Virus WAtch

Week ending 9th February 2020

Key Points

Influenza and influenza-like illnesses (ILI)
- **Summary**: Indicators of influenza activity were generally above levels usually reported during this time of the year in WA.
- ILI activity at sentinel GPs this week was in the higher range of levels usually reported.
- ILI presentations and admissions to sentinel EDs decreased in the past week.
- PathWest influenza detections and test percent positivity were higher than levels usually reported at this time of year.
- Influenza A accounted for 92% of influenza detections at PathWest in the past week, comprising 67% influenza A/H1N1, 8% A/H3N2 and 17% were influenza A/not subtyped. Influenza B accounted for 8% of influenza detections.
- Overall non-influenza activity decreased in the past week.

Gastroenteritis
- The rate of gastroenteritis presentations to sentinel GPs was similar to levels normally reported at this time of year and the number of presentations and admissions to sentinel EDs was higher than baseline levels.
- PathWest laboratory detections of norovirus remained relatively stable in the past week, and rotavirus remained at low levels.

Other vaccine-preventable diseases
- **Shingles and chickenpox**: The rate of chickenpox presentations to sentinel GPs in the past week was higher than baseline levels and the number of presentations to sentinel EDs was similar to baseline levels. The rate of shingles presentations at sentinel GPs and sentinel EDs was lower than baseline levels.
- **Measles**: One measles case was notified in the past week.
- **Mumps**: One mumps case was notified in the past week.
- **Rubella**: No rubella cases notified in the past week.
- **Invasive meningococcal disease (IMD)**: One meningococcal serogroup W case was notified in the past week.


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 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 (ASPRÉN)
- 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, Bumbury 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).*
The number of routine PathWest influenza detections decreased in the past week and there was one detection among the samples submitted for influenza testing by sentinel GPs.

The rate of ILI presentations to sentinel GPs this week was in the higher range of 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.

**ED viral-illness* presentations and admissions**

- Number of ILI presentations
- Number of ILI admissions
- ILI/1000 presentations
- ILI/1000 admissions

Respiratory viral presentations and admissions to sentinel EDs decreased in the past week.

**ED viral-illness* presentations, 2016 to 2020**

The number of respiratory viral presentations to sentinel EDs decreased in the past week but is still above 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 in the past week was above 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 03/02/2020 and 09/02/2020. 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 was higher than levels usually reported at this time of year. Of 218 specimens submitted, 24 (11%) 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.
Twenty four positive samples were reported by PathWest in the past week, of which 22 were influenza A and two were influenza B. Of the 22 influenza A cases, 16 were A/H1N1, two were A/H3N2 and four were not subtyped.

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).

The overall non-influenza activity increased 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.
Gastroenteritis

The rate of gastroenteritis presentations to sentinel GPs increased in the past week and was similar to levels normally reported at this time of year.

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 is above the range of values normally reported at this time of year.

**Viral rashes**

The rate of chickenpox presentations reported by WA ASPREN GPs in the past week was higher than baseline levels and the rate of shingles presentations was lower than baseline levels.

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.

Chickenpox presentations to sentinel EDs in the past week were similar to baseline levels, and the shingles presentation rates were lower.

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