

Department of Health, Disability and Ageing



# 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 (30 June to 13 July 2025) and earlier severity reporting periods (up to 29 June 2025).

**In the community:** Respiratory illness activity (self-reported new fever and cough symptoms) remains lower than the trends observed at the same time last year and the five-year average. While the number of people reporting new fever and cough symptoms remained stable, fewer people reported taking time off work due to respiratory illness compared to the previous fortnight. The number of COVID-19 cases began decreasing last fortnight for the first time since April 2025. COVID-19 case numbers remain lower than at the same time in previous years. The number of influenza cases continued to increase in the last fortnight; however, the rate of increase slowed in the second week of the fortnight and case numbers remain lower than observed at the same time last year. The number of RSV cases in the last fortnight remained relatively stable; however, trends varied across jurisdictions.

**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 lower than the rates observed at the same time last year but higher than the five-year average.

**In hospitals:** Sentinel hospital-based surveillance shows the number of patients admitted with severe acute respiratory infections this year has continued to increase since late March 2025. 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. At sentinel hospitals, more children (those aged 16 years and younger) were admitted with RSV than with influenza or COVID-19, while more adults were admitted with COVID-19 compared to influenza or RSV. Sentinel intensive care surveillance shows the number of patients with severe acute respiratory infections each week has fluctuated but followed a generally increasing trend since late May. In 2025 to date, most patients were admitted to sentinel intensive care with rhinovirus / enterovirus, followed by influenza. A higher proportion of intensive care stay continues to vary only slightly between illnesses. In the last fortnight, the average number of COVID-19 cases in intensive care decreased slightly, while the average number of intensive care staff unavailable due to COVID-19 illness or exposure 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 decreased in the last fortnight, while test positivity for influenza and RSV increased. The SARS-CoV-2 variant under monitoring NB.1.8.1, is the dominant SARS-CoV-2 variant in the last 28 days in Australia, accounting for 70.5% of sequences. Small numbers of sequences of other variants under monitoring, including XFG, LP.8.1, LB.1, KP.3.1.1 and XEC continue to be observed in Australia.

**Vaccine coverage, effectiveness and match:** Nationally, fewer adults have received a COVID-19 vaccine in the last 12 months compared to the 12 months prior. Influenza vaccine coverage this year to date is consistent with coverage at the same time last year; however, remains lower than coverage at the same time in 2023 and 2022. Since the commencement of the National RSV Mother and Infant Protection Program, 86,448 Abrysvo doses have been administered and 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 Jenna Hassall, Ash Donovan and Caitlin Trenorden 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</u> <u>COVID-19</u>, Influenza, and RSV. Please refer to the <u>Technical Supplement – Australian Respiratory</u> <u>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 30 June to 13 July 2025 and where comparisons to the previous fortnight are made this includes 16 June to 29 June 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 <u>Australian national surveillance case definitions</u>. 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 16 July 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 16 June to 29 June 2025 unless specified otherwise. Where comparisons to the previous severity fortnight are made this includes 2 June to 15 June 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 observed at the same time last year and the five-year average.
- In the last fortnight (30 June to 13 July 2025), survey participants reporting new fever and cough symptoms (2.1%) was consistent with the previous fortnight (2.1%) (Figure 1).
- In the last fortnight, more survey participants with new fever and cough symptoms used a rapid antigen test (RAT) (57.5%; 741/1,289) than a polymerase chain reaction (PCR) test (8.8%; 113/1,289) to test for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
- Self-reported SARS-CoV-2 RAT positivity was lower in the last fortnight (23.2%; 172/741) than in the previous fortnight (29.9%; 256/857). Self-reported SARS-CoV-2 PCR positivity was also lower in the last fortnight (13.3%; 15/113) than in the previous fortnight (15.9%; 25/157).
- In the last fortnight, 8.4% (108/1,289) 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 (26.9%; 29/108), than in the previous fortnight (24.0%; 35/146).
- In the last fortnight, less survey participants reported taking three or more days off work or normal duties due to fever and cough symptoms (47.8%; 616/1,289), than in the previous fortnight (53.7%; 769/1,432).
- From mid-March to late June 2025, the weekly proportion of survey participants with new fever and cough symptoms was lower than observed at the same time in 2022, 2024, and the five-year average; however, since early July the weekly proportion has been relatively similar to the trends observed at the same time last year and 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 13 July 2025



Source: FluTracking

\* 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 (30 June to 13 July 2025), there was a 19.5% decrease in COVID-19 cases, a • 24.4% increase in influenza cases, and a minor (0.6%) increase in RSV cases.

#### Table 1: Notified cases and notification rate per 100,000 population by disease, five-year age group, and jurisdiction\*<sup>†</sup>, Australia, 1 January to 13 July 2025

