



Virus WAtch

Week ending 1st October 2023

Key Points

Influenza and influenza-like illnesses (ILI)

- All indicators of influenza and ILI activity decreased or remained stable in the past week, apart from ILI presentations to sentinel GPs which increased.
- Influenza notifications to the Department of Health decreased but remained in the higher range of values usually reported at this time of year. Respiratory syncytial virus (RSV) notifications decreased.
- Total non-influenza respiratory virus detections at PathWest Laboratory Medicine (PathWest) decreased in the past week.
- COVID-19 notifications increased to 660 cases in the past week. See <u>COVID-19 Weekly</u> surveillance report (health.wa.gov.au)

Gastroenteritis

- The number of gastroenteritis presentations to EDs decreased in the past week.
- Rotavirus notifications to the Department of Health decreased in the past week and norovirus detections at PathWest increased.

Other vaccine-preventable diseases

- Chickenpox and shingles: There were no chickenpox presentations at sentinel GPs in the
 past week, while presentations to EDs decreased. Shingles presentations decreased at
 sentinel GPs and remained stable at EDs.
- Measles: No measles cases were notified in the past week.
- Mumps: No mumps cases were notified in the past week.
- Rubella: No rubella cases were notified in the past week.
- Invasive meningococcal disease (IMD): No IMD cases were notified in the past week.

Information on COVID-19 RAT registration

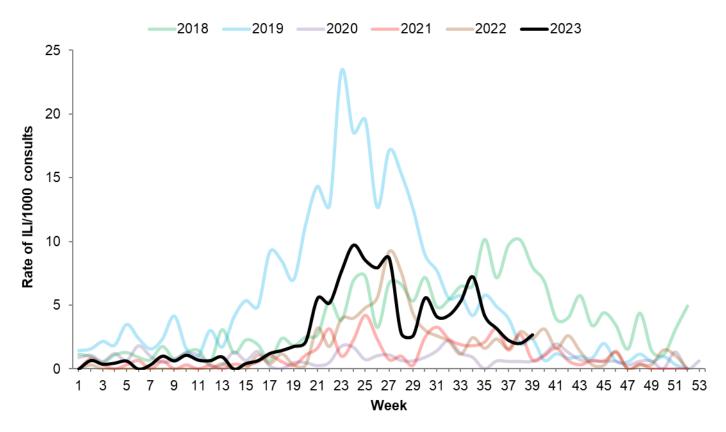
 From Monday 9th October the WA Department of Health will no longer require registration of positive COVID-19 RAT results. The online registration portal will be de-activated.

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Influenza and influenza-like illnesses (ILI)

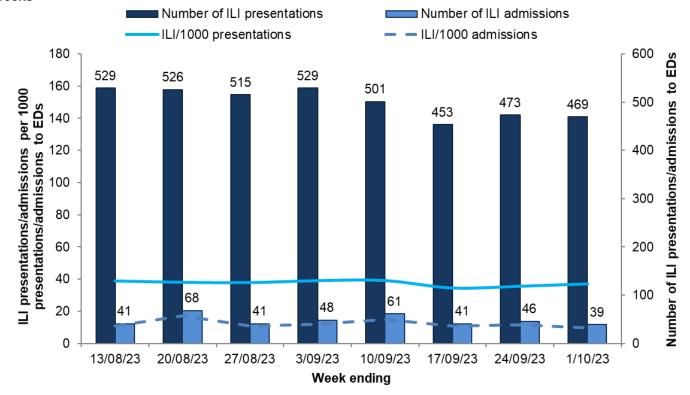
The rate of ILI presentations to sentinel GPs increased in the past week (Figure 1).

Figure 1. Rate of ILI per 1000 consultations at sentinel GPs (Australian Sentinel Practices Research Network) in WA by week, 2018 to 2023 YTD



The rate of ILI-related presentations to EDs was stable in the past week while the rate of admissions decreased slightly (Figure 2).

