COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 51, ENDING 19 DECEMBER 2020

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SUMMARY FOR THE WEEK ENDING 19 December 2020

- There were 73 locally acquired cases in NSW this week.
- 72 locally acquired cases were linked to a new cluster in the Northern Beaches. The source is currently under investigation.
- Two-thirds of locally-acquired cases (67%) reporting symptoms were in isolation within a day of symptom onset.
- The majority of locally-acquired cases (92%) reported this week were residents of Northern Sydney LHD.
- Testing numbers have almost doubled compared to the previous week (up 96%).
- The NSW Sewage Surveillance Program reported three detections of SARS-CoV-2. These samples were taken from the Malabar, Hornsby Heights and Warriewood treatment plants. Detections from these catchment areas are associated with reported cases.
- All people are reminded of the need to isolate and seek testing as soon as any symptoms develop, to limit spread of COVID-19 to other people.

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Indicators of effective prevention measure for COVID-19 in NSW per day for the week ending 19 December 2020

	Date Reported				Week ending 19 Dec
	19-Dec	18-Dec	17-Dec	16-Dec	
Number of cases **with symptoms** at diagnosis	61%	90%	74%	100%	74%
	(17/28)	(17/19)	(17/23)	(3/3)	(54/73)
Proportion of cases in isolation at least 48 hours before symptoms	6%	6%	0%	0%	4%
	(1/16)	(1/17)	(0/17)	(0/3)	(2/54)
Cases **not in isolation** at symptom onset					
Proportion tested (swabbed) within:					
• 1 day of symptom onset	50% (8/16)	56% (9/16)	82% (14/17)	67% (2/3)	63% (33/52)
• 2 days of symptom onset	81% (13/16)	69% (11/16)	88% (15/17)	67% (2/3)	79% (41/52)
• 3 days of symptom onset	100% (16/16)	88% (14/16)	88% (15/17)	100% (3/3)	92% (48/52)
Proportion tested more than 3 days after symptom onset	0% (0/16)	13% (2/16)	12% (2/17)	0% (0/3)	8% (4/52)
Proportion who entered isolation within:					
• 1 day of symptom onset	56% (9/16)	56% (9/16)	76% (13/17)	67% (2/3)	63% (33/52)
• 2 days of symptom onset	81% (13/16)	69% (11/16)	88% (15/17)	100% (3/3)	81% (42/52)
• 3 days of symptom onset	88% (14/16)	88% (14/16)	88% (15/17)	100% (3/3)	88% (46/52)
Proportion entering isolation more than 3 days after symptom onset	13% (2/16)	13% (2/16)	12% (2/17)	0% (0/3)	12% (6/52)
Number of tests conducted	**28,210**	**12,374**	**7,531**	**10,583**	**137,252**

Interpretation: There were 19 cases (26%) this week who did not report symptoms at the time of diagnosis and had sought testing because they were either close contacts or had been in a venue that had been visited by confirmed cases of COVID-19. Of those who were symptomatic, almost two-thirds were in isolation within one day of symptom onset.

There were 6 cases (12%) reported who went into isolation more than three days after symptom onset. It is important that people seek testing immediately if symptoms develop. Public health staff are responding quickly, with all cases interviewed within one day of notification.

SECTION 1: HOW IS THE OUTBREAK TRACKING IN NSW?

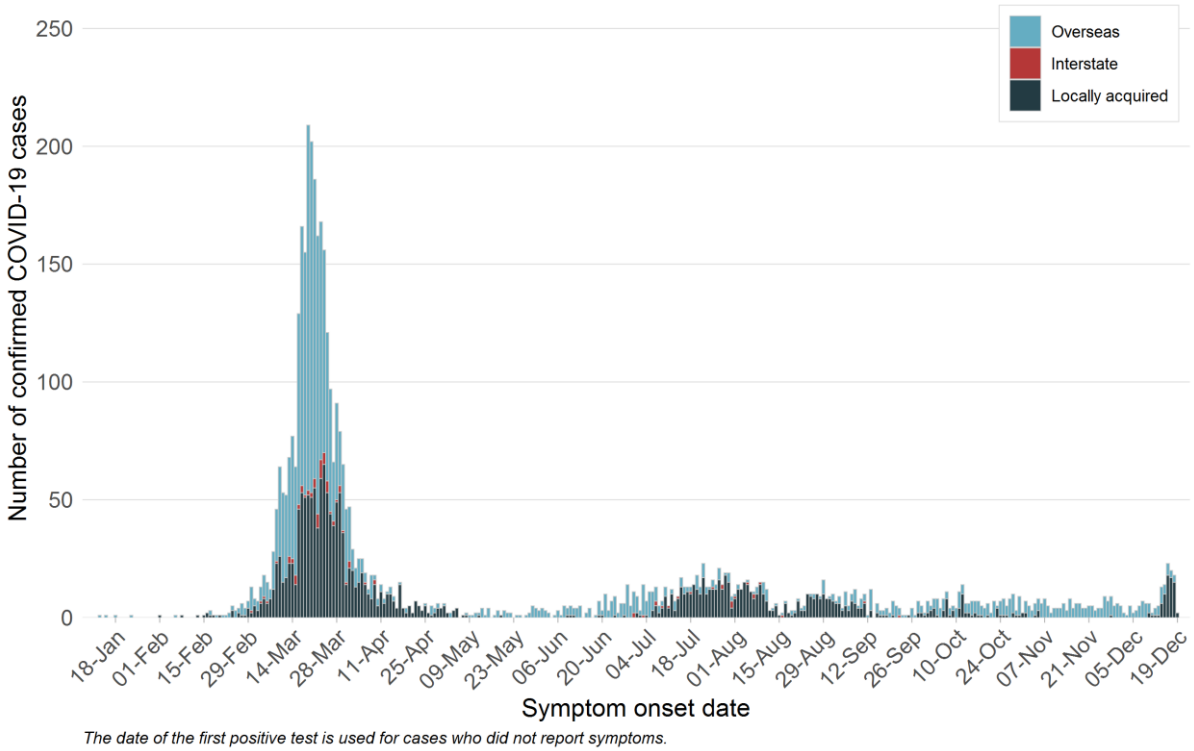
Table 1. COVID-19 cases and tests reported in NSW, up to 19 December 2020

	Week ending 19 Dec	Week ending 12 Dec	% change	Total to 19 Dec
Number of cases	109	34	↑221%	4,562
Overseas acquired	36	34	↑6%	2,529
Interstate acquired	0	0	-	90
Locally acquired	73	0	-	1943
No links to other cases or clusters	1	0	-	0
Number of deaths	0	0	-	55
Number of tests	137,252	70,190	↑96%	3,755,867

Note: The case numbers reported for previous weeks is based on the most up to date information from public health investigations.

To understand how the outbreak is tracking we look at how many new cases are reported each day and the number of people being tested. Each bar in the graph below represents the number of new cases based on the **date of symptom onset**.

Figure 1. COVID-19 cases by likely infection source and illness onset, NSW, 2020



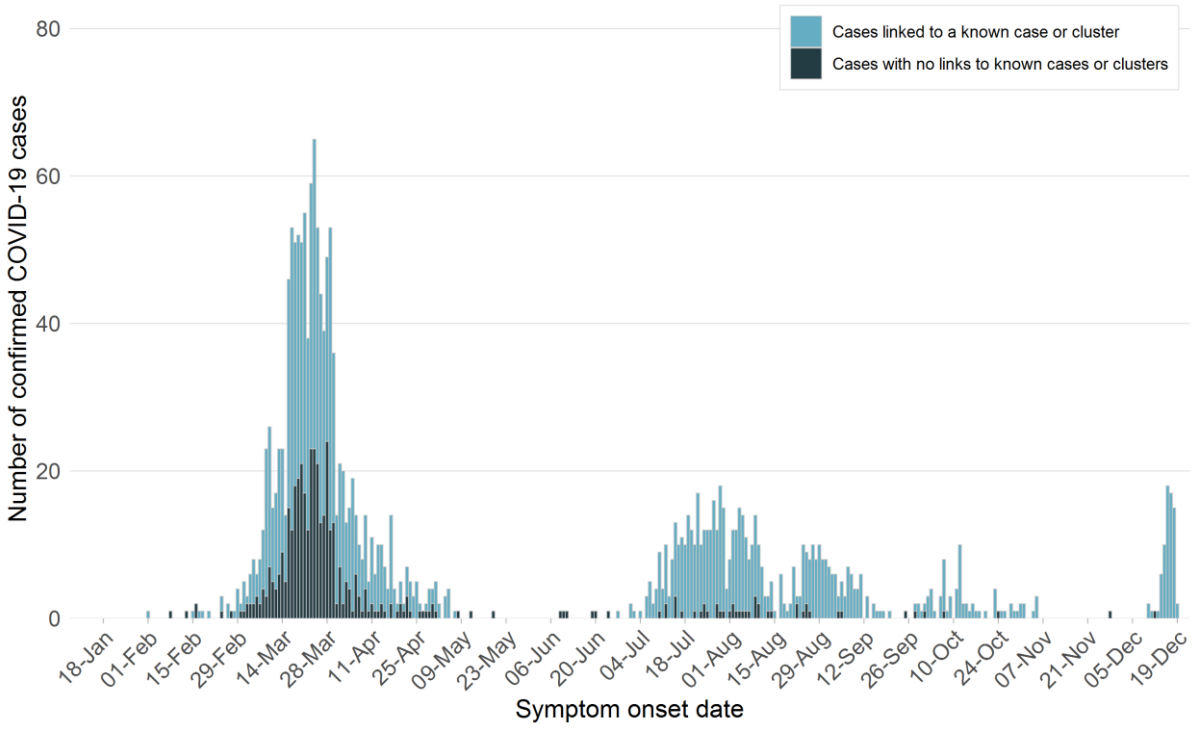
The date of the first positive test is used for cases who did not report symptoms.

Interpretation: There were 109 cases of COVID-19 reported in NSW with a symptom onset date in week ending 19 December. Of these, two-thirds (73/109) were locally-acquired infections.

How much local transmission is occurring in NSW?

Public health efforts are focused on contact tracing to limit further spread in the community, and identifying the source of infection for every case. To understand the extent of community transmission, locally-acquired cases who have had contact with a case or who are part of a known cluster are considered separately to those with an unidentified source of infection. Cases with no links to other cases or clusters suggest that there are people infected with COVID-19 in the community who have not been diagnosed.

Figure 2. Locally acquired COVID-19 cases by likely infection source and illness onset, NSW, 2020



The date of the first positive test is used for cases who did not report symptoms.

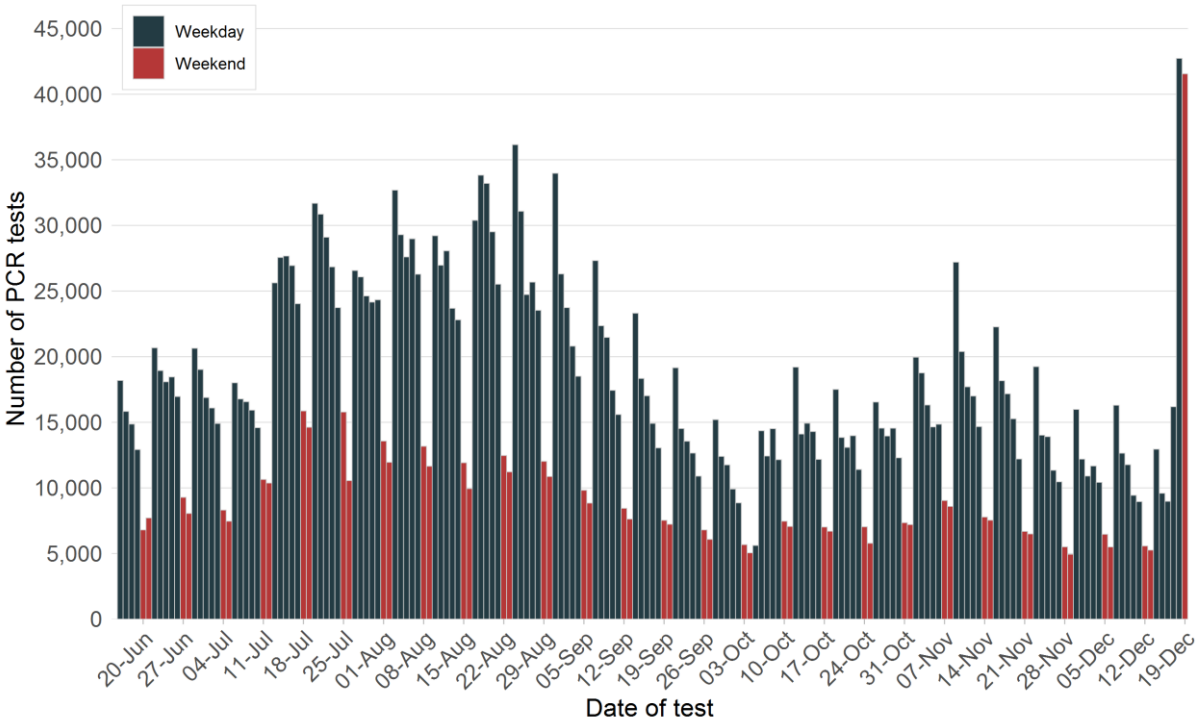
Interpretation: There were 73 locally acquired cases with an onset of symptoms in the last two weeks. The number of new cases diagnosed in NSW increased significantly this week following a large outbreak of COVID-19 in Northern Sydney LHD.

SECTION 2: COVID-19 TESTING IN NSW

How much testing is happening?

The bars on the graph below show the number of tests by the date a person presented for the test.[1] While public health facilities are open seven days a week, less testing occurs through GPs and private collection centres on weekends and public holidays. This explains the lower number of tests on weekends.

