INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Indicators of ILI and influenza activity continue to trend downwards and are approaching inter-seasonal levels.

- ILI presentations to sentinel general practitioners (GPs) and emergency departments (EDs) are now at inter-seasonal levels.
- The percent of tests positive for influenza virus and notifications of laboratory-confirmed influenza continue to decline towards inter-seasonal levels.
- Hospital admissions with notified influenza are decreasing, and are now around the average level experienced at this time of year.
- Influenza A/H3N2 (61% of detections) remains the dominant circulating virus with continuing influenza B (33%) activity.
- Respiratory syncytial virus detections and overall non-influenza virus activity continues to decrease, however parainfluenza virus activity remains relatively steady.

GASTROENTERITIS

- Gastroenteritis activity at sentinel GPs increased slightly this week, whilst presentations to sentinel EDs remained stable.
- Norovirus detections have been high in recent weeks, whilst rotavirus detections remain low and stable.

VARICELLA AND OTHER VACCINE-PREVENTABLE VIRAL DISEASES

- Shingles presentations to sentinel GPs remained above baseline levels, while chickenpox presentations remain low.
- Shingles and chickenpox presentations to sentinel EDs are at baseline levels.
- Measles was confirmed in a Perth resident who was infected in Indonesia, the second imported case in the past fortnight. No secondary cases have been documented to date.
- No further rubella cases have been reported since a WA resident was diagnosed after returning from Indonesia in early October.
- Imported cases of mumps were reported in WA residents returning from Fiji and the Philippines, respectively; and one north-west outbreak-related case was confirmed in the east Kimberley region.


Virus Watch is a weekly electronic publication by the Communicable Disease Control Directorate (CDDC) 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 CDDC, 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 CDDC, WA Department of Health.
The rate of ILI presentations to sentinel GPs continues to decline, with 2 presentations per 1,000 consultations. One (10%) of the 10 specimens submitted for influenza testing by sentinel GPs tested positive for influenza virus.

The rate of ILI presentations to WA ASPREN GPs continues to decrease, and is now at inter-seasonal levels.
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Respiratory viral presentations and admissions to sentinel EDs remained stable this week.

The number of respiratory viral presentations to sentinel EDs remains in the mid-range of values usually observed during this time period.
Influenza notifications received by the Department of Health continue to decrease sharply, and are approaching the seasonal threshold level.

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 24/10/2016 and 30/10/2016. 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 (excluding the pandemic year in 2009).

Influenza notifications in Western Australia by week, 2012 to 2016

The number of influenza cases hospitalised continues to decrease and is almost at the average level experienced at this time in previous years. Of the 15 cases hospitalised in the past week, 4 (47%) had influenza B; 7 (9%) influenza A/unsubtyped; and 4 (27%) influenza A/H3N2.
The proportion of hospital admissions notified as having laboratory-confirmed influenza continues to decline, and is now around the average rate for this time of year.

The graph is a summary of influenza notifications received by the DoH who were recorded as having a hospital admission, expressed per 1,000 admissions. Data for the current reporting week may be incomplete.

The percentage of specimens testing positive for influenza virus by PathWest-QEII-PMH continues to decline towards inter-seasonal levels. Of 287 routinely collected specimens, 18 (6%) tested positive.

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 during this reporting week, 11 (61%) influenza A/H3N2, 6 (33%) influenza B, and 1 (1%) influenza A/H1N1.

The graph is a summary of all samples that have been recorded as subtyped at PathWest QEII as of Wednesday 2nd November 2016. The number subtyped may not always correspond to the number of influenza detections.

Respiratory syncytial virus detections and overall non-influenza virus activity continues to decrease, however parainfluenza virus activity remains relatively steady.
Gastroenteritis presentations to sentinel GPs remained increased slightly this week. Norovirus activity has been high over recent weeks. Rotavirus activity remains low.

The rate of gastroenteritis presentations to sentinel GPs increased this week, and is now in the mid-range of values typically observed 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, 2015.

Gastroenteritis ED Presentations

Gastroenteritis presentations to sentinel EDs are around baseline level. Gastroenteritis admissions have remained stable.

ED Gastroenteritis Presentations 2012-2016

The rate of gastroenteritis presentations to sentinel EDs remains in the mid-range of values seen during this period in recent years.
Shingles presentations to sentinel GPs remained above baseline level this week, whilst chickenpox presentations were 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, 2011 to week 52, 2015.

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, 2011 to week 52, 2015.

Shingles presentations to sentinel EDs remained at or above baseline levels for the seventh week in a row. Chickenpox presentations continue to fluctuate around baseline levels.