Government of Western Australia
Department of Health

PathWest
LABORATORY MEDICINE WA

Virus WAtch

Week ending 5th February 2023

Key Points

Influenza and influenza-like illnesses (ILI)

- The rate of ILI presentations at sentinel GPs and emergency departments (EDs) increased in the past week.
- Influenza notifications to the Department of Health were stable in the past week.
- Non-influenza respiratory virus detections at PathWest Laboratory Medicine (PathWest) decreased in the past week.
- COVID-19 cases decreased by 18% in the past week to 2,030 cases.

Gastroenteritis

- The rate of gastroenteritis presentations to sentinel GPs in the past week was lower than the previous 5-year average.
- Rotavirus notifications to the Department of Health increased in the past week, while the number of norovirus detections at PathWest decreased.

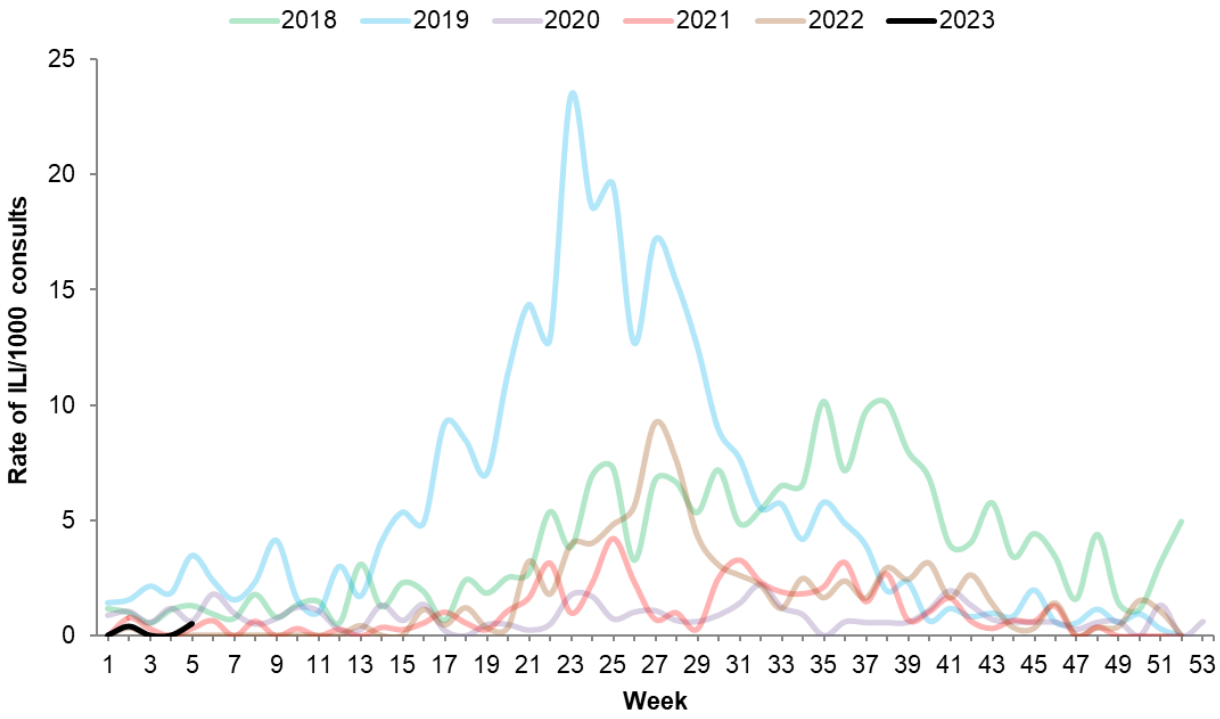
Other vaccine-preventable diseases

- **Chickenpox and shingles**: In the past week there were no chickenpox presentations to sentinel GPs and only two presentations to an ED, while shingles presentations to sentinel GPs decreased 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.

Influenza and influenza-like illnesses (ILI)

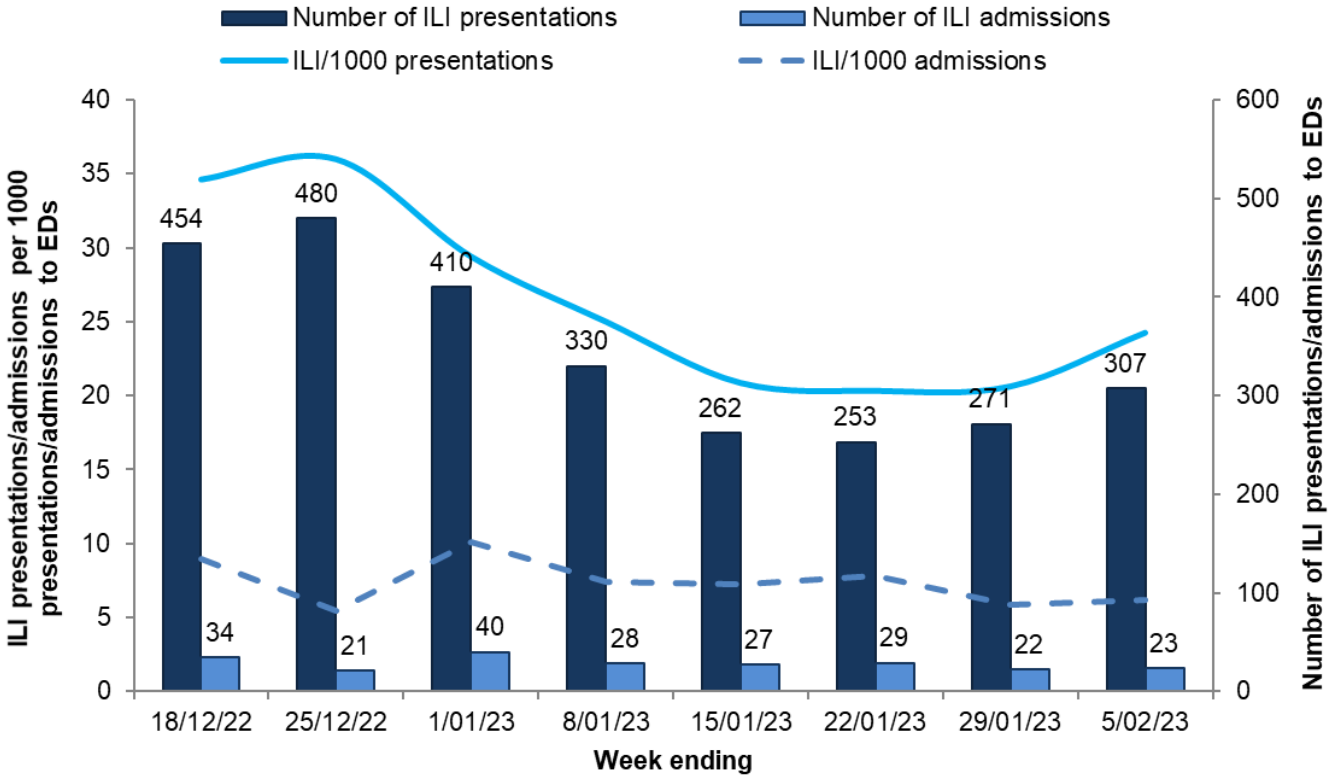
The rate of ILI presentations to sentinel GPs increased but remained in the lower range of values usually reported at this time of year (Figure 1).

