

COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 41, ENDING 10 OCTOBER 2020

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SUMMARY FOR THE WEEK ENDING 10 OCTOBER

- The number of locally-acquired cases in NSW increased significantly this week.
- There were 16 of 19 (84%) locally-acquired cases reported this week that were linked to known cases or clusters.
- There were two new clusters reported this week: one from a private health clinic across two sites located in Western and South Western Sydney LHDs, and one cluster in the community associated with transmission among a social group.
- More than half of cases (54%) reported this week were tested within two days of symptom onset.
- The majority of locally-acquired cases reported in the two weeks up to 10 October were residents of South Western Sydney LHD (65%, 13/20) and Western Sydney LHD (20%, 4/20).
- Testing numbers have remained similar to the previous week.
- The NSW Sewage Surveillance Program reported four detections of SARS-CoV-2. These samples were taken from the Bondi, Malabar, Liverpool and West Camden treatment plants. Detections from these catchment areas are associated with previously reported cases.
- All people are reminded of the need to isolate and **seek testing as soon as any symptoms develop**, to limit spread to other people.

SECTION 1: PREVENTING THE SPREAD OF COVID-19 – WE ALL PLAY A ROLE

Everyone has an important role to play to prevent the spread of COVID-19. For the public health response to be effective, members of the community, laboratories, clinicians and public health staff all have to play their part.

The sooner we can diagnose cases, the faster we can identify other people who may have been infected, and the better we can limit the spread of infection across our community.

The roles we all play are outlined below.

Everyone

- Seek medical attention and get tested quickly every time you develop respiratory symptoms (even if mild) or unexplained fever.
- Stay at home to avoid spreading infection to others as soon as you:
 - develop symptoms and until you are told that you do not have COVID-19 and you are well
 - are told that you are a close contact of a COVID-19 case and until your quarantine period has ended (even if you test negative before then).
- Follow the advice given in public health alerts regarding the need to self-isolate and seek testing if you attended a location at a time where a cluster has been identified.

People who are diagnosed with COVID-19

- Provide information to public health staff at the time of interview on the locations visited and people you have been in contact with in your **incubation period** and while infectious.
- Stay at home until you are told your isolation period has ended.

Clinicians

- Promote COVID-19 testing amongst symptomatic people to ensure a COVID-19 diagnosis as close as possible to the time symptoms start.
- Encourage testing in people without symptoms when advised to do so for public health purposes.
- Support cases to self-isolate until their isolation period has ended.
- Be vigilant in the use of personal protective equipment.

Laboratories

- Notify NSW Health of new diagnoses promptly so public health staff can interview cases and identify people potentially infected by a case (close contacts).

Public health staff

- Interview cases as quickly as possible after diagnosis and collect information from cases to detect new clusters and enable contact tracing.
- Quarantine close contacts as quickly as possible.

Indicators of effective prevention measure for COVID-19 in NSW in the past week

	Week ending 10 Oct
Number of cases with symptoms at diagnosis	63% (13/19)
Proportion of cases in isolation at least 48 hours before symptoms	0% (0/13)
Proportion tested (swabbed) within:	
• 1 day of symptom onset	38% (5/13)
• 2 days of symptom onset	54% (7/13)
• 3 days of symptom onset	69% (9/13)
Proportion tested more than 3 days after symptom onset	31% (4/13)
Proportion who entered isolation within:	
• 1 day of symptom onset	38% (5/13)
• 2 days of symptom onset	54% (7/13)
• 3 days of symptom onset	62% (8/13)
Proportion who entered isolation more than 3 days after symptom onset	38% (5/13)
Number of tests conducted	70,978
Proportion notified to NSW Health by the laboratory within:	
• 1 day of swab collection	95% (18/19)
• 2 days of swab collection	95% (18/19)
• 3 days of swab collection	95% (18/19)
Proportion notified to NSW Health by the laboratory more than 3 days after the swab collection	5% (1/19)*
Proportion of locally-acquired cases interviewed by public health staff within 1 day of notification to NSW Health	100% (19/19)
Proportion of close contacts (identified by the case) contacted by public health within 48 hours of case notification	100%

*Includes a past infection.

Interpretation: Six cases this week did not report symptoms at the time of diagnosis. Of these, one case was found through further testing to be an old infection, likely acquired in early August. Four cases, who were part of two separate family groups, tested positive whilst asymptomatic as a result of a positive family member. Of 13 cases reported in the last week who reported symptoms at diagnosis, none were in isolation at the time of diagnosis or before developing symptoms. Of the 13 cases, seven (54%) sought testing within two days of developing symptoms and seven (54%) had begun isolation within two days of their onset of illness. There were five cases reported this week who went into isolation more than three days after symptom onset. It is important that people seek testing immediately if mild symptoms develop.

The time taken to notify cases remains stable with 95% of new cases in the week ending 10 October notified to NSW Health within one day of swab collection. There was one case notified more than one day after testing. The case required further testing and was found to be an old infection likely acquired in early August. Public health staff are responding quickly, with all cases interviewed within one day of notification.

SECTION 2: HOW IS THE OUTBREAK TRACKING IN NSW?

Table 1. COVID-19 cases and tests reported in NSW, up to 10 October 2020

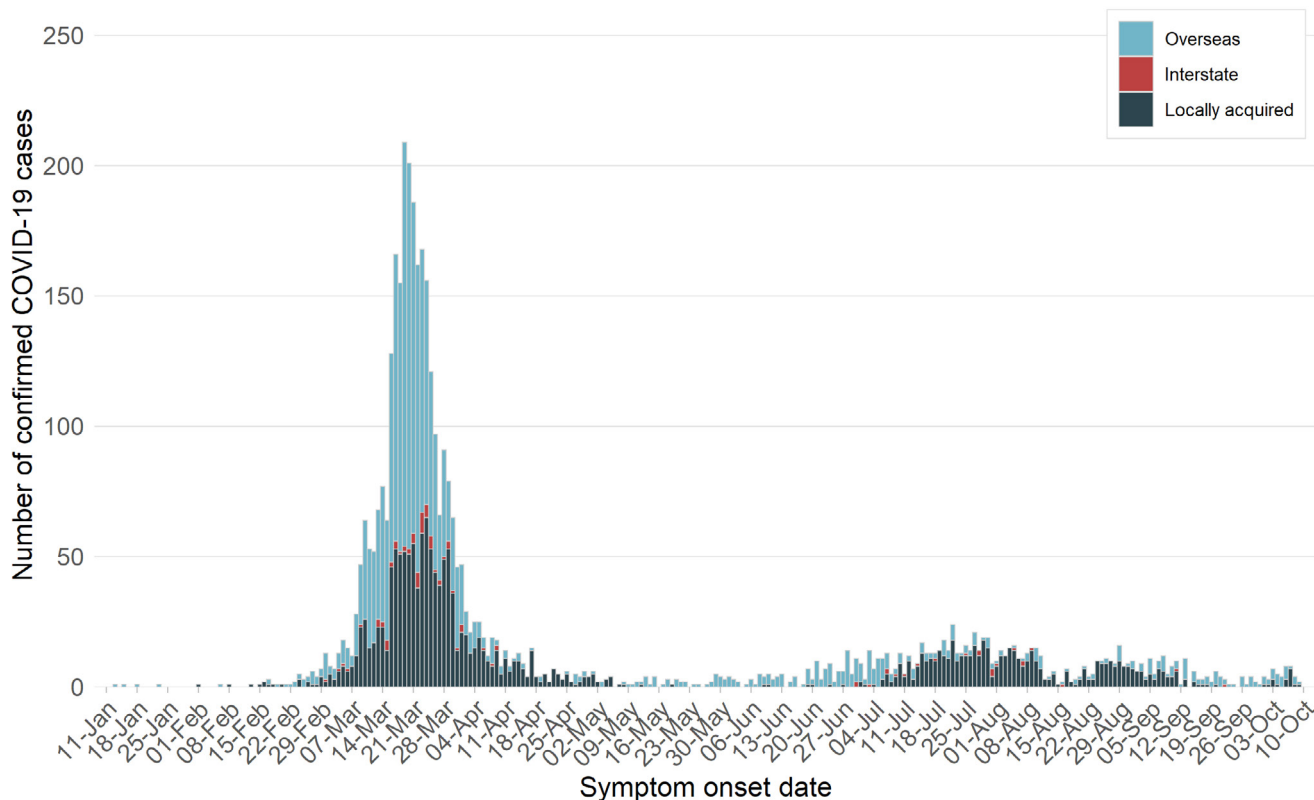
	Week ending 10 Oct	Week ending 3 Oct	% change	Total to 10 Oct
Number of cases	46	17	↑ 171%	4,091
Overseas acquired	27	15	↑ 80%	2,184
Interstate acquired	0	1	↓ 100%	91
Locally acquired	19*	1*	↑ 1800%	1,816
No links to other cases or clusters	3	1	↑ 200%	429
Number of deaths	0	0	-	55
Number of tests	70,978	69,452	↑ 2%	2,822,817

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

*Includes a past infection.

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: Most cases (67%) of COVID-19 infection diagnosed in the last two weeks in NSW have been overseas acquired.

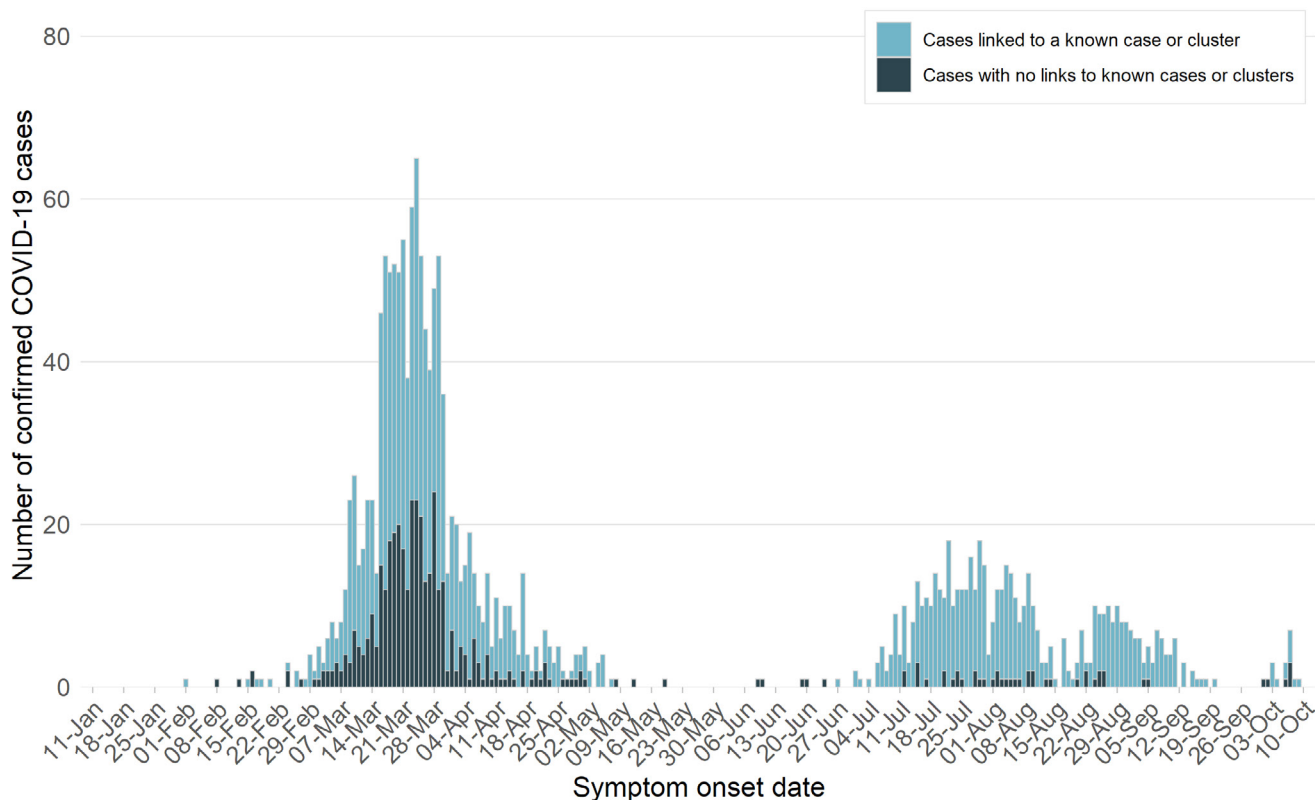
How many NSW cases were infected in Victoria?

