



WEEK ENDING 17TH AUGUST 2014

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Most indicators of influenza activity decreased this week. Overall non-influenza respiratory virus activity is also declining.

- Most indicators of influenza activity, including notifications, proportion of positive laboratory tests for influenza, Emergency Department ILI attendances and influenza-associated hospitalisations decreased this week, although ILI presentations to sentinel general practitioners (GPs) increased.
- The majority of influenza viruses subtyped were influenza A/H1N1, but there were also a significant number of A/H3N2 detections, particularly associated with epidemic activity in the West Kimberley region. Influenza B continues to circulate at a low level.
- Overall detections of non-influenza respiratory viruses decreased this week.

GASTROENTERITIS

- Gastroenteritis presentations to sentinel GPs decreased while ED presentations remain steady and below baseline.

VARICELLA AND VIRAL RASHES

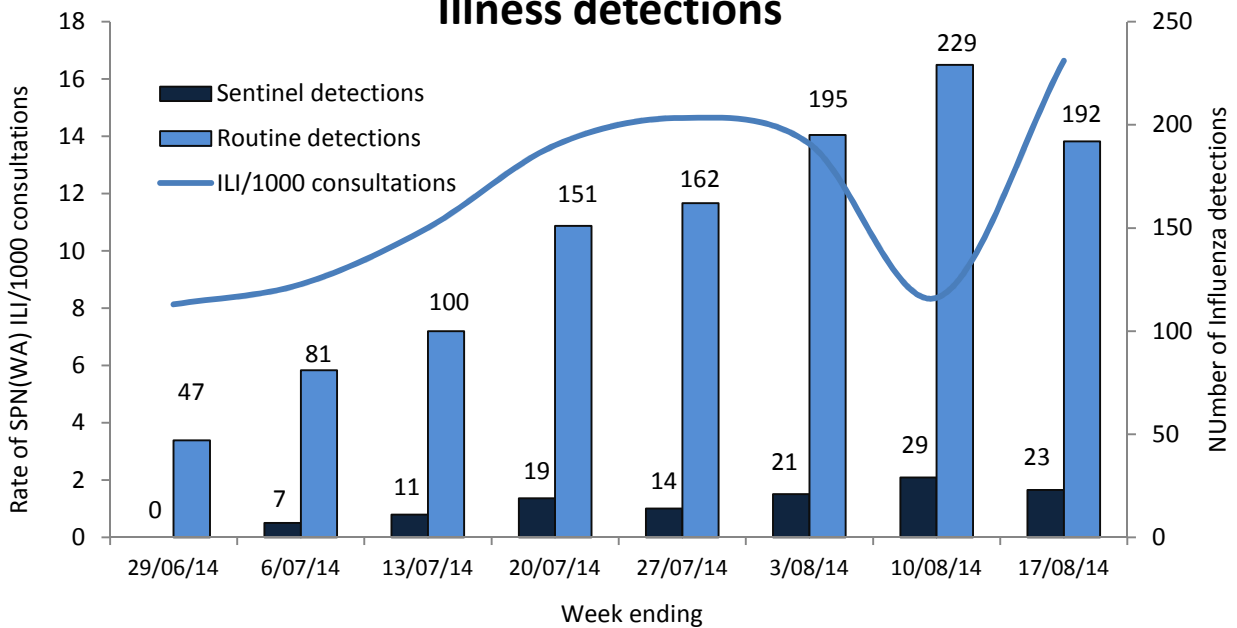
- Shingles and chickenpox presentations to sentinel GPs and EDs remain around expected levels.
- One case of measles was reported this week – the fifth secondary infection associated with an index case infected in the Philippines. No cases of rubella were reported this week but two cases of mumps were confirmed in adult travellers recently returned from Sri Lanka.

Current and archived issues of Virus Watch http://www.public.health.wa.gov.au/3/487/3/virus_watch.pm

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: Royal Perth Hospital, Sir Charles Gairdner Hospital, Fremantle 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.