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 to EDs increased in the past week while the rate of admissions was stable (Figure 2).

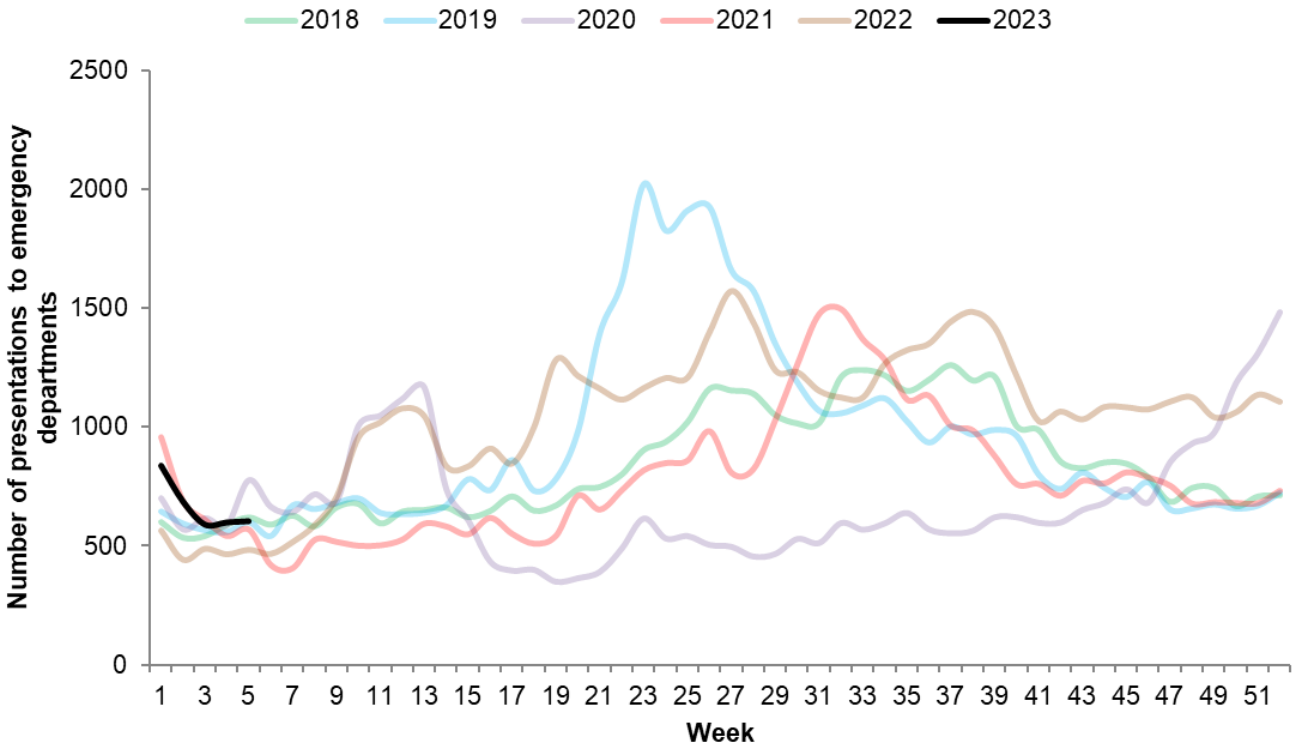
Figure 2. Number and rate of ILI presentations/admissions to emergency departments in WA in the past eight weeks



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 remained stable in the past week and was in the middle range of values usually reported at this time of year (Figure 3).

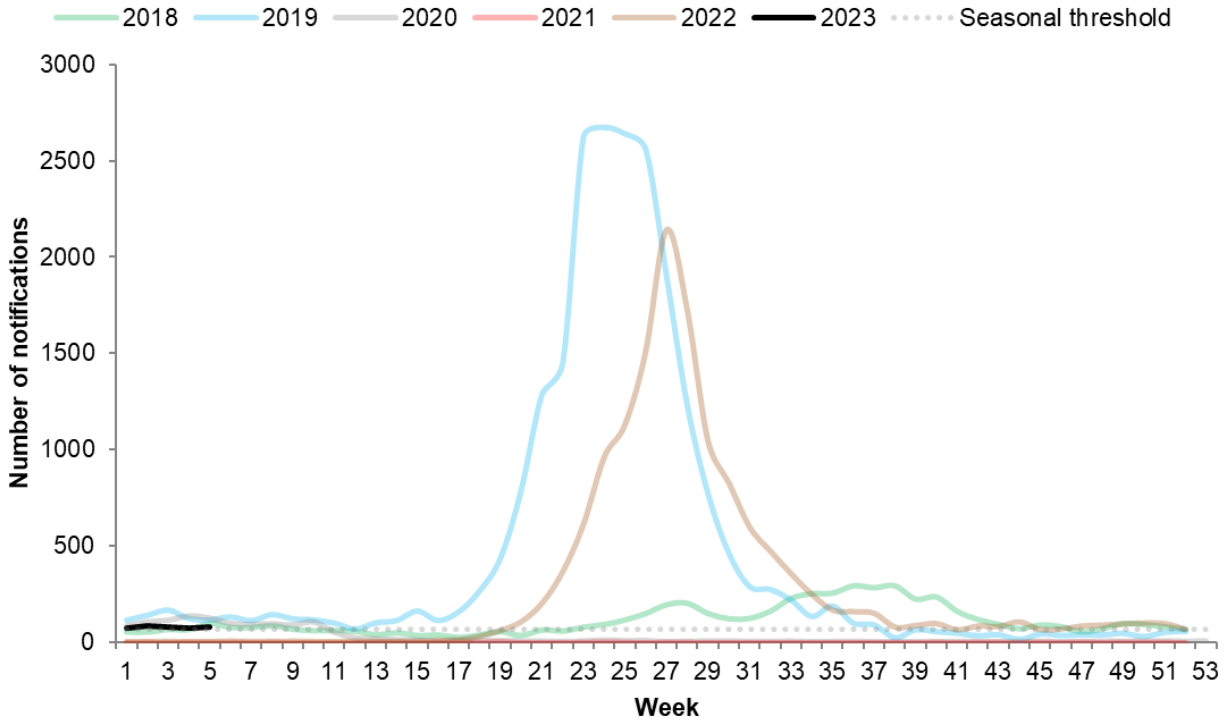
Figure 3. Number of respiratory illness presentations to emergency departments in WA by week, 2018 to 2023 YTD



