COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 1, ENDING 09 JANUARY 2021

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SUMMARY FOR THE WEEK ENDING 9 January 2021

- There were 18 locally acquired cases reported in NSW this week (down 65%). There were no new clusters reported this week.

- Of the 18 locally-acquired cases:
  - 12 were linked to the Berala cluster
  - 2 were linked to the Avalon cluster
  - 2 were linked to the Inner West cluster
  - 2 were unable to be linked to a known case or cluster.

- 13% of locally-acquired cases reporting symptoms were in isolation at least 48 hours before symptom onset.

- The majority of locally-acquired cases were residents of Western Sydney LHD (8, 44%) followed by Sydney LHD (6, 33%).

- Testing numbers decreased slightly this week (down 0.4%) but increased across all regional LHDs - most significantly in Far West and Western NSW LHDs following a report of case exposures in Broken Hill and Orange.

- The NSW Sewage Surveillance Program reported 16 detections – these samples were taken from the Ulladulla, Glenfield, Quakers Hill, Warriewood, West Hornsby, Bondi, North Head, Malabar 1 and Malabar 2 treatment plants, and Camellia North and Northmead sewage pumping station. Excluding Ulladulla, all other detections from these catchments are associated with reported cases from known locally acquired cases and returned travellers.

- There have been 16 returned travellers that have tested positive to COVID-19 Variants of Concern (VoC) since 30 November.

- 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.

Indicators of effective prevention measure for COVID-19 in NSW for the week ending 9 January 2021

Locally acquired cases in isolation during their infectious period

	Week of reporting			
	Week ending 9-Jan		Week ending 2-Jan	
	Count	%	Count	%
Locally acquired cases	18		52	
Cases with symptoms at diagnosis	15	83%	37	71%
Number in isolation at least 48 hours before symptoms	2	13%	10	27%
Cases reporting no symptoms at diagnosis	3	17%	15	29%
Number in isolation at least 48 hours before test	1	33%	9	60%

Interpretation: In the week ending 9 January 2021, 3 cases (17%) 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 the 15 cases who were symptomatic, 2 (13%) were in isolation at least 48 hours before symptoms. To reduce the spread of COVID-19 it is essential that people seek testing immediately if symptoms develop, however mild.

Measures of Public Health Action

	Week of reporting	
	Week ending 9-Jan	Week ending 2-Jan
Proportion locally-acquired cases notified to NSW Health by the laboratory within 24 hours	100% (18/18)	100% (52/52)
Locally-acquired cases interviewed by public health staff within 1 day of notification to NSW Health	100% (18/18)	100% (52/52)
Close contacts (identified by the case) contacted by public health within 48 hours of case notification	100%	100%

Interpretation: In the week-ending 9 January, all locally-acquired cases were notified within a day of positive test result and all close contacts were contacted by public health within 48 hours of case notification.

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SECTION 1: HOW IS THE OUTBREAK TRACKING IN NSW?

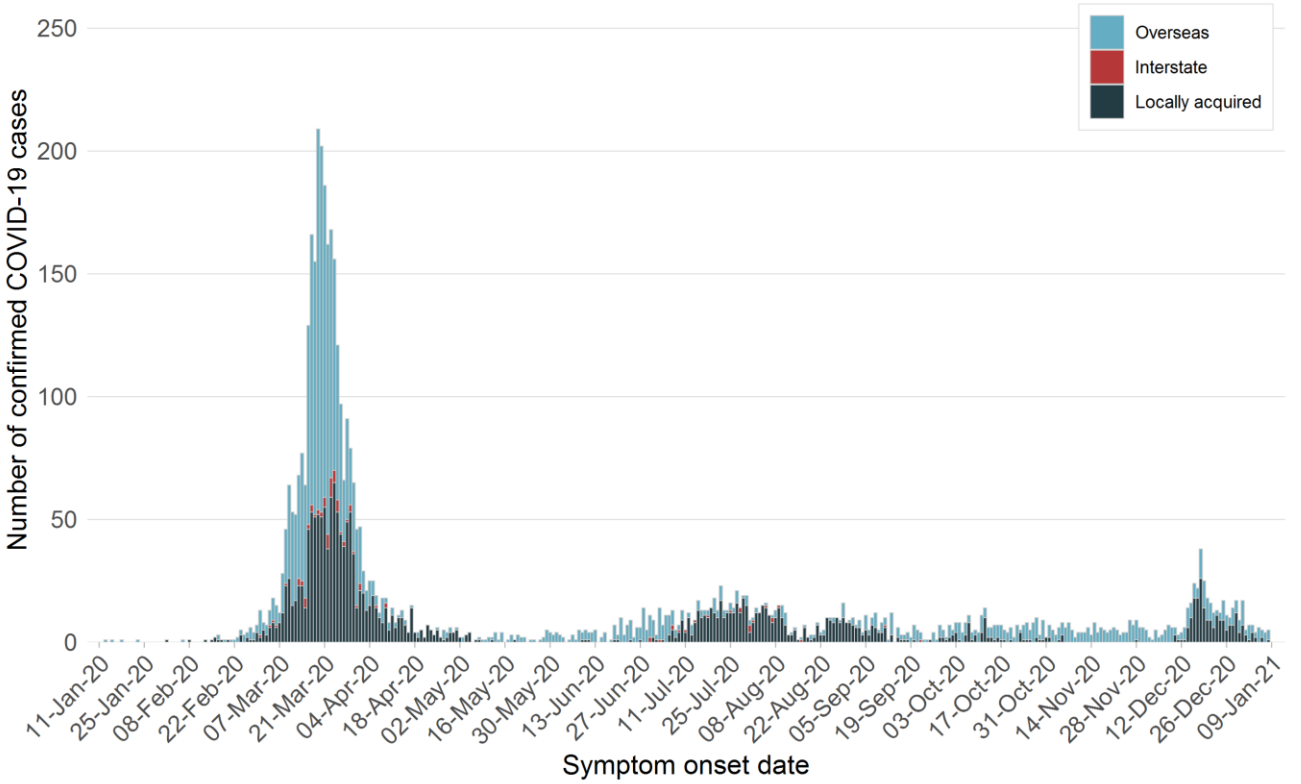
Table 1. COVID-19 cases and tests reported in NSW, up to 9 January 2021

	Week ending 9 Jan	Week ending 2 Jan	% change	Pandemic total
Number of cases	54	96	↓44%	4,824
Overseas acquired	36	44	↓18%	2,658
Interstate acquired	0	0	-	90
Locally acquired	18	52	↓65%	2,076
No links to other cases or clusters	2	4	↓50%	445
Number of deaths	0	0	-	56
Number of tests	174,698	174,086	↓0.4%	4,380,378

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, week ending 09 January



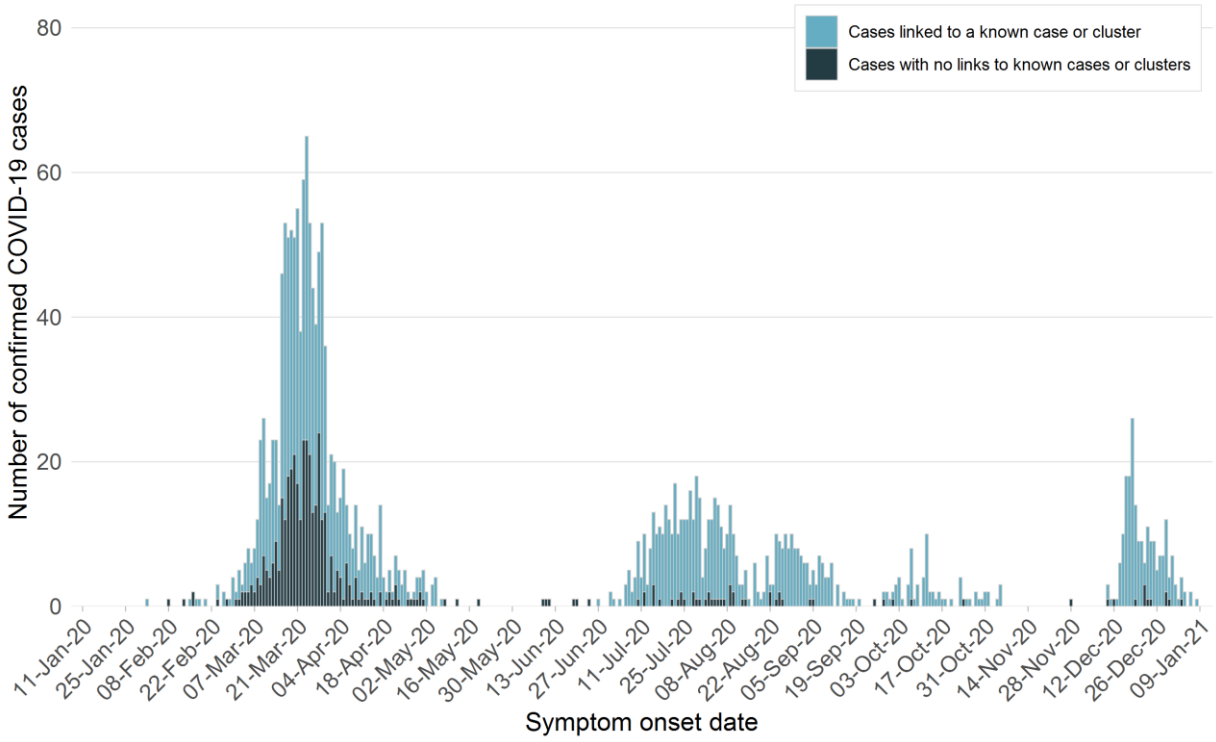
The date of the first positive test is used for cases who did not report symptoms.

Interpretation: Less than half (45%) of COVID-19 infections diagnosed in the last two weeks in NSW have been locally-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. COVID-19 cases by likely infection source and illness onset, NSW, week ending 09 January



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

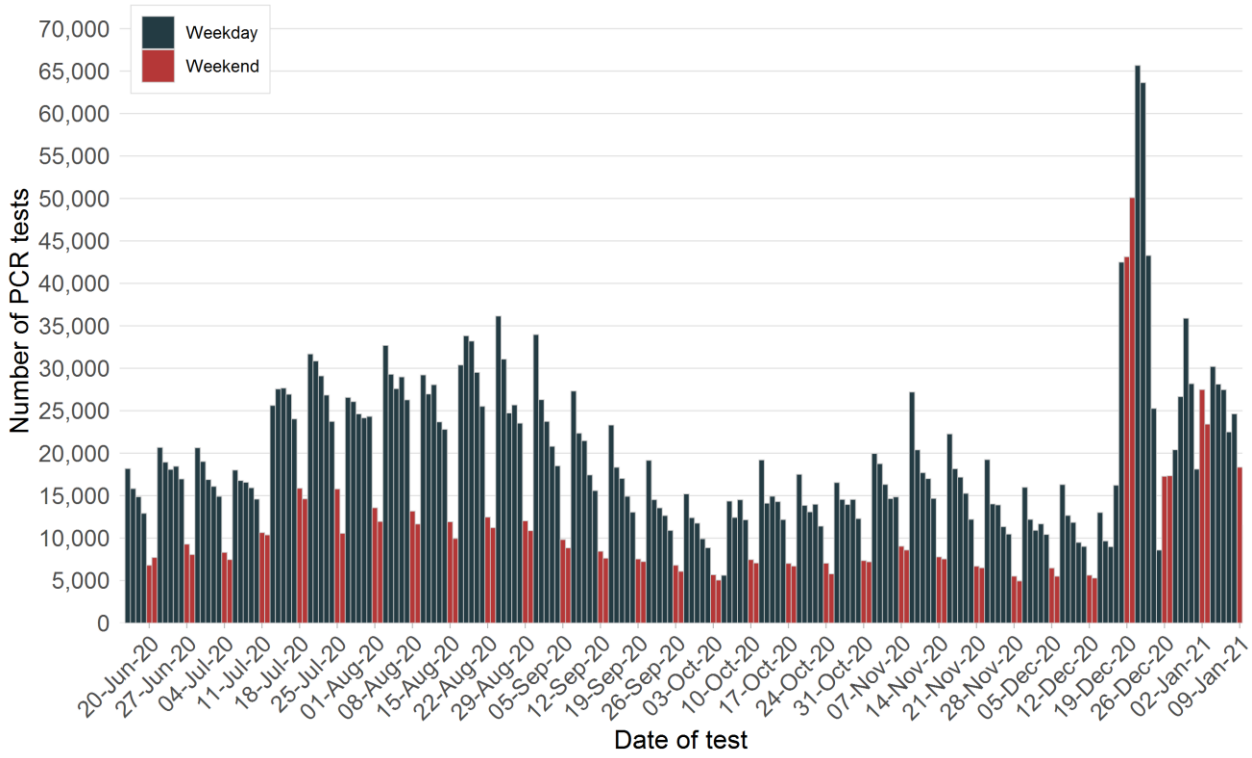
Interpretation: The majority (92%) of locally acquired cases with an onset of symptoms in the last two weeks were linked to a previously reported case or part of a known cluster.

