



# Australian Respiratory Surveillance Report



### Key messages

This report presents a national epidemiological update for acute respiratory infections, including coronavirus disease 2019 (COVID-19), influenza and respiratory syncytial virus (RSV), with a focus on the current reporting period (5 May to 18 May 2025) and earlier severity reporting periods (up to 4 May 2025).

In the community: Respiratory illness activity (self-reported new fever and cough symptoms) remains lower than observed at the same time in previous years. Slightly more participants reported new fever and cough symptoms compared to the previous fortnight and fewer people reported taking time off work due to respiratory illness (self-reported new fever and cough symptoms). The number of COVID-19 cases remained low in the last fortnight, but cases are increasing across most jurisdictions. The number of influenza cases remained low in the last fortnight and was consistent with the number of cases seen at the same time in previous years and the five-year average. It remains too early to definitively call the start of the 2025 influenza season. The number of RSV cases in the last fortnight was high and has increased compared with the previous fortnight, signaling the RSV season is underway nationally.

**In general practice:** There were slightly more influenza-like-illness (new fever and cough symptoms) consultations at sentinel surveillance sites in the last fortnight, compared with the previous fortnight. Influenza-like-illness rates in the last fortnight were similar to the rates observed at the same time in previous years and the five-year average.

In hospitals: Sentinel hospital-based surveillance shows the number of patients admitted with severe acute respiratory infections has remained low and stable in the last severity reporting period. Most of these patients were admitted with influenza. The length of hospital stay continues to vary only slightly between illnesses and the proportion of those patients who were admitted directly to intensive care at a sentinel hospital site has remained low. More children (those aged 16 years and younger) were admitted with RSV than with influenza or COVID-19 at sentinel hospitals, while more adults were admitted with COVID-19 compared to influenza or RSV. Sentinel intensive care surveillance shows the overall number of patients with severe acute respiratory infections has remained low and stable this year. The duration of intensive care stay varies slightly between illnesses. Most patients were admitted to sentinel intensive care with rhinovirus / enterovirus, followed by influenza. In the last fortnight the average number of COVID-19 cases in intensive care has remained stable. The average number of intensive care staff unavailable due to COVID-19 illness or exposure has increased.

**Deaths:** COVID-19 has been the leading cause of acute respiratory infection mortality across 2023–2025. All three of these acute respiratory infections are more likely to cause death in older age groups than younger age groups.

**In laboratories:** Test positivity for SARS-CoV-2, influenza and RSV have all increased in the last fortnight. JN.1 is the dominant SARS-CoV-2 variant in the last 28 days in Australia. Small numbers of sequences of variants under monitoring, including the most recently designated variant under monitoring LP.8.1, continue to be observed in Australia.

Vaccine coverage, effectiveness and match: Nationally, fewer adults have received a COVID-19 vaccine in the past 12 months compared to the 12 months prior. Influenza vaccine coverage this year to date remains lower than vaccine coverage at the same time in the last three years. For RSV, nirsevimab uptake is increasing; however, there is substantial variation in nirsevimab uptake in infants across jurisdictions. Of influenza isolates characterised in 2025 thus far, over 98% have been a good match to the corresponding 2025 vaccine components.

### **Australian Respiratory Surveillance Report**

This report was prepared by Lauren Welsh, Ash Donovan, Lauren Kutzner, Jenna Hassall, and Siobhan St George on behalf of the interim Australian Centre for Disease Control. We thank the staff and participants from the surveillance systems who contribute data for acute respiratory illness surveillance across Australia.

The report presents a national overview of acute respiratory infections in Australia, drawing information from several different surveillance systems. These surveillance systems help us to understand the distribution of acute respiratory illnesses in the community, the severity of infections including which populations might be at risk, and the impact of acute respiratory illnesses on the community and health system in Australia.

Surveillance indicators presented in this report are based on the <u>Australian National Surveillance Plan for COVID-19</u>, <u>Influenza</u>, <u>and RSV</u>. Please refer to the <u>Technical Supplement – Australian Respiratory Surveillance Report</u> for information on our surveillance sources and data considerations, including the considerable impact of the COVID-19 pandemic on acute respiratory infection surveillance in Australia. A summary of data considerations for this report are provided below:

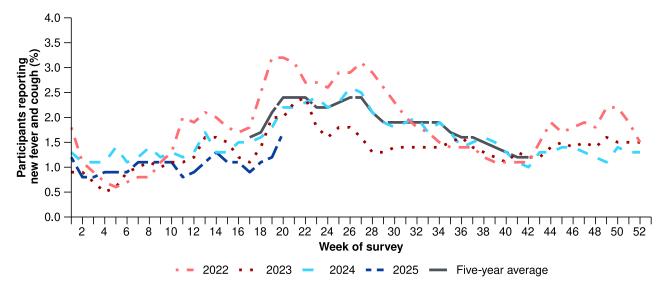
- Due to the dynamic nature of the surveillance systems used in this report, surveillance data are
  considered preliminary and subject to change as updates are received, with the most recent weeks
  considered particularly incomplete. Data in this report may vary from data reported in other national
  reports and reports by states and territories.
- Data in this report are presented by date of event (diagnosis, admission or death) or by the
  International Organization for Standardization (ISO) week date system, with weeks defined as sevenday periods which begin on a Monday and end on a Sunday. The ISO week date system is used to
  support trends comparisons over time more effectively. The current reporting period includes 5 May to
  18 May 2025 and where comparisons to the previous fortnight are made this includes 21 April to 4
  May 2025.
- In Australia, states and territories (the Australian Capital Territory [ACT], New South Wales [NSW], the Northern Territory [NT], Queensland [Qld], South Australia [SA], Tasmania [Tas], Victoria [Vic], and Western Australia [WA]) report notified cases to the National Notifiable Diseases Surveillance System (NNDSS) based on the Australian national surveillance case definitions. NNDSS data are analysed and reported based on diagnosis date, which is the true onset date of a case if known, otherwise it is the earliest of the specimen date, the notification date, or the notification received date. The NNDSS data for this report were extracted on 21 May 2025.
- To account for the lag in collection and provision of severity data from some surveillance systems, and for the time delay between illness onset and the development of severe disease outcomes, cases with an admission date or a diagnosis date in the last two weeks are excluded from severity analyses for hospitalisations and intensive care admissions. As such, the severity reporting periods are two weeks behind the end of the current reporting period. For this report, severity reporting includes data from 21 April to 4 May 2025 unless specified otherwise. Where comparisons to the previous severity fortnight are made this includes 7 April to 20 April 2025.
- Death registrations from the Australian Bureau of Statistics (ABS) Provisional Mortality Statistics are
  now used as the primary data source for measuring acute respiratory infection associated deaths. The
  ABS mortality data is sourced from the Registry of Births, Deaths and Marriages and is separate from
  the NNDSS. Registration-based mortality data needs time to be received and processed. For this
  reason, mortality statistics in this report may lag by at least two months.
- Analysis and reporting outputs were produced using R Statistical Software v4.3.1. While every care
  has been taken in preparing this report, the Australian Government Department of Health, Disability
  and Ageing does not accept liability for any injury or loss or damage arising from the use of, or
  reliance upon, the content of the report or Technical Supplement. For further information about this
  report refer to the <u>Technical Supplement Australian Respiratory Surveillance Report</u> or contact
  respiratory.surveillance@health.gov.au.

### **Community surveillance**

Community surveillance monitors respiratory illnesses in the community, providing information on the number of people reporting respiratory symptoms, testing practices, and the impact of respiratory illnesses. Community surveillance includes notification data obtained from laboratory tests for infections. Infections that are diagnosed and notified are only a subset of the total number of infections occurring in the community.

- Community surveys via FluTracking indicate current respiratory illness symptoms and test positivity remain lower than the trends observed at the same time in previous years.
- In the last fortnight (5 May to 18 May 2025), slightly more survey participants reported new fever and cough symptoms (1.4%), than in the previous fortnight (1.0%) (Figure 1).
- In the last fortnight, more survey participants with new fever and cough symptoms used a rapid antigen test (RAT) (45.0%; 365/811) than a polymerase chain reaction (PCR) test (7.8%; 63/811) to test for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
- Self-reported SARS-CoV-2 RAT positivity was higher in the last fortnight (27.7%; 101/365) than in the previous fortnight (20.8%; 75/361). Self-reported SARS-CoV-2 PCR positivity was also slightly higher in the last fortnight (12.7%; 8/63) than in the previous fortnight (12.5%; 10/80).
- In the last fortnight, 7.5% (61/811) of survey participants with new fever and cough symptoms used a PCR test to test for influenza. Self-reported influenza PCR positivity was higher this fortnight (23.0%; 14/61), than in the previous fortnight (19.7%; 14/71).
- In the last fortnight, fewer survey participants reported taking three or more days off work or normal duties due to fever and cough symptoms (38.3%; 311/811), than in the previous fortnight (45.0%; 327/727).
- From January to early March 2025, the weekly proportion of survey participants with new fever and cough symptoms was relatively consistent with the proportions observed at the same time in 2022–2024. Since mid-March, the weekly proportion has been lower than observed at the same time in 2022–2024, and from late April has been considerably lower than the five-year average (Figure 1).

Figure 1: Age standardised proportion of survey participants reporting new fever and cough symptoms compared with the five-year average\* by year and week of survey, Australia, 2022 to 18 May 2025



Source: FluTracking

<sup>\*</sup> From 2020, FluTracking expanded their data capture period to year-round. Data before May and after October for any year before 2020 are not available for historical comparisons. The years 2020 and 2021 are excluded when comparing the current season to historical periods when influenza virus has circulated without public health restrictions. As such, the five-year average includes the years 2018 to 2019 and 2022 to 2024. Please refer to the <u>Technical Supplement</u> for interpretation of the five-year average.

• In the last fortnight (5 May to 18 May 2025), there was a 63.4% increase in COVID-19 cases, a 23.3% increase in influenza cases, and a 29.9% increase in RSV cases.

