WEEK ENDING 07TH APRIL 2019

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Influenza activity has returned to inter-seasonal levels this week.

- ILI activity at sentinel GPs and EDs increased slightly this week.
- PathWest influenza detections and percent positivity decreased this week, and are at levels usually seen at this time of year.
- Influenza A/H3N2 comprised the largest proportion of influenza detections at Pathwest this week (44%) followed by influenza A/H1N1 (25%), and influenza B (31%).
- Overall non-influenza activity increased this week, mostly driven by an increase in RSV detections.

GASTROENTERITIS

- Gastroenteritis activity at sentinel GPs and EDs was in the mid-range of values usually seen at this time of year.
- PathWest laboratory detections of norovirus and rotavirus remain at low levels.

OTHER VACCINE-PREVENTABLE DISEASES

- Shingles and chickenpox: Shingles activity at sentinel GP and EDs was above baseline levels this week.
- Measles: One measles case confirmed this week in a returned traveller.
- Mumps: One mumps case notified this week.
- 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.
The number of routine PathWest influenza detections increased slightly this week. One of the two samples (50%) submitted for influenza testing by sentinel GPs tested positive.

The rate of ILI presentations to WA ASPREN sentinel GPs is in the higher range of values typically reported at this time of the year.
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

**Viral Respiratory ED Presentations and Admissions**

- **Week ending 17/02/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED
- **Week ending 24/02/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED
- **Week ending 03/03/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED
- **Week ending 10/03/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED
- **Week ending 17/03/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED
- **Week ending 24/03/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED
- **Week ending 03/04/19**: Number of ILI presentations/admissions per 1000 presentations/admissions to ED

**Respiratory presentations to sentinel ED and admissions to hospital increased this week.**

**ED Respiratory Viral Presentations, 2015-2019**

- **2015**: The number of respiratory viral presentations to sentinel EDs increased this week, and remains within the mid-range of levels typically reported at this time of the year.
The number of influenza hospitalisations have been higher than expected during the interseasonal period, particularly in adults.

The graph is a summary of influenza notifications received by the DoH who were recorded as having a hospital admission to the end of the current reporting week, for which cases had a specimen collection date between 01/04/2019 and 07/04/2019. Paediatric notifications were defined as individuals less than 18 years of age.

The number of influenza notifications reported to the Department of Health is now at interseasonal levels.

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 01/04/2019 and 07/04/2019. 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 testing positive for influenza virus at PathWest has returned to levels typically reported at this time of year. Of 245 specimens, 16 (7%) tested positive in the past week.

The graph is a summary of all WA samples reported by PathWest as of Wednesday 11th of April 2019, excluding samples referred by other private laboratories for influenza subtyping.

Sixteen samples were subtyped by PathWest during this reporting week; 4 (25%) influenza A/H1N1, 7 (44%) influenza A/H3N2; and 5 (31%) influenza B.

The graph is a summary of all WA samples positive for influenza reported at PathWest as of Wednesday 11th of April 2019, excluding samples referred by other private laboratories for influenza subtyping.
Overall non-influenza activity increased this week, mostly driven by an increase in RSV detections. The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest as of Wednesday 11th of April 2019.

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

The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations and admissions were calculated using the mean of weekly EDIS data from week 1, 2015 to week 52, 2018.
Gastroenteritis presentations to sentinel ED fell below baseline level this week, whilst admissions to hospital remained around baseline levels.

The number of gastroenteritis presentations to sentinel EDs is in the mid-range of values normally reported at this time of year.
Shingles activity reported by WA ASPREN GPs rose above baseline levels this week. There was no chickenpox activity reported again 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, 2015 to week 52, 2018.

The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for varicella-zoster virus presentations.

**Varicella-Zoster virus ED Presentations**

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<th>Week ending</th>
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<tr>
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Shingles and chickenpox presentations at sentinel EDs were above baseline levels this week. Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2015 to week 52, 2018.