In response to the continued community transmission in Victoria, border measures were introduced to limit the spread of infection into NSW. From 8 July, under the Public Health (COVID-19 Border Control) Order 2020, a person who has been in Victoria within the last 14 days must not travel to NSW without a permit. The Order was last updated on 28 September. Recent changes included expansions to the border region and changes to permitted activities. The last case acquired in Victoria was reported on 1 October.

How much transmission is occurring in NSW?

All new cases are investigated by public health staff to determine the likely source of infection and to identify **clusters**. 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. Currently, public health efforts are focused on contact tracing to limit further spread in the community, and identifying the source of infection for every case.

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



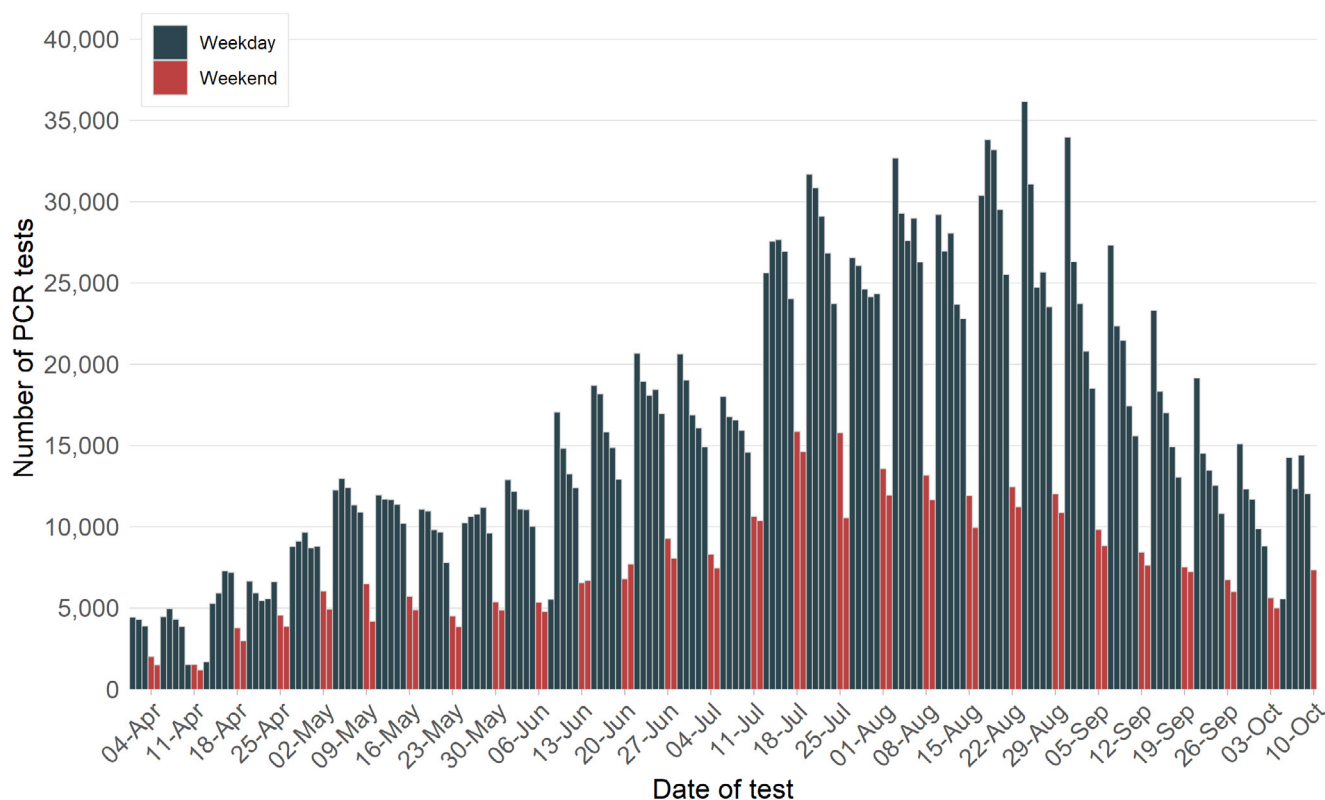
The date of the first positive test is used for cases who did not report symptoms.

Interpretation: Of the locally-acquired cases with an onset in the last four weeks, 78% (21/27) were linked to known cases or clusters.

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.

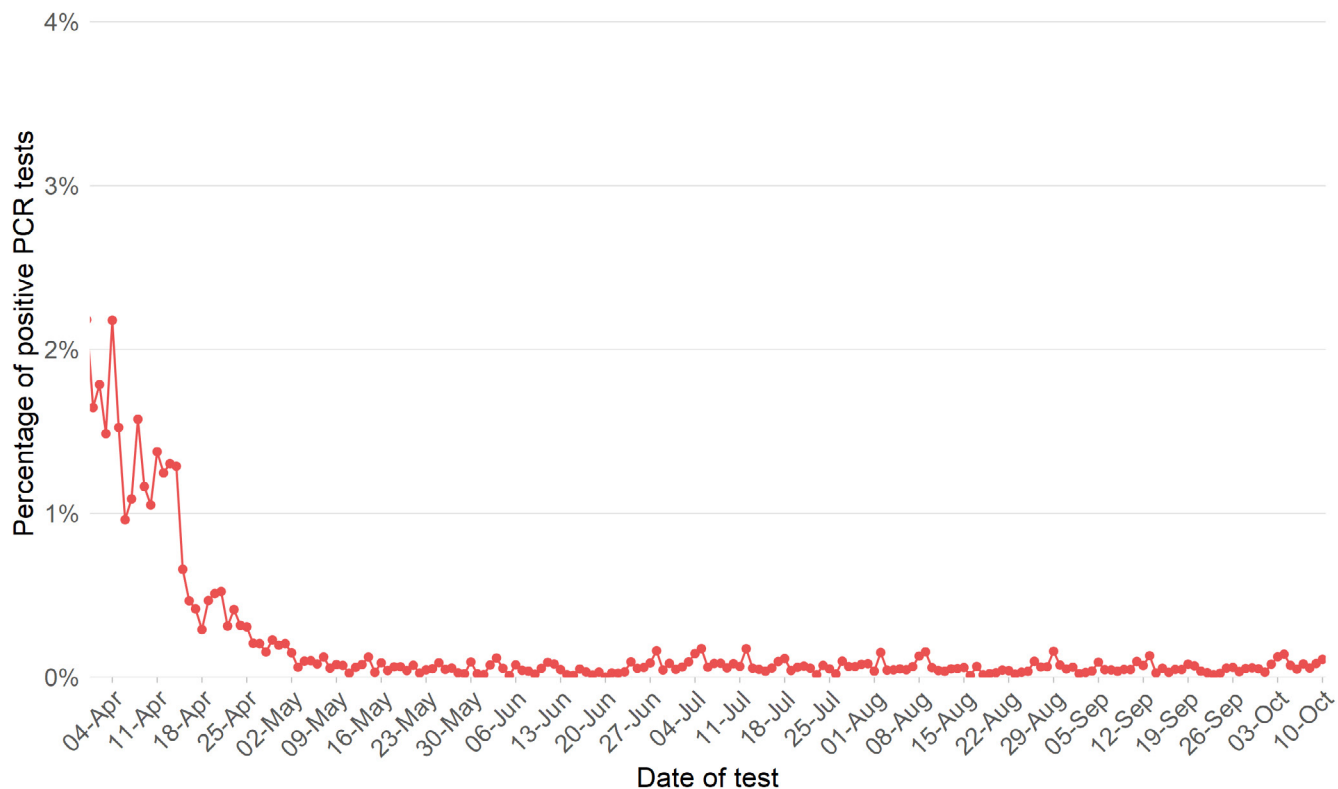
Interpretation: Early in the outbreak the focus of testing was on returned travellers and close contacts of confirmed cases, whereas now testing is recommended for anyone with even mild respiratory symptoms or unexplained fever.

Testing numbers in the week ending 10 October were similar compared with the previous week. The number of tests reported in the last week is similar to the average recorded for mid to late May. An average of 1.3 tests were conducted per 1,000 people in NSW each day in the past week, compared to an average of 1.2 tests per 1,000 people in the previous week.

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

What proportion of tests are positive?

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

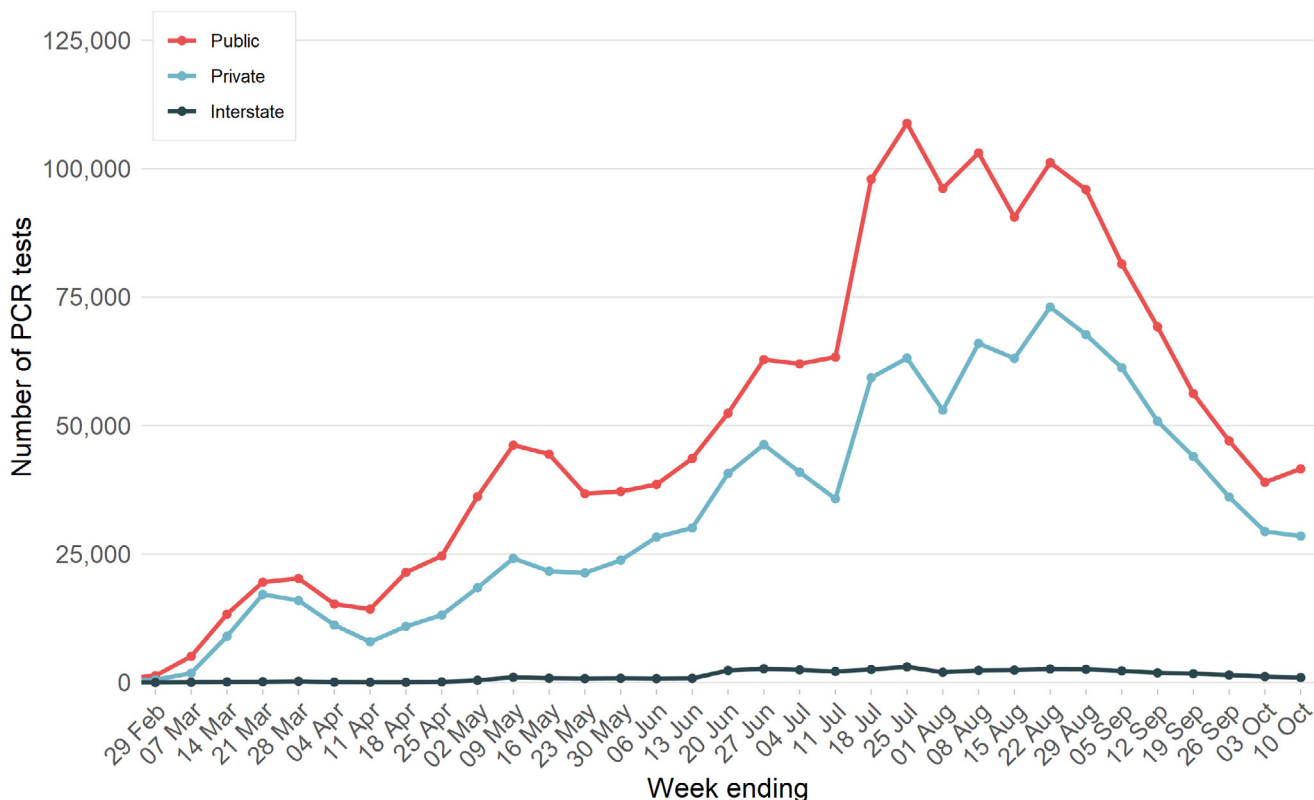


Includes SARS-CoV-2 PCR tests only and excludes repeat positive tests for an individual.

Interpretation: The proportion of tests positive for COVID-19 in NSW declined in mid-March to early May, 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.

Which laboratories are doing the testing?

Figure 5. Number of PCR tests by week and facility type, NSW, 2020



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

Interpretation: In the week ending 10 October, testing in private facilities slightly decreased, whereas testing in public facilities increased compared to the previous week. Approximately 59% of PCR tests were conducted at public laboratories during this period.

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.

Table 2. Locally-acquired COVID-19 cases in NSW, by week and source of infection, 13 September to 10 October 2020

Locally-acquired cases	Week ending				Total
	10 Oct	3 Oct	26 Sep	19 Sep	
Cases who are linked to a known case or cluster	16	0	2	12	30
Cases with no links to other cases or clusters	3	1	0	0	4
Total	19*	1*	2	12	34

*Includes a past infection.

Interpretation: The majority (79%) of cases in the four weeks ending 10 October were linked to known cases or clusters. There were three cases reported in the last week with no links to previously reported cases.