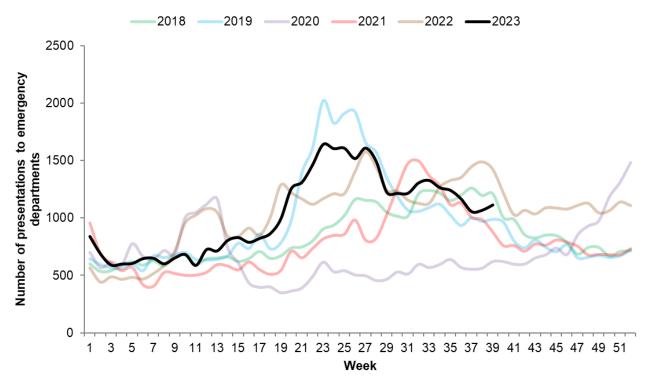
Figure 2. Number and rate of ILI presentations/admissions to emergency departments in WA in the past eight weeks



Note: This graph is a count of current EDIS data using the ICD codes B34.9 and J06.9, which are consistent with a clinical presentation of influenza-like illness. This data may differ from that presented in the Winter Respiratory Illness Report provided by the Information and System Performance Directorate, DoH.

The number of respiratory illness presentations to EDs increased in the past week and was in the mid-range of values usually reported at this time of year (Figure 3).

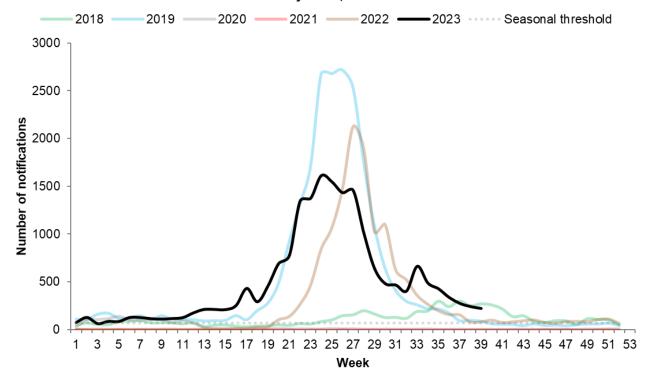
Figure 3. Number of respiratory illness presentations to emergency departments in WA by week, 2018 to 2023 YTD



Note: This graph is a count of current EDIS data using the ICD codes B34.9, H66.9, J00, J06.9, J09.0, J10.0, J10.1, J10.8, J11.0, J11.1, J11.8, J12.9, J18.0, J18.1, J18.9, J20.9, J21.9, J22, J40, J44.0, J44.1, J44.9, J45.9, J46.0, J98.8, J98.9, R05 and COVID-19 code U07.1, which are consistent with a clinical presentation of all respiratory-like illness. This data is different to Figure 3 but similar to that presented in the Winter Respiratory Illness Report provided by the Information and System Performance Directorate, DoH.

In the past week, 221 influenza cases were notified to the Department of Health, which was lower in comparison to the previous week (Figure 4).

Figure 4. Number of influenza notifications in WA by week, 2018 to 2023 YTD



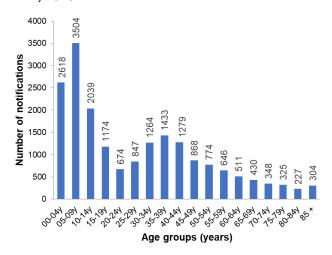
Note: This graph is a count of all influenza notifications by week of receipt by the DoH, WA (through WANIDD) to the end of the current reporting week. The seasonal threshold defines a value above which may indicate seasonal influenza activity. The threshold value is calculated based on analysis of inter-seasonal influenza data from 2015 to 2018.

In the year to date, the number of influenza notifications and hospitalisations are higher than the previous five-year average, while the number of reported deaths is lower. Vaccination coverage to date is highest in the ≥ 65 year age group (Table 1). Thirty-two percent of influenza notifications have been in children under 10 years old (Figure 5).