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, 09 January



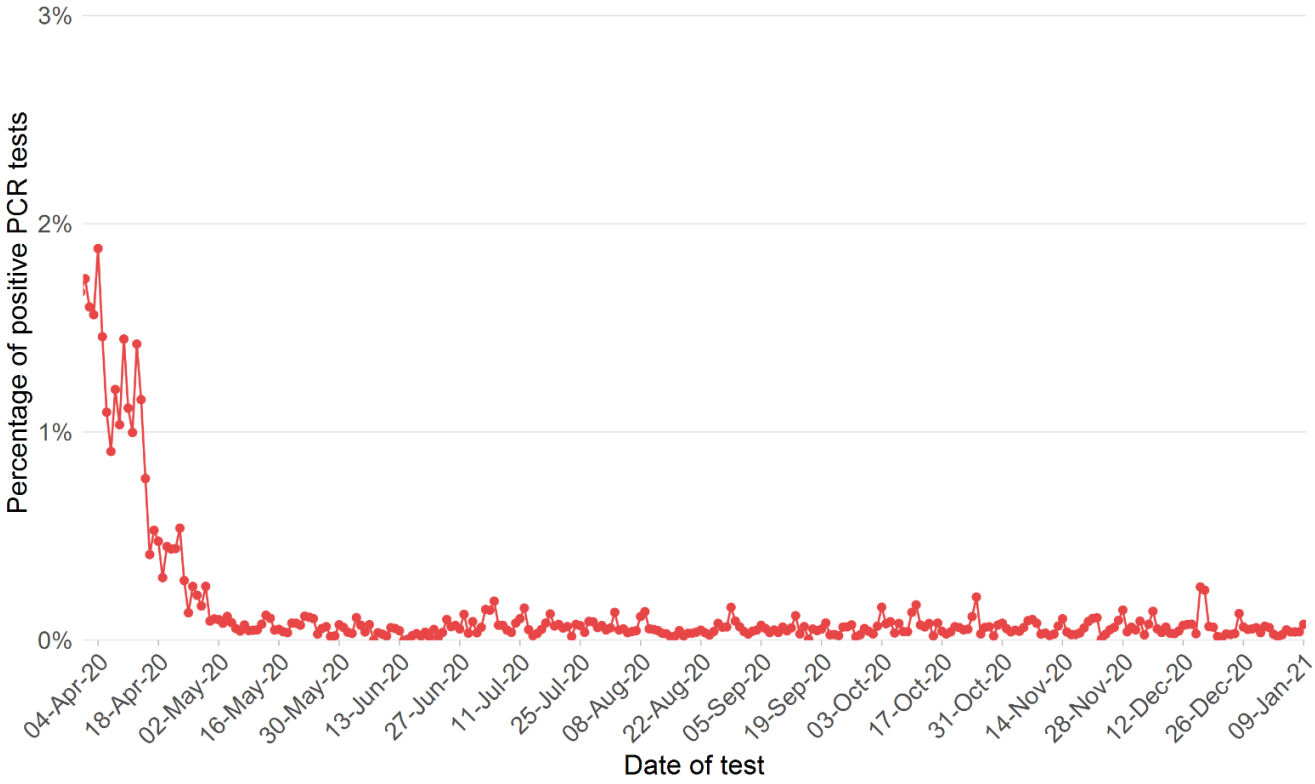
Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: In the week ending 9 January, testing rates remained high and were similar to the previous week (3.1 tests conducted per 1,000 people) in NSW each day in the week. This compares to a daily average of approximately 1.4 tests per 1,000 people in October.

[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. Number of PCR tests per day, NSW, 09 January

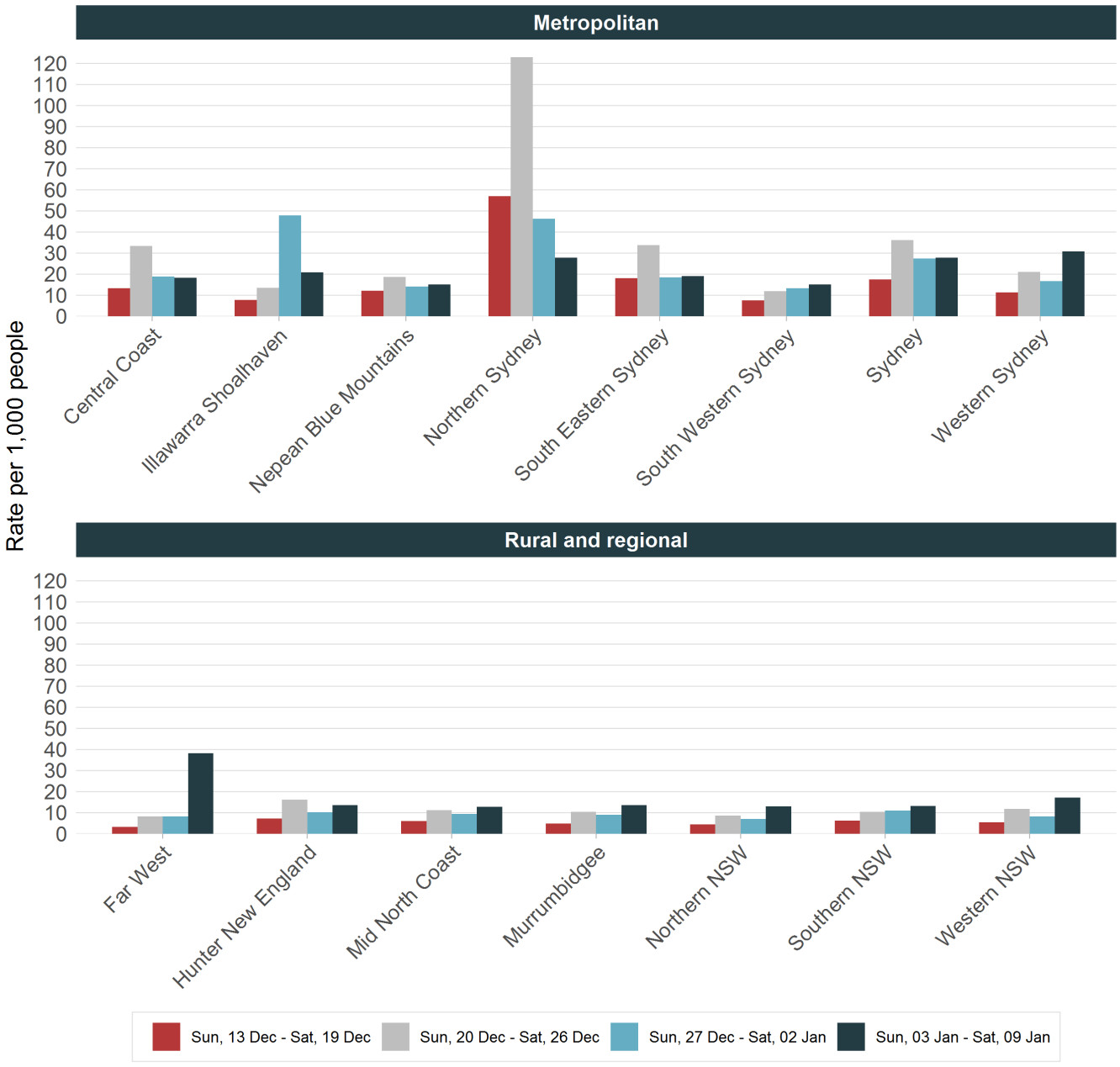


Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: The proportion of tests positive for COVID-19 in NSW declined in mid-March to early May 2020, and then stabilised at very low levels. Despite high rates of testing, the overall proportion of tests found to be positive indicate low levels of transmission in the community.

Testing by Local Health District

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

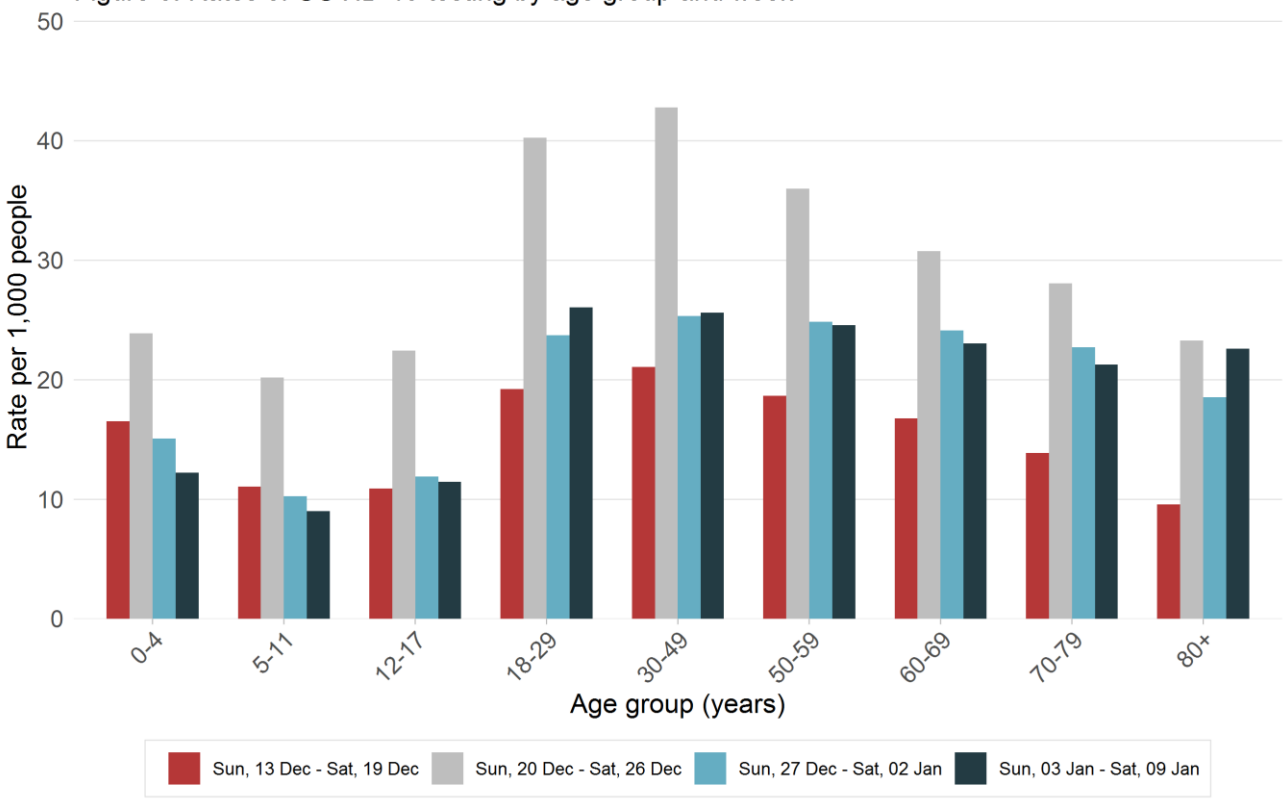


Includes SARS-CoV-2 PCR tests only and excludes notifications with missing postcode of residence.

Interpretation: State-wide testing rates in the week ending 9 January increased across all rural and regional LHDs with a surge in testing in Far West and Western NSW LHDs following reports of a positive case who had visited the regions while unknowingly infectious. Testing rates in Western Sydney LHD also increased in response to targeted public health messaging to the Berala, Wentworthville and Lidcombe community after a number of COVID-19 affected venues in the area were identified. Testing rates decreased or remained steady across all metropolitan LHDs with the largest decrease in Northern Sydney following elevated testing rates in the last few weeks. Overall testing rates were similar compared to the previous week (22 per 1,000 people).