|            | C                          | OVID-19                |                           | In                         | fluenza                |                           |                            | RSV                    |                           |
|------------|----------------------------|------------------------|---------------------------|----------------------------|------------------------|---------------------------|----------------------------|------------------------|---------------------------|
|            | Reporting<br>period<br>(n) | Year to<br>date<br>(n) | Year to<br>date<br>(rate) | Reporting<br>period<br>(n) | Year to<br>date<br>(n) | Year to<br>date<br>(rate) | Reporting<br>period<br>(n) | Year to<br>date<br>(n) | Year to<br>date<br>(rate) |
| Age grou   | p (years)                  |                        |                           |                            |                        |                           |                            |                        |                           |
| 0-4        | 1,351                      | 11,471                 | 760                       | 5,426                      | 22,928                 | 1,520                     | 6,226                      | 50,280                 | 3,332                     |
| 5–9        | 356                        | 3,091                  | 192                       | 6,660                      | 28,651                 | 1,778                     | 1,249                      | 7,466                  | 463                       |
| 10–14      | 304                        | 3,438                  | 205                       | 4,324                      | 19,164                 | 1,144                     | 452                        | 3,020                  | 180                       |
| 15–19      | 318                        | 3,958                  | 238                       | 2,213                      | 11,112                 | 668                       | 226                        | 1,981                  | 119                       |
| 20–24      | 401                        | 4,022                  | 225                       | 1,275                      | 6,161                  | 344                       | 210                        | 1,641                  | 92                        |
| 25–29      | 524                        | 5,081                  | 255                       | 1,131                      | 6,078                  | 305                       | 272                        | 2,033                  | 102                       |
| 30–34      | 641                        | 6,130                  | 301                       | 2,008                      | 8,956                  | 439                       | 350                        | 2,601                  | 128                       |
| 35–39      | 765                        | 7,042                  | 355                       | 2,926                      | 12,276                 | 619                       | 386                        | 2,666                  | 134                       |
| 40–44      | 798                        | 6,790                  | 367                       | 2,922                      | 12,695                 | 685                       | 325                        | 2,242                  | 121                       |
| 45–49      | 633                        | 5,859                  | 360                       | 2,153                      | 9,831                  | 604                       | 274                        | 2,062                  | 127                       |
| 50–54      | 615                        | 5,942                  | 352                       | 1,752                      | 8,973                  | 531                       | 346                        | 2,539                  | 150                       |
| 55–59      | 625                        | 5,790                  | 378                       | 1,631                      | 8,231                  | 537                       | 397                        | 2,742                  | 179                       |
| 60–64      | 669                        | 6,194                  | 404                       | 1,574                      | 8,070                  | 526                       | 423                        | 3,079                  | 201                       |
| 65–69      | 674                        | 6,366                  | 468                       | 1,272                      | 7,046                  | 518                       | 450                        | 3,242                  | 238                       |
| 70+        | 4,487                      | 39,825                 | 1,192                     | 4,461                      | 22,881                 | 685                       | 1,806                      | 13,196                 | 395                       |
| Jurisdicti | on                         |                        |                           |                            |                        |                           |                            |                        |                           |
| ACT        | 242                        | 1,942                  | 410                       | 1,089                      | 3,969                  | 837                       | 381                        | 1,648                  | 348                       |
| NSW        | 5,864                      | 55,057                 | 649                       | 17,112                     | 72,592                 | 856                       | 4,662                      | 50,171                 | 591                       |
| NT         | 43                         | 861                    | 338                       | 300                        | 2,229                  | 874                       | 34                         | 557                    | 218                       |
| Qld        | 2,535                      | 23,859                 | 427                       | 6,620                      | 36,191                 | 648                       | 1,726                      | 19,035                 | 341                       |
| SA         | 710                        | 7,502                  | 399                       | 3,742                      | 14,538                 | 774                       | 1,021                      | 4,050                  | 216                       |
| Tas        | 221                        | 1,649                  | 287                       | 572                        | 2,813                  | 489                       | 159                        | 921                    | 160                       |
| Vic        | 2,230                      | 21,610                 | 310                       | 9,991                      | 47,813                 | 685                       | 4,236                      | 20,320                 | 291                       |
| WA         | 1,320                      | 8,584                  | 289                       | 2,308                      | 12,948                 | 437                       | 1,175                      | 4,099                  | 138                       |
| Total      | 13,165                     | 121,064                | 445                       | 41,734                     | 193,093                | 710                       | 13,394                     | 100,801                | 371                       |

Source: National Notifiable Diseases Surveillance System (NNDSS) \* Rate per 100,000 population for the given time period. Population data are based on the Australian Bureau of Statistics (ABS) <u>Estimated Resident</u> <u>Population (ERP)</u> for the reference period June 2024, released 12 December 2024. † Total includes cases with missing age.

- In the last fortnight, the number of COVID-19 cases began decreasing for the first time since late April 2025 (Figure 2), although COVID-19 cases are not consistently decreasing across all jurisdictions. This may indicate the peak of the most recent wave of transmission has passed nationally; however, it is too early to definitively determine.
- Following an increasing trend from late April 2025 to an apparent peak in late June, the number of COVID-19 cases this year to date (n=121,064) remains 33.8% less than the number of cases observed in the same time period last year (n=182,856) (Figure 2).
- In the last fortnight, COVID-19 notification rates decreased across most jurisdictions, most notably the ACT, NSW and WA. However, in the last fortnight COVID-19 notification rates continued to increase in Tas and remained stable in Qld (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 such as people who live in a residential aged care home (Table 1).
- In the year to date, COVID-19 notification rates are highest in NSW and lowest in Tas (Table 1).

#### Figure 2: Notified COVID-19 cases (laboratory-confirmed only) by year and week of diagnosis, Australia, 2022 to 13 July 2025



Source: National Notifiable Diseases Surveillance System (NNDSS)

Figure 3: Notification rates\* per 100,000 population for COVID-19 cases by state or territory and week of diagnosis, Australia, 1 January to 13 July 2025



Source: National Notifiable Diseases Surveillance System (NNDSS)

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





Source: National Notifiable Diseases Surveillance System (NNDSS)

\* 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, the number of influenza cases continued to increase; however, the rate of
  increase slowed in the second week of the fortnight (the week ending 13 July 2025) (Figure 4).
- Influenza cases numbers have been increasing since early May 2025 in line with seasonal trends; however, the number of cases this year to date (n=193,093) is 3.9% less than the number of cases observed in the same time period last year (n=200,913). Weekly influenza case numbers in 2025 have not yet surpassed the number of cases seen at the peak of the influenza season in either 2022 (n=29,621) or 2024 (n= 28,453) (Figure 4).
- In the last fortnight, influenza notification rates increased across all jurisdictions, with the NT commencing a second period of increasing influenza notifications this year similar to the trends observed in 2024 (Figure 5). In tropical and subtropical regions, like the NT, it is not uncommon for

influenza seasonality to be less distinct, with some tropical and subtropical regions experiencing yearround circulation, multiple peaks, or extended periods of activity.

