



WEEK ENDING 19TH JULY 2015

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Non-influenza virus activity, particularly respiratory syncytial virus (RSV), remains high. Influenza activity, primarily due to influenza B virus, remains moderate in intensity.

- ILI presentations to sentinel general practitioners (GPs) increased this week, but conversely presentations to sentinel emergency departments (EDs) decreased.
- Influenza virus detections and notifications decreased for the second consecutive week, while percent positivity has fluctuated at around 20% over recent weeks.
- Hospitalisations with confirmed influenza increased to 17.5 per 1000 admissions, similar to the average for this week in recent years. Over 60% of influenza admissions are due to influenza B virus.
- Influenza B (68%) and influenza A/H3N2 (29%) viruses remain the dominantly detected subtypes. The influenza B strains currently circulating are around 80% Yamagata lineage, matching the trivalent influenza vaccine strain.
- Non-influenza respiratory virus (particularly RSV) activity remains high.

GASTROENTERITIS

- Gastroenteritis presentations to sentinel GPs and EDs are relatively steady and consistent with levels experienced previously at this time of the year.
- Rotavirus detections remain high. Rotavirus has caused recent outbreaks of gastroenteritis in residential care and childcare settings in metropolitan Perth.

VARICELLA AND VIRAL RASHES

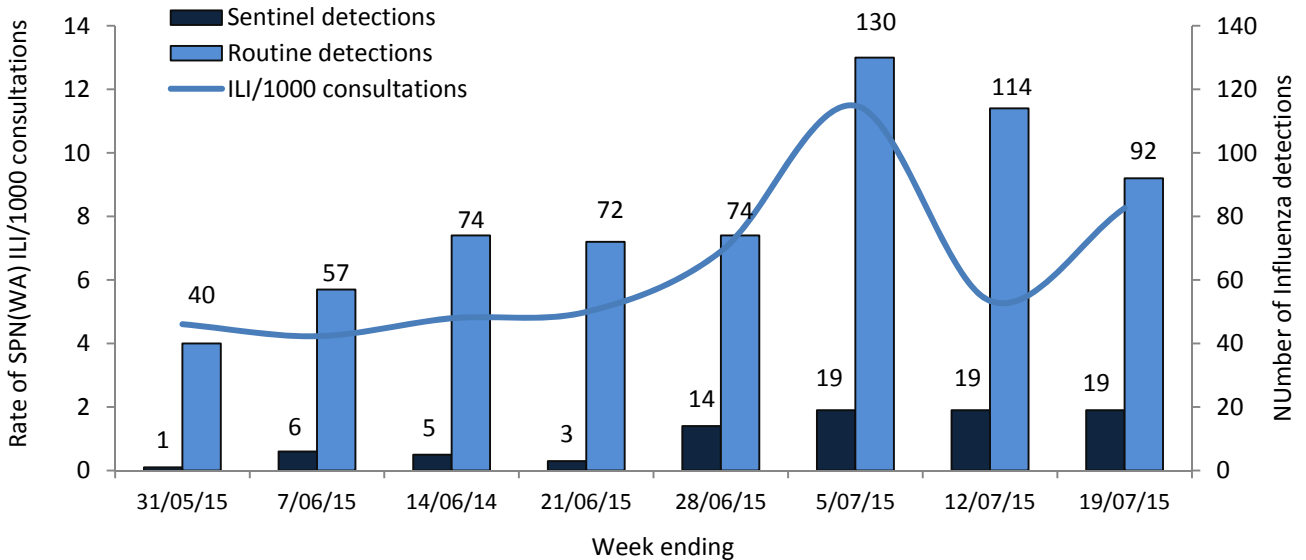
- Chickenpox and shingles presentations to sentinel EDs and GPs are near or below baseline levels.
- No cases of measles or rubella were notified.
- Several further cases of mumps have been confirmed among Aboriginal children, teenagers and young adults in the Kimberley region, including in Broome.

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.

