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 and parainfluenza 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 continues to fluctuate around baseline levels.
- Rubella: no cases have been confirmed in WA since two imported cases in early April 2017.
- Mumps: one confirmed case was reported this week in an adult infected in New Zealand.

MEASLES ALERT
Two further cases were notified in the past week. There have now been nine measles cases confirmed in Perth residents since mid-March, including four adults, four infants too young for vaccination, and one teenager. Seven of the nine cases were infected while travelling overseas, including two infants exposed to an infectious case on international flights from India and Kuala Lumpur. The imported cases have been infected in Bali, Thailand, India and Malaysia. In addition, two cases have been infected in WA – one in a hospital Emergency Department attended by one of the imported cases, and the other probably somewhere in the Kalamunda area. The latter case has no travel history and no identifiable source of infection, suggesting they were exposed to an undiagnosed case in that area. It is recommended that measles vaccine 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.

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.

Current and archived issues of Virus Watch [Link to Virus Watch website]

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. None of the four 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 is in the mid 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 09/04/2018 and 15/04/2018. 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 within the range of values usually reported at this time of year. Of 182 specimens, 4 (2%) 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 18th April 2018. This number does not include samples referred by other private laboratories for influenza subtyping.
Four routine samples were subtyped by PathWest during this reporting week; all four of these samples were typed influenza A/H3N2.

The graph is a summary of all WA routine samples that have been recorded as subtyped at PathWest as of Wednesday 18th 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 and parainfluenza activity.
The number of gastroenteritis presentations to sentinel GPs is in the mid-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 fell below baseline level this week.
The number of gastroenteritis presentations to sentinel EDs has fallen into the lower range of values for this time of year.

Rotavirus and norovirus activity remained low this week.
Shingles and chickenpox activity at WA ASPREN sentinel GPs continues to fluctuate around baseline level.
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**

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

Chickenpox and shingles presentations at sentinel EDs fell below 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.