- 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 WA (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 13 July 2025



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

- In the last fortnight, most influenza notifications were influenza A(Unsubtyped) (64.6%; 26,964/41,734), followed by influenza B (33.0%; 13,793/41,734), then influenza A(H1N1) (1.8%; 734/41,734), and influenza untyped (0.4%; 182/41,734). In the last fortnight, there have been 40 influenza A&B co-detections (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 the highest in the 5–19 years age group. There has been a small number of influenza A(H1N1) and influenza A(H3N2) cases across all age groups (Figure 6).
  - There is 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. Several jurisdictions have been experiencing increasing numbers of influenza B cases in the year to date; however, the proportion of influenza B and influenza A varies week-on-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 number and selection of influenza samples that undergo typing.

Figure 6: Notified influenza cases by influenza subtype, age group\*, and week of diagnosis, Australia, 1 January to 13 July 2025



Source: National Notifiable Diseases Surveillance System (NNDSS) \* Axis varies between age groups.





Source: National Notifiable Diseases Surveillance System (NNDSS) \* Axis varies between jurisdictions.

- In the last fortnight, the number of RSV cases remained relatively stable compared with the previous fortnight, and lower than the number of cases reported at the same time last year (13,394 cases in the last fortnight, compared to 10,879 cases in the fortnight ending 14 July 2024).
- The number of RSV cases has been steadily increasing since the start of 2025, with slight week-onweek decreases observed from mid to late April. Overall, the number of cases this year to date (n=100,801) is 18.2% less than the number of cases observed in the same time period last year (n=123,233) (Figure 8).
- In the last fortnight, RSV notification rates have varied across jurisdictions (Figure 9). RSV notification rates in SA and WA increased steeply in the last fortnight, with slower increases in the ACT, the NT and Vic. In contrast, in the last fortnight RSV notification rates decreased in NSW and Qld, and remained stable in Tas.
- 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 13 July 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.





Source: National Notifiable Diseases Surveillance System (NNDSS) \* Rate per 100,000 population for the given time period. Population data are based on the Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) for the reference period June 2024, released 12 December 2024.

#### **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 continued to increase overall since May 2025, following a period of relatively stable influenza-like-illness consultation rates from mid-January to late April.
- In the last fortnight (30 June to 13 July 2025), there were slightly more general practice consultations for influenza-like illness (10.8 notifications per 1,000 consultations per fortnight) than in the previous fortnight (10.0 notifications per 1,000 consultations per fortnight) (Figure 10).
- From mid-January to May 2025, influenza-like-illness notification rates remained relatively consistent with rates observed in 2024 but were slightly higher than observed rates in the same period in previous years and the five-year average. Following a steadily increasing trend since early June 2025, influenza-like-illness consultation rates are now above the five-year average; however, rates remain lower than the same time period last year (Figure 10).

# Figure 10: Rate of influenza-like-illness notifications per 1,000 consultations per week with sentinel general practice sites compared with the five-year average by year and week of consultation\*<sup>†</sup>, Australia, 2022 to 13 July 2025



Source: Australian Sentinel Practice Research Network (ASPREN)

\* 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.

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

- In the last fortnight, 76.3% (116/152) of people attending general practice with influenza-like-illness who were tested have then tested positive for a respiratory pathogen.
- In the last fortnight, influenza (45.7%; 53/116) was the most commonly detected pathogen, followed by rhinovirus (16.4%; 19/116) and RSV (14.7%; 17/116) (Figure 11). Influenza positivity among people attending sentinel general practice sites in the last fortnight is the highest observed in this year to date.
- In the year to date, 68.0% (946/1,392) 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 (38.3%; 362/946) has been the most commonly detected pathogen, followed by influenza (27.2%; 257/946), SARS-CoV-2 (10.3%; 97/946), RSV (8.8%; 83/946), and human metapneumovirus (4.0%; 38/946) (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 13 July 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 followed an overall increasing trend since late March, after a period of relatively low and stable weekly admissions between January and March 2025. 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 fortnight (16 June to 29 June 2025), more patients were admitted to a sentinel hospital with a severe acute respiratory infection (n=918), than in the previous severity reporting fortnight (n=736).
  - In the last severity reporting fortnight, at sentinel hospitals there was a 11.2% decrease in admissions with COVID-19 (from 196 to 174), a 53.4% increase in admissions with influenza (from 281 to 431), and a 20.8% increase in admissions with RSV (from 259 to 313), compared to the previous severity reporting fortnight.
- In the year to date for severity reporting (1 January to 29 June 2025), there have been 6,181 admissions with severe acute respiratory infections at sentinel hospitals. Most patients with a severe acute respiratory infection have been admitted with influenza (n=2,379) followed by RSV (n=2,062) (Figure 12).





Source: Influenza Complications Alert Network (FluCAN)

- Patients admitted to sentinel hospitals with influenza have mostly been admitted with influenza A (82.2%; 1,956/2,379), while 17.6% (419/2,379) were admitted with influenza B.
  - Most hospital admissions with influenza A have been with influenza A(Unsubtyped) (79.9%; 1,563/1,956), followed by influenza A(H1N1) (18.6%; 364/1,956), and then influenza A(H3N2) (1.5%; 29/1,956).

- In the year to date for severity reporting, influenza A was the most commonly detected influenza subtype in all age groups. Influenza A(H1N1) and influenza A(H3N2) were more commonly observed in adults than children, while influenza B was more commonly observed in children. Of note, school aged children (5–16 years) had the highest proportion of influenza B compared with influenza A (Figure 13).
  - Trends in influenza subtypes should be interpreted with care as there may be differences in the number and selection of influenza samples that undergo typing.
  - 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 29 June 2025



Source: Influenza Complications Alert Network (FluCAN)

\* 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) have been 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. The

proportion of children admitted directly to intensive care was relatively similar across COVID-19, influenza and RSV (Table 2a).