Table 1: Notified cases and notification rate per 100,000 population by disease, five-year age group, and jurisdiction\*†, Australia, 1 January to 18 May 2025

	C	OVID-19		In	fluenza			RSV	
	Reporting period (n)	Year to date (n)	Year to date (rate)	Reporting period (n)	Year to date (n)	Year to date (rate)	Reporting period (n)	Year to date (n)	Year to date (rate)
Age group	p (years)								
0–4	640	6,545	434	1,166	9,085	602	4,743	26,665	1,767
5–9	190	1,604	100	1,399	9,984	620	534	2,852	177
10–14	227	1,766	105	852	6,265	374	203	1,225	73
15–19	221	2,199	132	565	4,290	258	172	936	56
20–24	226	2,272	127	286	3,047	170	145	862	48
25–29	320	2,806	141	285	3,068	154	159	1,017	51
30–34	372	3,328	163	404	4,006	196	233	1,310	64
35–39	446	3,782	191	561	5,142	259	212	1,237	62
40–44	396	3,550	192	610	5,220	282	152	1,035	56
45–49	337	3,212	197	434	4,295	264	155	993	61
50–54	379	3,280	194	415	4,277	253	205	1,270	75
55–59	363	3,122	204	387	3,884	253	226	1,413	92
60–64	354	3,412	222	390	3,991	260	243	1,528	100
65–69	375	3,543	261	329	3,560	262	283	1,677	123
70+	2,148	20,987	628	1,092	11,004	329	1,013	6,544	196
Jurisdiction	on								
ACT	163	977	206	221	1,039	219	106	477	101
NSW	3,476	29,094	343	3,363	30,937	365	5,028	27,826	328
NT	27	629	247	125	1,549	607	81	381	149
Qld	995	15,008	269	1,797	18,382	329	1,351	11,881	213
SA	474	4,171	222	714	4,619	246	236	1,478	79
Tas	74	885	154	151	1,125	196	68	346	60
Vic	1,282	10,591	152	2,233	17,078	245	1,591	6,713	96
WA	503	4,083	138	572	6,403	216	221	1,470	50
Total	6,994	65,438	241	9,176	81,132	298	8,682	50,572	186

<sup>\*</sup> Rate per 100,000 population for the given time period. Population data are based on the Australian Bureau of Statistics (ABS) <u>Estimated Resident Population (ERP)</u> for the reference period June 2024, released 12 December 2024.

<sup>†</sup> Total includes cases with missing age.

- In the last fortnight, the number of COVID-19 cases was low but increasing.
- Following a decreasing trend from early January to late April 2025, an increase in COVID-19 cases
  has been observed from early May 2025. Despite an increase in the number of cases in the last
  fortnight, the number of COVID-19 cases in the last fortnight is less than half of the number of cases
  reported at the same time last year (Figure 2).
- In the last fortnight, most jurisdictions observed an increasing trend in COVID-19 notification rates, except for the NT and Tas where notification rates were relatively stable compared with the previous fortnight (Figure 3).
- In the year to date, COVID-19 notification rates remain highest in people aged 70 years or over, likely due to higher case ascertainment from targeted testing strategies for populations at-risk of severe disease or who live in a high-risk setting such as a residential aged care home (Table 1).
- In the year to date, COVID-19 notification rates are highest in NSW and lowest in WA (Table 1).

Figure 2: Notified COVID-19 cases (laboratory-confirmed only) by year and week of diagnosis, Australia, 2022 to 18 May 2025

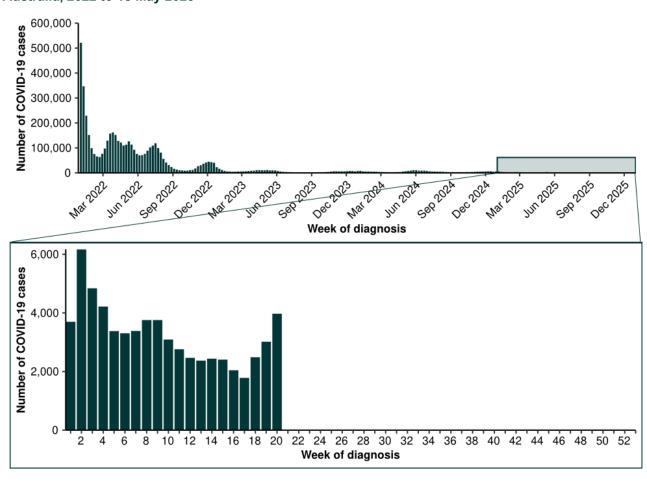


Figure 3: Notification rates\* per 100,000 population for COVID-19 cases by state or territory and week of diagnosis, Australia, 1 January to 18 May 2025

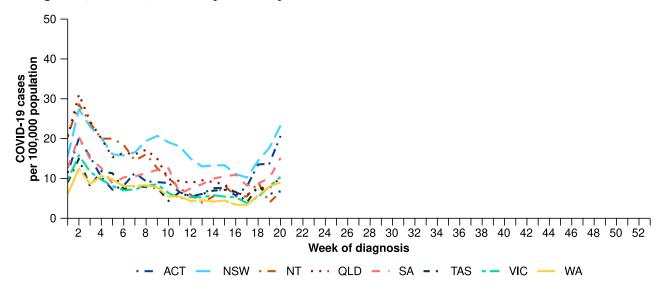
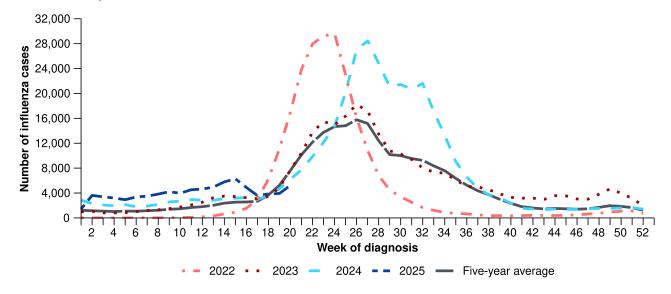


Figure 4: Notified influenza cases and five-year average\* by year and week of diagnosis, Australia, 2022 to 18 May 2025



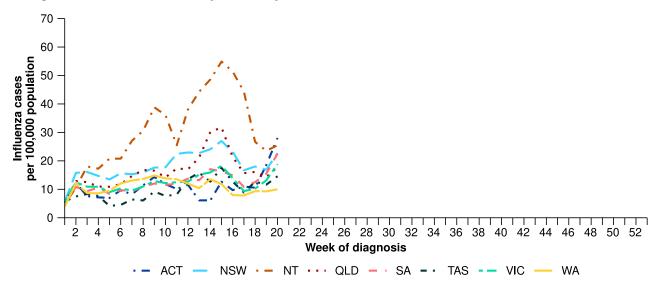
- In the last fortnight, the number of influenza cases was low.
- Following higher than previously observed influenza case numbers in January to mid-April, influenza cases decreased across late April. In the last fortnight, influenza case numbers have increased slightly but remain consistent with case numbers observed in the previous year and the five-year average (Figure 4).
- The small increase in influenza case numbers in the last fortnight is consistent with the timing and trends observed at the start of the 2023 and 2024 influenza seasons; however, given the recent decrease in case numbers across late April it is too early to definitively determine if the influenza season has commenced in 2025 (Figure 4).

<sup>\*</sup> Rate per 100,000 population for the given time period. Population data are based on the Australian Bureau of Statistics (ABS) <u>Estimated Resident Population (ERP)</u> for the reference period June 2024, released 12 <u>December 2024</u>

<sup>\*</sup> The years 2020 and 2021 are excluded when comparing the current season to historical periods when influenza virus has circulated without public health restrictions. As such, the five-year average includes the years 2018 to 2019 and 2022 to 2024. Please refer to the <u>Technical Supplement</u> for interpretation of the five-year average.

- In the last fortnight, most jurisdictions observed an increasing trend in influenza notification rates, most notably in the ACT. In WA, influenza notification rates remained stable compared with the previous fortnight (Figure 5).
- In the year to date, influenza notification rates remain highest in children aged 5–9 years and children aged 0–4 years (Table 1).
- In the year to date, influenza notification rates are highest NT and lowest in Tas (Table 1).

Figure 5: Notification rates\* per 100,000 population for influenza cases by state or territory and week of diagnosis, Australia, 1 January to 18 May 2025



- In the last fortnight, most influenza notifications were influenza A(Unsubtyped) (74.9%; 6,872/9,176), followed by influenza B (20.7%; 1,895/9,176), then influenza untyped (2.6%; 234/9,176), and influenza A(H1N1) (1.7%; 156/9,176). In the last fortnight, there have been six influenza A&B codetections (Figure 6).
- In the year to date, influenza A(Unsubtyped) has accounted for most cases across all age groups, followed by influenza B. The proportion of influenza B cases is highest in the 5-19 years age group, though still similar to the proportion of influenza A cases. There has been a small number of influenza A(H1N1) and influenza A(H3N2) cases across all age groups (Figure 6).
  - There is likely to be a comparatively higher proportion of influenza B cases this season than observed in 2024. While influenza B is often a good match with the seasonal influenza vaccine strain, influenza B can result in more severe infections in children.
- In the year to date, influenza A(Unsubtyped) has accounted for the majority of influenza cases across all jurisdictions. Many jurisdictions have been experiencing increasing numbers of influenza B cases; however, the comparative proportion of influenza B and influenza A varies each week (Figure 7).
- Influenza A(H1N1) and influenza A(H3N2) cases were most commonly observed in Qld, Tas and WA (Figure 7); however, trends in influenza subtypes should be interpreted with care as there are jurisdictional differences in the proportion and selection of influenza samples that undergo typing.

<sup>\*</sup> Rate per 100,000 population for the given time period. Population data are based on the Australian Bureau of Statistics (ABS) <u>Estimated Resident Population (ERP) for the reference period June 2024, released 12 December 2024</u>.