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 was stable in the past week (Figure 4).

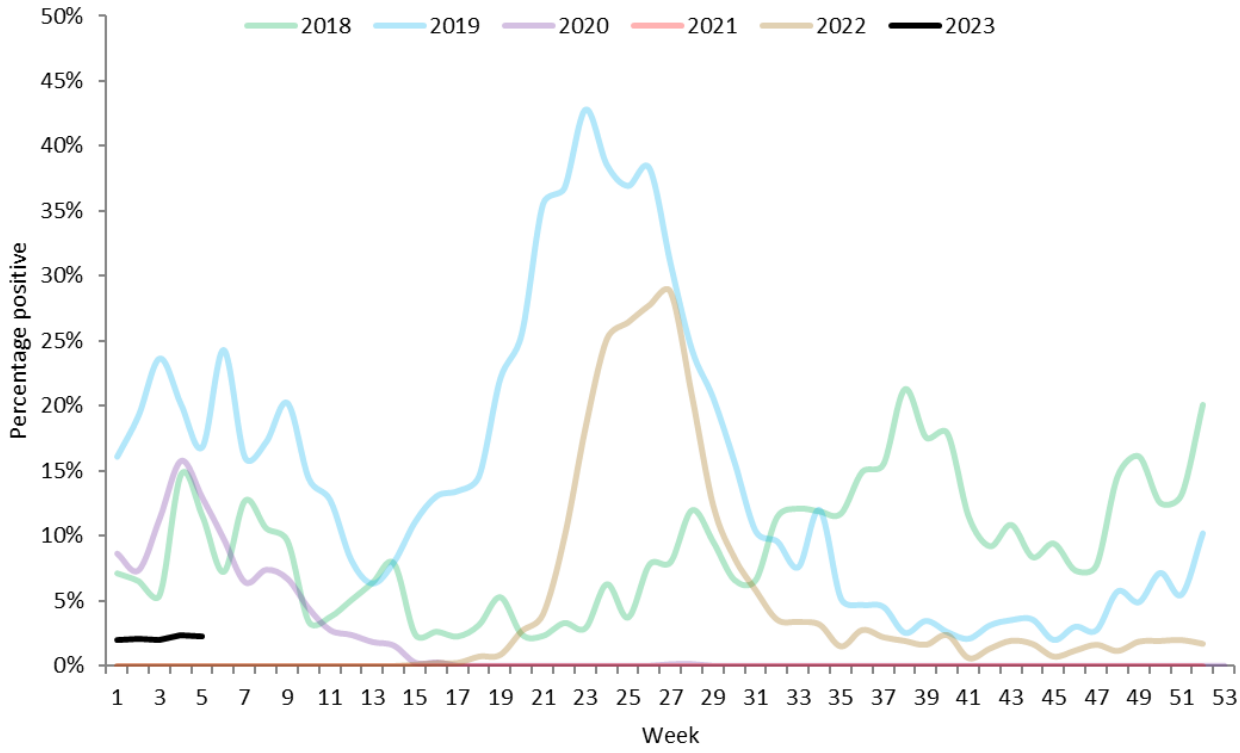
Figure 4. Number of influenza notifications in WA by week, 2018 to 2023 YTD



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.

Of the 860 specimens submitted for influenza PCR testing at PathWest in the past week, 17 (2.0%) tested positive (Figure 5).

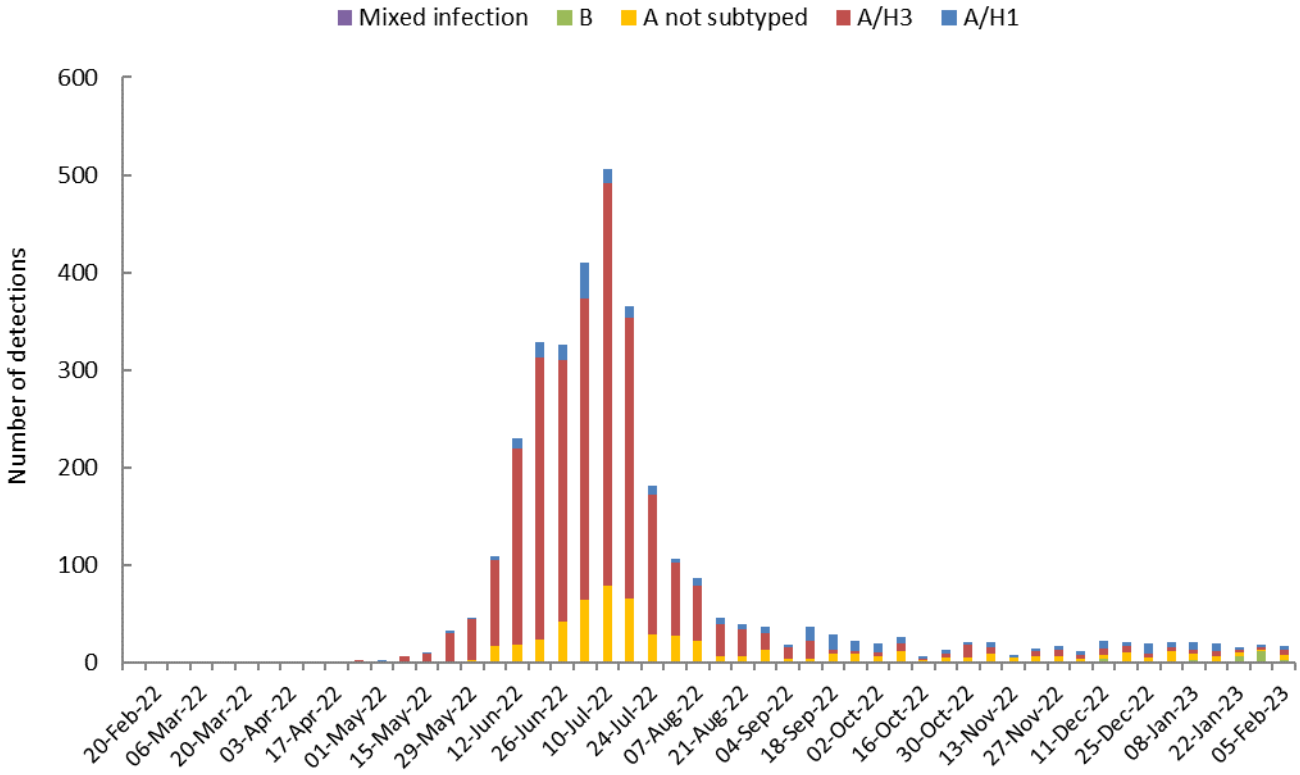
Figure 5. Proportion of PCR positive influenza detections at PathWest by week, WA, 2018 to 2023 YTD