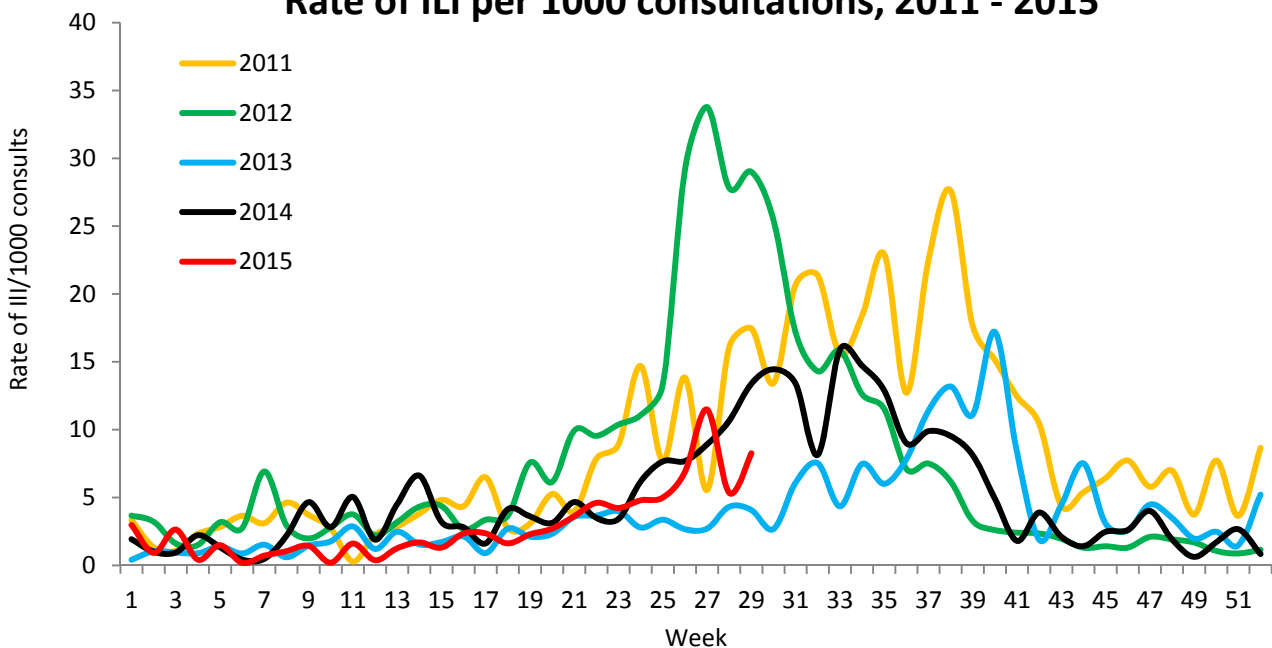
Influenza and Influenza-like Illnesses

Sentinel and Routine Influenza and Influenza-like-Illness detections



The rate of ILI seen at sentinel GPs increased this week, while routine influenza virus detections decreased for the second week in a row, and sentinel site detections remained steady. Of 435 routinely collected specimens, 92 (21%) tested positive for influenza virus; 58 specimens were collected at sentinel GP sites, 19 (33%) of which tested positive for influenza virus.

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

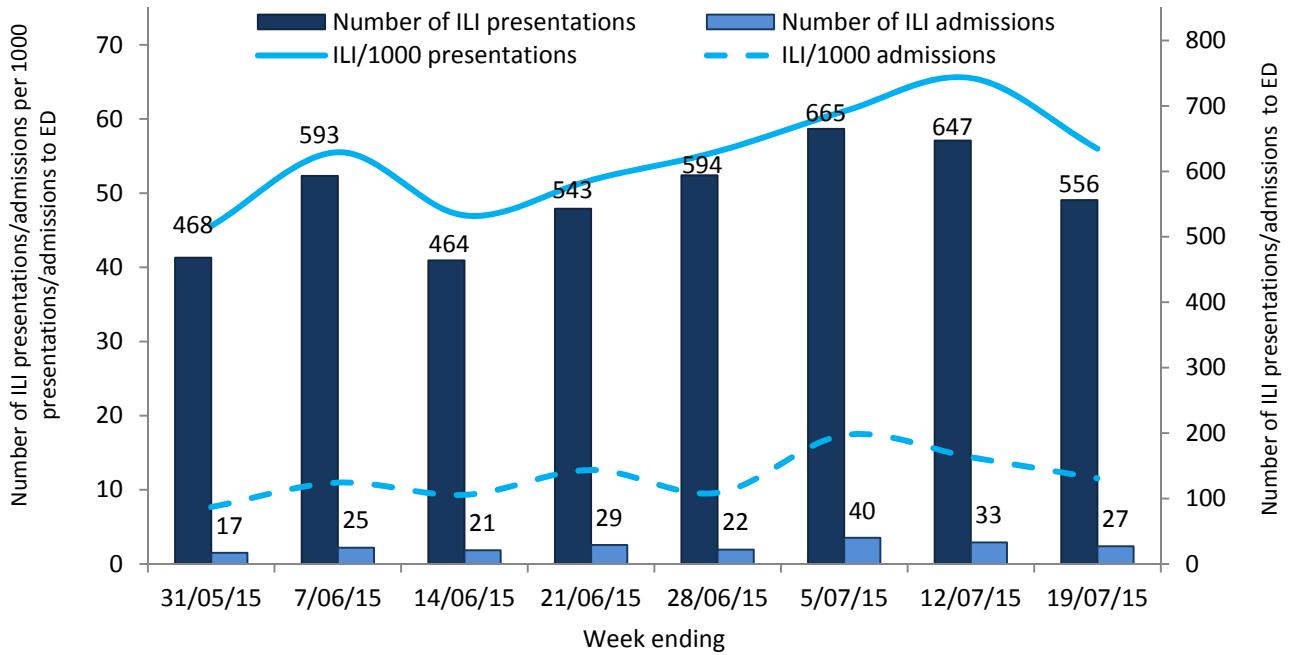


The rate of ILI presentations to SPN(WA) GPs increased this week and is in the mid-range of values seen during this time period in recent years.



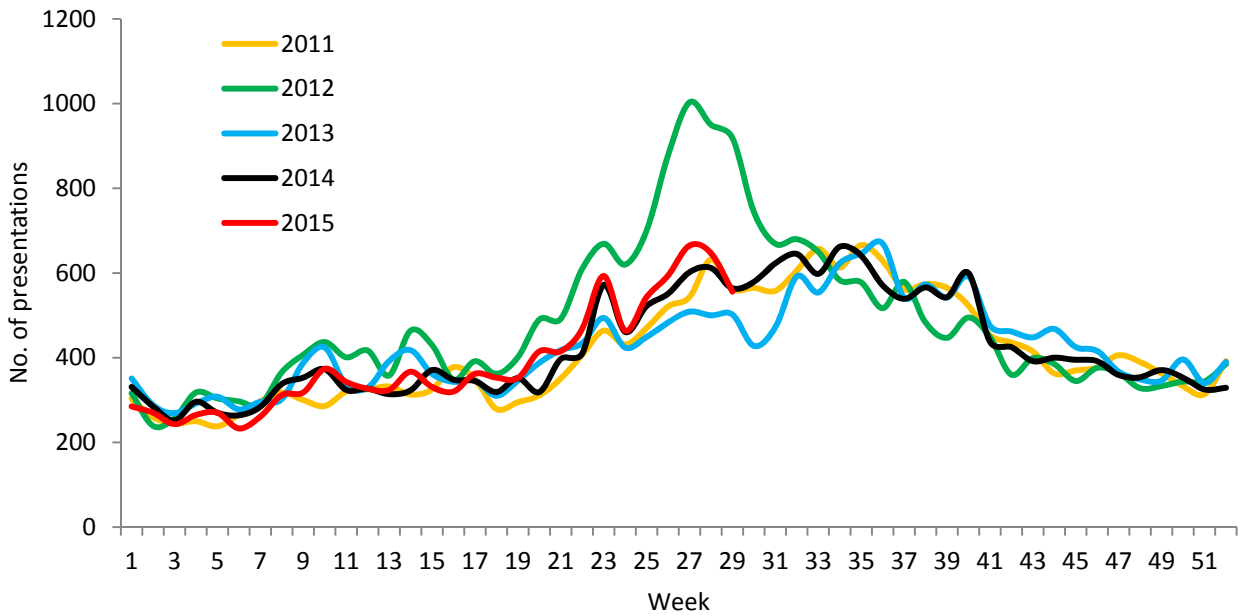
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Viral Respiratory ED Presentations and Admissions



