**WEEK ENDING 10TH JUNE 2018**

**KEY POINTS**

**INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)**

**Summary:** Influenza and influenza-like illness activity is currently low and relatively steady.

- ILI presentations at sentinel GPs and EDs are fluctuating at low levels.
- Influenza notifications and PathWest laboratory detections and percent positivity remained low this week.
- Influenza B and influenza A (both H1N1 and H3N2) viruses continue to co-circulate at low levels.
- Overall and virus-specific non-influenza activity has been fluctuating over recent weeks, although the general trend, primarily due to RSV, has been upwards.

**GASTROENTERITIS**

- Gastroenteritis activity at sentinel GPs and EDs is currently around expected levels for this time of year.
- Rotavirus and norovirus activity remains low.

**VARICELLA AND OTHER VACCINE-PREVENTABLE DISEASES**

- Shingles activity at sentinel GPs and EDs continues to fluctuate around baseline level, whilst chickenpox activity is low.
- **Rubella:** No cases have been confirmed in WA since two imported cases in early April 2017.
- **Mumps:** No cases notified this week. Thirteen cases have been confirmed to date in 2018, associated with infection acquired overseas or interstate, or with limited local transmission in adolescents in the Perth metro area, with the most recent onset dates in late May.
- **Measles:** No cases have been notified in over a month, and it is now two incubation periods since the end of the infectious period in the last reported case. Clinicians should remain alert to the possibility of measles in persons with fever and rash illnesses who have recently been overseas. It is recommended that measles vaccine (MMR) be considered for all people travelling overseas, including to Bali, who were born after 1965 and who do not have clear documentation of having previously received two doses of measles vaccine.


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, Princess Margaret 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.
Reported routine influenza detections remained steady this week. ILI activity at sentinel GPs was low, and no samples were submitted for influenza testing.

The rate of ILI presentations to WA ASPREN sentinel GPs is currently around average levels for this time of 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 viral presentations to sentinel EDs continued to increase this week, whilst admissions remained stable.

**ED Respiratory Viral Presentations, 2014-2018**

Relative to recent seasons, the number of respiratory viral presentations to sentinel EDs is currently in the mid-range of levels reported at this time of year.
The number of influenza notifications received by the Department of Health remains at inter-seasonal 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 04/06/2018 and 10/06/2018. 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 is currently at inter-seasonal level; of 212 specimens, 7 (3%) tested positive in the past week. The graph is a summary of all WA routine and sentinel samples that have been processed by PathWest as of Wednesday 13th of June 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Seven routine samples were subtyped by PathWest during this reporting week; 5 (71%) influenza A/H3N2; and 2 (29%) influenza/H1N1.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 13th June 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Overall and virus-specific non-influenza activity has been fluctuating over recent weeks, although the general trend has been upwards.
The number of gastroenteritis presentations to sentinel GPs continues to fluctuate at relatively low levels.

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, 2013 to week 52, 2017.

Gastroenteritis ED Presentations

Gastroenteritis presentations and admissions to sentinel EDs remained below baseline level this week.
The number of gastroenteritis presentations to sentinel EDs is fluctuating within the range of values seen at this time of year.

Norovirus activity increased slightly this week, whilst rotavirus activity remains low.
Shingles and chickenpox activity at WA ASPREN remained low 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, 2013 to week 52, 2017.

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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<tr>
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</tr>
</tbody>
</table>

Shingles presentations at sentinel EDs were above baseline levels this week, whilst chickenpox activity was low. Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2013 to week 52, 2017.