

COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 50, ENDING 12 DECEMBER 2020

Published 17 December 2020

SUMMARY FOR THE WEEK ENDING 12 DECEMBER

- There were no new locally-acquired cases reported in NSW this week.
- The last locally-acquired case with an unknown source was reported on 2 December in a worker at a Sydney quarantine hotel.
- Testing numbers have decreased compared to the previous week (down 4%).
- The NSW Sewage Surveillance Program reported two detections of SARS-CoV-2 fragments. These samples were taken from the Liverpool and Batemans Bay treatment plants. Both detections are associated with recently diagnosed cases in the area.
- Emergency Department visits for bronchiolitis in children aged 0–4 years continued to increase to their highest level this year. RSV detections increased this week and have been above seasonal average since early October.
- To reduce the spread of COVID-19, it is important to test anyone with **respiratory symptoms, pneumonia and other respiratory syndromes, loss of sense of smell or taste, or unexplained fever** regardless of alternative diagnoses.

In Focus – Symptom profile for COVID-19 in NSW (1 July to 12 December 2020)

- Most confirmed COVID-19 cases in NSW reported a mild respiratory illness at diagnosis.
- More severe respiratory symptoms such as shortness of breath, pneumonia, and acute respiratory distress were reported in older people.
- The most common symptoms reported in school-aged children included runny nose, cough, sore throat, headache and fatigue.
- Children aged 0–4 years were most likely to not report any symptoms compared to older age groups.
- Cough was the most common symptom reported without any other symptom, followed by headache.

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SECTION 1: HOW IS THE OUTBREAK TRACKING IN NSW?

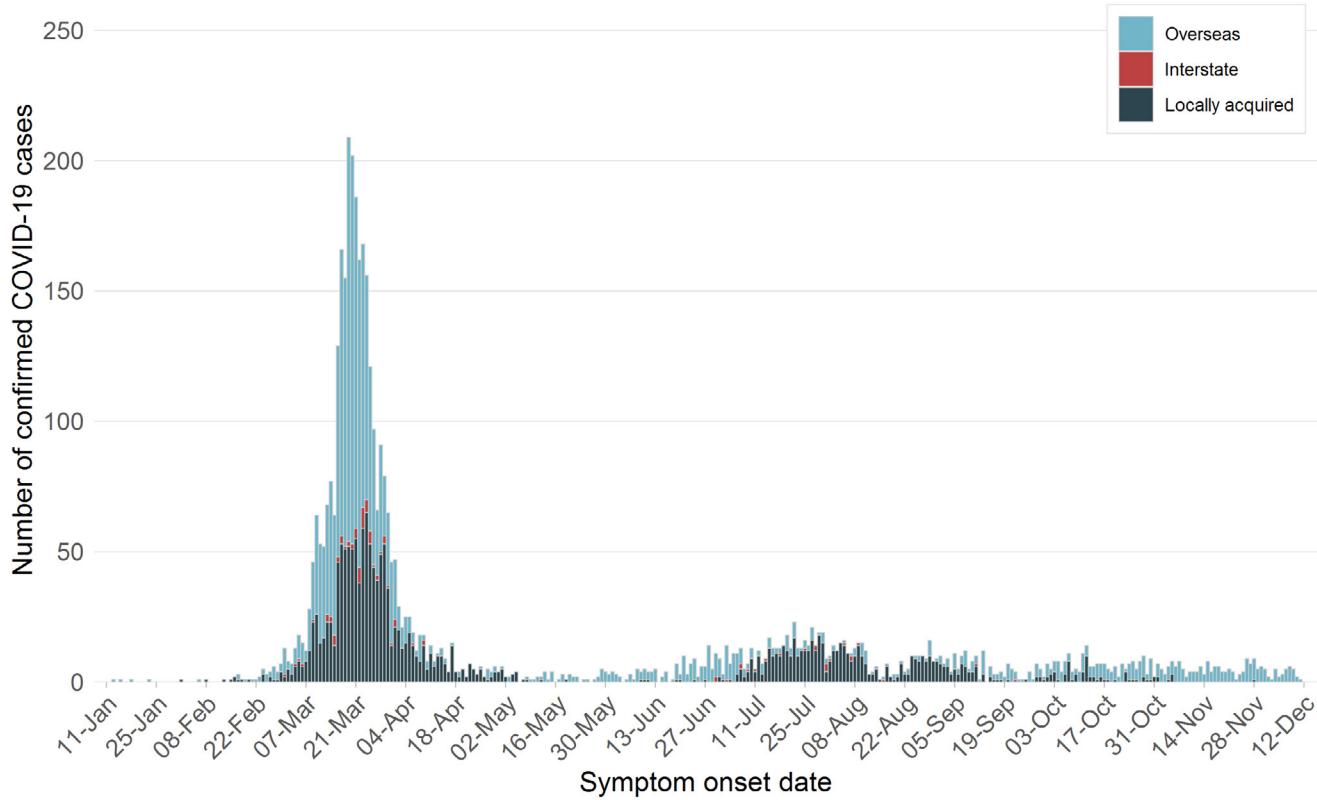
Table 1. COVID-19 cases and tests reported in NSW, up to 12 December 2020

	Week ending 12 Dec	Week ending 5 Dec	% change	Total to 12 Dec
Number of cases	34	40	↓15%	4,453
Overseas acquired	34	39	↓13%	2,493
Interstate acquired	0	0	-	90
Locally acquired	0	1	↓100%	1,870
No links to other cases or clusters	0	1	↓100%	433
Number of deaths	0	0	-	55
Number of tests	70,065	72,595	↓ 4%	3,618,481

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



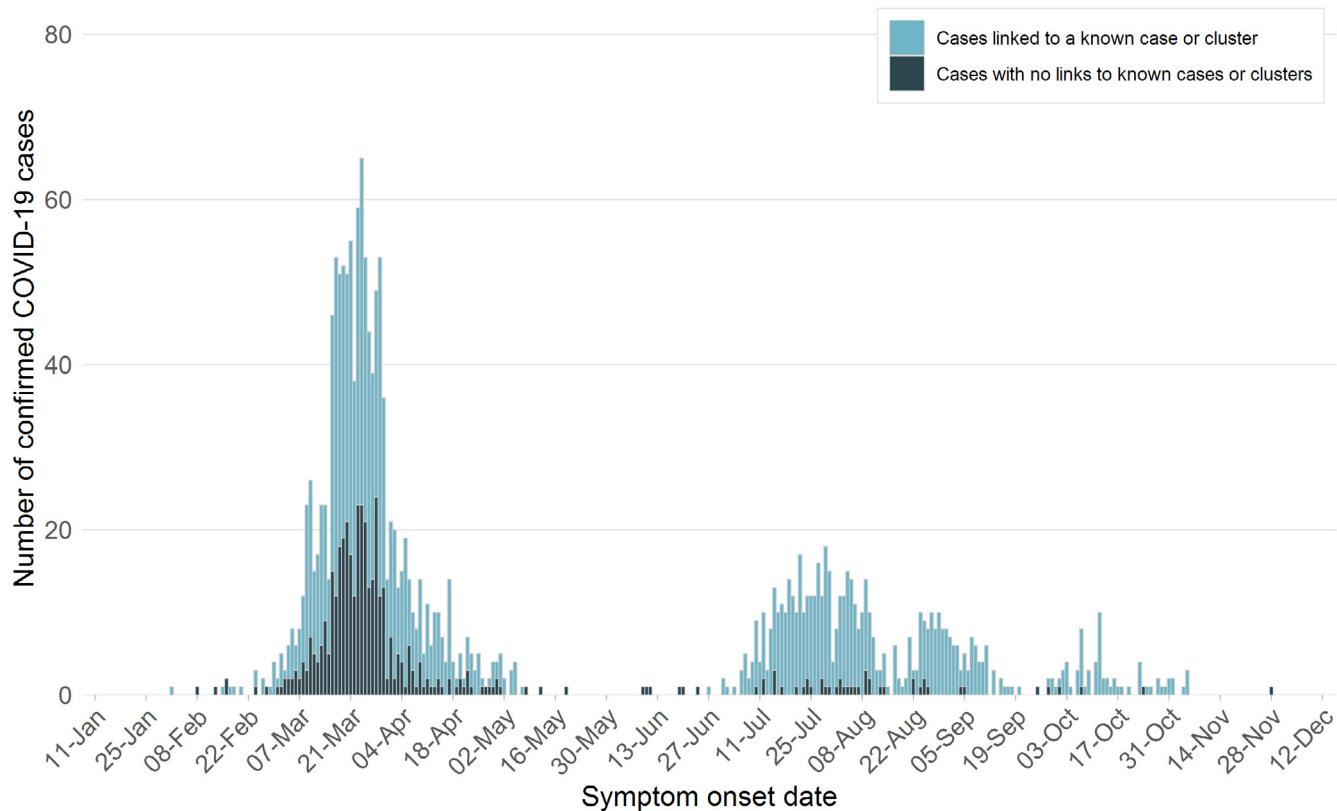
The date of the first positive test is used for cases who did not report symptoms.

Interpretation: All recent COVID-19 cases in NSW with an **onset of symptoms** in the last two weeks have been overseas acquired.

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.

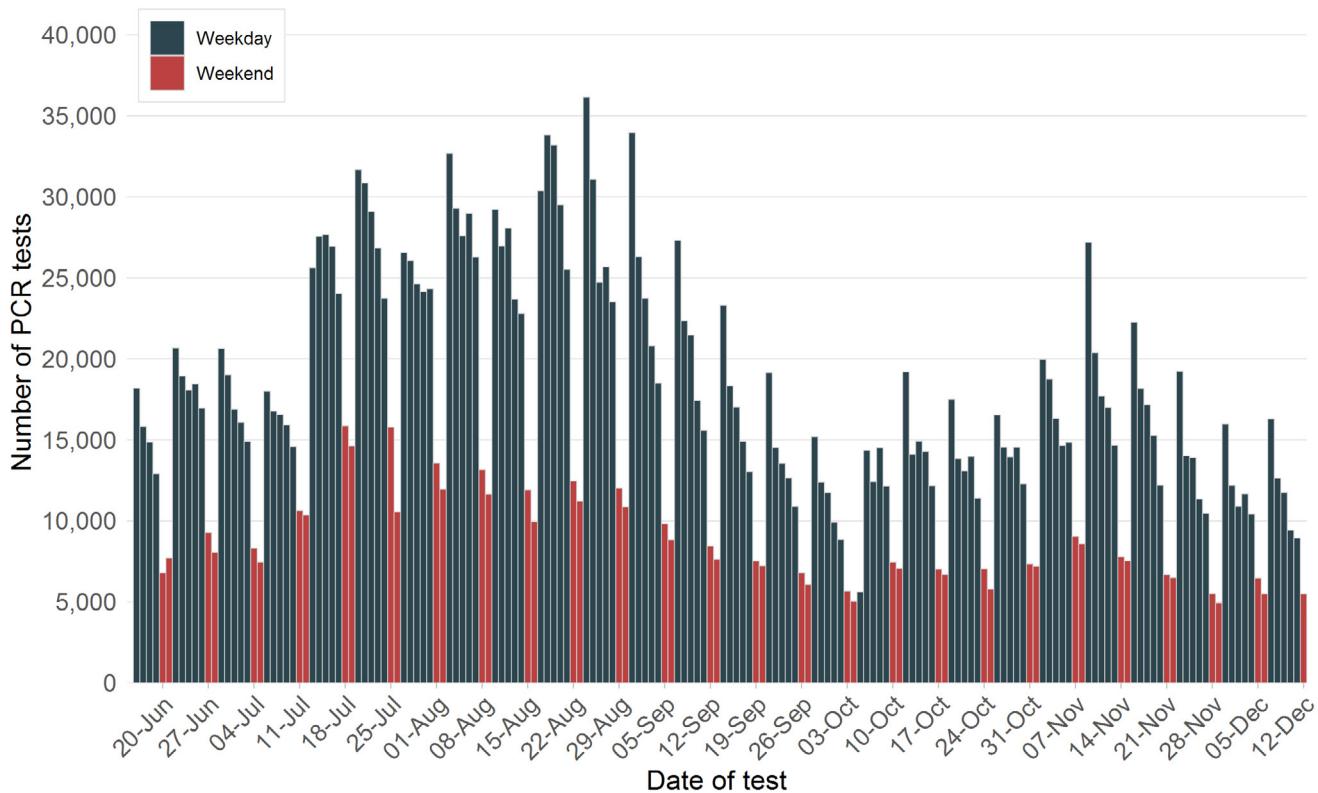
Interpretation: There was one locally-acquired case with an onset of symptoms in the last four weeks. The case was likely exposed at a Sydney quarantine hotel, however, no definite links to known cases have been confirmed.