Testing by age group

Figure 6. Rates of COVID-19 testing by age group and week

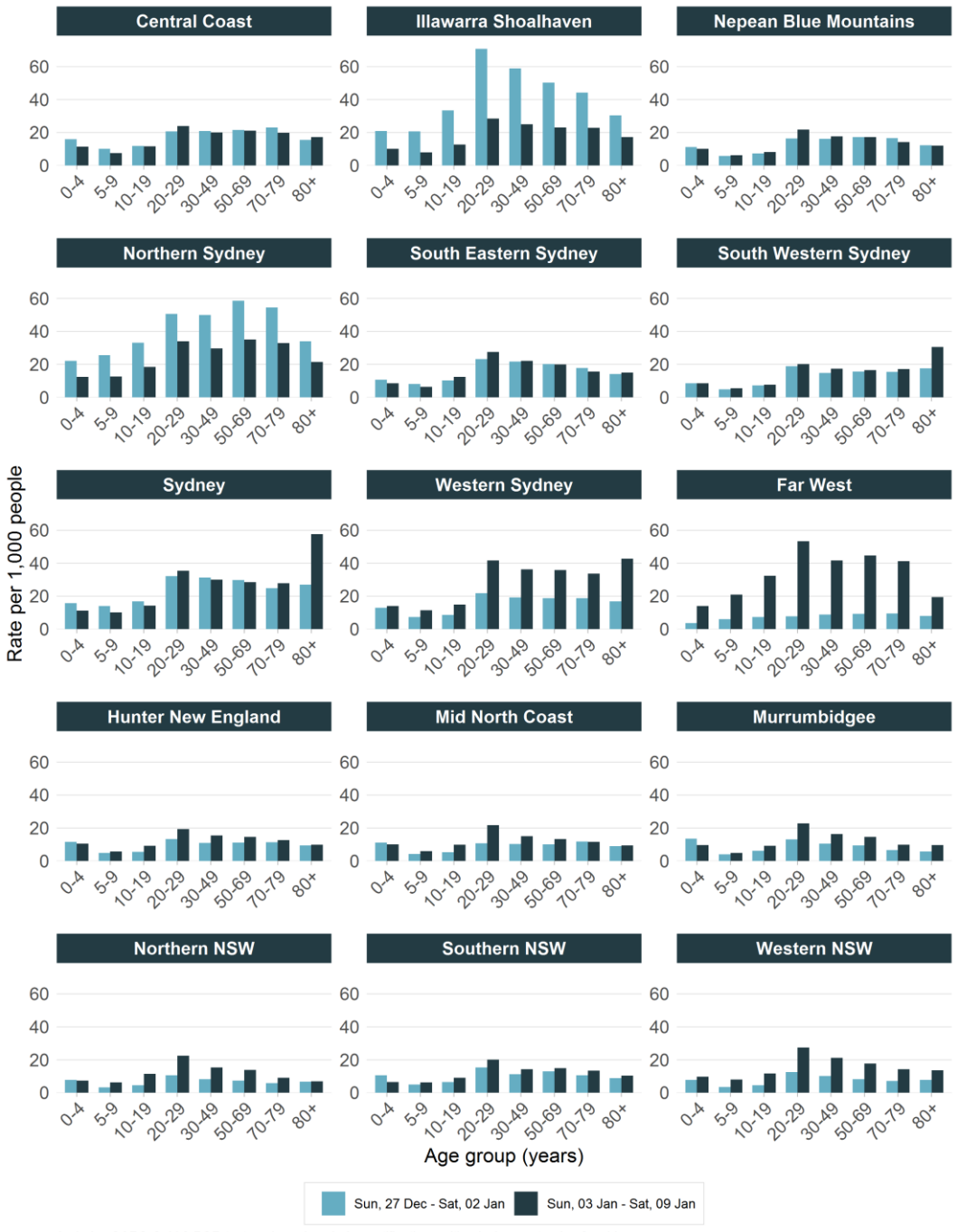


Includes SARS-CoV-2 PCR tests only and excludes notifications with age missing.

Interpretation: Testing rates decreased across most age groups excluding adults aged 18-49 and over 80 years of age. Increased testing in people aged 80 years and above was likely driven by targeted asymptomatic surveillance testing being carried out across various aged-care facilities in the Inner West and Cumberland LGAs.

Testing by LHD and age group

Figure 7. 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: In the week ending 9 January, there was a significant increase in testing across most age groups in Far West LHD and Western NSW LHD following a public health alert advising people who attended COVID-19 affected venues in the region to get tested and isolate regardless of symptoms. Testing rates also increased in all ages across Western Sydney LHD in response to the Berala cluster and in people aged 80 years and over in Sydney and South Western Sydney as part of targeted asymptomatic surveillance across various aged-care facilities in the area. Testing rates remain high but have decreased significantly across most age groups in Northern Sydney and Illawarra Shoalhaven following a surge of testing in previous weeks.

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, 12 December to 9 January 2021

Locally-acquired cases	Week ending				Total
	09Jan	02 Jan	26 Dec	19 Dec	
Cases who are linked to a known case or cluster	16	48	58	72	194
Cases with no links to other cases or clusters	2	4	5	1	12
Total	**18**	**52**	**63**	**73**	**206**

Interpretation: There were 16 cases that were linked to a known case or cluster and two cases with no links to a case or cluster in the week ending 9 January.

Table 3. Locally-acquired COVID-19 cases by LHD of residence and week reported, 12 December to 9 January 2021

Local Health District	Week ending				Total	Days since last case reported
	09 Jan	02 Jan	26 Dec	19 Dec		
Central Coast	0	2	0	2	4	11
Illawarra Shoalhaven	0	3	0	0	3	7
Nepean Blue Mountains	0	0	0	0	0	116
Northern Sydney	3	15	38	67	123	1
South Eastern Sydney	0	4	10	3	17	7
South Western Sydney	1	9	3	0	13	1
Sydney	6	8	4	1	19	0
Western Sydney	8	11	8	0	27	3
Far West	0	0	0	0	0	282
Hunter New England	0	0	0	0	0	156
Mid North Coast	0	0	0	0	0	263
Murrumbidgee	0	0	0	0	0	124
Northern NSW	0	0	0	0	0	168
Southern NSW	0	0	0	0	0	82
Western NSW	0	0	0	0	0	163
Total	**18**	**52**	**63**	**73**	**206**	**0**

Interpretation: There were 18 locally-acquired cases reported in the week ending 9 January. The majority of cases were residents of Western Sydney LHD (8, 44%) followed by Sydney LHD (6, 33%).

Table 4. Locally acquired COVID-19 cases with no identified links to known cases or cluster by LHD of residence and week reported, 12 December to 9 January 2021

Local Health District	Week ending				Total
	09 Jan	02 Jan	26 Dec	19 Dec	
Central Coast	0	0	0	0	0
Illawarra Shoalhaven	0	1	0	0	1
Nepean Blue Mountains	0	0	0	0	0
Northern Sydney	1	0	3	0	4
South Eastern Sydney	0	0	2	1	3
South Western Sydney	0	0	0	0	0
Sydney	0	2	0	0	2
Western Sydney	1	1	0	0	2
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	**2**	**4**	**5**	**1**	**12**

Interpretation: There were two locally-acquired COVID-19 cases reported this week with no links to a known case or cluster. Of these, one case was a resident of Northern Sydney LHD and had acquired their infection several days after being released from quarantine. The remaining case was a Western Sydney resident who has no associated links to a case or cluster. Both cases are under ongoing investigation.

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 (generally two days prior to symptom onset until the time of isolation and three days in high risk settings). Close contacts are quarantined to limit the spread of infection to others and encouraged to seek testing.

In the week ending 9 January there were 16 cases linked to a case or cluster. Of these, 12 cases were associated with the Berala cluster, 2 cases with the Avalon cluster and 2 cases with the Inner West cluster. In order to describe settings of transmission in the community, we report the groups of cases who were infected at each location and subsequent cases in contacts of households or other residential settings.

Cases in community settings

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 following another notification in a Northern Sydney resident 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. In addition, there were also seven exposure locations outside the Northern Beaches area where transmission occurred. These locations have been seeded by cases associated with this cluster and include two pubs, two hairdressing salons, an office in the CBD and a café and dinner party in Paddington. Whole genome sequencing of the virus suggests that this is an overseas strain most similar to strains circulating in the United States. The source of the outbreak remains under investigation.

In the week ending 9 January there were two cases in close contacts associated with the Avalon cluster. The reported cases were associated with separate exposure locations in Mona Vale. One case was in isolation on the day of symptom onset while the second was not isolated during their infectious period. Public health investigations have also linked a previously unlinked case to this cluster following updated information on the cases' movements placing them at the same location as a previously reported case during their infectious period. In total, there were 151 cases associated with this cluster. In the last four weeks there have been five cases reported that reside in the Northern Sydney area that are geographically associated with this cluster but have no direct epidemiological link. These cases are not included in the numbers below.

Table 5. Cases linked to Avalon cluster by setting of exposure, reported to week ending 9 January, NSW

Setting of exposure	Exposure site	Location	Primary cases	Subsequent cases		Total
				Non-household setting	Household setting	
Restaurant/Bar/Club	RSL	Avalon	26	0	5	31
	Bowling Club	Avalon	28	1	7	36
	RSL / Bowling Club	Avalon	8	1	2	11
	Pub	Erskineville	4	2	4	10
	Pub	Circular Quay	3	0	2	5
	Restaurant	Manly	1	0	1	2
	Pub	Newport	1	0	0	1
Gym	Gym 1	Mona Vale	5	1	0	6
	Gym 2	Avalon	2	0	3	5
School	Primary school	Narrabeen	8	1	2	11
Office Building	Workplace	CBD	5	0	1	6
Food Service	Take-away shop	Avalon	3	0	1	4
	Café	Paddington	2	0	0	2
Personal Service	Hair salon	Turramurra	7	0	0	7
	Hair salon	Paddington	2	0	1	3
Private event	Dinner party	Paddington	2	0	1	3
Retail Centre	Shopping centre	Mona Vale	3	2	3	8
Total			**110**	**8**	**33**	**151**

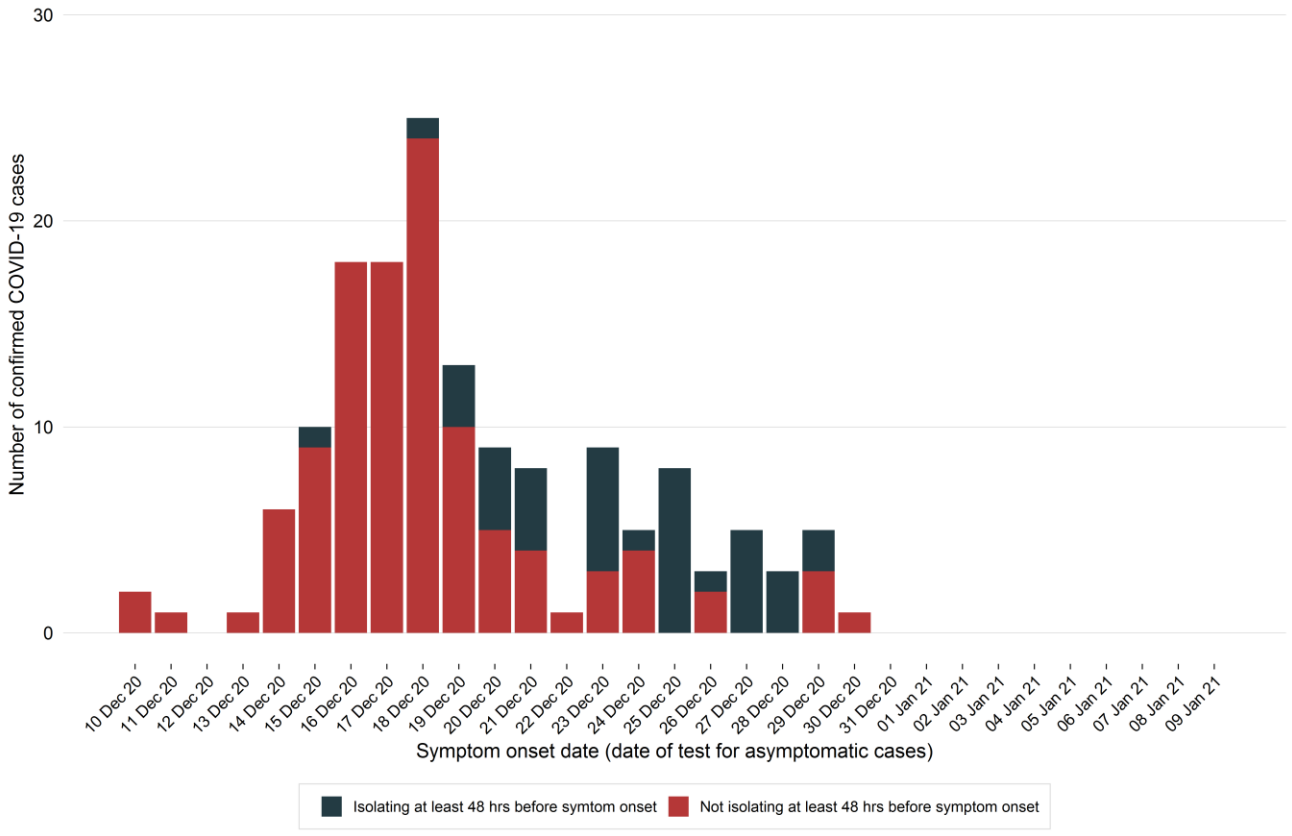
Table 6. Rates of PCR tests within the Northern Beaches LGA and rest of Greater Sydney region per 1,000 people by week of test request

Region	12-Dec-20	19-Dec-20	26-Dec-20	02-Jan-21	09-Jan-21	Rate per week
Northern Beaches LGA - Northern	9.2	266.4	388.9	164.2	93.2	184.4
Northern Beaches LGA - Southern	10.6	88.2	240.6	72.2	28.6	88
Rest of Greater Sydney LHDs	9.0	14.8	29.6	21.4	19.5	18.9

Note: Rate of tests in the most recent week could be lower than the actual due to delays in reporting negative results and/or being in the middle of the week.

