WEEK ENDING 29TH JULY 2018

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Influenza activity continued to decline this week, and is lower than levels usually experienced at this time of year.

- Influenza notifications, PathWest laboratory detections, and percent positivity decreased this week.
- Influenza B and influenza A (both H1N1 and H3N2) viruses have been co-circulating at low levels over recent weeks, however the majority (83%) of influenza detections this week were A/H1N1.
- Influenza-related hospitalisations are approaching average levels for this time of year; primarily attributable to influenza A/H1N1 virus.
- Non-influenza activity decreased again this week, driven largely by a drop in RSV detections.

GASTROENTERITIS

- Gastroenteritis activity at sentinel GPs and EDs is currently around expected levels for this time of year.
- Rotavirus and norovirus activity continues to fluctuate, but remain at low levels.

VARICELLA AND OTHER VACCINE-PREVENTABLE DISEASES

- Shingles and chickenpox activity at sentinel GPs and EDs continues to fluctuate around baseline level.
- Rubella: One imported infection was confirmed in an overseas visitor this week.
- Mumps: No mumps cases were notified this week. To date in 2018, seventeen cases have been confirmed, associated with infection acquired overseas or interstate, and with some low grade transmission in adolescents in the Perth metro area.
- Measles: A further two overseas-acquired measles cases were confirmed this week, making a total of four cases over the last fortnight. The cases were infected in Bali and the Philippines. Susceptible people may have been exposed on a Singapore Airlines flight from Singapore to Perth on 20 July, on a Batik Air flight from Bali to Perth on 22 July, as well as in several Perth hospital EDs or GP clinics, around the same time. 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.

PLEASE NOTE: Sentinel GP data was not available this week due to ongoing IT system issues.


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.
Reported routine influenza detections continued to decrease this week, and all ten samples submitted for influenza testing by sentinel GPs tested negative this week. Sentinel GP data was not available this week due to ongoing IT system issues.

The rate of ILI presentations to WA ASPREN sentinel GPs is in the lower range of values observed during this time period in recent years. The current week’s Sentinel GP data was not available due to ongoing IT system issues.
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 increased this week, whilst admissions to sentinel EDs continue to fluctuate.

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

The number of respiratory viral presentations to sentinel EDs increased this week, and is in the mid-range of levels reported at this time of the year.
The number of influenza notifications received by the Department of Health decreased this week, and is lower than levels usually experienced at this time of year.

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 22/07/2018 and 29/07/2018. 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 number of influenza cases hospitalised continued to decrease this week – however this data is subject to correction due to a lag in reporting. Of the nineteen hospitalised cases in the past week, 12 (63%) were influenza A/H1N1; 1 (5%) influenza A/H3N2; 4 (21%) influenza A/unsubtyped; and 2 (11%) influenza B.
The hospital admission rate of laboratory-confirmed influenza remains below the average rate for recent years. The rate for the last reporting week is 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.

PathWest-QEI influenza percentage positive 2014-2018

The percentage of specimens testing positive for influenza virus at PathWest decreased this week, and is lower than the levels usually reported at this time of year. Of 297 specimens, 18 (6%) 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 1st of August 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Eighteen routine samples were subtyped by PathWest during this reporting week; 15 (83%) influenza A/H1N1; 2 (11%) influenza A/unsubtyped; and 1 (6%) influenza B.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 1st of August 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Non-influenza activity continued to fall this week, largely driven by a drop in RSV detections.
The number of gastroenteritis presentations to sentinel GPs is fluctuating at relatively low levels. The current week’s Sentinel GP data was not available due to ongoing IT system issues.

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 presentations and admissions to sentinel EDs were slightly above baseline levels this week.
The number of gastroenteritis presentations to sentinel EDs increased this week, and is now in the higher-range of levels reported at this time of year.

Rotavirus and norovirus activity continues to fluctuate, but remain at low levels.
Shingles and chickenpox activity at WA ASPREN GPs have been fluctuating around baseline levels. The current week’s Sentinel GP data was not available due to ongoing IT system issues.

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.

Shingles and chickenpox presentations at sentinel EDs were above baseline this week.

Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2013 to week 52, 2017.