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 17 influenza detections at PathWest in the past week, 3 were influenza A/H1, 6 were influenza A/H3, 5 were influenza A cases yet to be subtyped and 3 were influenza B (Figure 6).

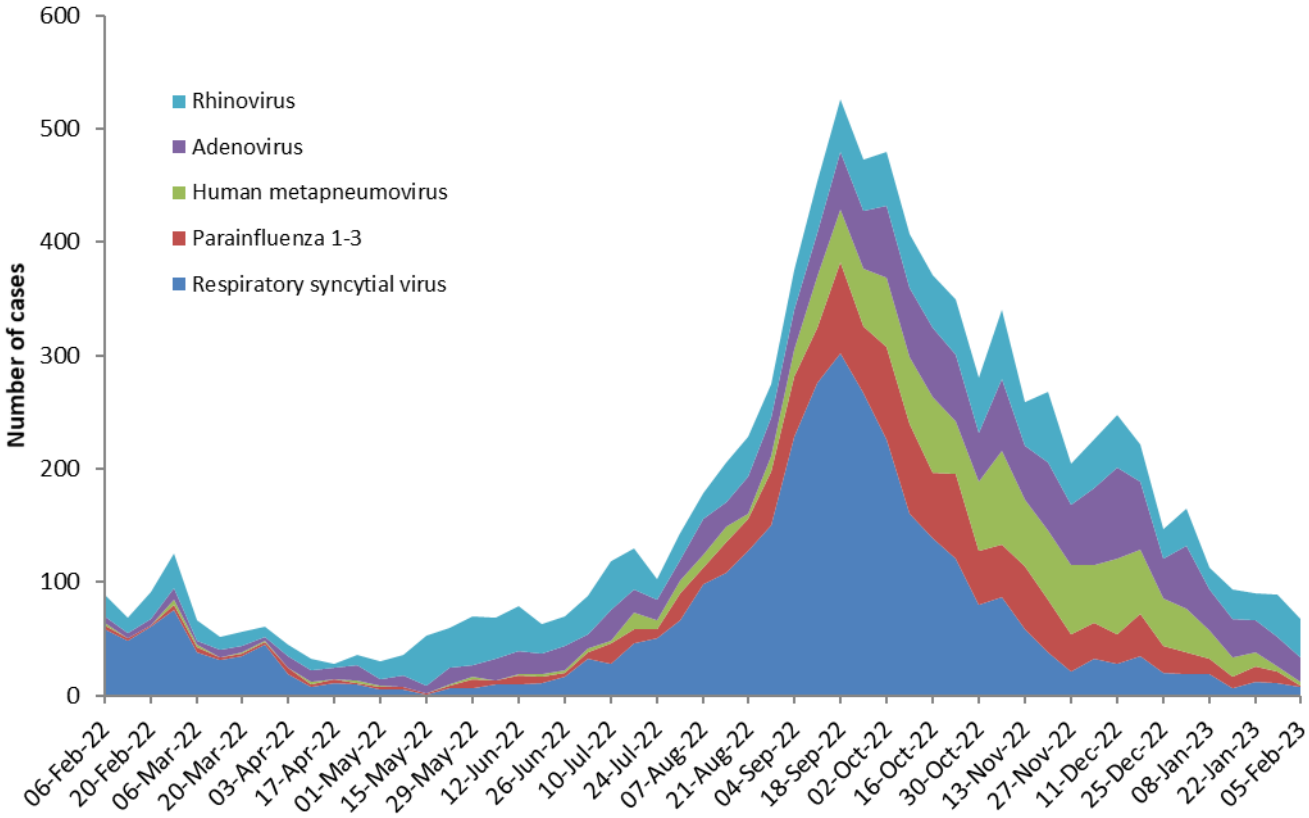
Figure 6. Number of PCR positive influenza detections at PathWest by type, subtype and week, WA, 2022 to 2023 YTD



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).

There was an overall decrease in non-influenza respiratory virus detections at PathWest in the past week (Figure 7). Excluding SARS-CoV-2, the most common non-influenza respiratory virus detected was rhinovirus (35 cases).