Interpretation: The testing rate increased significantly across Northern Beaches LGAs in the week ending 19 December compared to previous week in response to the Avalon cluster identified on 16 December. Northern Beaches testing rates have been higher than the rest of Greater Sydney for four consecutive weeks and is largely driven by targeted public health messaging to the Northern Beaches community advising them to seek testing and isolate immediately following the outbreak.

Figure 8. Number of confirmed cases linked to the Avalon cluster (n=151) by isolation status and illness onset date, week ending 9 January 2021



Interpretation: No cases, including the 2 new cases, had a **symptom onset** in the week ending 9 January. Overall, there was an increase in the proportion of people isolating at least 48 hours prior to symptoms onset in the later stages of the outbreak when compared to the start. The identification of cases and isolation of their close contacts before they develop symptoms is essential to limit the spread of COVID-19.

Patient transport cases

On 21 December Western Sydney Public Health Unit was notified of two cases in patient transport workers. Following investigation, the first case was found to be infected by returned travellers being transported from Sydney airport to a quarantine hotel. The second case was a close contact who had worked multiple shifts with the first case. In the week ending 9 January, a further two close contacts of these workers were subsequently notified as cases.

Berala cluster

On 31 December a case was reported in a Western Sydney resident whose source of infection was initially unknown. Subsequent testing of the case's household and contacts identified several more cases associated with a bottle shop in Berala. Further investigation supported by whole genome sequencing has revealed that this cluster is linked to one of the patient transport workers.

In the week ending 9 January there were 12 cases and two new transmission locations associated with this cluster. Of these, eight cases were associated with the bottle shop in Berala including three customers and five close contacts of previously reported cases. Four further cases were associated with separate dinner events at Macquarie fields and Hurlstone Park. Eight of the nine cases reported in the week ending 9 January were not in isolation at least 48 hours prior to symptom onset or test date and while considered infectious.

Table 7. Cases linked to Berala cluster by setting of exposure, reported to week ending 9 January, NSW

Setting of exposure	Exposure site	Location	Primary cases	Subsequent cases		Total
				Non-household setting	Household setting	
Retail	Bottle shop	Berala	8	1	12	21
Private event 1	Dinner party	Macquarie Fields	2	0	0	2
Private event 2	Social gathering	Hurlstone Park	1	0	1	2
Total			**11**	**1**	**13**	**25**

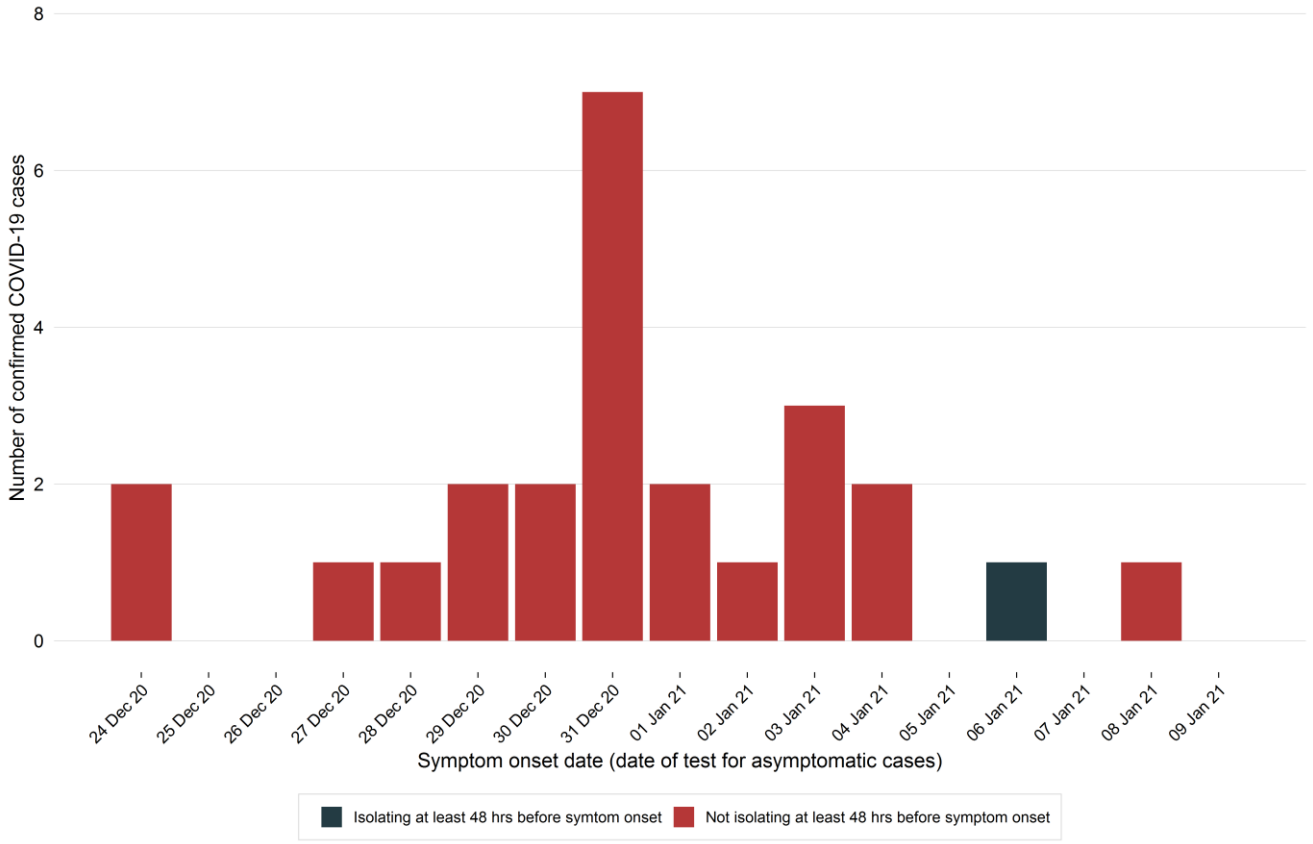
Interpretation: Excluding the source, a healthcare worker that acquired their infection in a healthcare setting, there are 25 cases and three exposure locations associated with this cluster

Table 8 . Rates of PCR tests within the Berala & surrounding suburbs and rest of Greater Sydney region per 1,000 people by week of test request

Region	12-Dec-20	19-Dec-20	26-Dec-20	02-Jan-21	09-Jan-21	Rate per week
Berala & surrounding suburbs	6.6	7.4	14	37.1	136.8	40.4
Rest of Greater Sydney LHDs	9	14.8	29.6	21.4	19.5	18.9

Interpretation: The testing rate increased significantly across Berala and surrounding suburbs in the week ending 2 January compared to previous week in response to the cluster identified on 31 December. Testing surged again this week following multiple public health alerts advising people in the area who attended various COVID-19 affected venues to get tested and isolate.

Figure 9. Number of confirmed cases linked to the Berala cluster (n=25) by symptom onset date and symptoms, week ending 9 January 2021



Interpretation: The majority of people associated with the Berala cluster have not been isolating at least 48 hours prior to symptom onset. To help reduce the spread of COVID-19 NSW Health urges anyone in NSW with even the mildest symptoms, such as headache, fatigue, cough, sore throat or runny nose, to come forward immediately for testing, then isolate until they receive a negative result.

Inner West cluster

On 28 December Sydney Public Health Unit was notified of one case of COVID-19 in a resident of the Inner West. The source of infection was unknown. Investigation into close contacts and exposures during the cases' incubation period revealed a number of family gatherings in the preceding days before symptom onset. Testing of family contacts was undertaken and several more cases were identified.

In the week ending 9 January there were two cases linked to this cluster including a social and household contact of previously reported cases associated with multiple family gatherings. Both cases were in isolation at least 48 hours prior to symptom onset. Excluding the initial case, whose source is unknown at this point, there are ten cases linked to this cluster. Whole genome sequencing results suggest that this cluster is linked to the Avalon cluster, but epidemiological links are still under investigation.

An additional three cases in a family that reside in Illawarra Shoalhaven Local Health District are being investigated as potentially linked to this cluster. Investigations have revealed that a member of this family cluster and of the Inner West cluster dined at the same Wollongong restaurant on 19 November during their incubation period. This suggests a common yet unknown source. Whole genome sequencing of samples taken from the family indicate a match to the Inner West and Avalon cluster.

SECTION 5: COVID-19 IN SPECIFIC POPULATIONS

COVID-19 in healthcare workers

The following describes infections of COVID-19 in healthcare workers (HCWs). HCWs 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 healthcare to identify ongoing risks in healthcare settings.

There has been one case of COVID-19 reported in healthcare worker (HCW) in the week ending the 9 January. The reported case was infected in the community outside of a healthcare setting and worked one day whilst unknowingly infectious. Testing of close contacts has identified no transmission at their workplace.

In total, there have been 46 cases of COVID-19 in health care workers since 1 August 2020. Of these, 25 HCWs were potentially infected in healthcare settings. A further eight cases were social or household contacts of a known case, eight were exposed in community settings, and for five cases the source of infection is unknown.

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 were no locally-acquired cases in an Aboriginal person reported in the week ending 9 January. In total, 46 Aboriginal people have been diagnosed with COVID-19, representing 1% of all cases in NSW.

Pregnant women

There were no locally-acquired cases in pregnant women in the week ending 9 January. In total, 38 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?

There were no deaths reported in NSW in the week ending 9 January. In total, 1.2% of cases (56 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 21% (12/56) of the deaths were in overseas-acquired cases.

Table 9. Deaths as a result of COVID-19, by age group, NSW, 2021

Age group	Number of deaths	Number of cases	Case fatality rate
0-4 years	0	106	0%
5-11 years	0	113	0%
12-17 years	0	148	0%
18-29 years	0	1091	0%
30-49 years	0	1532	0%
50-59 years	1	662	0.2%
60-69 years	4	628	0.6%
70-79 years	15	382	3.9%
80+ years	36	162	22.2%
Total	**56**	**4824**	**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 under 50 years of age 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 9 January, 110 sewage samples were tested for fragments of SARS-CoV-2. Of these, there were 16 detections – these samples were taken from the Ulladulla, Glenfield, Quakers Hill, Warriewood (three samples detected), West Hornsby, Bondi (two samples), North Head (two samples), Malabar 1 (two samples) and Malabar 2 treatment plants, and Camellia North and Northmead sewage pumping stations. The table below shows results for previous weeks from various sites across NSW.