• Sadly, there have been a small number of children admitted with a severe acute respiratory infections who have died in hospital (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 29 June 2025

|                                       | COVID-19  | Influenza   | RSV   |
|---------------------------------------|---|---|---|
|                                       | Year to date for<br>severity reporting<br>(n=581) | Year to date for<br>severity reporting<br>(n=1,342) | Year to date for<br>severity reporting<br>(n=1,772) |
| Age (years)                           |   |   |   |
| Median [IQR]                          | 1 [0–3]   | 4 [1–8]   | 1 [0–2]   |
| Age group (years)                     |   |   |   |
| < 6 months                            | 189 (32.5%)                                       | 70 (5.2%)   | 431 (24.3%)   |
| 6 months – 4 years                    | 262 (45.1%)                                       | 623 (46.4%)   | 1213 (68.5%)  |
| 5–16 years                            | 130 (22.4%)                                       | 649 (48.4%)   | 128 (7.2%)  |
| Indigenous status                     |   |   |   |
| Aboriginal and Torres Strait Islander | 56 (9.6%)   | 97 (7.2%)   | 118 (6.7%)  |
| Length of hospital stay (days)†       |   |   |   |
| Median [IQR]                          | 1 [1–2]   | 1 [1–2]   | 2 [1–3]   |
| Patient admission location‡           |   |   |   |
| Admitted to hospital ward             | 546 (94.0%)                                       | 1276 (95.1%)  | 1679 (94.8%)  |
| Admitted to intensive care directly   | 35 (6.0%)   | 66 (4.9%)   | 93 (5.2%)   |
| Discharge status†                     |   |   |   |
| Alive                                 | 419 (72.1%)                                       | 969 (72.2%)   | 1214 (68.5%)  |
| Died                                  | _   | 2 (0.1%)  | 1 (0.1%)  |
| Incomplete/missing                    | 162 (27.9%)                                       | 371 (27.6%)   | 557 (31.4%)   |

Source: Influenza Complications Alert Network (FluCAN)

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

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 <u>COVID-19 in children</u>, <u>Paediatric</u> <u>Inflammatory Multisystem Syndrome (PIMS-TS) following COVID-19</u>, <u>influenza in children</u>, or <u>RSV in children</u> please visit the <u>PAEDS</u> webpages and dashboards.

- In the year to date for severity reporting, more adults (those aged 17 years and over) have been admitted to 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 only slightly higher in the 65 years and over age group compared to the 17–64 years age group (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 29 June 2025

|                                       | COVID-19  | Influenza   | RSV   |
|---------------------------------------|---|---|---|
|                                       | Year to date for<br>severity reporting<br>(n=1,159) | Year to date for<br>severity reporting<br>(n=1,036) | Year to date for<br>severity reporting<br>(n=290) |
| Age (years)                           |   |   |   |
| Median [IQR]                          | 75 [62–84]  | 66 [53–77]  | 74 [62–82]  |
| Age group (years)                     |   |   |   |
| 17–64 years                           | 329 (28.4%)   | 480 (46.3%)   | 86 (29.7%)  |
| 65 years and over                     | 830 (71.6%)   | 556 (53.7%)   | 204 (70.3%)                                       |
| Indigenous status                     |   |   |   |
| Aboriginal and Torres Strait Islander | 73 (6.3%)   | 76 (7.3%)   | 22 (7.6%)   |
| Length of hospital stay (days)†       |   |   |   |
| Median [IQR]                          | 5 [2–9]   | 4 [2–7]   | 4 [2–8]   |
| Patient admission location‡           |   |   |   |
| Admitted to hospital ward             | 1089 (94.0%)  | 932 (90.0%)   | 271 (93.4%)                                       |
| Admitted to intensive care directly   | 70 (6.0%)   | 104 (10.0%)   | 19 (6.6%)   |
| Discharge status†                     |   |   |   |
| Alive                                 | 835 (72.0%)   | 738 (71.2%)   | 181 (62.4%)                                       |
| Died                                  | 41 (3.5%)   | 21 (2.0%)   | 10 (3.4%)   |
| Incomplete/missing                    | 283 (24.4%)   | 277 (26.7%)   | 99 (34.1%)  |

Source: Influenza Complications Alert Network (FluCAN)

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

+ 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.

‡ 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 each week has fluctuated but followed a generally increasing trend in weekly admission numbers since late May, after a period of relatively low and stable weekly admissions between January and May 2025.
- In the last severity reporting period for sentinel intensive care (2 June to 29 June 2025), more patients have been admitted to a sentinel intensive care with a severe acute respiratory infection (n=334), than in the previous severity reporting period (n=278). The increase in overall admissions was largely driven by a 79.2% increase in admissions with influenza in the last severity reporting period (n=129), compared with the previous period (n=72 from 5 May to 1 June 2025) (Figure 14).
- In the year to date for severity reporting (1 January to 29 June 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 29 June 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 29 June 2025



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

Note: 4.4% (73/1,656) 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.

\* 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 generally been among older people. In contrast, admissions with rhinovirus or RSV have been among younger people, primarily those aged 0–9 years old (Figure 15; Table 3).
- A higher proportion of admissions with 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, predominately among those with COVID-19 (Table 3).

#### Table 3: Demographic characteristics and outcomes of patients admitted with a severe acute respiratory infection to a sentinel intensive care by disease<sup>\*†</sup>, Australia, 1 January to 29 June 2025

