Virus Watch

Week ending 2nd April 2023

Key Points

Influenza and influenza-like illnesses (ILI)

- The rate of ILI presentations increased at sentinel GPs and emergency departments (EDs) in the past week.
- Influenza notifications to the Department of Health decreased in the past week.
- Non-influenza respiratory virus detections at PathWest Laboratory Medicine (PathWest) remained stable in the past week.
- COVID-19 cases were stable in the past week at 3,372 cases.

Gastroenteritis

- The number of gastroenteritis presentations to sentinel GPs decreased in the past week.
- Rotavirus notifications to the Department of Health increased in the past week while norovirus detections at PathWest slightly decreased.

Other vaccine-preventable diseases

- **Chickenpox and shingles**: In the past week there were no chickenpox presentations to sentinel GPs and the rate of shingles presentations decreased slightly. The number of chickenpox and shingles presentations to EDs increased in the past week.
- **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.
**Influenza and influenza-like illnesses (ILI)**

The rate of ILI presentations to sentinel GPs increased and remained in the mid-range of values usually reported at this time of year (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 increased slightly in the past week and admissions to EDs increased were stable (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 to 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, J18.8, 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.

The number of influenza cases notified to the Department of Health decreased in the past 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 onset, received 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.
The percentage positivity of influenza PCR testing at PathWest increased to 10% (86 detections) in the last week. (Figure 5).

Figure 5. 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.

Of the 86 influenza detections at PathWest in the past week, 62 were influenza B, 16 were influenza A/H1 and 8 were influenza A cases yet to be subtyped (Figure 6).

Figure 6. 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).
Excluding SARS-CoV-2, non-influenza respiratory virus detections at PathWest remained stable in the past week (Figure 7). The most common non-influenza respiratory virus detected was rhinovirus (25 cases).

Figure 7. Number of non-influenza respiratory virus detections at PathWest by week, WA, 2022 to 2023 YTD

![Graph showing non-influenza respiratory virus detections at PathWest by week, WA, 2022 to 2023 YTD. The most common virus detected was rhinovirus (25 cases).](image)

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, there were 3,372 COVID-19 cases reported in WA, which was stable compared to the previous week. Of these, 10% were diagnosed by PCR test and 90% were diagnosed by rapid antigen test (Figure 8).

Figure 8. Number of COVID-19 cases in WA by test type and notification date, 2022 to 2023 YTD

![Graph showing number of COVID-19 cases in WA by test type and notification date, 2022 to 2023 YTD.](image)

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 increased in the Wheatbelt, Pilbara, Midwest and Kimberley regions, decreased in the Goldfields region and remained stable in all other regions (Figure 10).

Figure 10. 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). See also the WA COVID-19 Weekly surveillance report for further epidemiological analysis and the Australian Government Dept of Health and Aged Care for immunisation coverage data.

**Gastroenteritis**

The number of gastroenteritis presentations to sentinel GPs decreased in the past week (Figure 12).

Figure 12. Number of gastroenteritis presentations per 1000 consultations at sentinel GPs (Australian Sentinel Practices Research Network) in WA by week, 2018 to 2023 YTD
Rotavirus notifications to the Department of Health increased in the past week while norovirus detections at PathWest slightly decreased (Figure 13).

**Figure 13. Number of rotavirus notifications to the Department of Health and norovirus detections at PathWest in WA in the past eight weeks**

![Figure 13](image)

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 slightly (Figure 14).

**Figure 14. Number of varicella-zoster presentations per 1000 consultations at sentinel GPs (Australian Sentinel Practices Research Network) in WA in the past eight weeks**

![Figure 14](image)

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.
The number of chickenpox and shingles presentations to EDs increased in the past week (Figure 15).

**Figure 15. Number of varicella-zoster presentations to Emergency Departments in WA in the past eight weeks**

![Chart showing number of chickenpox and shingles presentations](image)

*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 laboratory definitive evidence.
- 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).

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