Table 1. Influenza notifications and vaccination coverage in WA, 2023 YTD

| Notifications | Category | 2023 Year to Date | 5 yr average |
|---|--------------------------|----------------------|-----------------|
| Influenza infections extracted by optimal date of receipt | Notifications | 19,265 | 10,238 |
| | Hospitalisations | 2,242 | 1,631 |
| | Reported Deaths | 16 | 40 |
| Vaccinations | Ago group | 2023 Year to Date | 5 yr |
| | Age group | to Date | average |
| | 6mo-< 5 yrs | 27.3% | NA NA |
| Influenza vaccinations | | | |
| as recorded in the | 6mo-< 5 yrs | 27.3% | NA |
| | 6mo-< 5 yrs 5-<15 yrs | 27.3% 18.6% | NA NA |

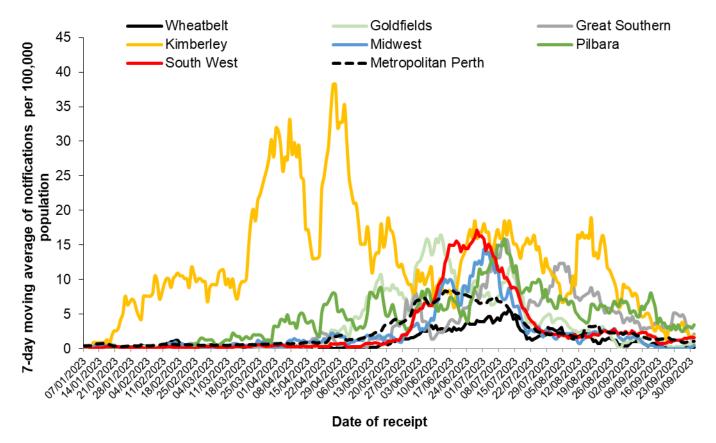
Figure 5. Influenza notifications by age group in WA, 2023 YTD



Note: Five-year average includes the years 2016 to 2019 and 2022. NA: data not available. Notification data source: WANIDD. Vaccination data source: AIR data downloaded from National Centre for Immunisation Research and Surveillance.

The seven-day moving average of influenza notification rates were stable in all regions except the Great Southern, Midwest and Pilbara where the rate increased (Figure 6).

Figure 6. 7-day moving average of influenza notifications per 100,000 people in WA by health region, 2023 YTD



Note: This graph shows the 7-day moving average of influenza cases per 100,000 people in the WA health regions for 2023 by date of receipt, received by the DoH, WA (through WANIDD) to the end of the current reporting week.

The number of influenza cases reported as hospitalised increased slightly among adults and remained stable among children in the past week (Figure 7).

350 -Adult ---Child Numbers of hospitalised influenza notifications 300 250 200

Figure 7. Number of notified influenza cases hospitalised in WA by week, 2018 to 2023 YTD

150

100

50

0

2018

Note: This graph shows the number of all notified influenza cases that have been hospitalised, by week of notification receipt, received by the DoH, WA (through WANIDD) to the end of the current reporting week. Child notifications were defined as individuals less than 18 years of age.

15212733394551 5 11172329354147 1

2019

The influenza PCR test positivity remained stable at 3.8% (49 detections) at PathWest in the last