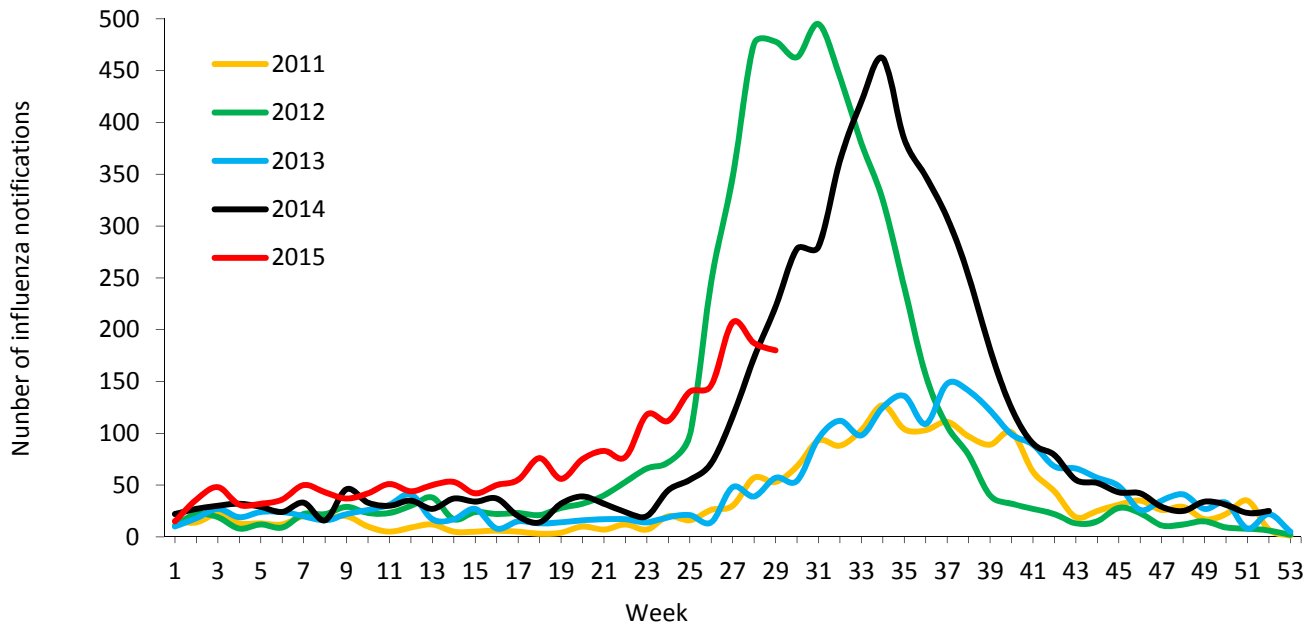
Presentations and admissions to sentinel EDs declined for the second consecutive week.

ED Respiratory Viral Presentations, 2011 - 2015



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

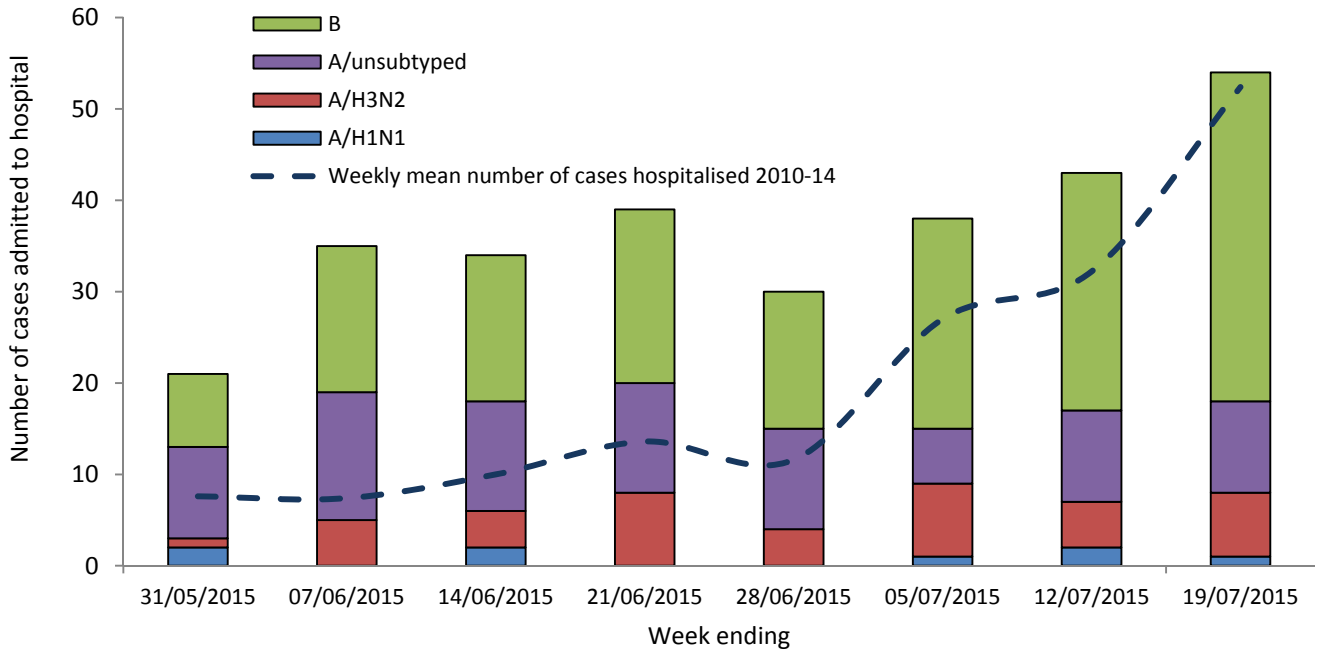
Influenza notifications in Western Australia by week, 2011 to 2015



A total of 180 cases of influenza were notified to the Department of Health this week, declining for the second consecutive week.