Figure 6: Notified influenza cases by influenza subtype, age group\*, and week of diagnosis, Australia, 1 January to 18 May 2025

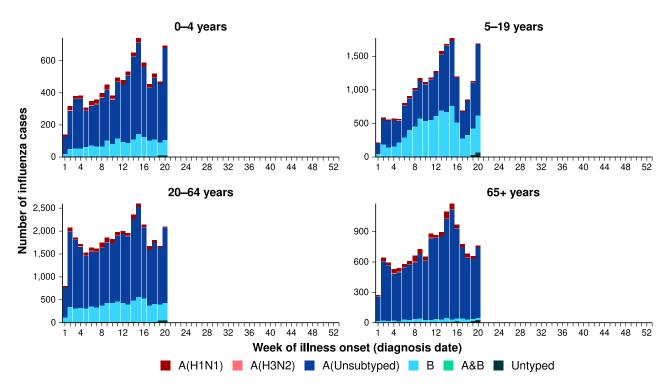
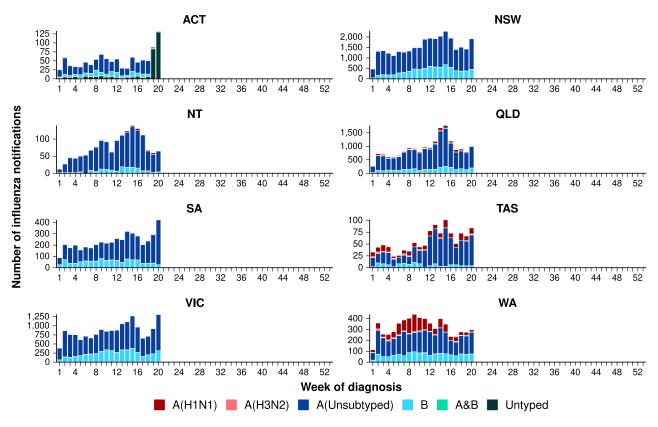


Figure 7: Notified influenza cases by influenza subtype, jurisdiction\*, and week of diagnosis, Australia, 1 January to 18 May 2025



<sup>\*</sup> Axis varies between age groups.

<sup>\*</sup> Axis varies between jurisdictions.

- In the last fortnight, the number of RSV cases are high.
- The number of RSV cases has been steadily increasing since the start of 2025, with slight week-on-week decreases observed across early to mid-April. The increasing trend in the number of cases overall is consistent with trends observed in previous years and signals the RSV season is underway nationally (Figure 8).
- In the last fortnight, RSV notification rates increased noticeably across most jurisdictions compared with the previous fortnight; however, in SA, Qld and WA notifications rates were relatively stable (Figure 9).
- In the year to date, RSV notification rates remain considerably higher in children aged 0–4 years than in other age groups (Table 1).
- In the year to date, RSV notification rates are highest in NSW and lowest in WA (Table 1).

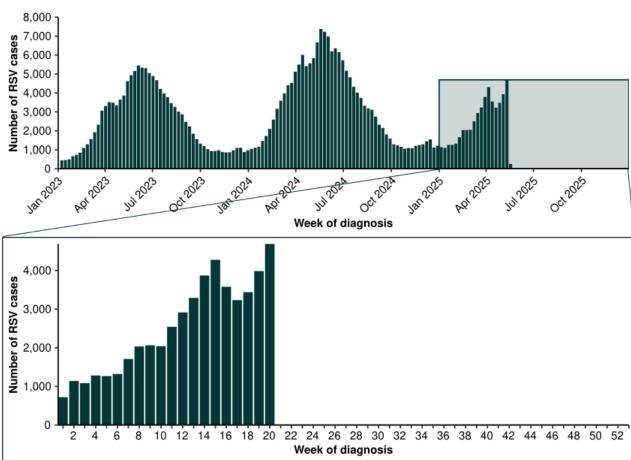
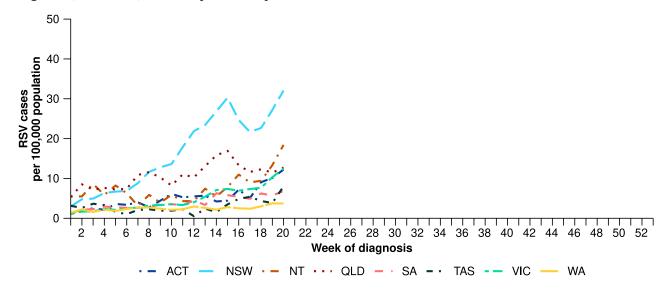


Figure 8: Notified RSV cases by year and week of diagnosis\*, Australia, 2023 to 18 May 2025

Source: National Notifiable Diseases Surveillance System (NNDSS). Please note, RSV became notifiable in all states and territories on 1 September 2022 and comprehensive national notification data became available after this point. For this reason, RSV notification trends are only presented from 1 January 2023.

Figure 9: Notification rates\* per 100,000 population for RSV cases by state or territory and week of diagnosis, Australia, 1 January to 18 May 2025



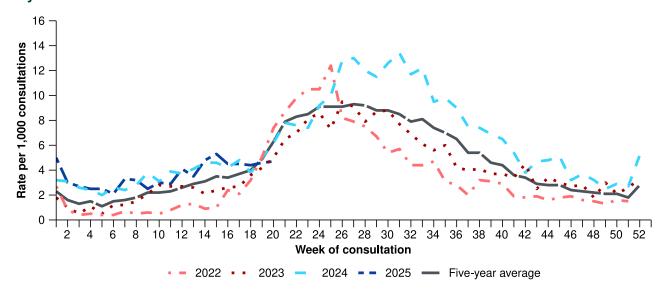
<sup>\*</sup> Rate per 100,000 population for the given time period. Population data are based on the Australian Bureau of Statistics (ABS) <u>Estimated Resident Population (ERP)</u> for the reference period June 2024, released 12 <u>December 2024</u>.

## Primary care surveillance

Primary care surveillance monitors the number and characteristics of people who have presented to their general practitioner with influenza-like-illness and provides insight on the different respiratory pathogens that are causing illness in the community.

- Sentinel general practice surveillance indicates general practice consultations for respiratory illness
  have stabilised following a period of increasing influenza-like-illness consultation rates from February
  to mid-April 2025.
- In the last fortnight (5 May to 18 May 2025), there were slightly more general practice consultations for influenza-like illness (4.6 notifications per 1,000 consultations per fortnight) than in the previous fortnight (4.5 notifications per 1,000 consultations per fortnight) (Figure 10).
- Since mid-January, influenza-like-illness rates have been relatively consistent with observed rates in 2024 but have been slightly higher than observed rates in the same period in previous years and the five-year average. However, since early May, influenza-like-illness rates have been consistent with the observed rates in previous years and the five-year average (Figure 10).

Figure 10: Rate of influenza-like-illness per 1,000 consultations per week with sentinel general practice sites compared with the five-year average by year and week of consultation\*†, Australia, 2022 to 18 May 2025



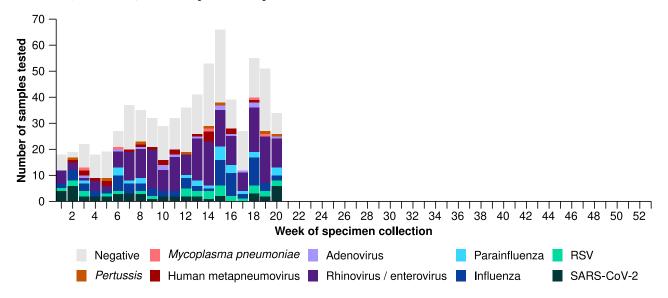
Source: Australian Sentinel Practice Research Network (ASPREN)

<sup>\*</sup> The years 2020 and 2021 are excluded when comparing the current season to historical periods when influenza virus has circulated without public health restrictions. As such, the five-year average includes the years 2018 to 2019 and 2022 to 2024. Please refer to the <u>Technical Supplement</u> for interpretation of the five-year average.

<sup>†</sup> Please refer to the Technical Supplement for notes on impact of COVID-19 on ASPREN data.

- In the last fortnight, 62.4% (53/85) of people attending general practice with influenza-like-illness who were tested have then tested positive for a respiratory pathogen.
- In the last fortnight, rhinovirus (54.7%; 29/53) has been the most commonly detected pathogen, followed by SARS-CoV-2 (15.1%; 8/53) and influenza (9.4%; 5/53) (Figure 11).
- In the year to date, 61.7% (426/690) of people attending general practice with influenza-like-illness who were tested have then tested positive for a respiratory pathogen.
- In the year to date, rhinovirus (46.5%; 198/426) has been the most commonly detected pathogen, followed by influenza (17.8%; 76/426), SARS-CoV-2 (11.3%; 48/426), RSV (7.3%; 31/426), and human metapneumovirus (4.9%; 21/426) (Figure 11).

Figure 11: Number of samples tested for respiratory pathogens among people with influenza-likeillness attending sentinel general practice sites by respiratory pathogen and week of specimen collection, Australia, 1 January to 18 May 2025



Source: Australian Sentinel Practice Research Network (ASPREN)

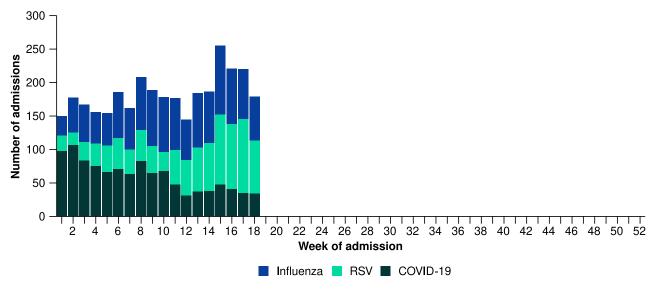
Note: All ASPREN swab samples are transported to the SA Pathology laboratory in Adelaide to be tested for viral and bacterial respiratory pathogens via a multiplex real-time reverse transcription polymerase chain reaction (RT-PCR) assay using in-house primers.