Table 3. Locally-acquired COVID-19 cases by LHD of residence, 13 September to 10 October 2020

Local Health District	Week ending				Total	Days since last case
	10 Oct	3 Oct	26 Sep	19 Sep		
Central Coast	0	0	0	0	0	40
Illawarra Shoalhaven	0	0	0	0	0	36
Nepean Blue Mountains	0	0	0	3	3	25
Northern Sydney	2	0	0	1	3	1
South Eastern Sydney	0	0	1	3	4	20
South Western Sydney	12	1	1	4	18	0
Sydney	1	0	0	1	2	0
Western Sydney	4	0	0	0	4	3
Far West	0	0	0	0	0	191
Hunter New England	0	0	0	0	0	65
Mid North Coast	0	0	0	0	0	172
Murrumbidgee	0	0	0	0	0	33
Northern NSW	0	0	0	0	0	77
Southern NSW	0	0	0	0	0	61
Western NSW	0	0	0	0	0	39
Total	19*	1*	2	12	34	

*Includes a past infection.

Interpretation: The majority of locally-acquired cases reported in the two weeks up to 10 October were residents of South Western Sydney LHD (65%, 13/20) and Western Sydney LHD (20%, 4/20).

COVID-19 cases with no links to known cases or clusters

Cases with no identified links to known cases or clusters suggest that there are people infected with COVID-19 in the community who have not been diagnosed. Testing of people with whom they have been in contact in the 14 days prior to symptom onset, and more broadly in the local community, is important to identify the source of the infection, detect other cases and prevent further transmission in the community.

Table 4. Locally-acquired COVID-19 cases with no identified links to known cases or clusters by LHD of residence, 13 September to 10 October 2020

Local Health District	Week ending				Total
	10 Oct	3 Oct	26 Sep	19 Sep	
Central Coast	0	0	0	0	0
Illawarra Shoalhaven	0	0	0	0	0
Nepean Blue Mountains	0	0	0	0	0
Northern Sydney	0	0	0	0	0
South Eastern Sydney	0	0	0	0	0
South Western Sydney	2	1	0	0	3
Sydney	1	0	0	0	1
Western Sydney	0	0	0	0	0
Far West	0	0	0	0	0
Hunter New England	0	0	0	0	0
Mid North Coast	0	0	0	0	0
Murrumbidgee	0	0	0	0	0
Northern NSW	0	0	0	0	0
Southern NSW	0	0	0	0	0
Western NSW	0	0	0	0	0
Total	3	1*	0	0	4

*Includes a past infection.

Interpretation: Extensive public health investigations were unable to identify a source of infection for three cases in the week ending 10 October. This indicates that there were at least three transmission events not linked to a known case or cluster in the past week.

SECTION 4: CURRENT COVID-19 CLUSTERS IN NSW

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

Cases in community settings

In total, 15 cases were reported in the last week that were linked to known clusters, including six cases associated with a private health clinic across two sites, one case linked to Liverpool Hospital and eight cases linked to a community cluster among a social and family network. The source for the community cluster is under investigation but may be linked to Liverpool Hospital.

Liverpool Hospital cluster

On 10 August, South Western Sydney Public Health Unit was notified of a case in a healthcare worker that worked in Clinical area 1 at Liverpool Hospital. The source of their infection was a previously reported case from a known cluster. A public health investigation identified that the staff member had worked two days whilst infectious. A case was reported from a second clinical area on 1 September.

In the week ending 10 October, there was one case linked to this cluster in a patient that attended Clinical area 2 (infection likely acquired in August).

There have been two additional cases (one case reported in a previous week and one from this week) who likely acquired their infection at the hospital, however a direct link to a known case has not been identified to date. It is thought that both cases (a staff member and patient) acquired their infection from a diagnosed case at the hospital.

One of the cases likely linked to this cluster has been identified as the source for a community cluster of eight cases among a social and family network.

Table 5. Cases linked to Liverpool Hospital cluster by setting of exposure

Setting of exposure	Exposure site	Exposure site	No. cases	Cases in household setting	Total cases
		Local area			
Primary exposure location					
Healthcare	Liverpool Hospital (Clinical area 1)	Liverpool	8	9	17
Secondary exposure location					
Healthcare	Liverpool Hospital (Clinical area 2)	Liverpool	3	0	3
Total			11	9	20

Interpretation: Excluding the source, a healthcare worker who was exposed in a household setting, there are 20 cases linked to this cluster: six healthcare workers, four patients, one hospital visitor and nine people exposed in home settings.

Private health clinic cluster

On 7 October, Western Sydney Public Health Unit was notified of a case in a healthcare worker at a private health clinic in Bella Vista. On the same day, a second case was reported in a resident of South Western Sydney. The second case was a household contact of another staff member (who subsequently tested positive) who worked at both the clinic in Bella Vista and a related private clinic in Liverpool. Close contacts among staff and patients were placed in isolation and recommended for testing, and both clinics were closed for cleaning.

Table 6. Cases linked to private health clinic cluster by setting of exposure

Setting of exposure	Exposure site	Exposure site	No. cases	Cases in household setting	Total cases
		Local area			
Primary exposure location					
Healthcare	Private health clinic	Liverpool	2	0	2
Healthcare	Private health clinic	Bella Vista	1	3	4
Total			3	3	6

Interpretation: Excluding the source, a healthcare worker that worked at both clinics, there are six cases linked to this cluster: two healthcare workers, one visitor accompanying a patient who attended the Liverpool clinic, and three household contacts.

Previously reported active clusters with no new cases identified this week

City Tattersalls gym

The last case associated with this cluster was notified on 15 September in a close contact of a previous case associated with a workplace in the CBD. Almost a third (29%, 19/65) of transmission within this cluster occurred in a gym setting and one-tenth of cases (11%, 7/65) were acquired in an office-type workplace setting. Excluding the source, who is unlinked to any known case or cluster, there are 65 people linked to this cluster.

Eastern Suburbs Legion Club

The last case associated with this cluster was notified on 16 September. There are nine cases linked to this cluster: six cases were exposed at the club and three in household settings. The source for this cluster is currently unknown, however genome sequencing of virus from cases suggests the outbreak was likely seeded by the City Tattersalls outbreak.

Concord Hospital

The last case associated with this cluster was notified on 20 September in a household contact of a staff member at Concord Hospital. In total, there are 22 cases (excluding the source who was a healthcare worker at both Liverpool and Concord Hospitals) linked to this cluster. There are eight healthcare workers, including seven at Concord Hospital and one at Liverpool Hospital. There were 10 cases exposed in residential settings who were from six separate households.

Table 7. Previously reported clusters with no new cases identified in the week ending 10 October 2020

Date cluster first identified	Cluster	Cases linked in the week ending 10 Oct	Date of last case
25 Aug	City Tattersalls gym	0	15 Sep
8 Sep	Eastern Suburbs Legion Club	0	16 Sep
6 Sep	Concord Hospital	0	20 Sep

Clusters with no ongoing public health risk

There have been no new cases linked to St Paul's Catholic College, Greystanes for four weeks. Two or more incubation periods have now passed since the last case and there is no ongoing public health risk. This cluster is now closed.

SECTION 5: COVID-19 IN SPECIFIC POPULATIONS

COVID-19 in healthcare workers

The following describes infections of COVID-19 in healthcare workers (HCWs) and those that were potentially acquired in healthcare settings in NSW. 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 were five new COVID-19 cases in HCWs reported in the last week. Of these, three were potentially infected in healthcare settings, and for two cases the source of infection has not been identified.

In total, there have been 33 cases of COVID-19 in HCWs since 1 August. Of these, 21 HCWs were potentially infected in healthcare settings. A further six cases were household contacts of a known case, three were exposed in community settings, and for three cases the source of infection is unknown.

Table 8. Potential healthcare-acquired infections for HCWs by healthcare setting in the past four weeks

Healthcare setting	Week ending				Total
	10 Oct	3 Oct	26 Sep	19 Sep	
NSW public health setting	1	0	0	3	4
Private health setting	2	0	0	0	2
Total	3	0	0	3	6

Interpretation: Two-thirds (4/6) of the potentially healthcare-acquired cases in the last four weeks were reported in NSW public health settings.

Clusters in healthcare settings

Of the 21 potentially healthcare-acquired infections in HCWs reported since 1 August, 19 were associated with four clusters in healthcare settings: two from Hornsby Hospital, eight from Liverpool Hospital, seven from Concord Hospital and two from a private health clinic.

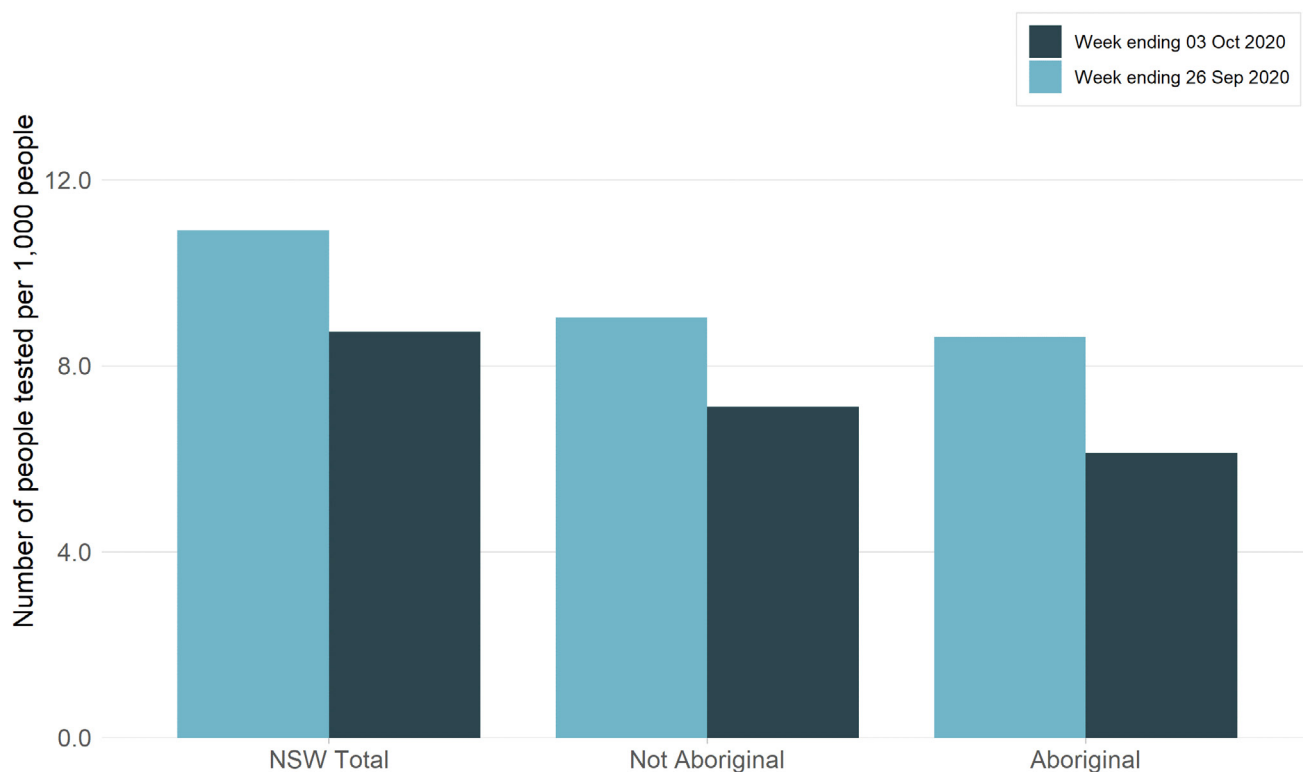
Aboriginal people

Aboriginal people are considered to be a vulnerable group for serious COVID-19 disease due to their high burden of chronic disease. Additionally, transmission within Aboriginal communities is likely to be high due to factors such as high number of people per household and barriers to accessing healthcare.

No cases in Aboriginal people were reported in the week ending 10 October. In total, 45 Aboriginal people have been diagnosed with COVID-19, representing 1% of all cases in NSW.

While Aboriginal status is collected by public health staff on interview with the case at the time of diagnosis, those who test negative are not interviewed. Aboriginal status for those tested can be ascertained through linkage with other health information systems but there is a delay in getting this information. Results of the most recent linkage are available for people tested up to 3 October 2020, with Aboriginal status ascertained for approximately 90% of all COVID-19 test records.