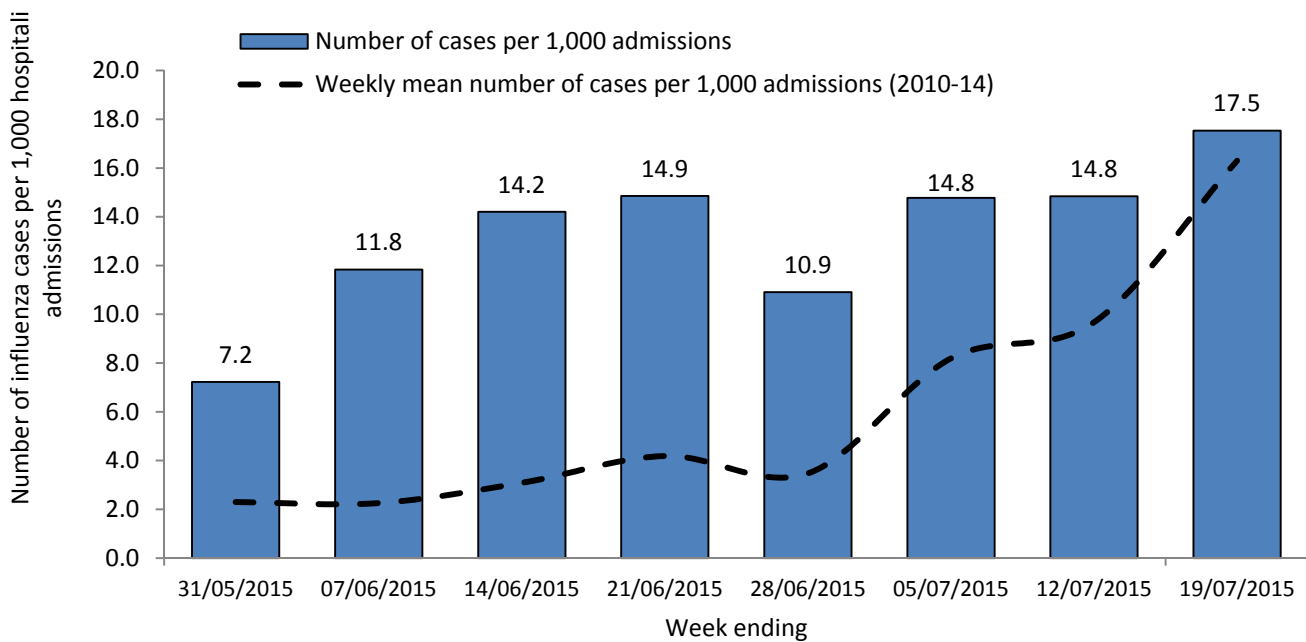
The graph is a summary of all influenza notifications received by the DoH, Western Australia to the end of the current reporting week, for which cases had date of symptom onset or specimen collection between 13/07/2015 and 19/07/2015.

Number of influenza cases hospitalised



The number of influenza cases hospitalised increased; 54 notified cases were hospitalised last week: 36 (67%) with influenza B, 7 (13%) with influenza A/H3N2, 1 (2%) with influenza A/H1N1, and 10 (18%) with influenza A/unsubtyped.

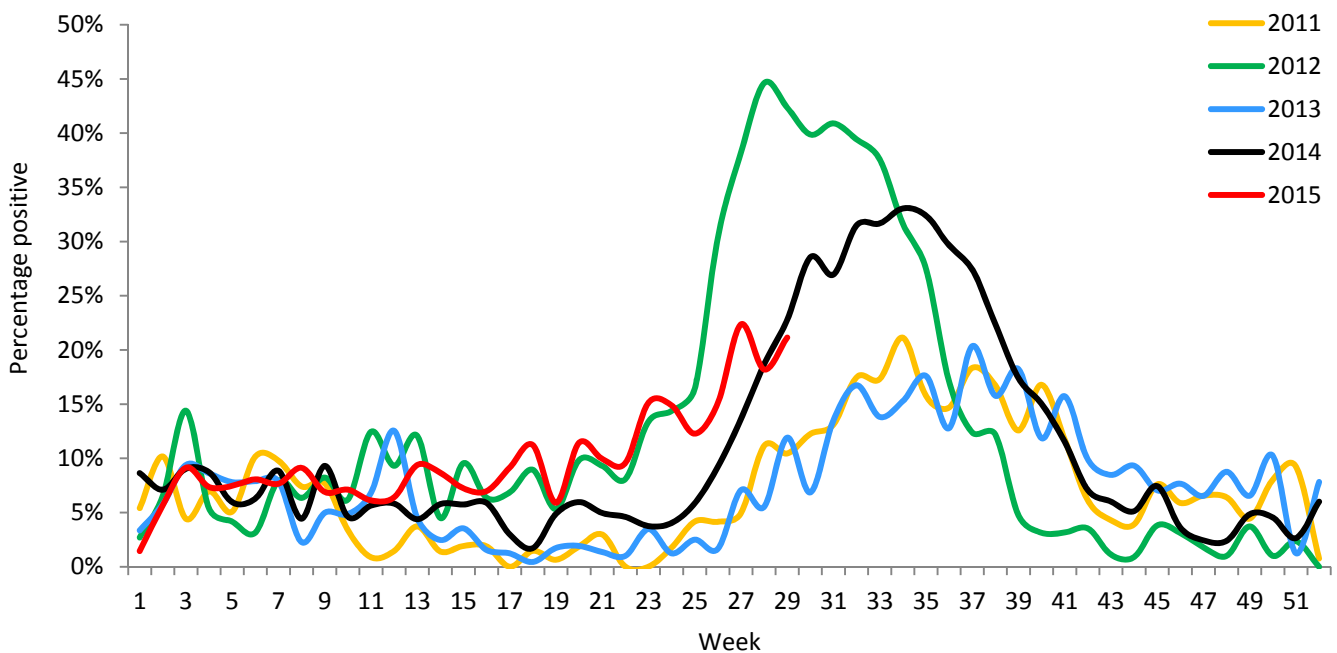
Influenza cases per 1000 hospital admissions



