WEEK ENDING 29TH OCTOBER 2017

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Influenza notifications, PathWest direct detections, test percent positivity, and hospitalisations are all in decline. Current influenza activity is around the average level expected at this time of year.

- ILI presentations at sentinel GPs continued to decrease this week, whilst sentinel ED activity increased slightly.
- Influenza notifications, PathWest laboratory detections and percent positivity continue to trend downwards; influenza A/H3N2 virus remains predominant (50% this week), closely followed by influenza B virus (47%).
- Overall non-influenza respiratory virus activity continued to decrease.

GASTROENTERITIS

- Gastroenteritis activity at sentinel GPs and EDs remains low and levels are fluctuating around expected values for this time of year.
- Rotavirus and norovirus activity increased marginally this week.

VARICELLA AND OTHER VACCINE-PREVENTABLE VIRAL DISEASES

- Chickenpox activity at sentinel GPs and EDs was above baseline level this week. Shingles continues to fluctuate around average levels.
- Rubella: no cases have been confirmed in WA since two imported cases in early April.
- Measles: no cases have been confirmed for two months.
- Mumps: no cases have been confirmed in the past month.


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 decrease this week. Two of the six samples (33%) submitted for influenza testing by sentinel GPs tested positive this week.

The rate of ILI presentations to WA ASPREN sentinel GPs continued to trend downwards this week.
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Respiratory viral presentations were steady while admissions to sentinel EDs increased this week, however are overall trending downwards.

The number of respiratory viral presentations to sentinel EDs increased marginally, and current levels are above average for this time of year.
The number of influenza notifications received by the Department of Health continues to trend downwards after peaking in mid-September. 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 23/10/2017 and 29/10/2017. 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 number of influenza cases hospitalised decrease, and is returning to the average level experienced in recent years. The most recent week’s data are subject to correction due to a lag in reporting. Of the 22 hospitalised cases in the past week, there were 10 (45%) influenza B; 9 (40%) influenza A/H3N2; 1 (5%) influenza A/H1N1; 1 (5%) influenza A/unsubtyped; and 1 (5%) untyped.
The hospital admission rate of laboratory-confirmed influenza continues to decline and is at the average level for recent years. The most recent week’s data are subject to correction due to a lag in reporting.

The graph is a summary of influenza notifications received by the DoH who were recorded as having a hospital admission, expressed per 1,000 admissions. Data for the current reporting week may be incomplete.

The percentage of specimens testing positive for influenza virus by PathWest has continued to decrease and is in the higher range of values observed for this time period in recent years. Of 276 specimens, 30 (11%) 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 1st November 2017. This number does not include samples referred by other private laboratories for influenza subtyping.
Thirty routine samples were subtyped by PathWest during this reporting week; 15 (50%) influenza A/H3N2; 14 (47%) influenza B; and 1 (3%) influenza A/H1N1.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 1st November 2017. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Non-influenza respiratory virus activity continued to decrease this week.
The number of gastroenteritis presentations to sentinel GPs is in the lower range of values seen 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 were calculated using the mean of weekly EDIS data from week 1, 2011 to week 52, 2016.

Gastroenteritis ED Presentations

Gastroenteritis presentations and admissions to sentinel EDs remain below baseline level.
The number of gastroenteritis presentations to sentinel EDs remains in the lower range of values observed during this time period in recent years.

Rotavirus and norovirus activity increased slightly this week.
Shingles and chickenpox activity at WA ASPREN sentinel GPs were just above baseline level 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 activity at sentinel EDs remains above baseline levels this week, while shingles presentations were below baseline levels.