



WEEK ENDING 28TH JUNE 2015

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Rates of influenza-like illness increased this week.

- ILI presentations to sentinel emergency departments (EDs) and sentinel general practitioners (GPs) increased this week.
- Hospitalisations with confirmed influenza have been relatively steady over recent weeks, at around 10 per 1000 admissions.
- Influenza virus detections, test positivity and notifications are have changed little in the past few weeks, with influenza B viruses (75%) and influenza A/H3N2 (20%) viruses dominating detections; influenza A/H1N1 is co-circulating at a low level (5%). The influenza B strains currently circulating are 90% Yamagata lineage, matching the trivalent influenza vaccine strain.
- Non-influenza respiratory virus detections decreased; however, respiratory syncytial virus activity remains high.

GASTROENTERITIS

- Gastroenteritis presentations to sentinel GPs and ED presentations are fluctuating at low levels.
- Rotavirus detections decreased this week, but remain relatively high. Rotavirus has caused recent outbreaks of gastroenteritis in residential care and childcare settings in metropolitan Perth.

VARICELLA AND VIRAL RASHES

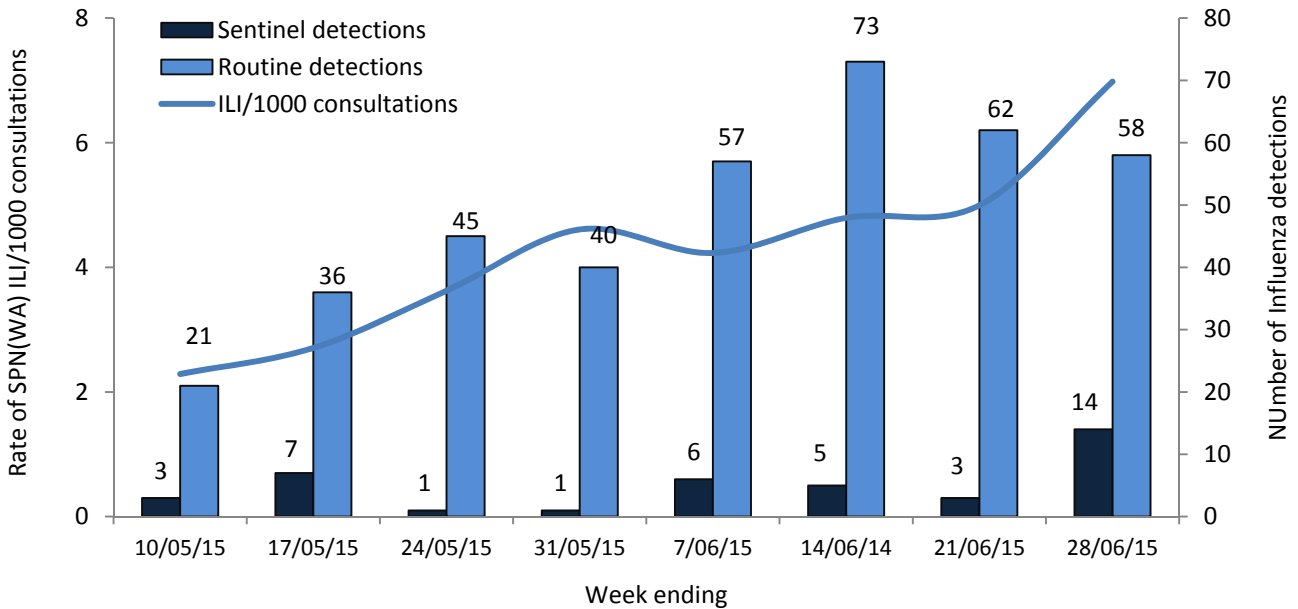
- Chickenpox and shingles presentations to sentinel EDs and GPs are near or below baseline levels.
- No cases of rubella were notified. One possible secondary measles case acquired in a healthcare setting is under investigation.
- Several further cases of mumps have been confirmed among Aboriginal children, teenagers and young adults in the Kimberley region, including in Broome.

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: 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.

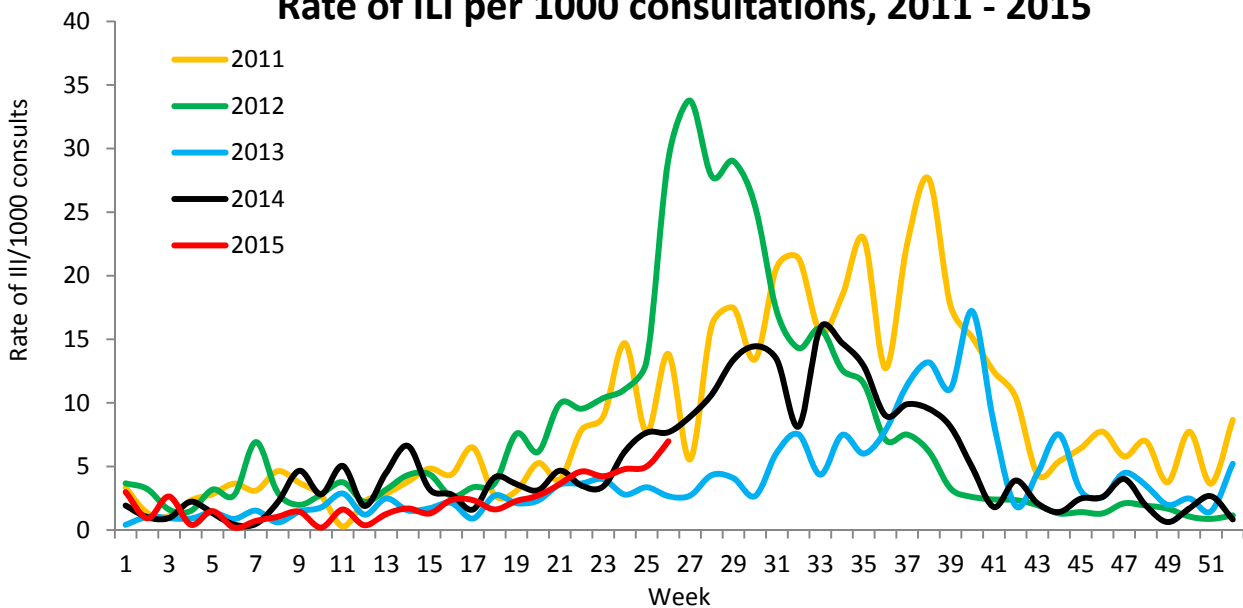
Influenza and Influenza-like Illnesses

Sentinel and Routine Influenza and Influenza-like-Illness detections



The rate of ILI seen at sentinel GPs increased this week. Of 397 routinely collected specimens, 58 (15%) tested positive for influenza virus; 36 specimens were collected at sentinel GP sites, 14 (39%) of which tested positive for influenza virus.