#### Hospital-based surveillance

Hospital-based surveillance monitors persons with more severe illness who have been admitted to hospital for their respiratory illness (severe acute respiratory infections). Hospital-based surveillance also measures the ability of the health system to cope with the number of severe acute respiratory infection admissions to ensure delivery of safe, timely and quality health care.

- Sentinel hospital-based surveillance from the Influenza Complications Alert Network (FluCAN) shows
  the number of patients admitted with severe acute respiratory infections this year has remained low
  and stable overall. The length of hospital stay continues to vary only slightly between illnesses and the
  proportion of patients with a severe acute respiratory infection who were admitted directly to an
  intensive care has remained low.
- In the last severity reporting period (21 April to 4 May 2025), fewer patients were admitted to a sentinel hospital with a severe acute respiratory infection (n = 399), than in the previous severity reporting period (n = 476).
  - In the last severity reporting period, at sentinel hospitals there was a 22.5% decrease in admissions with COVID-19 (from 89 to 69), a 24.2% decrease in admissions with influenza (from 186 to 141), and a 6.0% decrease in admissions with RSV (from 201 to 189), compared to the previous severity reporting period.
- In the year to date for severity reporting (1 January to 4 May 2025), there have been 3,295 admissions with severe acute respiratory infections at sentinel hospitals. Most patients with a severe acute respiratory infection have been admitted with influenza (n=1,233) followed by COVID-19 (n=1,096) (Figure 12).

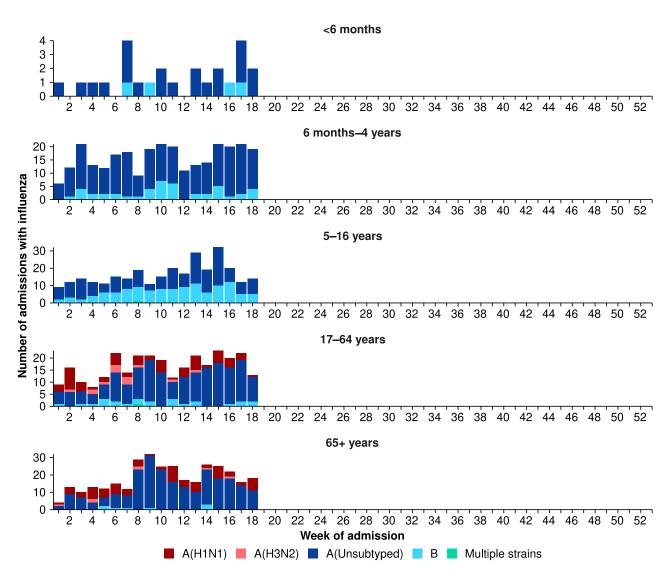
Figure 12: Total number of patients (children and adults) admitted with a severe acute respiratory infection to sentinel hospitals by disease and week of admission\*†‡, Australia, 1 January to 4 May 2025



Source: Influenza Complications Alert Network (FluCAN)

- Patients admitted to sentinel hospitals with influenza have mostly been admitted with influenza A (83.5%; 1,029/1,233), while 16.4% (202/1,233) were admitted with influenza B.
  - Most hospital admissions with influenza A have been with influenza A(Unsubtyped) (84.5%; 870/1,029), followed by influenza A(H1N1) (13.5%; 139/1,029), and then influenza A(H3N2) (1.9%; 20/1,029).
- In the year to date for severity reporting, influenza A was most commonly detected in all age groups. Influenza A(H1N1) and influenza A(H3N2) were most commonly observed in adults (Figure 13). Of note, school aged children (5–16 years) had the highest proportion of influenza B (40.7%; 120/295) compared with influenza A (59.0%; 174/295) (Figure 13).
  - While influenza B is often a good match with the seasonal influenza vaccine strain, influenza
     B can result in more severe infections in children.

Figure 13: Number of patients admitted with influenza to sentinel hospitals by influenza subtype, age group, and week of admission\*, Australia, 1 January to 4 May 2025



Source: Influenza Complications Alert Network (FluCAN)

<sup>\*</sup> Axis varies between age groups. The age distribution of admissions with influenza may not reflect the age distribution of all patients.

- In the year to date for severity reporting, more children (those aged 16 years and younger) were admitted to sentinel hospitals with RSV than with influenza or COVID-19 (Table 2a).
- Children admitted to sentinel hospitals with influenza tended to be older than children admitted with COVID-19 or RSV (Table 2a).
- Children admitted to sentinel hospitals with RSV had a slightly longer length of hospital stay compared to children with influenza or COVID-19; however, the difference in the length of stay was minor. A higher proportion of children admitted with COVID-19 were admitted directly to intensive care, compared to children admitted with influenza or RSV (Table 2a).

Table 2a: Demographic characteristics and outcomes for children admitted with a severe acute respiratory infection to a sentinel hospital by disease, Australia, 1 January to 4 May 2025

	COVID-19	Influenza	RSV
	Year to date for severity reporting (n=343)	Year to date for severity reporting (n=607)	Year to date for severity reporting (n=811)
Age (years)			
Median [IQR]	1 [0–3]	4 [1–8]	1 [0–2]
Age group (years)			
< 6 months	112 (32.7%)	25 (4.1%)	189 (23.3%)
6 months – 4 years	161 (46.9%)	287 (47.3%)	564 (69.5%)
5–16 years	70 (20.4%)	295 (48.6%)	58 (7.2%)
Indigenous status			
Aboriginal and Torres Strait Islander	35 (10.2%)	51 (8.4%)	66 (8.1%)
Length of hospital stay (days)†			
Median [IQR]	1 [1–3]	1 [1–2]	2 [1–3]
Patient admission location‡			
Admitted to hospital ward	323 (94.2%)	578 (95.2%)	782 (96.4%)
Admitted to intensive care directly	20 (5.8%)	29 (4.8%)	29 (3.6%)
Discharge status†			
Alive	289 (84.3%)	526 (86.7%)	618 (76.2%)
Died	-	1 (0.2%)	-
Incomplete/missing	54 (15.7%)	80 (13.2%)	193 (23.8%)

Source: Influenza Complications Alert Network (FluCAN)

The Paediatric Active Enhanced Disease Surveillance (PAEDS) network carries out enhanced sentinel hospital surveillance for some acute respiratory infections or conditions in children. PAEDS data for acute respiratory infections in children are presented in the Australian Respiratory Surveillance Reports in the sentinel hospital data from FluCAN. For additional information on COVID-19 in children, Paediatric Inflammatory Multisystem Syndrome (PIMS-TS) following COVID-19, influenza in children, or RSV in children please visit the PAEDS webpages and dashboards.

<sup>\*</sup> Does not include patients with missing age; therefore, the sum of age-specific totals above may not equal the total number of patients.

<sup>†</sup> For patients who are still in hospital data may not be complete; therefore, these data are not included in the length of stay or discharge status. In addition, length of stay data excludes patients that acquired their infection in hospital.

<sup>‡</sup> Admission location reflects the initial admission ward. Some patients may be initially admitted to general ward then later admitted to an intensive care and this is not reflected here. Does not include patients with missing admission location; therefore, the sum of admission location specific totals above may not equal the total number of patients.

- In the year to date for severity reporting, more adults (those aged 17 years and over) were admitted at sentinel hospitals with COVID-19 than with influenza or RSV (Table 2b).
- Adults admitted to sentinel hospitals with COVID-19 or RSV were predominately 65 years and over, whereas the proportion of admissions with influenza was relatively similar across the 17–64 years and 65 years and over age groups (Table 2b).
- Adults admitted to sentinel hospitals with COVID-19 had a slightly longer length of hospital stay
  compared to adults with influenza or RSV. A higher proportion of adults with influenza were admitted
  directly to intensive care, compared to adults admitted with COVID-19 or RSV (Table 2b).
- Sadly, there have been a number of adults admitted with a severe acute respiratory infections who have died in hospital (Table 2b).

Table 2b: Demographic characteristics and outcomes for adults admitted with a severe acute respiratory infection to a sentinel hospital by disease, Australia, 1 January to 4 May 2025

	COVID-19	Influenza	RSV
	Year to date for severity reporting (n=753)	Year to date for severity reporting (n=626)	Year to date for severity reporting (n=155)
Age (years)			
Median [IQR]	75 [60–84]	66 [53–76]	74 [62–82]
Age group (years)			
17–64 years	229 (30.4%)	296 (47.3%)	48 (31.0%)
65 years and over	524 (69.6%)	330 (52.7%)	107 (69.0%)
Indigenous status			
Aboriginal and Torres Strait Islander	59 (7.8%)	53 (8.5%)	16 (10.3%)
Length of hospital stay (days)†			
Median [IQR]	5 [2–9]	4 [2–6]	4 [2–8]
Patient admission location‡			
Admitted to hospital ward	707 (93.9%)	557 (89.0%)	144 (92.9%)
Admitted to intensive care directly	46 (6.1%)	69 (11.0%)	11 (7.1%)
Discharge status†			
Alive	535 (71.0%)	375 (59.9%)	91 (58.7%)
Died	26 (3.5%)	9 (1.4%)	6 (3.9%)
Incomplete/missing	192 (25.5%)	242 (38.7%)	58 (37.4%)

Source: Influenza Complications Alert Network (FluCAN)

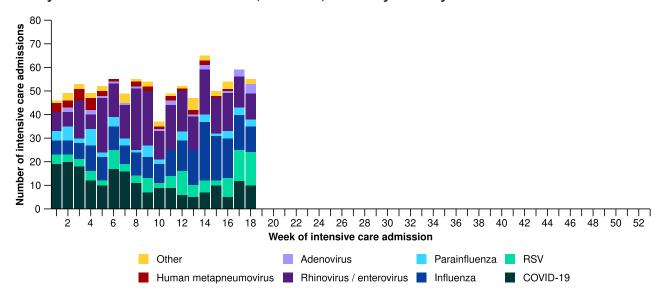
<sup>\*</sup> Does not include patients with missing age; therefore, the sum of age-specific totals above may not equal the total number of patients.