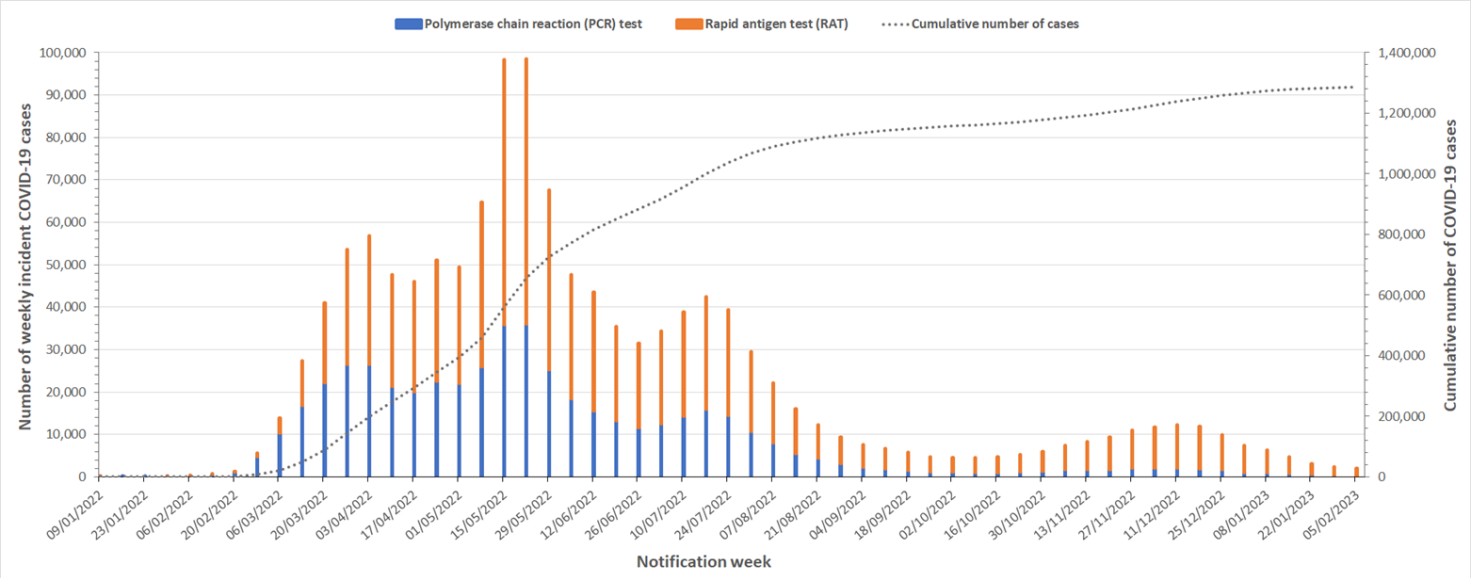
Figure 7. Number of non-influenza respiratory virus detections at PathWest by week, WA, 2022 to 2023 YTD



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, there were 2,030 COVID-19 cases reported in WA, which was 18% lower than the previous week. Of these, 15% were diagnosed by PCR test and 85% 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



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

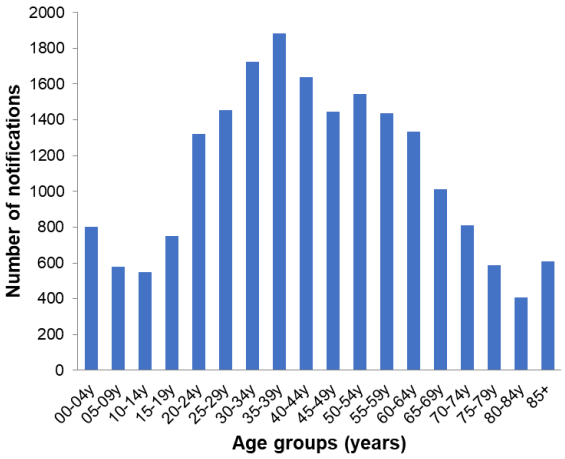
The number of COVID-19 notifications, hospitalisations and deaths to date are all significantly higher than reported in the same period in 2022, when border closures were still enforced. Vaccination coverage has been highest among those aged 16 years or older (Table 1). The majority of notifications have been reported in those aged less than 45 years (Figure 9).

Table 1. COVID-19 notifications and vaccination coverage in WA, 2023 YTD

Notifications	Category	2023 Year to Date	2022 Same Period
COVID-19 infections extracted by date of receipt of notification	Notifications	19,639	547
	Hospitalisations	608	9
	Reported Deaths	114	0
Vaccinations	**Age group**	**Two doses**	**Three doses**
Number of people vaccinated with COVID-19 vaccines as recorded in the Australian Immunisation Register	5-11 years	39.6%	N/A
	12-15 years	72.8%	N/A
	16+ years	95.2%	79.4%

Note: NA: data not available. Notification data source: Public Health Operations COVID-19 Unified System (PHOCUS). Vaccination data source: Australian Government Dept of Health and Aged Care Hospitalisation data source: WANIDD.

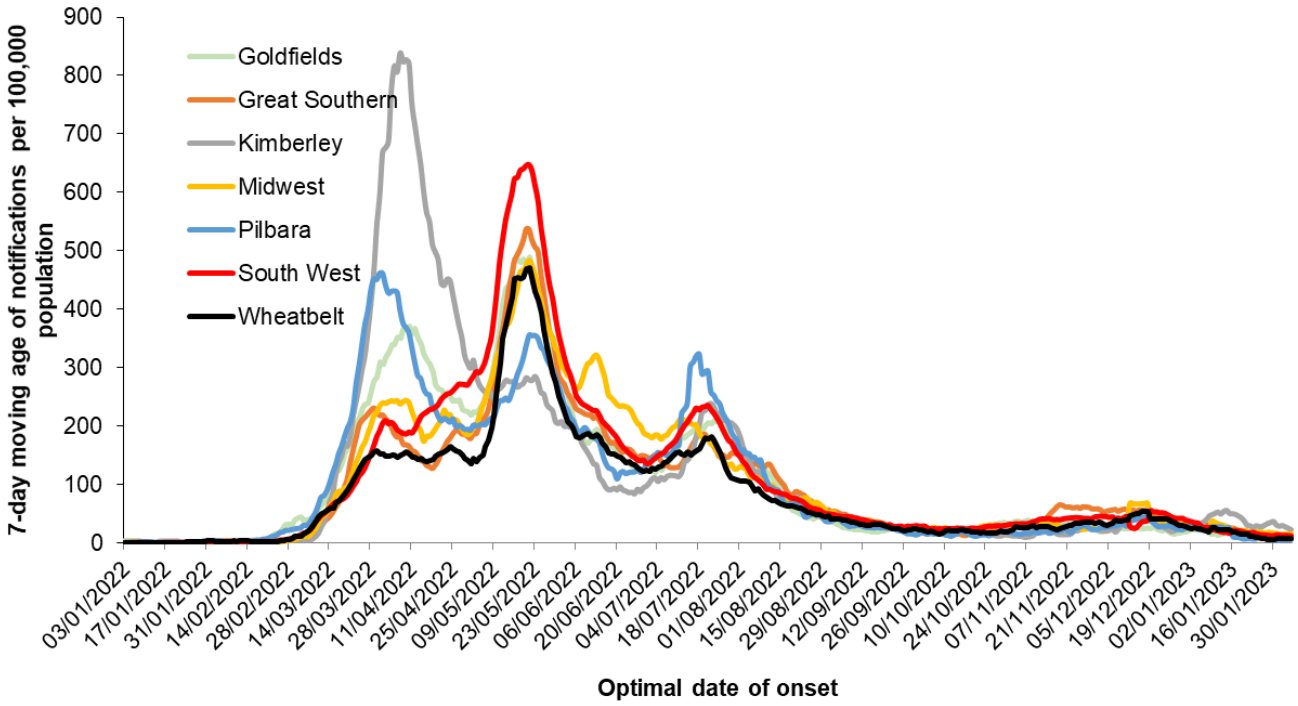
Figure 9. COVID-19 notifications by age group in WA, 2023 YTD