Figure 3. Number of PCR tests per day, NSW, 2020



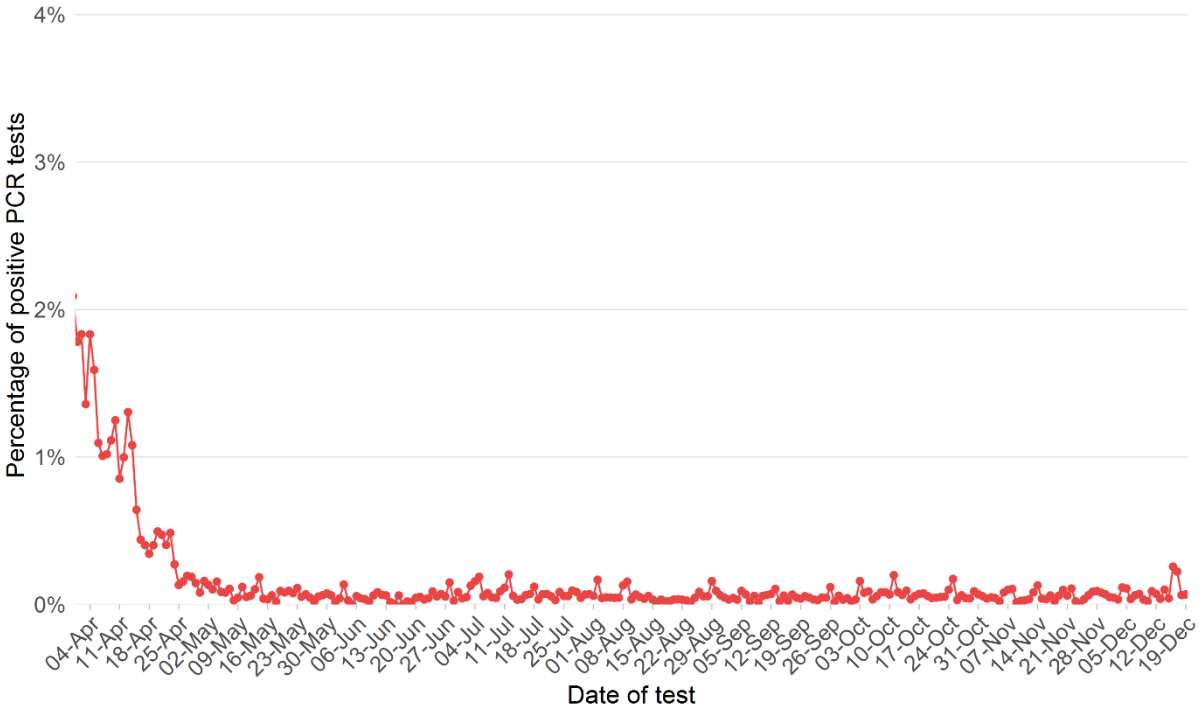
Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: In the week ending 19 December, there was a surge in testing in response to an outbreak of COVID-19 in Northern Sydney following reports of two cases on 16 December. Testing numbers almost doubled this week compared to the previous week with more than 40,000 tests conducted on Friday 18 December. An average of 2.4 tests were conducted per 1,000 people in NSW each day in the week ending 19 December, compared to a daily average of 1.2 per 1,000 people in the previous week.

[1] The number of tests per day displayed below is different to the 24 hour increase in tests reported each day as there are delays in some laboratories providing negative results to NSW Health.

What proportion of tests are positive?

Figure 4. Proportion of PCR tests positive for COVID-19, NSW, 2020

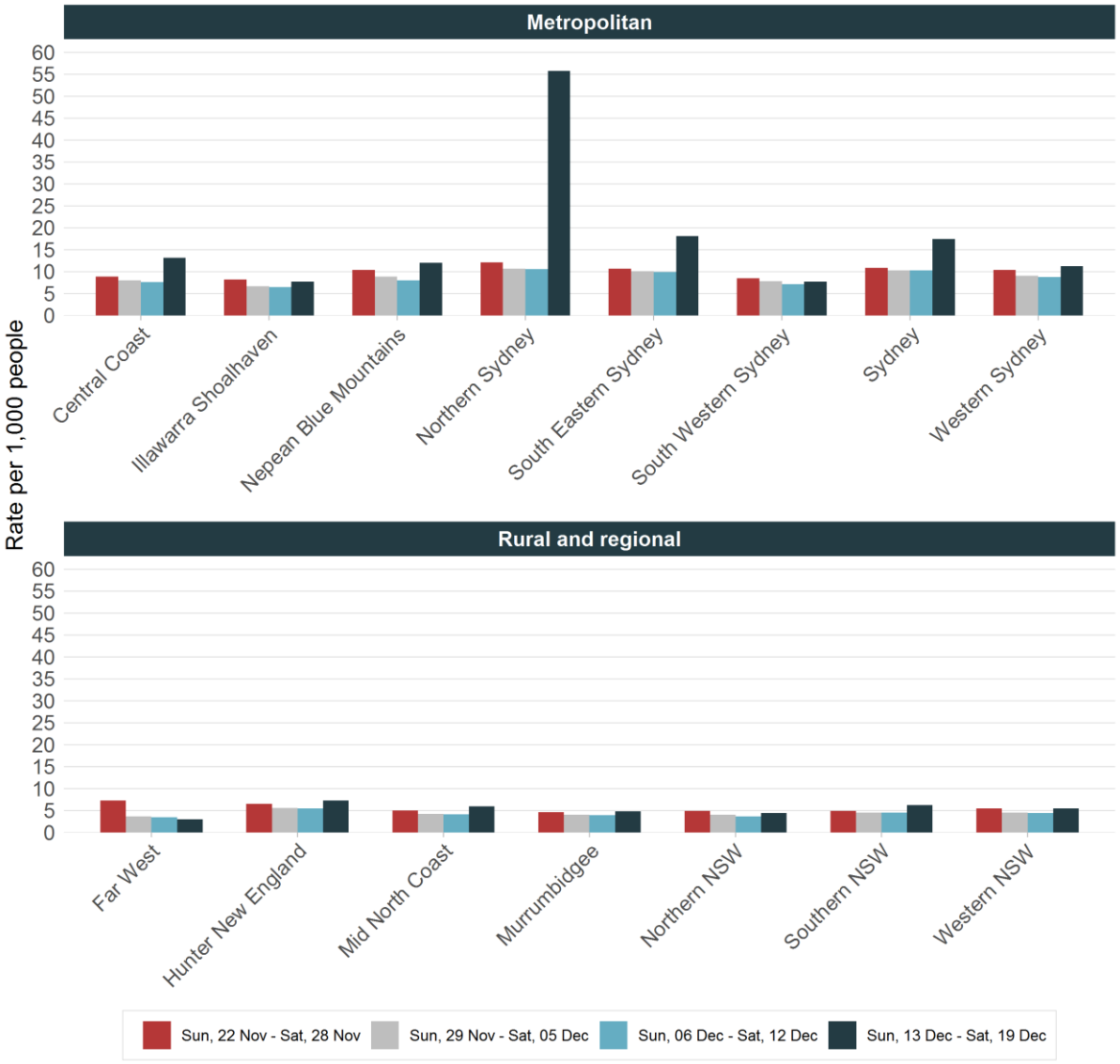


Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: There was an increase in the proportion of tests positive for COVID-19 (0.2%). Increased positivity suggests an increase COVID-19 transmission in the community.

Testing by Local Health District

Figure 5. Rates of COVID-19 testing by LHD of residence and week



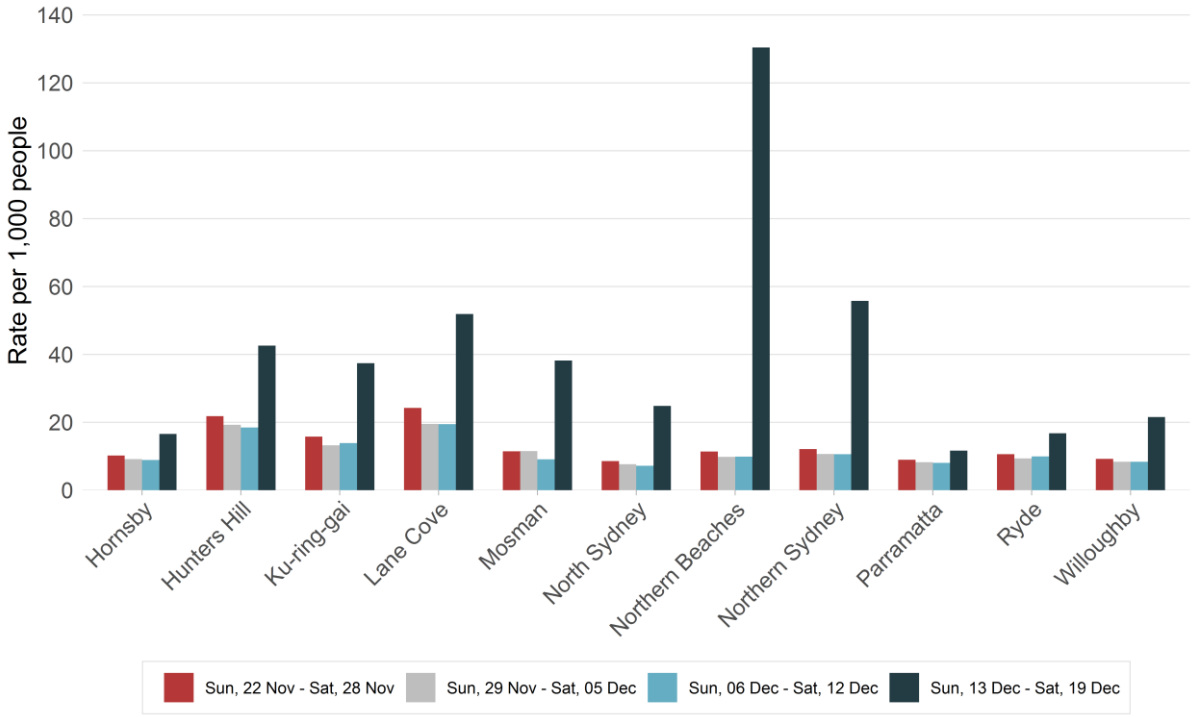
Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

Interpretation: Statewide testing rates in the week ending 19 December increased across most LHDs. Testing rates surged in Northern Sydney LHD during the week in response to the recent cluster in the Northern Beaches (from an average 1,500 tests a day to more than 20,000 tests on 19 December). On the same day, testing also increased significantly across South Eastern Sydney (1,500 tests a day to more than 4,000 tests) and Sydney LHD (1500 tests a day to more than 3,000 tests).

Testing across Northern Sydney LGAs

The following figure displays the number of tests by Local Government Area across the Northern Sydney Local Health District.

Figure 6. Rates of COVID-19 testing across Northern Sydney LGAs by week

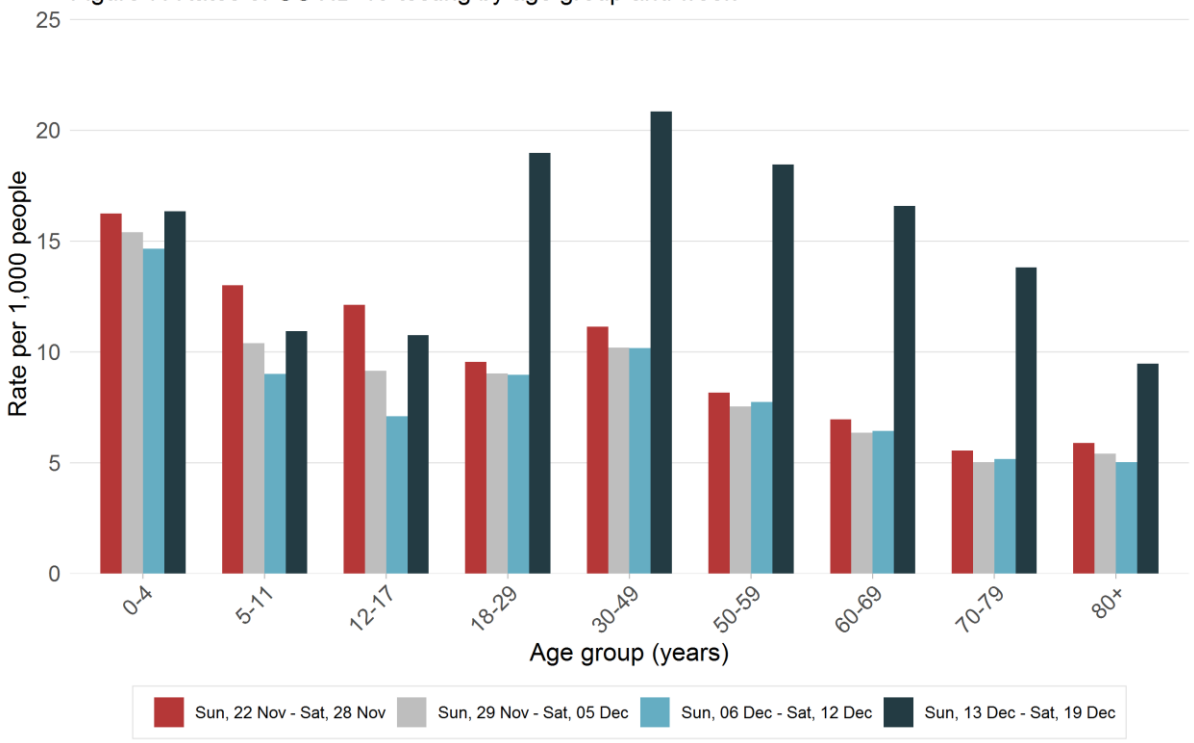


The date of the first positive is used for cases who did not report symptoms

Interpretation: Testing rates surged across most LGAs in Northern Sydney LHD during the week in response to the recent cluster in the Northern Beaches (55.8 tests per 1000 people compared with 10.6 per 1,000 last week). This was mainly driven by testing in Northern Beaches LGA (130.4 tests per 1000 people compared with 9.9 per 1,000 last week).