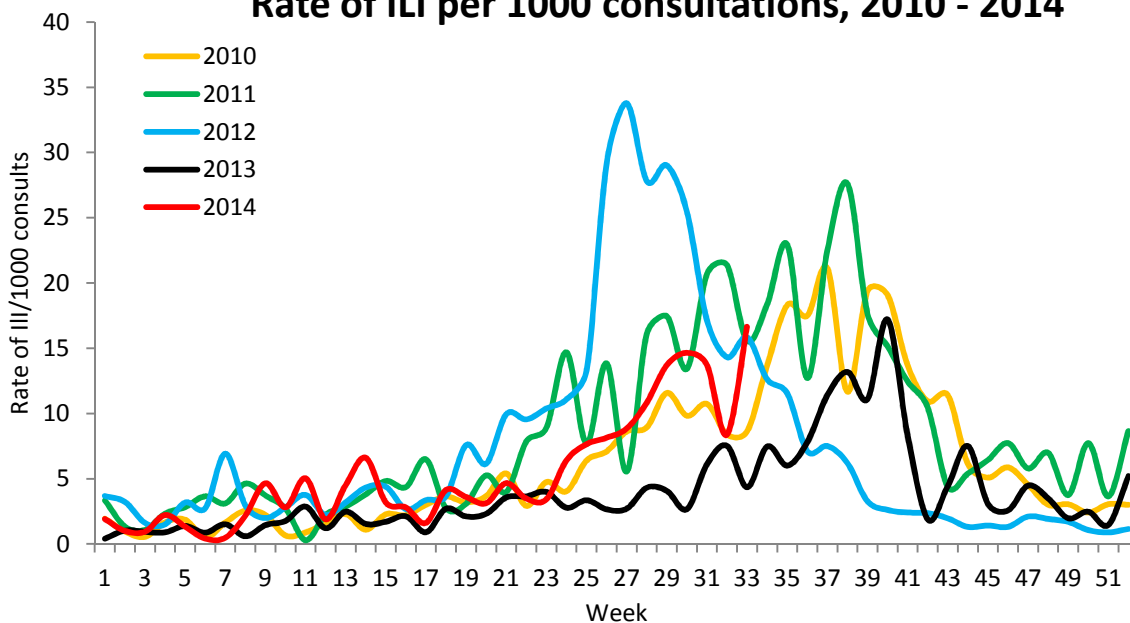
Influenza and Influenza-like Illnesses

Sentinel and Routine Influenza and Influenza-like-Illness detections



ILI presentations to sentinel GPs increased this week. Routine and SPN(WA) detections of influenza virus decreased. Twenty three (35%) of 66 swabs collected at sentinel practices tested positive for influenza virus. Of 650 routinely collected specimens, 192 (30%) tested positive.

Sentinel Practitioner Network of WA - GP surveillance Rate of ILI per 1000 consultations, 2010 - 2014

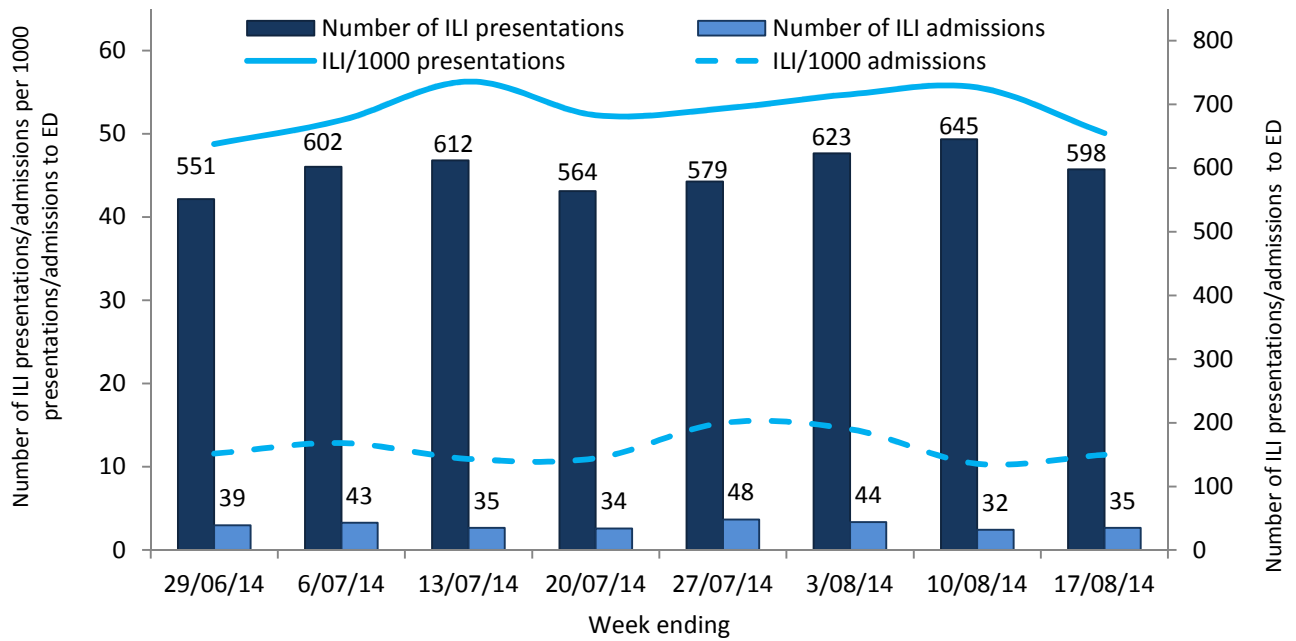


The rate of ILI presentations to SPN(WA) GPs increased to 17 cases per 1000 consultations, and is around the mid-range of figures seen at this time in recent seasons.



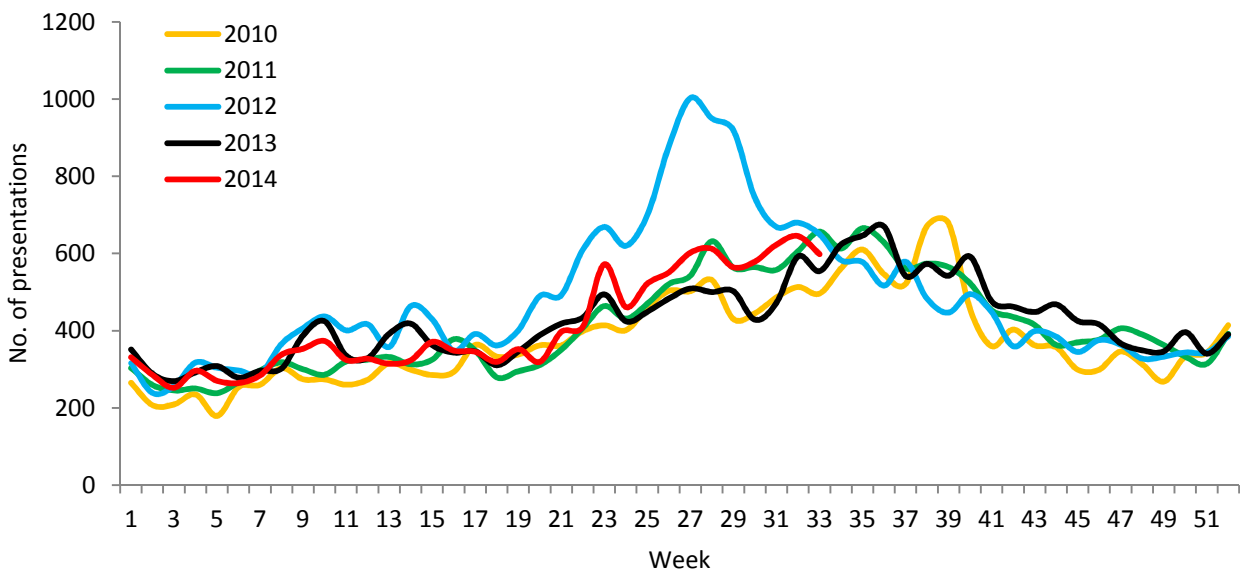
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Viral Respiratory ED Presentations and Admissions