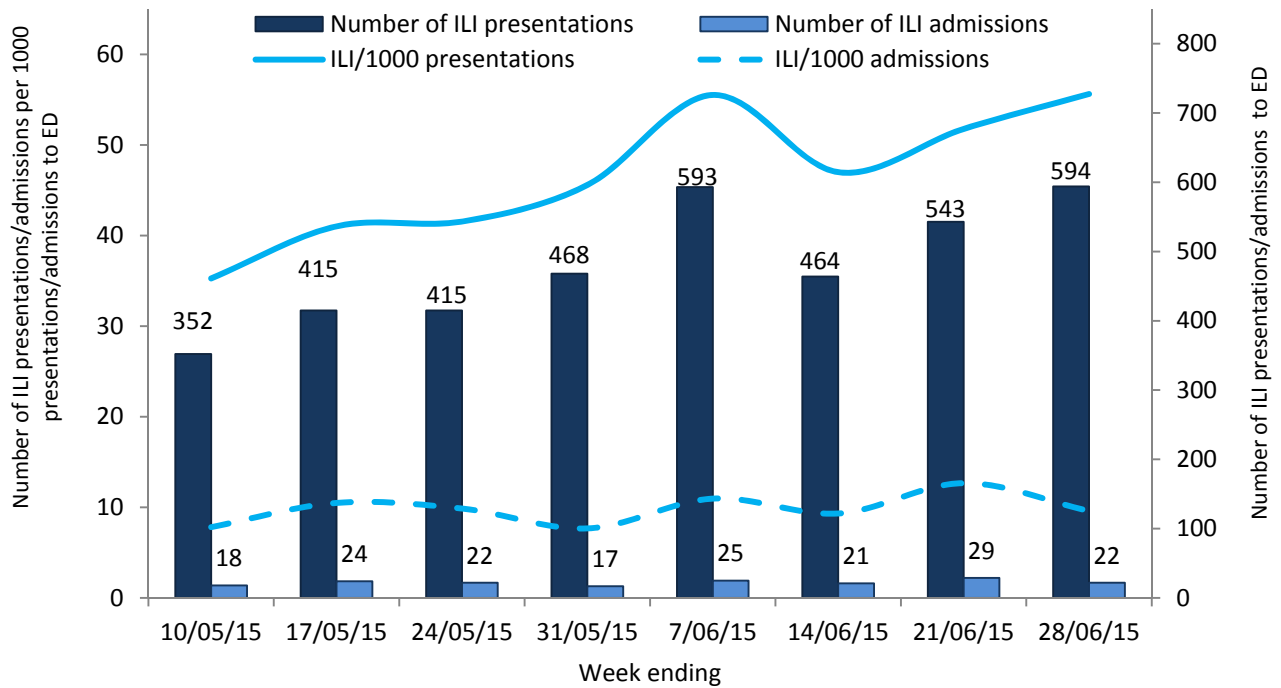
Sentinel Practitioner Network of WA - GP surveillance Rate of ILI per 1000 consultations, 2011 - 2015



The rate of ILI presentations to SPN(WA) GPs increased this week and is in the mid-range of values for presentations during this time period in recent years.

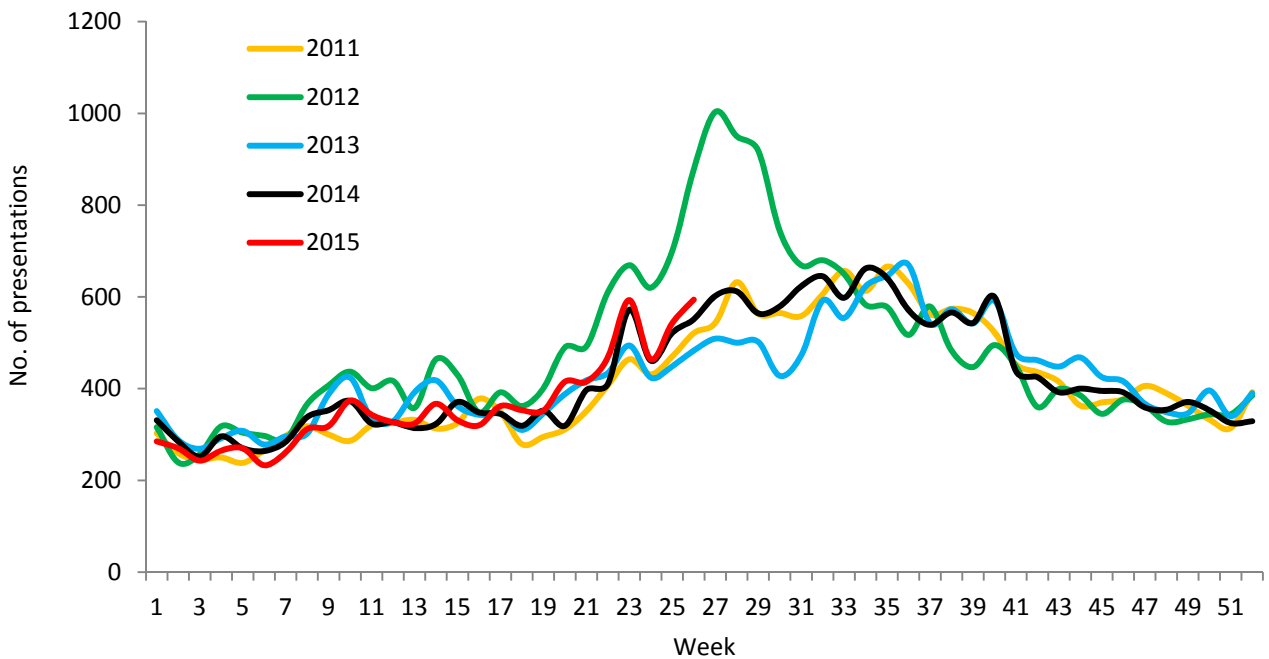
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Viral Respiratory ED Presentations and Admissions