Testing by age group

Figure 7. Rates of COVID-19 testing by age group and week

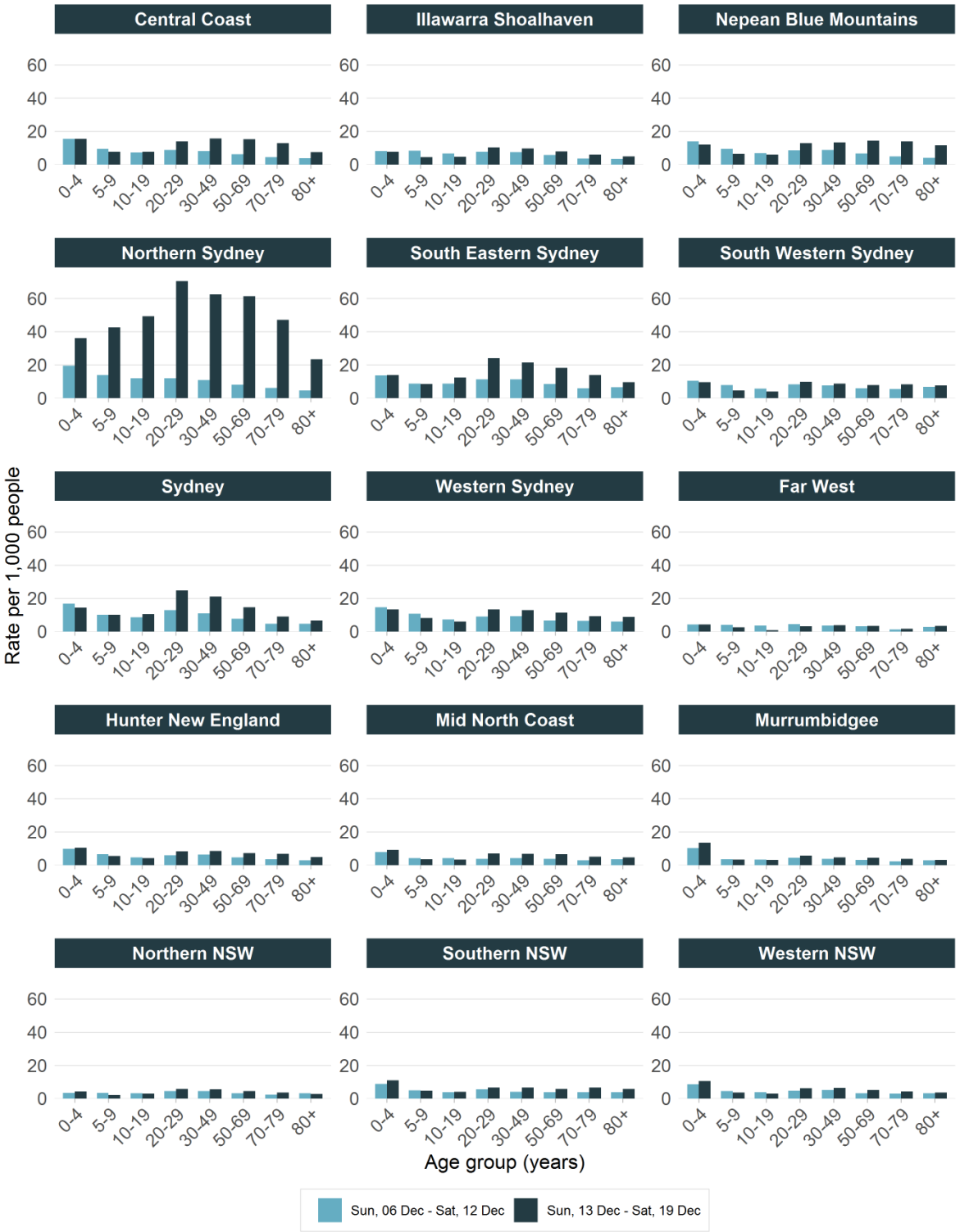


Includes SARS-CoV-2 PCR tests only and excludes notifications with age missing.

Interpretation: For the week ending 19 December, testing rates increased for all ages and most significantly in adults aged 18 years and over. Testing rates remain high in children aged 0-4 years which may relate to elevated emergency presentations for bronchiolitis seen in children under 5 years old since early November

Testing by LHD and age group

Figure 8. Rates of COVID-19 testing by age group, LHD of residence and week



Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

Interpretation: Testing rates have surged across all age groups in Northern Sydney LHD in the week ending 19 December in response to the Northern Beaches cluster. Overall testing rates have increased or remained steady in older age groups while rates in children aged 0-4 years remain high compared with other age groups across most regional LHDs.

SECTION 3: COVID-19 TRANSMISSION IN NSW IN THE LAST FOUR WEEKS

Information from cases who were diagnosed in the last four weeks is used to understand where COVID-19 is spreading in the community. This takes into account the **incubation period** and the time it takes for people to seek testing and for the laboratory to perform the test.

This section summarises cases based on the date the case was reported to NSW Health.

Table 2. Locally-acquired COVID-19 cases in NSW, by notification week and source of infection, 22 November to 19 December 2020

Locally-acquired cases	Week ending				Total
	19 Dec	12 Dec	5 Dec	28 Nov	
Cases who are linked to a known case or cluster	72	0	0	0	72
Cases with no links to other cases or clusters	1	0	1	0	2
Total	**73**	**0**	**1**	**0**	**74**

Interpretation: There were 72 cases that were linked to a known cluster and one case with no links to a case or cluster in the week ending 19 December. The source of the cluster in the Northern Beaches area is still under investigation.

The unlinked case is a driver who transported flight crew to and from the airport and their hotels. Investigations into possible transmission from flight crew to this case continue. Close contacts were identified, tested and isolated and no onward transmission has been identified to date. Whole genome sequencing of the case indicates that the genomic strain is related to sequences from America and not related any known local sequences.

Table 3. Locally-acquired COVID-19 cases by LHD of residence and week reported, 22 November to 19 December 2020

Local Health District	Week ending				Total	Days since last case reported
	19 Dec	12 Dec	5 Dec	28 Nov		
Central Coast	2	0	0	0	2	1
Illawarra Shoalhaven	0	0	0	0	0	106
Nepean Blue Mountains	0	0	0	0	0	95
Northern Sydney	67	0	0	0	67	0
South Eastern Sydney	2	0	0	0	3	2
South Western Sydney	0	0	1	0	1	17
Sydney	2	0	0	0	1	0
Western Sydney	0	0	0	0	0	36
Far West	0	0	0	0	0	261
Hunter New England	0	0	0	0	0	135
Mid North Coast	0	0	0	0	0	242
Murrumbidgee	0	0	0	0	0	103
Northern NSW	0	0	0	0	0	147
Southern NSW	0	0	0	0	0	61
Western NSW	0	0	0	0	0	142
Total	**73**	**0**	**1**	**0**	**74**	**0**

Interpretation: There were 73 locally-acquired cases reported in the week ending 19 December. The majority of locally-acquired cases are residents of Northern Sydney LHD (92%).

Table 4. Locally acquired COVID-19 cases with no identified links to known cases or cluster by LHD of residence and week reported, 22 November to 19 December 2020

Local Health District	Week ending				Total
	19 Dec	12 Dec	5 Dec	28 Nov	
Central Coast	0	0	0	0	0
Illawarra Shoalhaven	0	0	0	0	0
Nepean Blue Mountains	0	0	0	0	0
Northern Sydney	0	0	0	0	0
South Eastern Sydney	1	0	0	0	1
South Western Sydney	0	0	1	0	1
Sydney	0	0	0	0	0
Western Sydney	0	0	0	0	0
Far West	0	0	0	0	0
Hunter New England	0	0	0	0	0
Mid North Coast	0	0	0	0	0
Murrumbidgee	0	0	0	0	0
Northern NSW	0	0	0	0	0
Southern NSW	0	0	0	0	0
Western NSW	0	0	0	0	0
Total	**1**	**0**	**1**	**0**	**2**

Interpretation: There was one locally acquired COVID-19 case reported with no identified links to known cases or clusters in the week ending 19 December.

SECTION 4: CURRENT COVID-19 CLUSTERS IN NSW

Public health staff interview all new cases at the time of diagnosis to identify the likely source of their infection. Cases are also asked to report all the locations visited and people with whom they have been in contact within their infectious period (two days prior to symptom onset until the time of isolation). Close contacts are quarantined to limit the spread of infection to others and encouraged to seek testing.

Cases in community settings

In total, 72 cases were reported in the last week associated with a new cluster in the Northern Beaches. In the week ending 19 December, there are seven exposure locations linked to this cluster.

Avalon cluster

On 16 December Northern Sydney Public Health Unit was notified of two cases of COVID-19 in Avalon residents. While both cases were known to each other, the source of their infection was unknown. Further investigation revealed that the cases had likely been exposed at the Avalon RSL. Several more cases were reported over subsequent days all associated with a growing cluster of infections related to the Avalon area. By the end of the reporting week, this cluster has seeded two additional clusters outside of the Northern Beaches area including a hair salon in Turramurra and a workplace in the CBD.

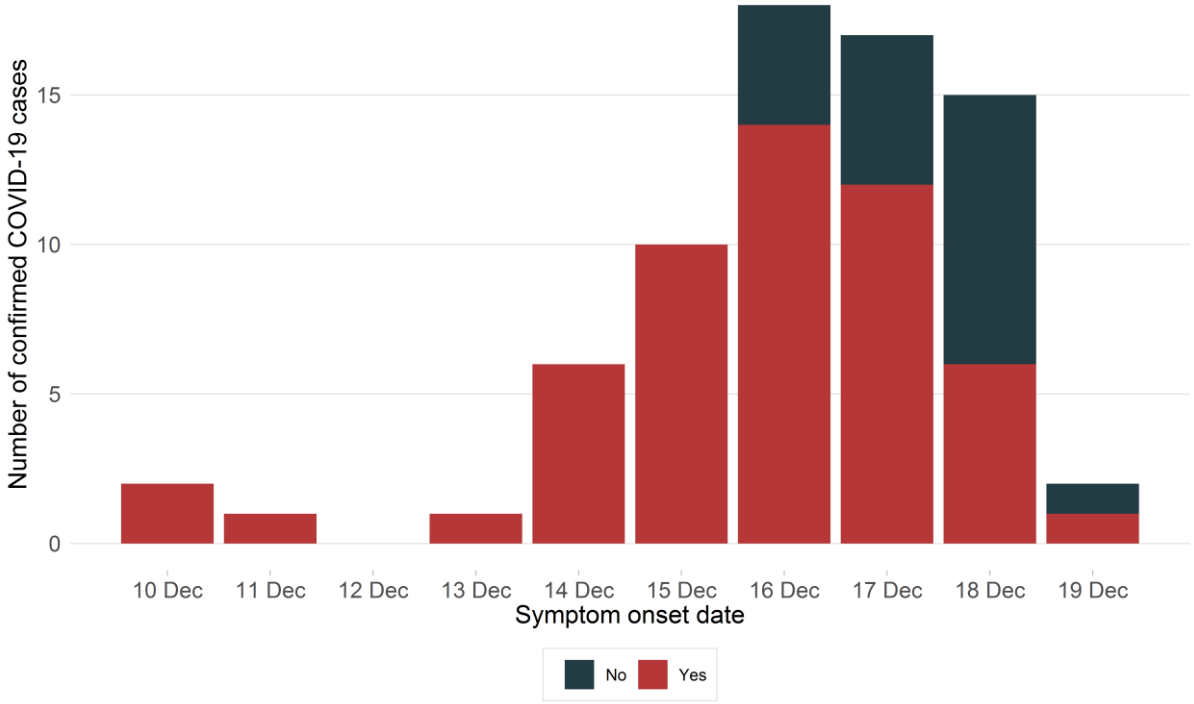
Cases associated with this cluster attended a large number of public venues across Sydney including clubs, restaurants, gyms, hair salons and schools. To limit the spread of COVID-19, NSW Health have issued multiple public health alerts to people who may have been exposed.

Whole genome sequencing of the virus confirms that this is an overseas strain most similar to one circulating in the United States. The absence of sewage detections in the Northern Beaches catchment prior to this week suggests that the virus is a new introduction into the area and has not been circulating previously.

Table 5. Cases linked to Avalon cluster by setting of exposure, week ending 19 December, NSW

Setting of exposure	Exposure site	Primary cases	Secondary cases		Total
			Non-household setting	Household setting	
Restaurant/Bar/Club	RSL	20	1	0	21
	Bowling Club	25	1	1	27
	RSL and Bowling Club	8	0	1	9
Gym	Gym 1	2	0	2	4
	Gym 2	2	0	0	2
Office Building	Workplace	3	0	0	3
Food Service	Take-away shop	3	1	0	4
Personal Service	Hair Salon	2	0	0	2
Total		**65**	**3**	**4**	**72**

Figure 9. COVID-19 cases by illness onset and symptoms



Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

Interpretation: The majority of cases reported having symptoms at the time diagnosis at the start of the outbreak. Rapid targeting messaging to people in the Northern Beaches area advising them to get tested led to a larger proportion asymptomatic cases at diagnosis in the later stages of the outbreak. The identification of cases early and before they develop symptoms is essential to limit the spread of COVID-19.

SECTION 5: COVID-19 IN SPECIFIC POPULATIONS

COVID-19 in healthcare workers

There has been one case of COVID-19 reported in a healthcare worker (HCW) in the week ending the 19 December. This case is associated with the Avalon Cluster and was not a health-care acquired infection.

In total, there have been 38 cases of COVID-19 in health care workers since 1 August. Of these, 23 HCWs were potentially infected in healthcare settings. A further seven cases were household contacts of a known case, five were exposed in community settings, and for three cases the source of infection is unknown.