Note: Data source: Public Health Operations COVID-19 Unified System (PHOCUS).

The seven-day moving average of COVID-19 notifications per 100,000 population decreased or remained stable in all health regions (Figure 10).

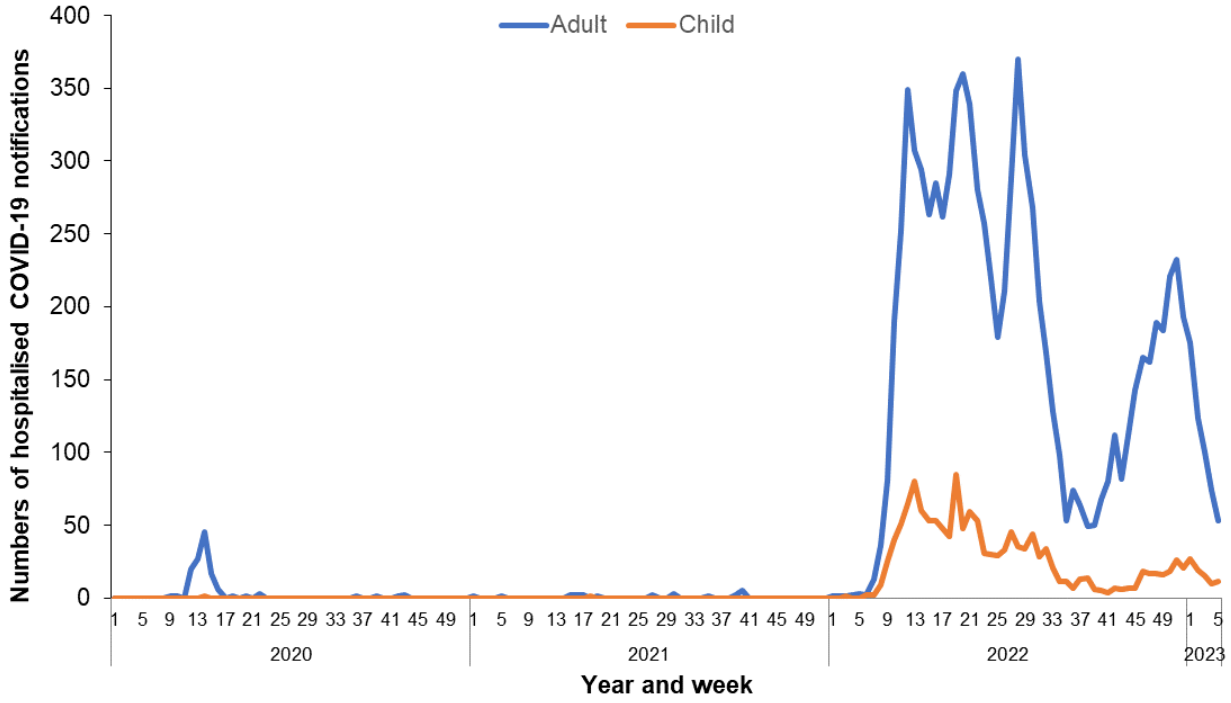
Figure 10. Seven-day moving average of COVID-19 notifications per 100,000 people in WA by health region, 2022 to 2023 YTD.



Note: Data sourced from Public Health Operations COVID-19 Unified System (PHOCUS).

The number of COVID-19 cases reported as hospitalised in the past week decreased among adults and slightly increased among children (Figure 11).

Figure 11. Number of notified COVID-19 cases hospitalised in WA by week, 2020 to 2023 YTD