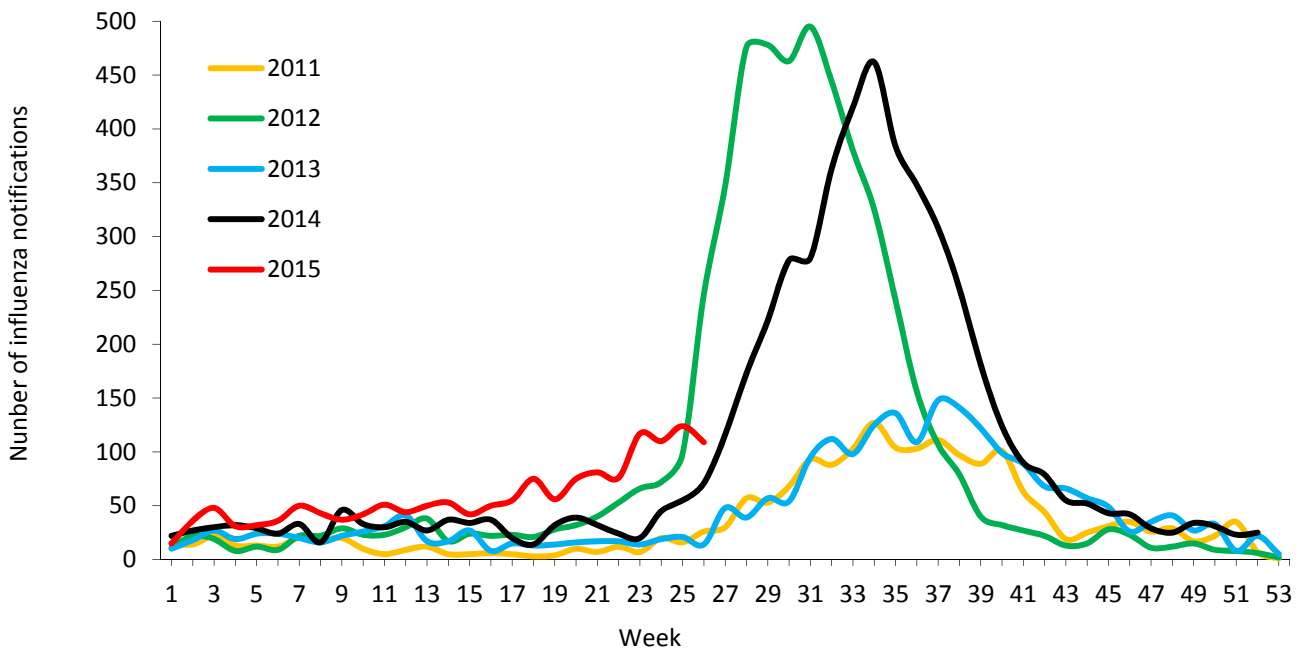
Presentations to sentinel EDs for viral respiratory illness increased this week.

ED Respiratory Viral Presentations, 2011 - 2015



The number of respiratory viral infection presentations to sentinel EDs increased this week.

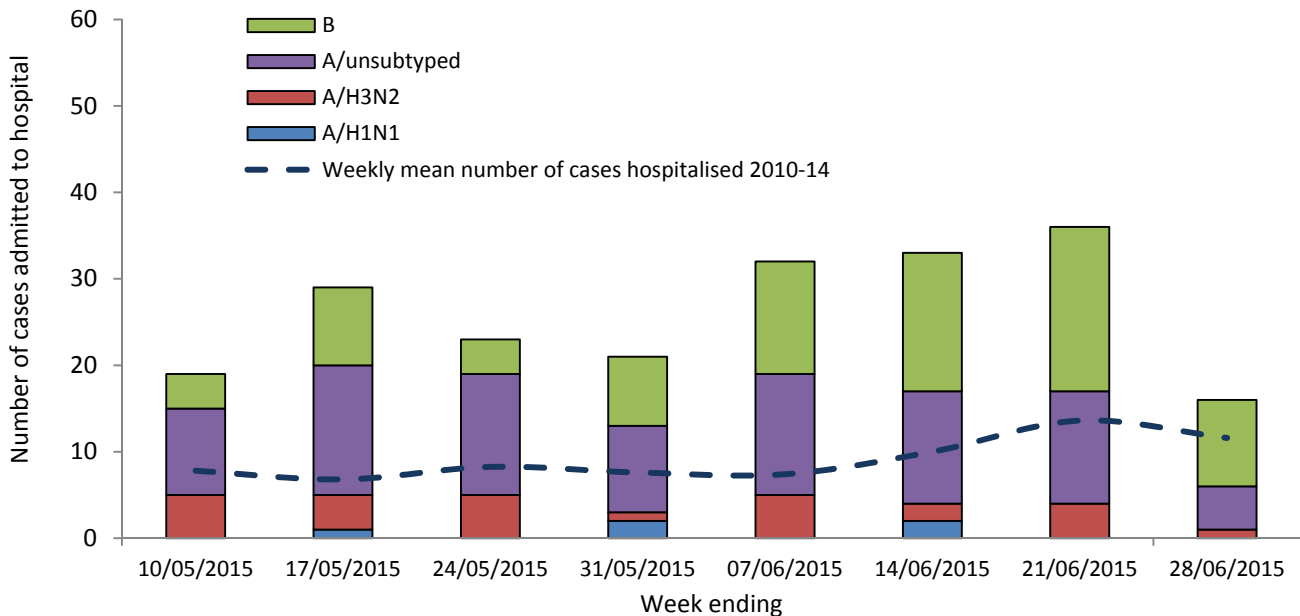
Influenza notifications in Western Australia by week, 2011 to 2015



There were 109 notifications for influenza this week, and while the numbers remain high compared with recent years for this time period, the increase remains gradual.