|   | COVID-19   | hMPV  | Influenza  | Parainfluenza                                    | Rhinovirus   | RSV  | Other   |
|---|--|---|--|--|--|--|---|
|   | Year to date<br>for severity<br>reporting<br>(n=337) | Year to date<br>for severity<br>reporting<br>(n=47) | Year to date<br>for severity<br>reporting<br>(n=434) | Year to date for<br>severity reporting<br>(n=91) | Year to date for<br>severity<br>reporting<br>(n=547) | Year to date<br>for severity<br>reporting<br>(n=191) | Year to date<br>for severity<br>reporting<br>(n=87) |
| Age (years)                                 |  |   |  |  |  |  |   |
| Median [IQR]                                | 66<br>[46–76]  | 37<br>[4–68]  | 59<br>[39–68]  | 30<br>[6–68]                                     | 12<br>[4–50]   | 10<br>[2–59]   | 22<br>[8–64]  |
| Indigenous status                           |  |   |  |  |  |  |   |
| Aboriginal and<br>Torres Strait<br>Islander | 34<br>(10.1%)  | 3<br>(6.4%)   | 48<br>(11.1%)  | 6<br>(6.6%)                                      | 55<br>(10.1%)  | 24<br>(12.6%)  | 7<br>(8.0%)   |
| Non-Indigenous                              | 303<br>(89.9%)                                       | 44<br>(93.6%)                                       | 386<br>(88.9%)                                       | 85<br>(93.4%)                                    | 492<br>(89.9%)                                       | 167<br>(87.4%)                                       | 80<br>(92.0%)                                       |
| Received invasive                           | mechanical venti                                     | lation  |  |  |  |  |   |
| Number (%)                                  | 97<br>(28.8%)  | 13<br>(27.7%)                                       | 140<br>(32.3%)                                       | 35<br>(38.5%)                                    | 143<br>(26.1%)                                       | 33<br>(17.3%)  | 30<br>(34.5%)                                       |
| Length of invasive                          | mechanical venti                                     | lation (days)*                                      |  |  |  |  |   |
| Median [IQR]                                | 3 [1–6]  | 3 [2–8]   | 5 [2–10]   | 2 [0–11]   | 2 [1–6]  | 3 [1–5]  | 2 [1–5]   |
| Length of intensive                         | e care stay (days)                                   | *   |  |  |  |  |   |
| Median [IQR]                                | 3 [2–5]  | 3 [1–6]   | 3 [2–6]  | 2 [1–6]  | 2 [1–5]  | 3 [2–4]  | 3 [2–7]   |
| Length of hospital                          | stay (days)*   |   |  |  |  |  |   |
| Median [IQR]                                | 7 [4–14]   | 9 [6–19]  | 8 [4–15]   | 7 [3–14]   | 6 [3–11]   | 5 [3–9]  | 8 [4–15]  |
| Patient outcome†                            |  |   |  |  |  |  |   |
| Ongoing care in intensive care              | 14<br>(4.2%)   | 1<br>(2.1%)   | 30<br>(6.9%)   | 2<br>(2.2%)                                      | 13<br>(2.4%)   | 2<br>(1.0%)  | 3<br>(3.4%)   |
| Ongoing care in hospital ward               | 19<br>(5.6%)   | -   | 21<br>(4.8%)   | 2<br>(2.2%)                                      | 26<br>(4.8%)   | 11<br>(5.8%)   | 5<br>(5.7%)   |
| Transfer to other hospital / facility       | 50<br>(14.8%)  | 7<br>(14.9%)  | 61<br>(14.1%)  | 15<br>(16.5%)                                    | 54<br>(9.9%)   | 22<br>(11.5%)  | 7<br>(8.0%)   |
| Discharged<br>home                          | 197<br>(58.5%)                                       | 35<br>(74.5%)                                       | 279<br>(64.3%)                                       | 66<br>(72.5%)                                    | 417<br>(76.2%)                                       | 146<br>(76.4%)                                       | 62<br>(71.3%)                                       |
| Died in hospital                            | 56<br>(16.6%)  | 4<br>(8.5%)   | 41<br>(9.4%)   | 5<br>(5.5%)                                      | 33<br>(6.0%)   | 10<br>(5.2%)   | 10<br>(11.5%)                                       |

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

Note: 4.4% (73/1,656) 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.

\* 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. † 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.

- Intensive care occupancy surveillance shows the number of COVID-19 cases occupying intensive care beds and number of staff unavailable to work have generally continued to increase since May 2025, following a decreasing or fluctuating trend from mid-January to early May.
- In the last fortnight (30 June to 13 July 2025), there were slightly less COVID-19 cases in intensive care across Australia than in the previous fortnight (Figure 16).
- In the last fortnight, there were 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<sup>\*†</sup>, Australia, 1 January to 13 July 2025



Source: Critical Health Resource Information System (CHRIS)

\* 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.

† 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.

- In the last fortnight, the number of COVID-19 cases in intensive care remained stable across most jurisdictions; however, decreased in Qld, SA and 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 increased in the ACT, NSW, the NT and SA, but decreased or remained stable in Qld, Tas, Vic and WA compared with the previous fortnight (Figure 17).

# 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\*<sup>†‡</sup>, Australia, 1 January to 13 July 2025



Source: Critical Health Resource Information System (CHRIS)

\* 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. Following an increased number of deaths occurring between November
  2024 and January 2025 (which was much lower than in previous years), deaths *due to* COVID-19 in
  February and March 2025 were substantially lower (Figure 18a).
- There were 581 deaths *due to* COVID-19 in the first four months of 2025. This is 52.7% fewer deaths *due to* COVID-19 than the 1,229 deaths *due to* COVID-19 that occurred between January and April 2024 and 65.8% fewer than the 1,701 deaths *due to* COVID-19 that occurred between January and April 2023 (Figure 18a).





Source: Australian Bureau of Statistics, Provisional Mortality Statistics, released 27 June 2025.

\* Axis varies between acute respiratory infections.

† 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 May 2025.

- There have been 180 deaths *due to* influenza in the first four months of 2025. This is 73.1% more deaths *due to* influenza than the 104 deaths *due to* influenza that occurred between January and April 2024 and substantially more than the 52 deaths *due to* influenza that occurred between January and April 2023 (Figure 18a). As noted previously; however, there was also a higher number of influenza cases notified in this period than in previous years.
- There have been 19 deaths due to RSV published in the first four months of 2025 (Figure 18a).
- 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.
- Since November 2024, there have been substantially fewer deaths *with* COVID-19 each month than there were in the corresponding months of the previous years (Figure 18b).
- Deaths *with* influenza have increased in April 2025 and are higher than in 2023 and 2024 (Figure 18b).
- Deaths with RSV are at similar levels in 2025 to in 2023 and 2024 (Figure 18b).
- All three of these acute respiratory infections are more likely to cause death in older age groups than younger age groups.

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



Source: Australian Bureau of Statistics, Provisional Mortality Statistics, released 27 June 2025.

\* Axis varies between acute respiratory infections.

† 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 May 2025.