Clusters associated with healthcare-acquired infections in HCWs

Of the 23 potentially healthcare-acquired infections in HCWs reported since 1 August, 20 were associated with five clusters in healthcare settings: two from Hornsby Hospital, seven from Liverpool Hospital, seven from Concord Hospital, three from two related private health clinics in Bella Vista and Liverpool and one case from a GP clinic in Lakemba.

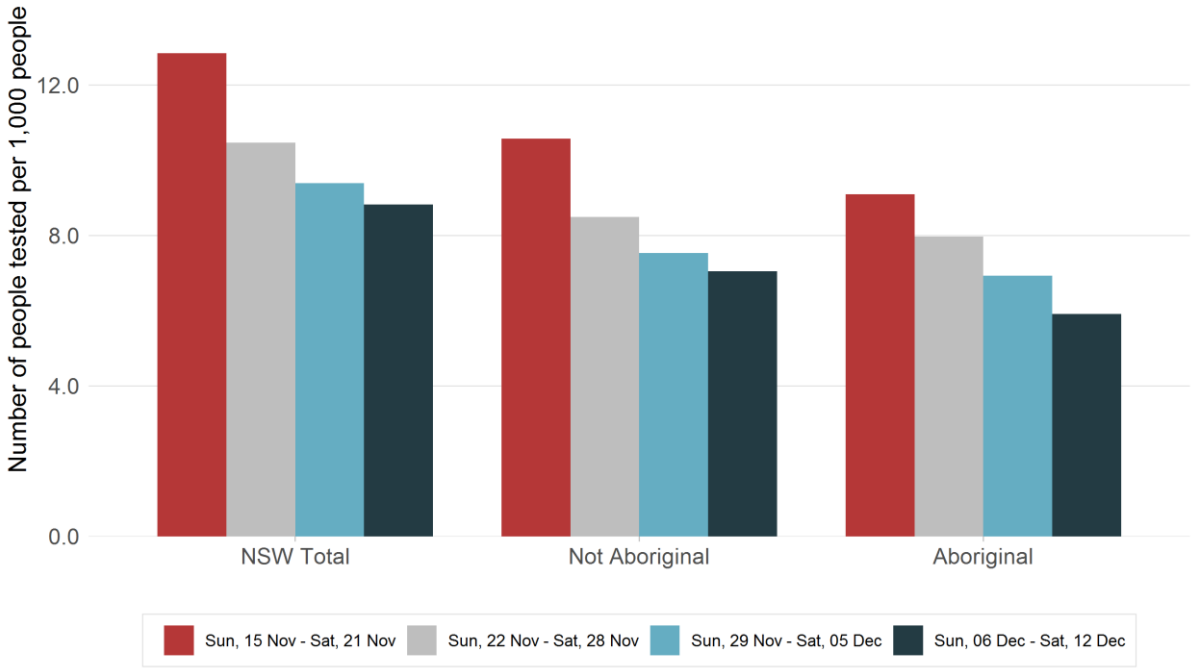
Aboriginal people

Aboriginal and Torres Strait Islander communities are recognised as a priority group due to key drivers of increased risk of transmission and severity of COVID-19 which include mobility, remoteness, barriers to access including institutional racism and mistrust of mainstream health services, crowded and inadequate housing, and burden of disease.

There was one locally-acquired case in an Aboriginal person reported in the week ending 19 December. In total, 46 Aboriginal people have been diagnosed with COVID-19, representing 1% of all cases in NSW.

While Aboriginal status is collected by public health staff on interview with the case at the time of diagnosis, those who test negative are not interviewed. Aboriginal status for those tested can be ascertained through linkage with other health information systems but there is a delay in getting this information. Results of the most recent linkage are available for people tested up to 12 December 2020, with Aboriginal status ascertained for approximately 90% of all COVID-19 test records.

Figure 10. Testing Rate per 1,000 by Aboriginality and week, NSW



Note: NSW Total includes persons tested in NSW without Aboriginality recorded.

Interpretation: Testing rates decreased slightly in the week ending 12 December compared to the previous week for Aboriginal and non-Aboriginal people. Testing rates for Aboriginal people have been lower than testing rates for non-Aboriginal people since early September. During May and June, testing rates were higher among Aboriginal people in NSW compared to non-Aboriginal people.

Pregnant women

There was one locally-acquired case in a pregnant woman reported in the week ending 19 December. In total, 37 pregnant women have been diagnosed with COVID-19 in NSW. As those who test negative are not interviewed, testing rates among pregnant women are not available.

SECTION 6: DEATHS

How many people have died as a result of COVID-19?

In total, 1.2% of cases (55 people) have died as a result of COVID-19, most of whom were 70 years of age or older, including 28 residents of aged care facilities with known COVID-19 outbreaks. Approximately 22% (12/55) of the deaths were in overseas-acquired cases.

Table 6. Deaths as a result of COVID-19, by age group, NSW, 2020

Age group	Number of deaths	Number of cases	Case fatality rate
0-4 years	0	91	0%
5-11 years	0	85	0%
12-17 years	0	128	0%
18-29 years	0	1010	0%
30-49 years	0	1405	0%
50-59 years	1	621	0.2%
60-69 years	4	590	0.7%
70-79 years	14	364	3.8%
80+ years	36	159	22.6%
Total	**55**	**4453**	**1.2%**

Interpretation: Cases older than 80 years of age had both the highest number of deaths and the highest case fatality rate. No cases below the 50–59 age group have died as a result of COVID-19 in NSW.

SECTION 7: NSW Sewage Surveillance Program

The NSW Sewage Surveillance Program tests untreated sewage for fragments of the COVID-19 (SARS-CoV-2) virus at sewage treatment plant locations across NSW. Testing sewage can help track infections in the community and provide early warning of an increase in infections. These tests provide data to support NSW Health's response to COVID-19.

An infected person can shed virus in their faeces even if they do not have symptoms, and shedding can continue for several weeks after they are no longer infectious. The NSW sewage surveillance for SARS-CoV-2 is in the preliminary stages of analysis and work is progressing to assess the significance of the results. For example, it is not currently known the minimum number of cases that can be detected in a catchment. A small number of cases in a large sewage catchment may not be detected by sewage surveillance due to factors such as dilution, inhibition, reduction in shedding over the infection period or movement of cases.

In the week ending 19 December, 83 sewage samples were tested for fragments of SARS-CoV-2. Of these, there were three detections – these samples were taken from the Warriewood, Hornsby Heights and Malabar treatment plants. Bomaderry, Nowra, St Georges Basin, Gunning, Harrington, Hawkes Nest, Hallidays Point, Nambucca Heads, Bonny Hills and Dunbogan have commenced as new sites. The table below shows results for previous weeks from various sites across NSW.

Table 7. Locations with positive SARS-CoV-2 detections in sewage samples since September for the week ending 19 December 2020

Pop.	Location	LHD	10-Oct	17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec
			Week										
			41	42	43	44	45	46	47	48	49	50	51
60, 514	Blue Mountains (Winmalee)	NBMLHD											
4,681	North Richmond	NBMLHD											
13,052	Richmond	NBMLHD											
110,114	Penrith	NBMLHD											
12,000	Lithgow	NBMLHD											
19,000	South Windsor	NBMLHD											
8,000	McGraths Hill	NBMLHD											
69,245	Warriewood	NSLHD											
1,241	Brooklyn	NSLHD											
31,924	Hornsby Heights	NSLHD											
57,933	West Hornsby	NSLHD											
318,810	Bondi	S&SESLHD											
233,176	Cronulla	SESLHD											
1,857,740	Malabar 1	S&SES&SWSLHD											
	Malabar 2	S&SES&SWSLHD											
181,005	Liverpool	SWSLHD											
98,743	West Camden	SWSLHD											
6,882	Wallacia	SWSLHD											
14,600	Picton	SWSLHD											
161,200	Glenfield	SWSLHD											
1,341,986	North Head	NS&WSLHD											
26,997	Castle Hill Cattai	WSLHD											
	Castle Hill Glenhaven	WSLHD											
163,374	Quakers Hill	WSLHD											
119,309	Rouse Hill	WSLHD											

Pop.	Location	LHD	10-Oct	17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec
37,061	Riverstone	WSLHD											
163,147	St Marys	NBM&WSLHD											
73,686	Shellharbour	ISHLHD											
196,488	Wollongong	ISHLHD											
Regional sites													
14,700	Bowral	SWSLHD											
14,000	Mittagong	SWSLHD											
9,000	Moss Vale	SWSLHD											
1,000	Berrima	SWSLHD											
2,000	Bundanoon	SWSLHD											
900	Robertson	SWSLHD											
16,068	Bombo	ISHLHD											
32,000	Ulladulla	ISHLHD											
18,000	Bomaderry	ISHLHD											
37,500	Nowra	ISHLHD											
16,000	St Georges Basin	ISHLHD											
11,000	Cullburra Beach	ISHLHD											
147,500	Gosford-Kincumber	CCLHD											
-	Wyong-Toukley	CCLHD											
	Bateau Bay	CCLHD											
	Woy Woy	CCLHD											
5,000	Perisher	M&SLHD											
8,400	Thredbo	M&SLHD											
3,000	Jindabyne	M&SLHD											
8,000	Cooma	M&SLHD											
500	Gunning	M&SLHD											
500	Charlottes Pass	M&SLHD											
51,750	Albury composite	M&SLHD											
	Albury Kremer St	M&SLHD											
	Albury Waterview	M&SLHD											
22,419	Goulburn	M&SLHD											
21,000	Batemans Bay	M&SLHD											
18,000	Moruya	M&SLHD											
17,000	Narooma	M&SLHD											
8,000	Eden	M&SLHD											
15,500	Merimbula	M&SLHD											
5,000	Bermagui	M&SLHD											
7,800	Deniliquin	M&SLHD											
48,000	Queanbeyan	M&SLHD											
50,000	Wagga Wagga composite	M&SLHD	c	c	c	c	c	c	c		c		c
	Wagga Wagga-inlet 1	M&SLHD											
	Wagga Wagga-inlet 2	M&SLHD											
	Wagga Wagga - Kooringal STP	M&SLHD											
2,050	Bourke	W&FWLHD											
36,603	Bathurst	W&FWLHD											
19,000	Broken Hill	W&FWLHD											
500	Dareton	W&FWLHD											
11,600	Parkes	W&FWLHD											
37,000	Dubbo	W&FWLHD											

Pop.	Location	LHD	10-Oct	17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec
24,000	Armidale	HNELHD											
45,000	Tamworth	HNELHD											
10,000	Moree	HNELHD											
12,000	Forster	HNELHD											
7,582	Hallidays Point	HNELHD											
5,180	Harrington	HNELHD											
10,715	Hawks Nest	HNELHD											
225,834	Hunter - Burwood Beach	HNELHD											
60,000	Hunter - Shortland	HNELHD											
115,000	Hunter - Belmont	HNELHD											
60,000	Hunter - Morpeth	HNELHD											
58,300	Hunter - Boulder Bay	HNELHD											
35,000	Hunter - Raymond Terrace	HNELHD											
2,500	Hunter - Karuah	HNELHD											
17,000	East Lismore	N&MNCLHD											
15,500	South Lismore	N&MNCLHD											
18,958 (both plants total)	Byron Bay - Ocean Shores	N&MNCLHD											
	Byron Bay	N&MNCLHD											
31,104	Ballina	N&MNCLHD											
72,000 (Tweed District)	Tweed - Kingscliff	N&MNCLHD											
	Tweed - Hastings Point	N&MNCLHD											
12,250	North Grafton	N&MNCLHD											
6,300	South Grafton	N&MNCLHD											
6,500	Yamba	N&MNCLHD											
8,730	Nambucca Heads	N&MNCLHD											
54,370	Port Macquarie	N&MNCLHD											
7,010	Bonny Hills	N&MNCLHD											
8,540	Dunbogan	N&MNCLHD											
50,000	Coffs Harbour	N&MNCLHD											

	not sampled or not analysed
	SARS-CoV-2 not detected
	SARS-CoV-2 detected
	site moved to composite sample or ceased
sampling commenced in week 29 (week ending 18 July 2020)	
c	composite of the separate influent samples
l	result from another laboratory
p	result pending, not available at time of reporting
n	result from network sites

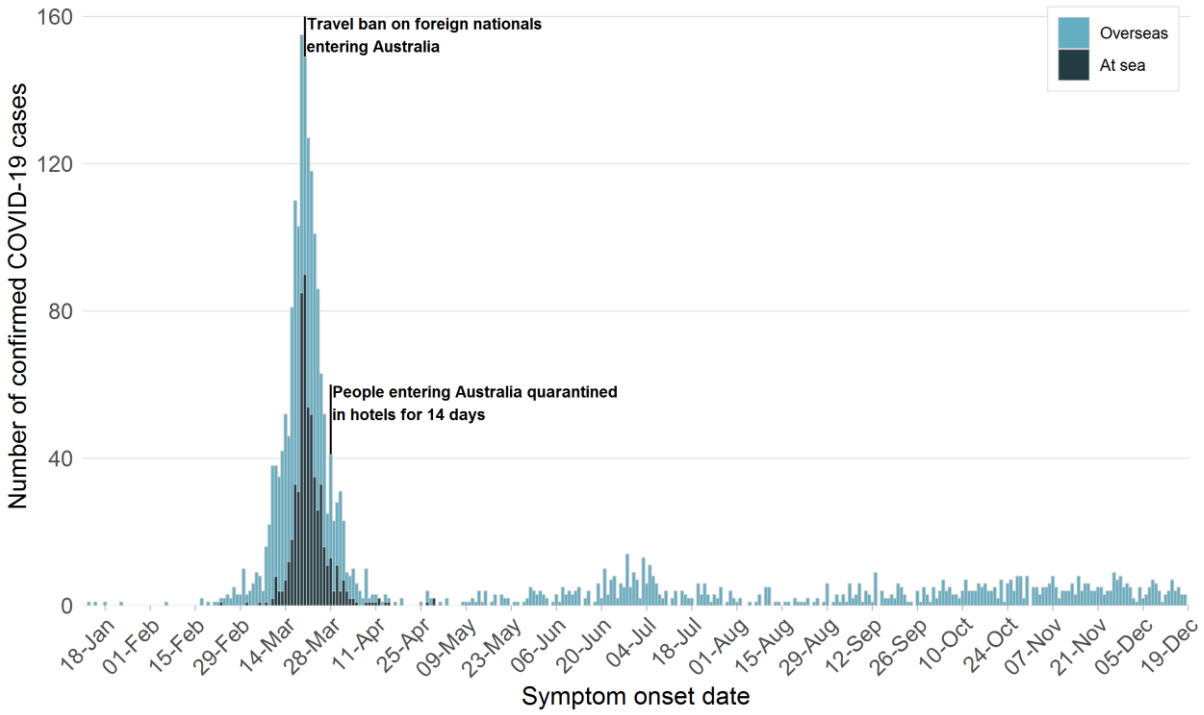
Interpretation: In the last week, there were three detections of SARS-CoV-2 from the Malabar, Hornsby Heights and Warriewood treatment plants. All three detections are associated with recently diagnosed cases in hotel quarantine or from known locally acquired cases in the Northern Beaches.

