Virus WAtch

WEEK ENDING 31ST AUGUST 2014

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Influenza activity appears to have peaked, and may be beginning to decline. Non-influenza respiratory virus activity was relatively stable this week.

- Indicators of influenza activity, including notifications, proportion of positive laboratory tests for influenza, ILI presentations to sentinel general practitioners (GPs), Emergency Department ILI presentations and influenza-associated hospitalisations decreased this week. Given reporting delays, however, it is not clear that all indicators are truly decreasing.
- The majority of influenza viruses subtyped were influenza A/H1N1; there are still a significant number of A/H3N2 detections, although epidemic activity in the West Kimberley region is now decreasing. Influenza B continues to circulate at a low level.
- Detections of most non-influenza respiratory viruses remained stable this week.

GASTROENTERITIS

- Gastroenteritis presentations to sentinel GPs and EDs decreased this week and are now at the lower margin of levels seen in previous years.

VARICELLA AND VIRAL RASHES

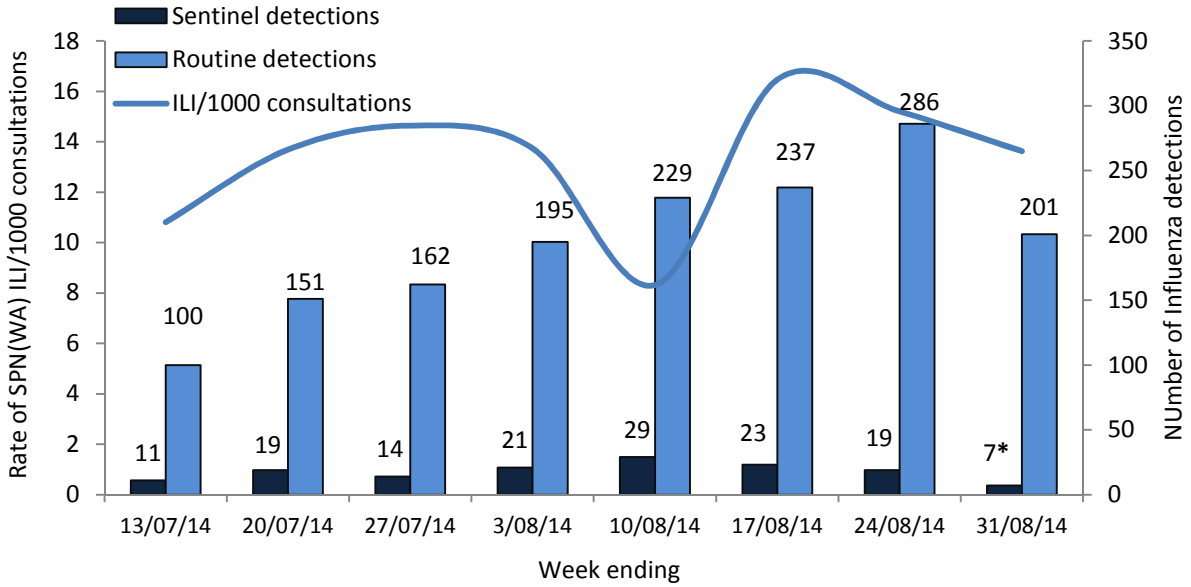
- Shingles presentations to GPs are slightly above baseline; there were no chickenpox presentations to sentinel GPs. Both shingles and chickenpox presentations to sentinel EDs remain around expected levels.
- One case of mumps was confirmed in a contact of two travellers who were infected in Sri Lanka.
- No measles or rubella cases were reported.

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.

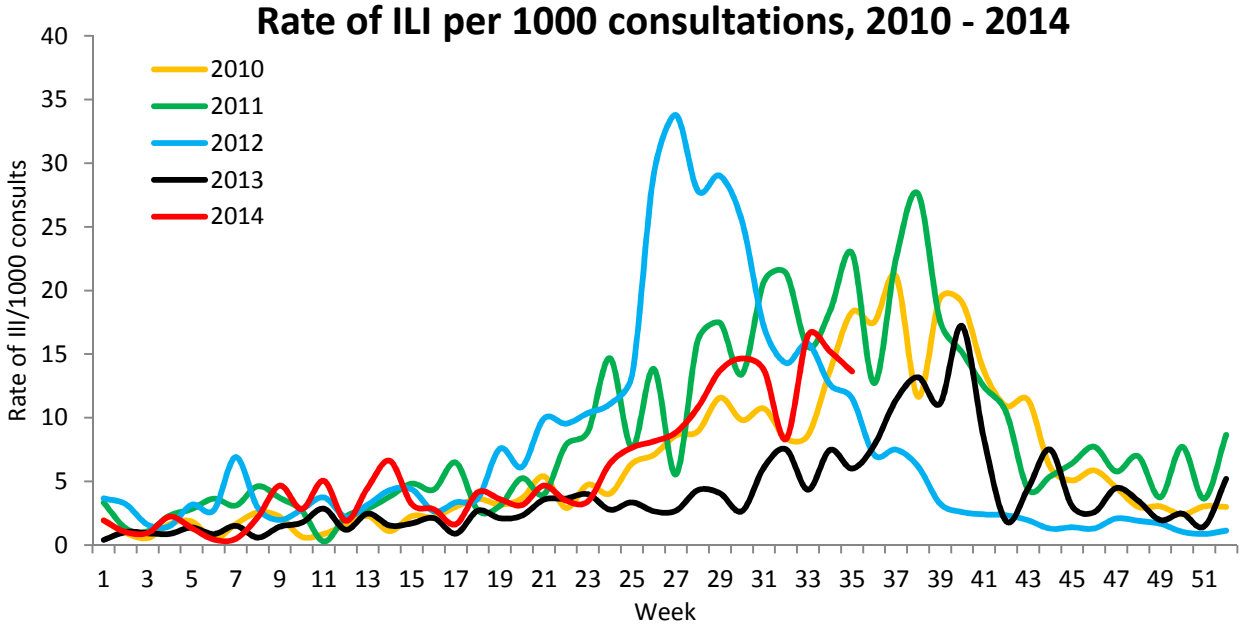
Influenza and Influenza-like Illnesses

Sentinel and Routine Influenza and Influenza-like-Illness detections



ILI presentations to sentinel GPs decreased this week. Routine detections of influenza virus decreased. Of 680 routinely collected specimens, 201 (30%) tested positive.*Testing of swabs collected at sentinel practices is incomplete, but 41% of specimens tested thus far have been positive for influenza virus.