Table 10. Locations with positive SARS-CoV-2 detections in sewage samples since September for the week ending 9 January 2021

		Week ending									
		7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec	26-Dec	2-Jan	9-Jan
Pop.	Location	45	46	47	48	49	50	51	52	53	1
60, 514	Blue Mountains (Winmalee)										
4,681	North Richmond										
13,052	Richmond										
110,114	Penrith										
12,000	Lithgow										
19,000	South Windsor										
8,000	McGraths Hill										
69,245	Warriewood										
1,241	Brooklyn										
31,924	Hornsby Heights										
57,933	West Hornsby										
318,810	Bondi										
233,176	Cronulla										
	Malabar 1										
1,857,740	Malabar 2										
181,005	Liverpool				n						
98,743	West Camden										
6,882	Wallacia										
14,600	Picton										
161,200	Glenfield										
1,341,986	North Head										
	Castle Hill Cattai										
26,997	Castle Hill Glenhaven										
163,374	Quakers Hill										
119,309	Rouse Hill										
37,061	Riverstone										
163,147	St Marys										
73,686	Shellharbour										
55,000	Wollongong										

Regional sites		Week ending									
		7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec	26-Dec	2-Jan	9-Jan
14,700	Bowral										
14,000	Mittagong										
9,000	Moss Vale										
1,000	Berrima										
2,000	Bundanoon										
900	Robertson										
16,068	Bombo										
32,000	Ulladulla										
18,000	Bomaderry										
37,500	Nowra										
16,000	St Georges Basin										
11,000	Cullburra Beach										
139,500	Gosford-Kincumber										
59,060	Charmhaven										
29,300	Wyong-Toukley										
38,900	Bateau Bay										
41,300	Woy Woy										
3,000	Jindabyne										
8,000	Cooma										
500	Gunning										
51,750	Albury composite	c			c	c			c		
	Albury Waterview										
22,419	Goulburn										
21,000	Batemans Bay										
18,000	Moruya										
17,000	Narooma										
8,000	Eden										
15,500	Merimbula										
5,000	Bermagui										
7,800	Deniliquin										
48,000	Queanbeyan										
50,000	Wagga Wagga composite	c	c	c		c		c			
2,050	Bourke										
	Nyngan										
40,000	Orange										
36,603	Bathurst										
19,000	Broken Hill										
500	Dareton										
11,600	Parkes										
37,000	Dubbo										
24,000	Armidale										
45,000	Tamworth										
10,000	Moree										
26,394	Taree										
12,000	Forster										
7,582	Hallidays Point										
5,180	Harrington										
10,715	Hawks Nest										
225,834	Hunter - Burwood Beach										
60,000	Hunter - Shortland										
115,000	Hunter - Belmont										
60,000	Hunter - Morpeth										

Regional sites		Week ending									
		7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec	26-Dec	2-Jan	9-Jan
58,300	Hunter - Boulder Bay										
35,000	Hunter - Raymond Terrace										
32,000	Hunter - Dora Creek										
42,000	Hunter - Toronto										
70,000	Hunter - Edgeworth										
2,500	Hunter - Karuah										
17,000	East Lismore										
15,500	South Lismore										
18,958 (both plants total)	Byron Bay - Ocean Shores										
	Byron Bay										
31,104	Ballina										
72,000 (Tweed District)	Tweed - Murwillumbah										
	Tweed - Banora Point										
	Tweed - Kingscliff										
	Tweed - Hastings Point										
12,250	North Grafton										
6,300	South Grafton										
6,500	Yamba										
8,730	Nambucca Heads										
54,370	Port Macquarie										
7,010	Bonny Hills										
8,540	Dunbogan										
12,105	South West Rocks										
4,052	Crescent Head										
12,000	Bellingen										
50,000	Coffs Harbour										

not sampled or not analysed
SARS-CoV-2 not detected
SARS-CoV-2 detected

Interpretation: In the last week, there were 16 detections of SARS-CoV-2. The Malabar, Bondi and North Head (including the Camellia North and Northmead sewage pumping stations) treatment plants serve around 3.5 million people, including quarantine hotels and known cases. Excluding Ulladulla, all other detections from these catchments are associated with reported cases from known locally acquired cases and returned travellers.

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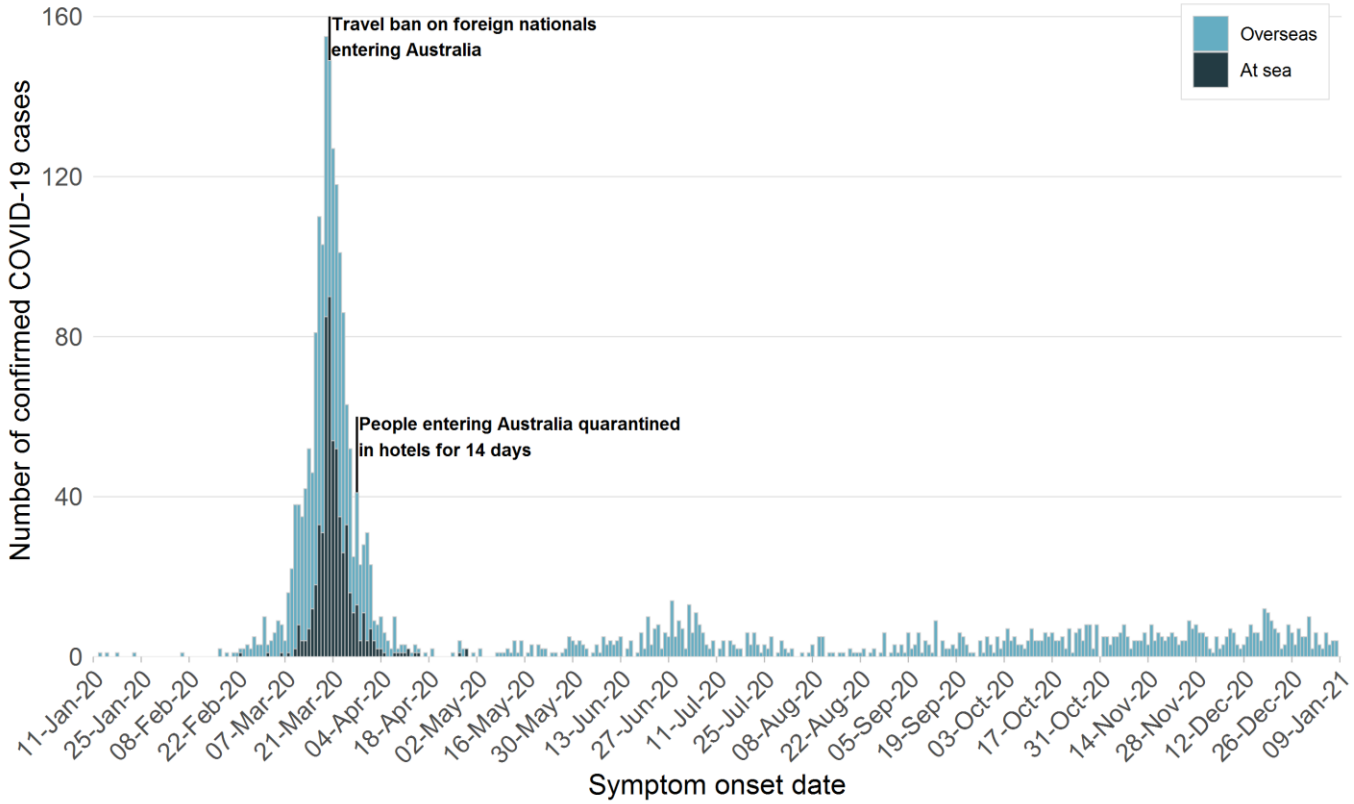
SECTION 8: COVID-19 IN RETURNED TRAVELLERS

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 10. Number of PCR tests per day, NSW, 09 January



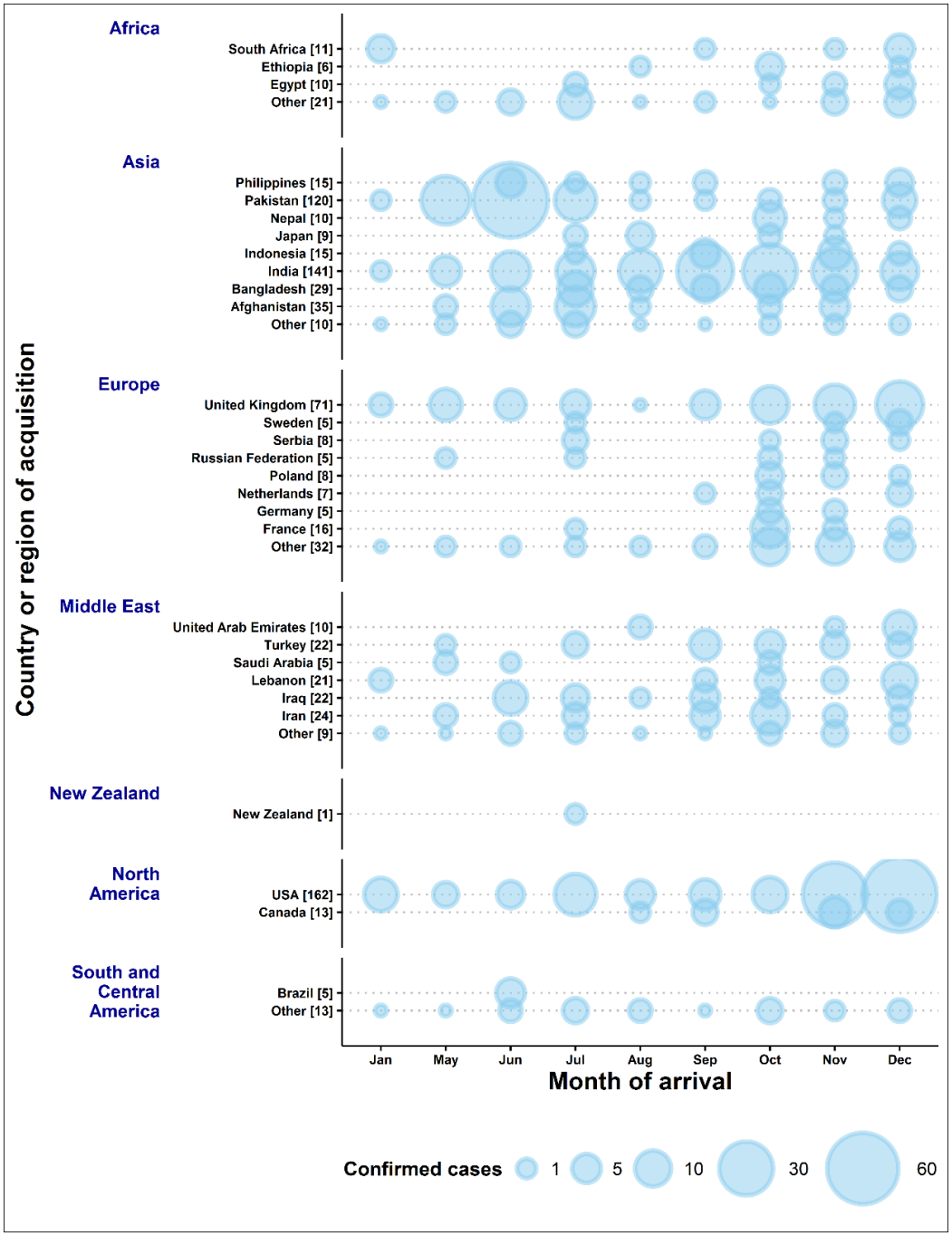
The date of the first positive test is used for cases who did not report symptoms.

Interpretation: The number of new cases in returned travellers has decreased markedly since March in line with travel restrictions. There were 36 overseas acquired cases reported in the week ending 9 January, 18% 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 11. Overseas-acquired COVID-19 cases by country of acquisition and arrival month, reported from May to December, NSW, 2020



Interpretation: Since May, the majority of international travellers diagnosed in NSW were likely infected in Asia or North America. Over the last few weeks there has been a steady increase in the number of positive return travellers from Europe, particularly the United Kingdom. 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 165 COVID-positive travellers who have arrived in NSW. The table below lists the top 10 countries of acquisition for these travellers.

Table 11. Top 10 countries of acquisition for overseas travellers that have tested positive in the last four weeks, 13 December to 9 January 2021

Country of acquisition of COVID-19	Number (%) of cases in the last four weeks
USA	60 (36%)
United Kingdom	16 (10%)
Lebanon	11 (7%)
India	10 (6%)
South Africa	10 (6%)
Pakistan	7 (4%)
United Arab Emirates	6 (4%)
Egypt	5 (3%)
Canada	3 (2%)
Netherlands	3 (2%)
Other	34 (21%)
Total	165 (100%)

Interpretation: In the last four weeks, travellers returning from the United States accounted for the largest number of overseas acquired cases (60, 36%), followed by travellers returning from the United Kingdom (16, 10%), and Lebanon (11, 6%).

