people with a history of injecting drug use continue to be a priority population, migrants from countries and regions with a high prevalence of CHC (Egypt, Pakistan, the Mediterranean and Eastern Europe, Africa, and Southern Asia) represent a priority population with low uptake of CHC treatment.

Management and treatment

Antimicrobial resistance

Antimicrobial resistance is an emerging and urgent issue to address for STIs. For gonorrhoea, there is only one available effective antibiotic for which resistance is rising and there are no other suitable antibiotics. (34) Multi-drug resistant gonorrhoea is increasing in some countries, particularly Southeast Asian countries. Given that the CESP HN region is a hub for workers, travellers and overseas students, the communicable nature of STIs warrants activities that target non-CESP HN residents. (35)

S100 prescribing for HIV

In a 2018 survey of 181 GPs in the CESP HN region, only 4% had completed S100 HIV prescriber training. Fifty-eight per cent said they would manage a newly diagnosed patient with HIV if they were supported appropriately – this may be a significant opportunity for increasing GP HIV management capacity. Twenty-four per cent were willing but see this as “*too complicated*”. This indicates a continuing need for ongoing education to improve GP confidence in the management of HIV, thereby ensuring HIV patients feel comfortable and supported by their GPs.

International students

Stakeholders and providers have observed an increase in sexual health and reproductive health issues among international students, particularly STI and HIV notifications and unplanned pregnancies. There is anecdotal evidence of a rise in STI and HIV notifications in MSM from south-east Asian and Asian backgrounds. Young

female international students are identified as a vulnerable demographic due to a lack of reporting of sexual assault and lack of knowledge on contraception.(36)

Access to sexual and reproductive health services may be limited by lack of knowledge of the Australian health care system, Medicare ineligibility and their private health care cover, and limited understanding and knowledge of sexual health. These may also be exacerbated by a lack of social support, language barriers and cultural stigma.(36)

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