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 22/06/2015 and 28/06/2015.

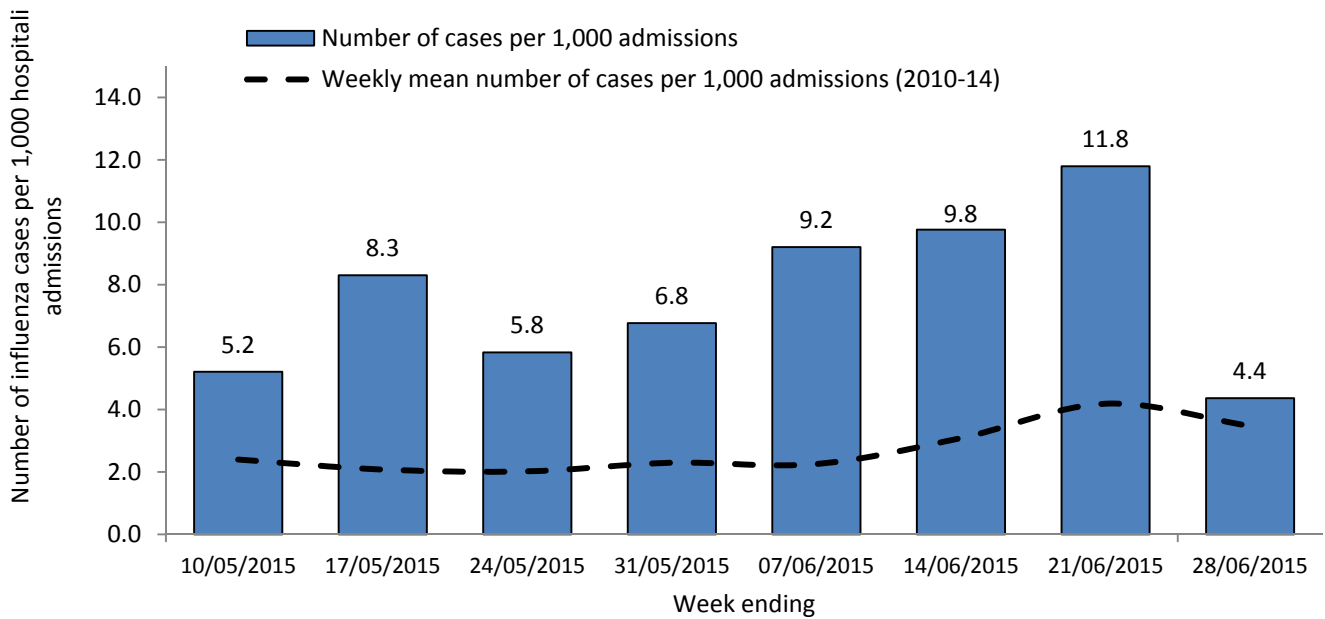
Number of influenza cases hospitalised



The number of hospitalisations for influenza has been fairly steady over recent weeks, but at a higher level than the average of recent years. Data for the last week are incomplete, but sixteen notified influenza cases were hospitalised; 1 (6%) with influenza A/H3N2, 5 (31%) with influenza A/unsubtyped and 10 (63%) with influenza B.



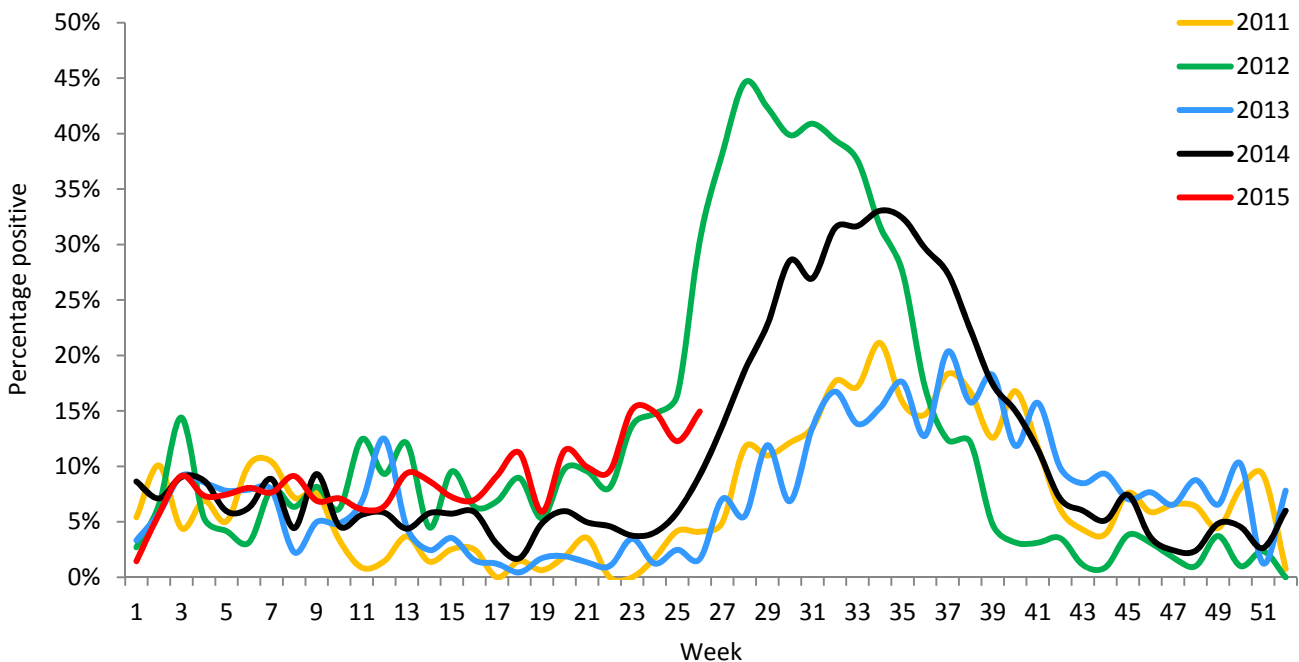
Influenza cases per 1000 hospital admissions