COVID-19 Variants of Concern (VoC) in returned travellers

Mutations of the COVID-19 virus are the basis for new genetic variants and the changing prevalence of variant viruses over time. New variants of COVID-19 may be of concern if they demonstrate to be more infectious, spreading more quickly from person to person. In the last few weeks NSW Health Pathology has identified two Variants of Concern in returned travellers in hotel quarantine, B.1.1.7 and B.1.351. Both strains are defined by multiple mutations including a shared mutation in the spike protein that binds to the human ACE2 receptor. Emerging evidence suggests that both variants of COVID-19 are more infectious than the dominant strains currently circulating in NSW.

NSW Health has strict protocols in place for managing the health of returned travellers and staff which have been further strengthened to address the additional risk associated with the new variants. Since 30 November, 16 returned travellers have tested positive with the two Variants of Concern.

Table 12. Overseas travellers that have tested positive for Variants of Concern, 30 November 2020 to 9 January 2021

	Week ending (report date)						Total
	5-Dec	12-Dec	19-Dec	26-Dec	2-Jan	9-Jan	
Overseas acquired cases	39	34	36	49	44	36	238
Cases with VoC	1	1	0	4	3	7	16
B.1.1.7	1	1	0	4	3	3	12
B.1.351	0	0	0	0	0	4	4
% of overseas cases with VoC	3%	3%	0%	8%	7%	19%	7%

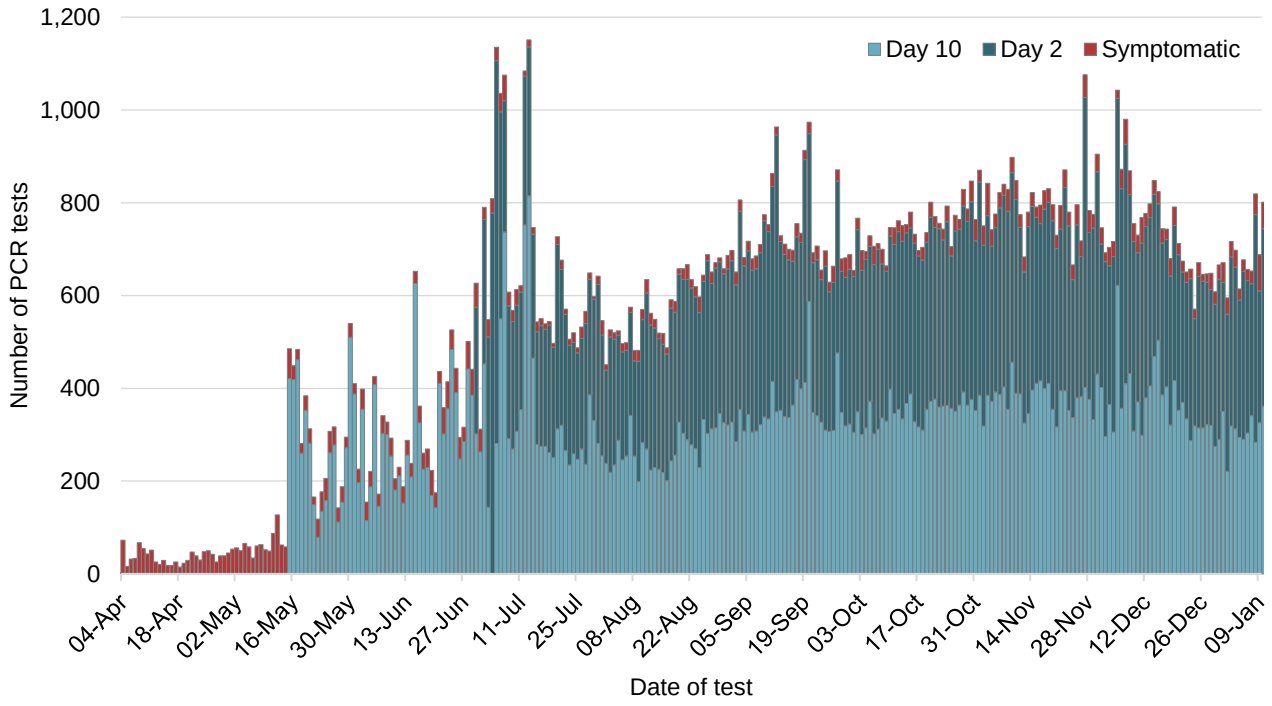
Interpretation: In the week ending 9 January, 19% of return travellers in hotel quarantine have been identified as having COVID-19 Variants of Concern (B.1.1.7 and B.1.351).

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.

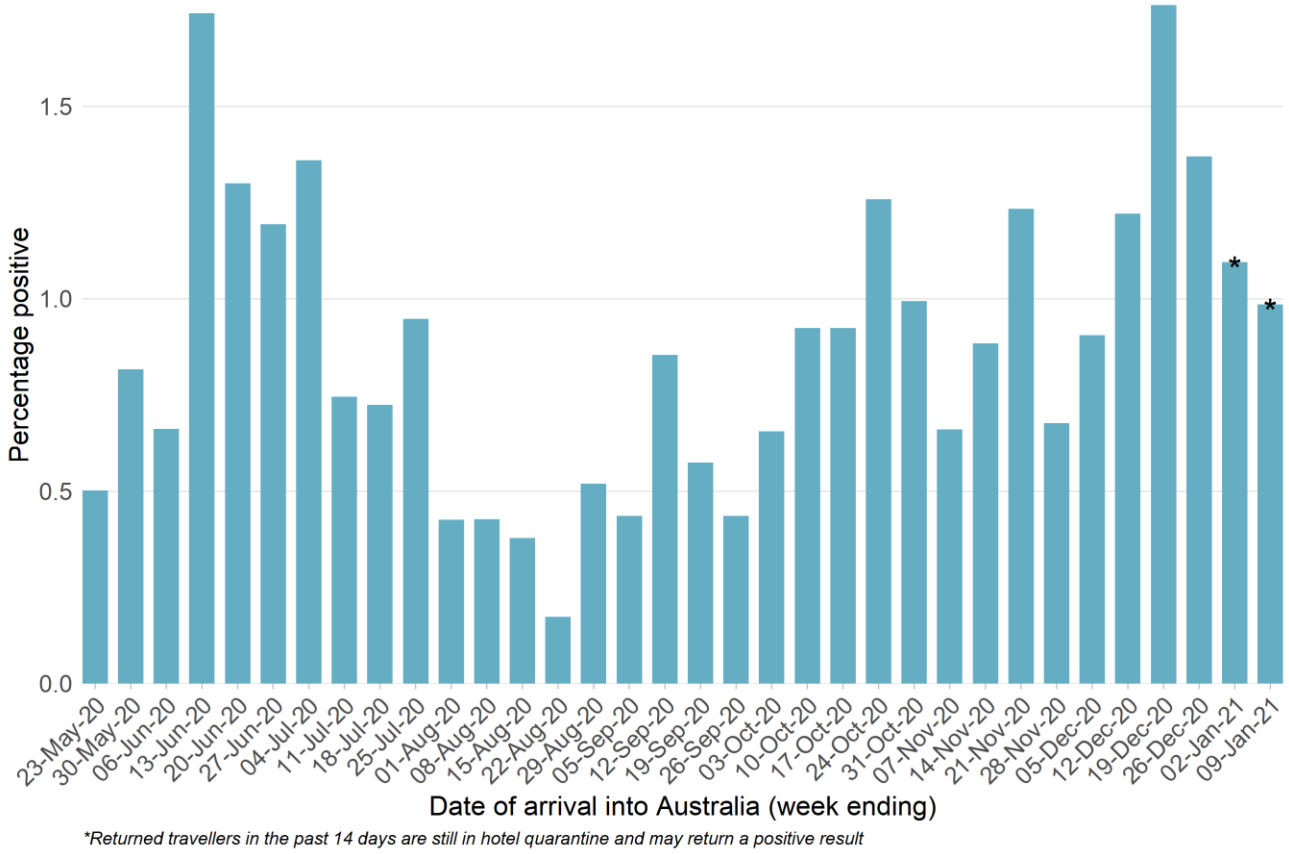
Since hotel quarantine began on 29 March, a total of 154,443 PCR tests have been conducted with 791 overseas acquired cases and 4 interstate acquired COVID-19 cases detected while in hotel quarantine. In the last four weeks, 9,063 returned travellers received a day two swab in hotel quarantine; of these 2.7% reported symptoms at the time of screening. In the same time period, 9,446 returned travellers received a day 10 swab, and 1.0 % reported symptoms at the time of screening.

Figure 12. COVID-19 testing in returned travellers in hotel quarantine, reported from 21 March to 9 January, NSW, 2021



Interpretation: In the week ending 9 January, there were 4,801 tests of travellers conducted through the hotel quarantine screening programs.

Figure 13. COVID-19 percentage positive in returned travellers in hotel quarantine by week of arrival in Australia, reported from week ending 23 May 2020 to week ending 9 January, NSW, 2021



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

Interpretation: In the most recent weeks, slightly more than 1% of returned travellers have tested positive during their stay in hotel quarantine. This increase suggests that more returned travellers are testing positive on arrival into NSW, which is consistent with the current high numbers of COVID-19 cases being reported worldwide. 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 3 January 2021

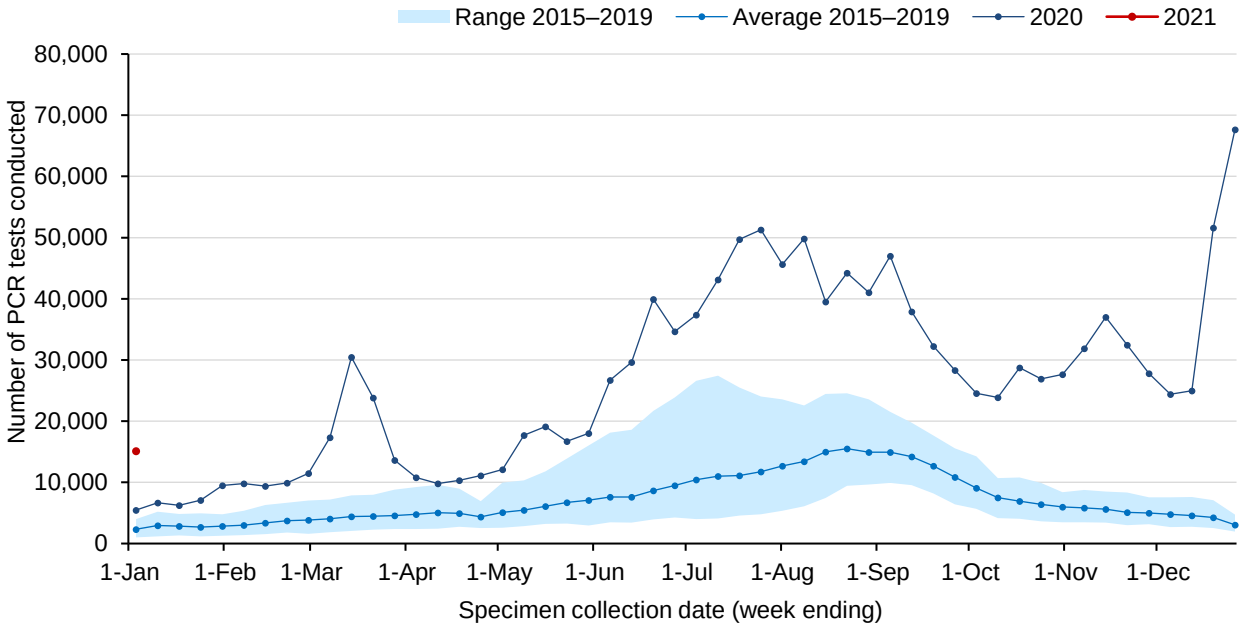
In NSW, routine surveillance for influenza and other respiratory viruses is conducted through sentinel laboratories. The number of all PCR tests (positive and negative) are provided to NSW Health by participating laboratories each week. Testing counts reflect the number of influenza PCR tests conducted;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

The most recent data available is for testing carried out to 3 January 2021. A total of 15,120 influenza tests have been performed at participating laboratories to 3 January. 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 in 2021 and the black line shows the testing numbers for 2020. The blue line shows the average number of tests carried out for the same week in the last five years (2015-2019) and the shaded area shows the range of counts reported in the same time period.