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



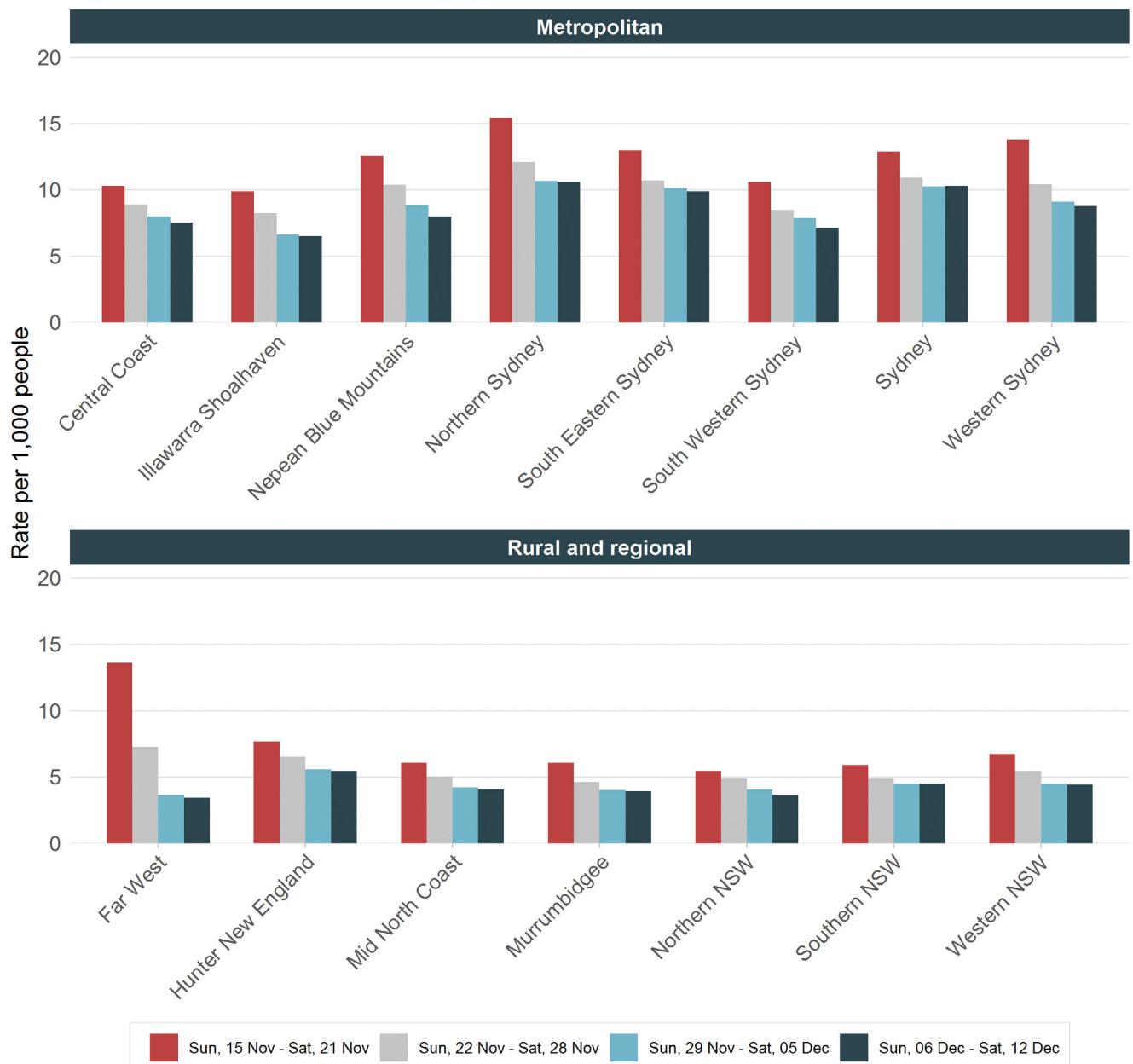
Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: Testing is recommended for anyone with respiratory symptoms, loss of sense of smell or taste, or unexplained fever. In the week ending 12 December, testing rates decreased for the fourth consecutive week. An average of 1.2 tests were conducted per 1,000 people in NSW each day in the week ending 12 December, compared to a daily average of 1.3 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.

Testing by Local Health District

Figure 4. Rates of COVID-19 testing by LHD of residence and week

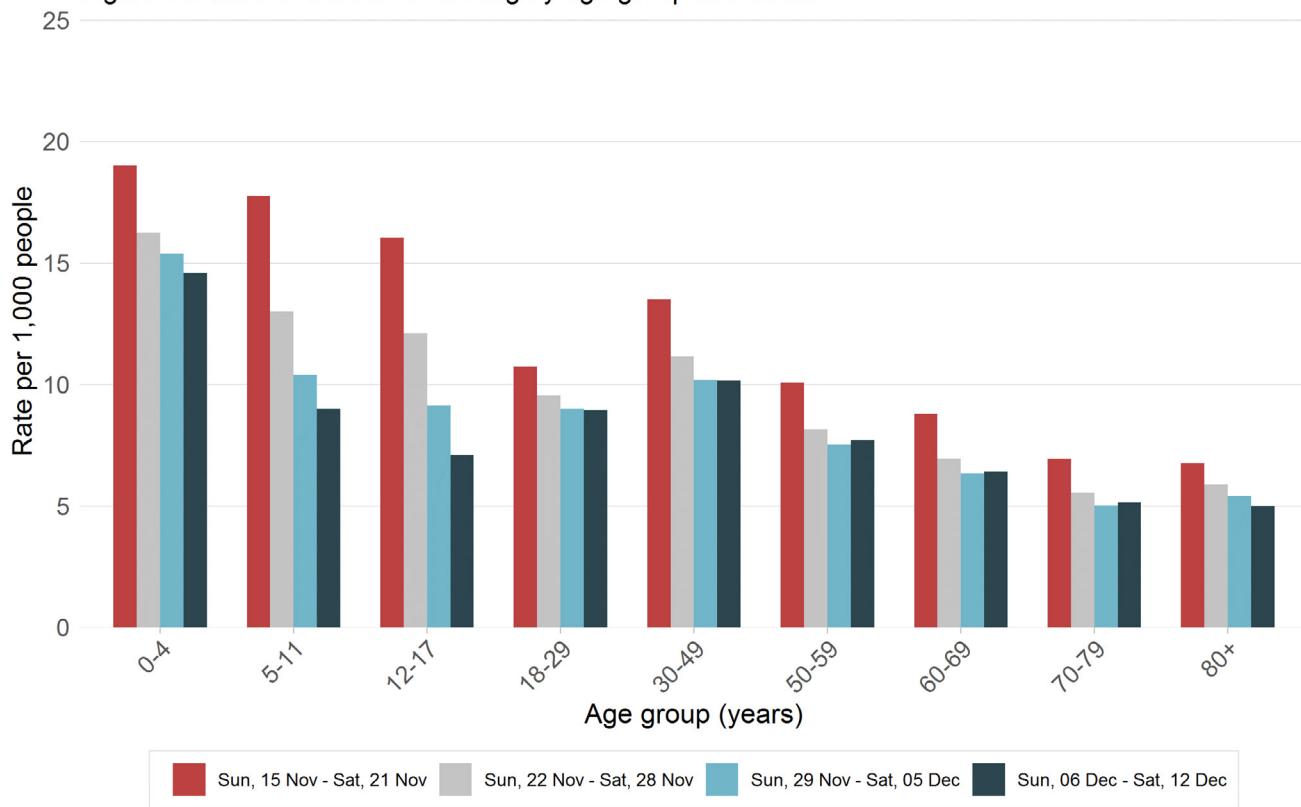


Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

Interpretation: Statewide testing rates in the week ending 12 December were slightly lower compared to the previous week (8.7 per 1,000 vs 9.0 per 1,000). Testing decreased or remained stable across all LHDs.

Testing by age group

Figure 5. Rates of COVID-19 testing by age group and week

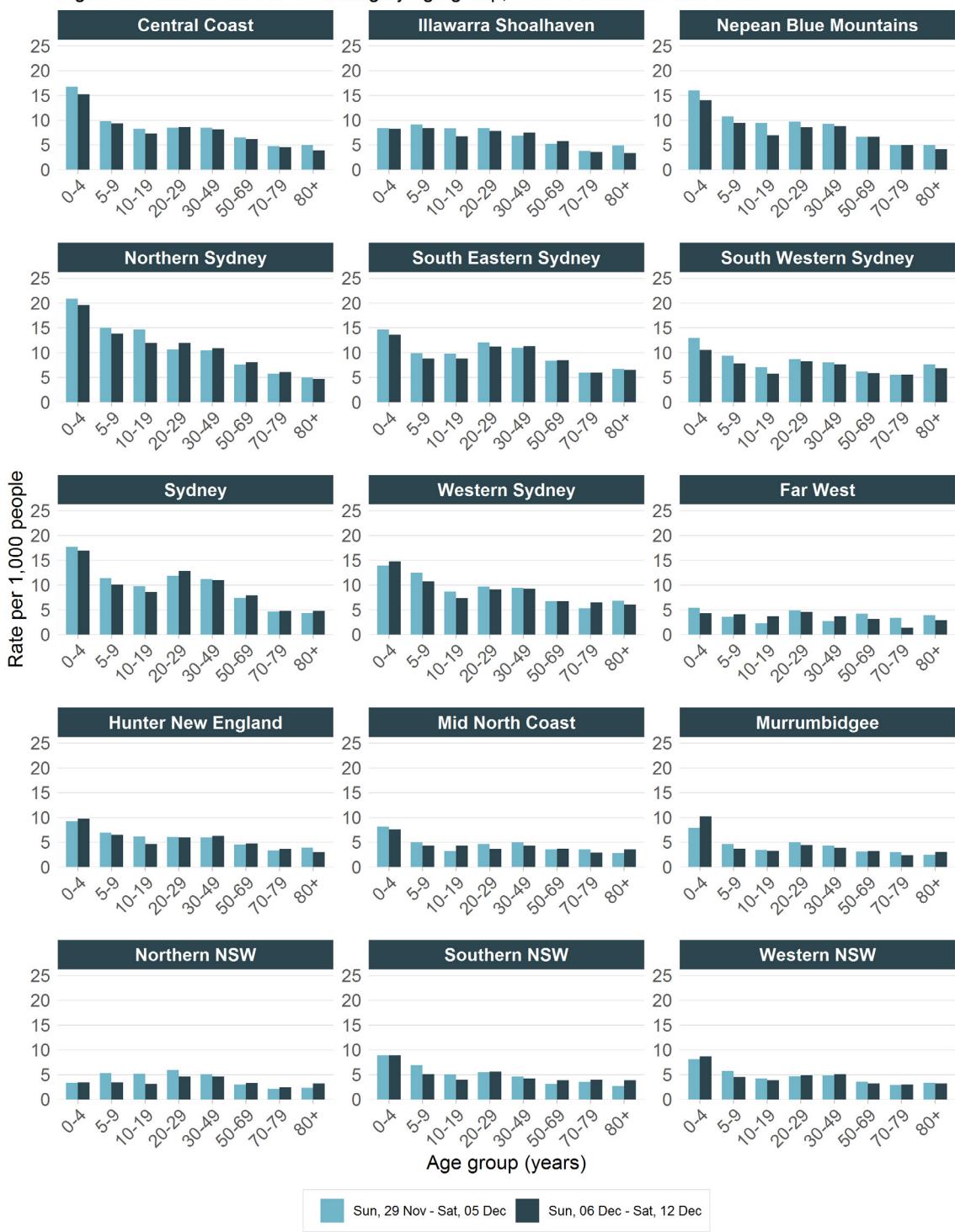


Includes SARS-CoV-2 PCR tests only and excludes notifications with age missing.

Interpretation: For the week ending 12 December, testing rates decreased or remained stable across all age groups for the fifth consecutive week. Rates remain higher in young children aged 0-4 years compared to older age groups. The largest decrease in testing compared to previous weeks was seen in school-aged children (5-17 years).

Testing by LHD and age group

Figure 6. 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 mostly decreased or remained stable for all age groups across all LHDs for the week ending 12 December. In the last two weeks, higher testing rates in children aged 0-4 have been mainly driven by testing in most metropolitan LHDs and in the regional LHD of Murrumbidgee.

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

Information from locally-acquired 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, 15 November to 12 December 2020

Locally-acquired cases	Week ending				Total
	12 Dec	5 Dec	28 Nov	21 Nov	
Cases who are linked to a known case or cluster	0	0	0	0	0
Cases with no links to other cases or clusters	0	1	0	0	1
Total	0	1	0	0	1

Interpretation: There has been one locally-acquired case in the last four weeks (likely exposed in a Sydney quarantine hotel). The case had no clear links to a case or cluster, however, the genomic strain of the virus relating to the case does not match any recent cases in the community or interstate. The last reported case linked to a known case was reported on 13 November in a person with a past infection, likely acquired earlier in October.