<sup>†</sup> For patients who are still in hospital data may not be complete; therefore, these data are not included in the length of stay or discharge status. In addition, length of stay data excludes patients that acquired their infection in hospital.

<sup>‡</sup> Admission location reflects the initial admission ward. Some patients may be initially admitted to general ward then later admitted to an intensive care and this is not reflected here. Does not include patients with missing admission location; therefore, the sum of admission location specific totals above may not equal the total number of patients.

- Sentinel intensive care surveillance shows the number of patients admitted to intensive care with severe acute respiratory infections has remained low and stable this year.
- In the last severity reporting period (7 April to 4 May 2025), slightly more patients have been admitted to a sentinel intensive care with a severe acute respiratory infection (n=206), than in the previous severity reporting period (n=203) (Figure 14).
- In the year to date for severity reporting (1 January to 4 May 2025), most patients were admitted to sentinel intensive care with rhinovirus / enterovirus, followed by influenza (Figure 14; Table 3).

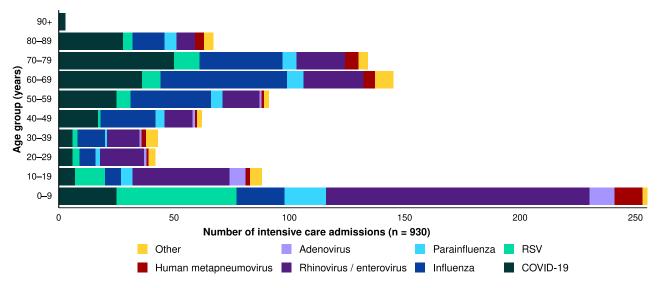
Figure 14: Number of patients admitted with severe acute respiratory infections to a sentinel intensive care by disease and week of admission, Australia, 1 January to 4 May 2025



Source: Short Period Incidence Study of Severe Acute Respiratory Infection (SPRINT-SARI) Australia

Note: A range of diagnostic testing procedures are utilised across hospitals in Australia. SPRINT-SARI does not specify which diagnostic testing method
should be utilised as this is the domain of the hospital and treating clinicians. Therefore, virological data from SPRINT-SARI should be interpreted with care.

Figure 15: Number of patients admitted with severe acute respiratory infections to a sentinel intensive care by disease and age group\*, Australia, 1 January to 4 May 2025



Source: Short Period Incidence Study of Severe Acute Respiratory Infection (SPRINT-SARI) Australia

Note: 4.4% (39/889) of patients had co-infections of respiratory pathogens; therefore, the sum of pathogen-specific totals above may not equal the total number of severe acute respiratory infection patients.

<sup>\*</sup> The age distribution of severe acute respiratory infection intensive care admissions may not reflect the age distribution of all patients.

- In the year to date for severity reporting, admissions to a sentinel intensive care with COVID-19 or influenza have been generally among older people. In contrast, admissions to a sentinel intensive care with rhinovirus or RSV have been among younger people, primarily those aged 0–9 years old (Figure 15; Table 3).
- A higher proportion of patients with COVID-19, influenza and parainfluenza required invasive mechanical ventilation, and the length of ventilation was highest among those with influenza. The length of intensive care stay was relatively similar across diseases (Table 3).
- Most patients admitted to a sentinel intensive care with a severe acute respiratory infection have been discharged home. Sadly, a number of patients have died in hospital (Table 3).

Table 3: Demographic characteristics and outcomes of patients admitted with a severe acute respiratory infection to a sentinel intensive care by disease\*†, Australia, 1 January to 4 May 2025

	COVID-19	hMPV	Influenza	Parainfluenza	Rhinovirus	RSV	Other
	Year to date for severity reporting (n=203)	Year to date for severity reporting (n=34)	Year to date for severity reporting (n=211)	Year to date for severity reporting (n=53)	Year to date for severity reporting (n=272)	Year to date for severity reporting (n=100)	Year to date for severity reporting (n=57)
Age (years)							
Median [IQR]	65 [44–75]	41 [4–72]	59 [42–69]	42 [5–68]	13 [5–53]	9 [2–58]	23 [12–63]
Indigenous status							
Aboriginal and Torres Strait Islander	24 (11.8%)	3 (8.8%)	28 (13.3%)	4 (7.5%)	33 (12.1%)	15 (15.0%)	5 (8.8%)
Non-Indigenous	179 (88.2%)	31 (91.2%)	183 (86.7%)	49 (92.5%)	239 (87.9%)	85 (85.0%)	52 (91.2%)
Received invasive	mechanical venti	lation					
Number (%)	61 (30.0%)	9 (26.5%)	68 (32.2%)	18 (34.0%)	56 (20.6%)	16 (16.0%)	22 (38.6%)
Length of invasive	mechanical venti	ilation (days)*					
Median [IQR]	3 [1–6]	3 [2–7]	5 [2–12]	3 [1–13]	3 [1–7]	3 [1–6]	2 [1–7]
Length of intensive	care stay (days)	*					
Median [IQR]	3 [2–5]	4 [1–6]	3 [2–6]	2 [1–6]	2 [1–5]	2 [1–5]	4 [2–7]
Length of hospital	stay (days)*						
Median [IQR]	7 [4–15]	9 [6–20]	8 [5–15]	6 [3–11]	4 [2–10]	6 [4–9]	8 [4–16]
Patient outcome†							
Ongoing care in intensive care	10 (4.9%)	1 (2.9%)	13 (6.2%)	1 (1.9%)	20 (7.4%)	-	-
Ongoing care in hospital ward	5 (2.5%)	1 (2.9%)	8 (3.8%)	2 (3.8%)	12 (4.4%)	2 (2.0%)	4 (7.0%)
Transfer to other hospital / facility	35 (17.2%)	4 (11.8%)	35 (16.6%)	7 (13.2%)	19 (7.0%)	11 (11.0%)	6 (10.5%)
Discharged home	119 (58.6%)	26 (76.5%)	134 (63.5%)	38 (71.7%)	206 (75.7%)	82 (82.0%)	39 (68.4%)
Died in hospital	33 (16.3%)	2 (5.9%)	20 (9.5%)	4 (7.5%)	15 (5.5%)	5 (5.0%)	8 (14.0%)

Source: Short Period Incidence Study of Severe Acute Respiratory Infection (SPRINT-SARI) Australia

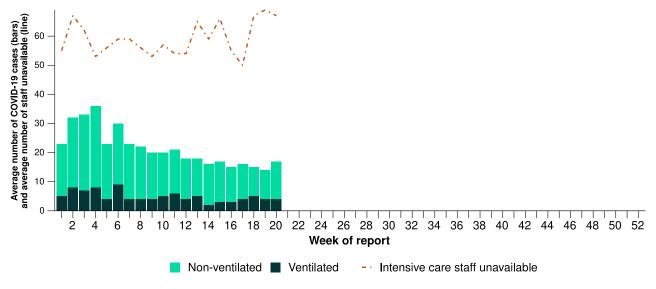
Note: 4.4% (39/889) of patients had co-infections of respiratory pathogens; therefore, the sum of pathogen-specific totals above may not equal the total number of severe acute respiratory infection patients.

<sup>\*</sup> For patients receiving ongoing care in intensive care data may not be complete; therefore, data are not included in the length of ventilation or stay.

<sup>†</sup> Patients who have been admitted with no discharge information for less than 90 days have been assumed to have ongoing care in the hospital. Patients who have no outcome entered or have been admitted for more than 90 days with no discharge information have been treated as missing.

- In the last fortnight (5 May to 18 May 2025), there has been a similar number of COVID-19 cases in intensive care across Australia compared to the previous fortnight (Figure 16).
- In the last fortnight, there have been more intensive care staff unavailable to work due to COVID-19 exposure or illness across Australia than in the previous fortnight (Figure 16).

Figure 16: Average number of COVID-19 cases in intensive care and the average number of intensive care staff unavailable to work due to COVID-19 exposure or illness by week of report\*†, Australia, 1 January to 18 May 2025



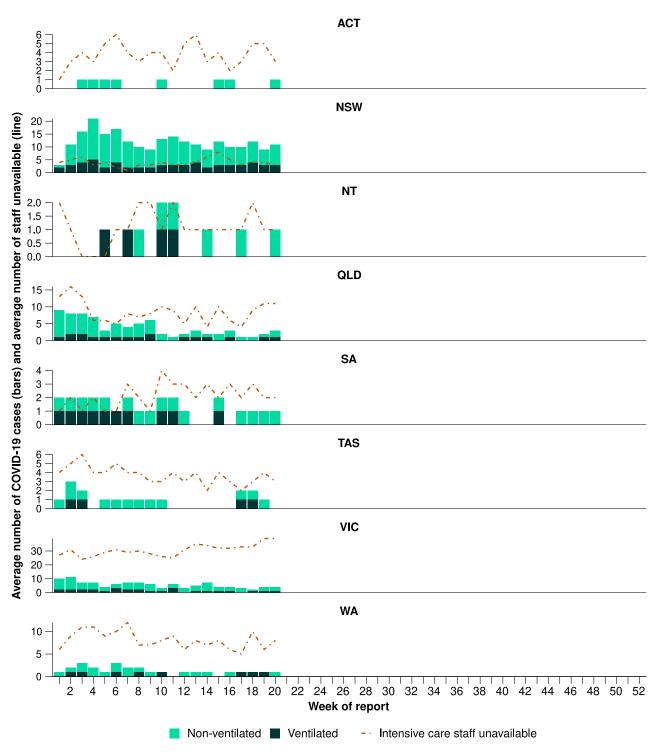
Source: Critical Health Resource Information System (CHRIS)

- In the last fortnight, the number of COVID-19 cases in intensive care has remained stable in most jurisdictions; however, has decreased in NSW but increased in Vic compared with the previous fortnight (Figure 17).
- In the last fortnight, the number of intensive care staff unavailable to work due to COVID-19 exposure or illness has remained stable in most jurisdictions, but increased in Tas, Vic, and Qld, and decreased in the NT compared with the previous fortnight (Figure 17).