Figure 14. Testing for influenza by week, to 3 January 2021

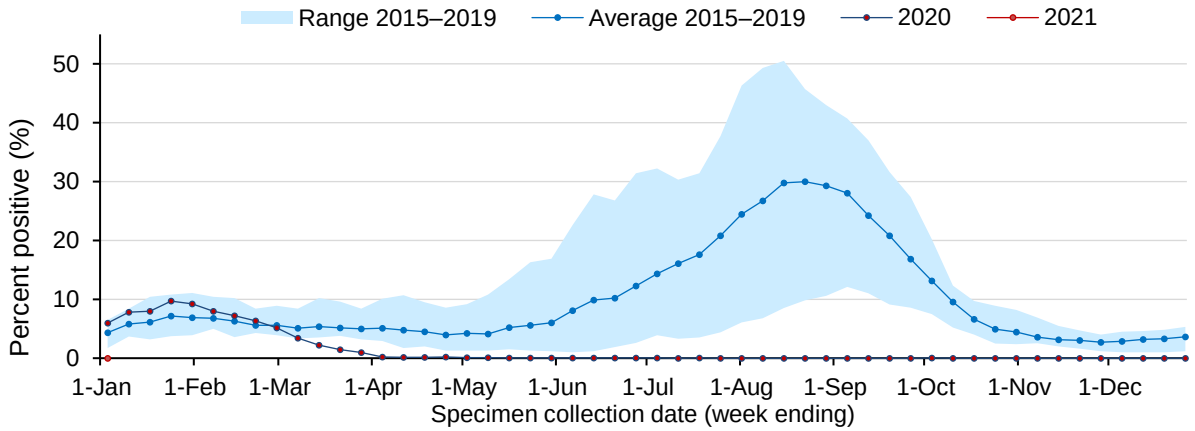


Interpretation: The number of influenza tests performed decreased significantly this week but the number of tests has exceeded the previous five-year average for this time of year.

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 2021, the black line showing counts for 2020, the blue line showing the average for 2015 to 2019 and the shaded area showing the range recorded for 2015 to 2019.

Figure 15. Proportion of tests positive for influenza, to 3 January 2021

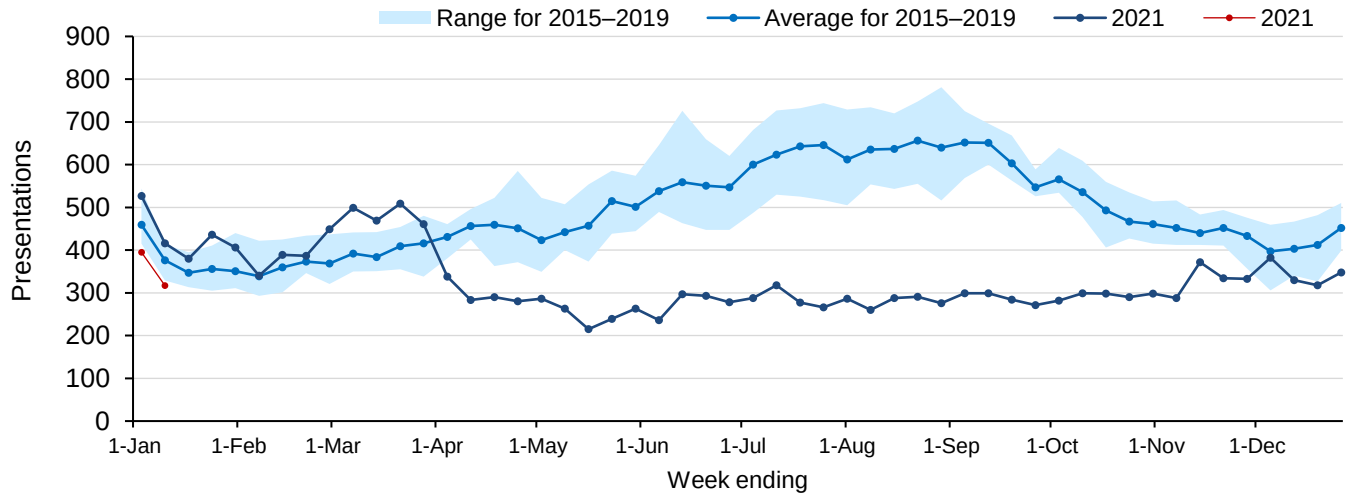


Interpretation: In the week ending 3 January, the percent of influenza tests that were positive continued to be very low (<0.01%), indicating limited influenza transmission in the community. Since early March 2020, this percentage has remained far lower than the usual range for the time of year.

How are emergency department presentations for respiratory infections tracking?

The figure below shows weekly pneumonia presentations to Emergency Departments in NSW, using PHREDSS[2].
The red line shows the weekly counts for 2021, the black line showing counts for 2020, the blue line showing the average for 2015 to 2019 and the shaded area showing the range recorded for 2015 to 2019.

Figure 16. Emergency Department pneumonia presentations in NSW by week, to 10 January 2021



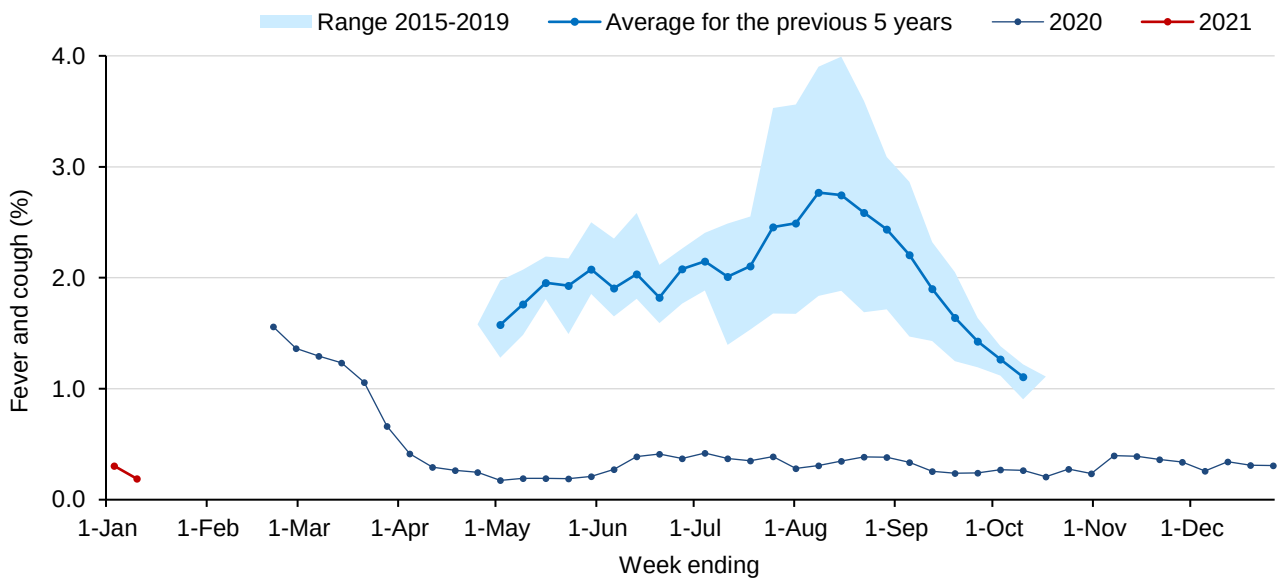
Interpretation: Pneumonia presentations include people with diagnoses of viral, bacterial, atypical or unspecified pneumonia, and Legionnaires' disease, but excludes 'pneumonia with influenza' and provides an indicator of more severe respiratory conditions. In the week ending 10 January, pneumonia presentations decreased and were below the seasonal range for the beginning of January.

[2] 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).

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 10 January 2021



Interpretation: In NSW in the week ending 10 January of the 12,717 people surveyed, 24 people (0.30%) reported flu-like symptoms.

APPENDIX A: COVID-19 PCR TESTS IN NSW

Local Health District	Local Government Area	Week ending				Total	
		01-January		26-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]	6425	18.2	6644	18.8	163334	462.9
Far West	Balranald	17	7.3	7	3.0	546	233.5
	Broken Hill	915	52.4	190	10.9	6617	378.6
	Central Darling	27	14.7	6	3.3	450	244.7
	Wentworth	195	27.7	45	6.4	2684	380.6
	LHD Total[2]	1154	38.3	248	8.2	10297	341.6
Hunter New England	Armidale Regional	392	12.7	245	8.0	11040	358.7
	Cessnock	513	8.6	290	4.8	17589	293.2
	Dungog	68	7.2	50	5.3	2748	291.6
	Glen Innes Severn	74	8.3	39	4.4	2021	227.8
	Gunnedah	133	10.5	80	6.3	3653	288.1
	Gwydir	16	3.0	13	2.4	769	143.7
	Inverell	141	8.4	65	3.9	4568	270.5
	Lake Macquarie	3324	16.1	2730	13.3	99634	483.9
	Liverpool Plains	107	13.5	48	6.1	2364	299.1
	Maitland	1369	16.1	934	11.0	44374	521.0
	Mid-Coast	929	9.9	804	8.6	27720	295.4
	Moree Plains	72	5.4	42	3.2	3281	247.4
	Muswellbrook	121	7.4	117	7.1	5112	312.2
	Narrabri	83	6.3	63	4.8	2966	225.8
	Newcastle	3078	18.6	2593	15.7	98086	592.4
	Port Stephens	924	12.6	791	10.8	32457	441.7
	Singleton	335	14.3	196	8.4	10567	450.4
	Tamworth Regional	977	15.6	526	8.4	24849	397.3
	Tenterfield	36	5.5	15	2.3	1180	179.0
	Upper Hunter Shire	124	8.7	106	7.5	4583	323.2
	Uralla	39	6.5	25	4.2	1383	230.0
	Walcha	39	12.4	20	6.4	1019	325.1
	LHD Total[2]	12888	13.5	9789	10.3	401657	421.7
Illawarra Shoalhaven	Kiama	510	21.8	654	28.0	11563	494.4
	Shellharbour	1238	16.9	2596	35.5	35547	485.4
	Shoalhaven	1868	17.7	1272	12.0	39064	369.8
	Wollongong	5176	23.7	15540	71.3	108161	495.9
	LHD Total[2]	8792	21.0	20062	47.8	194335	463.1
Mid North Coast	Bellingen	170	13.1	131	10.1	4204	323.5
	Coffs Harbour	1022	13.2	653	8.5	22833	295.5
	Kempsey	326	11.0	243	8.2	9986	335.7
	Nambucca	199	10.1	149	7.5	5526	279.0
	Port Macquarie-Hastings	1193	14.1	963	11.4	29573	349.9
	LHD Total[2]	2910	12.9	2139	9.5	72122	319.6

Local Health District	Local Government Area	Week ending				Total	
		01-January		26-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Murrumbidgee	Albury	911	16.8	547	10.1	19580	360.2
	Berrigan	43	4.9	25	2.9	2093	239.2
	Bland	61	10.2	22	3.7	1645	275.5
	Carrathool	18	6.4	14	5.0	377	134.7
	Coolamon	53	12.2	45	10.4	1392	320.7
	Cootamundra-Gundagai Regional	117	10.4	71	6.3	3321	295.6
	Edward River	93	10.2	39	4.3	2784	306.5
	Federation	129	10.4	79	6.4	3175	255.3
	Greater Hume Shire	134	12.5	95	8.8	3453	320.8
	Griffith	499	18.5	417	15.4	9982	369.3
	Hay	20	6.8	17	5.8	583	197.7
	Hilltops	220	11.8	132	7.1	5797	309.9
	Junee	56	8.4	36	5.4	1392	208.3
	Lachlan[1]	67	11.0	34	5.6	1045	172.0
	Leeton	145	12.7	79	6.9	2959	258.5
	Lockhart	25	7.6	14	4.3	857	260.9
	Murray River	57	4.7	33	2.7	925	76.3
	Murrumbidgee	41	10.5	32	8.2	883	225.4
	Narrandera	45	7.6	42	7.1	1226	207.8
	Snowy Valleys	156	10.8	99	6.8	4706	325.0
	Temora	41	6.5	23	3.7	1368	216.9
	Wagga Wagga	1184	18.1	852	13.1	28183	431.9
	LHD Total[2]	4063	13.6	2726	9.1	97025	325.5
Nepean Blue Mountains	Blue Mountains	1440	18.2	1953	24.7	49859	630.2
	Hawkesbury	926	13.8	772	11.5	34590	514.0
	Lithgow	240	11.1	190	8.8	7264	336.2
	Penrith	3361	15.8	2654	12.5	121022	568.2
	LHD Total[2]	5915	15.1	5533	14.2	211036	539.8
Northern NSW	Ballina	645	14.5	341	7.6	15555	348.6
	Byron	659	18.8	405	11.5	15167	432.3
	Clarence Valley	572	11.1	348	6.7	12674	245.3
	Kyogle	81	9.2	47	5.3	1990	226.2
	Lismore	628	14.4	350	8.0	16047	367.3
	Richmond Valley	261	11.1	135	5.8	7314	311.7
	Tenterfield	36	5.5	15	2.3	1180	179.0
	Tweed	1169	12.1	587	6.1	26976	278.1
	LHD Total[2]	4021	13.0	2215	7.1	96007	309.3
Northern Sydney	Hornsby	2372	15.6	2994	19.7	76072	500.3
	Hunters Hill	536	35.8	683	45.6	17224	1149.8
	Ku-ring-gai	3171	24.9	4602	36.2	99319	781.1
	Lane Cove	1547	38.5	2051	51.1	49306	1227.9
	Mosman	709	22.9	970	31.3	20726	669.0
	North Sydney	1386	18.5	1807	24.1	38015	506.7