Figure 6. Testing Rate per 1,000 by Aboriginality and week, NSW



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

Interpretation: Testing rates decreased in the week ending 3 October compared for the previous week for Aboriginal and non-Aboriginal people.

Pregnant women

No cases in pregnant women were reported in the week ending 10 October. 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, 1.3% 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 9. 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	63	0%
5-11 years	0	69	0%
12-17 years	0	118	0%
18-29 years	0	935	0%
30-49 years	0	1242	0%
50-59 years	1	584	0.2%
60-69 years	4	563	0.7%
70-79 years	14	357	3.9%
80+ years	36	160	22.5%
Total	55	4091	1.3%

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.

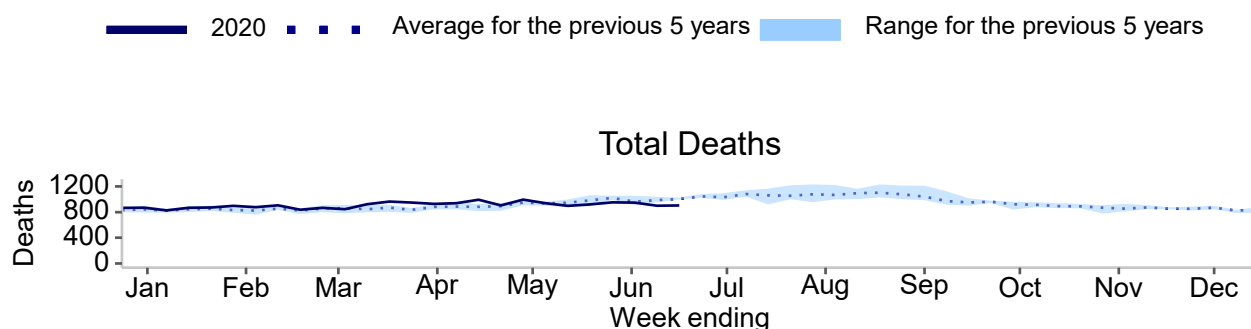
Internationally it is estimated that 3.1% of COVID-19 cases are reported to have died as a result of their infection.² Countries such as Italy, the United Kingdom and Spain have reported higher mortality rates (12.0%, 10.7% and 4.8%), while NSW reports similar rates to South Korea (1.7%) and New Zealand (1.7%). Mortality rates are heavily influenced by the testing criteria, with lower rates of COVID-19-related deaths reported in countries where testing is recommended for all cases, including those with mild illness.

² WHO Coronavirus disease (COVID-19) Weekly Epidemiological Update - 21 September 2020
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

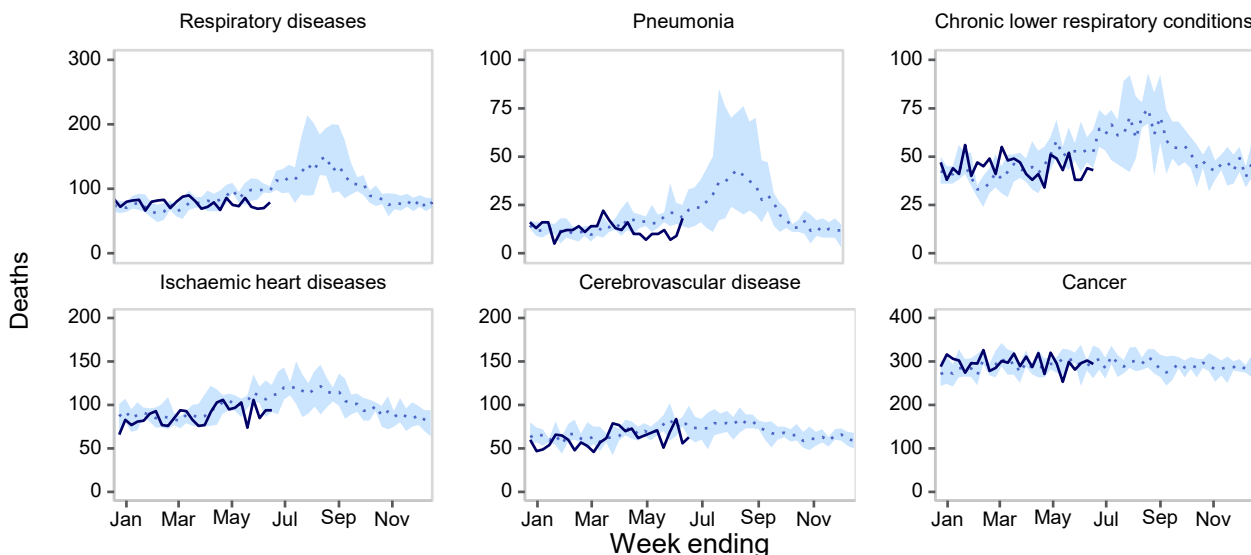
How many people have died in NSW from any cause of death?

The Australian Bureau of Statistics (ABS) has published Provisional Mortality Statistics for all of Australia for January to June 2020 (<https://www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0.55.004>) and provides data for NSW-registered deaths to NSW Health on a monthly basis around three months after the close of the month. The reported data includes only doctor-certified deaths, which include most deaths registered. This report excludes deaths referred to a coroner, such as suicides, accidents and assaults. Many causes of death are seasonal, with more deaths occurring in winter. The ABS includes COVID-19 deaths in total deaths, but not in the more specific causes shown here.

Figure 7. Deaths from any cause in NSW from January to 30 June 2020, by week



Source: Australian Bureau of Statistics

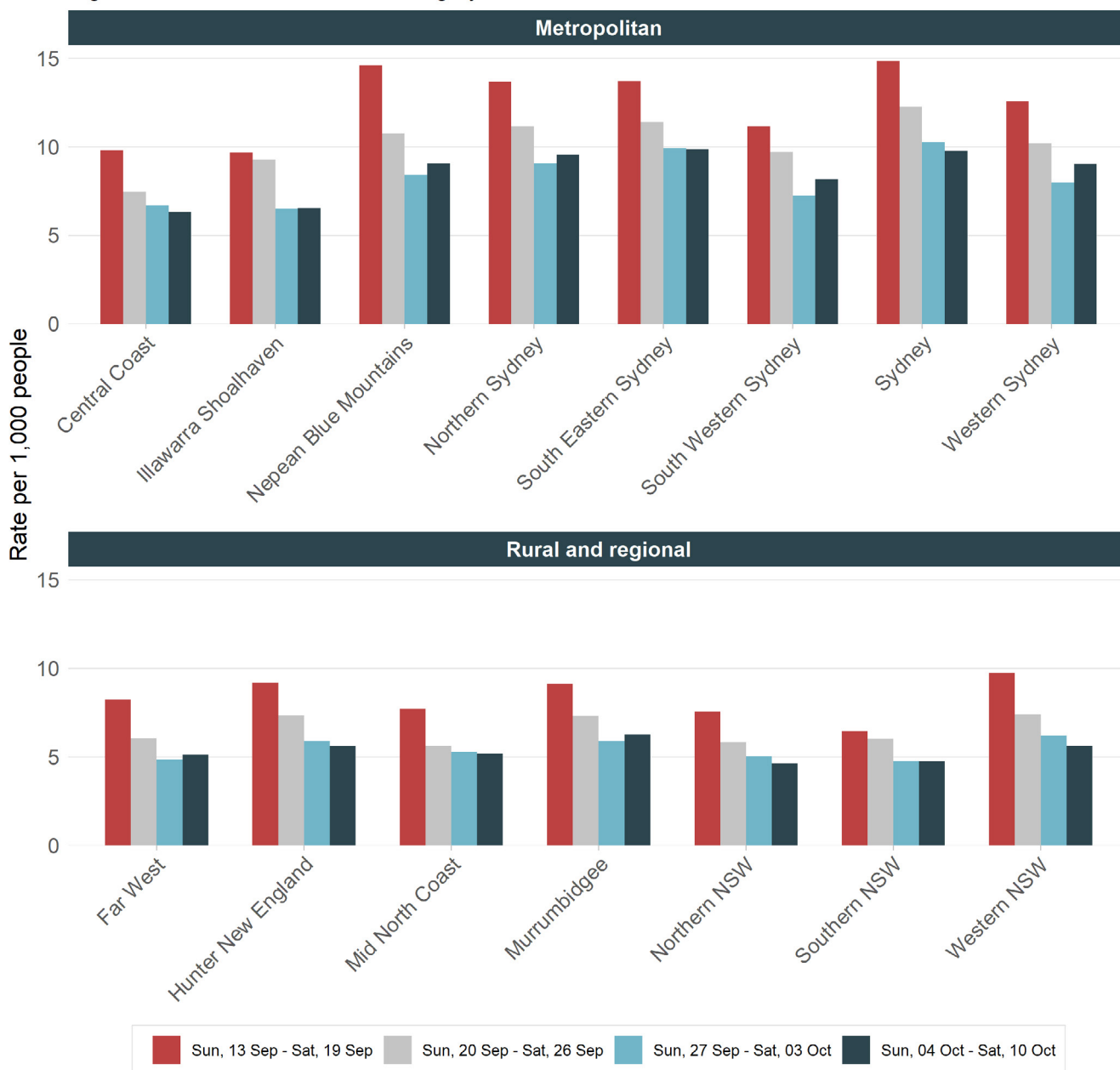


Source: Australian Bureau of Statistics

Interpretation: When compared with previous years, there have been fewer deaths due to respiratory diseases to date in 2020. This is likely to be due, at least in part, to the physical distancing and hand hygiene measures that have been put in place to help control the pandemic. These measures have reduced transmission of many infectious diseases that are transmitted person-to-person. The patterns of deaths from heart attack, stroke and cancer are similar to previous years.

SECTION 7: COVID-19 TESTING IN NSW

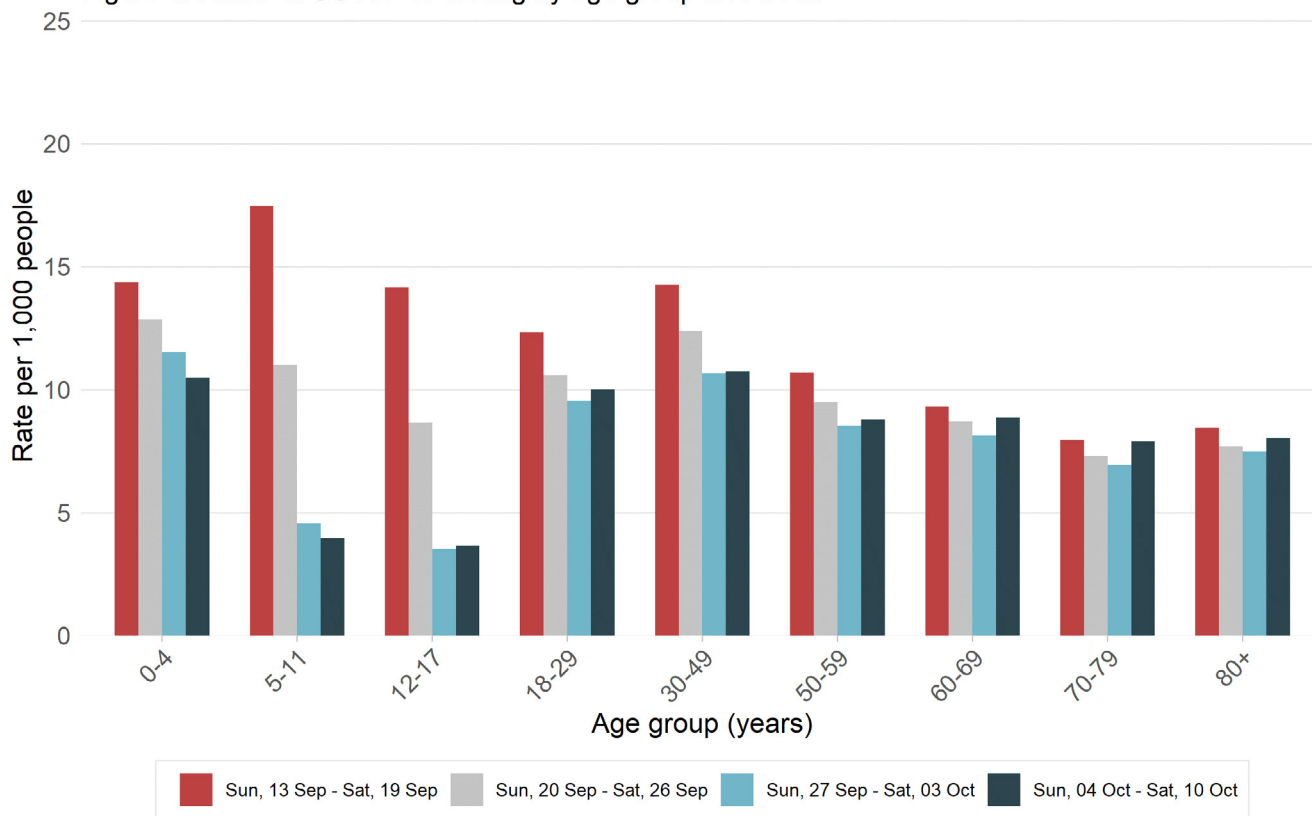
Figure 8. Rates of COVID-19 testing by LHD of residence and week



Interpretation: Statewide testing rates in the week ending 10 October were similar compared to the previous week (9 per 1,000). Testing rates remained fairly stable across NSW, with increased testing in South Western Sydney and Western Sydney LHDs where cases were reported in the past week.

