WEEK ENDING 10TH DECEMBER 2017

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)
Summary: Syndromic influenza-like illness activity and influenza notifications, PathWest laboratory detections, and percent positivity are all at or approaching baseline inter-seasonal levels.

- ILI presentations at sentinel GPs decreased this week and are now at inter-seasonal levels. ED ILI activity increased but levels are relatively low and consistent with this time of year.
- PathWest laboratory detections continue to decrease, whilst percent positivity remained stable this week. There is ongoing late season influenza B virus activity (53% of detections this week), complemented by A/H3N2 activity (43%). Influenza B activity currently relatively high in the Kimberley region.
- Non-influenza respiratory virus activity is now low.

GASTROENTERITIS
- Gastroenteritis activity at sentinel GPs and EDs continued to increase this week; yet remains around expected levels for this time of year.
- Rotavirus and norovirus activity remains low this week.

VARICELLA AND OTHER VACCINE-PREVENTABLE VIRAL DISEASES
- Shingles activity at sentinel GPs and EDs was above baseline levels this week.
- Rubella: no cases have been confirmed in WA since two imported cases in early April.
- Measles: no cases have been confirmed since August.
- Mumps: one overseas-acquired infection reported in the past week in an unvaccinated child.


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 receive 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.
Routine influenza detections and ILI presentations to WA ASPREN sentinel GPs continued to decline this week. Neither of the two samples submitted for influenza testing by sentinel GPs tested positive.

The rate of ILI presentations to WA ASPREN sentinel GPs is now at inter-seasonal levels.
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 and admissions to sentinel EDs increased this week.

**ED Respiratory Viral Presentations, 2013-2017**

The number of respiratory viral presentations to sentinel EDs increased this week but levels are consistent with the interseasonal period.
The number of influenza notifications received by the Department of Health continues to decline after peaking in mid-September and has crossed the interseasonal threshold level.

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 04/12/2017 and 10/12/2017. The seasonal threshold defines a value above which indicates epidemic seasonal influenza activity. The threshold value is calculated based on analysis of seasonal influenza data from the past eight years (excluding the pandemic year in 2009).

The percentage of specimens testing positive for influenza virus at PathWest remained stable at 9% this week, although overall is trending downwards. The graph is a summary of all WA routine and sentinel samples that have been processed by PathWest as of 29th November 2017. This number does not include samples referred by other private laboratories for influenza subtyping.
Nineteen routine samples were subtyped by PathWest during this reporting week; 10 (53%) influenza B; 8 (42%) influenza A/H3N2 and 1 (5%) influenza A/H1N1.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 13th December 2017. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Non-influenza respiratory virus activity is currently low.
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 were calculated using the mean of weekly EDIS data from week 1, 2011 to week 52, 2016.

Gastroenteritis ED Presentations

Gastroenteritis presentations to sentinel EDs remained above baseline level for the fifth consecutive week; gastroenteritis admissions also continued to increase.
The number of gastroenteritis presentations to sentinel EDs increased this week, and is now in the mid range of values observed during this time period in recent years.

Rotavirus and norovirus activity remained stable this week.
Shingles activity at WA ASPREN sentinel GPs increased above 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, 2012 to week 52, 2016.

The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for varicella-zoster virus presentations. Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2012 to week 52, 2016.

Varicella-Zoster Virus ED Presentations

Chickenpox and shingles activity at sentinel EDs was above baseline levels this week.