KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)
Summary: Influenza activity is at inter-seasonal levels.
- ILI presentations at sentinel GPs and EDs are fluctuating at low levels.
- PathWest laboratory detections and percent positivity increased this week, mostly due to an increase in influenza B detections, but overall notifications did not increase.
- Overall non-influenza respiratory virus activity remains low and stable.

GASTROENTERITIS
- Gastroenteritis activity at sentinel GPs and EDs is currently around expected levels for this time of year.
- Rotavirus activity remains low and relatively stable, while norovirus activity has increased over summer.

VARICELLA AND OTHER VACCINE-PREVENTABLE VIRAL DISEASES
- Chickenpox and shingles activity at both sentinel GPs and EDs continues to fluctuate around baseline levels.
- Rubella: no cases have been confirmed in WA since two imported cases in early April 2017.
- Measles: it is now four weeks since the end of the infectious period in an imported case (ex-Thailand) reported in early January, so it appears there was no transmission associated with this case. This was the first confirmed measles case in WA since a cluster of cases among unvaccinated secondary school students in August 2017.
- Mumps: no cases confirmed this week.

Routine influenza detections increased this week—driven by an increase in influenza B detections. 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 increased this week, whilst admissions were low.

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

The number of respiratory viral presentations to sentinel EDs increased again this week, and remains in the upper range of 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 22/01/2018 and 28/01/2018. 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.

PathWest-QEI influenza percentage positive 2014-2018

The percentage of specimens testing positive for influenza virus at PathWest increased sharply this week. Of 132 specimens, 18 (14%) 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 24\textsuperscript{th} January 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; 12 (67\%) influenza B; 4 (22\%) influenza A/H3N2; and 2 (11\%) influenza A/H3N2.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 31\textsuperscript{st} January 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Overall non-influenza respiratory virus activity remains low.
The number of gastroenteritis presentations to sentinel GPs remains 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 presentations to sentinel EDs fell below baseline level this week.
The number of gastroenteritis presentations to sentinel EDs is in the lower-range of values observed during this time period in recent years.

Rotavirus activity remains low, but there has been an upward trend in norovirus activity over summer.
Shingles activity at WA ASPREN sentinel GPs remained above 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. 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 continued to fluctuate around baseline levels this week.