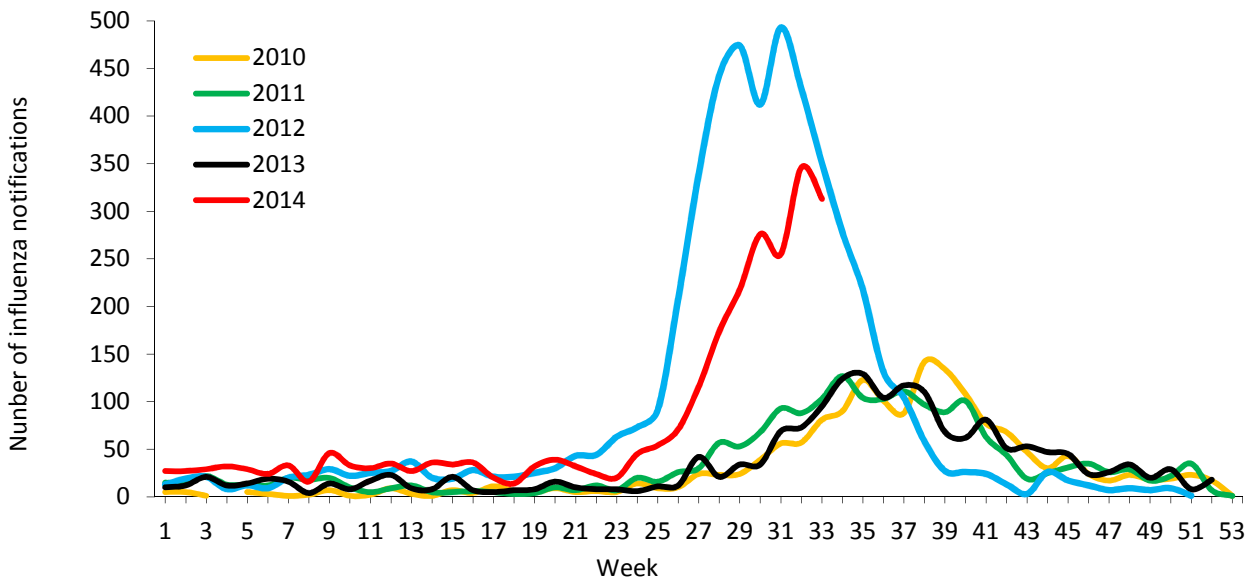
ED presentations for viral respiratory illness decreased this week, and have now fluctuated within a fairly narrow range for several weeks. The number of ILI admissions increased slightly.

ED Respiratory Viral Presentations, 2010 - 2014



The number of respiratory viral presentations to sentinel EDs decreased this week and remains near the upper margin of values for this time period in recent years.

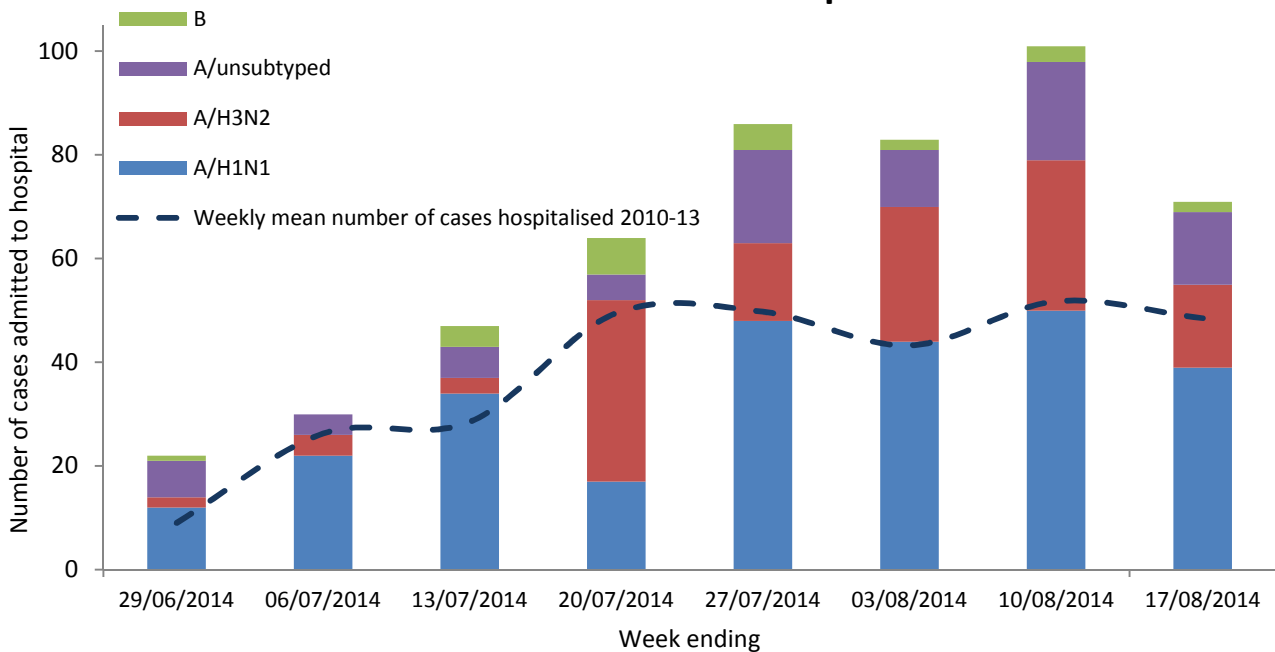
Influenza notifications in Western Australia by week, 2010 to 2014



Notifications of confirmed influenza to the Department of Health are significantly higher than levels at this time in recent mild seasons, but well below the peak of 2012, and now appear to be declining overall. Influenza A/H3N2 activity remains high in the West Kimberley region.