2020

Year and week

7 13 19 25 31 37 43 49 3 9 15 21 27 33 39 45 5 1 5 11 17 23 29 35

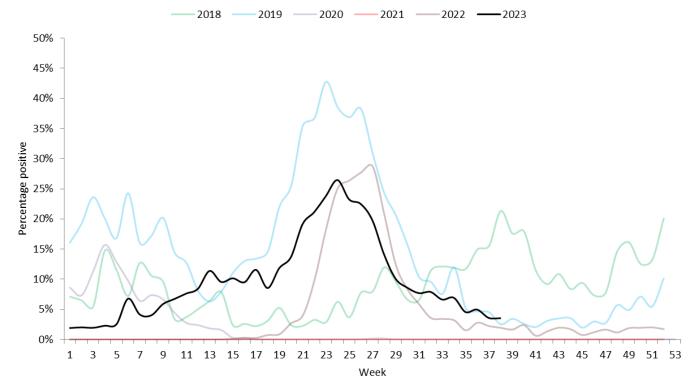
2022

2023

2021



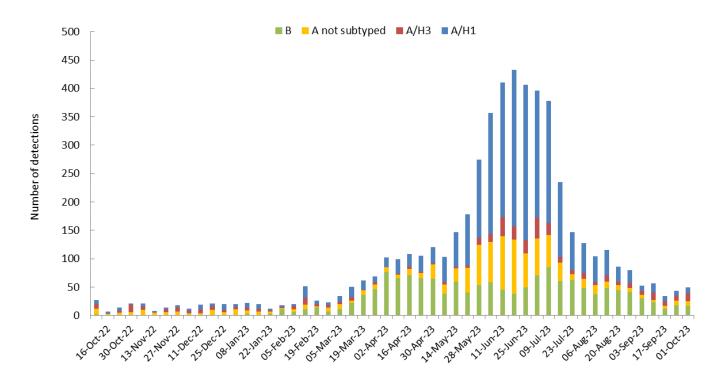
Figure 8. Proportion of PCR positive influenza detections at PathWest by week, WA, 2018 to 2023 YTD



Note: This graph is a count of all WA samples reported by PathWest, excluding samples referred by other private laboratories for influenza subtyping.

PathWest reported 49 influenza detections in the past week; 32 (65%) were influenza A (which included 10 A/H1, 14 A/H3 and 8 influenza A not yet subtyped); 17 (35%) were influenza B (Figure 9).

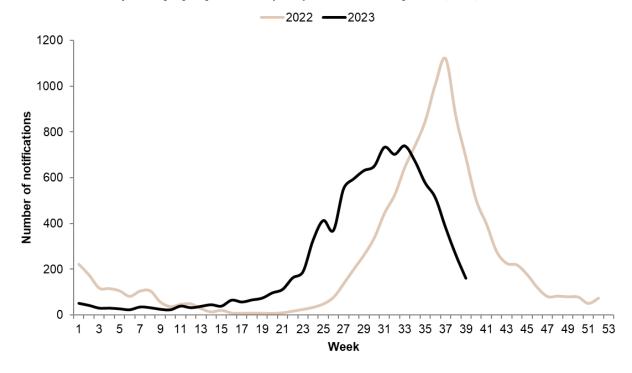
Figure 9. Number of PCR positive influenza detections at PathWest by type, subtype and week, WA, 2022 to 2023 YTD



Note: The graph is a summary of all WA samples positive for influenza reported at PathWest, excluding samples referred by other private laboratories for influenza subtyping. These samples were tested using a rapid testing method that does not determine the influenza subtype (i.e., influenza A/H3N2 or A/H1N1).

In the past week, 141 respiratory syncytial virus (RSV) cases were notified in WA, a decrease of 47% compared to the previous week (Figure 10).

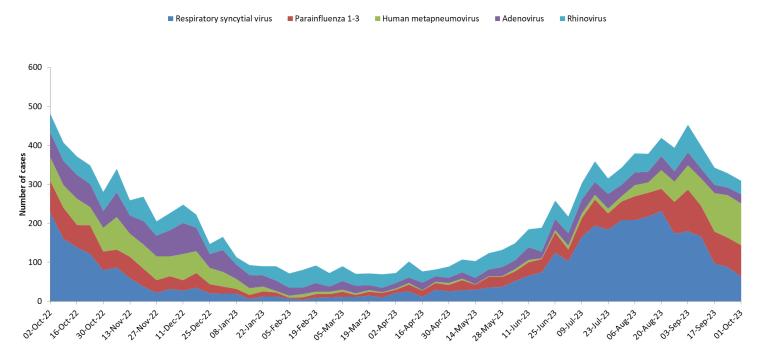
Figure 10. Number of respiratory syncytial virus (RSV) notifications by week, WA, 2022 to 2023 YTD



Note: Respiratory syncytial virus (RSV) was made a notifiable infectious disease in WA in July 2021. This graph is a count of all RSV by week of onset by the DoH, WA (through WANIDD) to the end of the current reporting week.

Non-influenza respiratory virus detections at PathWest decreased in the past week (Figure 11). The most common non-influenza respiratory virus detected was human metapneumovirus (hMPV) (107 cases).