The proportion of hospital admissions notified as having laboratory-confirmed influenza increased this week and is similar to the average rate of hospitalised cases 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. Data for the current reporting week may be incomplete.

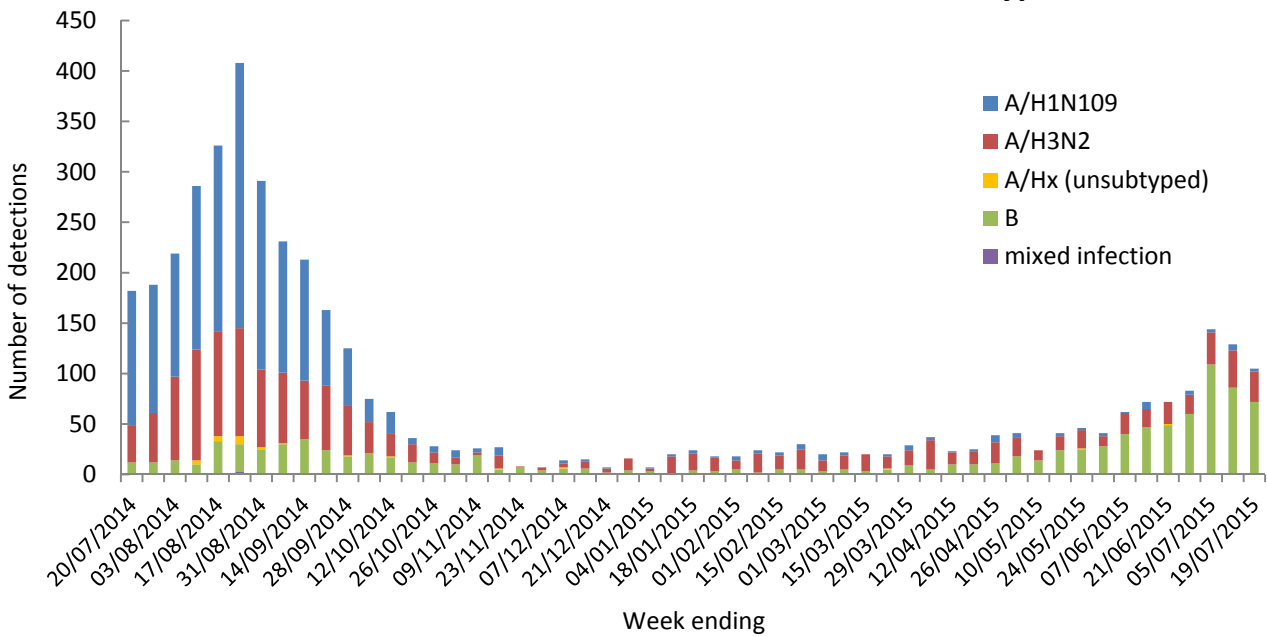
PathWest-QEII-PMH influenza percentage positive 2011-2015



The percentage of specimens tested by PathWest-QEII-PMH positive for influenza virus increased to 21.1% this week, consistent with the percentage positive observed at this time last year.



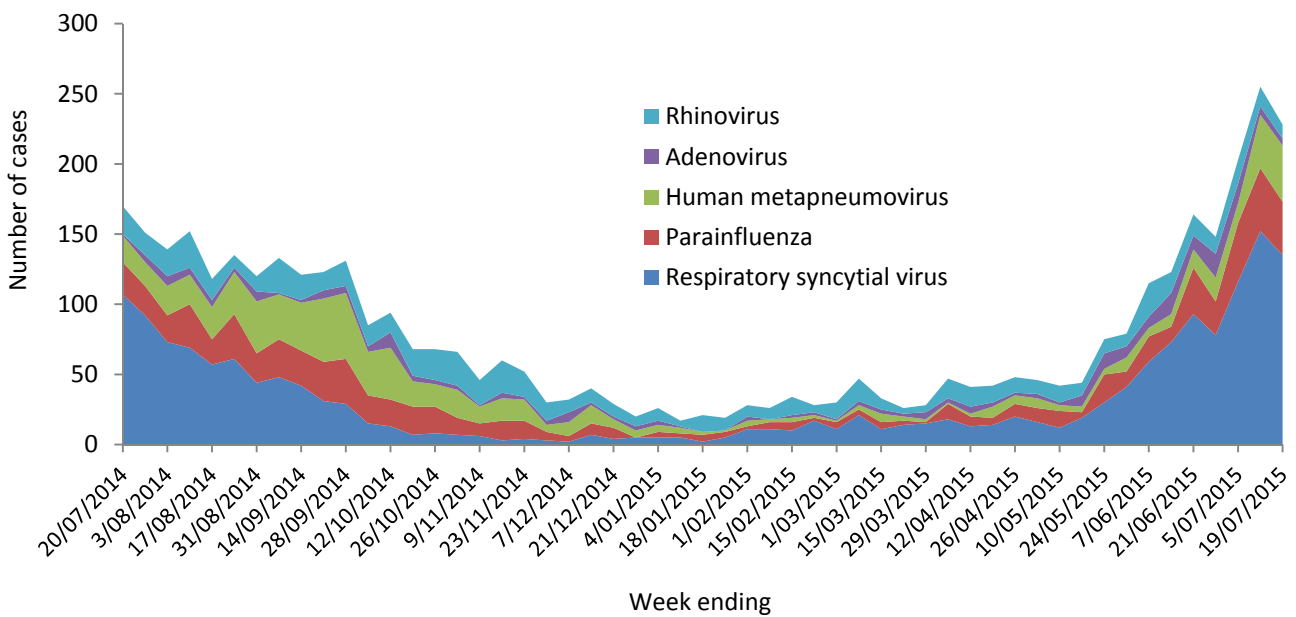
PathWest-QEII-PMH 2014-2015 all influenza subtypes