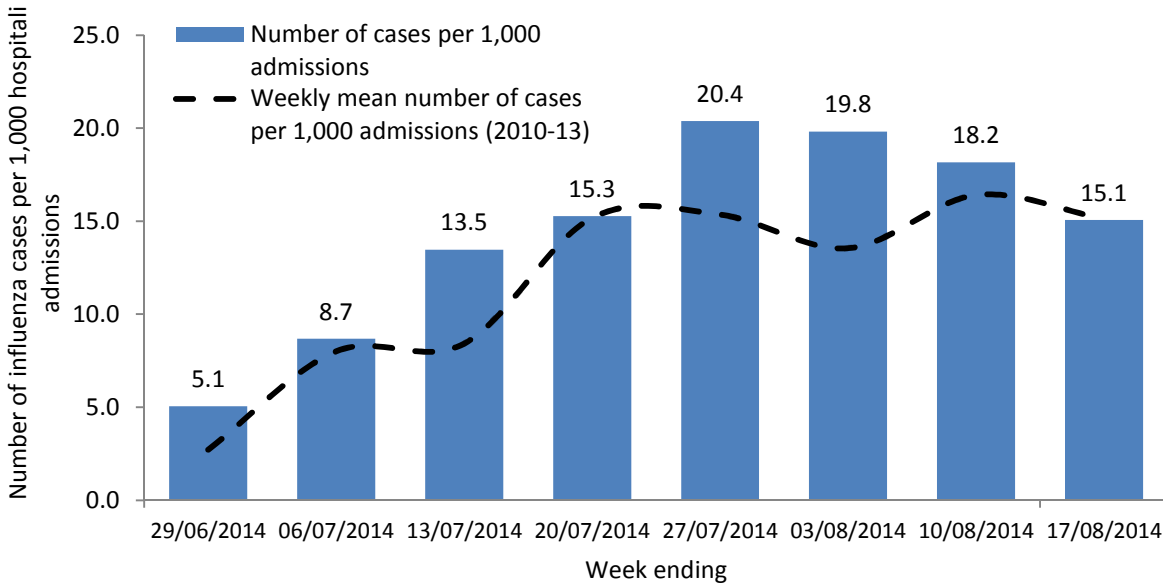
The graph is a summary of all influenza notifications received by the DoH, Western Australia to the end of the current reporting week, for which cases had date of symptom onset or specimen collection between 11/08/2014 and 17/08/2014.

Number of influenza cases hospitalised



71 notified influenza cases were hospitalised; 16 (23%) were influenza A/H3N2, 39 (55%) were influenza A/H1N1, 14 (20%) were influenza A/unsubtyped, and 2 (3%) were influenza B.

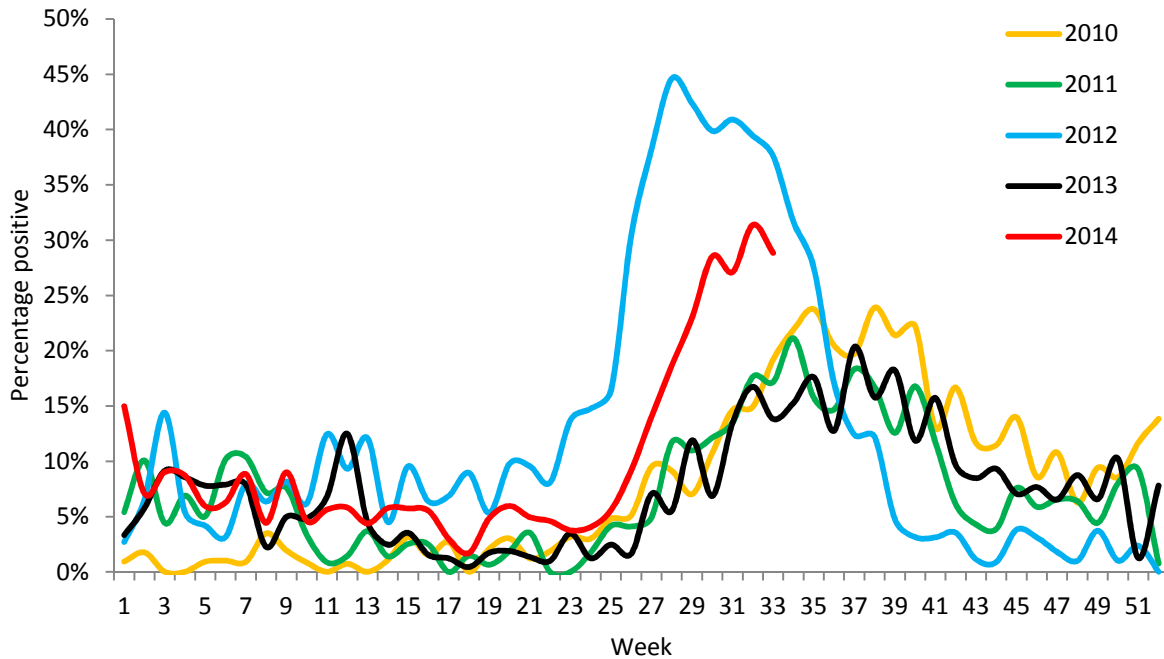
Influenza cases per 1000 hospital admissions



The proportion of hospital admissions notified as having laboratory-confirmed influenza decreased slightly to 15 cases per 1,000 admissions this week which is similar to the average from recent 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.

