WEEK ENDING 31ST MARCH 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 declined this week, whilst ILI activity at sentinel EDs increased slightly.
- PathWest influenza detections and percent positivity decreased this week, and are at or approaching levels usually seen at this time of year.
- Influenza A/H3N2 comprised the largest proportion of influenza detections at Pathwest this week (50%) followed by influenza A/H1N1 (20%), and influenza B (30%).
- Overall non-influenza activity was low this week.

GASTROENTERITIS

- Gastroenteritis activity at sentinel GPs and EDs was in the higher 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: Chickenpox presentations at sentinel EDs were at baseline levels this week.
- Measles: No measles cases confirmed this week.
- Mumps: No mumps cases notified this week.
- Rubella: No rubella cases notified this week.
- Invasive meningococcal disease (IMD): One meningococcal case notified this week, serogroup W.


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 decreased this week. There were no samples submitted by sentinel GPs that tested positive.

The rate of ILI presentations to WA ASPREN sentinel GPs is in the mid-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

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

ED Respiratory Viral Presentations, 2015-2019

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 25/03/2019 and 31/03/2019. Paediatric notifications were defined as individuals less than 18 years of age.

The number of influenza notifications received by 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 25/03/2019 and 31/03/2019. 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 continued to decrease this week, and has returned to levels typically reported at this time of year. Of 194 specimens, 10 (5%) tested positive in the past week.

The graph is a summary of all WA samples reported by PathWest as of Wednesday 3rd of April 2019, excluding samples referred by other private laboratories for influenza subtyping.

Ten samples were subtyped by PathWest during this reporting week; 2 (20%) influenza A/H1N1, 5 (50%) influenza A/H3N2; and 3 (30%) influenza B.

The graph is a summary of all WA samples positive for influenza reported at PathWest as of Wednesday 3rd of April 2019, excluding samples referred by other private laboratories for influenza subtyping.
Overall non-influenza activity remained low this week.
The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest as of Wednesday 3rd of April 2019.

The number of gastroenteritis presentations to sentinel GPs is in the mid to high 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.
Both gastroenteritis presentations to sentinel ED and admissions to hospital remained around baseline levels this week.

The number of gastroenteritis presentations to sentinel EDs remained in the higher range of values normally reported at this time of year.
Viral Rashes

Shingles activity reported by WA ASPREN GPs remained below baseline levels this week. There was no chickenpox activity reported 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 GP Presentations

<table>
<thead>
<tr>
<th>Week ending</th>
<th>No. of chickenpox/1000 consults</th>
<th>No. of shingles/1000 consults</th>
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</thead>
<tbody>
<tr>
<td>10/02/19</td>
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<tr>
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<tr>
<td>03/03/19</td>
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<td>2.0</td>
</tr>
<tr>
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</tr>
<tr>
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Varicella-Zoster virus ED Presentations

<table>
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<th>Week ending</th>
<th>No. of chickenpox presentations</th>
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<td>9</td>
</tr>
</tbody>
</table>

Chickenpox presentations at sentinel EDs were at 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.