KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Overall non-influenza respiratory virus activity continues to increase sharply, with a large contribution from respiratory syncytial virus. Indicators of influenza virus remain variable, but activity appears to be increasing slowly, dominated by influenza B virus.

- ILI presentations to sentinel emergency departments (EDs) and sentinel general practitioners (GPs) increased a little this week, but remain in the lower margins of what has been observed in recent years.
- Influenza virus detections and notifications are increasing gradually, with influenza B (81%) and influenza A/H3N2 (17%) viruses dominating detections.
- Overall non-influenza respiratory virus detections increased; respiratory syncytial virus activity remains high, and parainfluenza and human metapnuemovirus activity also increased this week.

GASTROENTERITIS

- Gastroenteritis presentations to sentinel GPs increased, while ED presentations decreased. Rotavirus detections remained high and stable, while norovirus activity is variable.

VARICELLA AND VIRAL RASHES

- Chickenpox presentations to sentinel EDs and GPs are around baseline levels.
- Shingles presentations have increased and are above baseline at both sentinel GPs and EDs.
- No cases of rubella or measles were notified.
- Transmission appears to be slowing in the mumps outbreak among Aboriginal children, teenagers and young adults in the Kimberley region, with satellite clusters in two boarding school communities. One imported case of mumps (ex-India) was also confirmed.


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 seen at sentinel GPs increased slightly this week. Of 394 routinely collected specimens, 54 (14%) tested positive for influenza virus; 8 specimens were collected at sentinel GP sites, 1 (13%) of which tested positive for influenza B virus.

The rate of ILI presentations to SPN(WA) GPs increased this week and remains in the lower range of values for presentations during this time period in recent years.
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Viral Respiratory ED Presentations and Admissions

Presentations and admissions to sentinel EDs for viral respiratory illness increased this week.

ED Respiratory Viral Presentations, 2011 - 2015

The number of respiratory viral infection presentations to sentinel EDs increased this week.
There were 107 notifications for influenza this week, and the numbers remain high compared with previous years for this time period.

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 15/06/2015 and 21/06/2015.

Twenty five notified influenza cases were hospitalised in the past week; 2 (8%) with influenza A/H3N2, 8 (32%) with influenza A/unsubtyped and 15 (60%) with influenza B.
The proportion of hospital admissions notified as having laboratory-confirmed influenza remains relatively steady but above the average proportion seen during this time period in previous years.

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.

Among samples tested at PathWest this week, 12.5% were positive for influenza virus, which is at the upper margin of levels for this time period in recent years.
Fifty four influenza viruses were subtyped by PathWest, QEII and PMH during this reporting week; 9 (17%) were influenza A/H3N2, 1 (2%) as influenza A/unsubtyped, and 44 (81%) were influenza B.

The graph is a summary of all samples that have been recorded as subtyped at PathWest QEII as of 12.01am Wednesday 24th June 2015. The number subtyped may not always correspond to the number of influenza detections.

Overall, non-influenza respiratory virus activity increased this week. Respiratory syncytial virus, parainfluenza and human metapneumovirus activity increased, all other viruses decreased or remained fairly stable.
Gastroenteritis presentations to SPN(WA) increased this week. Rotavirus detections remained high and norovirus detections decreased this week.

The rate of gastroenteritis presentations to sentinel GPs increased this week and is lower than levels of presentations 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**

- No. of gastro presentations
- No. of presentations admitted
- Baseline (2010-2014)

Gastroenteritis presentations to sentinel EDs remain below baseline level.

**ED Gastroenteritis Presentations 2011 - 2015**

The number of gastroenteritis presentations to sentinel EDs is within the expected range of values for this time period.
Shingles presentations to sentinel GPs increased above baseline level, and chickenpox cases remain low and at baseline. No cases of rubella or measles were notified. 45 cases of mumps have now been notified since March in an outbreak among Aboriginal children, teenagers and young adults in the Kimberley region, with satellite clusters in two boarding school communities. Transmission appears to be slowing. One case of mumps was reported in a traveller returning from India.

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 WA ASPREN 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 presentations to sentinel EDs increased this week, chickenpox presentations remain near baseline levels.