INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)
Summary: Influenza activity is currently at inter-seasonal levels.
- ILI presentations at sentinel GPs and EDs are fluctuating at low levels.
- Influenza notifications and PathWest laboratory detections and percent positivity remained low this week.
- Overall non-influenza respiratory virus activity has been gradually increasing over recent weeks, largely due to increasing RSV detections.

GASTROENTERITIS
- Gastroenteritis activity at sentinel GPs and EDs is currently around expected levels for this time of year.
- Rotavirus and norovirus activity remains low.

VARICELLA AND OTHER VACCINE-PREVENTABLE DISEASES
- Chickenpox and shingles activity at both sentinel GPs and EDs was just above baseline levels this week.
- Rubella: no cases have been confirmed in WA since two imported cases in early April 2017.
- Mumps: two secondary cases were reported this week in Perth secondary school students, linked to a previously reported locally acquired case, source unknown.

MEASLES ALERT
Three further cases were confirmed in the past week: an adult infected in India, a teenager who was infected locally by a previously reported Bali-acquired case, and an infant whose source is currently undetermined. There have now been five unrelated overseas-acquired measles infections identified in WA residents since mid-March, plus the single (to date) secondary case and one case with an as yet undetermined source. It is recommended that measles vaccine be considered for 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.

HEPATITIS A ALERT
A national outbreak of hepatitis A, including one case in WA, has been linked to consumption of Creative Gourmet brand Frozen Pomegranate Arils, sold through Coles stores. The implicated product has been subject to a voluntary recall, but given the long incubation period of hepatitis A, it is possible further cases could present over coming weeks.


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, Princess Margaret 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 WA ASPREN sentinel GPs were low this week. Neither of the two samples submitted for influenza testing by sentinel GPs tested 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 and admissions to sentinel EDs remained stable this week.

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

The number of respiratory viral presentations to sentinel EDs remained stable, and in the higher range of interseasonal levels.
The number of influenza notifications received by the Department of Health remains 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 02/04/2018 and 08/04/2018. 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 four years.

The percentage of specimens testing positive for influenza virus at PathWest is currently in the low to mid-range of values usually reported at this time of year. Of 154 specimens, 10 (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 11th April 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Ten routine samples were subtyped by PathWest during this reporting week; 5 (50%) influenza A/H1N1; 3 (30%) influenza B; and 2 (20%) influenza A/H3N2.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 11th April 2018. This number does not include sentinel samples or samples referred by other private laboratories for influenza subtyping.

Overall non-influenza respiratory virus activity has been gradually increasing over recent weeks, largely due to increasing RSV activity.
The number of gastroenteritis presentations to sentinel GPs is in the lower-range of values usually 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 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 rose just above baseline level this week.
The number of gastroenteritis presentations to sentinel EDs remains around average for this time of year.

Rotavirus and norovirus activity remained low this week.
Shingles and chickenpox 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.

**Varicella-Zoster Virus GP Presentations**

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**Varicella-Zoster virus ED Presentations**

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Chickenpox and shingles presentations at sentinel EDs was above baseline levels 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.