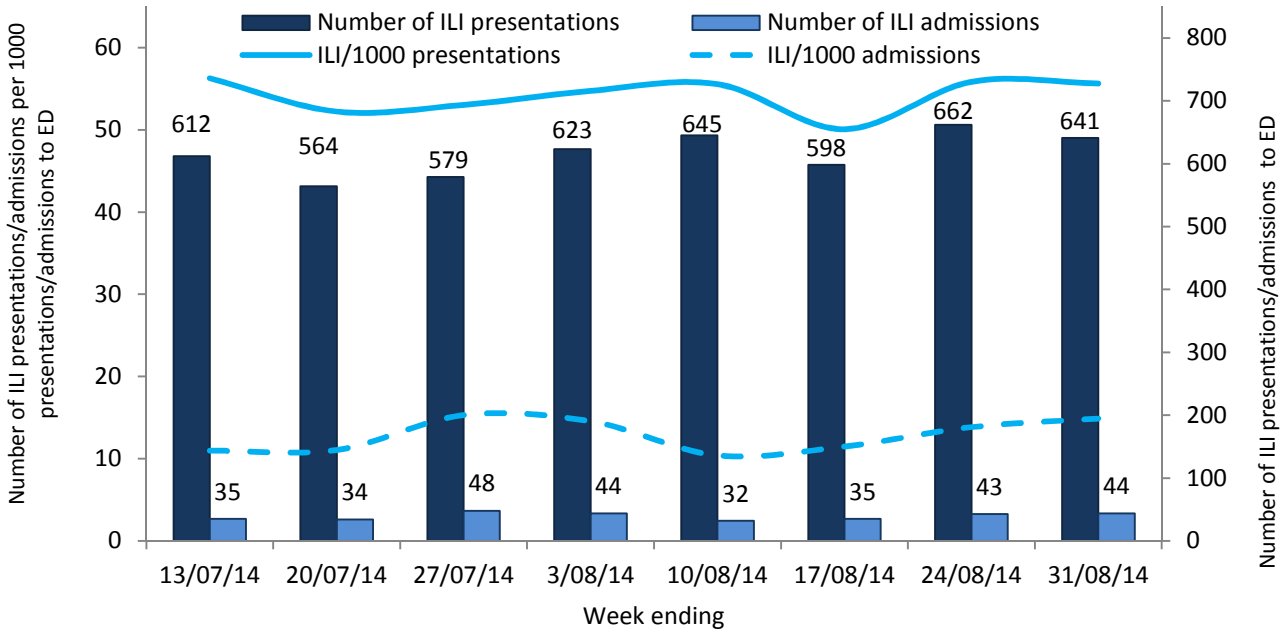
Sentinel Practitioner Network of WA - GP surveillance
Rate of ILI per 1000 consultations, 2010 - 2014



The rate of ILI presentations to SPN(WA) GPs decreased to 14 cases per 1000 consultations, and is around the mid-range of figures seen at this time in recent seasons.

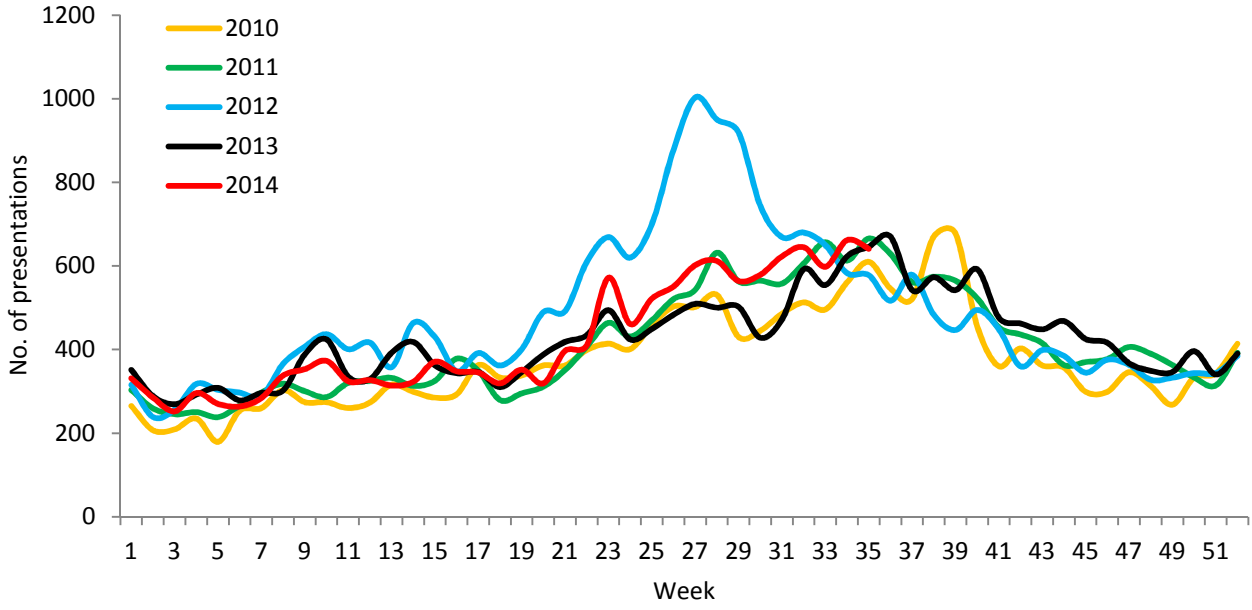
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Viral Respiratory ED Presentations and Admissions