The proportion of hospital admissions notified as having laboratory-confirmed influenza has been increasing gradually over recent weeks and is above the average of levels in recent years. Data for the last week are incomplete.

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.

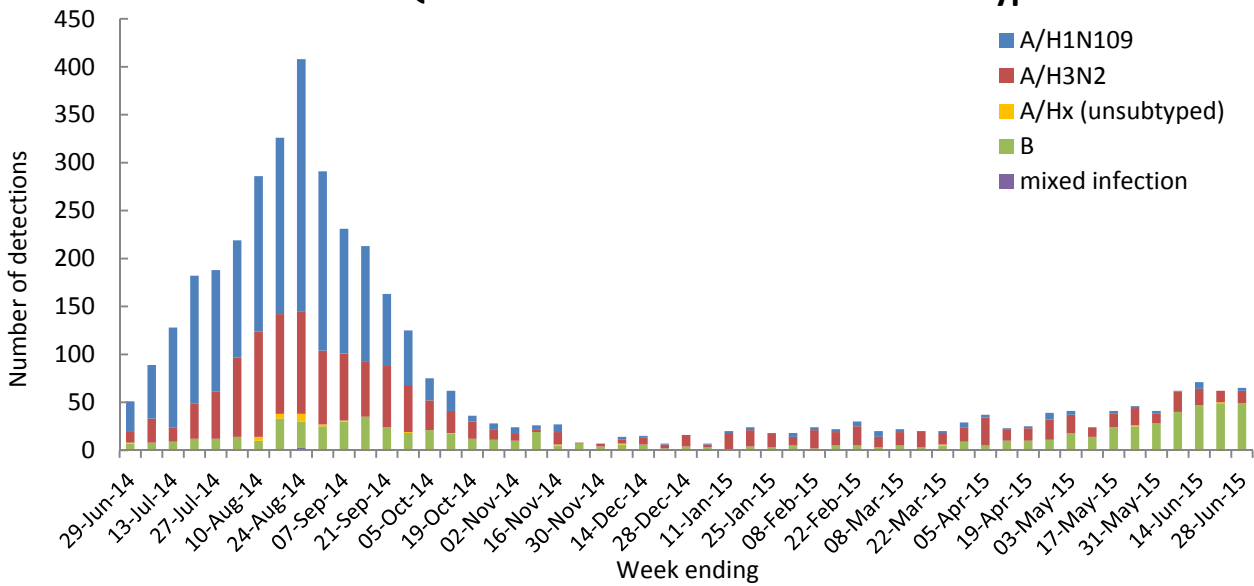
PathWest-QEII-PMH influenza percentage positive 2011-2015



Influenza test positivity has been fluctuating in the range of 10-15% over recent weeks, with no clear upward trend evident as yet.



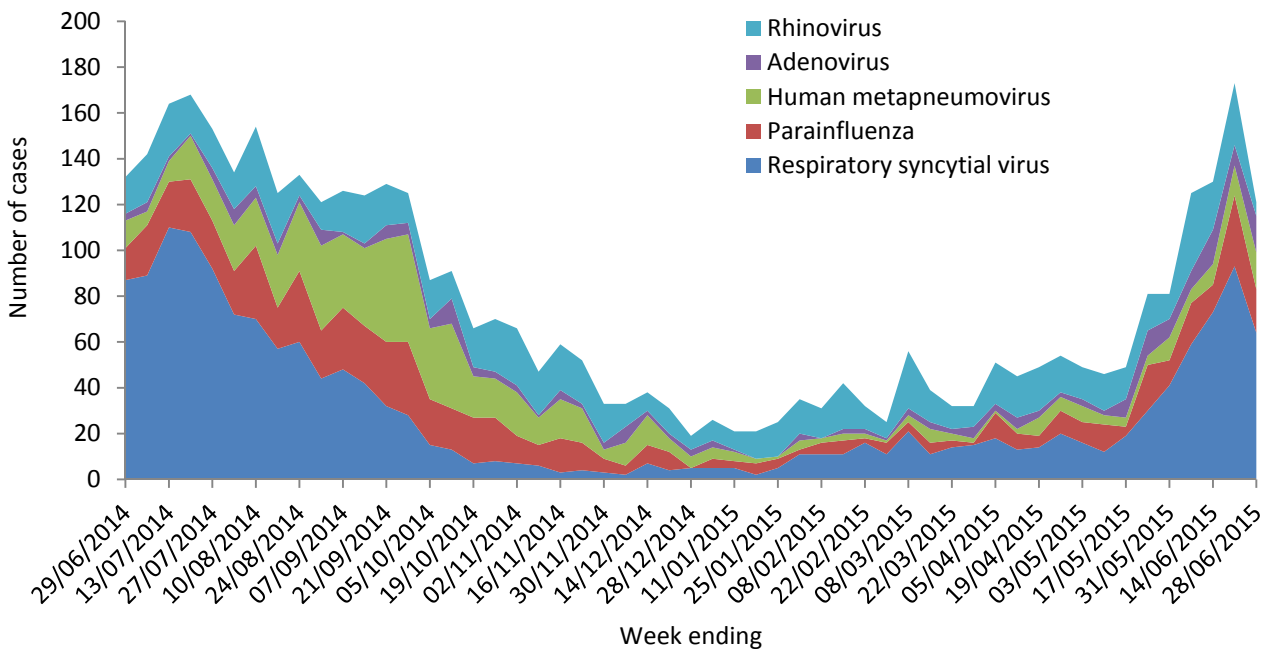
PathWest-QEII-PMH 2014-2015 all influenza subtypes



Sixty five influenza viruses were subtyped by PathWest, QEII and PMH during this reporting week; 13 (20%) were influenza A/H3N2, 3 (5%) influenza A/H1N1, and 49 (75%) were influenza B. The influenza B strains currently circulating in WA are 90% Yamagata lineage, matching the trivalent influenza vaccine strain.