SECTION 8: COVID-19 IN RETURNED TRAVELLERS

To limit the spread of COVID-19 into NSW, travel restrictions were introduced for all non-Australian citizens and permanent residents. In addition, since 29 March returned travellers have been quarantined in hotels for a 14-day period and travellers who develop symptoms are isolated until no longer infectious.

The graph below shows the number of cases in returned travellers by the date of symptom onset. Cases acquired at sea refers to those cruise ship passengers who acquired their infection prior to disembarking in NSW.

Figure 11. Overseas acquired COVID-19 cases by infection source and illness onset, NSW, 2020



The date of the first positive test is used for cases who did not report symptoms.

Interpretation: The number of new cases in returned travellers has decreased markedly since March in line with travel restrictions and declined further again since mid-July. There were 36 overseas acquired cases reported in the week ending 19 December, 13% less than the previous week.

Country of acquisition of COVID-19 for overseas travellers

In the last four weeks, there have been 140 COVID-positive travellers who have arrived in NSW.

The table below lists the top 10 countries of acquisition for these travellers.

Table 8. Top 10 countries of acquisition for overseas travellers that have tested positive in the last four weeks, 22 November to 19 December 2020

Country of acquisition of COVID-19	Number (%) of cases in the last four weeks
USA	54 (39%)
United Kingdom	15 (11%)
India	14 (10%)
Lebanon	6 (4%)
Canada	5 (4%)
Pakistan	5 (4%)
Bangladesh	4 (3%)
Turkey	4 (3%)
United Arab Emirates	4 (3%)
Egypt	3 (2%)
Other	26 (19%)
Total	**140 (100%)**

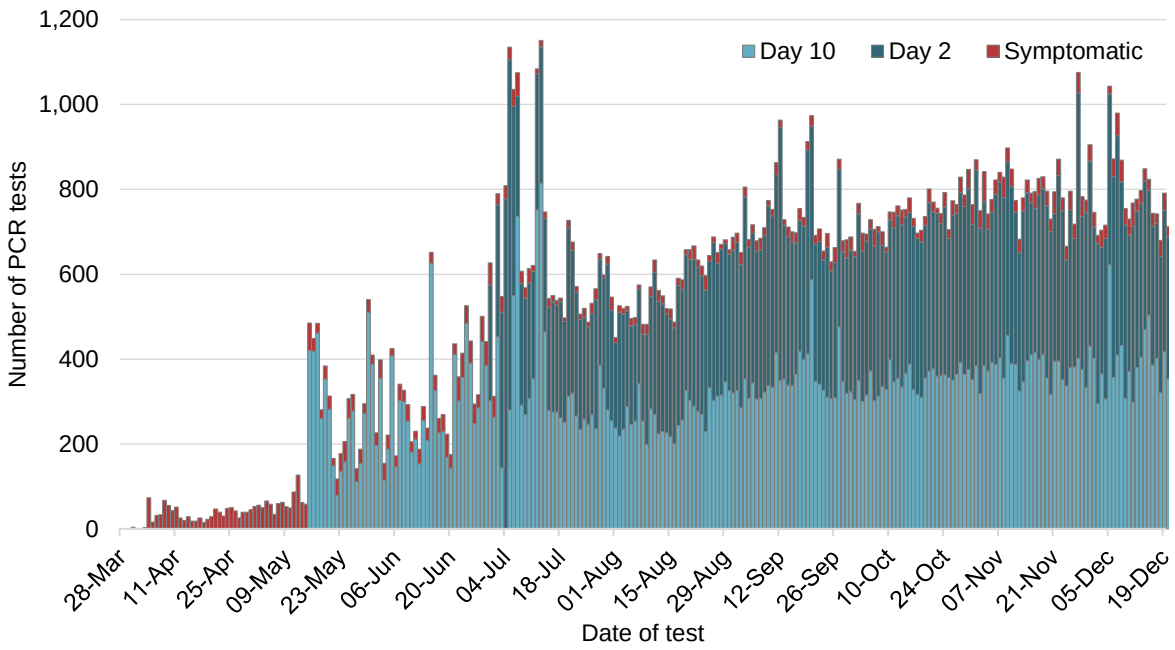
Interpretation: In the last four weeks, travellers returning from the United States accounted for the largest number of overseas acquired cases (50, 39%), followed by travellers returning from the United Kingdom (15, 11%), and India (14, 10%).

Hotel quarantine

The program of screening all overseas travellers after arrival in NSW commenced on 15 May 2020. From 30 June 2020, the program was extended to include screening on both day two and day ten after arrival. Testing is also carried out on individuals that became symptomatic in additional to the two mandatory tests.

Since hotel quarantine began on 29 March, a total of 135,078 PCR tests have been conducted with 660 overseas acquired cases and 4 interstate acquired COVID-19 cases detected while in hotel quarantine. In the last four weeks, 10,598 returned travellers received a day two swab in hotel quarantine; of these 2.9% reported symptoms at the time of screening. In the same time period, 10,841 returned travellers received a day 10 swab, and 1.2% reported symptoms at the time of screening.

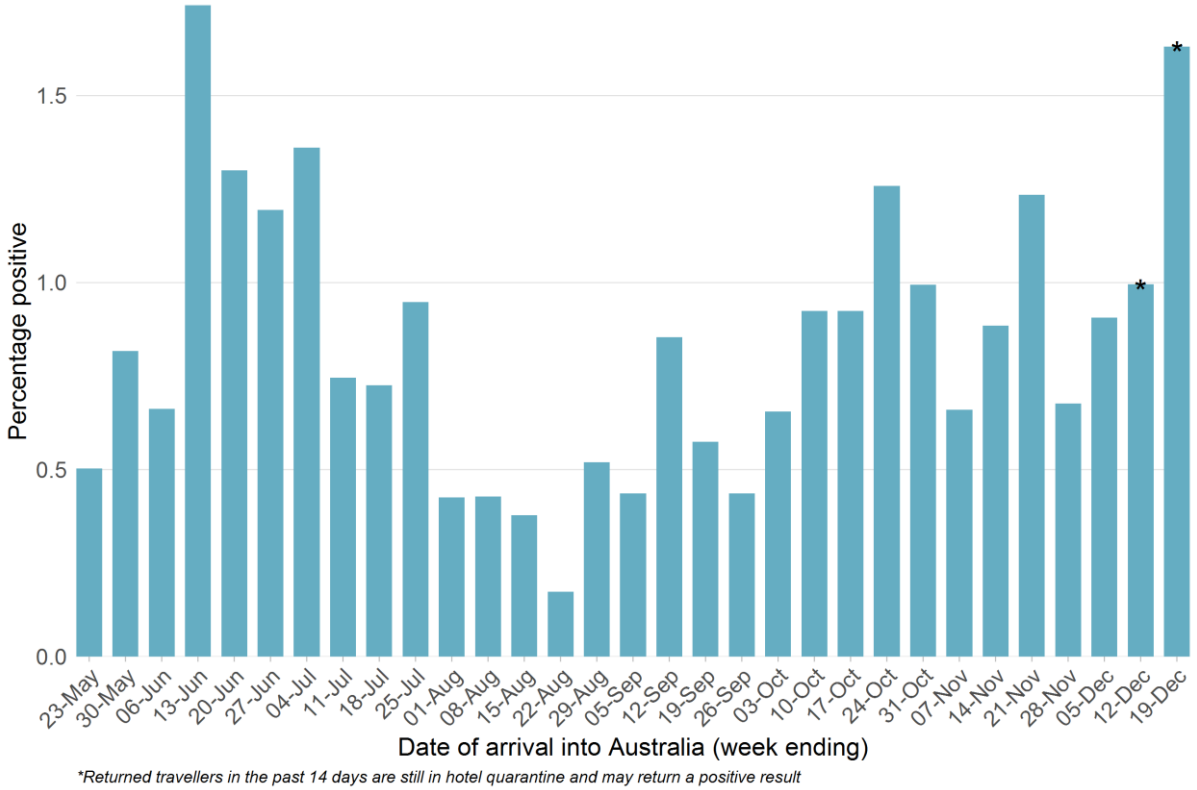
Figure 12. COVID-19 testing in returned travellers in hotel quarantine, reported from 29 March to 19 December, NSW, 2020



Interpretation: In the week ending 19 December, there were 5,427 tests of travellers conducted through the hotel quarantine screening programs.

The graph below shows the proportion of international travellers who were diagnosed with COVID-19 during their stay in hotel quarantine in NSW. Percentages are reported by week of arrival in Australia.

Figure 13. COVID-19 percentage positive in returned travellers in hotel quarantine by week of arrival in Australia, reported from week ending 23 May to week ending 19 December, NSW, 2020



*Returned travellers in the past 14 days are still in hotel quarantine and may return a positive result

Interpretation: In the week ending 19 December, the percentage positive in return travellers in hotel quarantine was high (1.6%) compared to previous weeks. In most weeks since May 2020, less than 1% of returned travellers have tested positive during their stay in hotel quarantine. Data is likely incomplete for returned travellers who have arrived within the last two weeks as they are still in hotel quarantine.

SECTION 9: OTHER RESPIRATORY INFECTIONS IN NSW

Influenza and other respiratory virus cases and tests reported in NSW, up to 13 December 2020

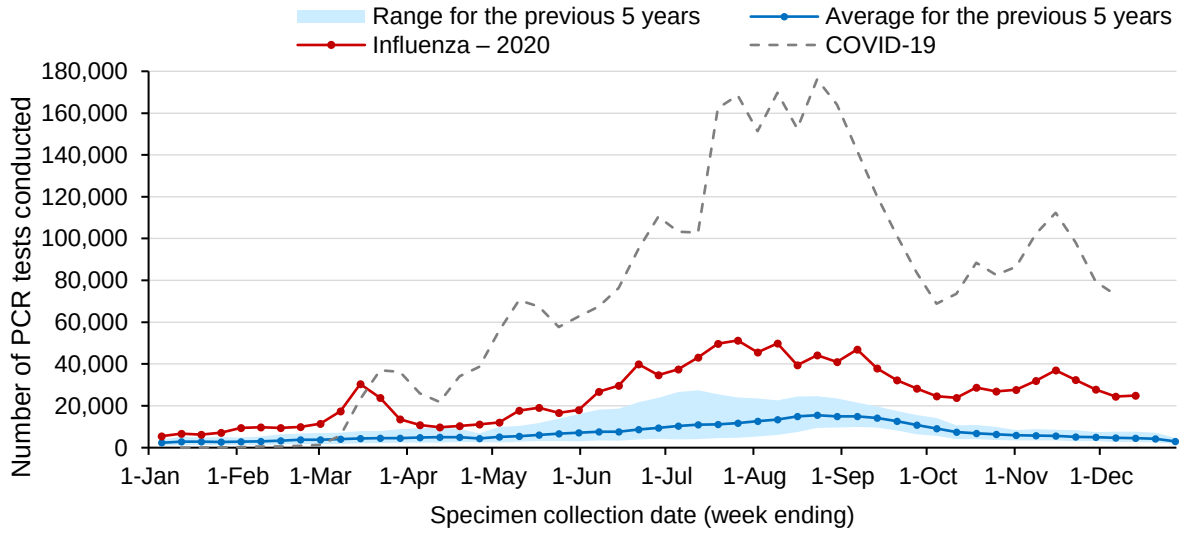
In NSW, routine surveillance for influenza and other respiratory viruses is conducted through sentinel laboratories. The number of all PCR tests (positive and negative) are provided to NSW Health by participating laboratories each week. Testing counts reflect the number of influenza PCR tests conducted; not all samples are tested for all respiratory viruses.

The most recent data available is for testing carried out to 13 December. A total of 1,287,780 influenza tests have been performed at participating laboratories to 13 December, with 24,954 tests conducted in the most recent week. Refer to Appendix B for PCR testing results for a range of respiratory viruses.

How much influenza testing is happening?

The red line in the figure below shows the number of PCR tests for influenza carried out each week. The blue line shows the average number of tests carried out for the same week in the last five years and the shaded area shows the range of counts reported in the previous five years. The grey line shows the number of COVID-19 tests.