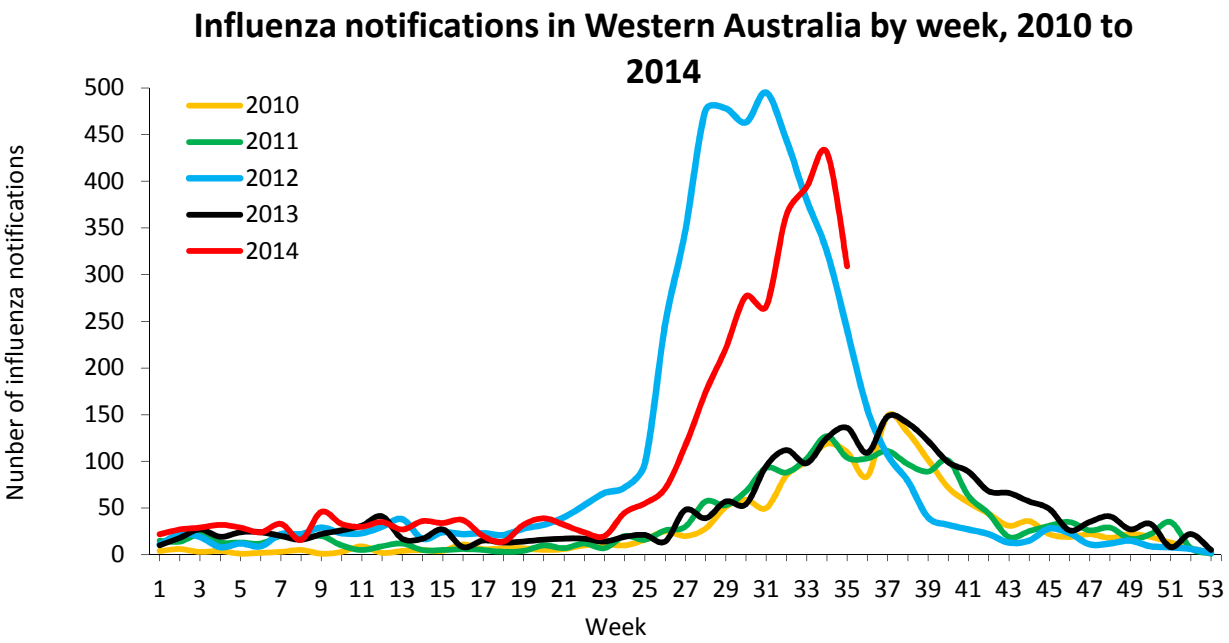


ED presentations for viral respiratory illness decreased this week. The number of ILI admissions remained stable.

ED Respiratory Viral Presentations, 2010 - 2014

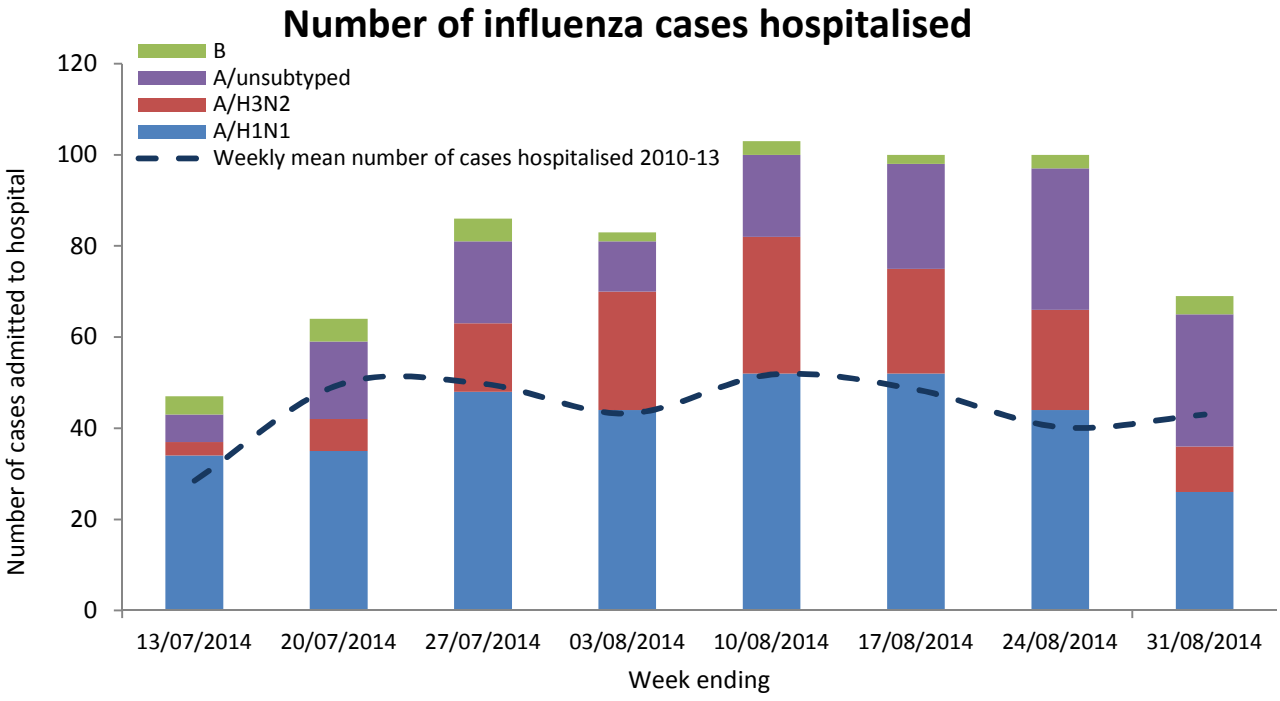


The number of respiratory viral presentations to sentinel EDs decreased this week and remains at the upper margin of values for this time period in recent years.