The graph is a summary of all samples that have been recorded as subtyped at PathWest QEII as of 12.01am Wednesday 1st July 2015. The number subtyped may not always correspond to the number of influenza detections.

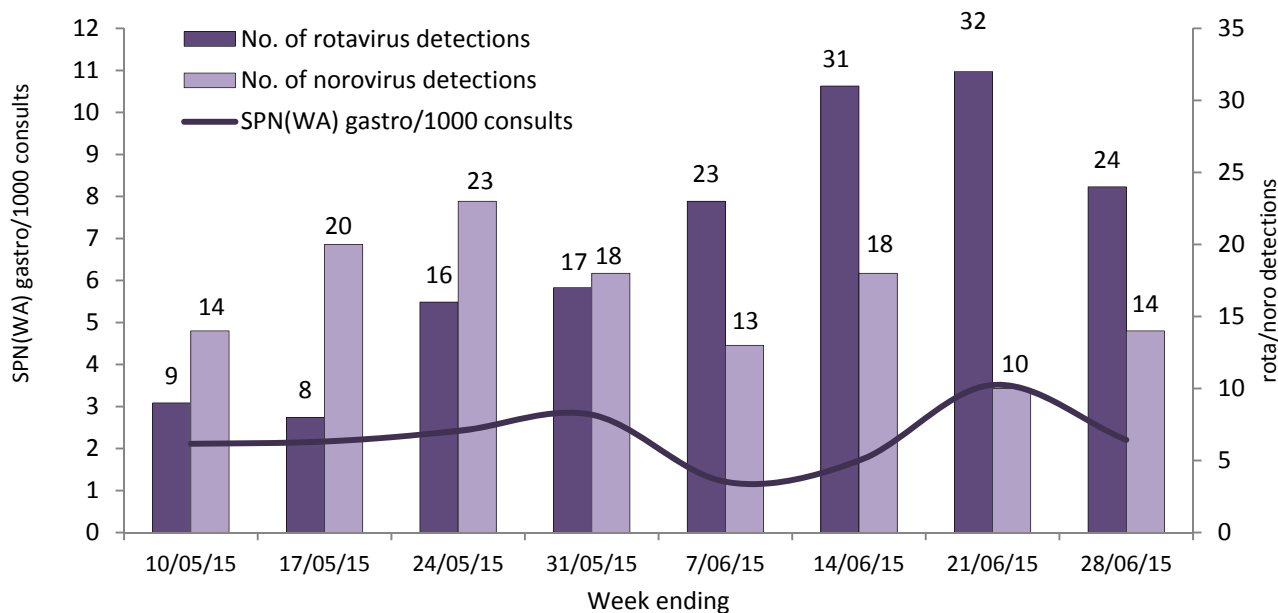
2014-2015 Non-influenza respiratory viruses - QEII and PMH



Overall, non-influenza respiratory virus activity decreased this week; however, respiratory syncytial virus activity remains high.

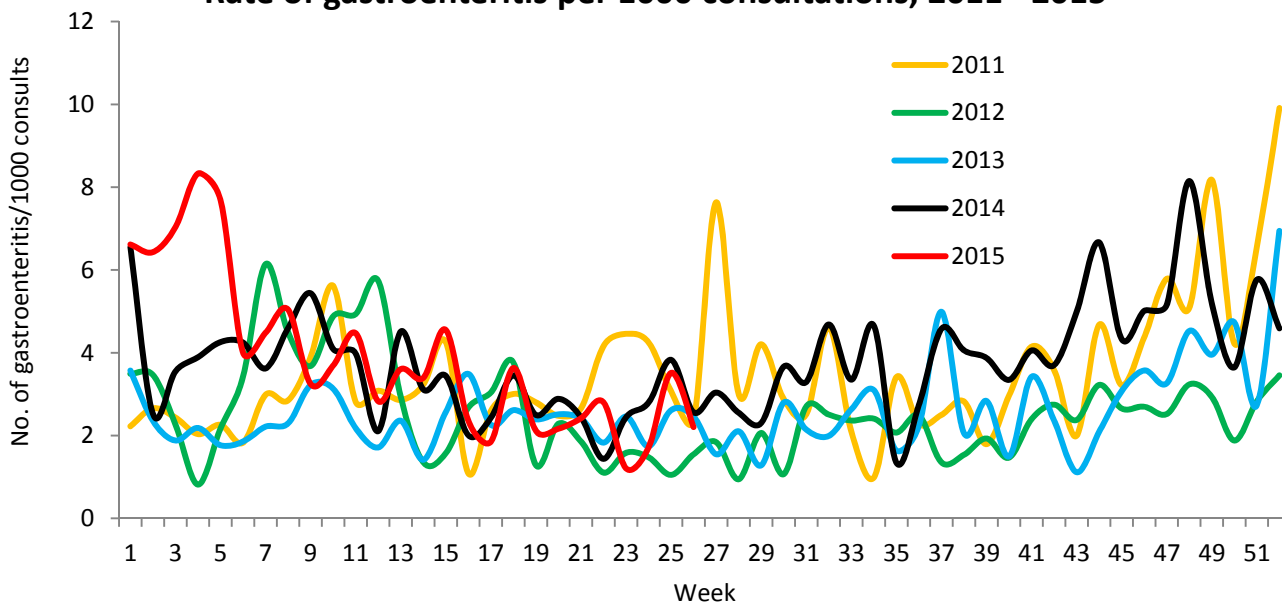
Gastroenteritis

Gastroenteritis virus detections and GP Presentations



Gastroenteritis presentations to SPN(WA) continue to fluctuate at low levels. Rotavirus detections decreased, but remain high. Recently, several gastroenteritis outbreaks in residential care and childcare settings have been caused by rotavirus.