Testing by age group

Figure 9. Rates of COVID-19 testing by age group and week

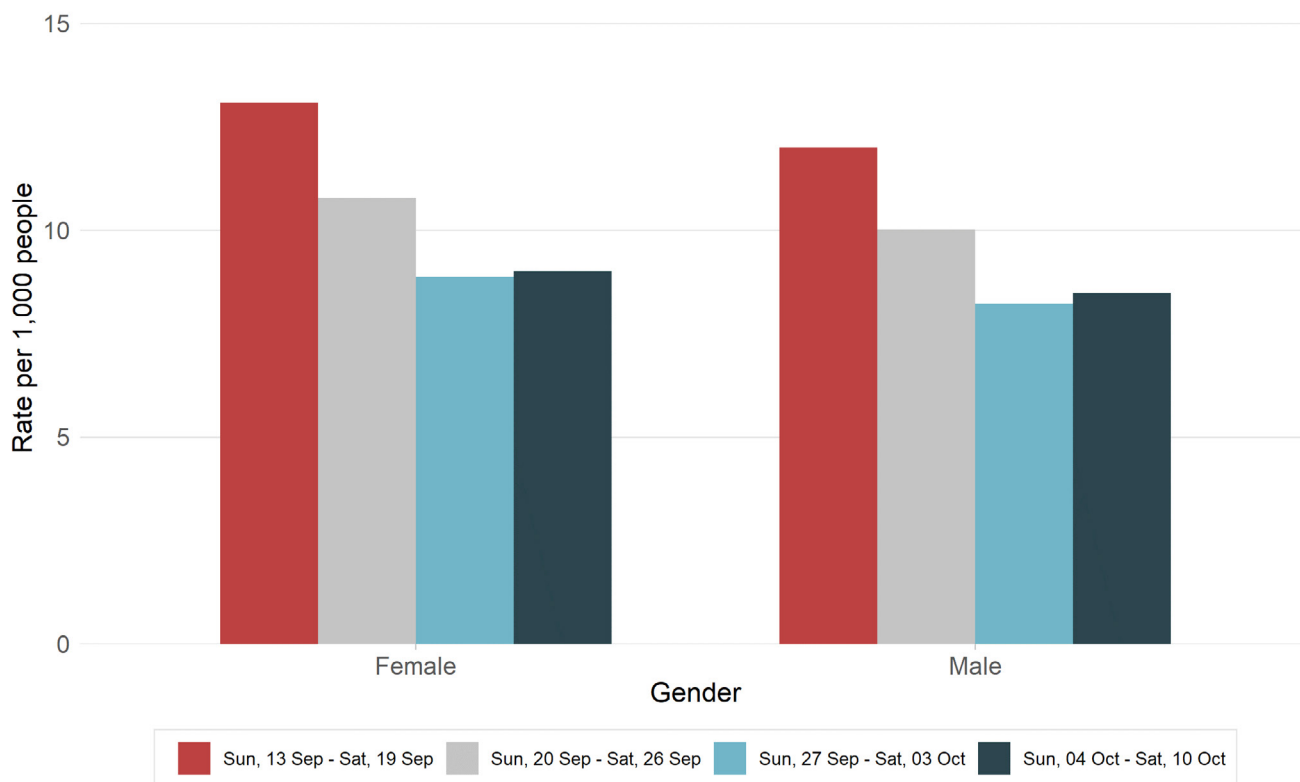


Includes SARS-CoV-2 PCR tests only and excludes notifications with age missing.

Interpretation: Testing rates were again lower in school-aged children compared to other age groups for the week ending 10 October. This may be due to school holidays.

Testing by gender

Figure 10. Rates of COVID-19 testing by gender and week



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

Interpretation: Testing rates are consistently higher in females compared with males, although this difference has narrowed in the past few weeks. In both groups, rates remained comparable in the week ending 10 October with the previous week.

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 to 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 any 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 how many cases can be detected per population. 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.

To date there have been detections of the virus fragments in samples from multiple sewage treatment plants in NSW including Perisher, Newcastle, Byron Bay, Blue Mountains and Metropolitan Sydney sites.

In the week ending 10 October, four of 52 sewage samples detected SARS-CoV-2. These samples were taken from the Bondi, Malabar, Liverpool and West Camden treatment plants which serve over 2 million people, including Sydney city and quarantine hotels. The West Camden catchment in South Western Sydney includes suburbs around Narellan where recent cases have been identified after a call for increased testing was issued. The table below shows results for previous weeks from various sites across NSW. Goulburn has been added as a new site.

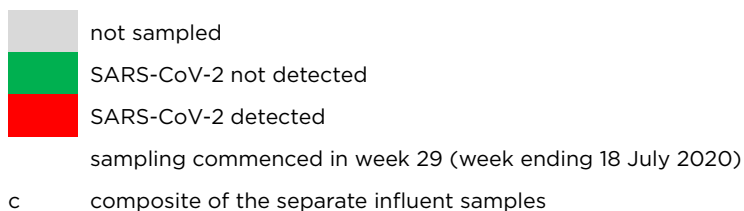
Table 10. Locations with positive SARS-CoV-2 detections in sewerage samples, week ending 18 July to 10 October 2020

Pop.	Sewage treatment plant	LHD	18 Jul	25 Jul	1 Aug	8 Aug	15 Aug	22 Aug	29 Aug	5 Sep	12 Sep	19 Sep	26 Sep	3 Oct	10 Oct
			Week												
			29	30	31	32	33	34	35	36	37	38	39	40	41
60,514	Blue Mountains (Winmalee)	NBMLHD									Positive	Positive	Positive	Positive	
4,681	North Richmond	NBMLHD												Positive	Positive
13,052	Richmond	NBMLHD												Positive	Positive
110,114	Penrith	NBMLHD									Positive	Positive	Positive	Positive	Positive
69,245	Warriewood	NSLHD												Positive	Positive
1,241	Brooklyn	NSLHD												Positive	Positive
31,924	Hornsby Heights	NSLHD												Positive	Positive
57,933	West Hornsby	NSLHD												Positive	Positive
318,810	Bondi	S&SESLHD									Positive	Positive	Positive	Positive	Positive
233,176	Cronulla	SESLHD									Positive	Positive	Positive	Positive	Positive
1,857,740	Malabar 1	S&SES&SWSLHD									Positive	Positive	Positive	Positive	Positive
	Malabar 2	S&SES&SWSLHD									Positive	Positive	Positive	Positive	Positive
181,005	Liverpool	SWSLHD												Positive	Positive

COVID-19 WEEKLY SURVEILLANCE IN NSW
Epidemiological week 41, ending 10 October 2020

			18 Jul	25 Jul	1 Aug	8 Aug	15 Aug	22 Aug	29 Aug	5 Sep	12 Sep	19 Sep	26 Sep	3 Oct	10 Oct	
			Week													
Pop.	Sewage treatment plant	LHD	29	30	31	32	33	34	35	36	37	38	39	40	41	
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															
163,374	Quakers Hill	WSLHD														
119,309	Rouse Hill	WSLHD														
37,061	Riverstone	WSLHD														
163,147	St Marys	NBM& WSLHD														
16,068	Bombo	ISHLHD														
73,686	Shellharbour	ISHLHD														
196,488	Wollongong	ISHLHD														
147,500	Gosford-Kincumber	CCLHD														
-	Wyong-Toukley	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														
51,750	Albury composite	M&SLHD														
22,419	Goulburn	M&SLHD														
21,000	Batemans Bay	M&SLHD														
8,000	Eden	M&SLHD														
15,500	Merimbula	M&SLHD														
5,000	Bermagui	M&SLHD														
7,800	Deniliquin	M&SLHD														
48,000	Queanbeyan	M&SLHD														
50,000	Wagga Wagga composite	M&SLHD														
2,050	Bourke	W& FWLHD														
19,000	Broken Hill	W& FWLHD														

			18 Jul	25 Jul	1 Aug	8 Aug	15 Aug	22 Aug	29 Aug	5 Sep	12 Sep	19 Sep	26 Sep	3 Oct	10 Oct
			Week												
Pop.	Sewage treatment plant	LHD	29	30	31	32	33	34	35	36	37	38	39	40	41
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													
2,500	Hunter - Karuah	HNELHD													
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													
54,370	Port Macquarie	N&MNCLHD													
50,000	Coffs Harbour	N&MNCLHD													



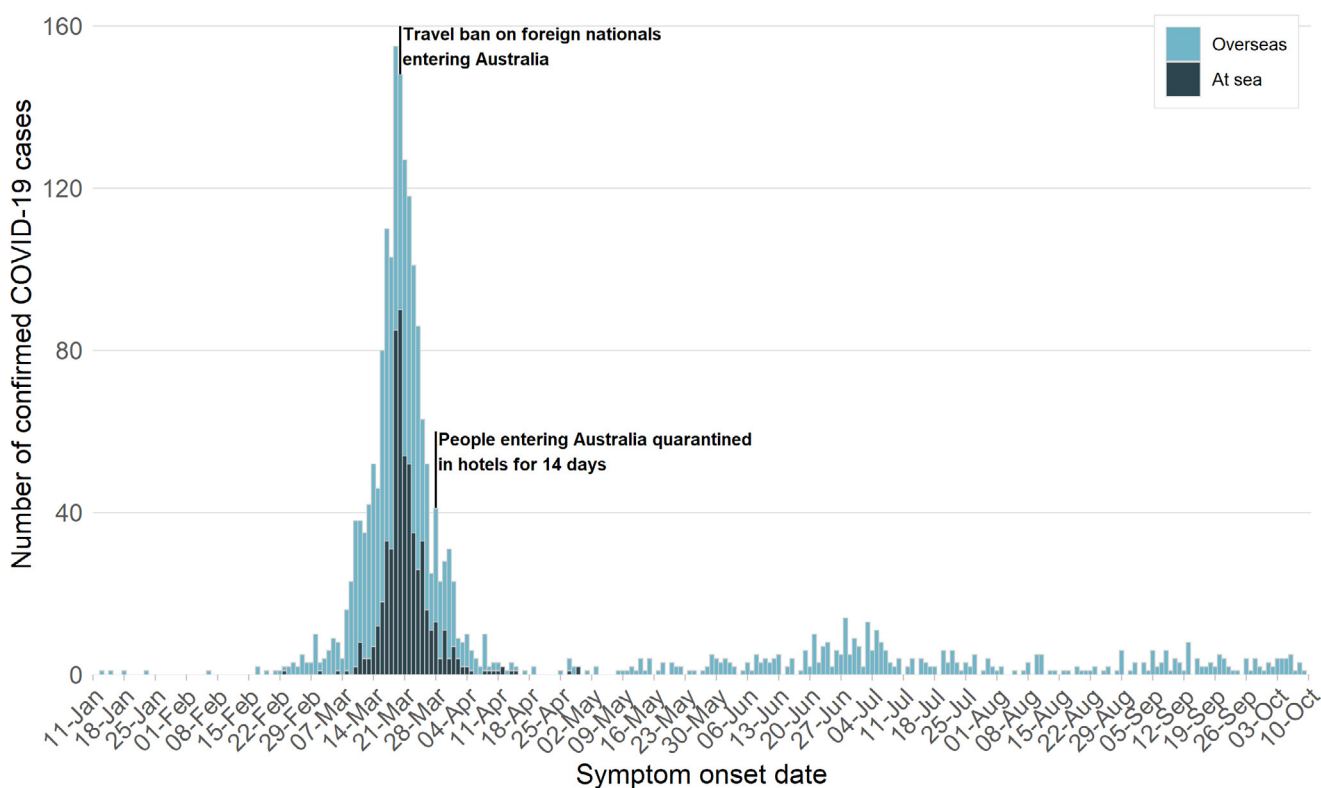
Interpretation: In the last week there were four detections of SARS-CoV-2. Detections from these catchment areas are associated with previously reported cases.

SECTION 8: COVID-19 IN RETURNED TRAVELLERS

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

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

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



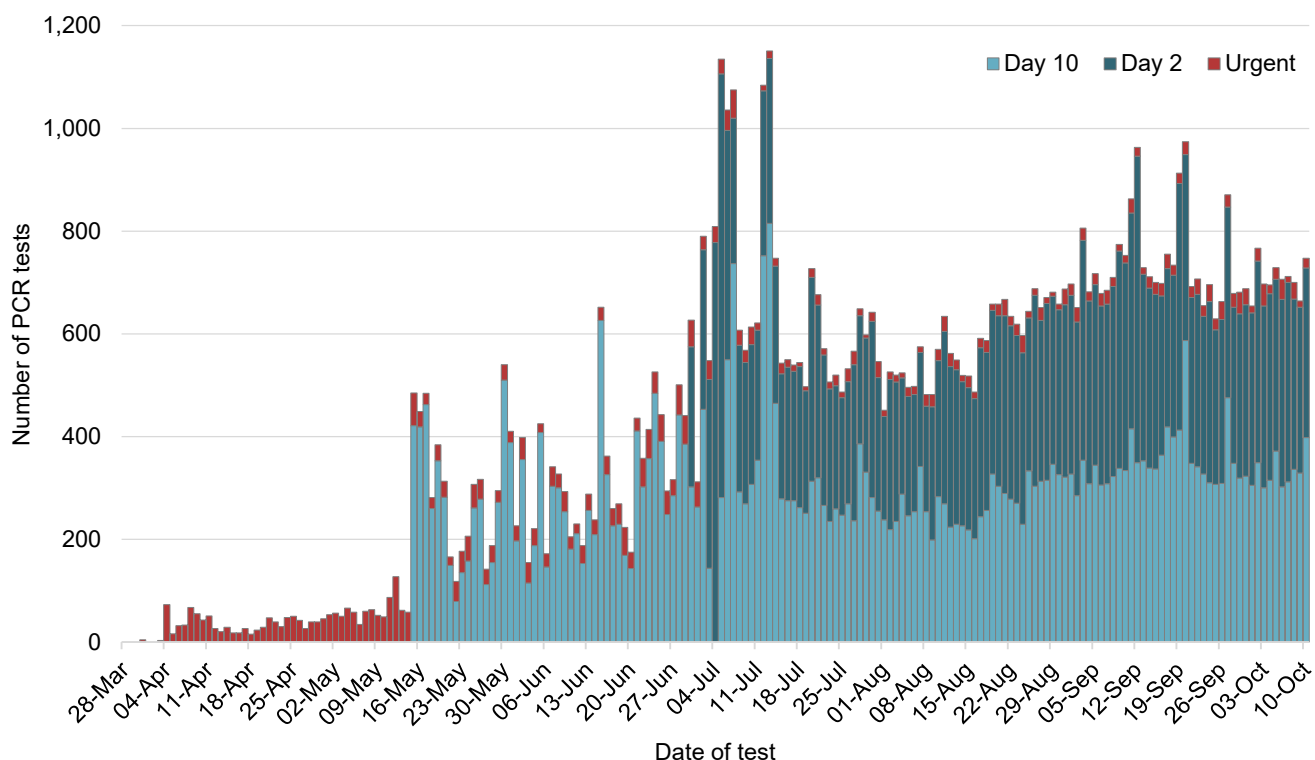
The date of the first positive test is used for cases who did not report symptoms.

Interpretation: The number of new cases in returned travellers has decreased markedly since March in line with travel restrictions and declined further again since mid-July. There were 27 overseas-acquired cases reported in the week ending 10 October, 80% more than the previous week. Of the 27 overseas-acquired cases, nine cases were travellers returning with family.

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.

Figure 12. COVID-19 testing in returned travellers in hotel quarantine, reported from 29 March to 10 October, NSW, 2020



Interpretation: In the week ending 10 October, there were 4,953 tests conducted through the hotel quarantine screening programs. Of these, 12% were screening tests for domestic travellers from Victoria. Since hotel quarantine began on 29 March, a total of 85,226 PCR tests have been conducted with 421 overseas-acquired cases and four interstate-acquired COVID-19 cases detected while in hotel quarantine.

SECTION 9: OTHER RESPIRATORY INFECTIONS IN NSW

Influenza and other respiratory virus cases and tests reported in NSW, up to 4 October 2020

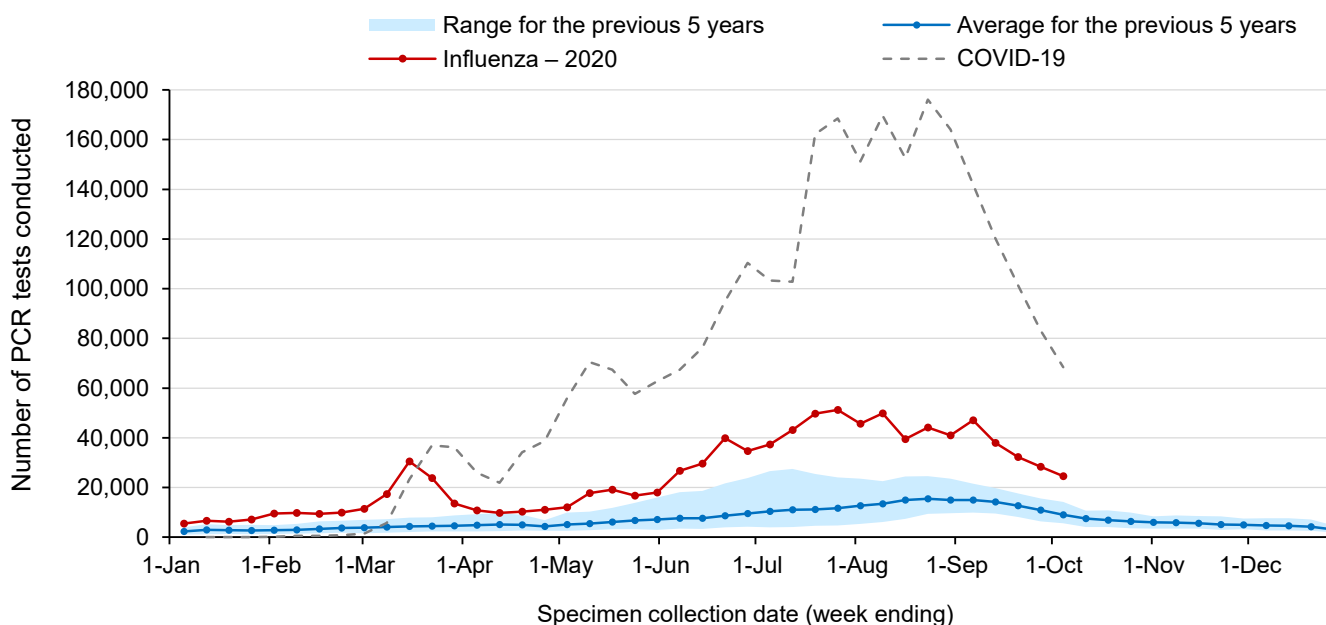
In NSW, routine surveillance for influenza and other respiratory viruses is conducted through sentinel laboratories. The number of all PCR tests (positive and negative) are provided to NSW Health by participating laboratories each week. Testing counts reflect the number of influenza PCR tests conducted;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

The most recent data available is for testing carried out to 4 October. A total of 989,115 influenza tests have been performed at participating laboratories to 4 October, with 24,539 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 4 October 2020

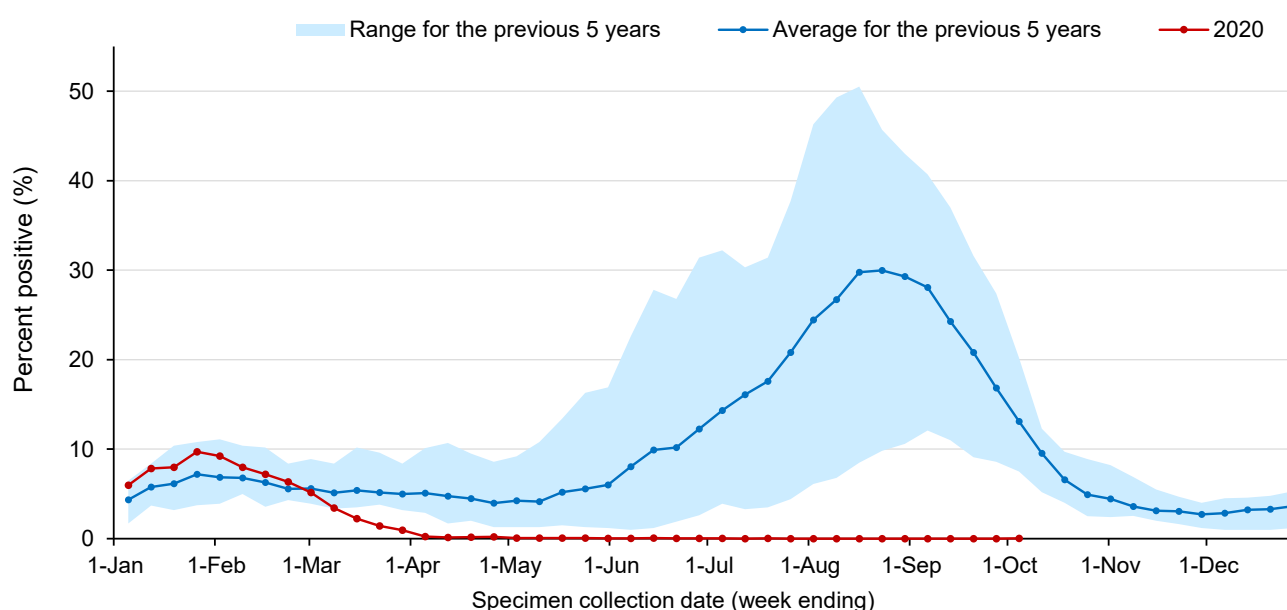


Interpretation: In every week this year, the number of influenza tests performed has exceeded the previous five-year average.

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.

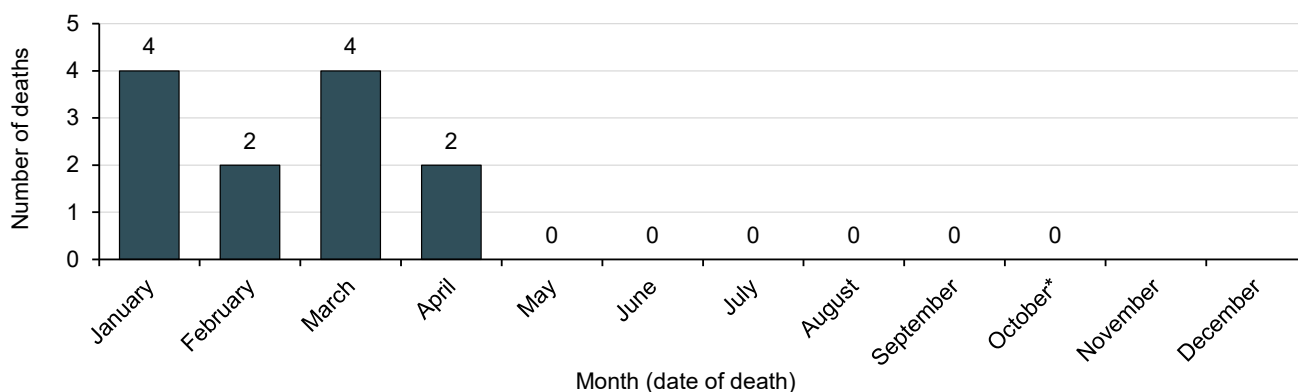
Figure 14. Proportion of tests positive for influenza, to 4 October 2020



Interpretation: In the week ending 4 October, the percent of influenza tests that were positive continued to be very low (less than 0.1%), 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 4 October 2020



Note: *month to date.

Interpretation: No influenza deaths were reported in the week ending 4 October. The number of influenza-related deaths identified via coroner’s reports and death registrations from 1 January to 4 October 2020 is lower than the same period last year (12 deaths in 2020 compared with 293 in 2019).³ Two-thirds of the deaths were in people aged 65 years and over.