Figure 14. Testing for influenza and COVID-19 by week, to 13 December 2020

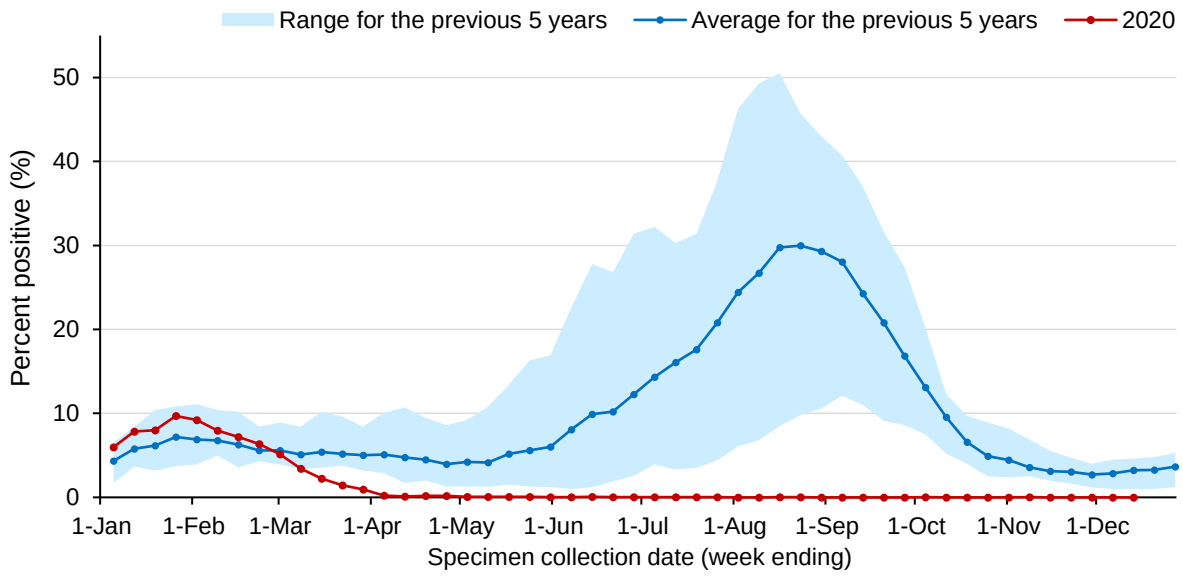


Interpretation: The number of influenza tests performed have remained steady this week. In every week this year, the number of tests has exceeded the previous five-year average.

How much influenza is circulating?

The graph below shows the proportion of tests found to be positive for influenza with the red line showing weekly counts for 2020, the blue line showing the average for the past five years and the shaded area showing the range recorded in the previous five years.

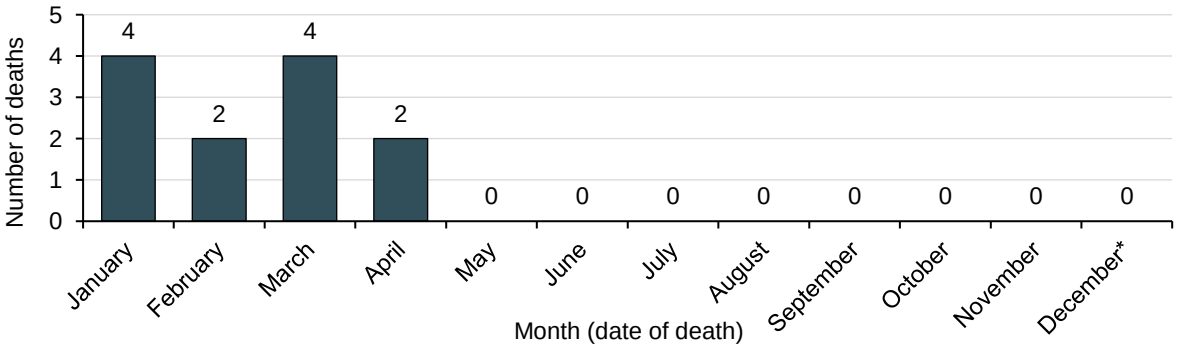
Figure 15. Proportion of tests positive for influenza, to 13 December 2020



Interpretation: In the week ending 13 December, the percent of influenza tests that were positive continued to be very low (<0.01%), indicating limited influenza transmission in the community. Since early March, this percentage has remained far lower than the usual range for the time of year.

How many people have died as a result of influenza?

Figure 16. Laboratory-confirmed influenza deaths by month of death, to 13 December 2020



Interpretation: No influenza deaths have been reported in NSW since April 2020. The number of influenza-related deaths identified via Coroner's reports and death registrations from 1 January to 13 December 2020 is lower than the same period last year (12 deaths in 2020 compared with 331 in 2019)[2]. Two-thirds of the deaths were in people aged 65 years and over.

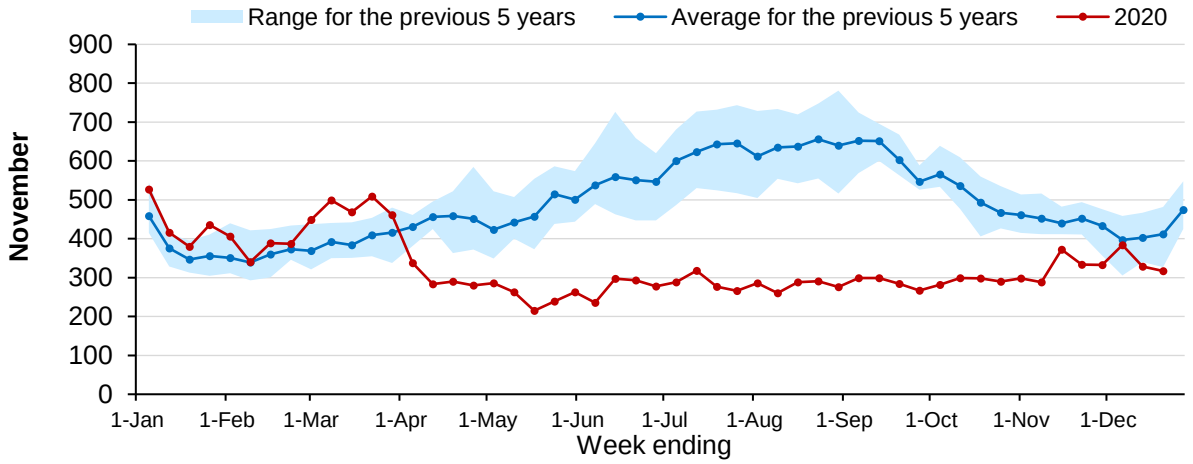
[2] Includes deaths in people with laboratory-confirmed influenza.

How are emergency department presentations for respiratory infections tracking?

The figure below show weekly pneumonia presentations to Emergency Departments in NSW, using PHREDSS[3].

The red line shows the weekly counts for 2020, the blue line shows the average for the same week for the past five years and the shaded area shows the range recorded in the previous five years.

Figure 17. Emergency Department pneumonia presentations in NSW by week, to 20 December 2020



Interpretation: Pneumonia presentations include people with diagnoses of viral, bacterial, atypical or unspecified pneumonia, and Legionnaires' disease, but excludes 'pneumonia with influenza' and provides an indicator of more severe respiratory conditions.

In the week ending 20 December, pneumonia presentations decreased and are below the seasonal range for December.

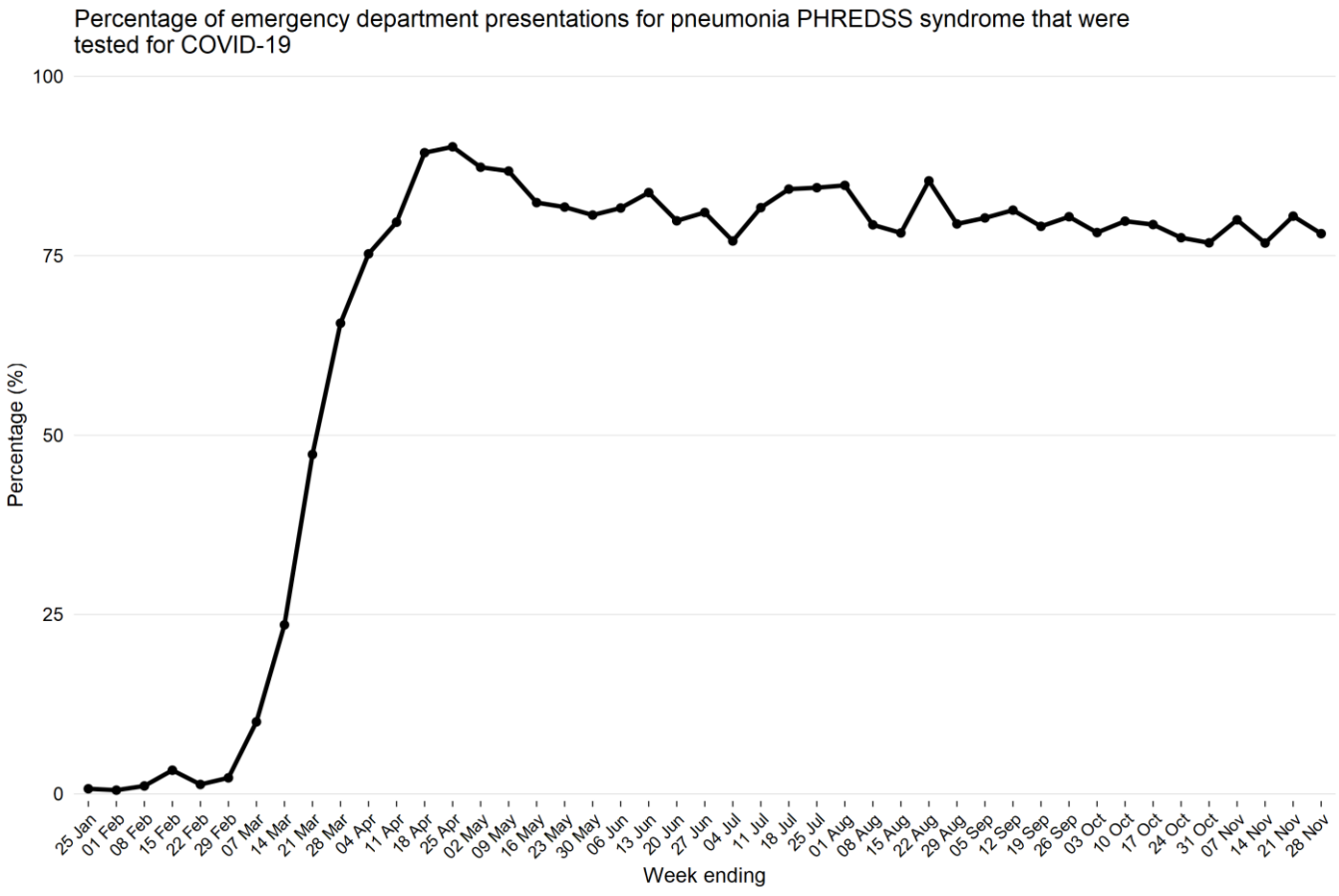
[3] NSW Health Public Health Rapid, Emergency Disease and Syndromic Surveillance (PHREDSS) system, CEE, NSW Ministry of Health. Comparisons are made with data for the preceding 5 years. Includes unplanned presentations to 67 NSW emergency departments (accounts for 87% of total public ED activity).

Are all people diagnosed with pneumonia in a NSW Emergency Department tested for COVID-19?

COVID-19 testing is recommended for everyone with respiratory symptoms. To understand the testing rates among patients presenting to an Emergency Department (ED) with pneumonia, COVID-19 testing data was linked to the Emergency Department Data Collection (EDDC) which contains data on all unplanned presentations to NSW EDs. Pneumonia presentations were recorded as having been tested for COVID-19 if testing occurred on the same date or one day either side of the ED presentation. As there is a delay in receipt of data to the EDDC, complete data on pneumonia presentations was limited to the week ending 17 October.

The figure below shows the percentage of ED presentations for pneumonia that were tested for COVID-19. Pneumonia presentations are defined using the NSW Health Public Health Rapid, Emergency Disease and Syndromic Surveillance (PHREDSS) system definitions. This included diagnoses of viral, bacterial, atypical or unspecified pneumonia, and Legionnaires' disease, but excluded diagnoses of pneumonia with influenza.

Figure 18. Percentage of Emergency Department pneumonia presentations tested for COVID-19, NSW, 2020

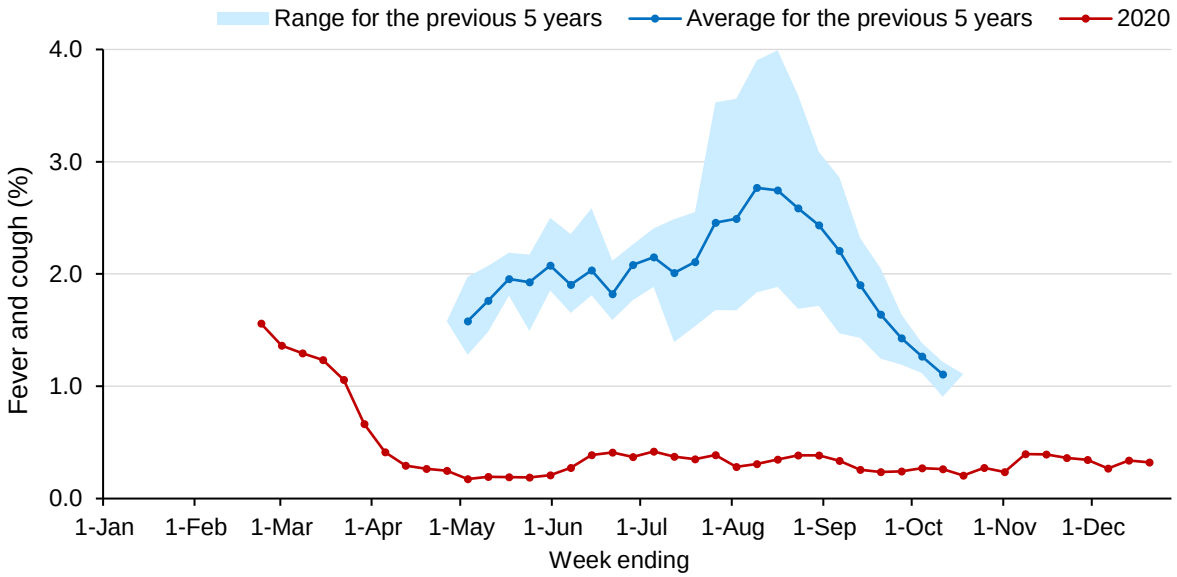


Interpretation: The percentage of ED pneumonia presentations that were tested for COVID-19 has remained steady and above 75% since May, with a peak of almost 90% of all pneumonia presentations tested during late April.