One hundred and five viruses were subtyped by PathWest, QEII and PMH during this reporting week; 72 (68%) influenza B, 30 (29%) influenza A/H3N2, and 3 (3%) influenza A/H1N1. In the past fortnight around 80% of the influenza B strains circulating in WA have been 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 22nd July 2015. The number subtyped may not always correspond to the number of influenza detections.

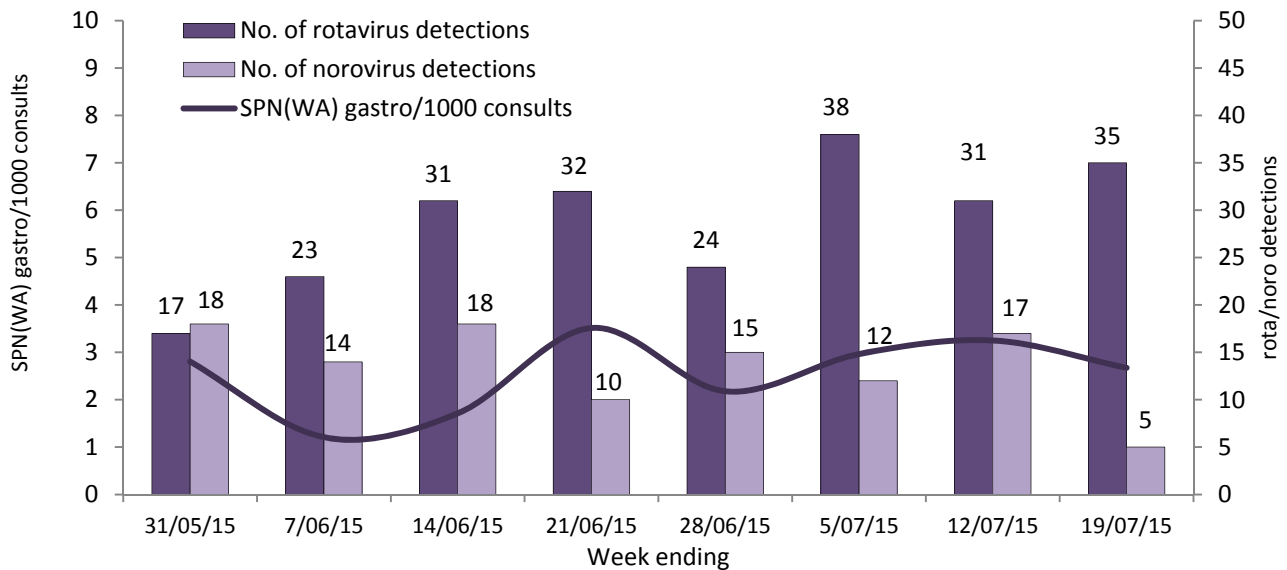
2014-2015 Non-influenza respiratory viruses - QEII and PMH



Non-influenza respiratory virus activity declined slightly this week, but overall remains high, particularly respiratory syncytial virus activity.

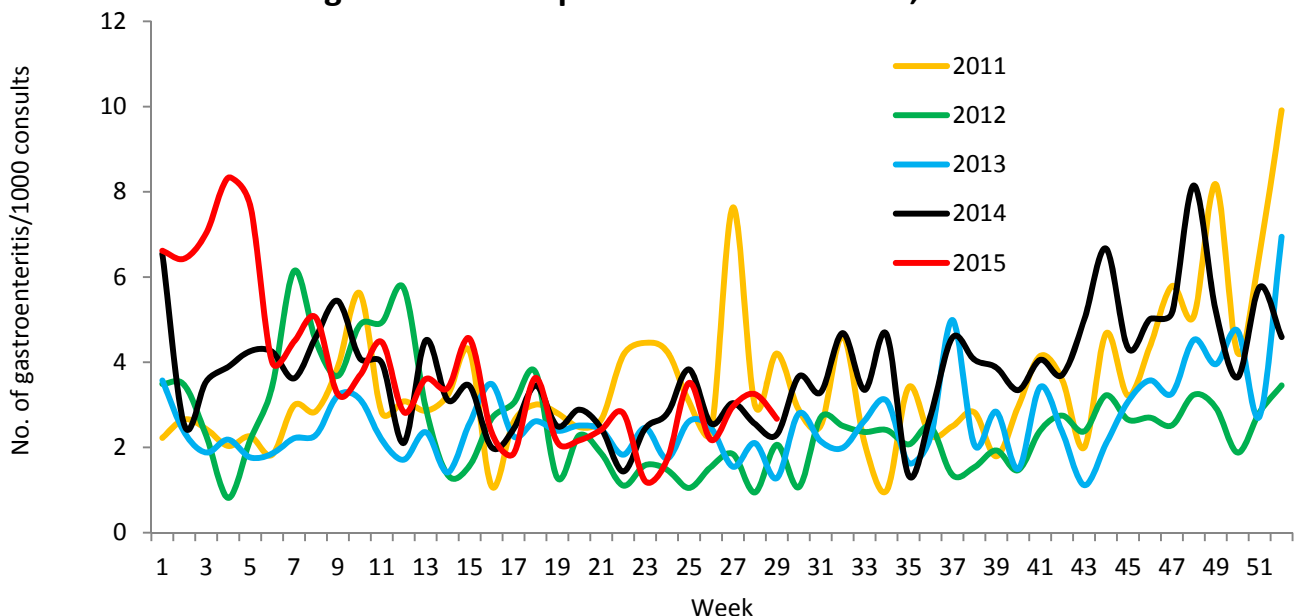
Gastroenteritis

Gastroenteritis virus detections and GP Presentations



Gastroenteritis presentations to SPN(WA) remains near 3 cases per 1,000 consultations. Norovirus activity remains relatively low, but rotavirus detections remain high. Recently, several gastroenteritis outbreaks in residential care and childcare settings have been caused by rotavirus.