<sup>\*</sup> Average number of ventilated and non-ventilated COVID-19 cases in intensive care includes only active COVID-19 cases (those in isolation) and does not include cleared COVID-19 cases.

<sup>†</sup> Intensive care staff include both medical and nursing staff. Staff unavailability will be underestimated in NSW as most public hospitals in NSW do not report staff unavailability.

Figure 17: Average number of COVID-19 cases in intensive care and the average number of intensive care staff unavailable to work due to COVID-19 exposure or illness by jurisdiction and week of report\*†‡, Australia, 1 January to 18 May 2025



Source: Critical Health Resource Information System (CHRIS)

<sup>\*</sup> Axis varies between jurisdictions.

<sup>†</sup> Average number of ventilated and non-ventilated COVID-19 cases in intensive care includes only active COVID-19 cases (those in isolation) and does not include cleared COVID-19 cases.

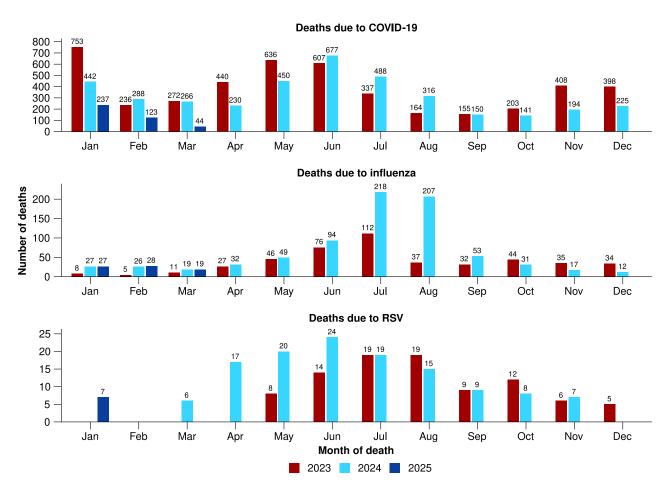
<sup>‡</sup> Intensive care staff include both medical and nursing staff. Staff unavailability will be underestimated in NSW as most public hospitals in NSW do not report staff unavailability.

#### **Mortality surveillance**

Death registrations can provide information on the scale and severity of disease associated with acute respiratory infections. For more information on death registrations including completeness, timeliness, and definitions of deaths involving (both *due to* and *with*), *due to* and *with* acute respiratory infections, refer to the <u>Technical Supplement</u>. Please note, there has not been an update to the Provisional Mortality Statistics, as such the mortality surveillance data presented here have not been updated since the previous report.

- COVID-19 has been the leading cause of acute respiratory infection mortality across 2023–2025.
- Since the end of 2021, a pattern has been observed for COVID-19 where there are two peaks of
  mortality during the year one occurring between November and January and the other occurring
  between May and August. While there was still an increase in deaths occurring between November
  2024 and January 2025, the number of deaths occurring during this period was much lower than other
  years.
- The 4,981 deaths involving COVID-19 in 2024 were 19.5% lower than the 6,187 deaths involving COVID-19 recorded in 2023. Similar to the trend in deaths involving COVID-19, the number of deaths due to COVID-19 decreased over the November to January period in 2024–2025 when compared to the same period in earlier years. The 3,867 deaths due to COVID-19 in 2024 were 16.1% lower than the 4,609 deaths due to COVID-19 recorded in 2023 (Figure 18a).

Figure 18a: Provisional numbers of deaths *due to* an acute respiratory infection\*†‡ by month, year, and disease, Australia, 1 January 2023 to 31 March 2025



Source: Australian Bureau of Statistics, Provisional Mortality Statistics, released 29 April 2025.

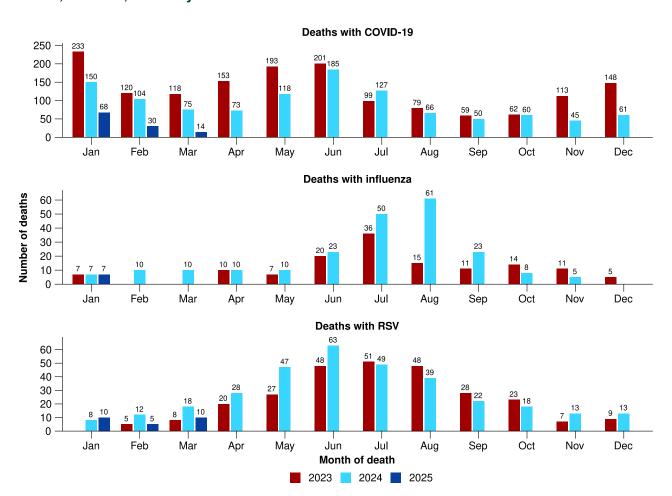
<sup>\*</sup> Axis varies between acute respiratory infections.

<sup>†</sup> Data is provisional and subject to change. It can take several weeks for death registrations to be reported, processed, coded, validated, and tabulated. Therefore, the data shown here may be incomplete. Data for some months were not published by the ABS due to small counts, and therefore not reported here. Data includes all deaths (both doctor and coroner certified) that occurred and were registered by 31 March 2025.

<sup>‡</sup> All deaths due to/with COVID-19 in this report have been coded to ICD-10 codes U07.1-U07.2, U10.9. All deaths due to/with influenza have been coded to J09-J11. All deaths due to/with RSV have been coded to J12.1, J20.5, J21.0, B34.8 with B97.4.

- Deaths involving influenza in 2024 were 65.7% higher than those recorded in 2023 (1,006 deaths in 2024 compared to 607 in 2023). However, this is **lower** than the number of deaths occurring in prepandemic years which were considered to be years of high influenza related mortality, including 2017 (1,656 deaths) and 2019 (1,314 deaths).
- In 2024, deaths *due to* influenza were 68.1% higher than in 2023, and deaths *due to* RSV were 33.7% higher. Deaths *due to* influenza in January and February 2025 were at comparable levels to the previous year, which is high relative to other recent years (Figure 18a).
- Deaths involving RSV have been at comparable levels to those recorded in 2023 since July 2024.
- In 2024, there were 57.9% more deaths *with* influenza than in 2023, and 20.0% more deaths *with* RSV than in 2023 (Figure 18b).
- All three of these acute respiratory infections are more likely to cause death in older age groups than younger age groups.
- The mortality rate for deaths *due to* COVID-19 or influenza for Aboriginal and Torres Strait Islander people was higher than for non-Indigenous people across each year in 2022–2024.

Figure 18b: Provisional numbers of deaths *with* an acute respiratory infection\*†‡ by month, year, and disease, Australia, 1 January 2023 to 31 March 2025



Source: Australian Bureau of Statistics, Provisional Mortality Statistics, released 29 April 2025.

<sup>\*</sup> Axis varies between acute respiratory infections.

<sup>†</sup> Data is provisional and subject to change. It can take several weeks for death registrations to be reported, processed, coded, validated, and tabulated. Therefore, the data shown here may be incomplete. Data for some months were not published by the ABS due to small counts, and therefore not reported here. Data includes all deaths (both doctor and coroner certified) that occurred and were registered by 31 March 2025.

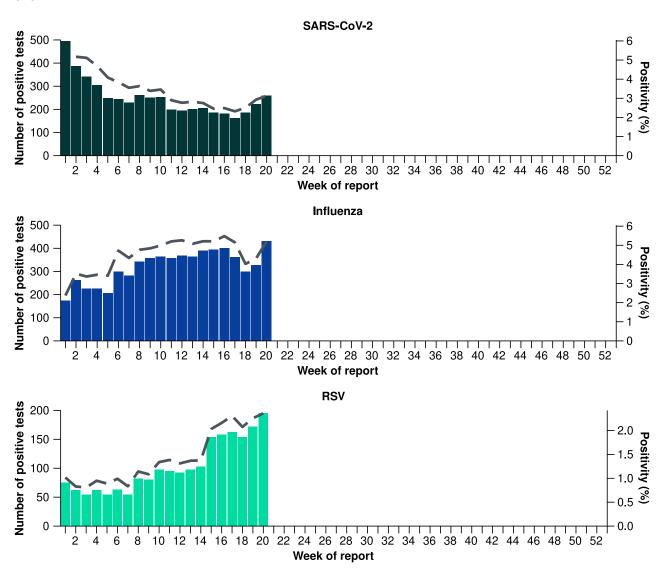
<sup>‡</sup> All deaths due to/with COVID-19 in this report have been coded to ICD-10 codes U07.1-U07.2, U10.9. All deaths due to/with influenza have been coded to J09-J11. All deaths due to/with RSV have been coded to J12.1, J20.5, J21.0, B34.8 with B97.4.

## Laboratory surveillance

Sentinel laboratory surveillance monitors and characterises respiratory pathogens to provide information on what pathogens are circulating, potential changes in the pathogens that might affect their infectiousness, severity, ability to evade vaccine and/or infection-acquired immunity, or resistance to antivirals.

• In the last fortnight (5 May to 18 May 2025), SARS-CoV-2 test positivity has increased slightly to 3.0% (405/13,332), influenza positivity has increased to 4.8% (759/15,884), and RSV positivity has increased slightly to 2.4% (317/13,332) (Figure 19).

Figure 19: Number of tests positive (bars) and test positivity (line) for SARS-CoV-2, influenza or RSV of those specimens tested by sentinel laboratories by week of report\*†, Australia, 1 January to 18 May 2025



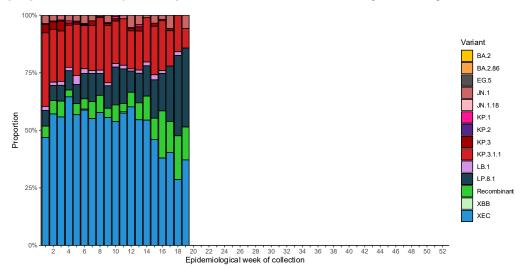
Source: Sentinel laboratories, including National Influenza Centres

<sup>\*</sup> Number of specimens tested excludes data from WA as testing denominator data are different for the three pathogens in Western Australia.
† A small minority of total samples from Victoria are tested only by respiratory panel (influenza, parainfluenza, adenovirus, human metapneumovirus,

<sup>†</sup> A small minority of total samples from victoria are tested only by respiratory panel (influenza, parainfluenza, adenovirus, numan metapneumovirus, seasonal coronaviruses, RSV, and some picornaviruses) but not for SARS-CoV-2. These minority samples include only forensic materials; all other samples are tested by respiratory panel and SARS-CoV-2 assay.