How many people have flu-like symptoms in the community?

FluTracking is an online survey that asks participants to report flu-like symptoms, such as fever or cough, in the last week. Across NSW approximately 25,000-30,000 people participate each week. The survey usually commences at the beginning of May in line with the flu season but commenced at the end of February this year given the COVID-19 outbreak.

Figure 19. Proportion of FluTracker participants in NSW reporting influenza-like illness, to 20 December 2020



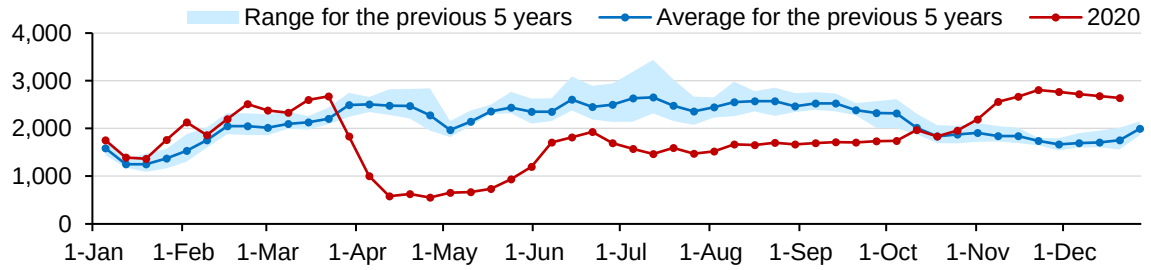
Interpretation: In NSW in the week ending 20 December of the 12,111 people surveyed, 39 people (0.32%) reported flu-like symptoms.

Respiratory infections in children aged 0-4 years

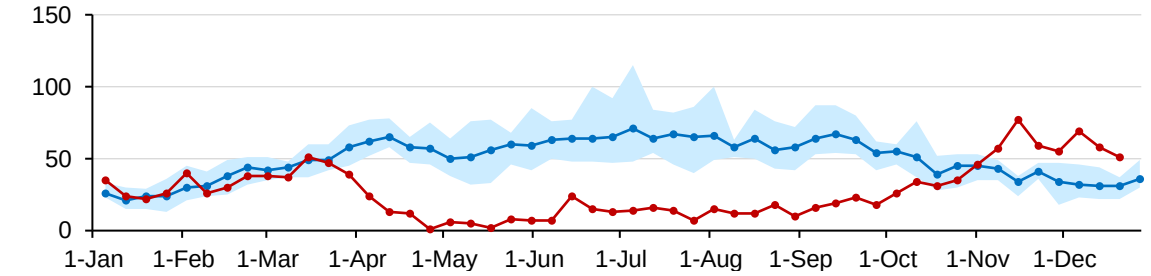
The figures below show weekly any respiratory, pneumonia and bronchiolitis presentations to Emergency Departments in NSW for children under five, using PHREDSS data. Also shown are weekly laboratory notifications for respiratory syncytial virus (RSV) from sentinel surveillance.

Figure 20. Emergency Department presentations in children 0–4 years, for all respiratory problems/fever and unspecified infection, pneumonia and bronchiolitis in NSW by week, to 20 December 2020

All respiratory problems/fever and unspecified infection – total



Pneumonia



Bronchiolitis

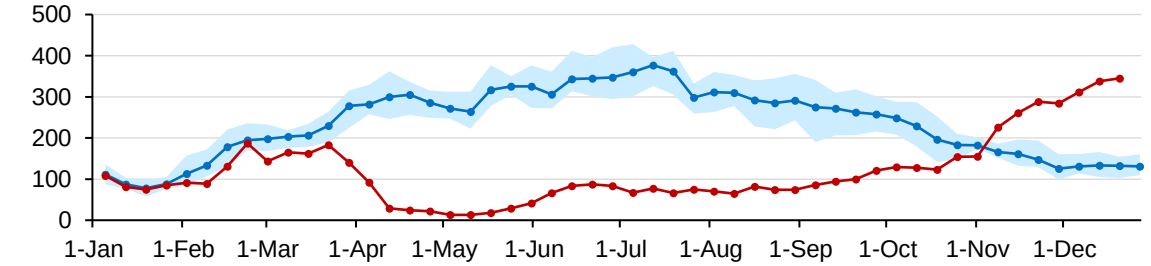
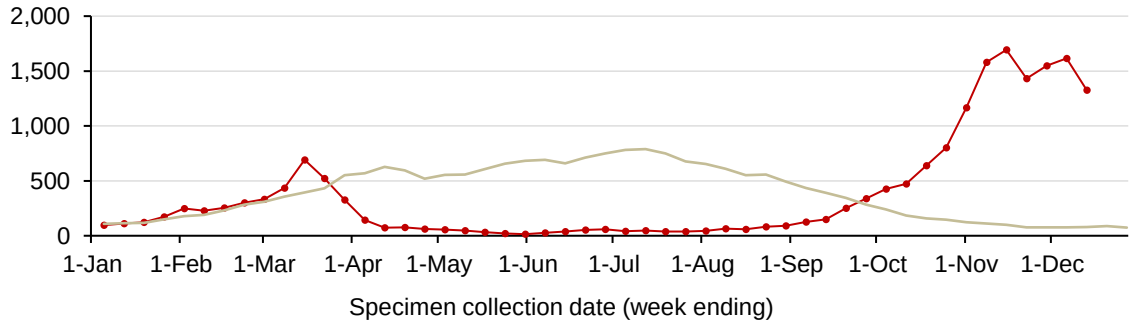


Figure 21. Number of positive PCR test results for all ages, for respiratory syncytial virus (RSV) at sentinel NSW laboratories, 1 January to 13 December 2020



Interpretation: Emergency presentations for any respiratory illness among those aged 0–4 years decreased slightly this week but have been above the seasonal range since early November.

Pneumonia presentations decreased this week in children aged 0–4 years but have been above the seasonal range since early November. For all other age groups, pneumonia presentations are below the seasonal range for this time of year.

Bronchiolitis is a common disease of infants often caused by respiratory syncytial virus (RSV). In the week ending 13 December, bronchiolitis presentations increased and remain above the usual five-year average range for December.

RSV detections decreased but have been above the five-year mean since September. The increase in reported cases in recent weeks corresponds to a sharp increase in emergency presentations for bronchiolitis, which has been above the usual seasonal range since early November.

APPENDIX A: COVID-19 PCR TESTS IN NSW

Local Health District	Local Government Area	Week ending				Total	
		19-December		13-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Central Coast	Central Coast / *LHD Total*[2]	4661	13.2	2687	7.6	138449	392.4
Far West	Balranald	3	1.3	5	2.1	513	219.4
	Broken Hill	59	3.4	51	2.9	5323	304.5
	Central Darling	7	3.8	13	7.1	417	226.8
	Wentworth	23	3.3	35	5.0	2386	338.3
	LHD Total[2]	92	3.1	104	3.5	8639	286.6
Hunter New England	Armidale Regional	169	5.5	132	4.3	10067	327.1
	Cessnock	218	3.6	206	3.4	16308	271.9
	Dungog	36	3.8	33	3.5	2536	269.1
	Glen Innes Severn	25	2.8	30	3.4	1872	211.0
	Gunnedah	57	4.5	39	3.1	3354	264.5
	Gwydir	7	1.3	12	2.2	720	134.5
	Inverell	60	3.6	45	2.7	4279	253.4
	Lake Macquarie	1967	9.6	1507	7.3	90045	437.3
	Liverpool Plains	30	3.8	24	3.0	2143	271.2
	Maitland	693	8.1	582	6.8	40703	477.9
	Mid-Coast	412	4.4	290	3.1	23272	248.0
	Moree Plains	23	1.7	25	1.9	3077	232.0
	Muswellbrook	94	5.7	63	3.9	4720	288.2
	Narrabri	19	1.5	33	2.5	2743	208.8
	Newcastle	1956	11.8	1460	8.8	88736	535.9
	Port Stephens	524	7.1	327	4.5	29396	400.1
	Singleton	157	6.7	122	5.2	9720	414.3
	Tamworth Regional	364	5.8	237	3.8	22635	361.9
	Tenterfield	11	1.7	10	1.5	1101	167.0
	Upper Hunter Shire	65	4.6	51	3.6	4182	294.9
	Uralla	14	2.3	13	2.2	1281	213.1
	Walcha	12	3.8	3	1.0	915	292.0
	LHD Total[2]	6910	7.3	5242	5.5	363517	381.7
Illawarra Shoalhaven	Kiama	215	9.2	185	7.9	10009	428.0
	Shellharbour	488	6.7	498	6.8	30888	421.8
	Shoalhaven	696	6.6	532	5.0	34757	329.0
	Wollongong	1854	8.5	1530	7.0	84149	385.8
	LHD Total[2]	3253	7.8	2745	6.5	159803	380.8
Mid North Coast	Bellingen	73	5.6	50	3.9	3734	287.3
	Coffs Harbour	381	4.9	296	3.8	20408	264.1
	Kempsey	171	5.8	120	4.0	9158	307.9
	Nambucca	93	4.7	86	4.3	4994	252.2

Local Health District	Local Government Area	Week ending				Total	
		19-December		13-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Port Macquarie-Hastings	637	7.5	377	4.5	26203	310.0
	LHD Total[2]	1355	6.0	929	4.1	64497	285.8
Murrumbidgee	Albury	336	6.2	216	4.0	17533	322.6
	Berrigan	15	1.7	14	1.6	1984	226.7
	Bland	10	1.7	13	2.2	1531	256.4
	Carrathool	3	1.1	2	0.7	338	120.8
	Coolamon	25	5.8	14	3.2	1239	285.4
	Cootamundra-Gundagai Regional	62	5.5	50	4.5	2966	264.0
	Edward River	17	1.9	24	2.6	2610	287.3
	Federation	41	3.3	41	3.3	2884	231.9
	Greater Hume Shire	23	2.1	36	3.3	3155	293.1
	Griffith	159	5.9	146	5.4	8653	320.1
	Hay	2	0.7	8	2.7	533	180.7
	Hilltops	78	4.2	78	4.2	5244	280.4
	Junee	11	1.7	26	3.9	1266	189.4
	Lachlan[1]	5	0.8	3	0.5	919	151.3
	Leeton	37	3.2	31	2.7	2636	230.3
	Lockhart	8	2.4	13	4.0	795	242.0
	Murray River	10	0.8	9	0.7	816	67.3
	Murrumbidgee	7	1.8	7	1.8	784	200.2
	Narrandera	12	2.0	14	2.4	1106	187.5
	Snowy Valleys	70	4.8	54	3.7	4318	298.2
	Temora	12	1.9	10	1.6	1282	203.3
	Wagga Wagga	500	7.7	363	5.6	25134	385.2
	LHD Total[2]	1441	4.8	1170	3.9	87119	292.2
Nepean Blue Mountains	Blue Mountains	1199	15.2	772	9.8	44484	562.3
	Hawkesbury	659	9.8	563	8.4	31785	472.3
	Lithgow	122	5.7	89	4.1	6630	306.9
	Penrith	2766	13.0	1728	8.1	110913	520.8
	LHD Total[2]	4718	12.1	3130	8.0	192267	491.8
Northern NSW	Ballina	252	5.7	159	3.6	14097	315.9
	Byron	240	6.8	222	6.3	13586	387.3
	Clarence Valley	220	4.3	149	2.9	11370	220.1
	Kyogle	29	3.3	13	1.5	1794	204.0
	Lismore	156	3.6	179	4.1	14720	336.9
	Richmond Valley	85	3.6	81	3.5	6763	288.2
	Tenterfield	11	1.7	10	1.5	1101	167.0
	Tweed	392	4.0	332	3.4	24481	252.4
	LHD Total[2]	1377	4.4	1136	3.7	87081	280.6
Northern Sydney	Hornsby	2523	16.6	1354	8.9	63555	418.0
	Hunters Hill	638	42.6	277	18.5	14713	982.2