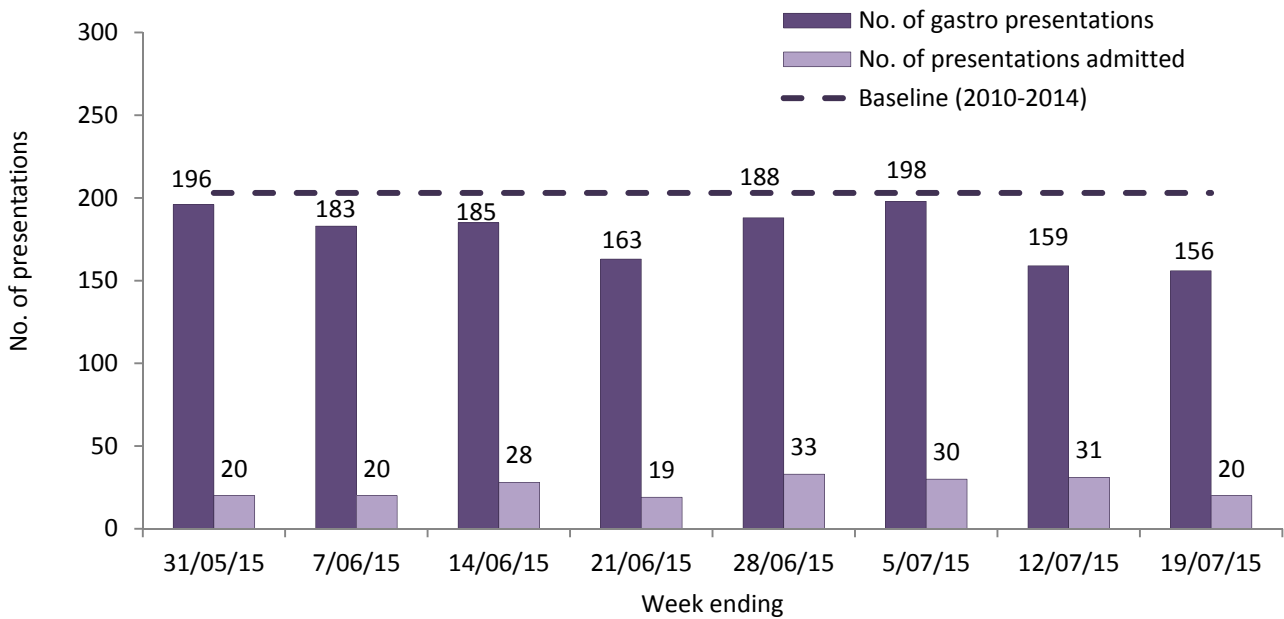
Sentinel Practitioner's Network of WA SPN(WA) - GP surveillance Rate of gastroenteritis per 1000 consultations, 2011 - 2015



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

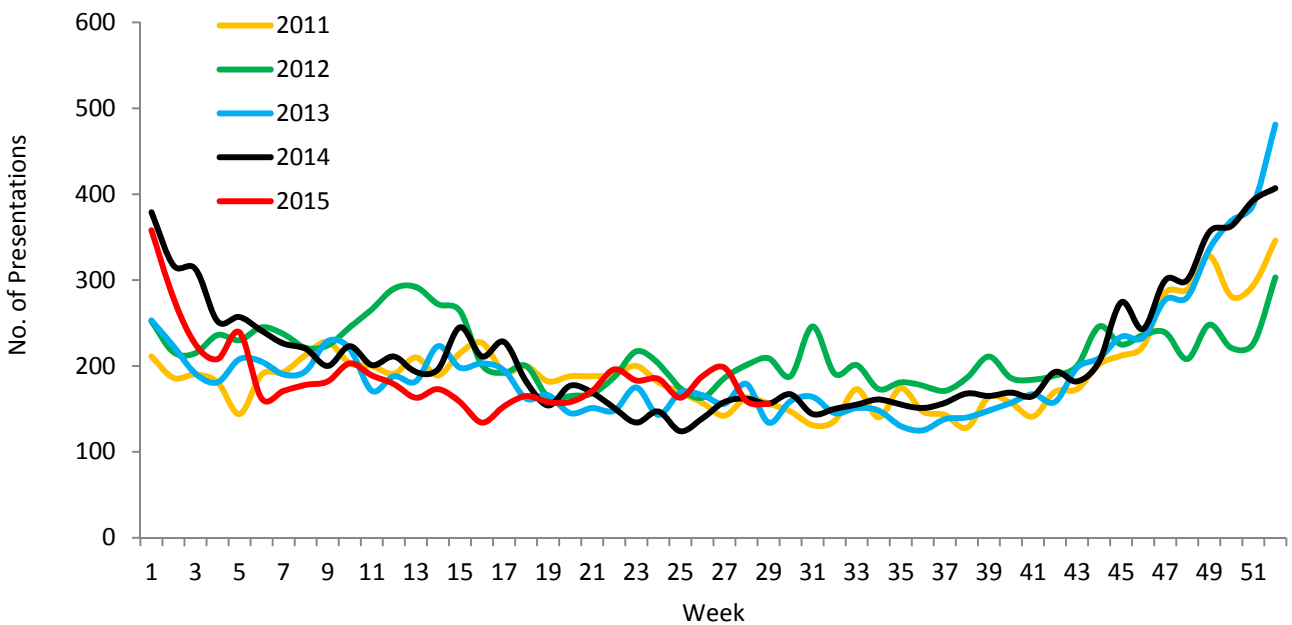
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations were calculated using the mean of weekly EDIS data from week 1, 2011 to week 52, 2014.