- There were 229 SARS-CoV-2 sequences uploaded to AusTrakka with dates of collection in the last 28 days (21 April to 18 May 2025). These sequences were from NSW, Qld, SA, and WA, with the most recent collection date 11 May 2025.
- All sequences were assigned to the BA.2.86 sub-lineage within B.1.1.529 (Omicron) or recombinants consisting of one or more Omicron sub-lineages (Figure 20a/b). In the last 28 days:
  - 46.3% (106/229) of sequences were from the sub-sub-lineages JN.1 (BA.2.86.1.1), including KP.3 (33/229). No sequences were identified from KP.2.
  - 53.7% (123/229) of sequences were recombinant or recombinant sub-lineages, including XEC, a recombinant between KS.1.1 (JN.1.13.1.1.1) and KP.3.3.
  - There were no BA.1, BA.3, BA.4, BA.5 or other BA.2 sub-sub-lineage sequences.
- JN.1 is now the dominant sublineage identified in AusTrakka among sequences with dates of
  collection in the last 28 days. While the total number of recombinant lineage sequences is greater
  than the total number of JN.1 sequences identified in AusTrakka this month, the recombinant number
  represents multiple different recombinant lineages (Figure 20a).
- The World Health Organization (WHO) have identified certain sub-sub-lineages and recombinants as variants under monitoring (VUM) or variants of interest (VOI) because of their epidemiological, pathological, or immunological features of concern. A select number of designated VUM or VOI are highlighted below due to their relevance in the Australian context:
  - there are 528 LP.8.1 sequences in AusTrakka, with 64 collected in the last 28 days. LP.8.1 was designated as a VUM as of 24 January 2025. The <u>February WHO Risk Evaluation</u>, noted the available evidence on LP.8.1 does not suggest additional public health risks relative to the other currently circulating Omicron descendent lineages.
  - there are 364 LB.1 sequences in AusTrakka, with one sequence collected in the last 28 days.
  - there are 2,857 KP.3.1.1 sequences in AusTrakka, with 32 sequences collected in the last 28 days.
  - there are 3,218 XEC sequences in AusTrakka, with 86 sequences collected in last 28 days.

Figure 20a: SARS-CoV-2 Omicron sub-lineage\* sequences by sample collection date, showing the proportions of sequences per week<sup>1</sup>, Australia, 1 January to 18 May 2025



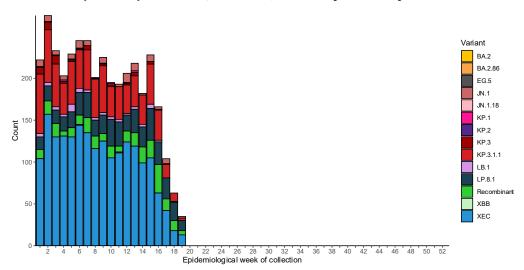
Source: AusTrakka

<sup>\*</sup> Some sub-sublineages are shown alongside their parent lineage, but not included in the parent lineage totals. For instance, KP.2 and KP.3 are sub-sub lineages of JN.1, so the total of JN.1 sequences will be higher than shown in the corresponding colour alone, and should include the KP.2 and KP.3 totals.

<sup>^</sup> Sequences in AusTrakka aggregated by week and reported based on date of sample collection, not date of sequencing.

<sup>†</sup> Proportions in Figure 20a may not be representative when sequence numbers are small; refer to Figure 20b. Data for earlier weeks may change between reporting periods as sequences with older collection dates are uploaded. These numbers are not equivalent to number of cases, as there are many cases which may not be sequenced. Non-VOI and non-VUM Omicron sub-lineages have been collapsed into parent lineages BA.1, BA.2, BA.3, BA.4 and BA.5.

Figure 20b: SARS-CoV-2 Omicron sub-lineage\* sequences by sample collection date, showing the count of sequences per week<sup>1</sup>, Australia, 1 January to 18 May 2025



Source: AusTrakka

- In the year to date, the WHO Collaborating Centre for Reference and Research on Influenza has antigenically characterised 1,342 influenza viruses from Australia (Table 4), of which:
  - 68.2% (915/1,342) have been influenza A(H1N1)
  - 15.9% (214/1,342) have been influenza A(H3N2)
  - 15.9% (213/1,342) have been influenza B/Victoria.
- In the year to date, there have been no influenza B/Yamagata viruses characterised (Table 4). The last influenza B/Yamagata virus characterised in Australia was in a sample from 2020.
- Of the influenza A(H1N1) samples tested for neuraminidase inhibitor resistance, 0.3% (1/309) demonstrated highly reduced inhibition to Oseltamivir. None of the influenza A(H3N2) samples tested for neuraminidase inhibitor resistance demonstrated highly reduced inhibition to Oseltamivir.
- None of the samples tested demonstrated highly reduced inhibition to Zanamivir.

Table 4: Australian influenza viruses typed by haemagglutination inhibition assay and jurisdiction\*†, 1 January to 18 May 2025

Strain	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
A(H1N1)	125	75	309	34	17	107	233	15	915
A(H3N2)	11	18	98	5	4	13	63	2	214
B/Victoria lineage	34	24	39	3	7	17	80	9	213
B/Yamagata lineage	0	0	0	0	0	0	0	0	0
Total	170	117	446	42	28	137	376	26	1,342

Source: World Health Organization (WHO) Collaborating Centre for Reference and Research on Influenza

<sup>\*</sup> Some sub-sublineages are shown alongside their parent lineage, but not included in the parent lineage totals. For instance, KP.2 and KP.3 are sub-sub lineages of JN.1, so the total of JN.1 sequences will be higher than shown in the corresponding colour alone, and should include the KP.2 and KP.3 totals.

<sup>^</sup> Sequences in AusTrakka aggregated by week and reported based on date of sample collection, not date of sequencing.

<sup>†</sup> Data for earlier weeks may change between reporting periods as sequences with older collection dates are uploaded. These numbers are not equivalent to number of cases, as there are many cases which may not be sequenced. Non-VOI and non-VUM Omicron sub-lineages have been collapsed into parent lineages BA.1, BA.2, BA.3, BA.4 and BA.5.

<sup>\*</sup>Viruses tested by the WHO Collaborating Centre for Reference and Research on Influenza are not necessarily a random sample of all those in the community and early-year data may be based on limited samples received. There may be up to a month delay on reporting of samples.

† Jurisdiction indicates the residential location for the individual tested, not the submitting laboratory.

## Vaccine coverage, effectiveness and match

Vaccine coverage, effectiveness and match for acute respiratory infections are monitored from several data sources in Australia. Refer to the Technical Supplement for more information.

#### Vaccine coverage

- In Australia, regular COVID-19 vaccinations are the best way to maintain protection against severe
  disease and death from COVID-19. Most adults should receive a COVID-19 vaccine each year to stay
  protected against severe illness, hospitalisation and death. Adults aged 75 years and over should get
  vaccinated every six months.
  - More information on COVID-19 vaccines in Australia is available via the <u>Department's COVID-19 webpages</u> or from the <u>National Centre for Immunisation Research and Surveillance (NCIRS)</u>.
- Nationally, 6.6% of adults (aged 18 years and over) have received a COVID-19 vaccine in the past six months (Table 5).
- Nationally, fewer adults have received a COVID-19 vaccine in the past 12 months (10.2%; Table 5), compared to the 12 months prior (16.1% from 15 May 2023 to 12 May 2024).
  - In the past 12 months, vaccine coverage decreased in all age groups, with the largest decrease seen in 65–74 years age group (from 37.4% in the 12 months prior to 24.3% in the past 12 months).
- There is substantial variation in COVID-19 vaccine coverage across age groups, ranging from 4.4% in adults aged 18–64 years to 39.2% in adults aged 75 years and over. Vaccine coverage increases with increasing age (Table 5).
- There is also some variation in vaccine coverage across jurisdictions, ranging from 4.1% in the NT to 17.5% in Tas (Table 5).

Table 5: COVID-19 vaccine coverage\*†‡ by age group and jurisdiction, Australia, 13 May 2024 to 18 May 2025

Age group	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
Past 12 months (13 May 2024 to 18 May	/ 2025)								
18–64 years	9.7	3.9	2.1	4.1	4.4	8.0	4.9	3.9	4.4
65–74 years	43.7	22.9	14.2	22.7	25.2	36.0	25.1	23.7	24.3
≥ 75 years	61.6	37.6	26.0	37.1	39.3	53.1	39.2	39.4	39.2
All ages (18 years and over)	17.0	9.6	4.1	9.5	11.2	17.5	10.5	9.4	10.2
Past 6 months (18 November 2024 to 1	8 May 2025)								
18–64 years	5.5	2.0	1.0	2.3	2.4	4.6	2.6	2.0	2.4
65–74 years	31.5	15.0	8.1	15.3	17.4	25.6	16.8	15.3	16.2
≥ 75 years	47.1	26.5	16.2	26.7	28.5	40.5	28.0	27.5	28.0
All ages (18 years and over)	11.2	6.1	2.2	6.2	7.4	12.0	6.7	5.9	6.6

Source: Australian Immunisation Register (AIR) as at 18 May 2025

<sup>\*</sup> COVID-19 vaccine coverage uses the Australian Bureau of Statistics June 2023 Estimated Resident Population (ERP) as denominator.