Local Health District	Local Government Area	Week ending				Total	
		19-December		13-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Ku-ring-gai	4755	37.4	1769	13.9	80517	633.2
	Lane Cove	2085	51.9	782	19.5	40916	1019.0
	Mosman	1184	38.2	282	9.1	16299	526.1
	North Sydney	1862	24.8	542	7.2	30195	402.5
	Northern Beaches	35671	130.4	2704	9.9	157966	577.6
	Parramatta[1]	3004	11.7	2075	8.1	97088	377.5
	Ryde	2198	16.7	1307	10.0	57620	438.9
	Willoughby	1750	21.6	681	8.4	31518	388.2
	LHD Total[2]	53333	55.8	10155	10.6	512153	535.8
South Eastern Sydney	Bayside	2023	11.3	1336	7.5	64964	364.2
	Georges River	1663	10.4	1163	7.3	56156	352.1
	Randwick	3074	19.8	1647	10.6	88741	570.1
	Sutherland Shire	4269	18.5	2150	9.3	119801	519.5
	Sydney[1]	6407	26.0	3579	14.5	140645	570.9
	Waverley	2068	27.8	864	11.6	50377	678.1
	Woollahra	1793	30.2	759	12.8	41725	702.6
	LHD Total[2]	17360	18.1	9532	9.9	474115	494.3
South Western Sydney	Camden	1197	11.8	1087	10.7	67932	669.7
	Campbelltown	1656	9.7	1662	9.7	90566	529.8
	Canterbury-Bankstown[1]	3064	8.1	2473	6.5	143536	379.8
	Fairfield	980	4.6	1006	4.8	71751	338.9
	Liverpool	1821	8.0	1758	7.7	111146	488.4
	Wingecarribee	639	12.5	475	9.3	27799	543.7
	Wollondilly	351	6.6	314	5.9	19519	367.3
	LHD Total[2]	8016	7.7	7451	7.2	460022	443.0
Southern NSW	Bega Valley	208	6.0	197	5.7	9620	279.0
	Eurobodalla	329	8.6	198	5.2	15349	399.0
	Goulburn Mulwaree	253	8.1	183	5.9	10476	336.5
	Queanbeyan-Palerang Regional	294	4.8	248	4.1	14238	233.0
	Snowy Monaro Regional	144	6.9	78	3.8	6126	294.6
	Upper Lachlan Shire	62	7.7	41	5.1	2227	276.3
	Yass Valley	76	4.5	41	2.4	3384	198.1
	LHD Total[2]	1366	6.3	986	4.5	61449	283.1
Sydney	Burwood	369	9.1	289	7.1	12077	297.4
	Canada Bay	1618	16.8	877	9.1	48980	509.8
	Canterbury-Bankstown[1]	3064	8.1	2473	6.5	143536	379.8
	Inner West	3979	19.8	2290	11.4	116954	582.4
	Strathfield	634	13.5	456	9.7	22408	477.5
	Sydney[1]	6407	26.0	3579	14.5	140645	570.9
	LHD Total[2]	12194	17.5	7182	10.3	359368	515.8
Western NSW	Bathurst Regional	351	8.1	248	5.7	17795	408.0

Local Health District	Local Government Area	Week ending				Total	
		19-December		13-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Blayney	47	6.4	33	4.5	2856	387.0
	Bogan	10	3.9	2	0.8	597	231.4
	Bourke	11	4.3	4	1.5	468	180.7
	Brewarrina	3	1.9	1	0.6	299	185.6
	Cabonne	51	3.7	26	1.9	2833	207.8
	Cobar	13	2.8	22	4.7	943	202.5
	Coonamble	14	3.5	11	2.8	855	216.0
	Cowra	63	4.9	35	2.8	3159	247.9
	Dubbo Regional	301	5.6	239	4.5	16846	313.6
	Forbes	32	3.2	31	3.1	2000	201.9
	Gilgandra	8	1.9	10	2.4	873	205.9
	Lachlan[1]	5	0.8	3	0.5	919	151.3
	Mid-Western Regional	169	6.7	155	6.1	7726	306.0
	Narromine	22	3.4	24	3.7	1582	242.8
	Oberon	23	4.3	20	3.7	1623	299.9
	Orange	342	8.1	299	7.0	18579	437.7
	Parkes	43	2.9	43	2.9	3831	258.2
	Walgett	10	1.7	15	2.5	1505	252.8
	Warren	12	4.5	7	2.6	1182	438.3
	Warrumbungle Shire	40	4.3	30	3.2	2519	271.5
	Weddin	6	1.7	7	1.9	765	211.7
	LHD Total[2]	1574	5.5	1264	4.4	89482	314.0
Western Sydney	Blacktown	4079	10.9	3483	9.3	170840	456.2
	Cumberland	2124	8.8	1746	7.2	97965	405.6
	Parramatta[1]	3004	11.7	2075	8.1	97088	377.5
	The Hills Shire	3228	18.1	2387	13.4	108723	610.9
	LHD Total[2]	11838	11.2	9283	8.8	458952	435.7
NSW Total[3]		***137,252***	***17.0***	***70,190***	***8.7***	***3,755,867***	***464.3***

[1]Local Government Area (LGA) spans multiple Local Health Districts.

[2]Local Health District total counts and rates includes tests for LHD residents only. Murrumbidgee includes Albury LGA residents.

[3]NSW Total counts and rates include tests where residential information is incomplete.
See https://www.health.nsw.gov.au/Infectious/covid-19/Pages/counting-tests.aspx for detail on how tests are counted.

APPENDIX B: NUMBER OF POSITIVE PCR TEST RESULTS FOR INFLUENZA AND OTHER RESPIRATORY VIRUSES AT SENTINEL NSW LABORATORIES, 1 January to 13 December 2020

The reported testing numbers reflect the number of influenza PCR tests conducted. Not all samples are tested for all of the other respiratory viruses. Therefore, data presented may tend to under-represent current respiratory virus activity in NSW.

Specimen collection date	PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhino-virus	HMPV**	Entero-virus
		No.	%Pos.	No.	%Pos.						
1 Jan — 13 Dec 2020											
Total	1,287,780	6,630	0.51%	955	0.07%	8,961	9,164	19,586	137,021	2,427	6,269
Month ending											
3 Feb*	34,953	2,508	7.18%	401	1.15%	846	1,900	752	5,036	599	335
1 March	40,575	2,363	5.82%	315	0.78%	798	2,435	1,118	8,245	437	1,007
29 March	85,238	1,549	1.82%	200	0.23%	898	4,117	1,977	18,088	664	1,502
3 May *	54,128	70	0.13%	13	0.02%	175	273	410	2,250	48	210
31 May	71,525	35	0.05%	6	0.01%	237	62	115	3,511	27	112
28 June	130,922	42	0.03%	11	0.01%	629	83	178	28,321	112	246
2 August *	227,152	34	0.01%	2	<0.01%	1,251	89	209	31,589	79	427
30 August	174,594	9	0.01%	2	<0.01%	1,137	37	299	13,926	14	235
27 Sept	145,489	6	<0.01%	1	<0.01%	938	35	866	8,416	61	259
1 Nov*	131,686	7	0.01%	1	<0.01%	894	56	3,508	5,632	51	662
29 Nov	129,164	6	0.00%	3	<0.01%	752	42	6,255	8,252	192	884
Week ending											
6 Dec	24,404	0	0.00%	0	0.00%	148	9	1,614	1,488	59	153
13 Dec	24,954	1	<0.01%	0	0.00%	159	14	1,666	1,334	73	139

Notes: Preliminary laboratory data is provided by participating sentinel laboratories on a weekly basis and are subject to change. Serological diagnoses are not included.

HMPV – Human metapneumovirus

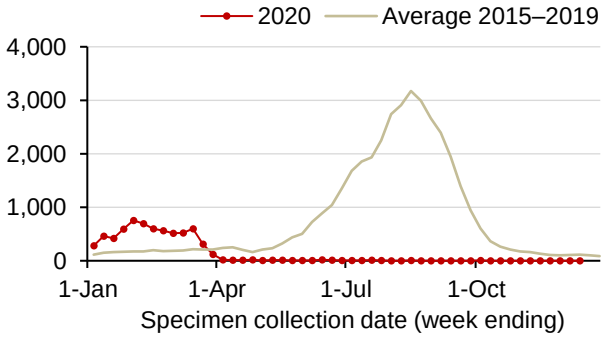
RSV - Respiratory syncytial virus

*Five-week period

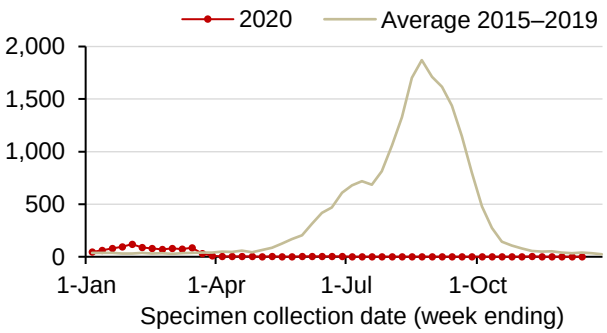
APPENDIX C: NUMBER OF POSITIVE PCR TEST RESULTS FOR INFLUENZA AND OTHER RESPIRATORY VIRUSES AT SENTINEL NSW LABORATORIES, 1 January to 13 December 2020

Not all samples are tested for all of the other respiratory viruses. Therefore, data presented may tend to under-represent current respiratory virus activity in NSW.

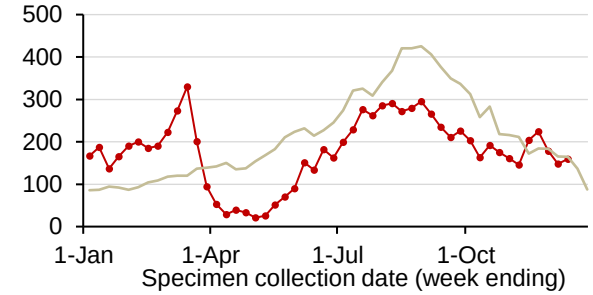
Influenza A



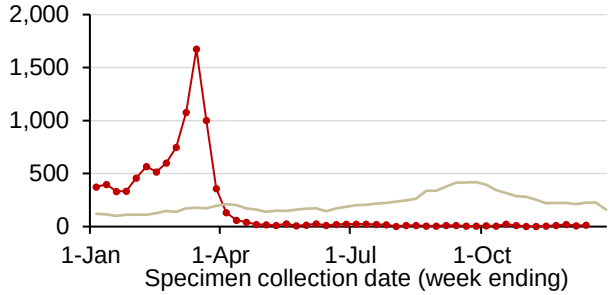
Influenza B



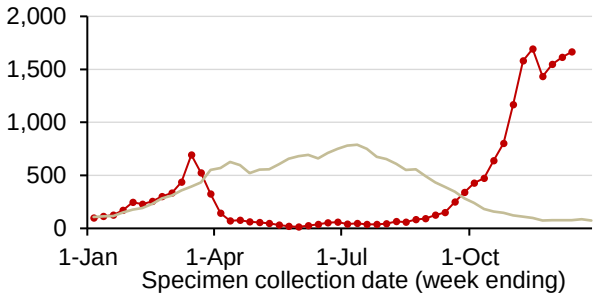
Adenovirus



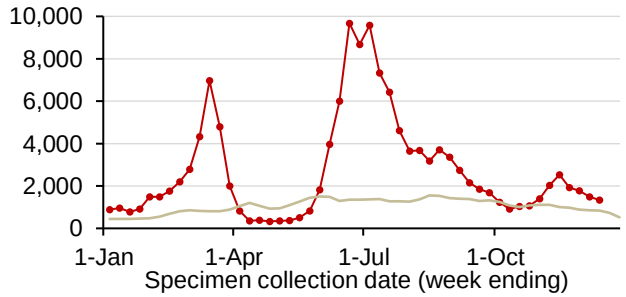
Parainfluenza



Respiratory syncytial virus (RSV)

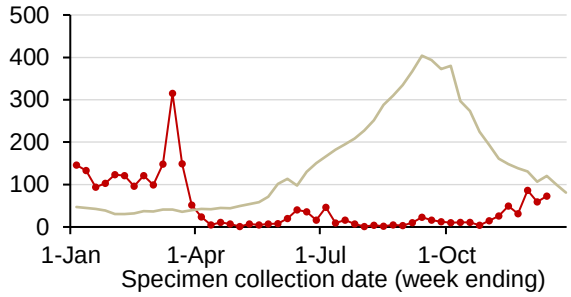


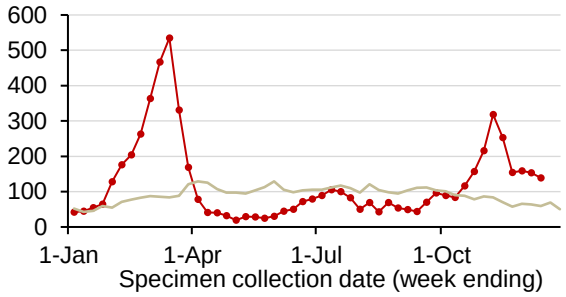
Rhinovirus



Human metapneumovirus (HMPV)

Enterovirus





Nots: Preliminary laboratory data is provided by participating sentinel laboratories on a weekly basis and are subject to change. Serological diagnoses are not included

GLOSSARY

Term	Description
Case	A person infected who has tested positive to a validated specific SARS-CoV-2 nucleic acid test or has had the virus identified by electron microscopy or viral culture. Blood tests (serology) is only used in special situations following a public health investigation and require other criteria to be met in addition to the positive serology result (related to timing of symptoms and contact with known COVID-19 cases). Case counts include: - NSW residents diagnosed in NSW who were infected overseas or in Australia (in NSW or interstate), and - interstate or international visitors diagnosed in NSW who were under the care of NSW Health at the time of diagnosis
Health care workers	Individuals who work within a hospital or other healthcare settings, including staff in direct or indirect contact with patients or infectious materials.
Incubation period	The time in which the case was infected. The incubation period for COVID-19 is between 1 and 14 days prior to symptom onset.
Overseas acquired case	Case who travelled overseas during their incubation period. While testing rates in NSW are high and case counts are low, cases who have travelled overseas in their incubation period are considered to have acquired their infection overseas.
Interstate acquired case	Case who travelled interstate during their infection and the public health investigation concludes the infection was likely acquired interstate.
Cluster	Group of cases sharing a common source of infection or are linked to each other in some way.

Dates used in COVID-19 reporting

Event	Date name	Source
Person first starts to feel unwell	Date of symptom onset	Public health staff interview all cases at the time of diagnosis. This is the date provided to NSW Health by the case.
Person has a swab taken	Date of test	This date is provided to NSW Health by the laboratory when the test result (positive or negative) is notified.
Laboratory notifies NSW Health of result	Date of notification	This date is provided to NSW Health by the laboratory. Laboratories prioritise notification of positive results to allow prompt public health action. Positive cases: The date of notification is collected by NSW Health on the day of notification. Cases are informed of their diagnosis by their doctor or public health staff as soon as the result is available. The date of notification to NSW Health is usually the same day as the date the case finds out about the result. Negative cases: Some laboratories notify NSW Health of negative results in batches at regular intervals. For these laboratories the date of notification to NSW Health does not reflect the date the negative result was available at the laboratory. NSW Health does not collect information on the date the person was informed of the result.