Table 3. Locally-acquired COVID-19 cases by LHD of residence and week reported, 15 November to 12 December 2020

Local Health District	Week ending				Total	Days since last case reported
	12 Dec	5 Dec	28 Nov	21 Nov		
Central Coast	0	0	0	0	0	103
Illawarra Shoalhaven	0	0	0	0	0	99
Nepean Blue Mountains	0	0	0	0	0	88
Northern Sydney	0	0	0	0	0	60
South Eastern Sydney	0	0	0	0	0	59
South Western Sydney	0	1	0	0	1	10
Sydney	0	0	0	0	0	59
Western Sydney	0	0	0	0	0	29
Far West	0	0	0	0	0	254
Hunter New England	0	0	0	0	0	128
Mid North Coast	0	0	0	0	0	235
Murrumbidgee	0	0	0	0	0	96
Northern NSW	0	0	0	0	0	140
Southern NSW	0	0	0	0	0	54
Western NSW	0	0	0	0	0	135
Total	0	1	0	0	1	10

Interpretation: There were no locally-acquired cases reported in the week ending 12 December. The last case reported was a resident of South Western Sydney LHD.

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

There were no cases reported in the last week who were linked to recent clusters.

SECTION 5: COVID-19 IN SPECIFIC POPULATIONS

COVID-19 in healthcare workers

There have been no new COVID-19 cases in healthcare workers (HCWs) reported for the last four weeks. The last case of COVID-19 reported in a HCW was notified on 13 October.

Healthcare workers in this section includes roles such as doctor, nurse, orderly, paramedic, laboratory technician, pharmacist, administrative staff, cleaners, and other support staff. Public health units routinely undertake investigations of cases of COVID-19 infections in HCWs to identify ongoing risks in healthcare settings.

In total, there have been 37 cases of COVID-19 in HCWs since 1 August. Of these, 23 HCWs were potentially infected in healthcare settings. A further seven cases were household contacts of a known case, four 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.

No cases in Aboriginal people were reported in the week ending 12 December. In total, 45 Aboriginal people have been diagnosed with COVID-19, representing 1% of all cases in NSW. The last case of COVID-19 in an Aboriginal person was reported on 6 September.

Pregnant women

There were no cases in pregnant women reported in the week ending 12 December. In total, 35 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 infection, 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 4. Deaths as a result of COVID-19, by age group, NSW, 2020

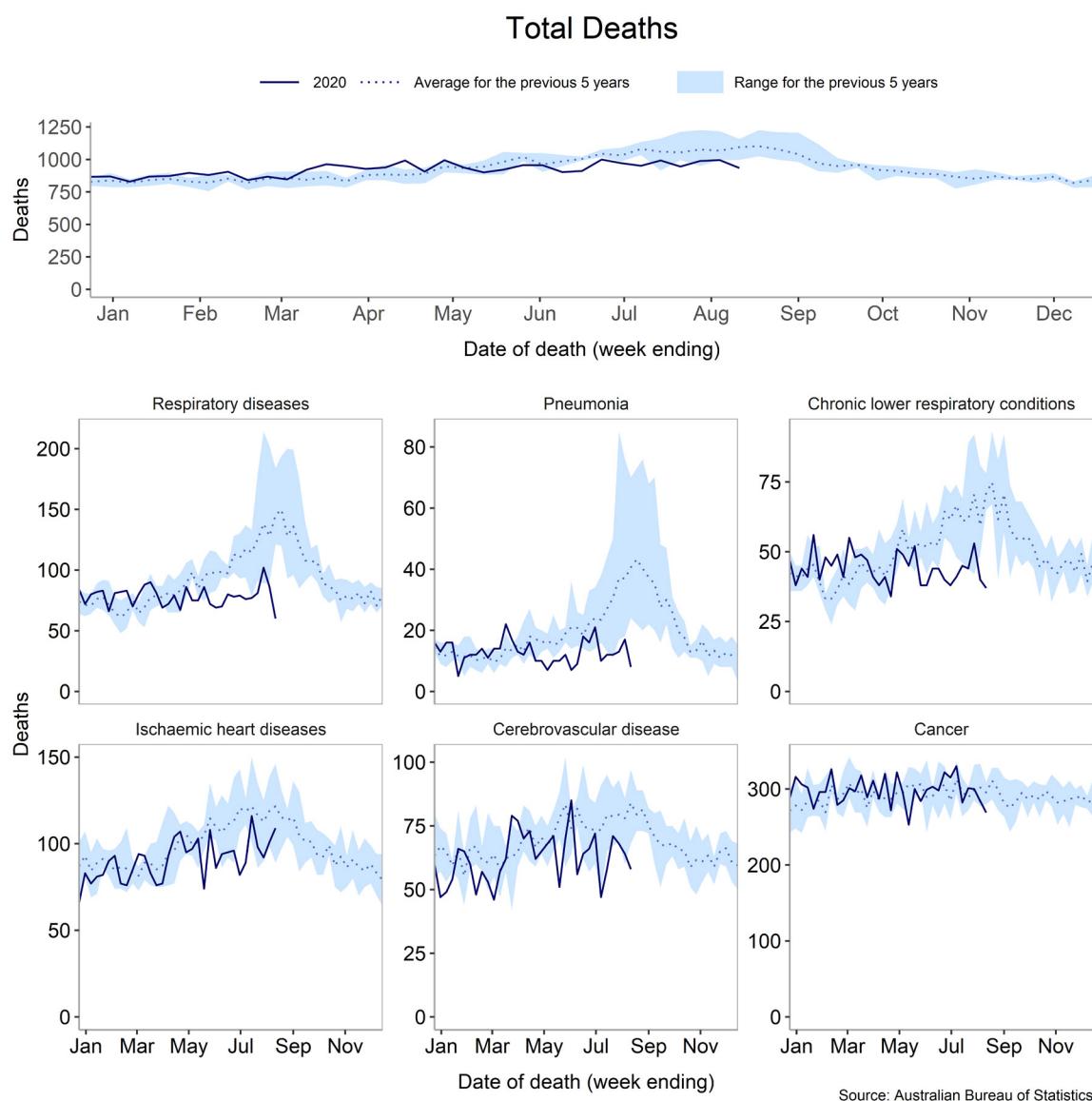
Age group	Number of deaths	Number of cases	Case fatality rate
0-4 years	0	91	0%
5-11 years	0	85	0%
12-17 years	0	128	0%
18-29 years	0	1010	0%
30-49 years	0	1405	0%
50-59 years	1	621	0.2%
60-69 years	4	590	0.7%
70-79 years	14	364	3.8%
80+ years	36	159	22.6%
Total	55	4453	1.2%

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.

How many people have died in NSW from any cause of death?

The Australian Bureau of Statistics (ABS) has published Provisional Mortality Statistics for all of Australia for January to August 2020 (<https://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0.55.004>) and provides monthly data for NSW-registered deaths to NSW Health around three months after the close of the month. The reported counts are doctor-certified deaths and excludes those referred to a coroner, such as suicides, accidents and assaults. In Australia, approximately 86–89% of deaths are certified by a doctor. Deaths from any cause are seasonal, increasing in winter and decreasing in summer.

Figure 7. Deaths from any cause in NSW from January to 25 August 2020



Source: Australian Bureau of Statistics

Interpretation: There have been fewer deaths this year due to respiratory diseases, in particular pneumonia, compared with previous years. This is likely partly attributable to international travel restrictions, high uptake of influenza vaccination, physical distancing and hygiene measures that have been put in place to help control the pandemic. These measures have reduced transmission of many infectious diseases, particularly influenza, which most years causes death directly and indirectly through pneumonia and other complications. The patterns of deaths from heart attack, stroke and cancer are similar to previous years.

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 12 December, 69 sewage samples were tested for fragments of SARS-CoV-2. Of these, there were two detections – these samples were taken from the Liverpool and Batemans Bay treatment plants. East Lismore and South Lismore have commenced as new sites. The following table shows results for previous weeks from various sites across NSW.

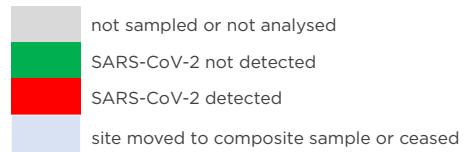
Table 5. Locations with positive SARS-CoV-2 detections in sewage samples since September for the week ending 12 December 2020

Pop.	Sewage treatment plant	LHD	Week									
			10 Oct	17 Oct	24 Oct	31 Oct	7 Nov	14 Nov	21 Nov	28 Nov	5 Dec	12 Dec
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									n	
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										
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										
11,000	Culburra Beach	ISHLHD										

COVID-19 WEEKLY SURVEILLANCE IN NSW
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Epidemiological week 50, ending 12 December 2020

			10 Oct	17 Oct	24 Oct	31 Oct	7 Nov	14 Nov	21 Nov	28 Nov	5 Dec	12 Dec
Pop.	Sewage treatment plant	LHD	Week									
			41	42	43	44	45	46	47	48	49	50
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	Charlottes Pass	M&SLHD										
	Albury composite	M&SLHD	C	C			C	C		C	C	
51,750	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										
	Wagga Wagga composite	M&SLHD	C	C	C	C	C	C		C		
50,000	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										
24,000	Armidale	HNELHD										
45,000	Tamworth	HNELHD										
10,000	Moree	HNELHD										
12,000	Forster	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										

			10 Oct	17 Oct	24 Oct	31 Oct	7 Nov	14 Nov	21 Nov	28 Nov	5 Dec	12 Dec
Pop.	Sewage treatment plant	LHD	Week									
			41	42	43	44	45	46	47	48	49	50
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										
54,370	Port Macquarie	N&MNCLHD										
50,000	Coffs Harbour	N&MNCLHD										



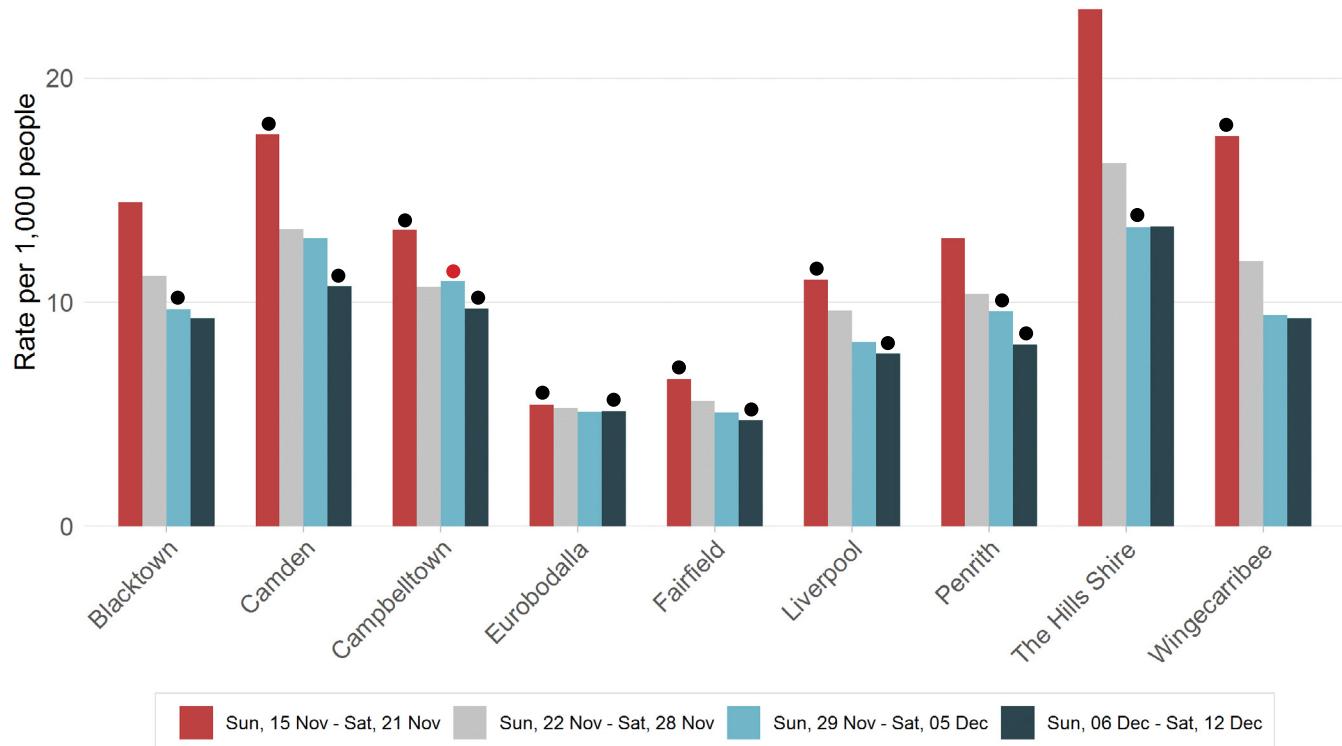
c composite of the separate influent samples
l result from another laboratory
n results from network sites

Interpretation: In the last week, there were two detections of SARS-CoV-2 from the Liverpool and Batemans Bay plants. Both detections are associated with recently recovered cases released from hotel quarantine that live in the area.

