



WEEK ENDING 7<sup>TH</sup> JUNE 2015

## KEY POINTS

### INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

**Summary:** Non-influenza respiratory virus detections, particularly respiratory syncytial virus, continue to increase. Indicators of influenza virus activity are variable, and while no upward trend is clearly apparent, we may be nearing the beginning of the influenza season.

- ILI presentations and admissions to sentinel emergency departments (EDs) increased this week, whereas ILI presentations to sentinel general practitioners (GPs) decreased and remain low.
- Influenza virus detections are relatively steady, with influenza B and influenza A/H3N2 comprising 98% of influenza viruses subtyped.
- Non-influenza respiratory virus detections continue to increase, particularly respiratory syncytial virus activity.

### GASTROENTERITIS

- Gastroenteritis presentations to sentinel GPs and EDs declined this week. Rotavirus detections have increased over recent weeks, while norovirus activity is variable.

### VARICELLA AND VIRAL RASHES

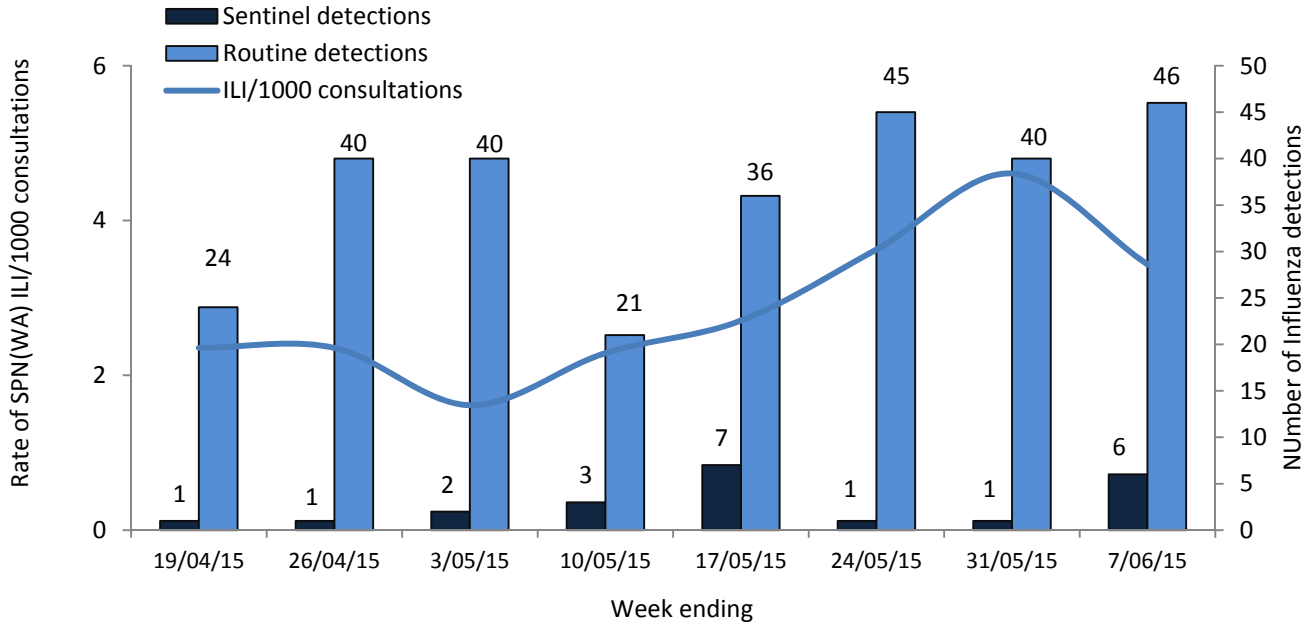
- Shingles and chickenpox presentations to sentinel EDs and GPs are near or below baseline levels.
- No cases of rubella were confirmed this week, but one case of measles was confirmed in a young adult infected in Bali.
- Several additional cases of mumps have been confirmed as part of an outbreak in highly vaccinated Aboriginal children in the Kimberley region, with spread to boarding schools in Perth and Esperance.

Current and archived issues of Virus Watch [http://www.public.health.wa.gov.au/3/487/3/virus\\_watch.pm](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.*

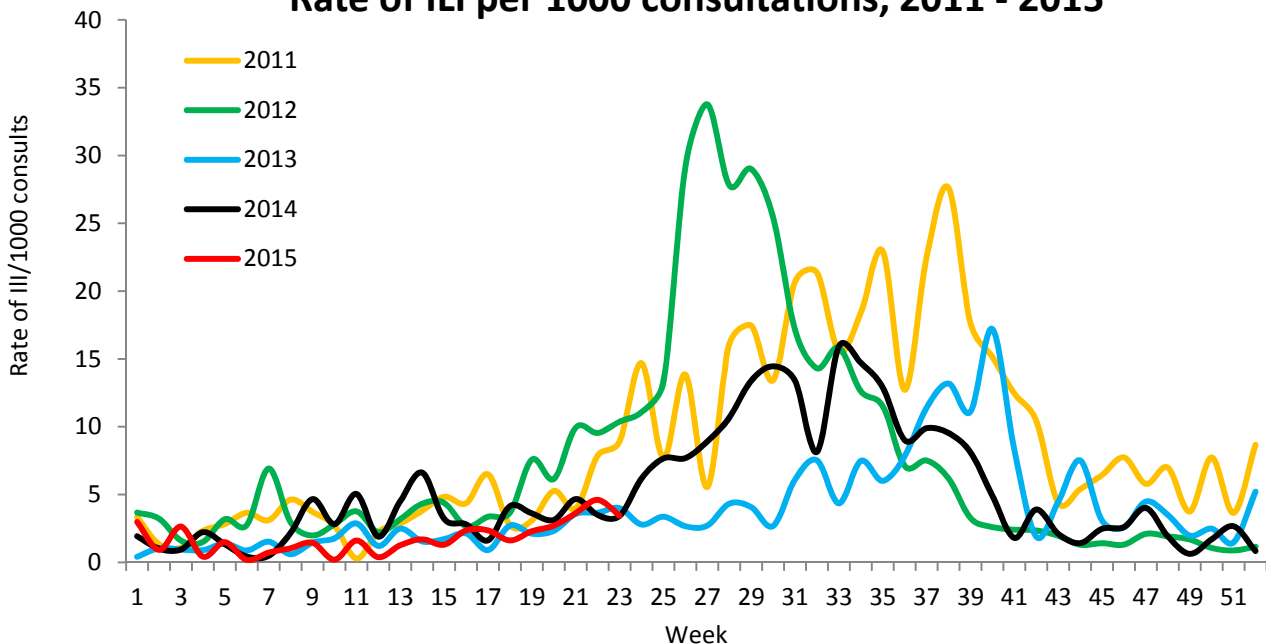
# