

NSW Respiratory Surveillance Report - week ending 26 August 2023

COVID-19 activity is stable at low levels, influenza activity has further declined and respiratory syncytial virus (RSV) activity is stable.

Summary

There was minimal change in COVID-19 activity over the last week. Influenza continues to decline, is circulating at moderate levels. RSV continues to circulate at moderate levels with a gradual decline in positivity.

Data sources and methods

The data source for this report updates as new information becomes available. Therefore, this report cannot be directly compared to previous versions of the NSW Respiratory Surveillance Report or to previous reporting periods. For additional information on the data sources and methods presented within this report please refer to [COVID-19 surveillance report data sources and methodology](#).

Public Health Rapid, Emergency, Disease and Syndromic Surveillance

The PHREDSS system provides daily information about presentations to NSW public hospital emergency departments and subsequent admission to hospital categorised by symptom profile. Here we report on COVID-19, influenza-like illness and bronchiolitis (which is mainly caused by respiratory syncytial virus, RSV). These PHREDSS indicators, particularly number of people admitted to hospital, are useful for monitoring the severity of illness and impact on the health system.

Interpretation: The number of COVID-19 presentations to EDs remained stable. The proportion being admitted dipped in the past two weeks and returned to prior levels. ED presentations for influenza-like illness declined, with the proportion requiring admission remaining stable. Bronchiolitis presentations in young children were stable.

Figure 1. 'COVID-19' weekly counts of unplanned emergency department (ED) presentations and admission following presentation, 2023, persons of all ages.

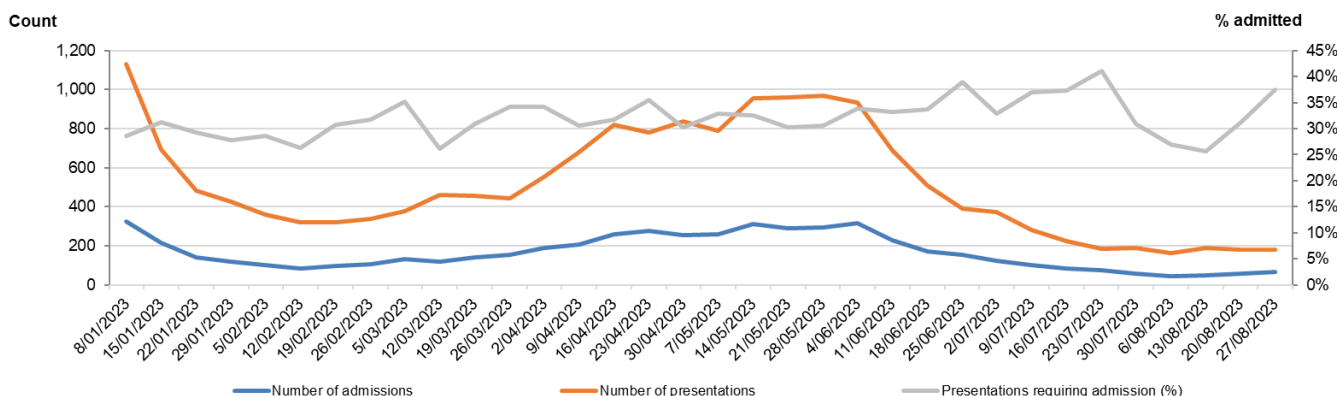


Figure 2. 'Influenza-like illness' weekly counts of unplanned emergency department (ED) presentations and admission following presentation, 2023, persons of all ages.

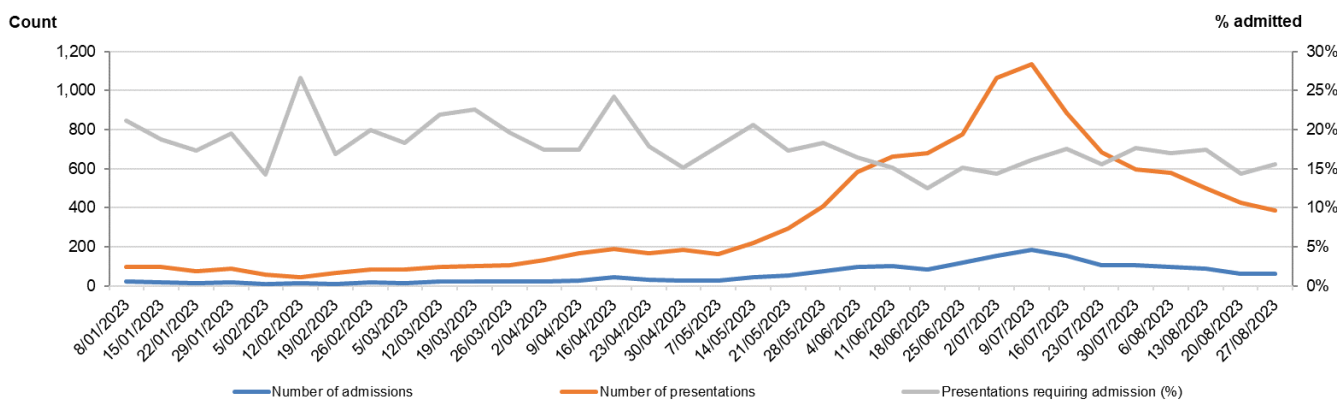
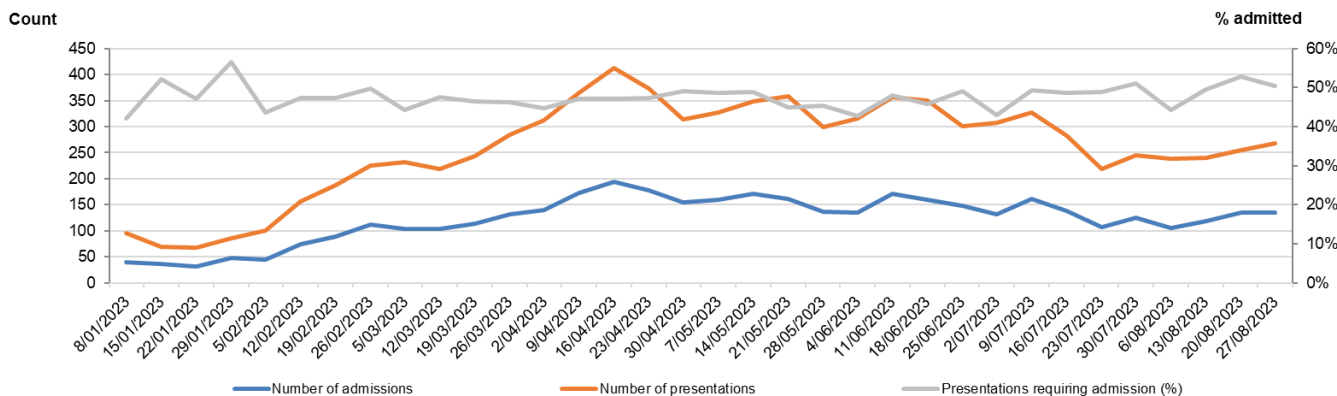


Figure 3. Bronchiolitis weekly counts of unplanned emergency department (ED) presentations and admission following presentation, 2023, children aged 0-4 years.



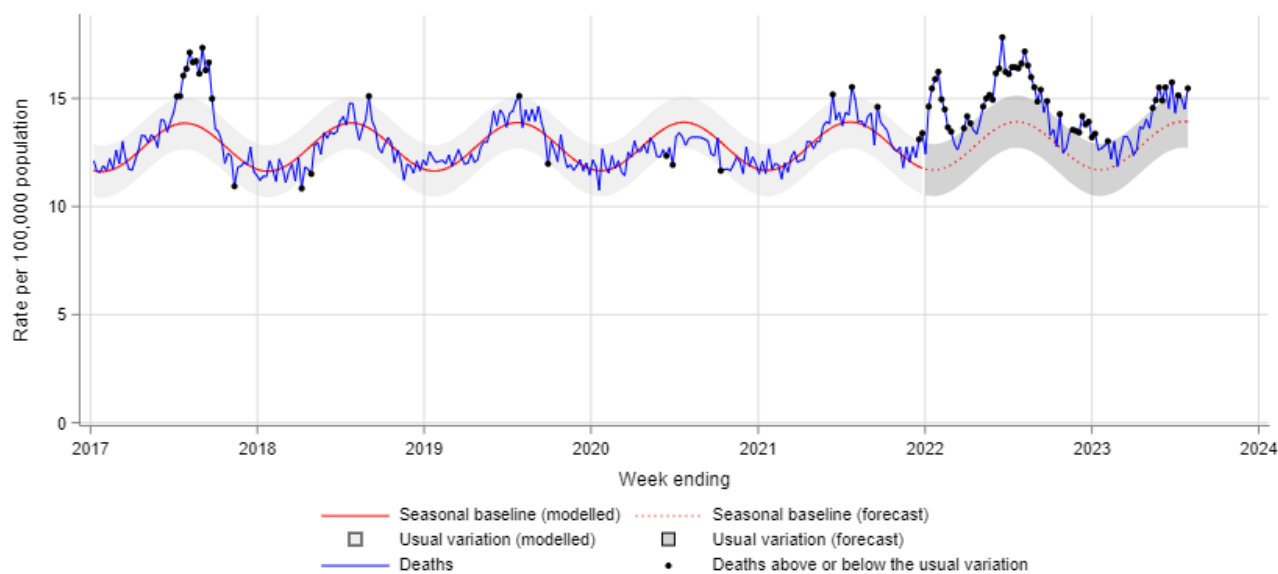
Death surveillance

All-cause mortality

All-cause mortality provides a comprehensive measure of total impact of health threats, such as severe influenza period, COVID-19 and heatwaves, by counting both deaths directly attributable and indirectly associated with the threat. Monitoring all-cause mortality allows rapid assessment of changing patterns of mortality, and whether the number of deaths in a period is more or less than expected. In this report mortality is determined from counts of deaths in the NSW Registry of Births Deaths & Marriages. The rate of death per week is presented with the seasonal baseline, which summarises the historic (2017-2021) rate of deaths for corresponding week (red dashed line, grey shading indicates the 95% confidence interval). This indicator provides a signal of the impact from any significant and prolonged cause on the NSW population.

Interpretation: Weekly lag adjusted all-cause mortality is above the seasonal baseline.

Figure 4. All-cause death rate per 100,000 population, all ages, 2017 to 30 July 2023



Notes:

In this report, due to the time interval between a death occurring and the date on which the death is registered, only deaths reported 4 weeks prior to the date of analysis are used. Deaths are lag adjusted for the weeks ending 25 June 2023 to 30 July 2023. For additional information see data sources and methods for details.

Death rates presented in this report are not directly translatable to analyses in the [ABS Provisional Mortality Statistics and Actuaries Institute COVID-19 Working Group](#) reports which make specific comparisons of mortality in the pre and during pandemic periods.

Notifications of COVID-19, influenza and RSV

Notification data is obtained from laboratory tests for infections, and for COVID-19 only includes tests reported by the public to NSW Health. This indicator provides information about community infection.

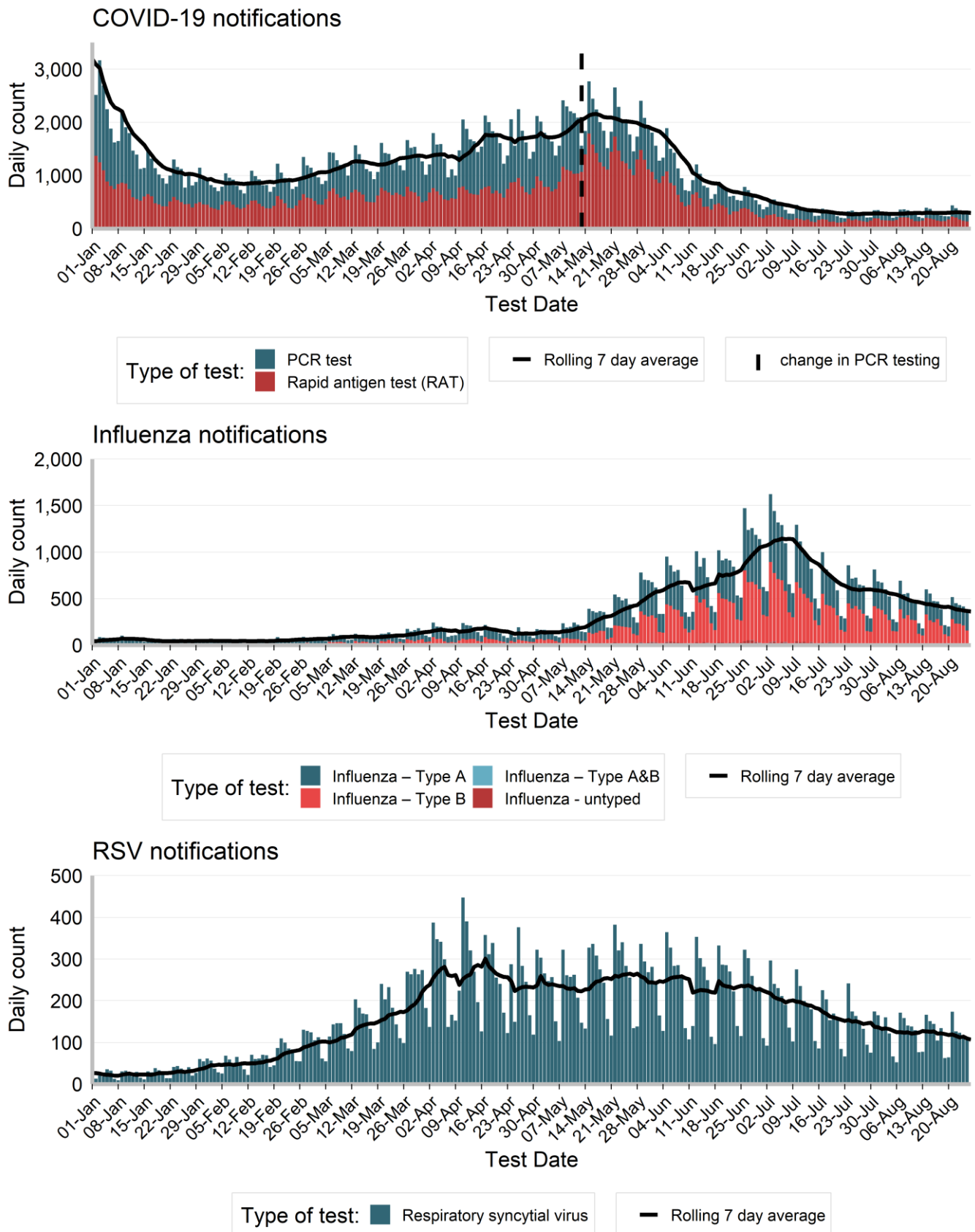
Interpretation: Influenza continues to be the most common respiratory virus notified. The distribution of COVID-19, influenza and RSV notifications by gender, age, Local Health District and Aboriginal status in the past week was similar to previous weeks

Table 1: Notifications of COVID-19, influenza and RSV, NSW, tested in the week ending 26 August 2023.

	COVID		Influenza		RSV	
	Week ending 26 August 2023	Year to Date	Week ending 26 August 2023	Year to Date	Week ending 26 August 2023	Year to Date
Gender						
Female	1,230	152,531(58%)	1,289	40,131(50%)	361	19,787(52%)
Male	832	111,097(42%)	1,242	39,286(49%)	386	18,319(48%)
Age group (years)						
0-4	95	9,006(3%)	304	11,047(14%)	343	20,524(54%)
5-9	87	8,227(3%)	536	16,997(21%)	51	2,085(5%)
10-19	167	21,590(8%)	533	15,624(20%)	67	1,715(4%)
20-29	187	29,728(11%)	244	6,219(8%)	29	1,382(4%)
30-39	299	39,567(15%)	343	10,228(13%)	27	1,780(5%)
40-49	300	38,601(15%)	237	8,212(10%)	28	1,385(4%)
50-59	279	36,283(14%)	136	4,292(5%)	46	1,904(5%)
60-69	263	33,094(13%)	86	3,100(4%)	56	2,260(6%)
70-79	205	25,065(9%)	57	2,186(3%)	54	2,280(6%)
80-89	142	16,006(6%)	45	1,197(2%)	33	1,949(5%)
90+	48	6,741(3%)	7	328(0%)	13	841(2%)
Local Health District of residence						
Central Coast	127	12,512(5%)	51	2,641(3%)	24	1,815(5%)
Far West	6	754(0%)	14	132(0%)	6	204(1%)
Hunter New England	214	34,159(13%)	217	6,079(8%)	90	3,429(9%)
Illawarra Shoalhaven	123	16,635(6%)	192	3,678(5%)	28	1,850(5%)
Mid North Coast	51	6,001(2%)	35	1,919(2%)	14	687(2%)
Murrumbidgee	64	8,271(3%)	132	2,447(3%)	34	1,834(5%)
Nepean Blue Mountains	116	12,942(5%)	105	5,020(6%)	44	2,277(6%)
Northern NSW	40	7,634(3%)	66	2,909(4%)	21	800(2%)
Northern Sydney	294	32,043(12%)	351	9,896(12%)	113	5,005(13%)
South Eastern Sydney	231	28,004(11%)	270	6,792(9%)	88	3,543(9%)
South Western Sydney	236	27,682(10%)	383	12,405(16%)	89	5,428(14%)
Southern NSW	74	7,030(3%)	78	1,315(2%)	24	764(2%)
Sydney	192	22,029(8%)	152	5,031(6%)	44	2,415(6%)
Western NSW	57	10,515(4%)	72	2,013(3%)	15	1,658(4%)
Western Sydney	224	34,668(13%)	384	16,843(21%)	106	6,285(16%)
Aboriginal status						
Aboriginal and/or Torres Strait Islander	47	8,538(3%)	78	2,767(3%)	23	1,357(4%)
Not Aboriginal or Torres Strait Islander	1,579	193,739(73%)	1,375	41,526(52%)	337	18,348(48%)
Not Stated / Unknown	438	61,665(23%)	1,079	35,181(44%)	387	18,424(48%)
Total	2,064	263,942(100%)	2,532	79,474(100%)	747	38,129(100%)

Note: Total includes all cases including those with missing gender, age, LHD; or who interstate or overseas residents.

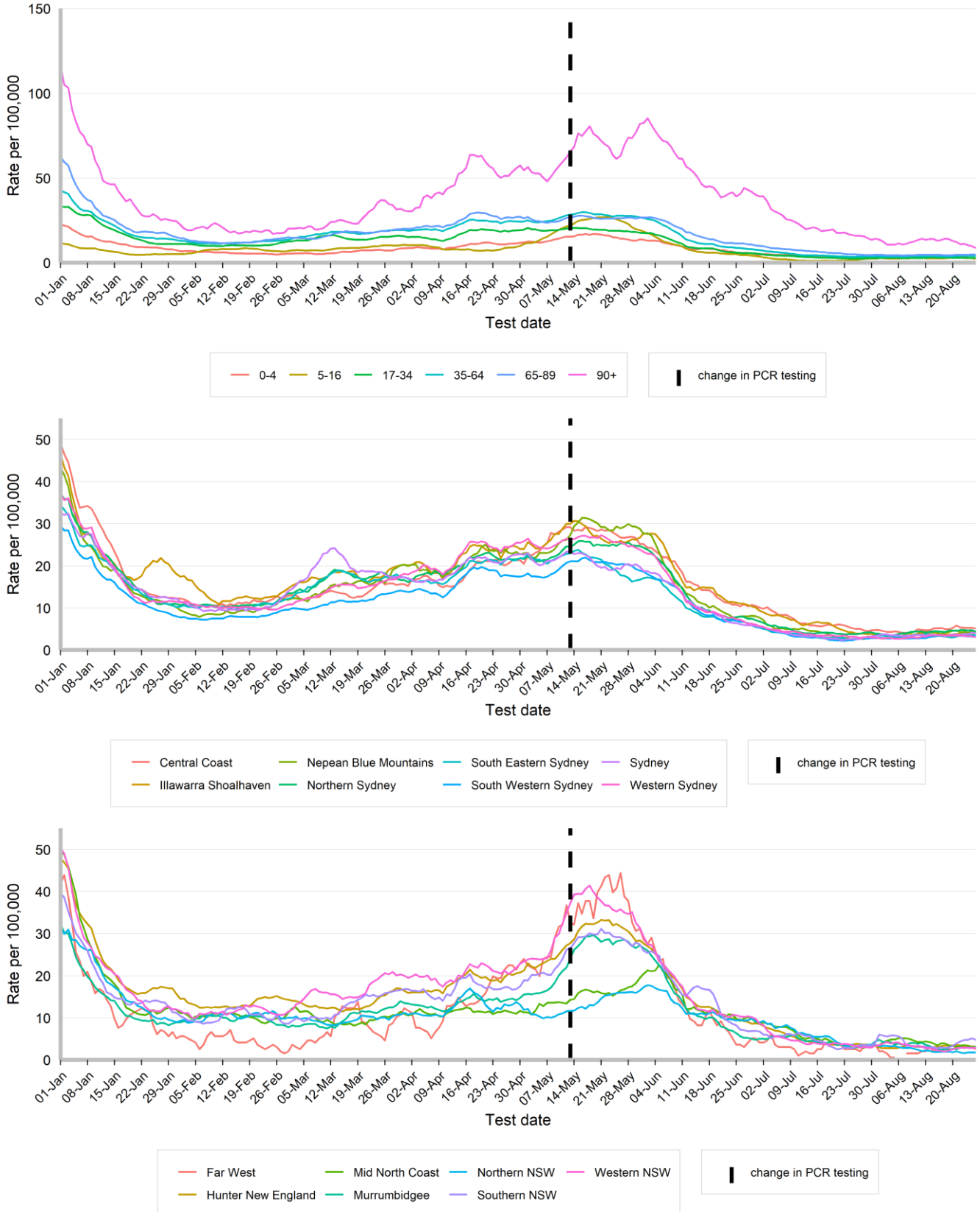
Figure 5. People notified with COVID-19, Influenza and RSV, by date of test and type of test performed, NSW, 01 January 2023 to 26 August 2023.



Rates of COVID-19 notifications per 100,000 population

Interpretation: Rates of COVID-19 notifications are stable across all ages. While declining, those aged 90 and over continue to experience the highest rate of notification.

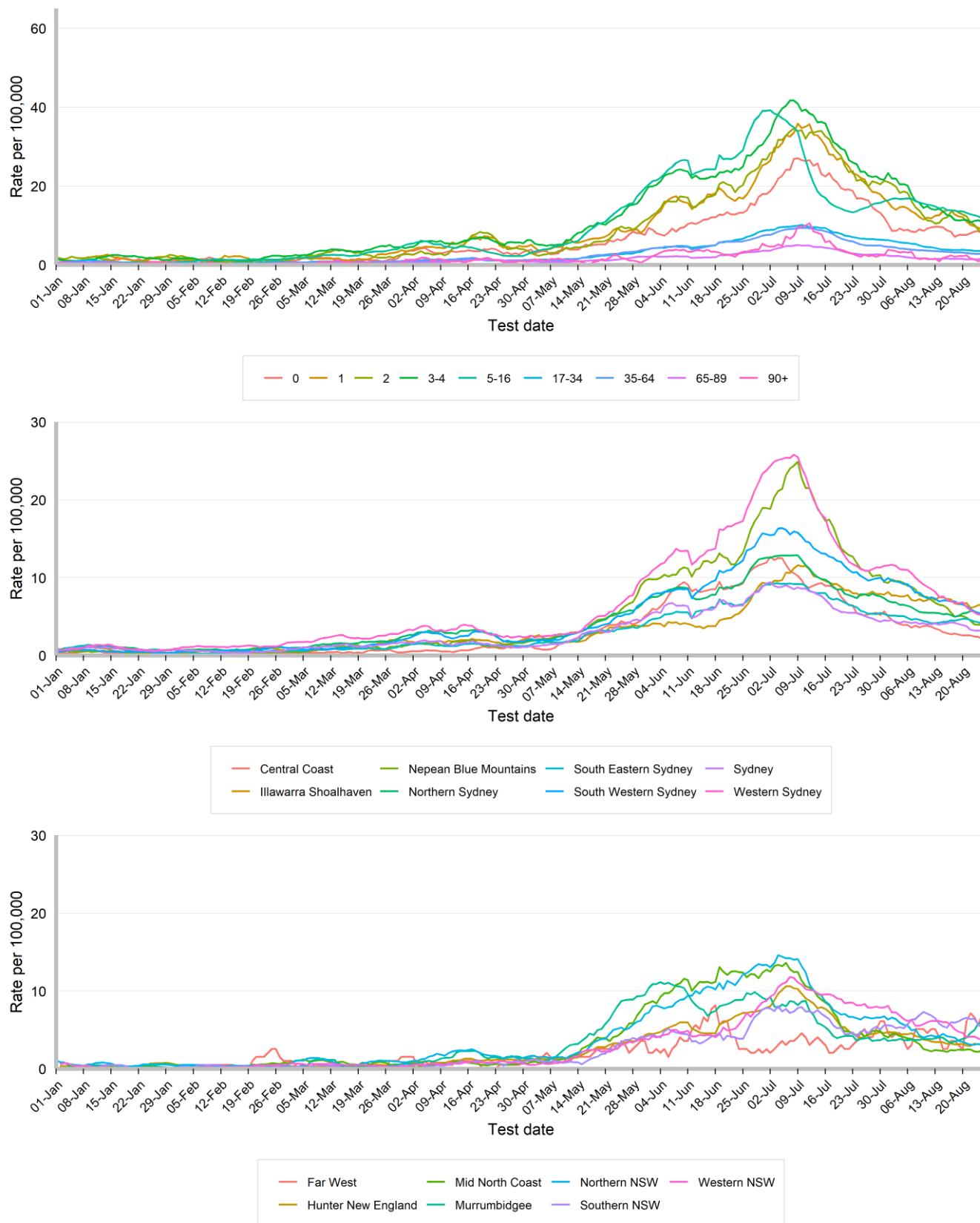
Figure 6. Daily seven-day rolling average rate of COVID-19 notifications per 100,000 population, by age group, Local Health District and test date, NSW, 01 January 2023 to 26 August 2023.



Rates of influenza notifications per 100,000 population

Interpretation: Rates of influenza notifications have been stable or declining across all age groups.

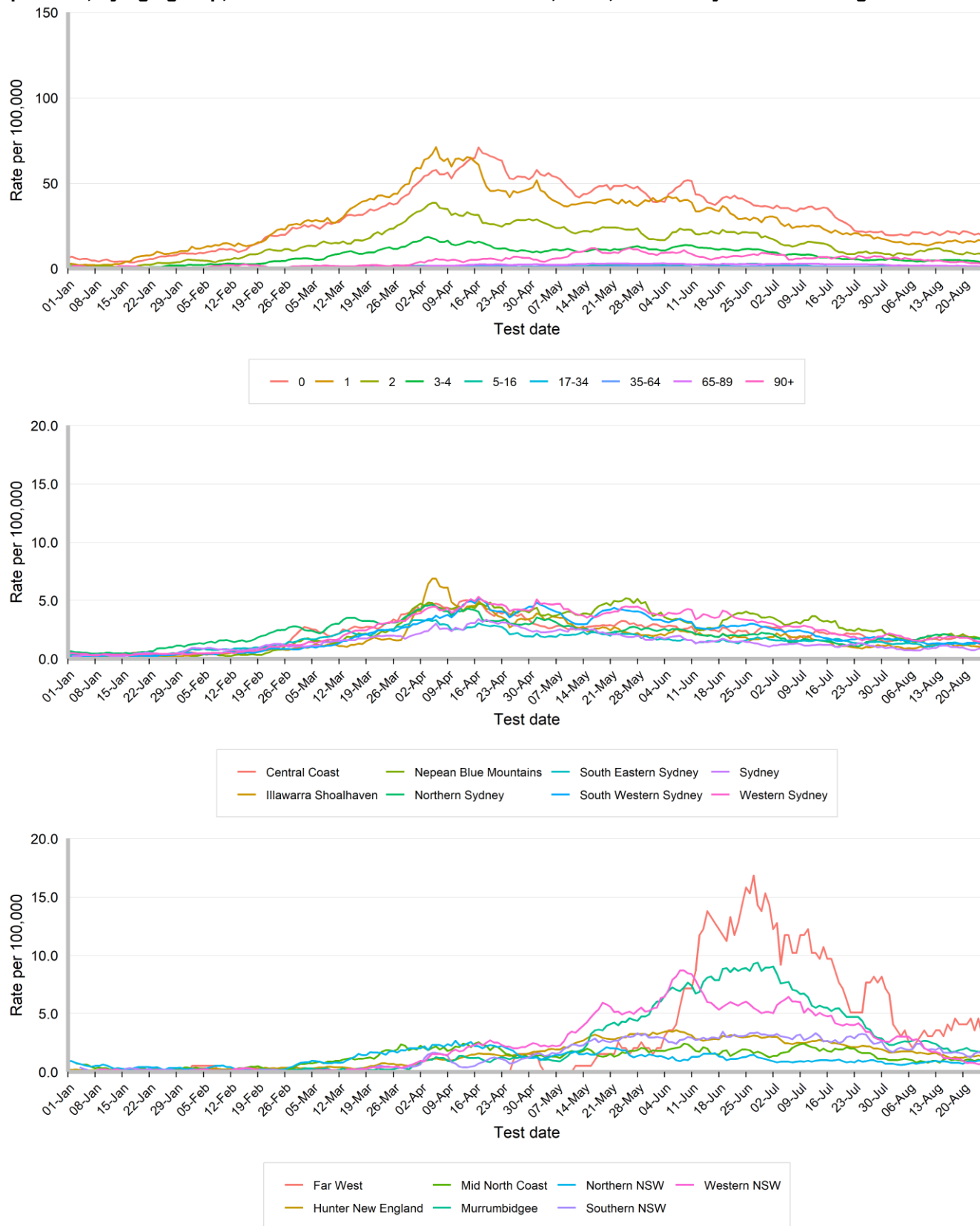
Figure 7. Daily seven-day rolling average rate of influenza notifications per 100,000 population, by age group, Local Health District and test date, NSW, 01 January 2023 to 26 August 2023.



Rates of respiratory syncytial virus notifications per 100,000 population

Interpretation: RSV notification rates are stable across all age groups.

Figure 8. Daily seven-day rolling average rate of respiratory syncytial virus notifications per 100,000 population, by age group, Local Health District and test date, NSW, 01 January 2023 to 26 August 2023.

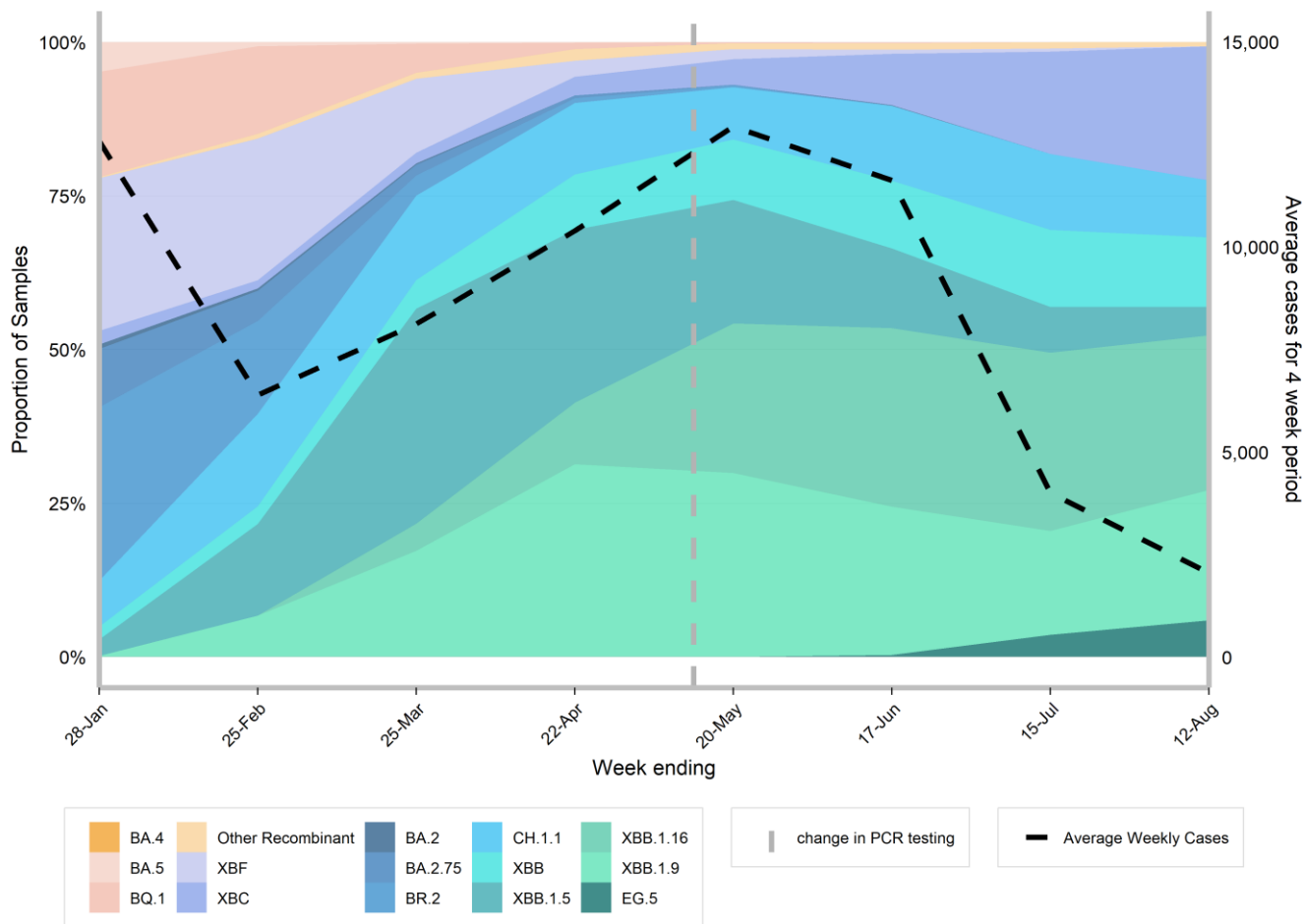


COVID-19 Whole Genome Sequencing

Specimens from people with COVID-19 undergo whole genome sequencing to identify and understand the behaviour of circulating variants. Community samples are sourced from cases who test via PCR at community pathology services, and may not necessarily reflect the distribution in all cases across NSW. NSW continues to monitor results from cases who are admitted from ICU to monitor for increased disease severity and from cases who return from overseas to monitor for new variants introduced into NSW. There is a lag between the date a PCR test is taken and the date that the results of WGS are reported.

Interpretation: XBB sub-lineages continue to dominate the variants circulating in the community. BA.2.86 has been detected in multiple countries but has not been detected in local samples.

Figure 9. Estimated distribution of COVID-19 sub-lineages in the community, 01 January 2023 to 12 August 2023.



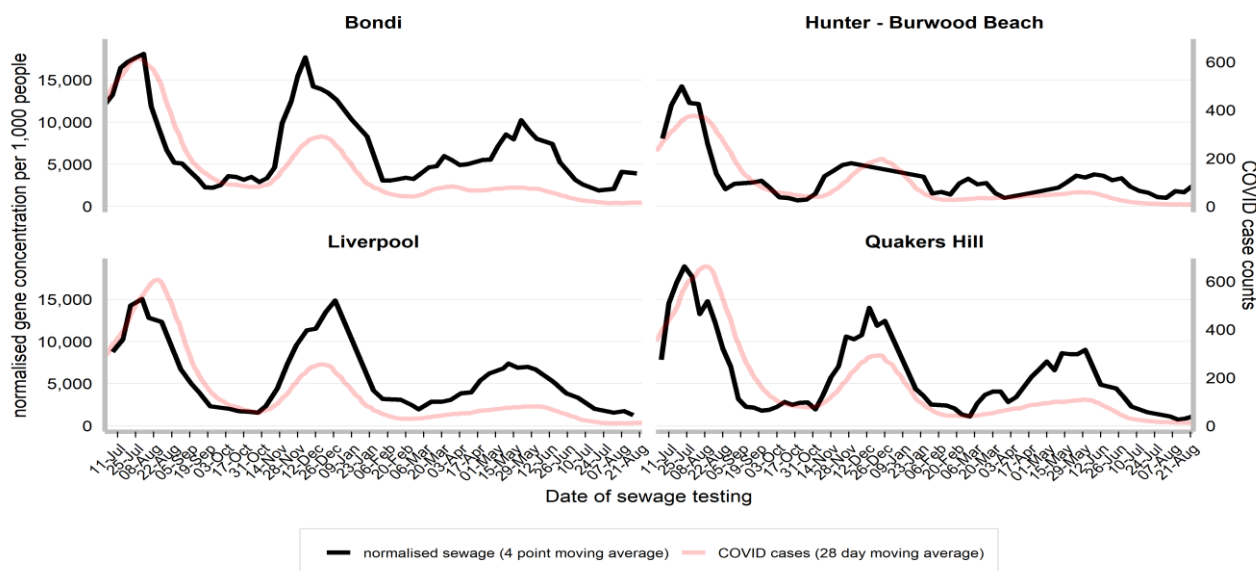
Other surveillance indicators

COVID-19 Sewage surveillance program

Trends are presented for Sydney Bondi, Quakers Hills, Liverpool and Burwood Beach sewage catchments from 5 February 2022 to the week ending 23 August 2023. For more information, please see the COVID-19 Sewage Surveillance Program website: <https://www.health.nsw.gov.au/Infectious/covid-19/Pages/sewage-surveillance.aspx>.

Interpretation: There was minimal change in gene concentrations per 1,000 people at catchment sites in the past week.

Figure 10. Gene concentration, per 1,000 people in each sewage catchment, 1 July 2022 to 23 August 2023.

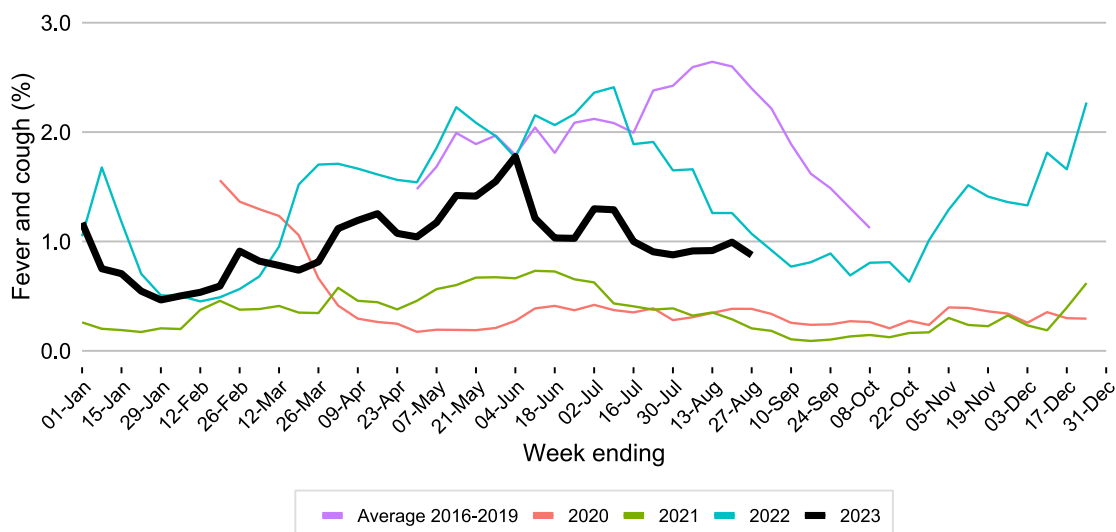


FluTracking and NSW sentinel laboratory network

FluTracking is an online health surveillance system used to detect epidemics of influenza across Australia and New Zealand. Participants complete an online survey each week to provide community level influenza-like illness surveillance, consistent surveillance of influenza activity across all jurisdictions over time, and year to year comparisons of the timing, attack rates and seriousness of influenza in the community. More information about FluTracking and ways to be involved are available here: <https://info.flutracking.net/about/>

Interpretation: Influenza-like illness reports to FluTracking are stable.

Figure 11. Proportion of FluTracking participants reporting influenza-like illness, NSW, 1 January to 27 August 2023.



Epidemiological week 34, ending 26 August 2023

The NSW sentinel laboratory network comprises of 13 public and private laboratories throughout NSW who provide additional data on positive and negative test results. This helps us to understand which respiratory viruses are circulating as well as how much.

Interpretation: The proportion of tests positive for COVID-19 and influenza is stable and RSV continues to decline. Human metapneumovirus (HPMV), rhinovirus and parainfluenza test positivity continues to increase.

Figure 12. Number and proportion of tests positive for COVID-19 at sentinel NSW laboratories, 1 January 2023 to 27 August 2023.

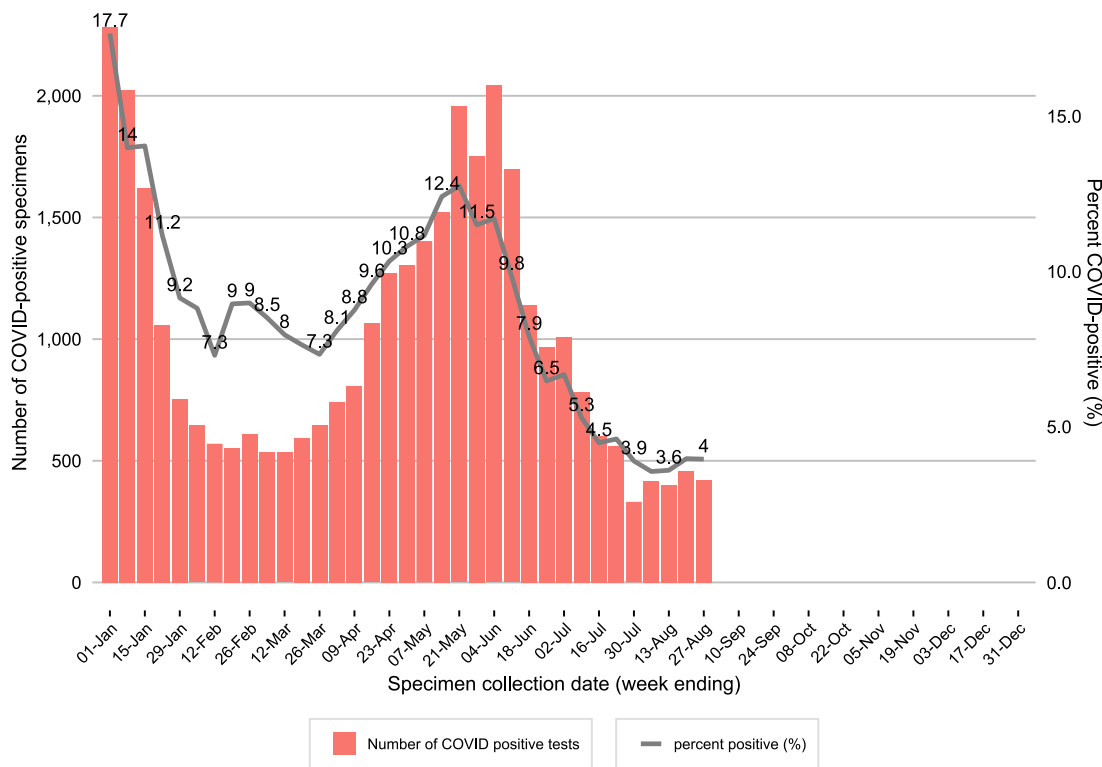


Figure 13. Number and proportion of tests positive for influenza at sentinel NSW laboratories, 1 January 2023 to 27 August 2023.

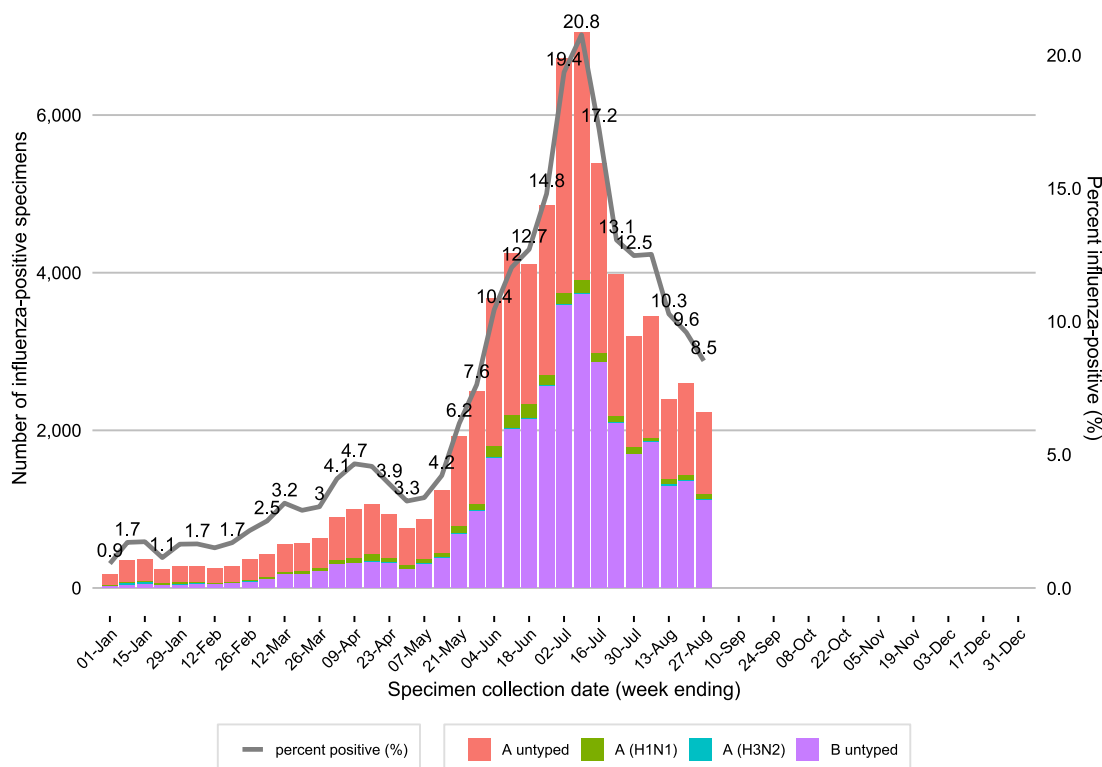


Figure 14. Number of positive PCR test results and proportion of tests positive for other respiratory viruses at sentinel NSW laboratories, 1 January 2023 to 27 August 2023.

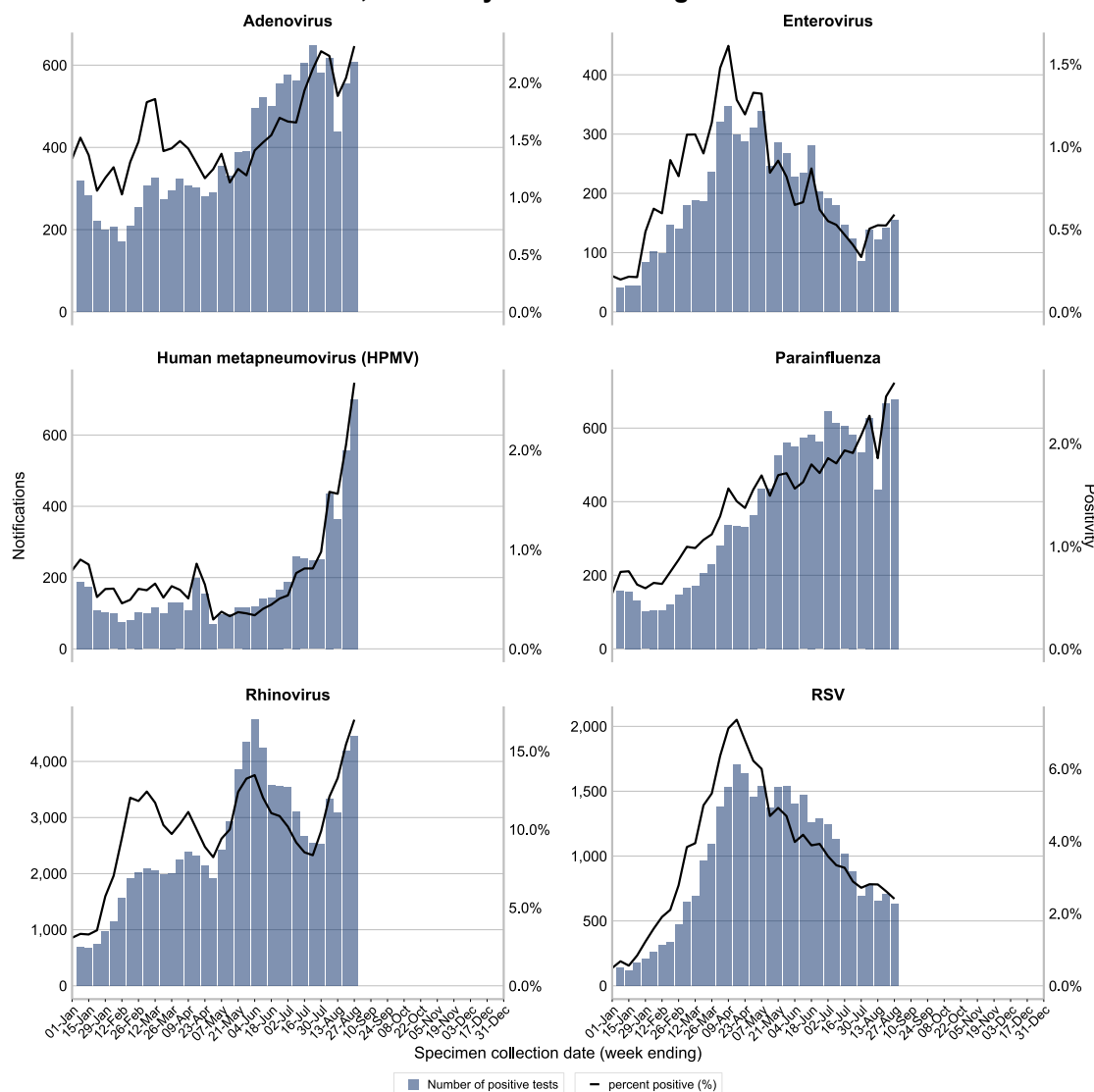


Table 2. Total number of respiratory disease notifications from sentinel laboratories, NSW in the four weeks to 27 August 2023.

	Week ending				Year to date
	06 August	13 August	20 August	27 August	
	n(% pos)	n(% pos)	n(% pos)	n(% pos)	n
Influenza	3,454 (12.5%)	2,391 (10.3%)	2,603 (9.6%)	2,228 (8.5%)	69,805
Adenovirus	616 (2.2%)	438 (1.9%)	554 (2.0%)	606 (2.3%)	13,530
Respiratory syncytial virus (RSV)	775 (2.8%)	652 (2.8%)	710 (2.6%)	629 (2.4%)	32,360
Rhinovirus	3,338 (12.1%)	3,090 (13.3%)	4,192 (15.4%)	4,448 (17.0%)	88,604
Human metapneumovirus (HMPV)	436 (1.6%)	363 (1.6%)	557 (2.1%)	700 (2.7%)	6,434
Enterovirus	139 (0.5%)	122 (0.5%)	142 (0.5%)	154 (0.6%)	6,460
Number of PCR tests conducted	27,587	23,252	27,147	26,134	867,015
SARS-CoV-2	418 (3.6%)	402 (3.6%)	457 (4.0%)	422 (4.0%)	35,081
Number of COVID PCR tests	11,718	11,144	11,479	10,643	396,499

Recent data is subject to change. For the week ending 27 August 2023, 10 out of 13 sentinel laboratories provided PCR testing data related to influenza and 3 out of 4 sentinel laboratories provided PCR data related to COVID.