### 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 (30 June to 13 July 2025), SARS-CoV-2 test positivity decreased to 3.9% (668/17,076), influenza test positivity increased to 15.3% (3,122/20,392), and RSV test positivity increased to 4.2% (711/17,076) (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<sup>\*†</sup>, Australia, 1 January to 13 July 2025



Source: Sentinel laboratories, including National Influenza Centres

\* 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, 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 308 SARS-CoV-2 sequences uploaded to AusTrakka with dates of collection in the last 28 days (16 June to 13 July 2025). These sequences were from NSW, Qld, SA, Tas and WA, with the most recent collection date 2 July 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:
  - 17.5% (54/308) of sequences were from the sub-sub-lineages JN.1 (BA.2.86.1.1)
  - 82.5% (254/284) of sequences were recombinant or recombinant sub-lineages, including NB.1.8.1
  - there were no BA.1, BA.3, BA.4, BA.5 or other BA.2 sub-sub-lineage sequences.
- NB.1.8.1 is the dominant sub-lineage in the last 28 days, accounting for 70.5% (217/308) of sequences (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 are highlighted below due to their relevance in the Australian context:
  - there are 75 XFG sequences in AusTrakka, with 15 collected in the last 28 days. XFG was designated a VUM by the WHO on 25 June 2025 and the overall <u>risk evaluation by the WHO</u> is considered low.
  - there are 851 NB.1.8.1 sequences in AusTrakka, with 217 collected in the last 28 days.
  - there are 700 LP.8.1 sequences in AusTrakka, with 26 collected in the last 28 days.
  - there are 368 LB.1 sequences in AusTrakka, with four sequences collected in the last 28 days.
  - there are 3,036 KP.3.1.1 sequences in AusTrakka, with 24 sequences collected in the last 28 days.
  - there are 3,432 XEC sequences in AusTrakka, with 17 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>†‡</sup>, Australia, 1 January to 13 July 2025

Source: AusTrakka

\* 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. † Sequences in AusTrakka aggregated by week and reported based on date of sample collection, not date of sequencing. † Proportions in Figure 20a may not be representative when sequence numbers are small: refer to Figure 20b mat for earlier weeks may change between

‡ 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>†‡</sup>, Australia, 1 January to 13 July 2025



#### Source: AusTrakka

\* 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. † Sequences in AusTrakka aggregated by week and reported based on date of sample collection, not date of sequencing. ‡ 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.

- In the year to date, the WHO Collaborating Centre for Reference and Research on Influenza has antigenically characterised 2,545 influenza viruses from Australia (Table 4), of which:
  - 72.2% (1,837/2,545) have been influenza A(H1N1)
  - 10.5% (266/2,545) have been influenza A(H3N2)
  - 17.4% (442/2,545) 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, 0.4% (3/695) 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\*<sup>†</sup>, 1 January to 13 July 2025

| Strain             | ACT | NSW | NT  | Qld | SA | Tas | Vic | WA | Total |
|--------------------|-----|-----|-----|-----|----|-----|-----|----|-------|
| A(H1N1)            | 228 | 160 | 487 | 77  | 49 | 304 | 502 | 30 | 1,837 |
| A(H3N2)            | 12  | 23  | 113 | 17  | 4  | 21  | 71  | 5  | 266   |
| B/Victoria lineage | 89  | 63  | 61  | 14  | 19 | 30  | 151 | 15 | 442   |
| B/Yamagata lineage | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0  | 0     |
| Total              | 329 | 246 | 661 | 108 | 72 | 355 | 724 | 50 | 2,545 |

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

\*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 <u>Technical Supplement</u> 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</u> (NCIRS).
- Nationally, 9.0% of adults (aged 18 years and over) have received a COVID-19 vaccine in the last six months (Table 5).
- Nationally, less adults have received a COVID-19 vaccine in the last 12 months (11.2%; Table 5), compared to the 12 months prior (14.4% from 10 July 2023 to 7 July 2024).
- In the last 12 months, vaccine coverage decreased in all age groups, with the largest decrease seen in 65–74 years age group (from 34.7% in the 12 months prior to 27% in the last 12 months).
- There is substantial variation in COVID-19 vaccine coverage across age groups, ranging from 4.8% in adults aged 18–64 years to 42.7% in adults aged 75 years and over. Vaccine coverage increases with increasing age (Table 5).
- There is some variation in vaccine coverage across jurisdictions, ranging from 4.2% in the NT to 19.2% in Tas (Table 5).

| Age group                                    | АСТ          | NSW  | NT   | Qld  | SA   | Tas  | Vic  | WA   | Total |  |
|--|--------------|------|------|------|------|------|------|------|-------|--|
| Last 12 months (8 July 2024 to 13 July 2025) |              |      |      |      |      |      |      |      |       |  |
| 18–64 years                                  | 10.5         | 4.1  | 2.1  | 4.5  | 4.6  | 8.7  | 5.2  | 4.7  | 4.8   |  |
| 65–74 years                                  | 48.0         | 25.1 | 14.9 | 25.8 | 27.7 | 40.1 | 27.6 | 27.6 | 27.0  |  |
| ≥ 75 years                                   | 66.7         | 40.5 | 27.1 | 41.5 | 42.4 | 57.7 | 42.0 | 44.6 | 42.7  |  |
| All ages (18 years and over)                 | 18.5         | 10.4 | 4.2  | 10.7 | 12.2 | 19.2 | 11.3 | 11.0 | 11.2  |  |
| Last 6 months (13 January 2025 to 1          | 3 July 2025) |      |      |      |      |      |      |      |       |  |
| 18–64 years                                  | 8.0          | 3.1  | 1.4  | 3.4  | 3.5  | 6.6  | 3.9  | 3.8  | 3.6   |  |
| 65–74 years                                  | 40.3         | 20.7 | 11.3 | 21.0 | 23.3 | 33.7 | 23.0 | 23.4 | 22.4  |  |
| ≥ 75 years                                   | 57.3         | 33.8 | 21.2 | 34.1 | 35.5 | 48.5 | 34.9 | 37.8 | 35.6  |  |
| All ages (18 years and over)                 | 15.0         | 8.3  | 3.0  | 8.5  | 9.9  | 15.6 | 9.1  | 9.2  | 9.0   |  |

#### Table 5: COVID-19 vaccine coverage\*\*\* by age group and jurisdiction, Australia, 8 July 2024 to 13 July2025

Source: Australian Immunisation Register (AIR) as at 13 July 2025

\* COVID-19 vaccine coverage among the general population uses the Australian Bureau of Statistics June 2023 Estimated Resident Population (ERP) as denominator for population data. Age in years is calculated as at the reporting week.