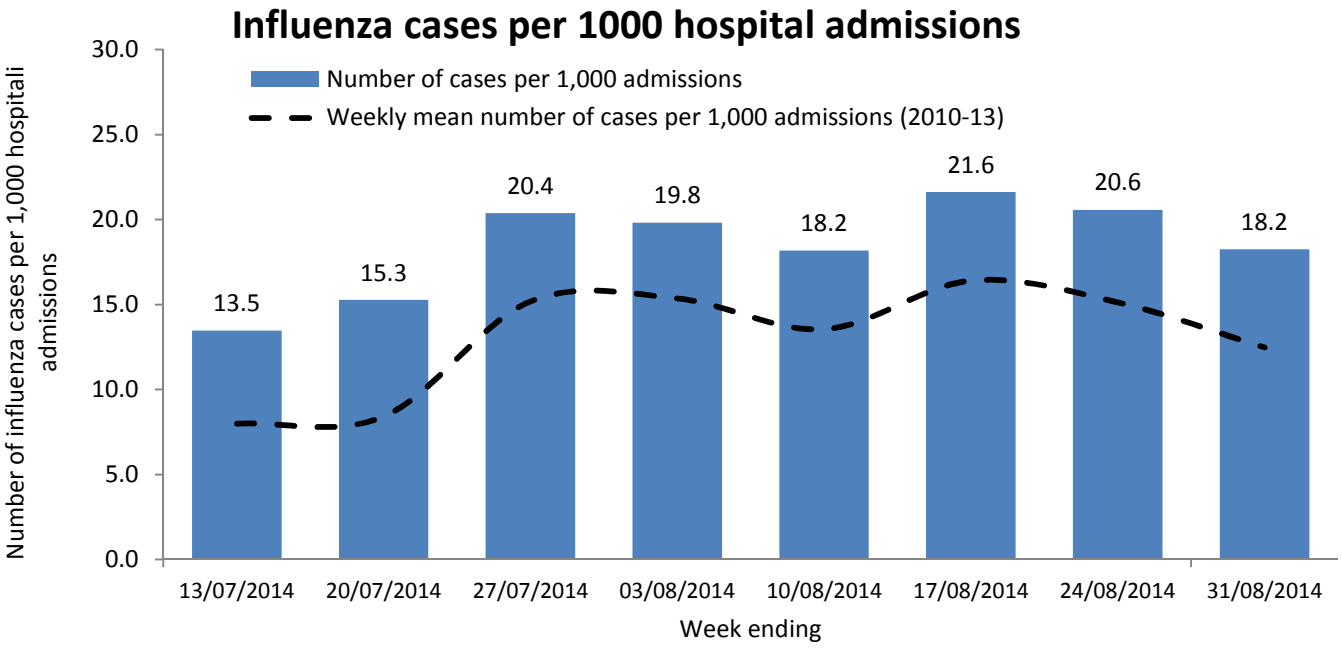


Notifications of confirmed influenza to the Department of Health are significantly higher than levels at this time in recent mild seasons Overall levels appear to have peaked and appear be declining, subject to reporting delays. Influenza A/H3N2 activity remains high in the West Kimberley region, although it has decreased in the last 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 25/08/2014 and 31/08/2014.