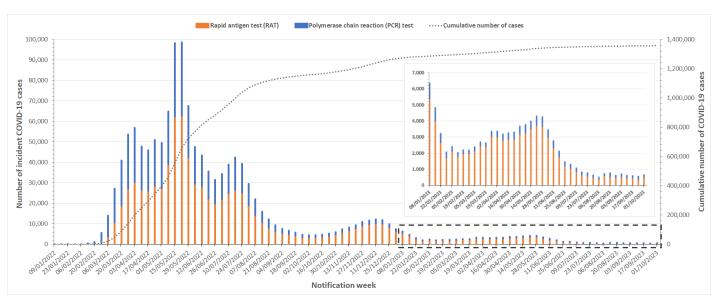
Figure 11. Number of non-influenza respiratory virus detections at PathWest by week, WA, 2022 to 2023 YTD



Note: This graph is a count of all WA samples positive for a common respiratory virus other than influenza reported by PathWest.

In the past week, 660 COVID-19 cases were notified in WA, an increase of 17% in comparison to the previous week. Of these, 19% were diagnosed by PCR test and 81% were diagnosed by rapid antigen test (Figure 12).

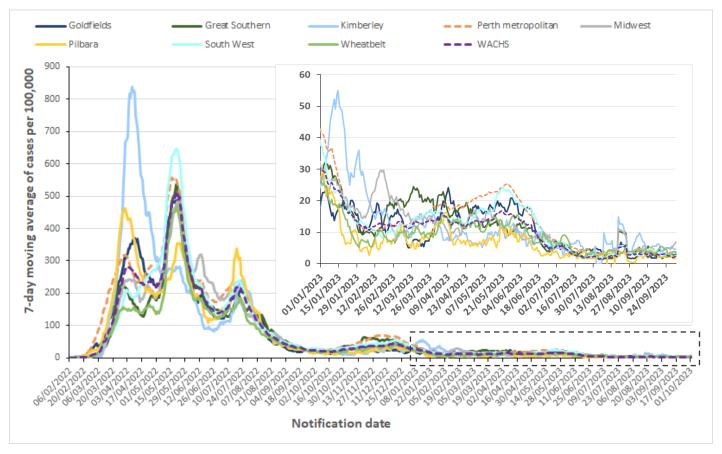
Figure 12. Number of COVID-19 cases in WA by test type and notification date, 2022 to 2023 YTD



Note: Data sourced from Public Health Operations COVID-19 Unified System (PHOCUS); Notification date is to the 6pm reporting period

The seven-day moving average of COVID-19 notifications per 100,000 population decreased in the Goldfields and Wheatbelt regions, increased in the Perth metropolitan, Great Southern and Midwest regions and remained stable in all other regions (Figure 13).

Figure 13. Seven-day moving average of COVID-19 notifications per 100,000 people in WA by health region, 2022 to 2023 YTD

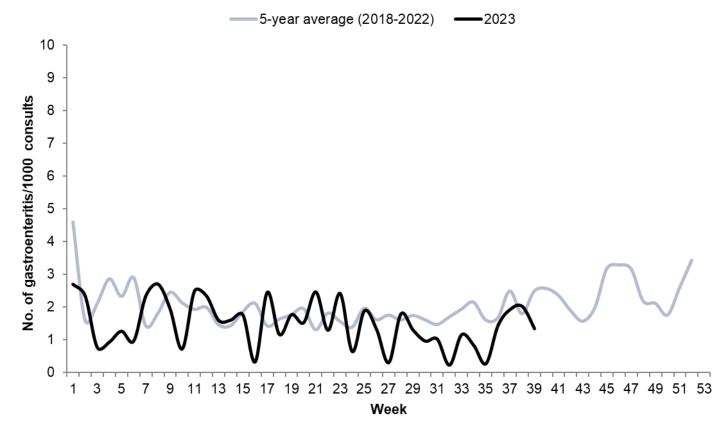


Note: Data sourced from Public Health Operations COVID-19 Unified System (PHOCUS). Western Australia Country Health Service (WACHS) region includes all non-metropolitan health regions: Central-Wheatbelt, Goldfields, Great Southern, Kimberley, Midwest, Pilbara and South West. Perth metropolitan region includes East Metropolitan Health Service, North Metropolitan Health Service and South Metropolitan Health Service. Population denominator sourced from Australian Bureau of Statistics 2020 estimates. See also the WACOVID-19 Weekly surveillance report for further epidemiological analysis and the Aged Care for immunisation coverage data.