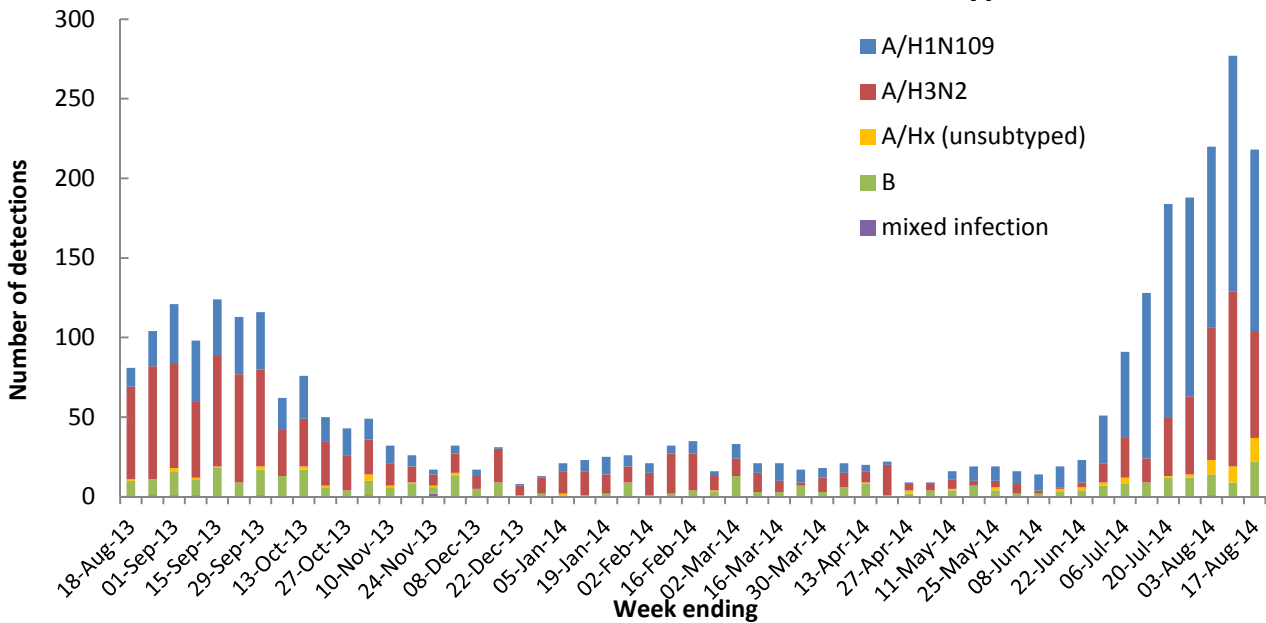
PathWest-QEII-PMH influenza percentage positive 2010 - 2014



Among samples tested at PathWest-QEII-PMH this week, 29% were positive for influenza virus, which remains higher than levels reported at this time during recent mild influenza seasons.



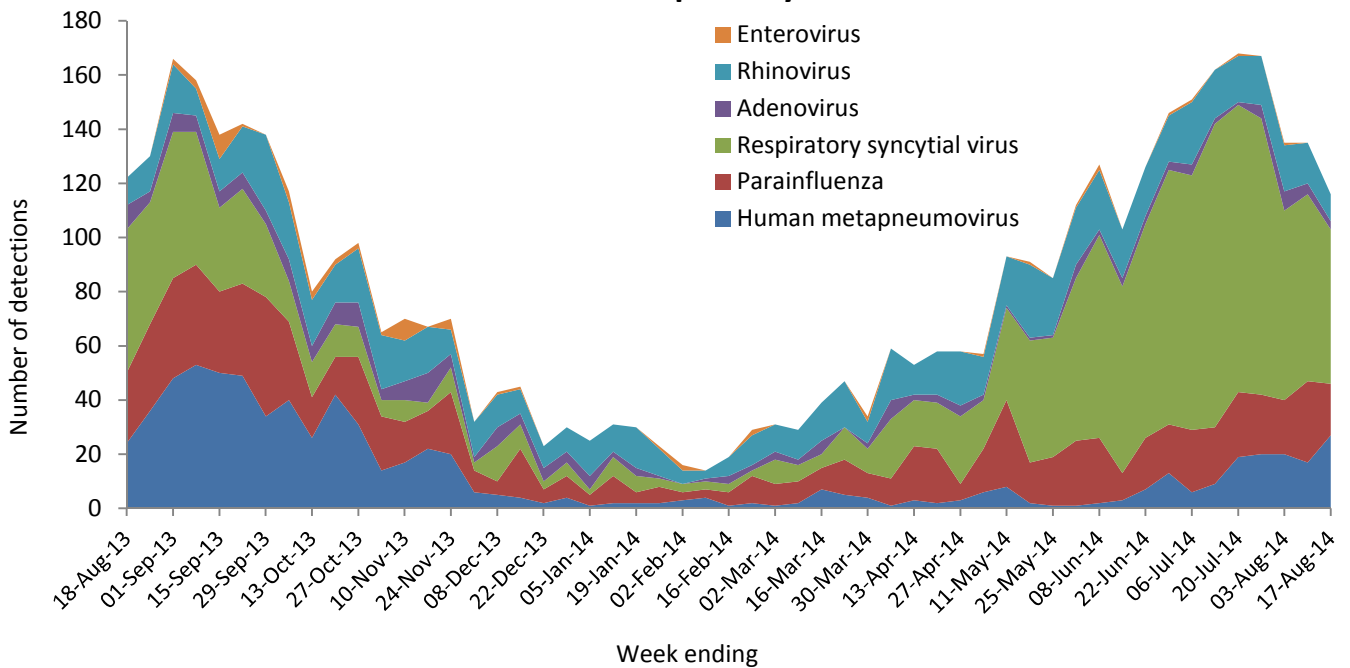
PathWest-QEII-PMH 2013-2014 influenza subtypes



Two hundred and eighteen influenza viruses were characterised by PathWest, QEII and PMH during this reporting week, comprising 114 (52%) influenza A/H1N1, 67 (31%) influenza A/H3N2, 15 (7%) influenza A/unsubtyped, and 22 (10%) influenza B (an increase from the previous week). A/H1N1 continues to be the predominant strain in the state, with the majority of A/H3N2 activity occurring in the West Kimberley region.