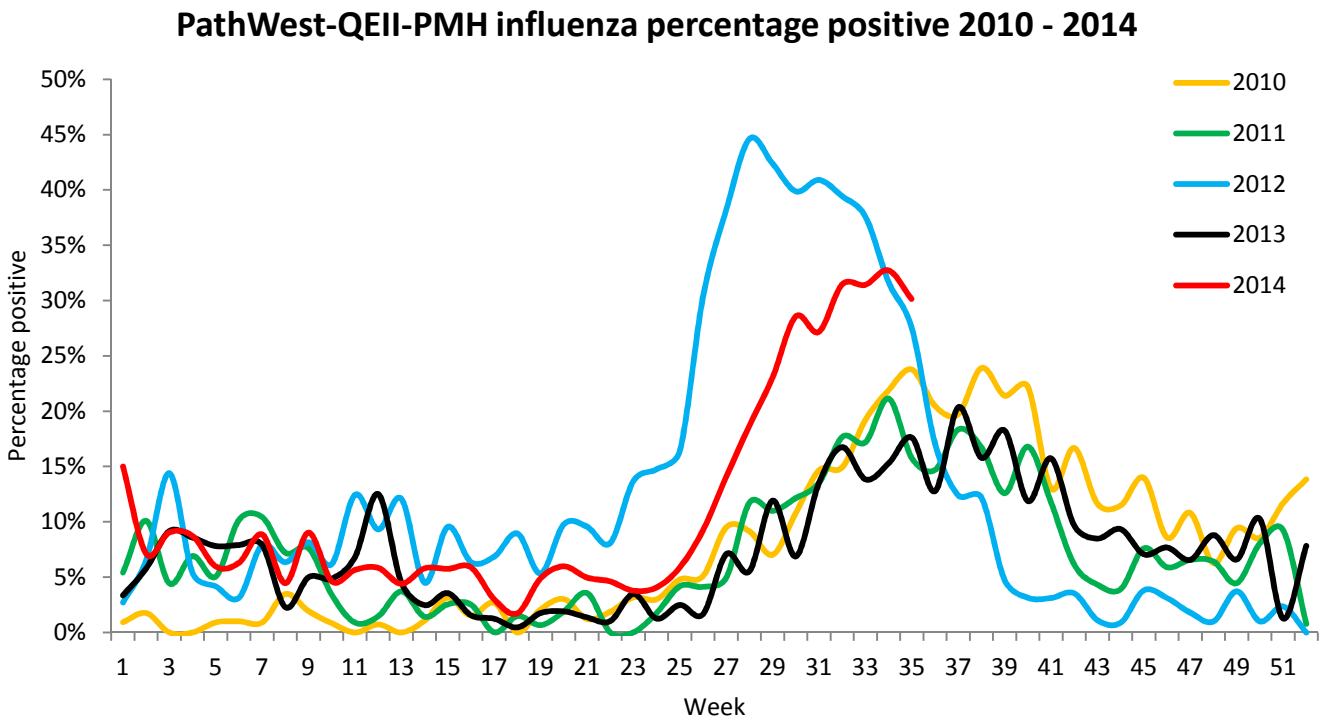


There were 69 hospital admissions for influenza recorded this week; 10 (14%) were influenza A/H3N2, 26 (38%) were influenza A/H1N1, 29 (42%) were influenza A/unsubtyped, and 4 (6%) were influenza B.

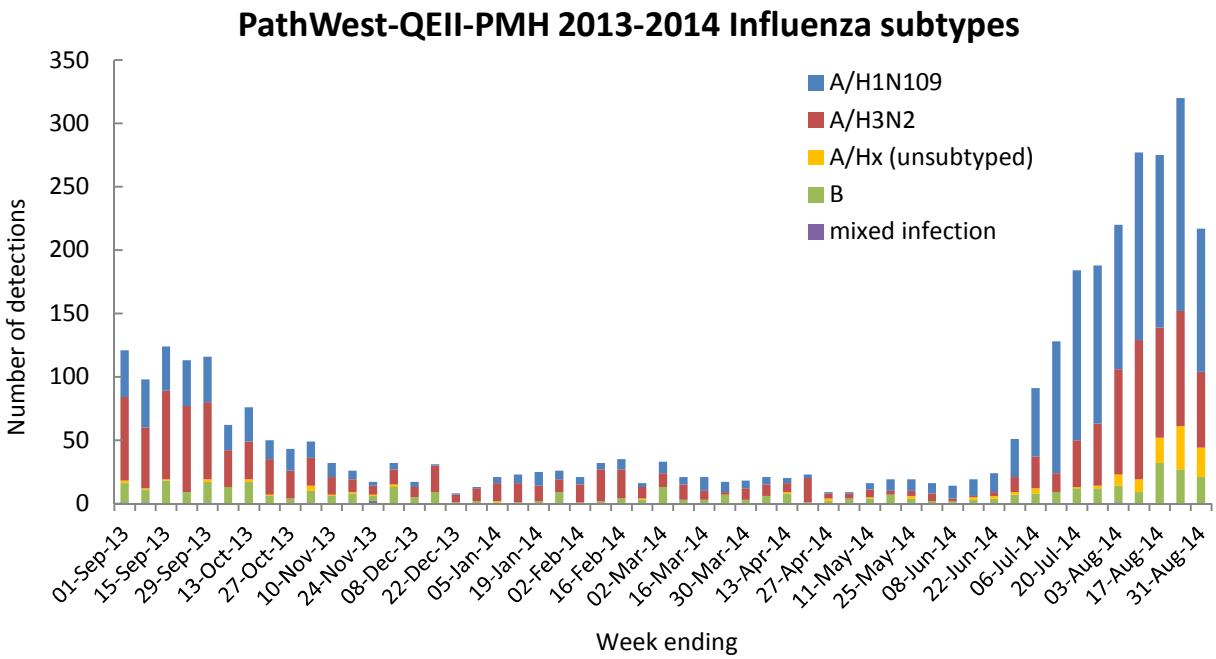


The proportion of hospital admissions notified as having laboratory-confirmed influenza remains just above average levels for the corresponding period in recent years.

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.

