INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Indicators of influenza activity are low and remain at inter-seasonal levels.

- ILI presentations to sentinel general practitioners (GPs) and emergency departments (EDs), hospitalisations, detections of influenza virus, percent positivity and notifications are low.
- Of influenza viruses subtyped this week, the majority were influenza A/H1N1 (78%).
- Non-influenza respiratory virus activity remains low.

GASTROENTERITIS

- Gastroenteritis presentations to sentinel EDs and GPs both remain slightly below expected levels.
- Detections of rotavirus and norovirus decreased.

VARICELLA AND VIRAL RASHES

- Shingles presentations to sentinel GPs remain above baseline this week.
- Shingles and chickenpox presentations to sentinel EDs are below baseline levels.
- No cases of measles or rubella were confirmed this week.
- More than 400 mumps cases have now been reported since March 2015, when an outbreak primarily affecting Aboriginal teenagers and young adults in the north-west of WA commenced. Around 15-25 cases are currently being notified each week, mostly from the Pilbara, Goldfields, Kimberley and Midwest regions. A few apparently sporadic locally acquired cases have been diagnosed in the Perth metropolitan area in the past fortnight.

*Please note the next issue of Virus WAtch will be released 8 January 2016.


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. General Practice data are collected by members of the Sentinel Practitioners Network of Western Australia - SPN(WA). Emergency Department data are provided by the Emergency Department Information System (EDIS), which incorporates data from the following hospitals: Fiona Stanley Hospital, Royal Perth Hospital, Princess Margaret Hospital, King Edward Memorial Hospital, Bunbury Hospital, Armadale Hospital, Joondalup Health Campus, Swan District Hospital and Rockingham General Hospital. Viral laboratory data are obtained from PathWest laboratories at QEII Medical Centre and Princess Margaret Hospital for Children, as well as via notification data sent by all WA laboratories to CDCD, WA Department of Health. All figures and data were accurate at time of publication, but subject to change.
The rate of ILI presentations at sentinel GPs and detections of influenza virus continues to fluctuate at low levels. Of 233 routinely collected specimens, 18 (8%) tested positive for influenza virus. Six specimens were collected at sentinel GP sites, none of which tested positive for influenza virus.

The rate of ILI presentations to SPN(WA) GPs remains low and at inter-seasonal 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 remain low.

**ED Respiratory Viral Presentations, 2011 - 2015**

The number of respiratory viral infection presentations to sentinel EDs is lower than the level of presentations seen during this time period in recent years.
Influenza notifications received by the Department of Health remain low and consistent with inter-seasonal levels; 31 cases were notified this week.

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 07/12/2015 and 13/12/2015.

The percentage of specimens testing positive for influenza virus by PathWest-QEII-PMH increased this week, but remains low at 1.8%.

The graph is a summary of percent of all specimens recorded as testing positive for influenza virus by PathWest in the previous week, which may not always correspond with the percent of routinely collected specimens testing positive in figure 1.
Eighteen specimens were subtyped by PathWest, QEII and PMH during this reporting week, comprising 14 (78%) influenza A/H1N1, 3 (17%) influenza A/H3N2, and 1 (5%) influenza B.

The graph is a summary of all samples that have been recorded as subtyped at PathWest QEII as of 12.01am Wednesday 16th December 2015. The number subtyped may not always correspond to the number of influenza detections.

**PathWest-QEII-PMH 2014-2015 all influenza subtypes**

- A/H1
- A/H3
- A/Hx
- B
- Mixed infection

**2014-2015 Non-influenza respiratory viruses - QEII and PMH**

- Rhinovirus
- Adenovirus
- Human metapneumovirus
- Parainfluenza
- Respiratory syncytial virus

Overall non-influenza respiratory virus activity remains low.
Gastroenteritis presentations to sentinel GPs remain stable. Detections of rotavirus and norovirus decreased this week.

Gastroenteritis virus detections and GP Presentations

The rate of gastroenteritis presentations to sentinel GPs is consistent with the range of values seen during this time period in recent years.
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, 2011 to week 52, 2014.

**Gastroenteritis ED Presentations**

Gastroenteritis presentations to sentinel EDs remain below baseline level this week.

**ED Gastroenteritis Presentations 2011 - 2015**

The number of gastroenteritis presentations to sentinel EDs remains lower than the range of values seen during this period in recent years.
Shingles presentations to sentinel GPs remain above baseline levels; no chickenpox cases were seen by sentinel GPs. No cases of measles or rubella were confirmed this week. Mumps cases continue to be notified from the north-west, Midwest and Goldfields regions of the state, with a few apparently sporadic locally acquired cases diagnosed recently in the Perth metropolitan area.

Baseline levels for chickenpox and shingles presentations to SPN(WA) GPs per thousand consultations were calculated using the mean of weekly WA ASPREN data from week 1, 2010 to week 52, 2014.

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, 2010 to week 52, 2014.

Shingles and chickenpox presentations to sentinel EDs are below baseline levels.