The graph is a summary of all samples that have been recorded as subtyped at PathWest QEII as of 12.01am Wednesday 20th August 2014.

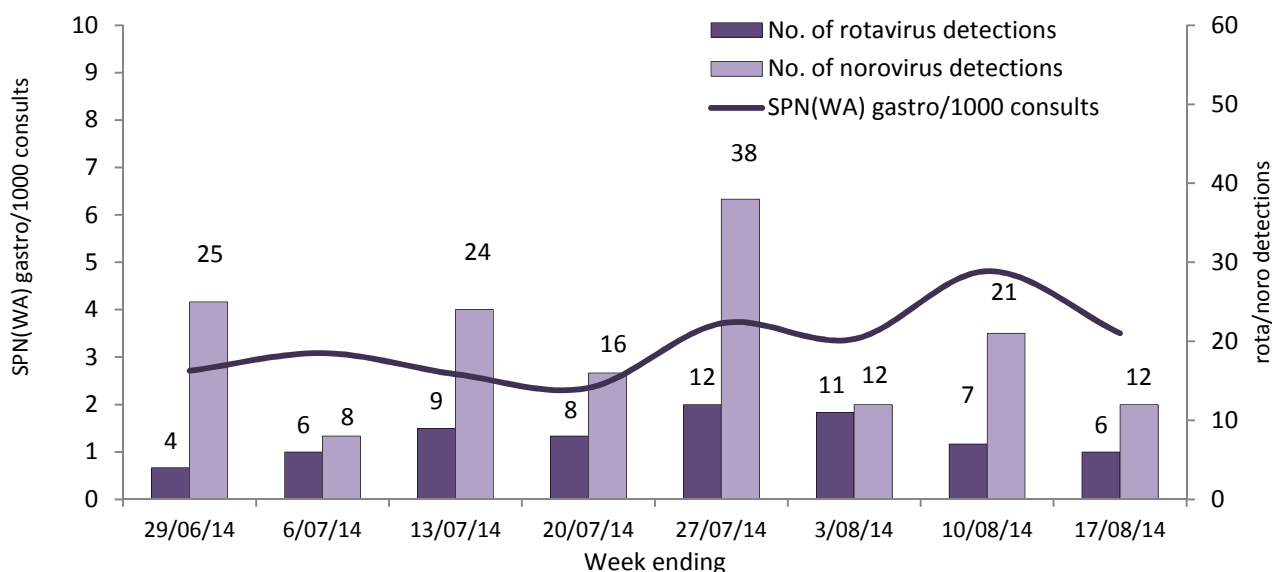
2013-2014 Non-Influenza respiratory viruses



Enterovirus, rhinovirus, adenovirus and respiratory syncytial virus activity decreased this week, while parainfluenza virus remained stable and human metapneumovirus activity increased.

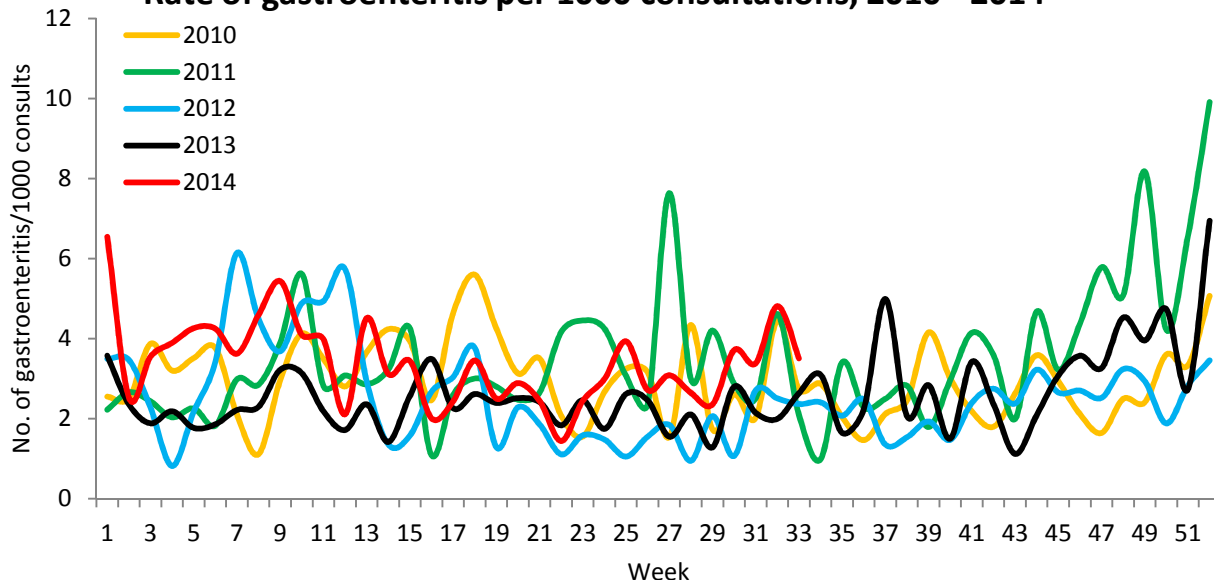
Gastroenteritis

Gastroenteritis GP Presentations



Gastroenteritis presentations to SPN(WA) GPs decreased this week to 3.5 per 1,000 consultations. Norovirus detections decreased and rotavirus remained stable.

