Virus WAAtch

Week ending 3rd November 2019

Key Points

Influenza and influenza-like illnesses (ILI)

- **Summary**: Indicators of influenza activity were below levels usually reported during this time of year in WA.
- ILI activity at sentinel GPs remained low in the past week.
- ILI presentations and admissions at sentinel EDs remained relatively stable in the past week.
- PathWest influenza detections and test percent positivity were at low levels for this time of year.
- Influenza A accounted for 60% of influenza detections at PathWest in the past week, comprising 20% influenza A/H1, 10% influenza A/H3 and 30% influenza A/not subtyped. Influenza B accounted for 40% of detections.
- Overall non-influenza activity decreased this week.

Gastroenteritis

- The rate of gastroenteritis presentations to sentinel GPs and the number of presentations to sentinel EDs were in the higher range of values normally reported at this time of year.
- PathWest laboratory detections of norovirus and rotavirus remained at low levels.

Other vaccine-preventable diseases

- **Shingles and chickenpox**: Chickenpox and shingles presentations to sentinel EDs in the past week were higher than baseline levels.
- **Measles** (updated cases to 8 November): No measles cases were notified in the week ending 8/11/2019.
- **Mumps**: Four mumps cases were notified in the past week.
- **Rubella**: No rubella cases notified in the past week.
- **Invasive meningococcal disease (IMD)**: One meningococcal case was notified in an adult, serogroup W.


Virus WAAtch 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 to important circulating viruses. All figures and data were accurate at time of publication, but subject to change. The data collections used to create this publication include:

- Sentinel General Practice data collected by WA members of the Australian Sentinel Practices Research Network (ASPREN)
- Emergency Department 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.
- Notification data derived from disease notifications received by CDCD, WA Department of Health from medical providers and public or private laboratories in WA. These data are updated routinely to include admission status for all public and public/private hospitals in WA and 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.

*these samples were tested using a rapid testing method that does not determine the influenza subtype (i.e influenza A/H3N2 or A/H1N1).*
Influenza and influenza-like illnesses

The number of routine PathWest influenza detections decreased in the past week. There were no detections among the samples submitted for influenza testing by sentinel GPs.

The rate of ILI presentations to sentinel GPs this week was below levels usually reported during this time of year.
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for respiratory viral presentations.

Respiratory viral presentations to sentinel EDs increased in the past week, while admissions remained stable.

The number of respiratory viral presentations to sentinel EDs increased in the past week but remained in the lower range of levels usually reported during this time of year.

*The graph is a summary of presentations at Emergency Department Sentinel Surveillance (EDSS) sites using the ICD codes B34.9 and J06.9 which are consistent with a clinical presentation of a viral illness. This data may differ from that presented in the Winter Respiratory Illness Report provided by the Information and System Performance Directorate.
Influenza notifications reported to the Department of Health remained below the seasonal threshold.

The graph is a summary of all influenza notifications received by the DoH, Western Australia to the end of the current reporting week, for which cases had date of symptom onset or specimen collection between 28/10/2019 and 03/11/2019. The seasonal threshold defines a value above which may indicate epidemic seasonal influenza activity. The threshold value is calculated based on analysis of seasonal influenza data from the past four years.

The percentage of specimens positive for influenza virus at PathWest remained below levels usually reported at this time of year. Of 257 specimens submitted, ten (4%) tested positive in the past week.

The graph is a summary of all WA samples reported by PathWest, excluding samples referred by other private laboratories for influenza subtyping.
Ten positive samples were reported by PathWest in the past week comprising: six (60%) influenza A and four (40%) influenza B. Of the three influenza A cases that were subtyped, two were influenza A/H1 and one was A/H3.

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).

Overall non-influenza activity decreased in the past week.

The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest.
The rate of gastroenteritis presentations to sentinel GPs increased in the past week and was in the higher range of values normally reported at this time of year.

Gastroenteritis presentations and admissions to sentinel EDs in the past week were higher than baseline levels.

Gastroenteritis presentations and admissions to sentinel EDs in the past week were higher than baseline levels.

This graph is a summary of current EDIS data for gastroenteritis presentations and admissions. Baseline levels for gastroenteritis presentations and admissions were calculated using the mean of weekly EDIS data from week 1, 2014 to week 52, 2018.
The number of gastroenteritis presentations to sentinel EDs increased in the past week and was in the higher range of values normally reported at this time of year.

**Viral rashes**

There were no chickenpox presentations reported by WA ASPREN GPs in the past week, and the rate of shingles presentations was comparable to the baseline level.

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, 2014 to week 52, 2018.
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for varicella-zoster virus presentations.

**ED varicella-zoster virus presentations**

- **No. of chickenpox presentations**
- **chickenpox baseline (2014-2018)**
- **No. of shingles presentations**
- **shingles baseline (2014-2018)**

Chickenpox and shingles presentations to sentinel EDs in the past week were higher than baseline levels.

Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2014 to week 52, 2018.