WEEK ENDING 1ST SEPTEMBER 2019

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Indicators of influenza activity are below levels usually reported during the influenza season in WA.

- ILI activity at sentinel GPs and sentinel EDs remained steady or decreased this week.
- PathWest influenza detections and test percent positivity are at low levels for this time of year.
- Influenza A accounted for the largest proportion of influenza detections at PathWest this week, with influenza A/H3N2 (38%), influenza A/not subtyped* (33%) and influenza A/H1N1 (4%), accounting for 75% of all samples, followed by influenza B (25%).
- Overall non-influenza activity decreased this week, mostly due to a fall in RSV detections.

GASTROENTERITIS

- The number of gastroenteritis presentations to sentinel EDs remained below baseline levels this week.
- PathWest laboratory detections of norovirus and rotavirus remain at low levels.

OTHER VACCINE-PREVENTABLE DISEASES

- Shingles and chickenpox: Shingles and chickenpox activity at sentinel EDs was at or above baseline levels this week.
- Measles: One measles case notified this week in a traveller returning from Singapore and Maldives.
- Mumps: One mumps case notified this week in a traveller returning from Saudi Arabia.
- Rubella: No rubella cases notified this week.
- Invasive meningococcal disease (IMD): No meningococcal cases notified this 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 (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).
The number of routine PathWest influenza detections decreased this week. One of the seven (14%) samples submitted for influenza testing by sentinel GPs tested positive this week.

The rate of ILI presentations this week is 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.

**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 this week.**

**ED Viral-illness* Presentations, 2015 to 2019**

*These graphs 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.*

The number of respiratory viral presentations to sentinel EDs decreased this week and is lower than levels usually reported during the winter months, despite high levels reported earlier in 2019.
Influenza notifications reported to the Department of Health increased slightly this week, and is consistent with past activity following a peak in notifications.

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 26/08/2019 and 01/09/2019. 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 remains below levels usually reported at this time of year. Of the 451 specimens, 24 (5%) tested positive in the past week.
Twenty-four positive samples were reported by PathWest this week comprising: 9 (38%) influenza A/H3N2, 1 (4%) influenza A/H1N1, and 6 (25%) influenza B. Eight (33%) influenza A samples 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).
Overall non-influenza activity decreased this week, mostly due to a fall in RSV detections.

The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest.

The number of gastroenteritis presentations to sentinel GPs is in the mid-range of values normally reported at this time of year.

Gastroenteritis presentations to sentinel EDs remained below baseline levels this week.
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.

**ED Gastroenteritis Presentations 2015 to 2019**

The number of gastroenteritis presentations to sentinel EDs remains in the mid-range of values normally reported at this time of year.

**Viral Rashes**

**GP Varicella-Zoster Virus Presentations**

Shingles and chickenpox activity reported by WA ASPREN GPs was below baseline levels this week.

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**

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<tr>
<th>Week ending</th>
<th>No. of chickenpox presentations</th>
<th>No. of shingles presentations</th>
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<th>shingles baseline (2014-2018)</th>
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</table>

**Shingles and chickenpox presentations at sentinel EDs were at or above baseline levels this week.**

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