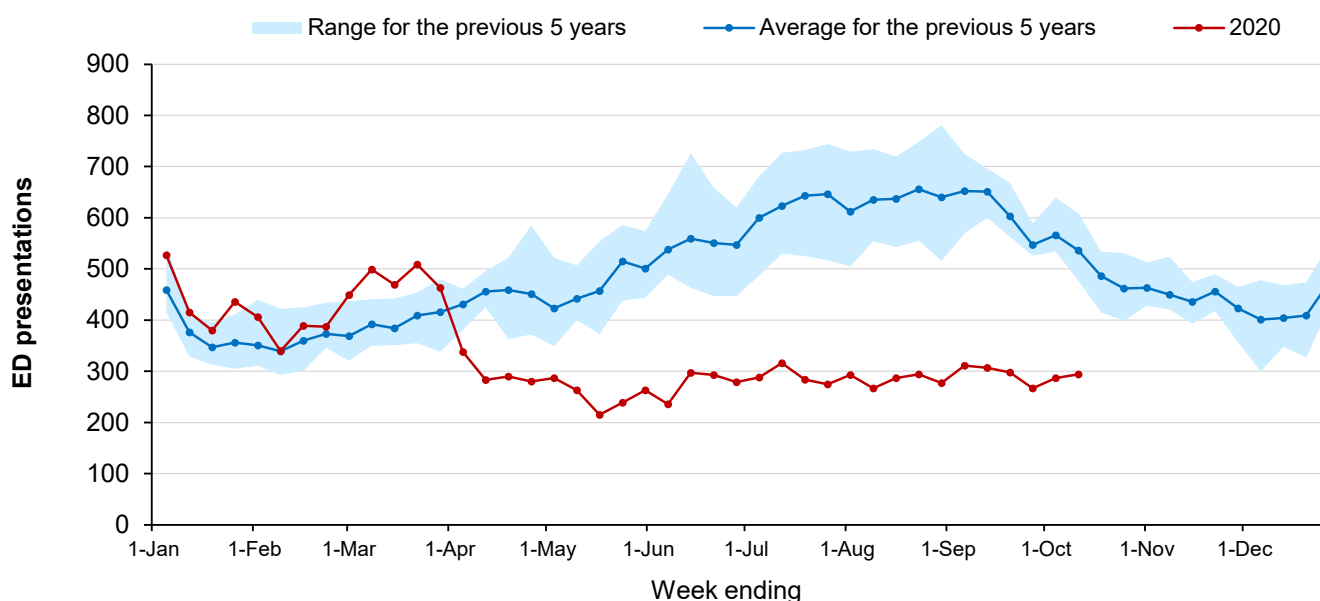
³ Includes deaths in people with laboratory-confirmed influenza.

How are emergency department presentations for pneumonia tracking?

The two figures below show weekly pneumonia and bronchiolitis presentations to Emergency Departments in NSW, using PHREDSS.⁴ 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.

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 11 October 2020

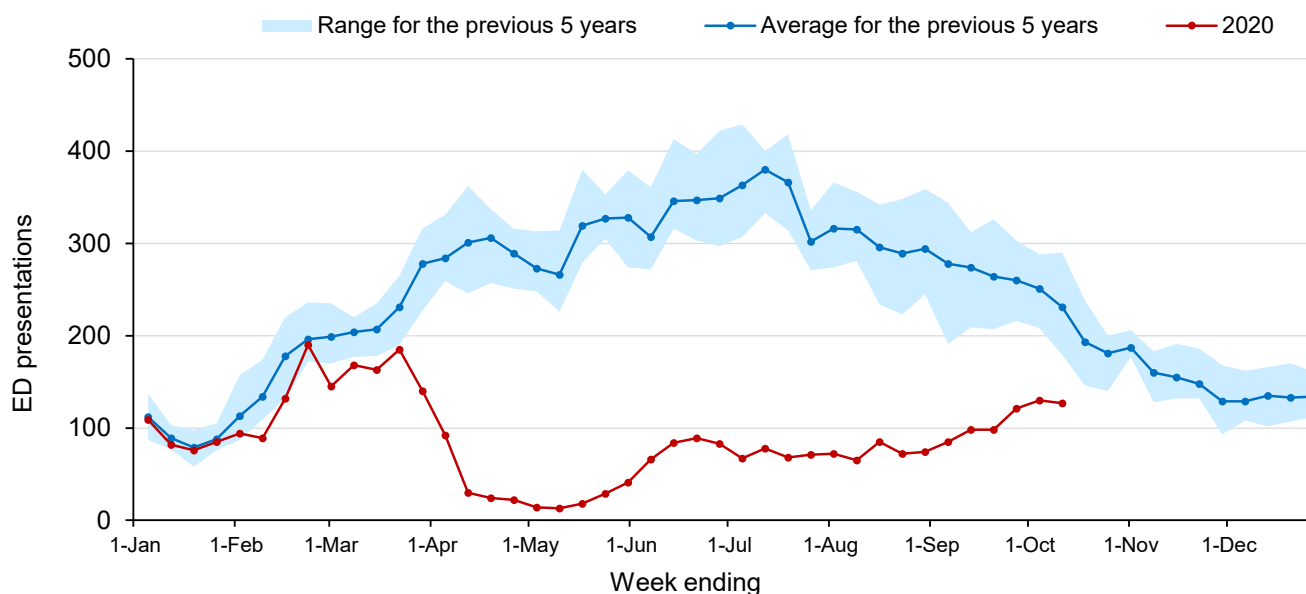


Interpretation: Pneumonia presentations include people with diagnoses of viral, bacterial, atypical or unspecified pneumonia, and Legionnaires’ disease, but excludes ‘pneumonia with influenza’ and provides an indicator of more severe respiratory conditions.

Pneumonia presentations decreased from the end of March and have continued to remain well below the usual range for this time of year.

⁴ 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).

Figure 17. Emergency Department bronchiolitis presentations in NSW by week, to 11 October 2020

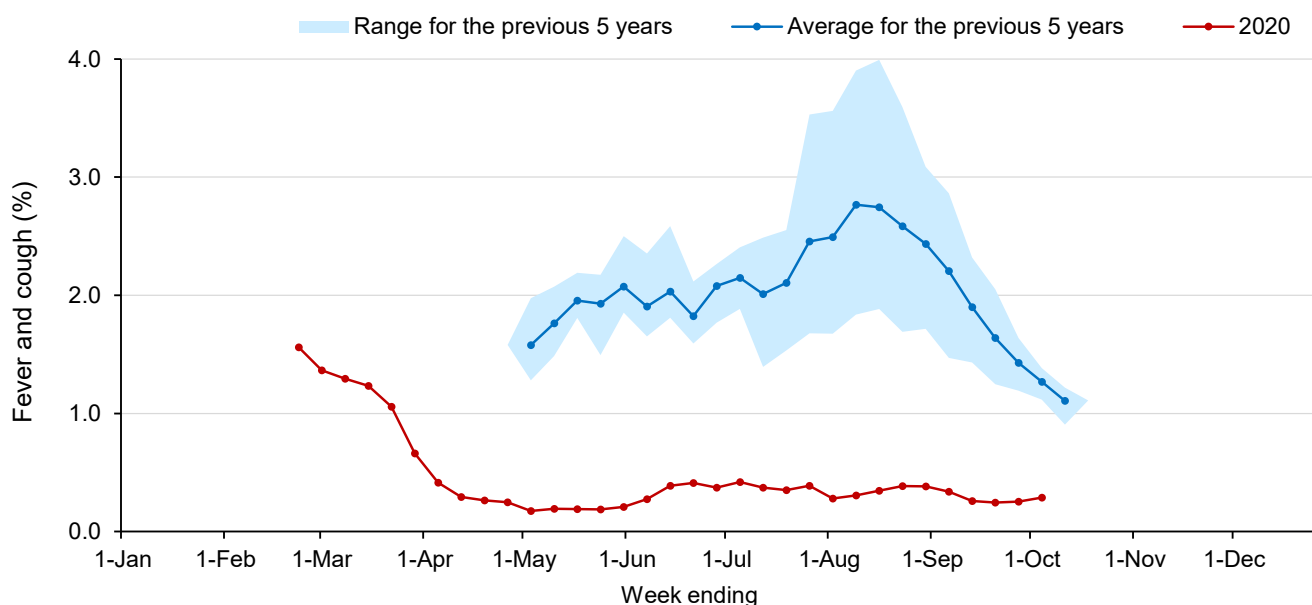


Interpretation: Bronchiolitis is a common disease of infants often caused by respiratory syncytial virus (RSV). Bronchiolitis presentations remain below the usual range for this time of year but have increased since early September. This increase corresponds to an increase in RSV detections.

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 18. Proportion of FluTracker participants in NSW reporting influenza-like illness, to 4 October 2020



Interpretation: In NSW in the week ending 4 October, of the 21,817 people surveyed, 63 people (0.29%) reported flu-like symptoms. The proportion of people reporting symptoms remains well below the usual range for this time of year.

APPENDIX A: COVID-19 PCR TESTS IN NSW

Local Health District	Local Government Area	Week ending				Total	
		10 October		3 October			
		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	2232	6.3	2365	6.7	105467	298.9
Far West	Balranald	11	4.7	14	6.0	405	173.2
	Broken Hill	79	4.5	64	3.7	4223	241.6
	Central Darling	0	0.0	10	5.4	306	166.4
	Wentworth	65	9.2	58	8.2	1820	258.1
	LHD Total ²	155	5.1	146	4.8	6754	224.1
Hunter New England	Armidale Regional	157	5.1	126	4.1	8155	265.0
	Cessnock	201	3.4	262	4.4	13654	227.6
	Dungog	33	3.5	27	2.9	2064	219.0
	Glen Innes Severn	22	2.5	33	3.7	1615	182.1
	Gunnedah	57	4.5	57	4.5	2833	223.4
	Gwydir	8	1.5	17	3.2	592	110.6
	Inverell	55	3.3	76	4.5	3706	219.4
	Lake Macquarie	1408	6.8	1468	7.1	72082	350.1
	Liverpool Plains	31	3.9	23	2.9	1826	231.1
	Maitland	559	6.6	587	6.9	33247	390.4
	Mid-Coast	360	3.8	368	3.9	19735	210.3
	Moree Plains	48	3.6	52	3.9	2653	200.1
	Muswellbrook	79	4.8	64	3.9	3969	242.4
	Narrabri	41	3.1	29	2.2	2405	183.1
	Newcastle	1319	8.0	1432	8.7	72223	436.2
	Port Stephens	361	4.9	386	5.3	24885	338.7
	Singleton	140	6.0	150	6.4	8065	343.8
	Tamworth Regional	371	5.9	362	5.8	18946	302.9
	Tenterfield	16	2.4	13	2.0	955	144.8
	Upper Hunter Shire	60	4.2	66	4.7	3516	248.0
	Uralla	23	3.8	19	3.2	1056	175.7
Walcha	6	1.9	14	4.5	766	244.4	
LHD Total ²	5350	5.6	5628	5.9	298699	313.6	
Illawarra Shoalhaven	Kiama	180	7.7	164	7.0	7831	334.9
	Shellharbour	544	7.4	502	6.9	24250	331.1
	Shoalhaven	552	5.2	591	5.6	27827	263.4
	Wollongong	1471	6.7	1476	6.8	64560	296.0
	LHD Total ²	2747	6.6	2733	6.5	124468	296.6
Mid North Coast	Bellingen	57	4.4	71	5.5	2935	225.8
	Coffs Harbour	412	5.3	407	5.3	16641	215.3
	Kempsey	163	5.5	170	5.7	7531	253.2
	Nambucca	72	3.6	95	4.8	4084	206.2
	Port Macquarie-Hastings	467	5.5	454	5.4	21230	251.2
	LHD Total ²	1171	5.2	1197	5.3	52421	232.3

