WEEK ENDING 07TH OCTOBER 2018

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Influenza notifications, PathWest detections, test positivity and hospitalisations are approaching inter-seasonal levels. ILI activity reported by sentinel sites decreased slightly this week, after low reported levels earlier in the season.

- Influenza notifications, PathWest laboratory detections and percent positivity have remained low in 2018, and are approaching inter-seasonal levels.
- ILI presentations at sentinel GPs and EDs fell this week.
- Influenza A/H3N2 detections increased this week while influenza A/H1N1 declined after being the predominant circulating strain this season. Influenza-related hospitalisations are below average levels for this time of year; with most hospitalisations for confirmed influenza attributable to influenza A/H1N1 (34%) and influenza A/H3N2 (34%).
- Overall non-influenza activity increased this week, mostly driven by an increase in parainfluenza detections.

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 remains at low levels.

OTHER VACCINE-PREVENTABLE DISEASES

- Chickenpox: activity at sentinel GPs and EDs increased above baseline level this week.
- Measles: No measles cases notified this week.
- Invasive meningococcal disease (IMD): No cases were notified this week. To date in 2018, there have been 28 cases notified, comprising 19 serogroup W, seven serogroup B and two serogroup Y meningococcal infections.
Sentinel GP influenza-like illness presentations and PathWest influenza detections

Routine PathWest influenza detections and ILI presentations reported by sentinel GPs decreased this week; none of the six samples submitted for influenza testing by sentinel GPs tested positive this week.

Australian Sentinel Practices Research Network WA - GP surveillance
Rate of ILI per 1000 consultations, 2014-2018

The rate of ILI presentations to WA ASPREN sentinel GPs decreased this week, and remains in the mid-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 decreased sharply this week.

The number of respiratory viral presentations to sentinel EDs decreased this week and is now 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 in the mid-range of 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 01/10/2018 and 07/10/2018. 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 in recent years. Of the 47 hospitalised cases in the past week, 16 (34%) were influenza A/H1N1; 16 (34%) influenza A/H3N2; 11 (23%) influenza A/unsubtyped; and 4 (9%) influenza B.
The hospitalisation rate of laboratory-confirmed influenza has remained well below the historical average rate. 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 is in the mid-range of values for this time of year. Of 375 specimens, 69 (18%) tested positive in the past week.

The graph is a summary of all WA samples reported by PathWest as of Wednesday 11th of October 2018, excluding samples referred by other private laboratories for influenza subtyping.
Sixty-nine routine samples were subtyped by PathWest during this reporting week; 30 (43%) influenza A/H1N1; 35 (51%) influenza A/H3N2; 2 (3%) influenza A/unsubtyped; and 2 (3%) influenza B.

The graph is a summary of all WA samples positive for influenza reported at PathWest as of Wednesday 11th of October 2018, excluding samples referred by other private laboratories for influenza subtyping.

Overall non-influenza activity increased this week, mostly driven by an increase in parainfluenza detections.

The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest as of Wednesday 11th of October 2018.
The number of gastroenteritis presentations to sentinel GPs is in the lower-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 and admissions to sentinel EDs fell below baseline levels this week.
The number of gastroenteritis presentations to sentinel EDs is in the mid-range of values normally reported at this time of year.

PathWest laboratory detections of norovirus and rotavirus were low this week.
Chickenpox activity reported at WA ASPREN GPs increased above baseline 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 GP Presentations**

- **No. of chickenpox/1000 consults**
- **No. of shingles/1000 consults**
- **shingles baseline (2013-2017)**
- **chickenpox baseline (2013-2017)**

**Varicella-Zoster virus ED Presentations**

- **No. of chickenpox presentations**
- **No. of shingles presentations**
- **chickenpox baseline (2013-2017)**
- **shingles baseline (2013-2017)**

**Chickenpox presentations at sentinel EDs were above 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.