KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)
Summary: All indicators of influenza activity are at inter-seasonal levels.
- ILI presentations at sentinel GPs and EDs are fluctuating at low levels.
- PathWest laboratory detections and percent positivity are overall trending downwards. Only small numbers of influenza A and B viruses are currently being detected.
- Overall non-influenza respiratory virus activity remains low and stable.

GASTROENTERITIS
- Gastroenteritis activity at sentinel GPs and EDs is currently below expected levels for this time of year.
- Norovirus activity is currently at relatively high levels this week, whilst rotavirus activity is at moderate levels.

VARICELLA AND OTHER VACCINE-PREVENTABLE VIRAL DISEASES
- Chickenpox activity at both sentinel GPs and EDs was above baseline level this week, whilst shingles activity continues to fluctuate around baseline level.
- Rubella: no cases have been confirmed in WA since two imported cases in early April 2017.
- Measles: no other reports associated with a case notified last week. Perth residents might potentially have been exposed on an incoming Thai airways flight on 2nd January, at Perth Airport, at several shopping areas in the northern suburbs between 2nd and 6th January, and at Joondalup Health Campus on 7th and 8th January.
- Mumps: One locally acquired infection was reported in a middle-aged Perth resident. Since December 2017, there have been four confirmed cases in Perth residents, two acquired in WA and two acquired overseas.

Routine influenza detections rose slightly; however are overall trending downwards. ILI presentations reported by WA ASPREN sentinel GPs remained low. The sole sample submitted for influenza testing by sentinel GPs this week did not test positive.

The rate of ILI presentations to WA ASPREN sentinel GPs remains at interseasonal levels.
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 to sentinel EDs decreased further this week, whilst admissions increased slightly.

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

The number of respiratory viral presentations to sentinel EDs remains at interseasonal levels.
The number of influenza notifications received by the Department of Health is at interseasonal levels. 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 08/01/2018 and 14/01/2018. 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.

The percentage of specimens testing positive for influenza virus at PathWest is within the interseasonal range. Of 145 specimens, 12 (8%) 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 17th January 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Twelve routine samples were subtyped by PathWest during this reporting week; 6 (50%) influenza B; 3 (25%) influenza A/H1N1; 2 (17%) influenza A/H3N2; and 1 (8%) mixed influenza infection.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 17th January 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Individual and overall non-influenza respiratory virus activity remains low.
The number of gastroenteritis presentations to sentinel GPs fell significantly this week, and is now 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, 2013 to week 52, 2017.

Gastroenteritis ED Presentations

Gastroenteritis presentations to sentinel EDs fell below baseline level this week.
The number of gastroenteritis presentations to sentinel is now in the lower range of values observed during this time period in recent years.

Norovirus activity is currently at relatively high levels this week, whilst rotavirus activity is at moderate levels.
Shingles activity at WA ASPREN sentinel GPs fell below baseline level this week while chickenpox activity remained low.

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

Shingles and chickenpox activity at sentinel EDs was above baseline level this week.