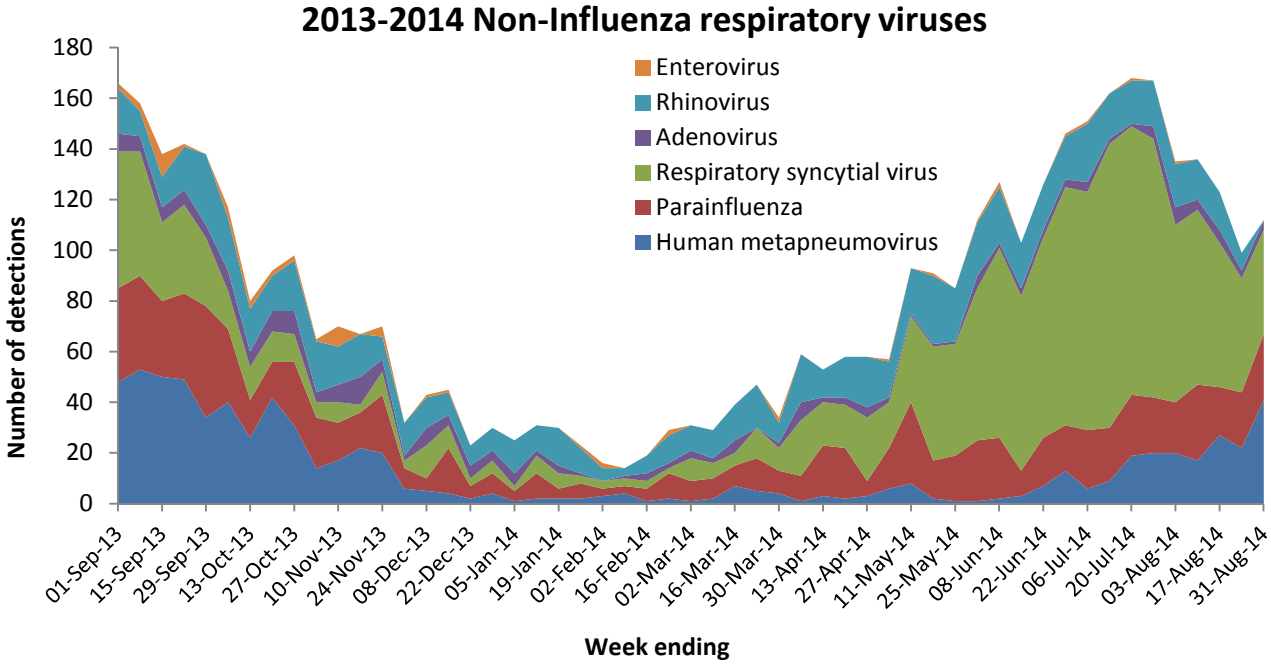


Among samples tested at PathWest-QEII-PMH this week, 30% were positive for influenza virus, which remains higher than levels reported at this time during recent mild influenza seasons.



Two hundred and seventeen influenza viruses were characterised by PathWest, QEII and PMH during this reporting week, comprising 113 (52%) influenza A/H1N1, 60 (28%) influenza A/H3N2, 23 (11%) influenza A/unsubtyped, and 21 (10%) influenza B. A/H1N1 continues to be the predominant strain in the state, A/H3N2 activity is now declining in the West Kimberley region.

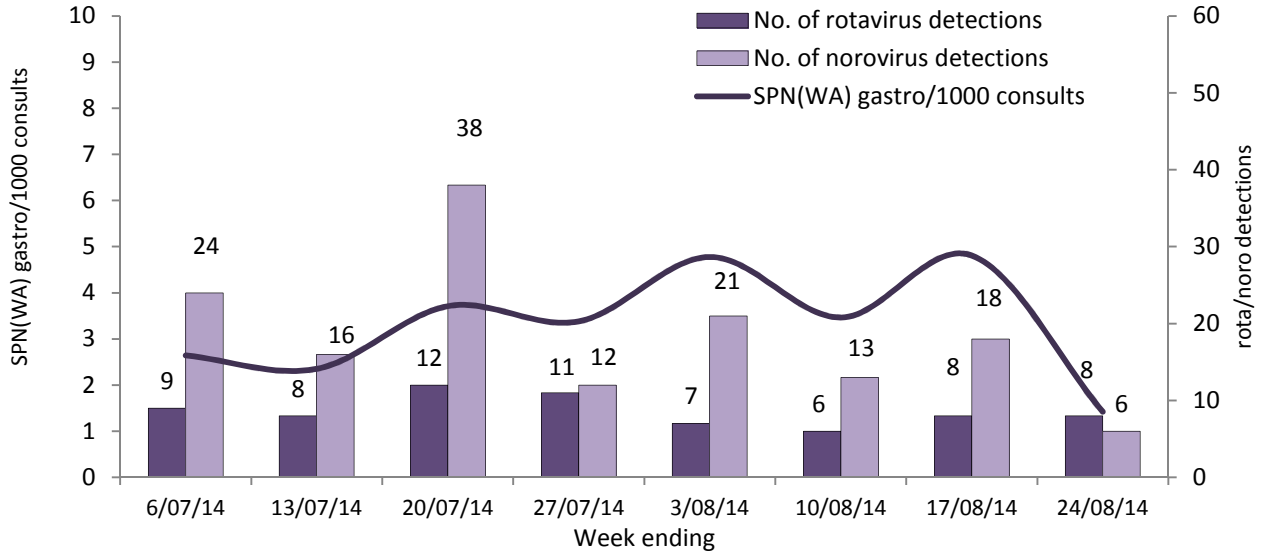
The graph is a summary of all samples that have been recorded as subtyped at PathWest QEII as of 12.01am Wednesday 3rd September 2014.



Non-influenza respiratory virus activity was relatively stable this week, with the exception of human metapneumovirus which increased.