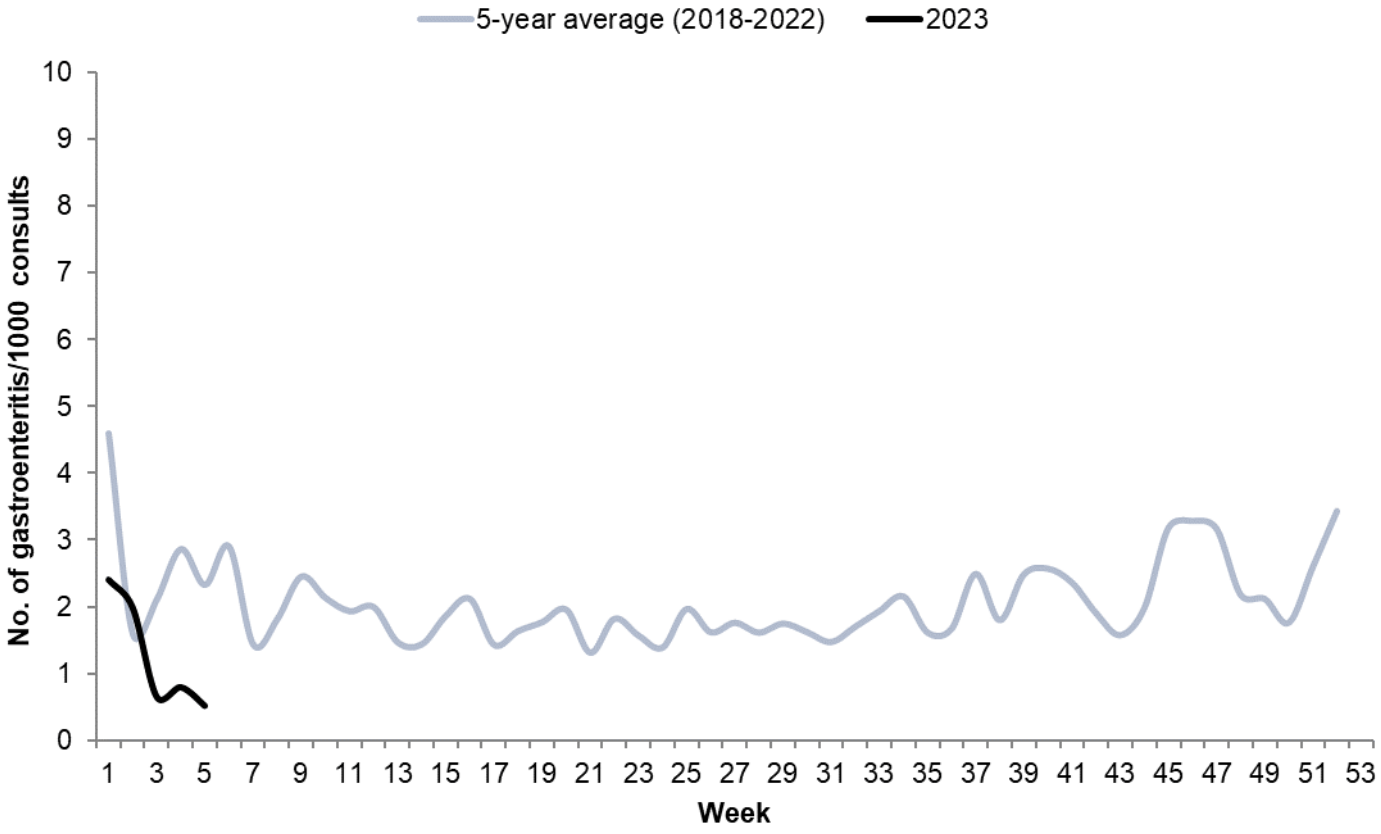


Note: Data source: WANIDD. A child is defined as less than 18 years of age.

Gastroenteritis

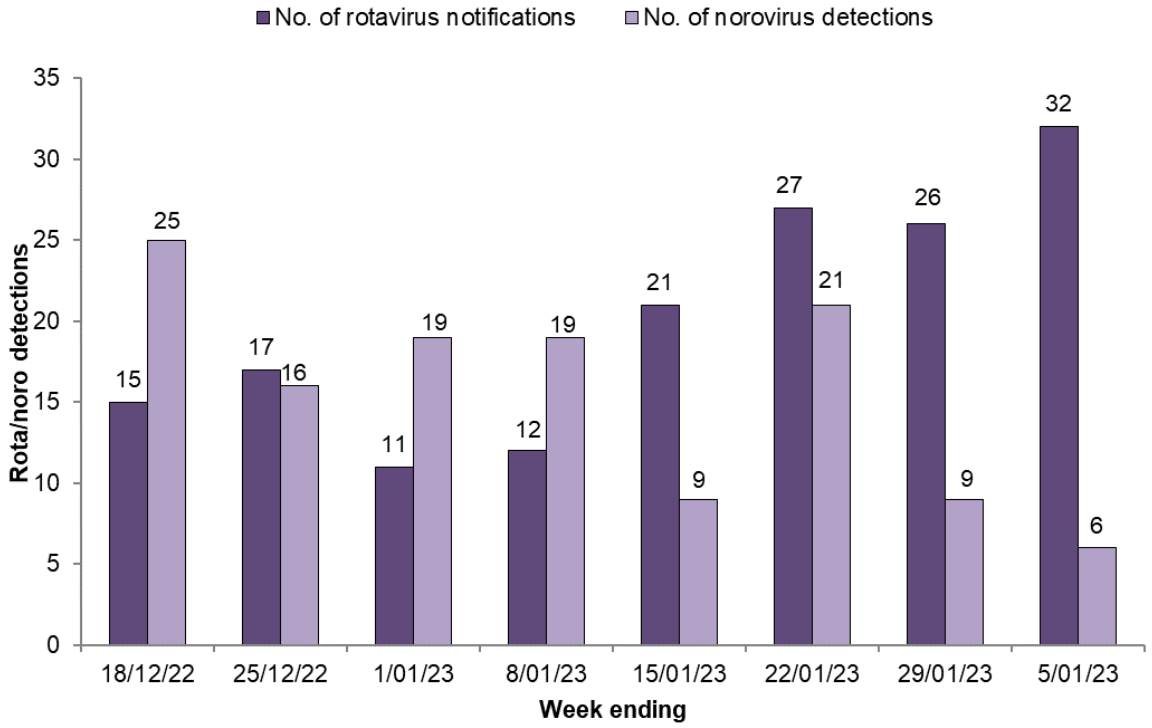
The rate of gastroenteritis presentations to sentinel GPs decreased in the past week and remained well below the previous 5-year average (Figure 12).

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 the number of norovirus detections at PathWest 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

