WEEK ENDING 05TH AUGUST 2018

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)
Summary: ILI and influenza activity, PathWest detections, test positivity and hospitalisations all declined this week, and are unusually low for this time of the year.
- Influenza notifications, PathWest laboratory detections, and percent positivity decreased this week.
- ILI presentations at sentinel GPs decreased this week, whilst sentinel ED activity remained stable.
- The majority (60%) of influenza detections this week were influenza A/H1N1, with low levels of influenza A/H3N2 and influenza B reported.
- Influenza-related hospitalisations are approaching average levels for this time of year; primarily attributable to influenza A/H1N1 virus.
- Non-influenza activity increased this week, largely driven by an increase in human metapneumovirus.

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: Another two measles cases were confirmed this week. Since 20 July, six young adults have been confirmed with measles infection, three of whom were fully vaccinated. Five of the six cases were infected while travelling overseas and one case was infected in WA. The imported 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.


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.
Routine influenza detections and ILI presentations reported by sentinel GPs continued to decrease this week; the two samples submitted for influenza testing by sentinel GPs tested negative this week.

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 following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Respiratory viral presentations to sentinel EDs remained steady this week, whilst admissions declined.

The number of respiratory viral presentations to sentinel EDs 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 continued to decrease this week, and is unusually low compared to levels typically 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 30/07/2018 and 05/08/2018. 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 and is well below the average number of hospitalised cases over recent years – however this data is subject to correction due to a lag in reporting. Of the fifteen hospitalised cases in the past week, 10 (67%) were influenza A/H1N1; 3 (20%) influenza A/unsubtyped; and 2 (13%) influenza B.
The hospital admission rate of laboratory-confirmed influenza remains well 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.

The percentage of specimens testing positive for influenza virus at PathWest remained low this week. Of 364 specimens, 21 (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 8th of August 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Twenty-one routine samples were subtyped by PathWest during this reporting week; 18 (86%) influenza A/H1N1; 2 (10%) influenza A/unsubtyped; and 1 (4%) influenza A/H3N2.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 9th of August 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Non-influenza activity increased this week, largely driven by an increase in human metapneumovirus.
The number of gastroenteritis presentations to sentinel GPs is increased this week, and is in the mid-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, 2013 to week 52, 2017.

Gastroenteritis presentations fell below baseline levels; whilst admissions to sentinel EDs were at baseline levels this week.
The number of gastroenteritis presentations to sentinel EDs decreased this week, and is now in the lower range of levels reported at this time of year.

Norovirus activity continues to fluctuate, but remain at low levels, whilst rotavirus activity has increased slightly in recent weeks.
Shingles and chickenpox activity at WA ASPREN GPs rose 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, 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 continue to fluctuate around baseline levels. Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2013 to week 52, 2017.