Testing rates in areas associated with new cases or sewage detections

Public health alerts are routinely issued in relation to reported cases in the community and detections of SARS-CoV-2 in sewage. The following figure demonstrates the impact of messages on testing rates in areas with recent cases or detections of virus fragments in sewage.

Figure 8. COVID-19 testing by LGA with recent SARS-CoV-2 sewage detections or cases



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

- Sewage detection reported
- Locally-acquired case reported

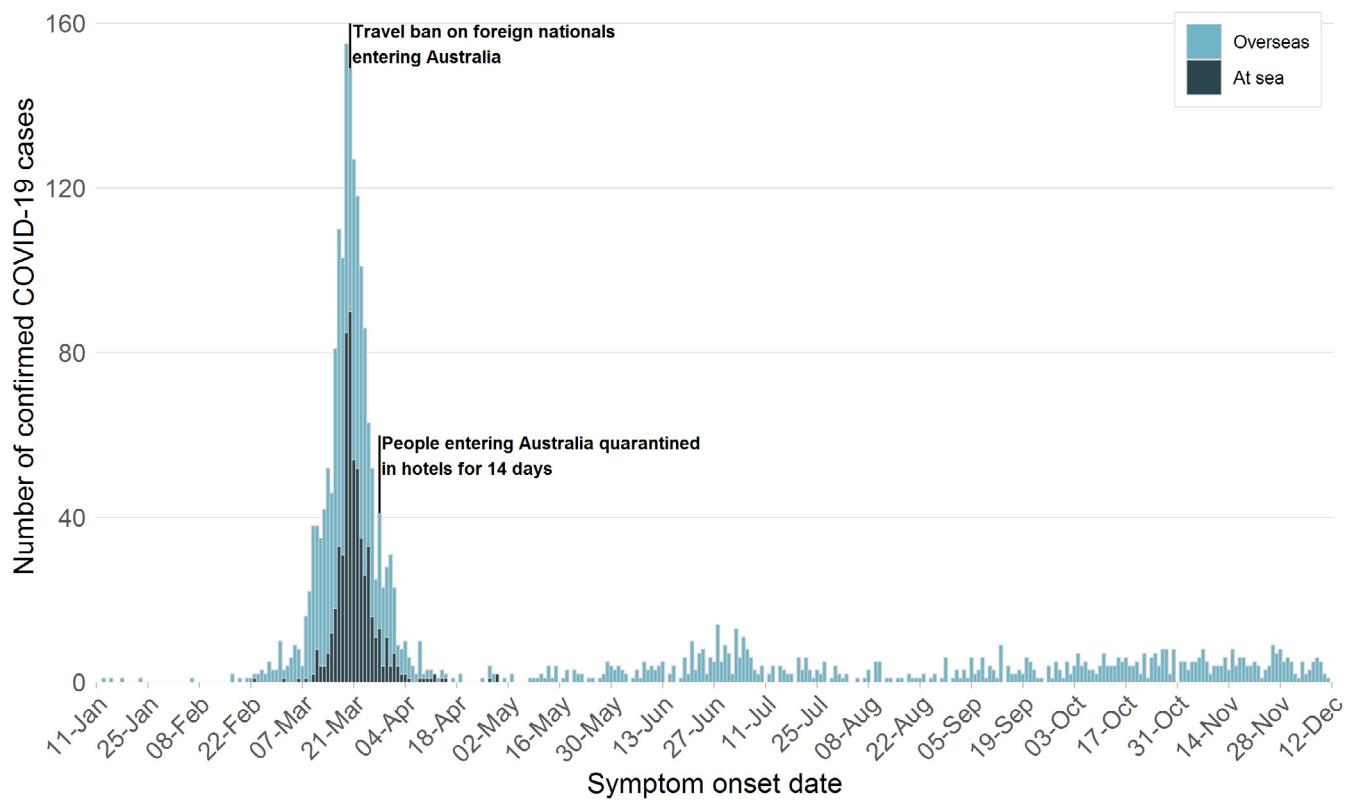
Interpretation: A sewage detection in Batemans Bay and Liverpool last week prompted health alerts to promote testing across South Western Sydney and Eurobodalla LGA. Testing in Eurobodalla and The Hills Shire remained steady while rates decreased across all other LGAs with recent cases or sewage detections.

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



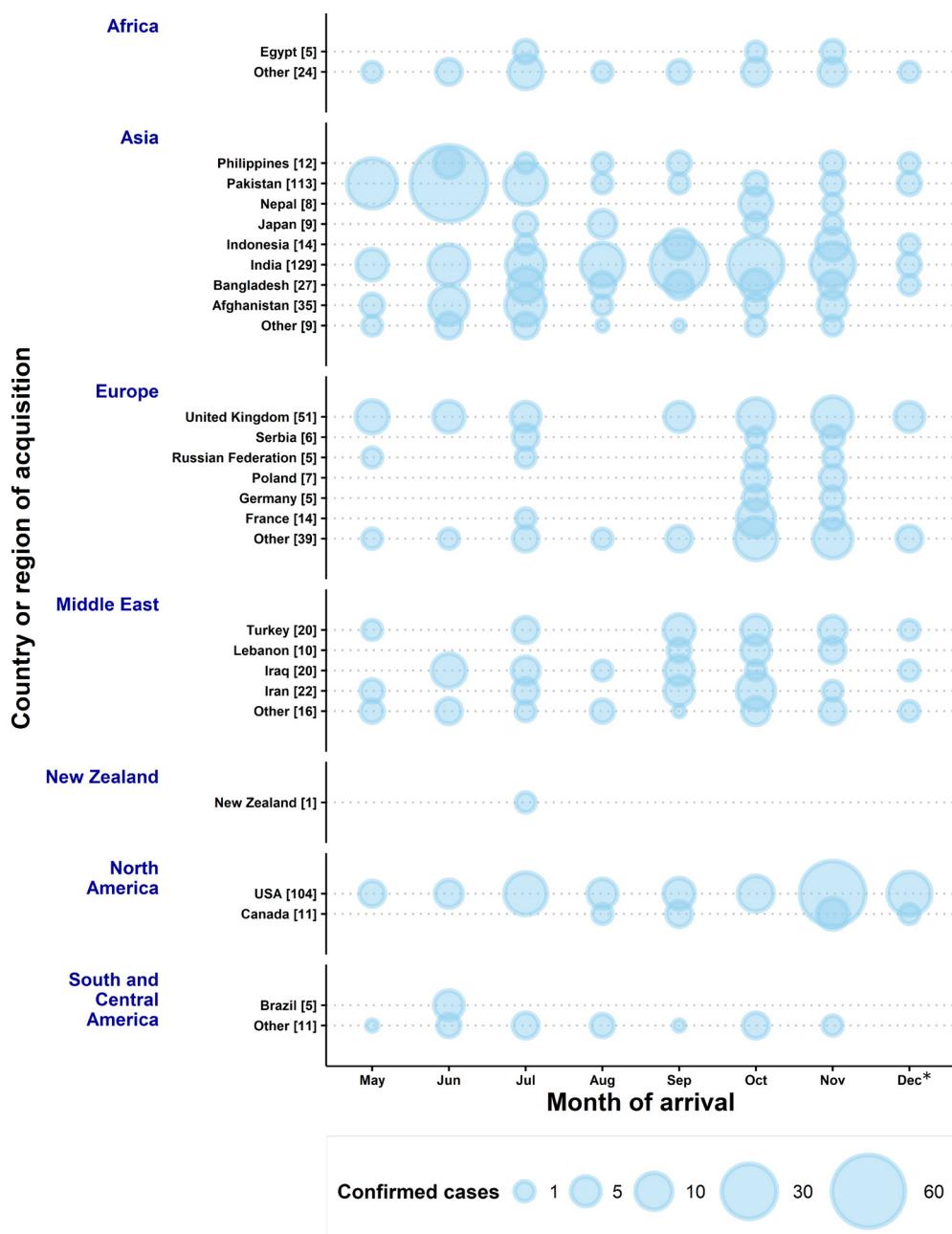
The date of the first positive test is used for cases who did not report symptoms.

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 34 overseas-acquired cases reported in the week ending 12 December, 13% less than the previous week.

Country of acquisition of COVID-19 for overseas travellers

The following figure displays the countries and regions with the greatest numbers of international travellers diagnosed with COVID-19 in NSW.

Figure 10. Overseas-acquired COVID-19 cases by country of acquisition and arrival month, reported from May to 12 December, NSW, 2020



* Month to date

Interpretation: Since May, the majority of international travellers diagnosed in NSW were likely infected in Asia or North America. The pattern seen in COVID-positive travellers over time reflects the evolving nature of the pandemic in those areas.

In the last four weeks, there have been 145 COVID-positive travellers who have arrived in NSW. The table below lists the top 10 countries of acquisition for these travellers.

Table 6. Top 10 countries of acquisition for overseas travellers that have tested positive in the last four weeks (15 November–12 December)

Country of acquisition of COVID-19	Number (%) of cases in the last four weeks
United States	50 (35%)
United Kingdom, Channel Islands and Isle of Man	16 (11%)
India	15 (10%)
Afghanistan	5 (4%)
Canada	5 (4%)
Indonesia	5 (4%)
Bangladesh	4 (3%)
Kenya	3 (2%)
Pakistan	3 (2%)
Lebanon	2 (2%)
Other	37 (26%)
Total	145 (100%)

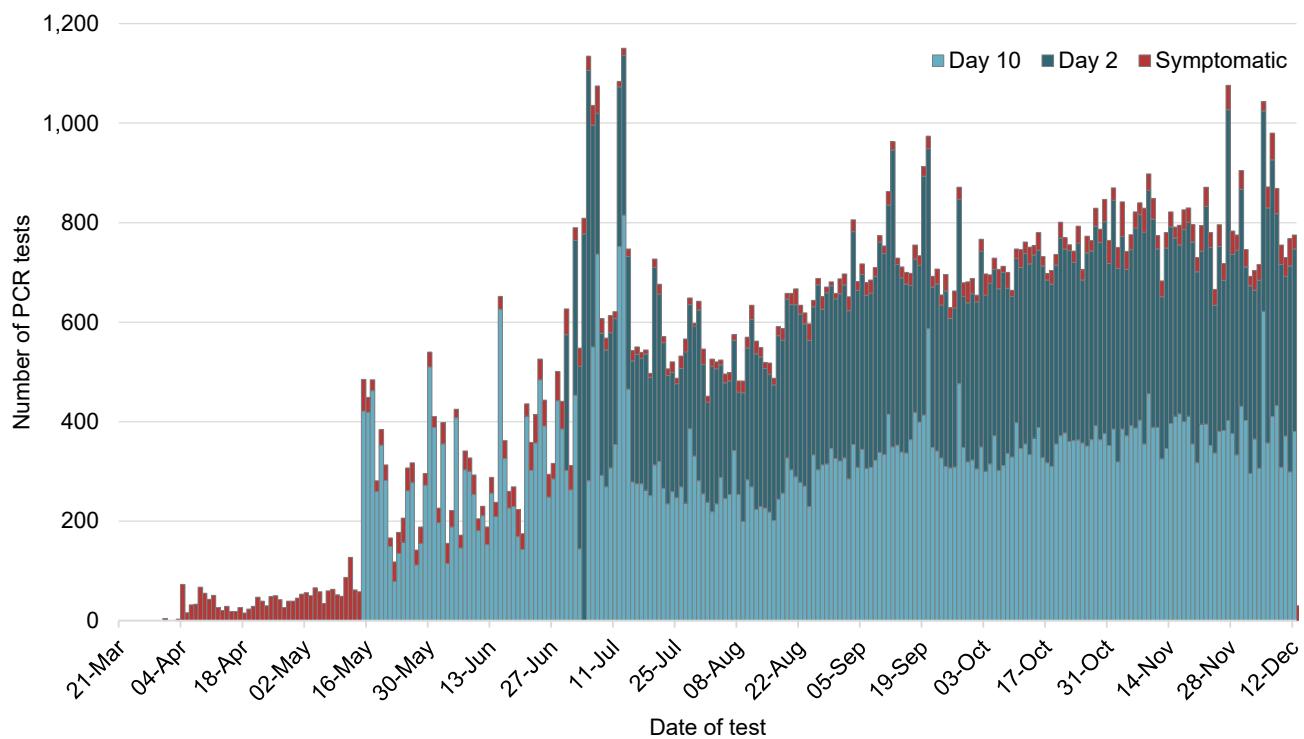
Interpretation: In the last four weeks, travellers returning from the United States accounted for the largest number of overseas-acquired cases (50, 35%), followed by travellers returning from the United Kingdom (16, 11%), and India (15, 10%).

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 10 after arrival. Testing is also carried out on individuals that became symptomatic in addition 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 four interstate-acquired COVID-19 cases detected while in hotel quarantine. In the last four weeks, 10,904 returned travellers received a day two swab in hotel quarantine; of these 3.0% reported symptoms at the time of screening. In the same time period, 10,641 returned travellers received a day 10 swab, and 1.3% reported symptoms at the time of screening.