† COVID-19 vaccination uptake and coverage are influenced by changes in ČOVID-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. 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.
‡ 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. Total rows will include individuals where jurisdiction was missing.

- Nationally, 3.6% of Aboriginal and Torres Strait Islander adults (aged 18 years or over) have received a COVID-19 vaccine in the last six months (Table 6).
- Nationally, less Aboriginal and Torres Strait Islander adults have received a COVID-19 vaccine in the last 12 months (4.7%; Table 6), compared to the 12 months prior (6.9% from 10 July 2023 to 7 July 2024).
- In the last 12 months, vaccine coverage decreased in all age groups of Aboriginal and Torres Strait Islander people, with the largest decrease seen in ≥ 75 years age group (from 34.1% in the 12 months prior to 26.9% in the last 12 months).
- Among Aboriginal and Torres Strait Islander people there is substantial variation in COVID-19 vaccine coverage across age groups, ranging from 2.7% in adults aged 18–64 years to 26.9% in adults aged 75 years and over. Vaccine coverage increases with increasing age (Table 6).
- Among Aboriginal and Torres Strait Islander people, there is slight variation in vaccine coverage across jurisdictions, ranging from 2.5% in the NT to 9.5% in Tas (Table 6).

#### Table 6: COVID-19 vaccine coverage\*<sup>†‡</sup> among Aboriginal and Torres Strait Islander populations by age group and jurisdiction, Australia, 8 July 2024 to 13 July 2025

| Age group                             | АСТ        | NSW  | NT   | Qld  | SA   | Tas  | Vic  | WA   | Total |
|---------------------------------------|------------|------|------|------|------|------|------|------|-------|
| Last 12 months (8 July 2024 to 13 Jul | y 2025)    |      |      |      |      |      |      |      |       |
| 18–64 years                           | 6.2        | 2.7  | 1.8  | 2.5  | 2.7  | 5.4  | 4.0  | 2.3  | 2.7   |
| 65–74 years                           | 34.5       | 18.6 | 8.4  | 17.3 | 17.9 | 31.2 | 20.6 | 15.6 | 17.7  |
| ≥ 75 years                            | 48.0       | 29.0 | 13.3 | 25.1 | 29.1 | 42.3 | 32.0 | 25.8 | 26.9  |
| All ages (18 years and over)          | 9.3        | 5.1  | 2.5  | 4.3  | 4.9  | 9.5  | 6.7  | 3.8  | 4.7   |
| Last 6 months (13 January 2025 to 13  | July 2025) |      |      |      |      |      |      |      |       |
| 18–64 years                           | 4.8        | 2.0  | 1.1  | 1.9  | 1.9  | 4.2  | 2.9  | 1.7  | 2.0   |
| 65–74 years                           | 27.0       | 15.3 | 5.7  | 13.8 | 14.3 | 26.1 | 16.7 | 13.0 | 14.3  |
| ≥ 75 years                            | 39.7       | 23.8 | 10.5 | 20.4 | 24.4 | 34.6 | 26.4 | 21.0 | 22.0  |
| All ages (18 years and over)          | 7.3        | 4.0  | 1.6  | 3.3  | 3.7  | 7.6  | 5.1  | 2.9  | 3.6   |

Source: Australian Immunisation Register (AIR) as at 13 July 2025

\* COVID-19 vaccine coverage among Aboriginal and Torres Strait Islander populations is based on the AIR population as as known at the reporting week. Age in years is calculated as at the reporting week.

† 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. 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> 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. Total rows will include individuals where jurisdiction was missing.

- 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 six 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 28.9% for the 2025 seasonal campaign so far (Table 7). Influenza vaccine coverage this year to date is consistent with coverage at the same time last year (28.3%); however, remains lower than coverage at the same time in 2023 and 2022.
- There is substantial variation in influenza vaccine coverage across age groups, ranging from 13.7% in children aged 5–14 years to 59.3% in adults aged 65 years and over (Table 7). The current trend should be interpreted with care as people aged 5–64 years are generally not eligible for free seasonal influenza vaccine under the National Immunisation Program.
- There is some variation in influenza vaccine coverage across jurisdictions, ranging from 21.3% in the NT to 38.5% in the ACT (Table 7).
- Among Aboriginal and Torres Strait Islander populations, there is substantial variation in influenza vaccine coverage across age groups, ranging from 10.5% in children aged 5–14 years to 57.9% 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 16.9% in WA to 28% in the ACT (Table 7).