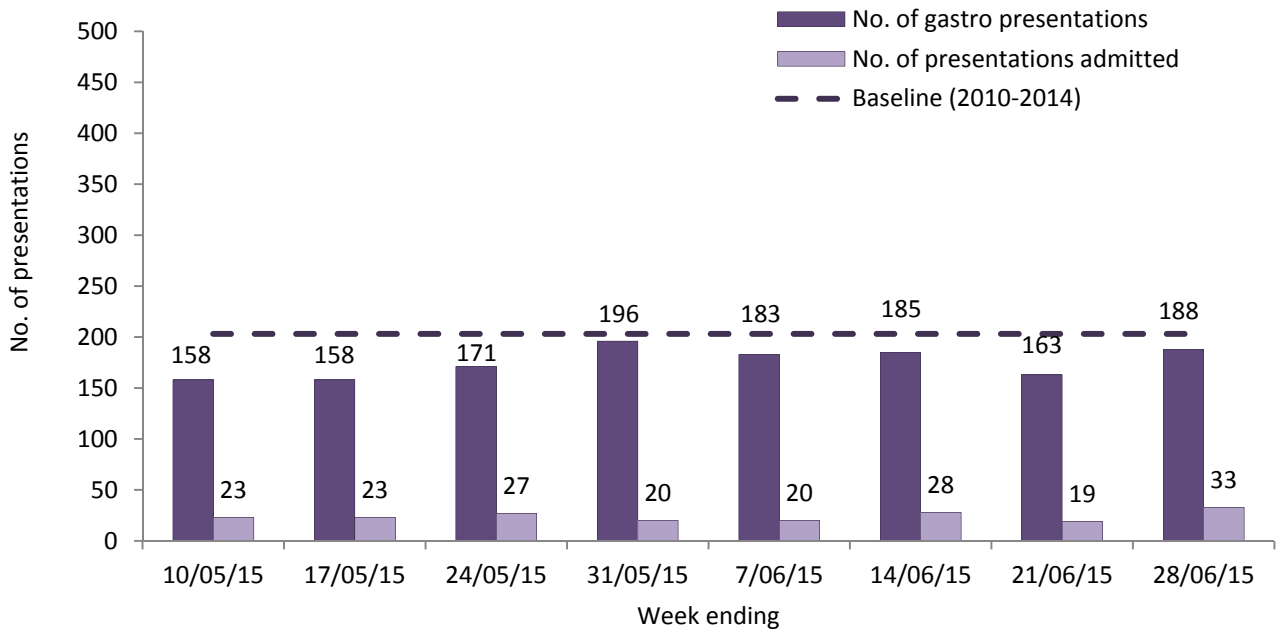
Sentinel Practitioner's Network of WA SPN(WA) - GP surveillance Rate of gastroenteritis per 1000 consultations, 2011 - 2015



The rate of gastroenteritis presentations to sentinel GPs continues to fluctuate within the levels of presentations seen during this time period in recent years.

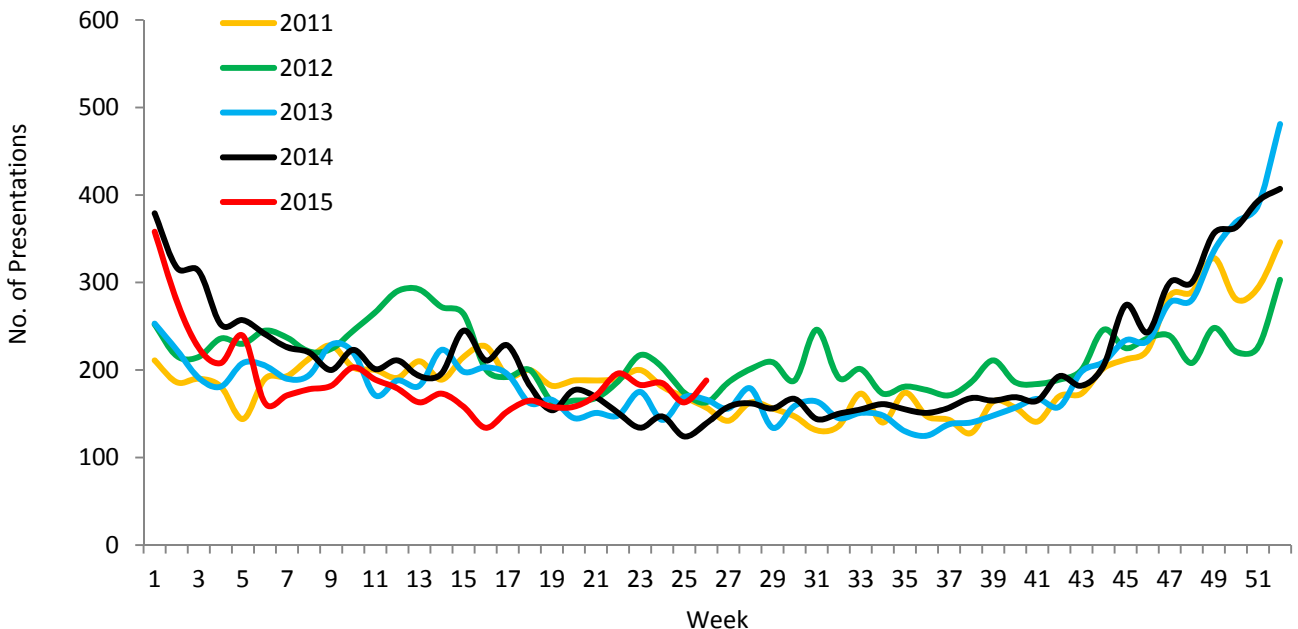
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations were calculated using the mean of weekly EDIS data from week 1, 2011 to week 52, 2014.