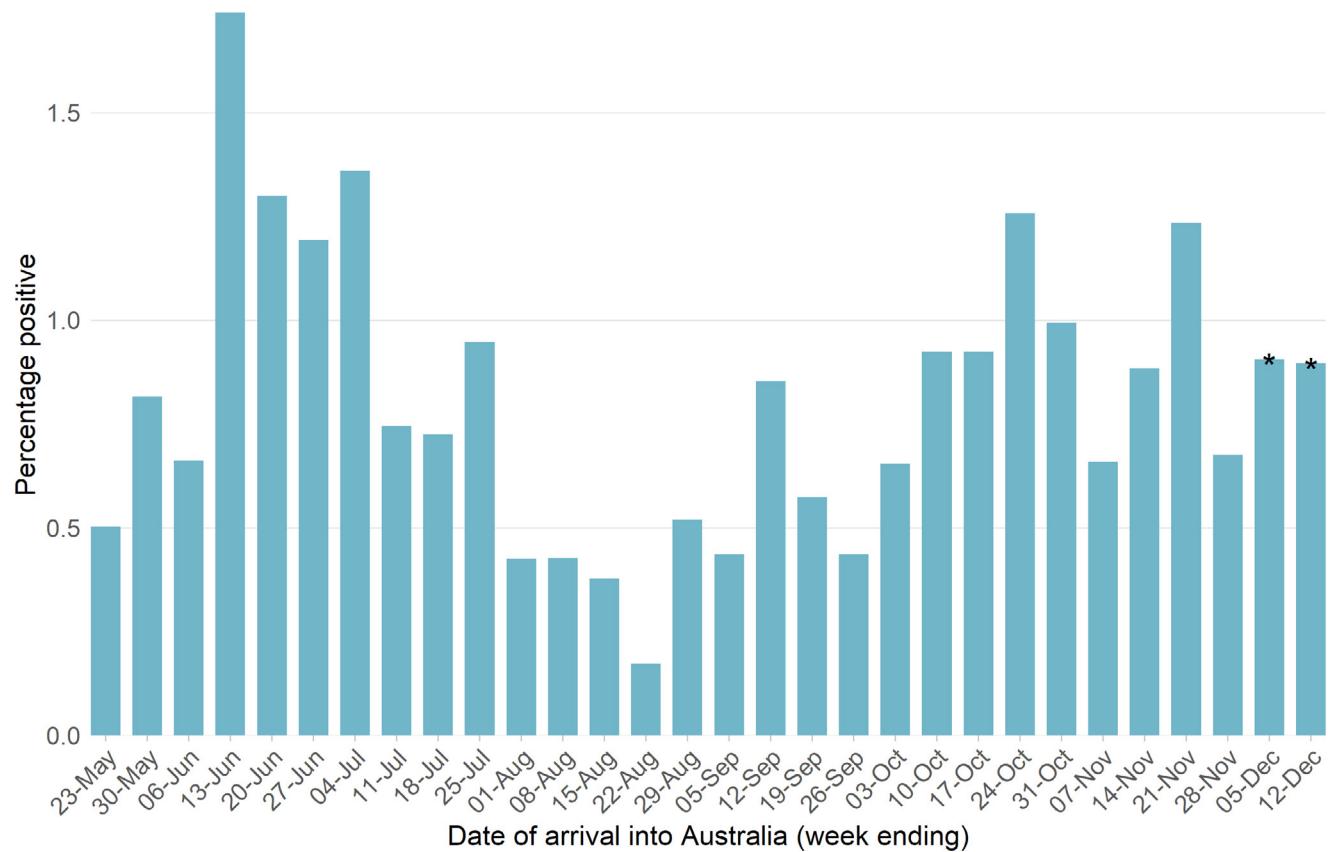
Figure 11. COVID-19 testing in returned travellers in hotel quarantine, reported from 29 March to 12 December, NSW, 2020



Interpretation: In the week ending 12 December, there were 5,749 tests conducted through the hotel quarantine screening programs.

The following graph 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 12. 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 12 December, NSW, 2020



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

Interpretation: 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 6 December 2020

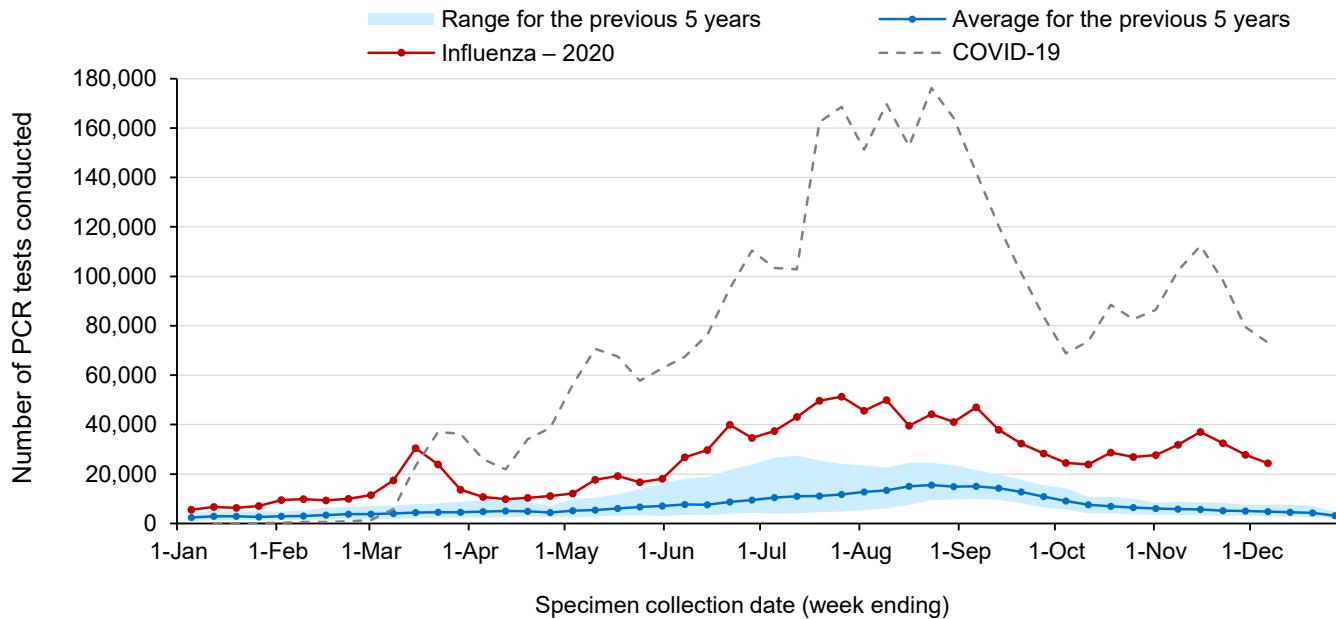
In NSW, routine surveillance for influenza and other respiratory viruses is conducted through sentinel laboratories. The number of all PCR tests (positive and negative) are provided to NSW Health by participating laboratories each week. Testing counts reflect the number of influenza PCR tests conducted;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

The most recent data available is for testing carried out to 6 December. A total of 1,249,830 influenza tests have been performed at participating laboratories to 6 December, with 24,404 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 13. Testing for influenza and COVID-19 by week, to 6 December 2020

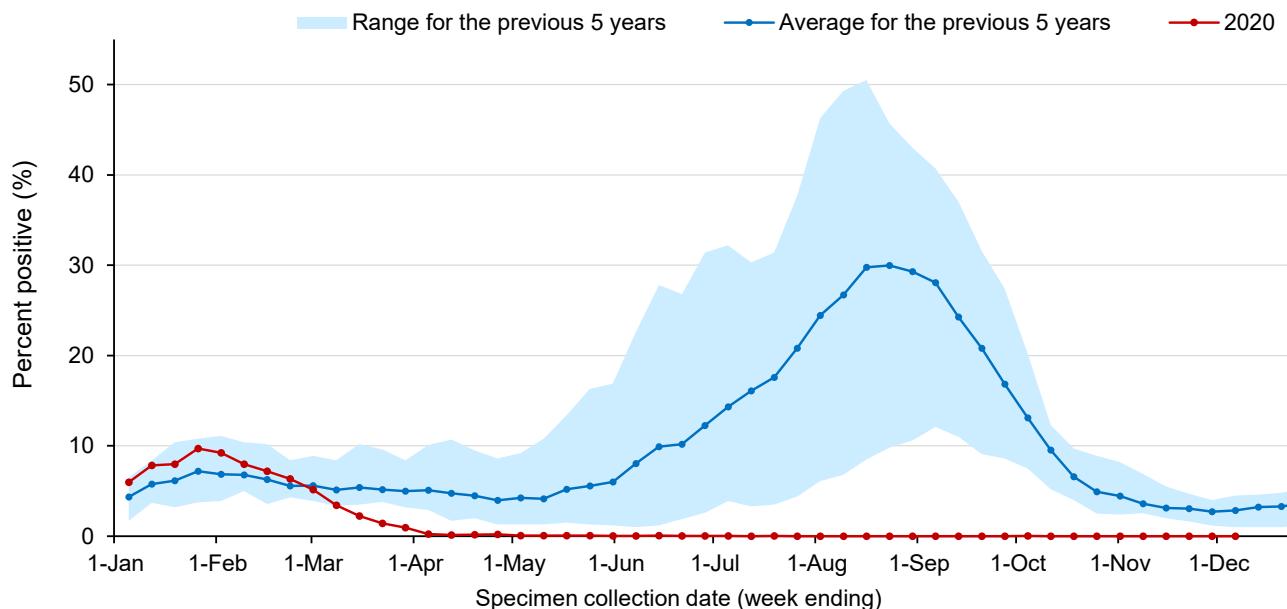


Interpretation: The number of influenza tests performed has decreased for the third consecutive week. In every week this year, the number of tests has exceeded the previous five-year average.

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.

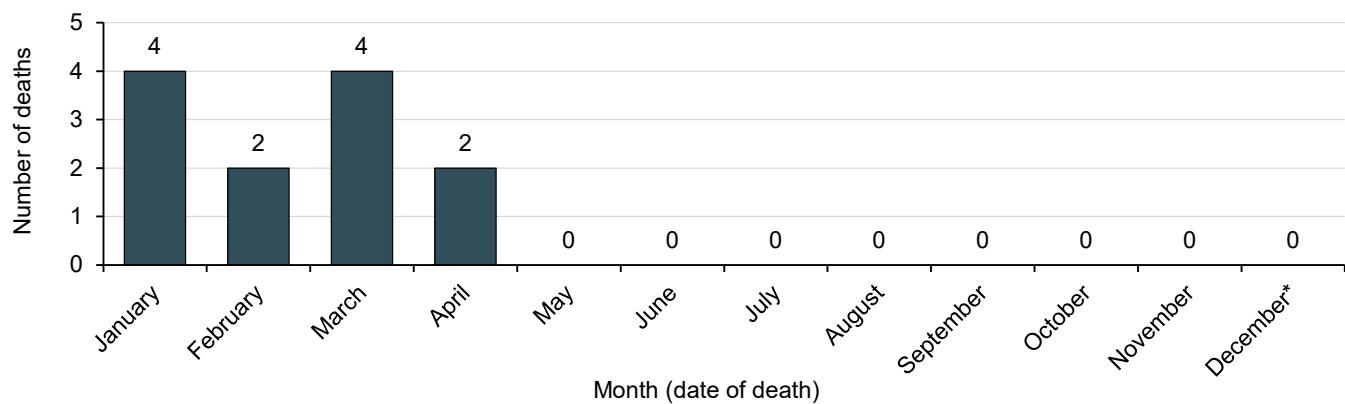
Figure 14. Proportion of tests positive for influenza, to 6 December 2020



Interpretation: In the week ending 6 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 15. Laboratory-confirmed influenza deaths by month of death, to 6 December 2020



Note: *month to date.