Local Health District	Local Government Area	Week ending				Total	
		10 October		3 October		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Murrumbidgee	Albury	446	8.2	419	7.7	13240	243.6
	Berrigan	37	4.2	41	4.7	1543	176.3
	Bland	32	5.4	30	5.0	1296	217.0
	Carrathool	8	2.9	10	3.6	271	96.8
	Coolamon	22	5.1	19	4.4	1024	235.9
	Cootamundra-Gundagai Regional	55	4.9	53	4.7	2361	210.2
	Edward River	44	4.8	45	5.0	2132	234.7
	Federation	88	7.1	69	5.6	2178	175.1
	Greater Hume Shire	59	5.5	62	5.8	2520	234.1
	Griffith	187	6.9	189	7.0	6983	258.4
	Hay	7	2.4	8	2.7	429	145.5
	Hilltops	90	4.8	97	5.2	4183	223.6
	Junee	16	2.4	15	2.2	1040	155.6
	Lachlan ¹	13	2.1	11	1.8	808	133.0
	Leeton	55	4.8	55	4.8	2104	183.8
	Lockhart	18	5.5	16	4.9	663	201.8
	Murray River	28	2.3	14	1.2	646	53.3
	Murrumbidgee	12	3.1	22	5.6	649	165.7
	Narrandera	21	3.6	18	3.1	911	154.4
	Snowy Valleys	81	5.6	38	2.6	3645	251.7
	Temora	24	3.8	24	3.8	1078	170.9
Wagga Wagga	540	8.3	507	7.8	20096	308.0	
LHD Total ²	1876	6.3	1756	5.9	69264	232.3	
Nepean Blue Mountains	Blue Mountains	784	9.9	820	10.4	34278	433.3
	Hawkesbury	643	9.6	567	8.4	24439	363.2
	Lithgow	102	4.7	88	4.1	5311	245.8
	Penrith	2039	9.6	1848	8.7	86774	407.4
	LHD Total ²	3543	9.1	3293	8.4	149576	382.6
Northern NSW	Ballina	186	4.2	273	6.1	11740	263.1
	Byron	255	7.3	270	7.7	10784	307.4
	Clarence Valley	187	3.6	201	3.9	9342	180.8
	Kyogle	29	3.3	31	3.5	1443	164.1
	Lismore	194	4.4	226	5.2	12078	276.4
	Richmond Valley	110	4.7	101	4.3	5702	243.0
	Tenterfield	16	2.4	13	2.0	955	144.8
	Tweed	475	4.9	455	4.7	20101	207.2
LHD Total ²	1441	4.6	1560	5.0	71428	230.1	

Local Health District	Local Government Area	Week ending				Total	
		10 October		3 October		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Northern Sydney	Hornsby	1250	8.2	1180	7.8	46493	305.8
	Hunters Hill	284	19.0	225	15.0	11003	734.5
	Ku-ring-gai	1436	11.3	1476	11.6	56946	447.9
	Lane Cove	736	18.3	741	18.5	30118	750.0
	Mosman	301	9.7	285	9.2	11736	378.8
	North Sydney	638	8.5	541	7.2	22195	295.9
	Northern Beaches	2107	7.7	2273	8.3	93600	342.2
	Parramatta ¹	2438	9.5	1906	7.4	70351	273.5
	Ryde	1275	9.7	1032	7.9	41544	316.5
	Willoughby	622	7.7	584	7.2	22436	276.3
	LHD Total ²	9133	9.6	8677	9.1	349239	365.3
South Eastern Sydney	Bayside	1312	7.4	1386	7.8	47845	268.2
	Georges River	1195	7.5	1129	7.1	42046	263.7
	Randwick	1803	11.6	1824	11.7	67271	432.2
	Sutherland Shire	2003	8.7	2186	9.5	90481	392.4
	Sydney ¹	3278	13.3	3134	12.7	101644	412.6
	Waverley	901	12.1	924	12.4	38625	519.9
	Woollahra	789	13.3	785	13.2	31629	532.6
	LHD Total ²	9455	9.9	9524	9.9	353889	369.0
South Western Sydney	Camden	1433	14.1	1149	11.3	48564	478.8
	Campbelltown	1839	10.8	1671	9.8	67604	395.5
	Canterbury-Bankstown ¹	2676	7.1	2619	6.9	109612	290.0
	Fairfield	1146	5.4	1067	5.0	58578	276.7
	Liverpool	1931	8.5	1709	7.5	85180	374.3
	Wingecarribee	472	9.2	407	8.0	19482	381.0
	Wollondilly	366	6.9	286	5.4	14734	277.2
	LHD Total ²	8493	8.2	7532	7.3	349703	336.7
Southern NSW	Bega Valley	194	5.6	155	4.5	7734	224.3
	Eurobodalla	195	5.1	223	5.8	13082	340.0
	Goulburn Mulwaree	218	7.0	186	6.0	8049	258.5
	Queanbeyan-Palerang Regional	257	4.2	266	4.4	11286	184.7
	Snowy Monaro Regional	83	4.0	120	5.8	4963	238.7
	Upper Lachlan Shire	46	5.7	41	5.1	1736	215.4
	Yass Valley	41	2.4	44	2.6	2800	163.9
	LHD Total ²	1034	4.8	1037	4.8	49677	228.9

Local Health District	Local Government Area	Week ending				Total	
		10 October		3 October		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population		
Sydney	Burwood	266	6.6	246	6.1	9050	222.8
	Canada Bay	786	8.2	886	9.2	37407	389.4
	Canterbury-Bankstown ¹	2676	7.1	2619	6.9	109612	290.0
	Inner West	2042	10.2	2330	11.6	89207	444.2
	Strathfield	547	11.7	498	10.6	16814	358.3
	Sydney ¹	3278	13.3	3134	12.7	101644	412.6
	LHD Total ²	6810	9.8	7156	10.3	270982	388.9
Western NSW	Bathurst Regional	300	6.9	349	8.0	13198	302.6
	Blayney	39	5.3	77	10.4	2280	309.0
	Bogan	11	4.3	11	4.3	494	191.5
	Bourke	6	2.3	7	2.7	387	149.4
	Brewarrina	8	5.0	6	3.7	268	166.4
	Cabonne	58	4.3	45	3.3	2288	167.8
	Cobar	14	3.0	9	1.9	711	152.6
	Coonamble	20	5.1	13	3.3	738	186.5
	Cowra	54	4.2	64	5.0	2478	194.5
	Dubbo Regional	326	6.1	360	6.7	13280	247.2
	Forbes	26	2.6	36	3.6	1627	164.2
	Gilgandra	16	3.8	17	4.0	741	174.8
	Lachlan ¹	13	2.1	11	1.8	808	133.0
	Mid-Western Regional	148	5.9	143	5.7	6059	240.0
	Narromine	19	2.9	24	3.7	1285	197.2
	Oberon	23	4.3	24	4.4	1289	238.2
	Orange	402	9.5	432	10.2	14653	345.2
	Parkes	47	3.2	74	5.0	3258	219.6
	Walgett	29	4.9	13	2.2	1309	219.9
	Warren	10	3.7	21	7.8	1004	372.3
	Warrumbungle Shire	33	3.6	28	3.0	2111	227.5
Weddin	8	2.2	10	2.8	643	178.0	
LHD Total ²	1605	5.6	1770	6.2	70667	247.9	
Western Sydney	Blacktown	3065	8.2	3065	8.2	126319	337.3
	Cumberland	2090	8.7	1825	7.6	75097	310.9
	Parramatta ¹	2438	9.5	1906	7.4	70351	273.5
	The Hills Shire	2354	13.2	1902	10.7	76317	428.8
	LHD Total ²	9517	9.0	8416	8.0	337379	320.3
NSW Total³		70,978	8.8	69,452	8.6	2,822,817	348.9

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 4 OCTOBER 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—4 Oct 2020											
Total	989,115	6,621	0.67%	953	0.10%	7,112	9,040	6,350	120,611	2,051	4,422
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	<0.01%	1,251	89	209	31,589	79	427
30 August	174,594	9	0.01%	2	<0.01%	1,137	37	299	13,926	14	235
27 September	145,489	6	<0.01%	1	<0.01%	938	35	866	8,416	61	259
Week ending											
4 October	24,539	5	0.02%	2	0.01%	203	9	426	1,229	10	89

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

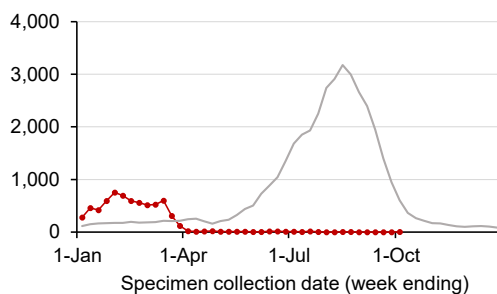
RSV - Respiratory syncytial virus

*Five-week period

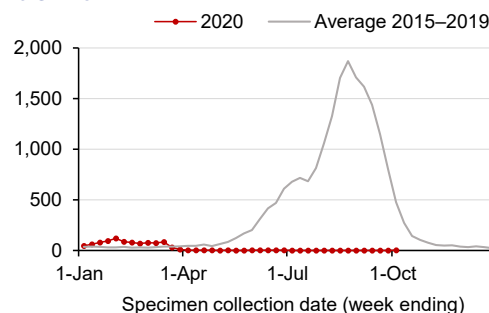
APPENDIX C: NUMBER OF POSITIVE PCR TEST RESULTS FOR INFLUENZA AND OTHER RESPIRATORY VIRUSES AT SENTINEL NSW LABORATORIES, 1 JANUARY TO 4 OCTOBER 2020

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

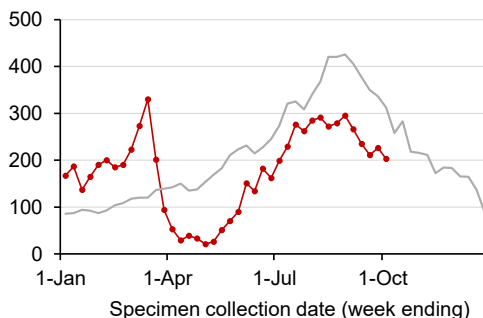
Influenza A



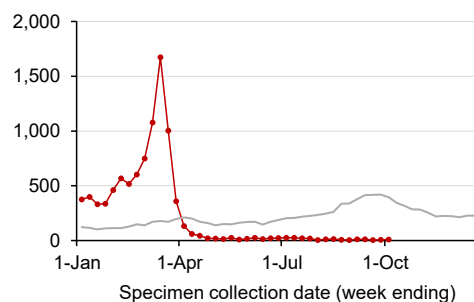
Influenza B



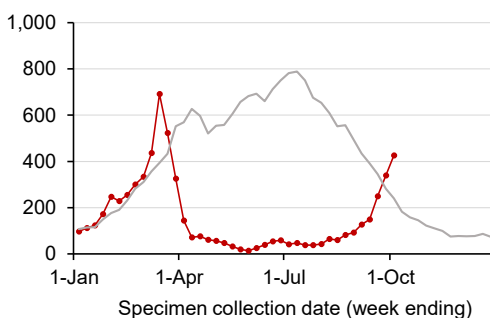
Adenovirus



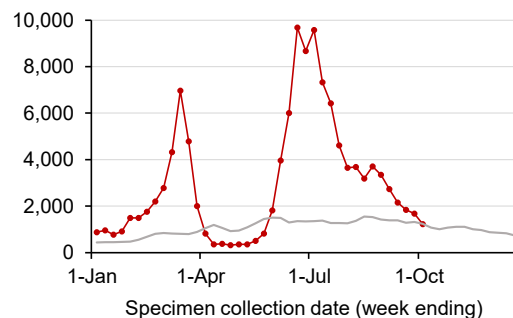
Parainfluenza



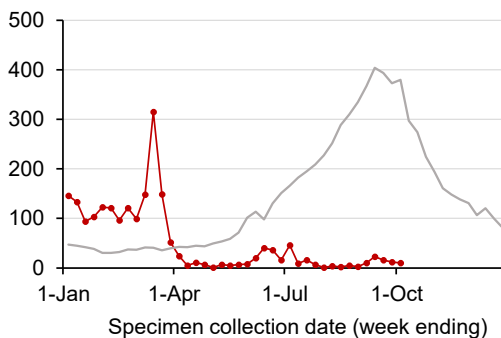
Respiratory syncytial virus (RSV)



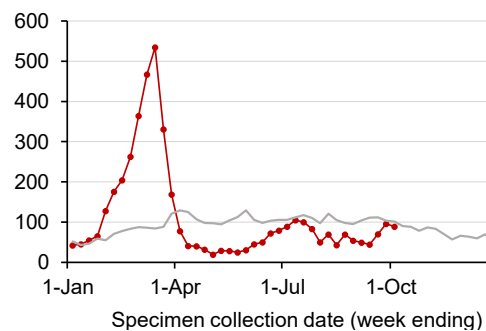
Rhinovirus



Human metapneumovirus (HMPV)



Enterovirus



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	<p>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).</p> <p>Case counts include:</p> <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	<p>This date is provided to NSW Health by the laboratory. Laboratories prioritise notification of positive results to allow prompt public health action.</p> <p>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.</p> <p>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.</p>