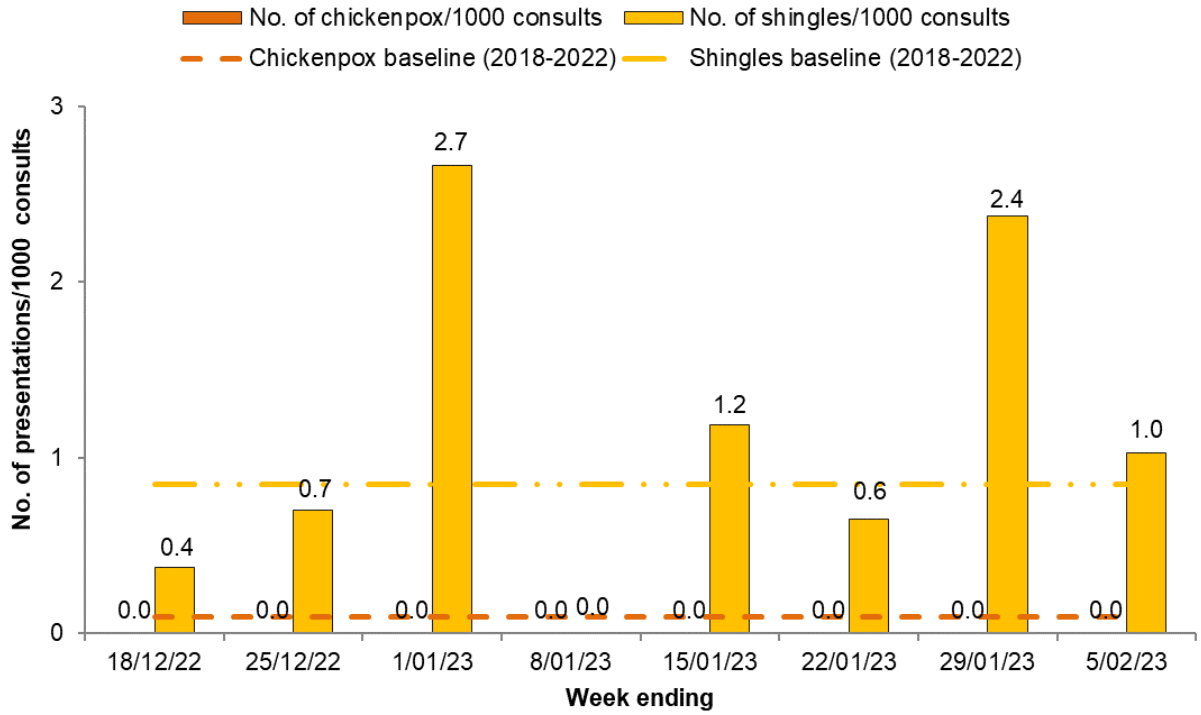


Note: Rotavirus notifications reported to the Department of Health include detections from all WA pathology laboratories. Norovirus detections are from PathWest only.

Viral rashes

The rate of shingles presentations to sentinel GPs decreased in the past week but remained above the baseline. There were no chickenpox presentations to sentinel GPs in the past eight weeks (Figure 14).

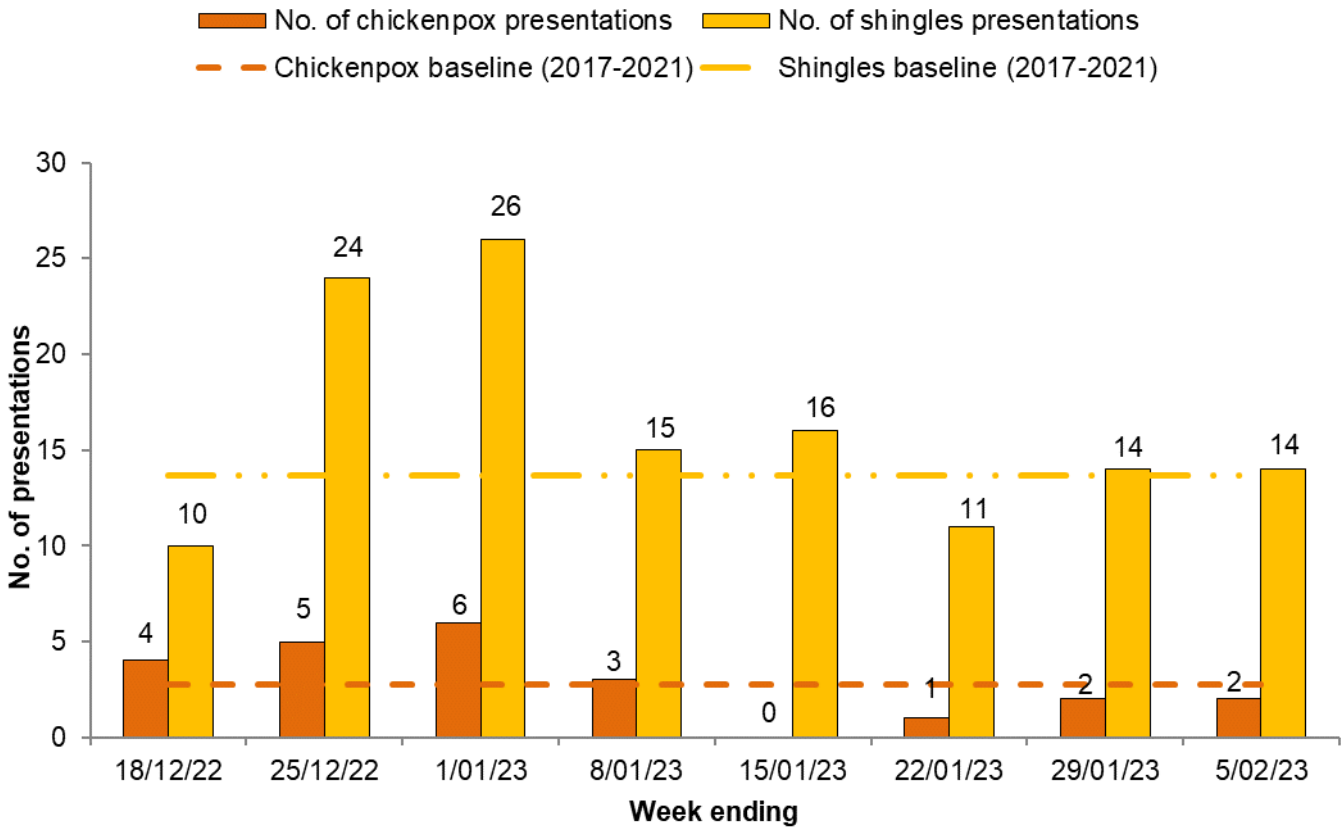
Figure 14. Number of varicella-zoster presentations per 1000 consultations at sentinel GPs (Australian Sentinel Practices Research Network) in WA in the past eight weeks



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.

There were two chickenpox presentations to an ED in the past week and the number of shingles presentations remained at the baseline (Figure 15).

Figure 15. 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 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).
- Current and archived issues of Virus Watch http://ww2.health.wa.gov.au/Articles/F_I/Infectious-disease-data/Virus-WAtch.

This document can be made available in alternative formats on request for a person with disability.