WEEK ENDING 26TH AUGUST 2018

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Influenza notifications, PathWest detections, test positivity and hospitalisations all decreased this week, and remain low for this time of the year.

- Influenza notifications, PathWest laboratory detections and percent positivity decreased this week.
- ILI presentations at sentinel GPs and EDs remained steady week, and are below the expected levels for this time of year.
- The majority (72%) of PathWest influenza detections this week were influenza A/H1N1, with low levels of influenza A/H3N2 and influenza B reported.
- Influenza-related hospitalisations are below average levels for this time of year; with most hospitalisations attributable to influenza A/H1N1 virus.
- Overall non-influenza activity decreased this week.

GASTROENTERITIS

- Gastroenteritis activity at sentinel GPs and EDs is currently around expected levels for this time of year.
- PathWest laboratory detections of norovirus and rotavirus 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: No rubella cases were notified 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: No new cases notified this week. Clinicians should continue to remain alert to the possibility of measles in persons with fever and rash illnesses even if fully vaccinated. Since mid-July, 15 confirmed cases aged 15-39 years (median: 25 years) have been notified. The first five cases were acquired overseas in Bali (n=4) or the Philippines (n=1). The following 10 were secondary cases infected in Perth following contact at a workplace and a hospital Emergency Department. Clinicians should remain alert to the possibility of measles in persons with fever and rash illnesses even if fully vaccinated. 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. However vaccination does not guarantee immunity, given that five of the recent cases reported two childhood doses of MMR 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 PathWest influenza detections have been trending upwards in recent weeks. ILI presentations reported by sentinel GPs remained stable; none of the four samples submitted for influenza testing by sentinel GPs tested positive this week.

The rate of ILI presentations to WA ASPREN sentinel GPs remains 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 and admissions to sentinel EDs remained stable this week.

The number of respiratory viral presentations to sentinel EDs is in the lower-range of levels reported at this time of the year.
The number of influenza notifications received by the Department of Health fell this week, and is still 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 20/08/2018 and 26/08/2018. 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 remains lower than recent years. Of the twenty four hospitalised cases in the past week, 13 (54%) were influenza A/H1N1; 6 (25%) influenza A/unsubtyped; 3 (13%) influenza A/H3N2; and 2 (8%) influenza B.
The hospital admission rate of laboratory-confirmed influenza remained steady, and 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 fell this week, and remains low for the time of year. Of 357 specimens, 39 (11%) tested positive in the past week. The graph is a summary of all WA samples reported by PathWest as of Wednesday 30th of August 2018, excluding samples referred by other private laboratories for influenza subtyping.
Thirty nine routine samples were subtyped by PathWest during this reporting week; 28 (72%) influenza A/H1N1; 6 (15%) influenza A/H3N2; 1 (3%) influenza A/unsubtyped; and 4 (10%) influenza B. The graph is a summary of all WA samples positive for influenza reported at PathWest as of Wednesday 30th of August 2018, excluding samples referred by other private laboratories for influenza subtyping.

The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest as of Wednesday 22nd of August 2018.

Overall non-influenza activity decreased this week. The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest as of Wednesday 22nd of August 2018.
The number of gastroenteritis presentations and admissions to sentinel GPs increased sharply this week, and is now in the higher-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 ED Presentations

Gastroenteritis presentations to sentinel EDs decreased this week, and admissions remained stable.
The number of gastroenteritis presentations to sentinel EDs decreased this week, and is in the mid-range of levels reported at this time of year.

PathWest laboratory detections of norovirus and rotavirus were low this week.
Shingles and chickenpox activity at WA ASPREN GPs was below 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, 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

Shingles and chickenpox presentations at sentinel EDs was below baseline level 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.