<sup>†</sup> COVID-19 vaccination uptake and coverage are influenced by changes in COVID-19 vaccine recommendations and eligibility criteria. For this reason, caution should be used when comparing coverage rates in the current 12 month period to previous 12 month periods.

<sup>‡</sup> Jurisdiction is based on the state or territory in which a vaccine was administered and may differ from a person's residential. Population denominator data used to calculate COVID-19 vaccine coverage are based on an individual's residential address.

- Nationally, 2.5% of Aboriginal and Torres Strait Islander adults (aged 18 years or over) have received a COVID-19 vaccine in the past six months (Table 6).
- Nationally, fewer Aboriginal and Torres Strait Islander adults have received a COVID-19 vaccine in the past 12 months (4.4%; Table 6), compared to the 12 months prior (8.2% in 15 May 2023 to 12 May 2024).
  - In the past 12 months, vaccine coverage decreased in all age groups of Aboriginal and Torres Strait Islander people, with the largest decrease seen in 75 years and over age group (from 36.7% in the 12 months prior to 25.2% in the past 12 months).
- Among Aboriginal and Torres Strait Islander people there is substantial variation in COVID-19 vaccine coverage across age groups, ranging from 2.6% in adults aged 18–64 years to 25.2% in adults aged 75 years and over. Vaccine coverage increases with increasing age (Table 6).
- Among Aboriginal and Torres Strait Islander populations, there is slight variation in vaccine coverage across jurisdictions, ranging from 2.6% in the NT to 9.0% in the ACT (Table 6).

Table 6: COVID-19 vaccine coverage\*†‡ among Aboriginal and Torres Strait Islander populations by age group and jurisdiction, Australia, 13 May 2024 to 18 May 2025

Age group	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
Past 12 months (13 May 2024 to 18 May	/ 2025)								
18–64 years	6.2	2.7	1.9	2.3	2.9	5.1	3.9	2.2	2.6
65–74 years	31.4	17.6	8.6	15.6	17.0	29.5	20.4	13.9	16.5
≥ 75 years	45.8	27.7	13.0	22.9	26.9	37.6	29.9	24.0	25.2
All ages (18 years and over)	9.0	4.9	2.6	3.9	4.8	8.8	6.5	3.5	4.4
Past 6 months (18 November 2024 to 1	8 May 2025)								
18–64 years	3.4	1.4	0.8	1.2	1.3	2.9	2.0	0.9	1.3
65–74 years	19.4	11.3	4.5	9.8	9.9	20.6	12.7	8.4	10.4
≥ 75 years	29.4	18.9	8.2	15.7	19.2	28.2	20.6	15.1	17.2
All ages (18 years and over)	5.2	2.9	1.2	2.3	2.6	5.7	3.7	1.8	2.5

Source: Australian Immunisation Register (AIR) as at 18 May 2025

<sup>\*</sup> COVID-19 vaccine coverage uses the AIR population as the denominator.

<sup>†</sup> COVID-19 vaccination uptake and coverage are influenced by changes in COVID-19 vaccine recommendations and eligibility criteria. For this reason, caution should be used when comparing coverage rates in the 12 month period to previous 12 month periods.

<sup>‡</sup> Jurisdiction is based on the state or territory in which a vaccine was administered and may differ from a person's residential. Population denominator data used to calculate COVID-19 vaccine coverage are based on an individual's residential address.

- Influenza virus strains change year to year, so annual vaccination before the peak of the influenza season provides Australians with the best protection against influenza and its complications. The seasonal influenza vaccine is recommended for everyone aged 6 months and over.
  - More information on influenza vaccines in Australia is available via the <u>Department's influenza</u> vaccine webpages or from <u>NCIRS</u>.
- Nationally, influenza vaccine coverage is 18.9% for the 2025 seasonal campaign so far (Table 7); however, influenza vaccine coverage this year to date remains lower than vaccine coverage at the same time in the last three years.
- There is substantial variation in influenza vaccine coverage across age groups, ranging from 7.7% in children aged 5–14 years to 40.5% in adults aged 65 years and over (Table 7).
- There is some variation in influenza vaccine coverage across jurisdictions, ranging from 12.9% in the NT to 26.2% in the ACT (Table 7).
- Among Aboriginal and Torres Strait Islander people, there is substantial variation in influenza vaccine coverage across age groups, ranging from 5.3% in children aged 5–14 years to 38.3% in adults aged 65 years and over (Table 7).
- Among Aboriginal and Torres Strait Islander populations, there is some variation in influenza vaccine coverage across jurisdictions, ranging from 8.4% in WA to 17.7% in the ACT (Table 7).

Table 7: Influenza vaccine coverage\*†‡ by age group and jurisdiction, Australia, 1 March to 18 May 2025

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
Age groups									
6 months to <5 years	23.8	12.1	12.5	9.0	12.5	11.6	13.1	7.2	11.3
5–14 years	14.0	8.0	4.7	7.6	8.5	7.8	8.3	5.6	7.7
15–49 years	20.5	12.5	11.0	11.6	15.3	14.5	14.2	8.6	12.3
50–64 years	30.8	20.7	15.4	21.3	24.8	25.6	22.5	15.8	20.6
≥ 65 years	47.4	40.2	24.0	43.1	48.0	44.9	42.0	37.4	40.5
All ages (6 months and over)	26.2	19.3	12.9	19.0	23.7	23.2	20.4	14.9	18.9
Aboriginal and Torres Strait Islander	populations								
6 months to <5 years	13.6	7.2	9.6	5.0	6.6	8.9	7.7	4.9	6.5
5–14 years	8.3	5.8	5.8	5.0	6.1	6.6	5.2	4.1	5.3
15–49 years	15.4	10.0	10.6	8.2	10.6	11.2	10.5	6.3	9.0
50–64 years	28.2	23.3	19.4	20.2	23.6	27.3	22.0	15.4	20.7
≥ 65 years	47.9	41.4	26.0	40.4	44.0	44.5	42.4	31.2	38.3
All ages (6 months and over)	17.7	13.2	12.0	10.9	13.6	15.5	13.7	8.4	11.7

Source: Australian Immunisation Register (AIR) as at 18 May 2025

<sup>\*</sup> Influenza vaccine coverage uses the AIR population as the denominator. Coverage data in these tables may differ slightly from coverage estimates in other reports due to differences in calculation methodologies and/or different data download dates.

<sup>†</sup> Age is calculated based on the person's age as at 1 July of the reporting year.

<sup>‡</sup> Jurisdiction is based on the state or territory in which a vaccine was administered and may differ from a person's residential. Population denominator data used to calculate influenza vaccine coverage are based on an individual's residential address as recorded on Medicare.

- Infants can be protected against severe RSV through the vaccination of pregnant people or the direct administration of monoclonal antibodies like nirsevimab.
- On 3 February 2025, the National RSV Maternal and Infant Protection Program commenced with the
  roll-out of the National Immunisation Program funded maternal RSV vaccine. The other component of
  the program is the state and territory nirsevimab (Beyfortus) for infants. This comprehensive program
  provides multiple opportunities for infants and young children to be protected.
  - More information on RSV immunisation in Australia is available via the <u>Department's RSV</u> vaccine webpages or from <u>NCIRS</u>.
- While high maternal vaccine uptake is a positive indicator of maternal program success, it may result
  in lower nirsevimab uptake rates in infants. This is because maternal antibodies passed to the infant
  can provide protection against RSV, potentially reducing the need for infant immunisation.
  - Maternal RSV vaccine data will be included in future reports. Until maternal RSV vaccine data
    is included in this report, please refer to the <u>Respiratory Syncytial Virus Mother and Infant</u>
    <u>Protection Program (RSV-MIPP) data</u> published by NCIRS.
- Nationally, 15.5% of infants (aged < 8 months) have received nirsevimab (Table 8).</li>
- There is substantial variation in nirsevimab uptake in infants across jurisdictions, ranging from 6.2% in Vic to 37.4% in Qld (Table 8).
  - The current trend is likely due to variation in the seasonality and eligibility criteria between state and territory programs, as well as the presence of previous nirsevimab programs. Some state and territory programs are seasonal (from 1 April to 30 September), whereas others are year-round. In states with seasonal programs (SA, Tas, Vic, and parts of WA), uptake may appear disproportionately lower at this time of the year. In addition, Qld and WA had nirsevimab programs in 2024, which may contribute to higher nirsevimab uptake rates in 2025 in these states.

Table 8: Nirsevimab (Beyfortus) uptake\*†‡ by age group and jurisdiction, Australia, 3 February to 18 May 2025

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
Age group									
Infants (aged < 8 months)	10.1	7.8	28.8	37.4	15.1	14.3	6.2	20.1	15.5
Young children (aged ≥ 8 to 24 months)	0.9	0.2	0.3	0.1	0.5	0.7	0.2	0.3	0.3

Source: Australian Immunisation Register (AIR) as at 18 May 2025

#### Vaccine effectiveness

• It is too early to assess vaccine effectiveness for the 2025 influenza season.

#### Vaccine match

- Refer to the <u>Technical Supplement</u> for information on the 2025 southern hemisphere influenza vaccines composition.
- In the year to date, 98.9% (905/915) of influenza A(H1N1) isolates, 100% (214/214) of influenza A(H3N2) isolates and 99.5% (212/213) of influenza B/Victoria lineage isolates characterised have been antigenically similar to the corresponding 2025 vaccine components.

<sup>\*</sup> Reporting of RSV monoclonal antibodies to the AIR is not compulsory; therefore, uptake estimates are likely to be underestimated. Nirsevimab is recommended for infants whose mother did not receive the RSV vaccine during pregnancy and therefore nirsevimab uptake should be interpreted with care. † For infants and young children vaccinated, age in months is calculate as months between the immunisation encounter and date of birth rounded down. For the infant and young children population, age in months is calculated as months between the AIR data extract date and date of birth rounded down. ‡ Jurisdiction is based on the state or territory in which nirsevimab was administered and may differ from a person's residential. Population denominator data used to calculate nirsevimab coverage are based on an individual's residential address as recorded on Medicare.