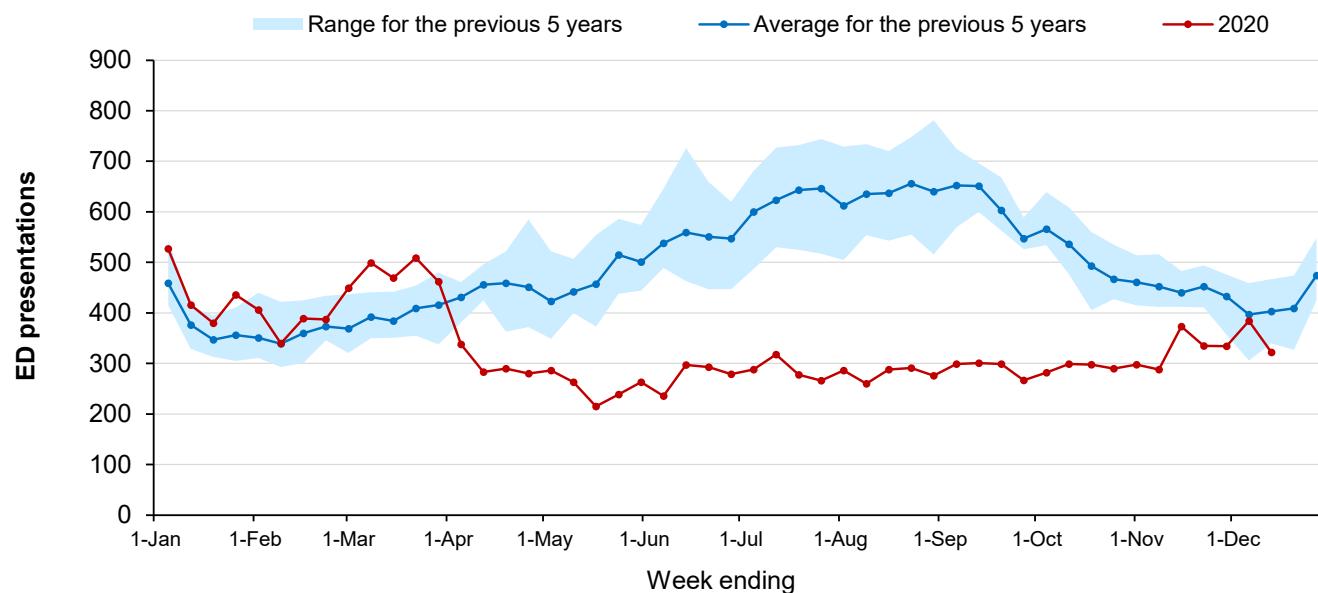
Interpretation: No influenza deaths have been reported in NSW since April 2020. The number of influenza-related deaths identified via coroner's reports and death registrations from 1 January to 6 December 2020 is lower than the same period last year (12 deaths in 2020 compared with 331 in 2019).² Two-thirds 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 shows 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 16. Emergency Department pneumonia presentations in NSW by week, to 13 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.

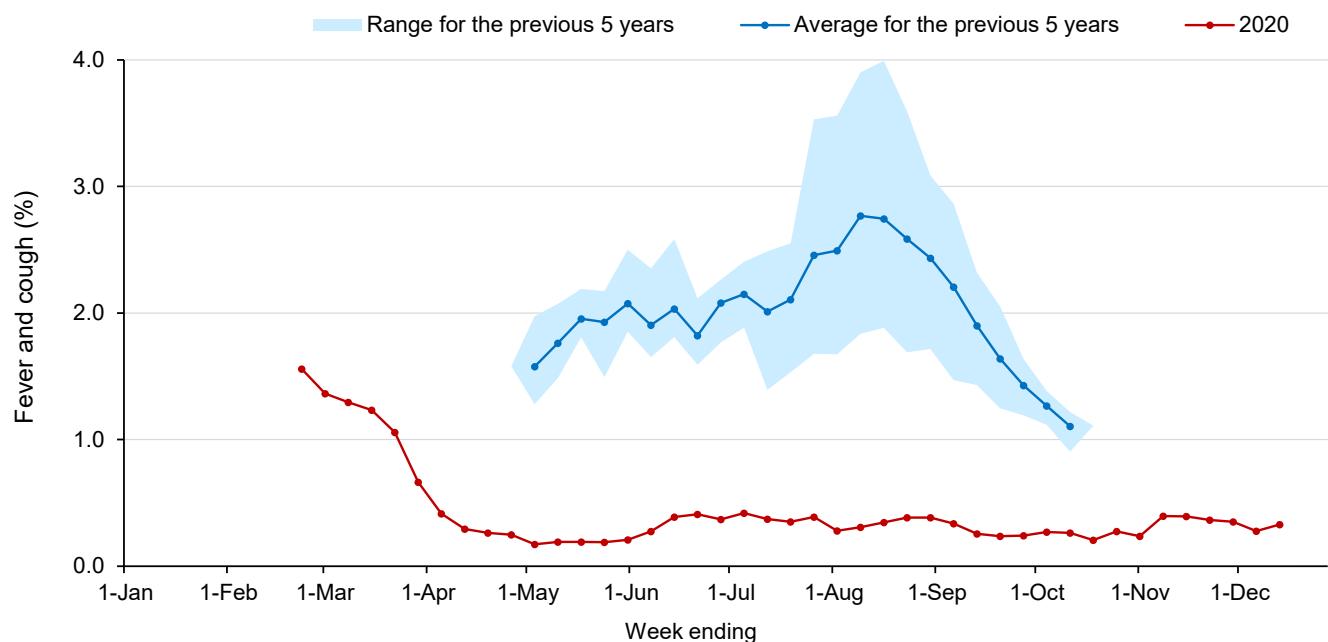
In the week ending 13 December, pneumonia presentations decreased and are below the seasonal range for December.

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 five years. Includes unplanned presentations to 67 NSW emergency departments (accounts for 87% of total public ED activity).

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 17. Proportion of FluTracker participants in NSW reporting influenza-like illness, to 13 December 2020



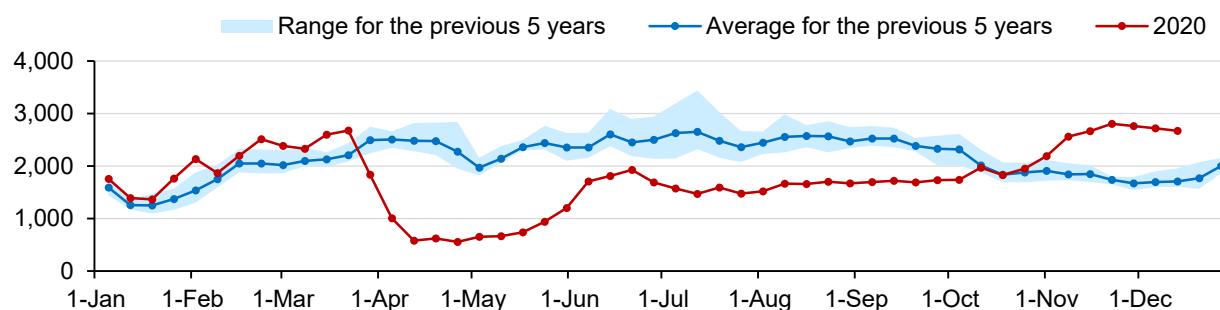
Interpretation: In NSW in the week ending 13 December, of the 12,720 people surveyed 342 people (0.33%) reported flu-like symptoms.

Respiratory infections in children aged 0-4 years

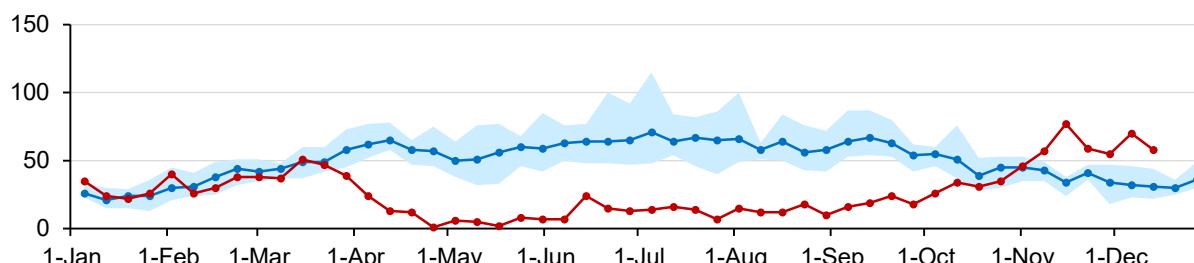
The figures below show weekly respiratory, pneumonia and bronchiolitis presentations to Emergency Departments in NSW for children under 5, using PHREDSS data. Also shown are weekly laboratory notifications for respiratory syncytial virus (RSV) from laboratory sentinel surveillance.

Figure 18. Emergency Department presentations in children 0-4 years, for all respiratory problems/fever and unspecified infection, pneumonia and bronchiolitis in NSW by week, to 13 December 2020

All respiratory problems/fever and unspecified infection - total



Pneumonia



Bronchiolitis

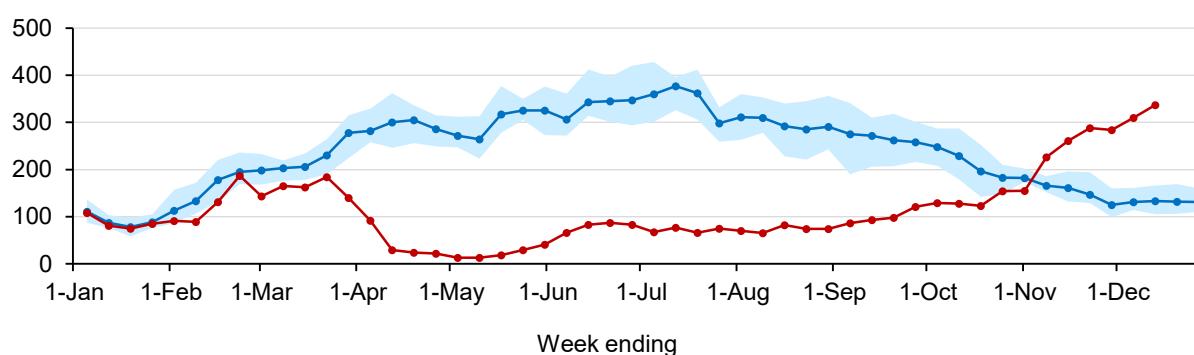
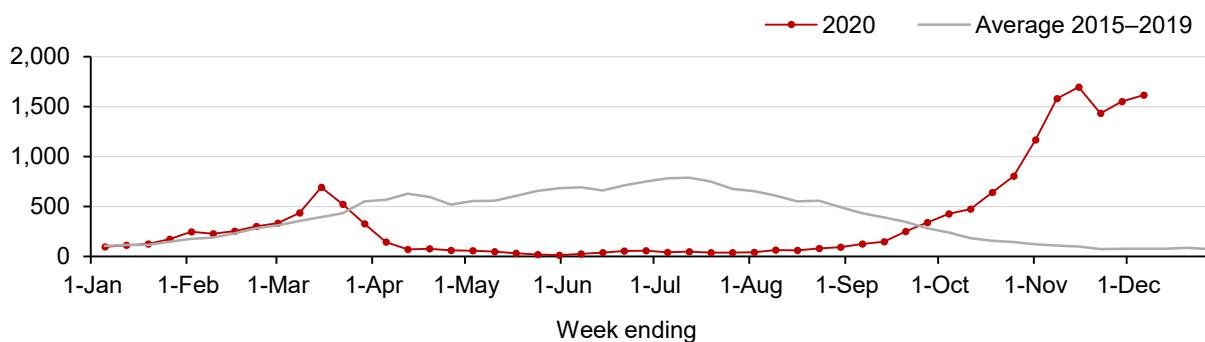


Figure 19. Number of positive PCR test results for all ages, for respiratory syncytial virus (RSV) at sentinel NSW laboratories, 1 January to 6 December 2020



Interpretation:

- Emergency presentations for any respiratory illness among those aged 0-4 years decreased slightly this week and have been above the seasonal range since early November.
- Pneumonia presentations decreased this week in children aged 0-4 years and 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 increased for the second consecutive week and have been above the five-year mean since September. The steep increase in reported cases in recent weeks corresponds with a sharp increase in emergency presentations for bronchiolitis, which have been above the usual seasonal range since early November.

IN FOCUS

SYMPTOM PROFILE FOR COVID-19 IN NSW

Reporting period: 1 July to 12 December 2020

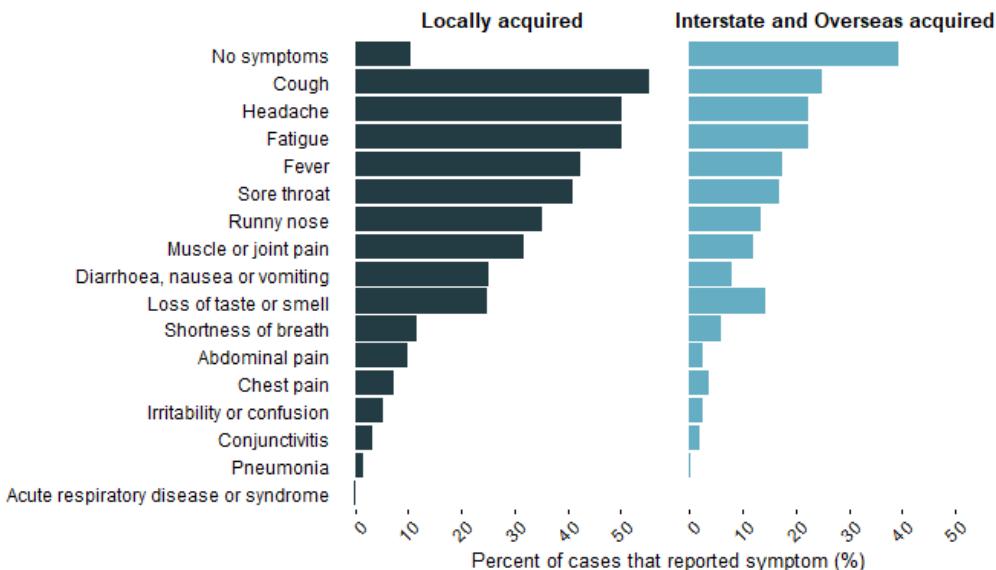
During the initial case interview all newly confirmed COVID-19 cases are asked whether they are currently experiencing any symptoms. This report is an analysis of the symptoms reported and includes all confirmed cases reported in NSW between 1 July and 12 December 2020.