Gastroenteritis

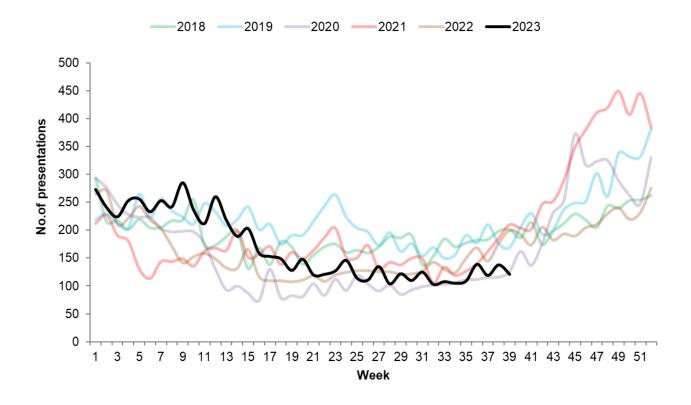
The rate of gastroenteritis presentations to sentinel GPs decreased below the baseline in the past week (Figure 14).

Figure 14. Number of gastroenteritis presentations per 1000 consultations at sentinel GPs (Australian Sentinel Practices Research Network) in WA by week, 2018 to 2023 YTD



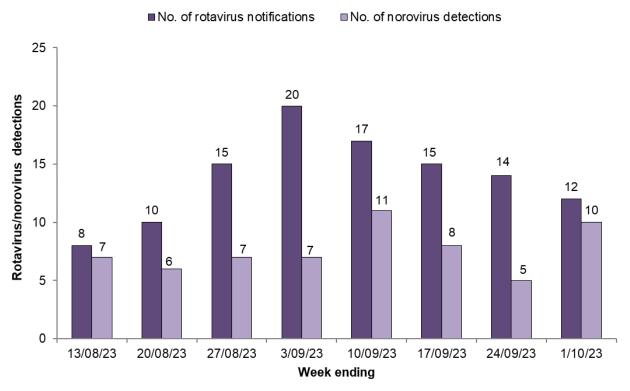
Gastroenteritis presentations at EDs decreased in the past week and remained in the lower range of values usually reported at this time of year (Figure 15).

Figure 15. Number of gastroenteritis presentations to Emergency Departments in WA by week, 2018 to 2023



In the past week, statewide rotavirus notifications to the Department of Health decreased and norovirus detections at PathWest increased (Figure 16).

Figure 16. Number of rotavirus notifications to the Department of Health and norovirus detections at PathWest in the past eight weeks

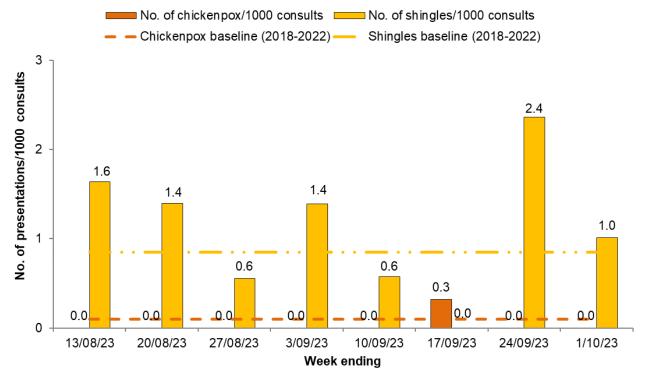


Note: Rotavirus notifications reported to the Department of Health include detections from all WA pathology laboratories. Norovirus detections are from PathWest only.