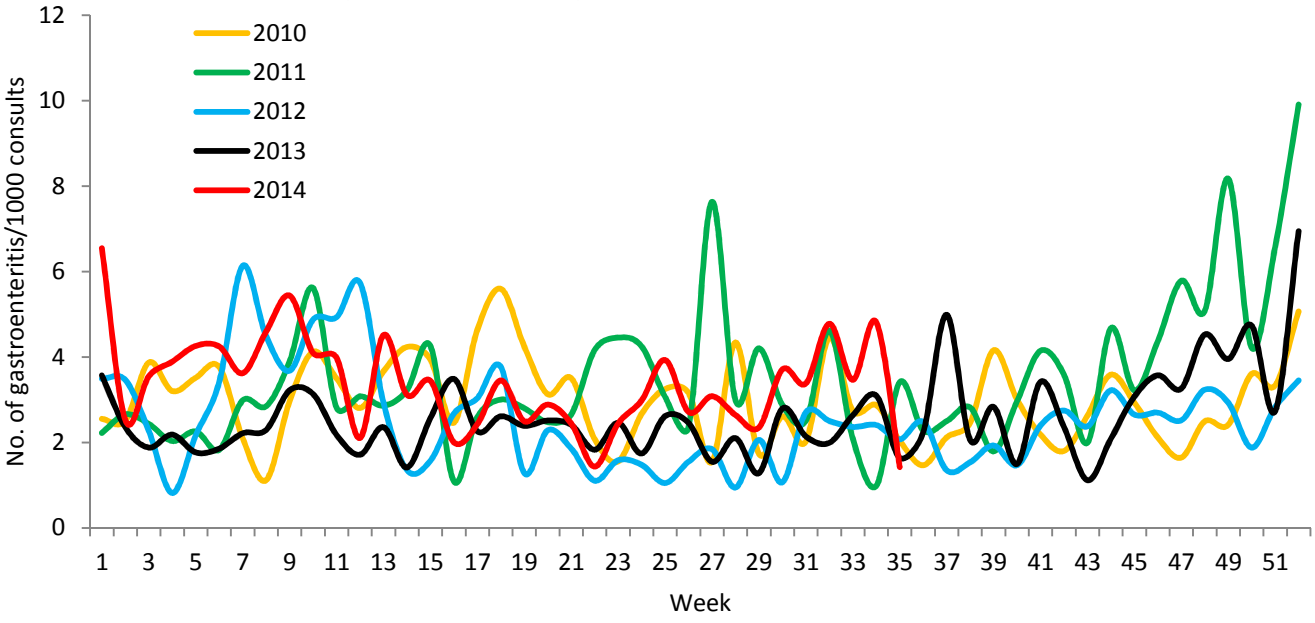
Gastroenteritis

Gastroenteritis GP Presentations



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

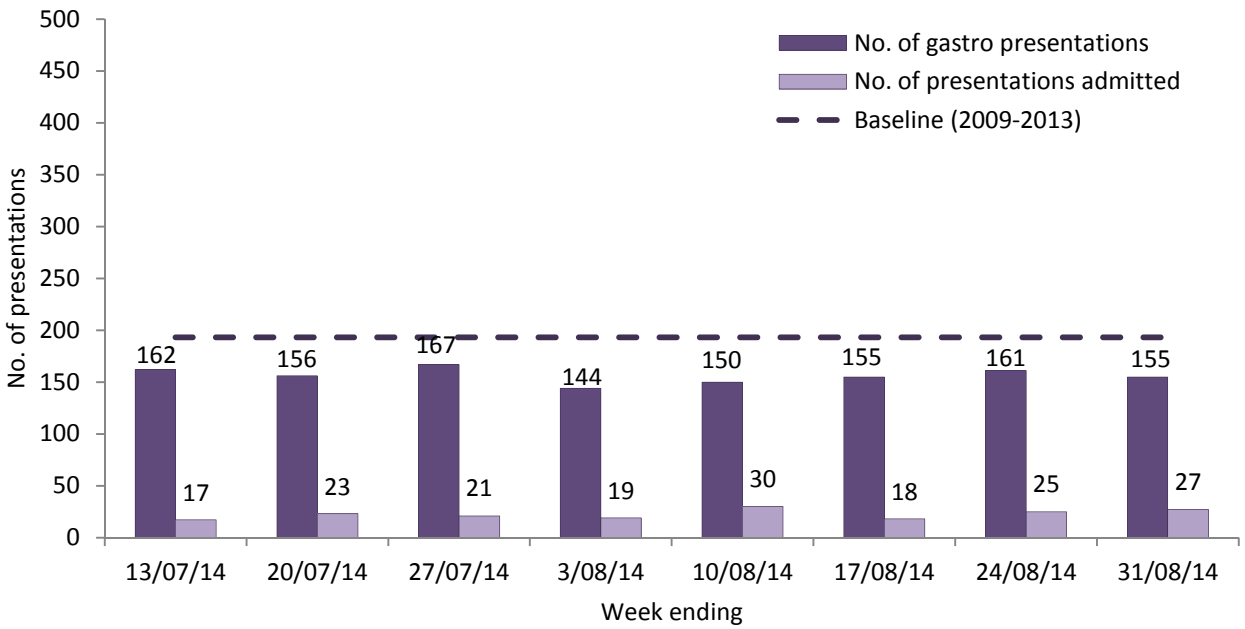
Sentinel Practitioner's Network of WA SPN(WA) - GP surveillance
Rate of gastroenteritis per 1000 consultations, 2010 - 2014



The rate of gastroenteritis presentations to sentinel GPs decreased this week, and is now at the lower margin of rates seen in the same time period in recent years.

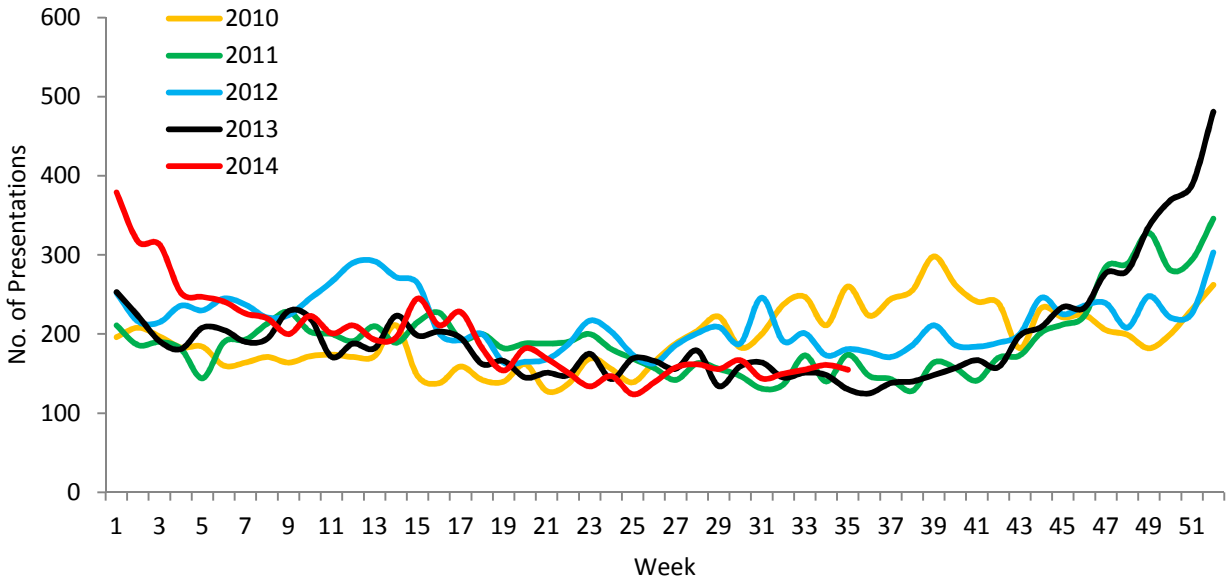
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations were calculated using the mean of weekly EDIS data from week 1, 2009 to week 52, 2013.