|   | ACT        | NSW  | NT   | Qld  | SA   | Tas  | Vic  | WA   | Total |
|---|------------|------|------|------|------|------|------|------|-------|
| Age groups                              |            |      |      |      |      |      |      |      |       |
| 6 months to <5 years                    | 46.8       | 24.7 | 29.3 | 19.1 | 27.0 | 28.2 | 29.7 | 22.2 | 25.2  |
| 5–14 years                              | 23.1       | 12.7 | 10.5 | 12.3 | 14.4 | 13.9 | 15.3 | 14.3 | 13.7  |
| 15–49 years                             | 31.3       | 18.5 | 18.9 | 17.0 | 22.3 | 22.2 | 22.5 | 17.6 | 19.7  |
| 50–64 years                             | 42.8       | 28.9 | 23.3 | 29.5 | 34.5 | 37.5 | 32.8 | 29.5 | 30.8  |
| ≥ 65 years                              | 63.6       | 56.9 | 34.8 | 59.0 | 65.3 | 66.5 | 60.6 | 58.8 | 59.3  |
| All ages (6 months and over)            | 38.5       | 27.8 | 21.3 | 26.7 | 33.3 | 34.7 | 31.0 | 27.0 | 28.9  |
| Aboriginal and Torres Strait Islander p | opulations |      |      |      |      |      |      |      |       |
| 6 months to <5 years                    | 28.5       | 15.9 | 27.4 | 12.0 | 15.2 | 19.5 | 19.0 | 14.5 | 15.7  |
| 5–14 years                              | 15.6       | 10.2 | 16.1 | 9.3  | 10.9 | 11.5 | 11.3 | 9.9  | 10.5  |
| 15–49 years                             | 24.4       | 15.4 | 23.5 | 13.9 | 17.3 | 17.8 | 17.7 | 13.4 | 15.9  |
| 50–64 years                             | 42.6       | 34.4 | 36.7 | 31.8 | 35.4 | 42.4 | 34.2 | 29.2 | 33.6  |
| ≥ 65 years                              | 67.3       | 60.4 | 42.3 | 57.6 | 60.9 | 67.4 | 61.5 | 51.2 | 57.9  |
| All ages (6 months and over)            | 28.0       | 20.2 | 25.4 | 17.7 | 21.2 | 24.3 | 22.5 | 16.9 | 19.9  |

#### Table 7: Influenza vaccine coverage\*1<sup>‡</sup> by age group and jurisdiction, Australia, 1 March to 13 July2025

Source: Australian Immunisation Register (AIR) as at 13 July 2025

\* 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.

Age is calculated based on the person's age as at 1 July of the reporting year.

<sup>‡</sup> From the report ending 13 July 2025, jurisdiction is based on the person's address on the AIR rather than an individual's residential address as recorded on Medicare. Total rows will include individuals where jurisdiction was missing. In addition, to align with departmental reporting methodologies, both the numerator (number of persons vaccinated) and denominator (AIR population) for influenza vaccine coverage only consider person records with a Personal Identification Number that was able to be matched to Medicare. Person records with a Synthetic Identification Number are now excluded from both numerator and denominator. For these reasons, influenza vaccine coverage metrics in previous Australian Respiratory Surveillance Reports and coverage metrics from the report ending 13 July 2025 moving forward should be interpreted with care.

- Infants can be protected against severe illness from RSV through the vaccination of pregnant people or the direct administration of monoclonal antibodies like nirsevimab. These are part of the National RSV Maternal and Infant Protection Program which launched on 3 February 2025 and includes both the National Immunisation Program funded Abrysvo vaccine and state and territory nirsevimab programs.
  - More information on RSV immunisation in Australia is available via the <u>department's RSV</u> vaccine webpages or from <u>NCIRS</u>.
- Since the commencement of the National RSV Mother and Infant Protection Program, 86,448 Abrysvo doses have been administered to pregnant people nationally (Table 8).
- 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.

#### Table 8: Number of doses of Abrysvo administered to pregnant people by jurisdiction\*, Australia, 3February to 13 July 2025

|                     | АСТ   | NSW    | NT  | Qld    | SA    | Tas   | Vic    | WA    | Total  |
|---------------------|-------|--------|-----|--------|-------|-------|--------|-------|--------|
| Age group           |       |        |     |        |       |       |        |       |        |
| 15–24 years         | 153   | 2,214  | 148 | 1,849  | 466   | 233   | 1,226  | 819   | 7,108  |
| 25–39 years         | 2,133 | 23,810 | 687 | 13,182 | 5,153 | 1,604 | 20,378 | 7,610 | 74,557 |
| 40–54 years         | 138   | 1,605  | 38  | 702    | 299   | 74    | 1,444  | 483   | 4,783  |
| Total (15–54 years) | 2,424 | 27,629 | 873 | 15,733 | 5,918 | 1,911 | 23,048 | 8,912 | 86,448 |

Source: Australian Immunisation Register (AIR) as at 13 July 2025

\* Jurisdiction is based on the state or territory in which a vaccine was administered and may differ from a person's residential address. Total rows will include individuals where jurisdiction was missing.

- Nationally, 20.6% of infants (aged < 8 months) have received nirsevimab (Table 9).</li>
- There is substantial variation in nirsevimab uptake in infants across jurisdictions, ranging from 12% in NSW to 36.2% in WA (Table 9).
- 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 in 2025 in these states.

#### Table 9: Nirsevimab (Beyfortus) uptake\*<sup>†‡</sup> by age group and jurisdiction, Australia, 3 February 2025 to13 July 2025

| Age group                              | АСТ  | NSW  | NT   | Qld  | SA   | Tas  | Vic  | WA   | Total |
|--|------|------|------|------|------|------|------|------|-------|
| Infants (aged < 8 months)              | 15.5 | 12.0 | 27.7 | 27.0 | 27.7 | 31.2 | 17.4 | 36.2 | 20.6  |
| Young children (aged ≥ 8 to 24 months) | 1.0  | 0.4  | 0.3  | 0.1  | 0.9  | 1.2  | 0.7  | 0.9  | 0.5   |

Source: Australian Immunisation Register (AIR) as at 13 July 2025

\* Reporting of RSV monoclonal antibodies to the AIR is not compulsory; therefore, uptake is likely to be underestimated. Uptake data in these tables may differ slightly from estimates in other reports due to differences in calculation methodologies and/or different data download dates.

† For infants and young children vaccinated, age in months is calculate as months between the immunisation encounter and date of birth rounded down as at the reporting date. 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 as at the reporting date.

‡ Jurisdiction is based on the state or territory in which a vaccine was administered and may differ from a person's residential. Total rows will include individuals where jurisdiction was missing. Population denominator data used to calculate nirsevimab uptake are based on an individual's residential address

#### 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, 99.3% (1,824/1,837) of influenza A(H1N1) isolates, 99.6% (265/266) of influenza A(H3N2) isolates and 98.6% (436/442) of influenza B/Victoria lineage isolates characterised have been antigenically similar to the corresponding 2025 vaccine components.