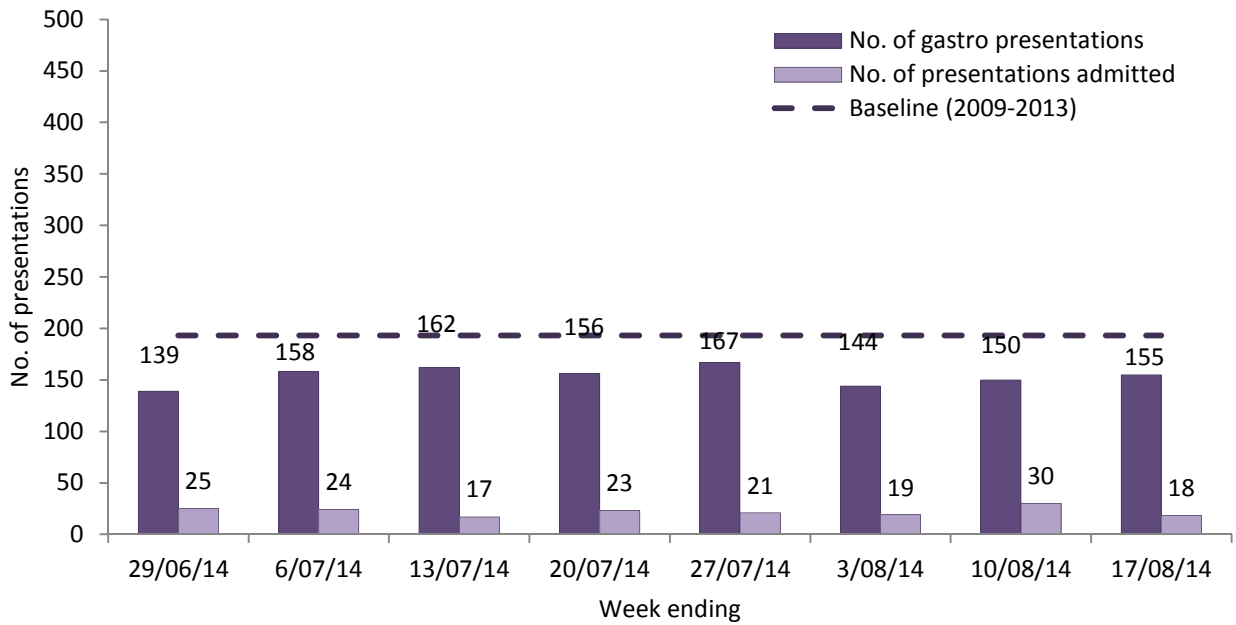
Sentinel Practitioner's Network of WA SPN(WA) - GP surveillance Rate of gastroenteritis per 1000 consultations, 2010 - 2014



The rate of gastroenteritis presentations to sentinel GPs decreased this week, but remains at the upper margin of rates seen in the same time period in recent years.

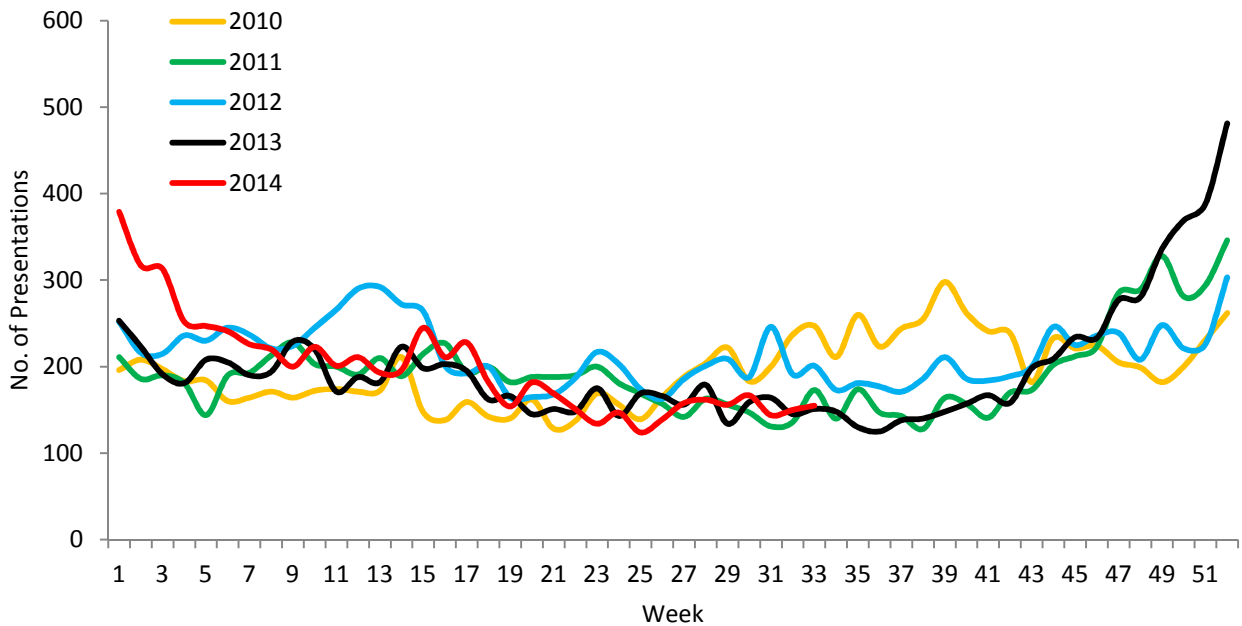
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations were calculated using the mean of weekly EDIS data from week 1, 2009 to week 52, 2013.