Gastroenteritis ED Presentations



Gastroenteritis presentations to sentinel EDs remain below baseline level.

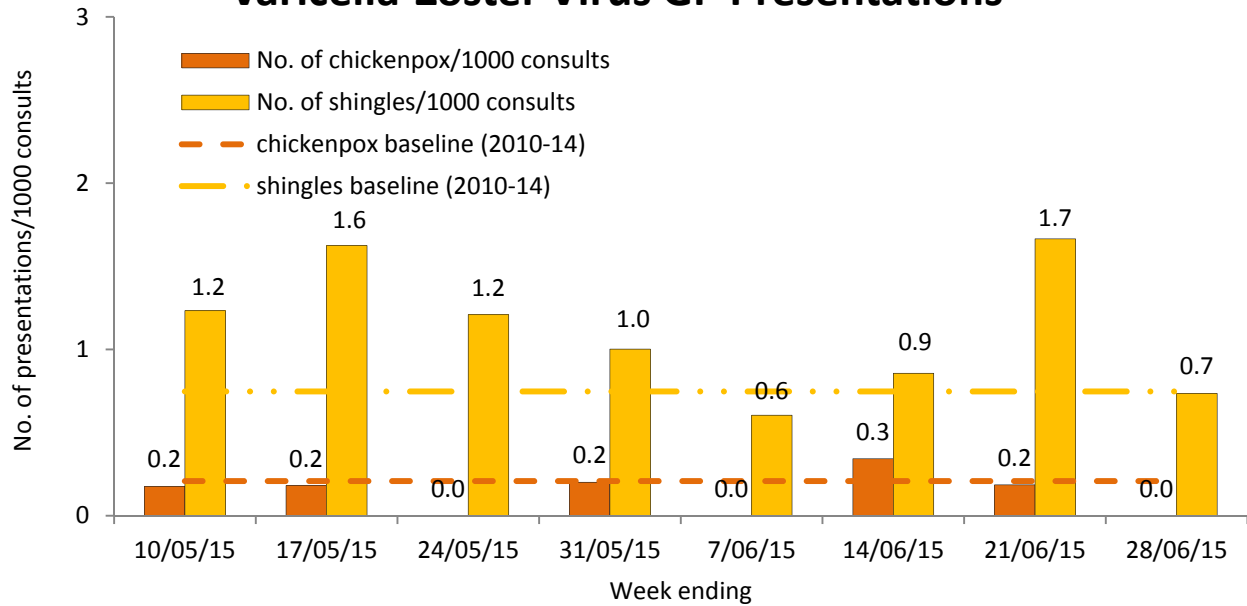
ED Gastroenteritis Presentations 2011 - 2015



The number of gastroenteritis presentations to sentinel EDs is in the range of expected values.

Viral Rashes

Varicella-Zoster Virus GP Presentations

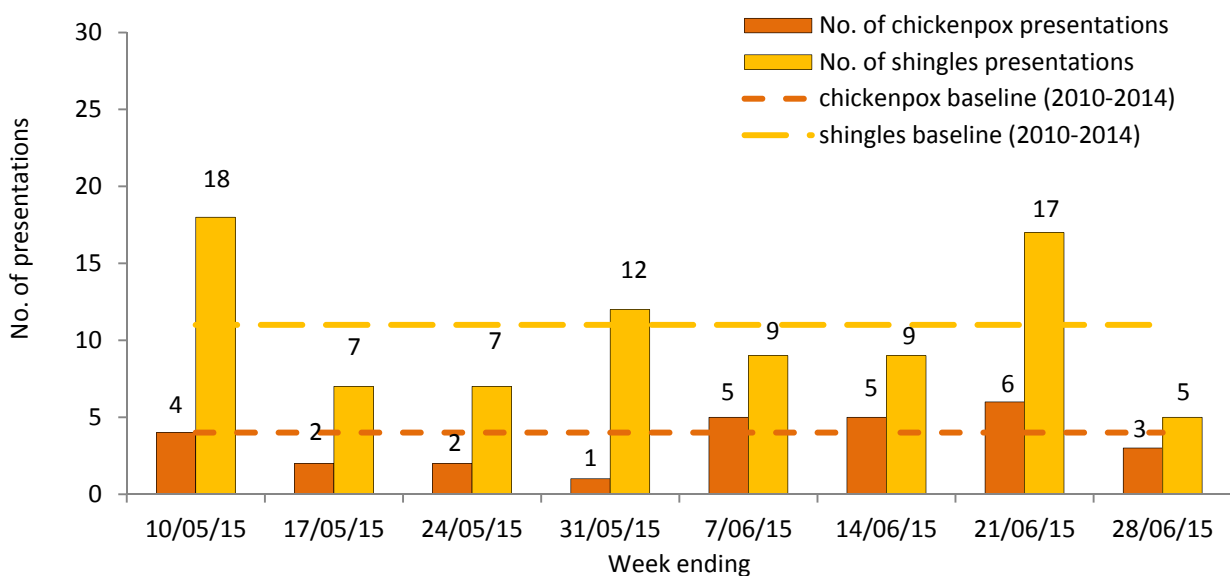


Shingles presentations to sentinel GPs are at baseline level. No chickenpox cases were seen by sentinel GPs this week. No cases of rubella were notified; one possible secondary measles case is under investigation. Several further cases of mumps have been confirmed as part of the outbreak among Aboriginal children, teenagers and young adults in the Kimberley region, including in Broome.

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.

Varicella-Zoster virus ED Presentations



Shingles presentations to sentinel EDs decreased this week and are at baseline level; chickenpox presentations remain near baseline levels.