The aim is to demonstrate the frequency of symptoms reported at interview by place of acquisition and age, and how frequently common symptoms have been reported in combination with other symptoms.

Since July 2020, 876 of the 1,256 (70%) confirmed COVID-19 cases have reported at least one symptom. There were 68 records (5%) which had no information on symptoms recorded.

The figure below shows the proportion of each symptom reported at the initial case interview by both locally-acquired cases and cases in returned travellers.

Figure 1. Proportion of COVID-19 cases reporting symptom at initial case interview, by place of acquisition, 1 July to 12 December 2020



Interpretation: Of the 876 cases since July reporting symptoms at interview, 566 were locally acquired, 290 were overseas acquired and 20 were interstate acquired.

Since July, almost 40% of cases in returned travellers reported no symptoms at the initial interview. This may reflect the screening programs performed during mandatory quarantine, and that people are returning positive testing results for old infections that are no longer symptomatic.

The majority of symptoms reported by **locally-acquired** COVID-19 cases in New South Wales are consistent with a mild respiratory infection. The principal symptoms reported in cases were cough (55%), headache (50%), fatigue (50%) and fever (42%).

More severe respiratory syndromes at diagnosis, including pneumonia, shortness of breath and/or acute respiratory distress (ARD), were reported in 15% (94/633) of locally-acquired cases. Of the four cases who died in this period none recorded severe symptoms at diagnosis.

Reporting period: 1 July to 12 December 2020

Difference in symptom profile by age group

Differences in reported symptoms may be influenced by a range of variables including the age of the case and the surveillance strategies used. Many children may have their parent or guardian conduct the interview on their behalf and may not be able to articulate the range of symptoms they are currently experiencing.

The table below shows the proportion of symptoms reported by each age group for locally-acquired cases.

Table 1. Proportion of locally-acquired COVID-19 cases reporting symptom at initial case interview by age group, 1 July to 12 December 2020

Symptoms	Age group at event								
	0-4	5-11	12-17	18-29	30-49	50-59	60-69	70-79	80+
No symptoms reported at interview	29%	13%	12%	10%	10%	8%	6%	13%	17%
Cough	43%	37%	47%	61%	53%	65%	53%	74%	58%
Headache	5%	37%	43%	60%	55%	53%	53%	45%	17%
Fatigue	24%	13%	43%	56%	56%	49%	59%	45%	58%
Fever	48%	17%	28%	43%	42%	51%	53%	52%	42%
Sore throat	29%	33%	47%	52%	43%	35%	33%	35%	17%
Runny nose	38%	47%	40%	38%	39%	31%	27%	16%	17%
Muscle and/or joint pain	0%	10%	17%	30%	38%	40%	46%	29%	17%
Diarrhoea, nausea or vomiting	14%	17%	17%	32%	24%	27%	26%	32%	25%
Loss of taste and/or smell	0%	10%	23%	26%	28%	29%	31%	13%	8%
Shortness of breath	5%	3%	7%	14%	13%	15%	17%	3%	0%
Abdominal pain	0%	13%	9%	9%	10%	9%	13%	6%	17%
Chest pain	0%	0%	5%	7%	9%	7%	10%	10%	17%
Irritability or confusion	14%	3%	4%	4%	8%	1%	4%	6%	17%
Conjunctivitis	5%	0%	4%	4%	3%	3%	4%	3%	0%
Pneumonia	0%	0%	0%	1%	0%	3%	7%	0%	8%
Acute respiratory distress	0%	0%	0%	0%	0%	0%	1%	0%	0%
Cases	21	30	75	114	184	96	70	31	12

Interpretation: The symptom profile among adults was consistent across ages 18–69 year olds. The more severe respiratory symptoms, such as pneumonia and acute respiratory distress, were more prevalent in older people.

The main symptoms reported at diagnosis for each age group are:

- Young children (0-4 years) — fever (48%), cough (43%), runny nose (38%), and sore throat (29%).
- Primary school-aged children (5-11) — runny nose (47%), cough (37%), headache (37%), sore throat (33%) and fever (17%).
- High school-aged children (12-17) — cough (47%), sore throat (47%), headache (43%), fatigue (43%) and runny nose (40%).
- Older adults (80+) — cough (58%), fatigue (58%), fever (42%), and diarrhoea and/or nausea and vomiting (25%).

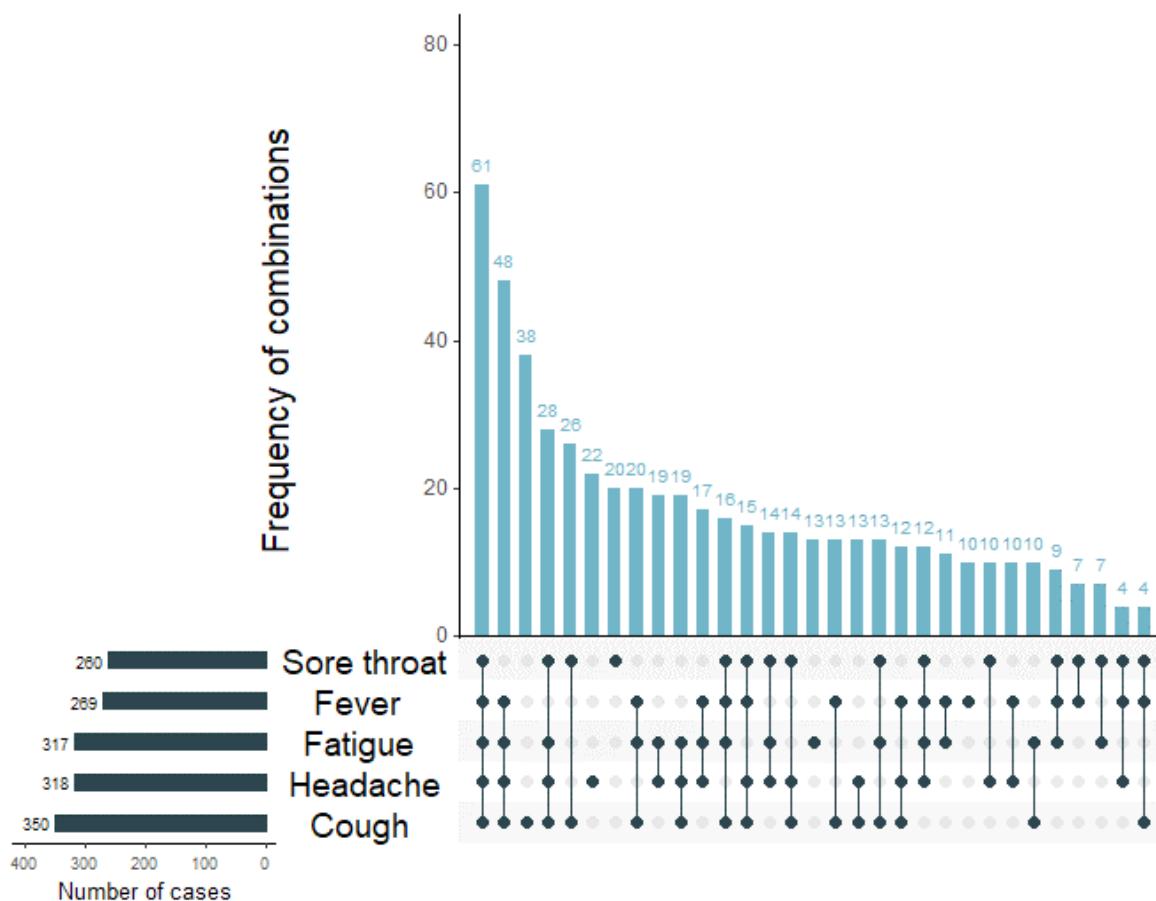
Reporting period: 1 July to 12 December 2020

Multiple symptoms

A typical symptom profile of a COVID-19 case includes the reporting of multiple symptoms.

Figure 2 shows the variation in combinations of symptoms observed in locally-acquired cases for the five most frequently observed symptoms (sore throat, fever, fatigue, headache, and cough). The horizontal bars on the left show the number of cases reporting that symptom, either individually or in combination. The black circles and lines indicate particular combinations of the five symptoms, with the vertical green bars showing how many cases reported that combination.

Figure 2. Combinations of COVID-19 symptoms in locally-acquired cases, 1 July to 12 December 2020



Interpretation: 61 locally-acquired cases recorded the top five symptoms more often than any other combination of symptoms. Cough is the most common symptom to be reported without any other symptom (38 cases), followed by headache (22 cases) and sore throat (22 cases). Fatigue, headache and fever are more likely to be reported in combination with another symptom rather than individually.

APPENDIX A: COVID-19 PCR TESTS IN NSW

Local Health District	Local Government Area	Week ending				Total	
		12 December		5 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	2657	7.5	2823	8.0	133758	379.1
Far West	Balranald	5	2.1	6	2.6	510	218.1
	Broken Hill	51	2.9	73	4.2	5264	301.2
	Central Darling	13	7.1	6	3.3	410	223.0
	Wentworth	35	5.0	26	3.7	2363	335.0
	LHD Total ²	104	3.5	111	3.7	8547	283.5
Hunter New England	Armidale Regional	132	4.3	140	4.6	9898	321.6
	Cessnock	206	3.4	207	3.5	16089	268.2
	Dungog	33	3.5	40	4.2	2500	265.3
	Glen Innes Severn	30	3.4	17	1.9	1847	208.2
	Gunnedah	39	3.1	47	3.7	3297	260.0
	Gwydir	12	2.2	6	1.1	713	133.2
	Inverell	45	2.7	46	2.7	4219	249.8
	Lake Macquarie	1504	7.3	1550	7.5	88075	427.8
	Liverpool Plains	23	2.9	14	1.8	2112	267.2
	Maitland	580	6.8	616	7.2	40008	469.8
	Mid-Coast	290	3.1	300	3.2	22860	243.6
	Moree Plains	25	1.9	35	2.6	3054	230.3
	Muswellbrook	61	3.7	69	4.2	4624	282.4
	Narrabri	31	2.4	23	1.8	2722	207.2
Illawarra Shoalhaven	Newcastle	1460	8.8	1365	8.2	86780	524.1
	Port Stephens	327	4.5	386	5.3	28872	392.9
	Singleton	122	5.2	120	5.1	9563	407.6
	Tamworth Regional	236	3.8	258	4.1	22270	356.1
	Tenterfield	10	1.5	12	1.8	1090	165.3
	Upper Hunter Shire	51	3.6	47	3.3	4117	290.3
	Uralla	13	2.2	17	2.8	1267	210.8
	Walcha	3	1.0	4	1.3	903	288.1
	LHD Total ²	5231	5.5	5317	5.6	356595	374.4
Mid North Coast	Kiama	185	7.9	154	6.6	9794	418.8
	Shellharbour	498	6.8	529	7.2	30400	415.1
	Shoalhaven	530	5.0	523	5.0	34059	322.4
	Wollongong	1529	7.0	1589	7.3	82294	377.3
	LHD Total ²	2742	6.5	2795	6.7	156547	373.1
	Bellingen	50	3.9	58	4.5	3661	281.7
	Coffs Harbour	281	3.6	306	4.0	20012	259.0
	Kempsey	120	4.0	141	4.7	8987	302.1
	Nambucca	85	4.3	81	4.1	4900	247.4
	Port Macquarie-Hastings	377	4.5	366	4.3	25566	302.5
	LHD Total ²	913	4.1	952	4.2	63126	279.7

COVID-19 WEEKLY SURVEILLANCE IN NSW
www.health.nsw.gov.au/coronavirus
Epidemiological week 50, ending 12 December 2020