Gastroenteritis ED Presentations



Gastroenteritis presentations to sentinel EDs remain below baseline this week.

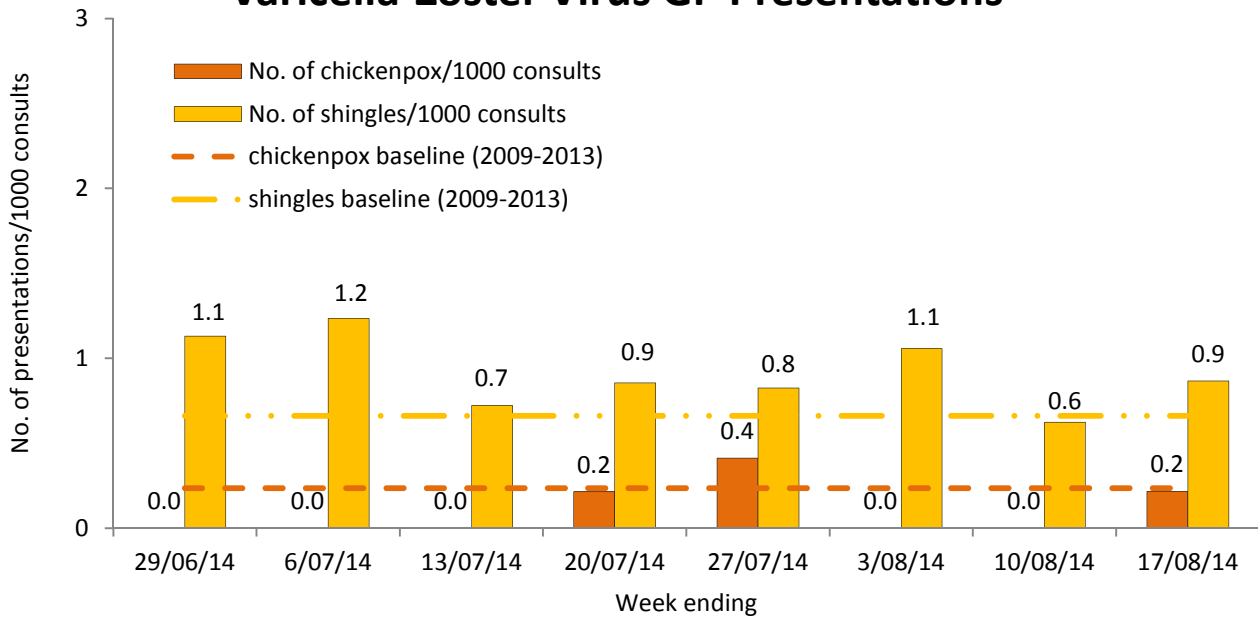
ED Gastroenteritis Presentations 2010 - 2014



The number of gastroenteritis presentations to sentinel EDs is in the lower range of values experienced at the same time period in recent years.

Viral Rashes

Varicella-Zoster Virus GP Presentations

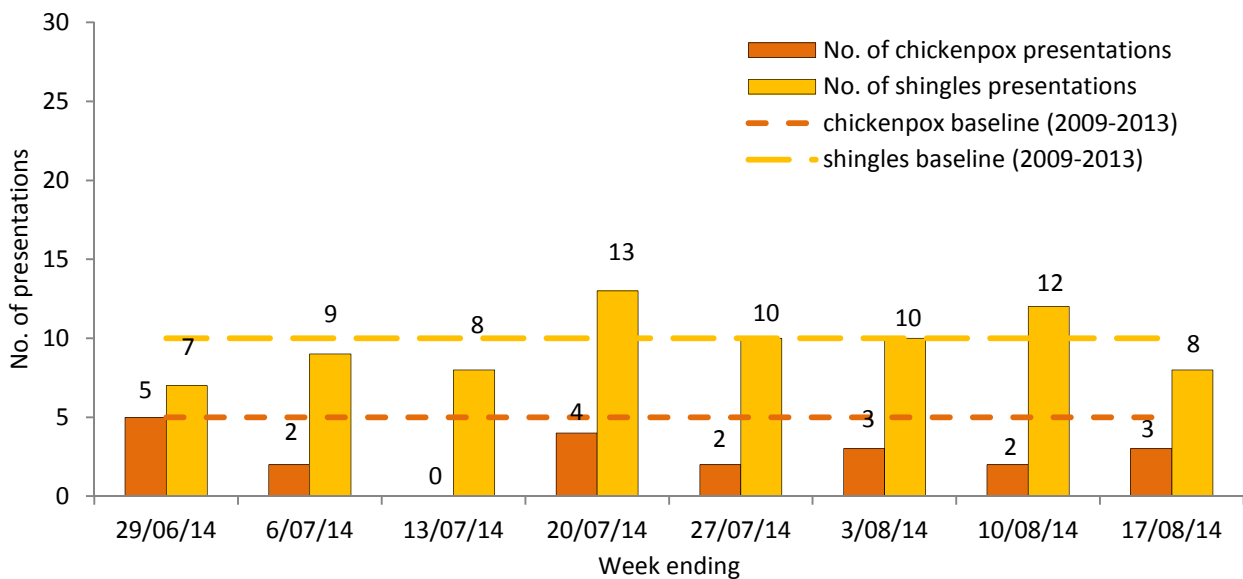


The rate of shingles presentations to sentinel GPs increased, one chickenpox case was reported. One case of measles was reported – the fifth secondary infection associated with an index case who was infected in the Philippines. No cases of rubella were reported this week, but two cases of mumps were confirmed in adult travellers recently returned from Sri Lanka.

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, 2009 to week 52, 2013.

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, 2009 to week 52, 2013.

Varicella-Zoster virus ED Presentations



Shingles presentations to sentinel EDs are just above below baseline levels. Chickenpox presentations remain below baseline.