Viral rashes

There were no chickenpox presentations to sentinel GPs in the past week and the rate of shingles presentations decreased whilst remaining above the baseline (Figure 17).

Figure 17. Number of varicella-zoster presentations per 1000 consultations at sentinel GPs (Australian Sentinel Practices Research Network) in WA in the past eight weeks

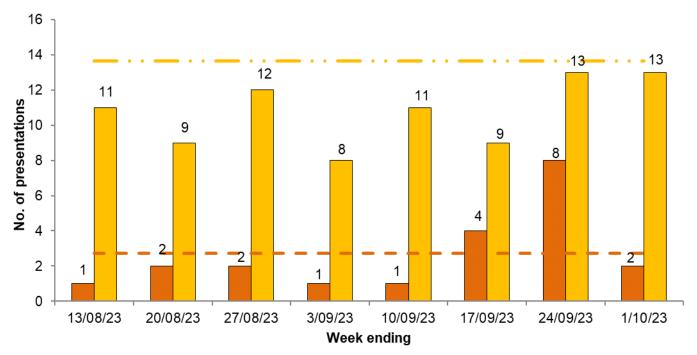


Note: Baseline levels for chickenpox and shingles presentations to WA ASPREN GPs per thousand consultations were calculated using the mean of weekly WA ASPREN data from week 1, 2018 to week 52, 2022.

Chickenpox presentations to EDs decreased below the baseline in the past week while shingles presentations remained stable (Figure 18).

Figure 18. Number of varicella-zoster presentations to Emergency Departments in WA in the past eight weeks





Note: Baseline levels for varicella-zoster virus presentations to Emergency Departments in WA were calculated using the mean of weekly EDIS data from week 1, 2018 to week 52, 2022.

Report Notes

Virus WAtch is a weekly electronic publication by the Communicable Disease Control Directorate (CDCD) and key collaborators. It provides a brief summary of general practice and hospital emergency department sentinel surveillance data on influenza-like illness, gastroenteritis, and varicella-zoster disease, together with relevant laboratory information, to alert health care workers in WA about important circulating viruses. All figures and data were accurate at time of publication, but subject to change. Please note that the influenza and ILI surveillance systems in Western Australia (WA) have been impacted by the COVID-19 pandemic. Therefore, respiratory viral activity should be interpreted with caution and take into account the effects of changes in health seeking behaviour including accessing alternate health services such as telehealth, focused testing for COVID-19 at COVID-19 clinics or specific acute respiratory infection clinics, increased testing for other respiratory viruses and the impact of international border closures. The data collections used to create this publication include:

- Sentinel general practice (GP) data collected by WA members of the Australian Sentinel Practices Research Network (ASPREN).
- Emergency Department (ED) data provided by the Emergency Department Information System (EDIS), which currently incorporates data from the following hospitals: Fiona Stanley Hospital, Sir Charles Gardiner Hospital, Royal Perth Hospital, Perth Children's Hospital, King Edward Memorial Hospital, St John of God Midland, Bunbury Hospital, Armadale Hospital, Joondalup Health Campus, and Rockingham General Hospital.
- Disease notification data are sourced from the Western Australian Notifiable Infectious Diseases
 Database (WANIDD). These data are received by CDCD, WA Department of Health from medical
 providers and public or private laboratories in WA. Hospitalisation data are included in the report
 during the influenza season.
- Viral laboratory data obtained from PathWest laboratories at QEII Medical Centre, as well as via notification data sent by all WA laboratories to CDCD, WA Department of Health.
- As of 1 January 2022, the definition of a confirmed influenza case has changed to remove 'Single high titre by CFT or HAI to influenza virus' from the list of <u>laboratory definitive evidence</u>.
- As of March 2022, this report includes COVID-19 cases diagnosed by Polymerase Chain Reaction (PCR) test and Rapid Antigen Test (RAT) sourced from Public Health Operations COVID-19 Unified System (PHOCUS).
- Current and archived issues of Virus Watch http://ww2.health.wa.gov.au/Articles/F I/Infectious-disease-data/Virus-WAtch.

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