Gastroenteritis ED Presentations



Gastroenteritis presentations to sentinel EDs were stable this week and remain below baseline.

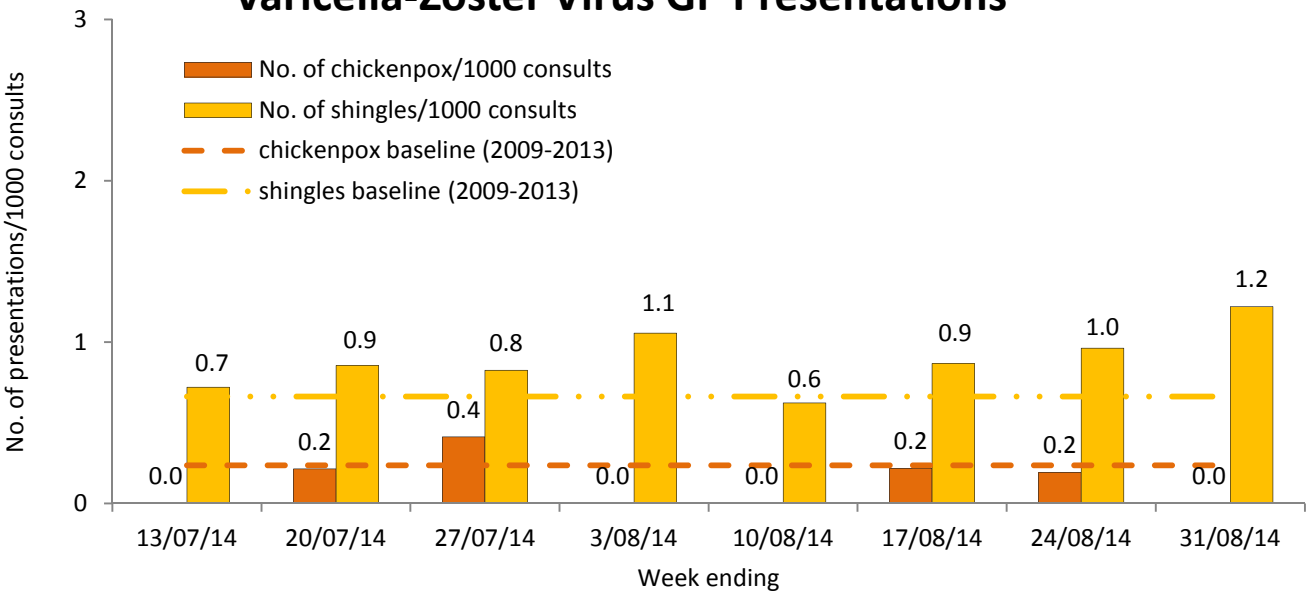
ED Gastroenteritis Presentations 2010 - 2014



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

Viral Rashes

Varicella-Zoster Virus GP Presentations

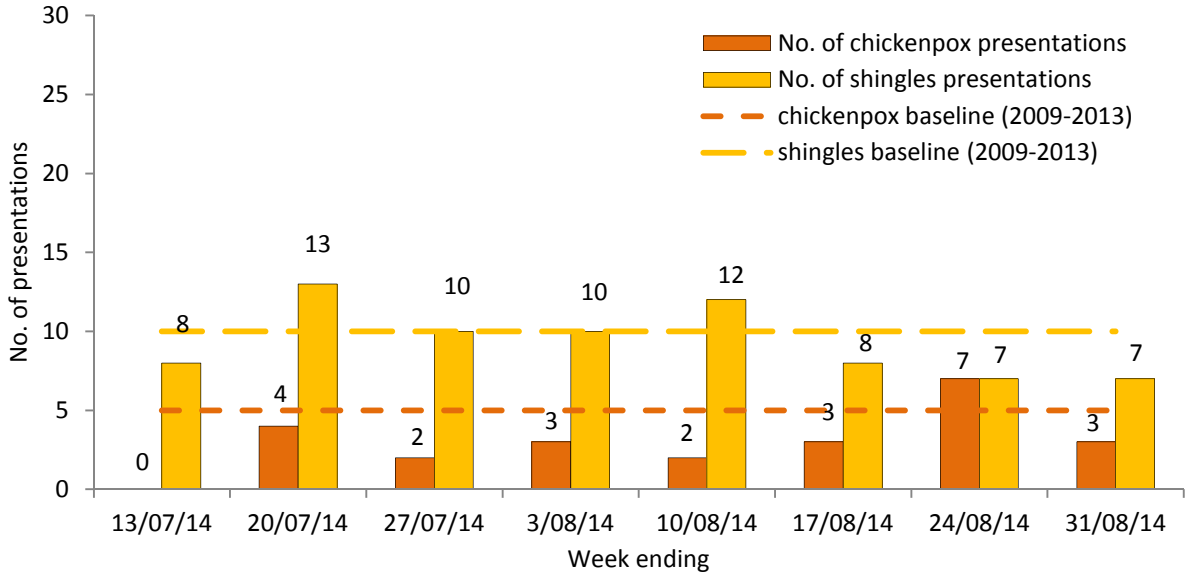


The rate of shingles presentations to sentinel GPs remains above baseline; there were no chickenpox presentations last week. One case of mumps was confirmed in a contact of two adult travellers who were infected in Sri Lanka.

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 decreased this week and are below baseline levels.