Local Health District	Local Government Area	Week ending				Total	
		12 December		5 December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Murrumbidgee	Albury	215	4.0	244	4.5	17196	316.4
	Berrigan	14	1.6	11	1.3	1969	225.0
	Bland	13	2.2	27	4.5	1521	254.7
	Carrathool	2	0.7	1	0.4	335	119.7
	Coolamon	14	3.2	10	2.3	1214	279.7
	Cootamundra-Gundagai Regional	50	4.5	38	3.4	2904	258.5
	Edward River	24	2.6	22	2.4	2593	285.5
	Federation	40	3.2	35	2.8	2842	228.5
	Greater Hume Shire	36	3.3	35	3.3	3132	291.0
	Griffith	146	5.4	147	5.4	8494	314.3
	Hay	8	2.7	6	2.0	531	180.1
	Hilltops	78	4.2	66	3.5	5166	276.2
	Junee	26	3.9	28	4.2	1255	187.8
	Lachlan ¹	3	0.5	3	0.5	914	150.5
	Leeton	31	2.7	44	3.8	2599	227.1
	Lockhart	13	4.0	17	5.2	787	239.6
	Murray River	9	0.7	6	0.5	806	66.5
	Murrumbidgee	7	1.8	10	2.6	777	198.4
	Narrandera	12	2.0	9	1.5	1092	185.1
	Snowy Valleys	54	3.7	74	5.1	4248	293.4
	Temora	10	1.6	19	3.0	1270	201.4
	Wagga Wagga	362	5.6	343	5.3	24633	377.5
Nepean Blue Mountains	LHD Total ²	1165	3.9	1194	4.0	85673	287.4
	Blue Mountains	772	9.8	731	9.2	43285	547.1
	Hawkesbury	562	8.4	619	9.2	31125	462.5
	Lithgow	89	4.1	105	4.9	6508	301.2
	Penrith	1728	8.1	2047	9.6	108147	507.8
Northern NSW	LHD Total ²	3129	8.0	3467	8.9	187548	479.7
	Ballina	159	3.6	168	3.8	13845	310.2
	Byron	222	6.3	284	8.1	13346	380.4
	Clarence Valley	149	2.9	182	3.5	11150	215.8
	Kyogle	13	1.5	22	2.5	1765	200.7
	Lismore	179	4.1	217	5.0	14564	333.3
	Richmond Valley	80	3.4	82	3.5	6677	284.6
	Tenterfield	10	1.5	12	1.8	1090	165.3
	Tweed	332	3.4	300	3.1	24089	248.3
	LHD Total ²	1135	3.7	1256	4.1	85703	276.1

COVID-19 WEEKLY SURVEILLANCE IN NSW
www.health.nsw.gov.au/coronavirus
Epidemiological week 50, ending 12 December 2020

Local Health District	Local Government Area	Week ending				Total	
		12 December		5 December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Northern Sydney	Hornsby	1352	8.9	1394	9.2	61029	401.4
	Hunters Hill	277	18.5	288	19.2	14075	939.6
	Ku-ring-gai	1769	13.9	1685	13.3	75761	595.8
	Lane Cove	782	19.5	785	19.6	38830	967.0
	Mosman	282	9.1	357	11.5	15115	487.9
	North Sydney	541	7.2	575	7.7	28332	377.7
	Northern Beaches	2697	9.9	2691	9.8	122281	447.1
	Parramatta ¹	2074	8.1	2129	8.3	94082	365.8
	Ryde	1302	9.9	1233	9.4	55417	422.2
	Willoughby	681	8.4	679	8.4	29766	366.6
	LHD Total ²	10139	10.6	10204	10.7	458792	480.0
South Eastern Sydney	Bayside	1333	7.5	1367	7.7	62938	352.8
	Georges River	1163	7.3	1120	7.0	54493	341.7
	Randwick	1647	10.6	1727	11.1	85667	550.4
	Sutherland Shire	2148	9.3	2284	9.9	115530	501.0
	Sydney ¹	3575	14.5	3489	14.2	134229	544.9
	Waverley	861	11.6	902	12.1	48306	650.2
	Woollahra	758	12.8	723	12.2	39937	672.5
	LHD Total ²	9519	9.9	9731	10.2	456749	476.2
South Western Sydney	Camden	1087	10.7	1305	12.9	66735	657.9
	Campbelltown	1661	9.7	1874	11.0	88909	520.1
	Canterbury-Bankstown ¹	2470	6.5	2581	6.8	140469	371.7
	Fairfield	1005	4.8	1076	5.1	70770	334.3
	Liverpool	1757	7.7	1874	8.2	109324	480.4
	Wingecarribee	475	9.3	482	9.4	27160	531.2
	Wollondilly	314	5.9	350	6.6	19168	360.7
	LHD Total ²	7447	7.2	8180	7.9	452002	435.2
Southern NSW	Bega Valley	196	5.7	178	5.2	9411	273.0
	Eurobodalla	198	5.2	197	5.1	15020	390.4
	Goulburn Mulwaree	183	5.9	187	6.0	10223	328.4
	Queanbeyan-Palerang Regional	248	4.1	225	3.7	13944	228.2
	Snowy Monaro Regional	78	3.8	110	5.3	5982	287.7
	Upper Lachlan Shire	41	5.1	36	4.5	2165	268.6
	Yass Valley	41	2.4	49	2.9	3308	193.6
	LHD Total ²	985	4.5	983	4.5	60082	276.8

COVID-19 WEEKLY SURVEILLANCE IN NSW

Epidemiological week 50, ending 12 December 2020

www.health.nsw.gov.au/coronavirus

Local Health District	Local Government Area	Week ending				Total	
		12 December		5 December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Sydney	Burwood	289	7.1	258	6.4	11708	288.3
	Canada Bay	876	9.1	944	9.8	47361	493.0
	Canterbury-Bankstown ¹	2470	6.5	2581	6.8	140469	371.7
	Inner West	2289	11.4	2239	11.2	112973	562.6
	Strathfield	456	9.7	502	10.7	21774	464.0
	Sydney ¹	3575	14.5	3489	14.2	134229	544.9
	LHD Total ²	7178	10.3	7165	10.3	347163	498.3
Western NSW	Bathurst Regional	247	5.7	250	5.7	17443	399.9
	Blayney	33	4.5	46	6.2	2809	380.7
	Bogan	2	0.8	7	2.7	587	227.5
	Bourke	4	1.5	4	1.5	457	176.5
	Brewarrina	1	0.6	4	2.5	296	183.7
	Cabonne	26	1.9	35	2.6	2782	204.1
	Cobar	22	4.7	21	4.5	930	199.7
	Coonamble	11	2.8	13	3.3	844	213.2
	Cowra	35	2.8	56	4.4	3096	243.0
	Dubbo Regional	239	4.5	225	4.2	16545	308.0
	Forbes	31	3.1	16	1.6	1968	198.7
	Gulgandra	10	2.4	9	2.1	865	204.1
	Lachlan ¹	3	0.5	3	0.5	914	150.5
	Mid-Western Regional	155	6.1	130	5.2	7556	299.2
	Narromine	24	3.7	17	2.6	1560	239.4
	Oberon	20	3.7	23	4.3	1600	295.7
	Orange	298	7.0	307	7.2	18236	429.6
	Parkes	43	2.9	51	3.4	3788	255.3
	Walgett	15	2.5	5	0.8	1495	251.1
	Warren	7	2.6	16	5.9	1170	433.8
	Warrumbungle Shire	30	3.2	28	3.0	2479	267.2
	Weddin	7	1.9	20	5.5	759	210.1
	LHD Total ²	1262	4.4	1284	4.5	87908	308.4
Western Sydney	Blacktown	3480	9.3	3628	9.7	166759	445.3
	Cumberland	1745	7.2	1934	8.0	95840	396.8
	Parramatta ¹	2074	8.1	2129	8.3	94082	365.8
	The Hills Shire	2385	13.4	2378	13.4	105493	592.8
	LHD Total ²	9277	8.8	9611	9.1	447108	424.4
NSW Total³		70,065	8.7	72,595	9.0	3,618,481	447.3

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

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

³NSW 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 6 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	Total PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhinovirus	HMPV	Enterovirus
		No.	%Pos.	No.	%Pos.						
1 Jan—6 Dec 2020											
Total	1,249,830	6,629	0.53%	955	0.08%	8,703	9,138	17,301	134,754	2,343	6,032
Month ending											
3 February*	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	0.00%	1,251	89	209	31,589	79	427
30 August	174,594	9	0.01%	2	0.00%	1,137	37	299	13,926	14	235
27 September	145,489	6	0.00%	1	0.00%	938	35	866	8,416	61	259
1 November*	131,686	7	0.01%	1	0.00%	894	56	3,508	5,632	51	662
29 November	129,164	6	0.00%	3	0.00%	752	42	6,255	8,252	192	884
Week ending											
8 November	31,883	1	0.00%	2	0.01%	146	3	1,580	2,034	26	318
15 November	37,010	3	0.01%	0	0.00%	204	7	1,693	2,523	49	253
22 November	32,467	2	0.01%	0	0.00%	224	12	1,433	1,927	31	154
29 November	27,804	0	0.00%	1	0.00%	178	20	1,549	1,768	86	159
6 December	24,404	0	0.00%	0	0.00%	148	9	1,614	1,488	59	153

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

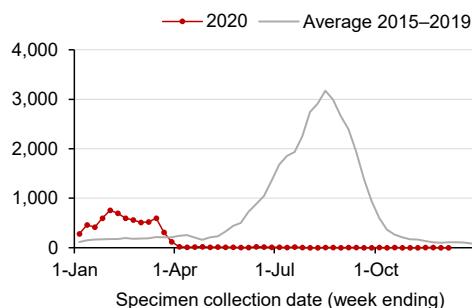
RSV - Respiratory syncytial virus

*Five-week period

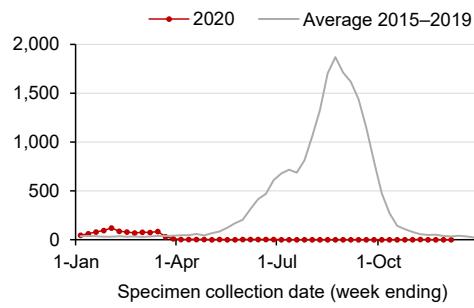
APPENDIX C: NUMBER OF POSITIVE PCR TEST RESULTS FOR INFLUENZA AND OTHER RESPIRATORY VIRUSES AT SENTINEL NSW LABORATORIES, 1 JANUARY TO 6 DECEMBER 2020

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.

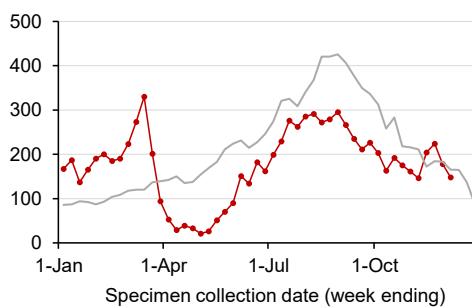
Influenza A



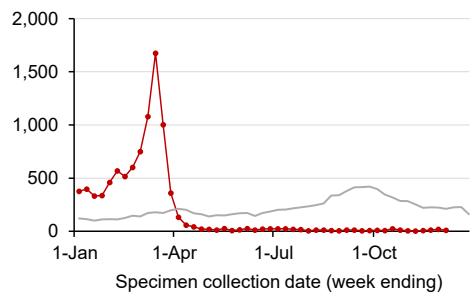
Influenza B



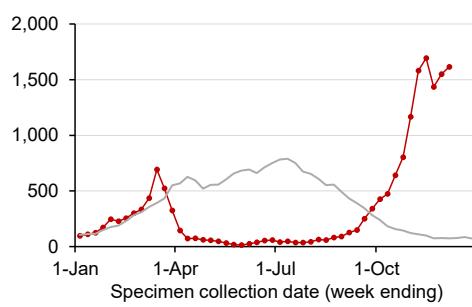
Adenovirus



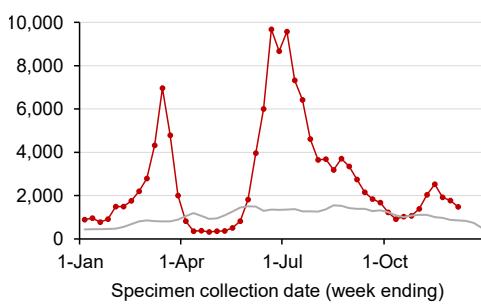
Parainfluenza



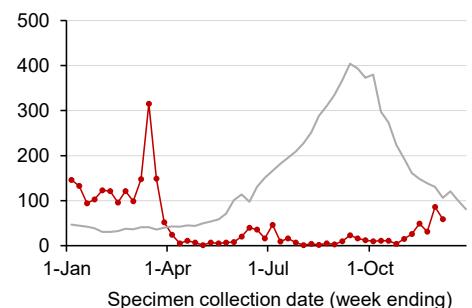
Respiratory syncytial virus (RSV)



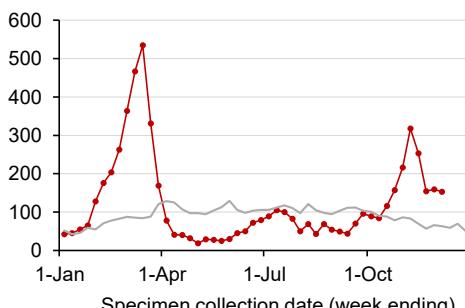
Rhinovirus



Human metapneumovirus (HPMV)



Enterovirus



Notes: 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: <ul style="list-style-type: none">- 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.
Healthcare 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 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.