Gastroenteritis ED Presentations



Gastroenteritis presentations to sentinel EDs remain below baseline level.

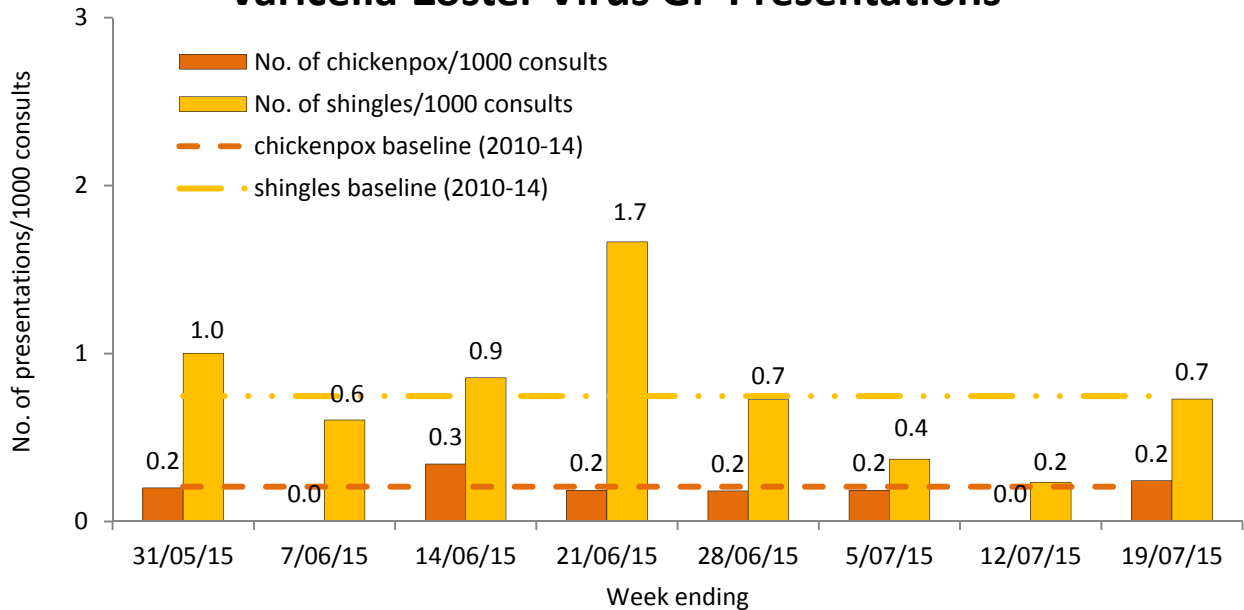
ED Gastroenteritis Presentations 2011 - 2015



The number of gastroenteritis presentations to sentinel EDs remains consistent with values seen during this week in recent years.

Viral Rashes

Varicella-Zoster Virus GP Presentations

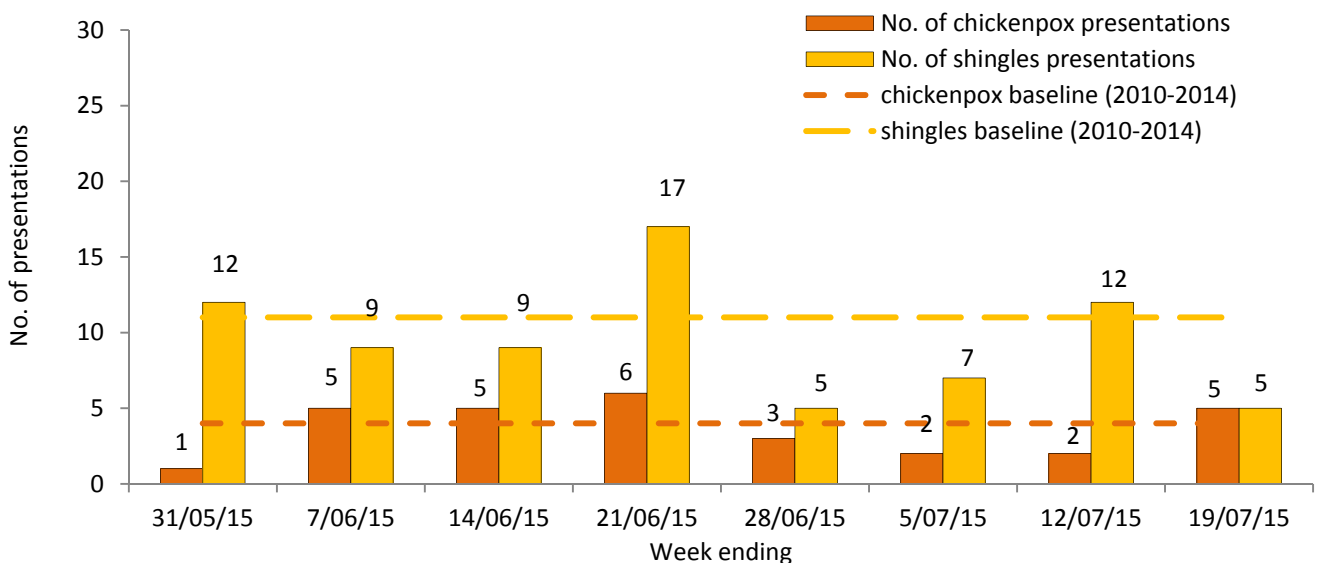


Shingles and chickenpox presentations to sentinel GPs are near baseline levels. No cases of measles or rubella were notified. Several further cases of mumps have been confirmed as part of the outbreak among Aboriginal children, teenagers and young adults in the Kimberley region, including in Broome.

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 and chickenpox presentations to sentinel EDs are near or below baseline levels.