Local Health District	Local Government Area	Week ending				Total	
		01-January		26-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Northern Beaches	12276	44.9	25861	94.6	271579	993.0
	Parramatta[1]	4876	19.0	3727	14.5	111749	434.5
	Ryde	2506	19.1	2813	21.4	69371	528.5
	Willoughby	1285	15.8	1688	20.8	38214	470.7
	LHD Total[2]	26568	27.8	44256	46.3	701984	734.4
South Eastern Sydney	Bayside	2966	16.6	2396	13.4	74125	415.5
	Georges River	2151	13.5	1923	12.1	63127	395.9
	Randwick	3955	25.4	3167	20.4	101973	655.2
	Sutherland Shire	4082	17.7	4270	18.5	135164	586.1
	Sydney[1]	5897	23.9	6126	24.9	164842	669.2
	Waverley	1829	24.6	2086	28.1	58592	788.6
	Woollahra	1463	24.6	1795	30.2	49302	830.2
	LHD Total[2]	18342	19.1	17665	18.4	542497	565.6
South Western Sydney	Camden	1853	18.3	1457	14.4	73001	719.7
	Campbelltown	2714	15.9	2090	12.2	97522	570.5
	Canterbury-Bankstown[1]	8978	23.8	7192	19.0	165316	437.4
	Fairfield	2252	10.6	1809	8.6	77433	365.8
	Liverpool	3310	14.5	3504	15.4	120808	530.8
	Wingecarribee	953	18.6	934	18.3	30776	601.9
	Wollondilly	567	10.7	457	8.6	21047	396.0
	LHD Total[2]	15765	15.2	13947	13.4	502190	483.6
Southern NSW	Bega Valley	557	16.2	591	17.1	11081	321.4
	Eurobodalla	639	16.6	543	14.1	17018	442.3
	Goulburn Mulwaree	389	12.5	327	10.5	11540	370.7
	Queanbeyan-Palerang Regional	673	11.0	418	6.8	15879	259.9
	Snowy Monaro Regional	356	17.1	293	14.1	7045	338.8
	Upper Lachlan Shire	91	11.3	73	9.1	2494	309.5
	Yass Valley	166	9.7	146	8.5	3871	226.6
	LHD Total[2]	2872	13.2	2391	11.0	68958	317.7
Sydney	Burwood	1084	26.7	1318	32.5	15269	376.0
	Canada Bay	3243	33.8	3146	32.8	58770	611.7
	Canterbury-Bankstown[1]	8978	23.8	7192	19.0	165316	437.4
	Inner West	5708	28.4	5951	29.6	137245	683.5
	Strathfield	1800	38.4	1444	30.8	26832	571.8
	Sydney[1]	5897	23.9	6126	24.9	164842	669.2
	LHD Total[2]	19419	27.9	19154	27.5	423265	607.5
Western NSW	Bathurst Regional	665	15.3	500	11.5	19582	448.9
	Blayney	152	20.6	84	11.4	3196	433.1
	Bogan	240	93.0	21	8.1	872	338.0
	Bourke	29	11.2	20	7.7	531	205.0
	Brewarrina	19	11.8	3	1.9	325	201.7
	Cabonne	145	10.6	75	5.5	3162	231.9
	Cobar	84	18.0	16	3.4	1079	231.6

Local Health District	Local Government Area	Week ending				Total	
		01-January		26-December			
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Coonamble	36	9.1	11	2.8	953	240.8
	Cowra	134	10.5	87	6.8	3507	275.2
	Dubbo Regional	787	14.7	451	8.4	18660	347.4
	Forbes	109	11.0	49	5.0	2237	225.8
	Gilgandra	37	8.7	24	5.7	962	226.9
	Lachlan[1]	67	11.0	34	5.6	1045	172.0
	Mid-Western Regional	294	11.6	246	9.7	8544	338.4
	Narromine	92	14.1	32	4.9	1765	270.8
	Oberon	37	6.8	33	6.1	1742	321.9
	Orange	1652	38.9	483	11.4	21628	509.5
	Parkes	160	10.8	94	6.3	4208	283.6
	Walgett	23	3.9	13	2.2	1579	265.2
	Warren	55	20.4	30	11.1	1317	488.3
	Warrumbungle Shire	57	6.1	45	4.9	2698	290.8
	Weddin	18	5.0	16	4.4	814	225.3
	LHD Total[2]	4878	17.1	2356	8.3	100104	351.2
Western Sydney	Blacktown	6912	18.5	5175	13.8	190998	510.1
	Cumberland	16156	66.9	5461	22.6	123150	509.9
	Parramatta[1]	4876	19.0	3727	14.5	111749	434.5
	The Hills Shire	3976	22.3	3714	20.9	122700	689.5
	LHD Total[2]	32480	30.8	17630	16.7	531422	504.5
NSW Total[3]		***174,698***	***21.6***	***174,086***	***21.5***	***4,380,378***	***541.5***

[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, Week ending 3 January 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.

Testing numbers in NSW in the week ending 3 January 2021

Specimen collection date	PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhino-virus	HMPV**	Entero-virus
		No.	%Pos.	No.	%Pos.						
3 January 2021	15,120	1	0.01%	0	0.00%	66	0	25	919	1	95

Testing numbers in NSW from January – 27 December 2020

Specimen collection date	PCR tests conducted	Influenza A		Influenza B		Adeno-virus	Para-influenza	RSV	Rhino-virus	HMPV**	Entero-virus
		No.	%Pos.	No.	%Pos.						
Total	1,393,182	6,631	0.48%	955	0.07%	9,139	9,193	22,004	138,737	2,435	6,434
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											
6 December	24,404	0	0.00%	0	0.00%	148	9	1,614	1,488	59	153
13 December	24,954	1	0.00%	0	0.00%	159	14	1,666	1,334	73	139
20 December	51,622	0	0.00%	0	0.00%	164	22	1,801	1,494	12	148
27 December	66,776	1	0.00%	0	0.00%	113	19	1,236	1,155	7	115

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

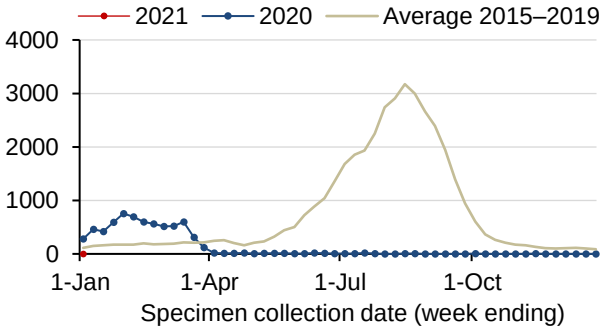
RSV - Respiratory syncytial virus

*Five-week period

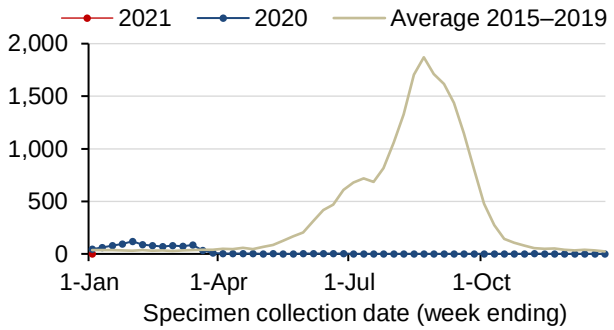
APPENDIX C: NUMBER OF POSITIVE PCR TEST RESULTS FOR INFLUENZA AND OTHER RESPIRATORY VIRUSES AT SENTINEL NSW LABORATORIES, January 2020 to 3 January 2021

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.

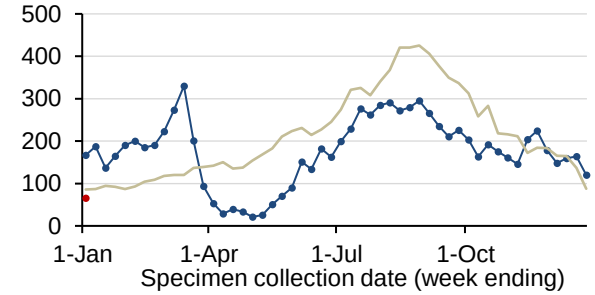
Influenza A



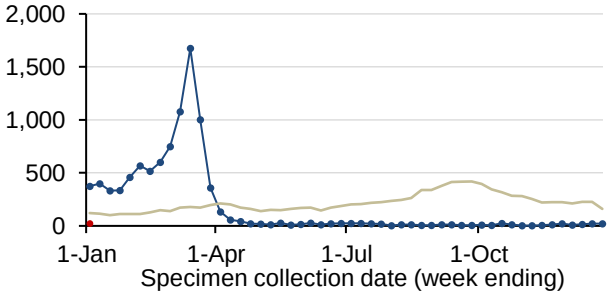
Influenza B



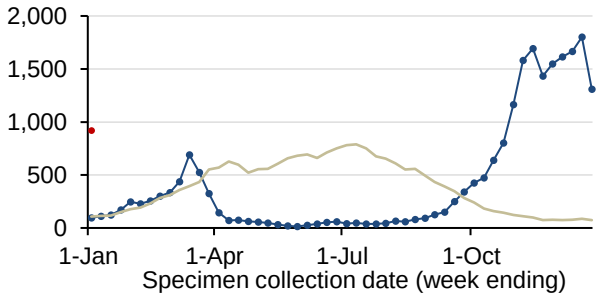
Adenovirus



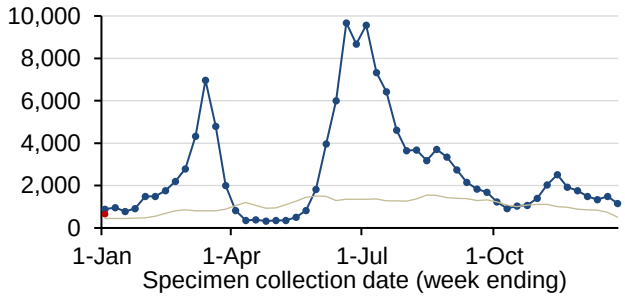
Parainfluenza



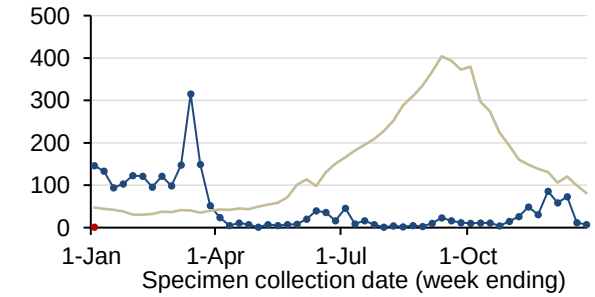
Respiratory syncytial virus (RSV)



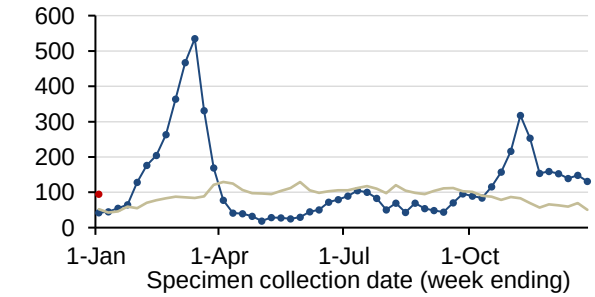
Rhinovirus



Human metapneumovirus (HMPV)



Enterovirus



Note: 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.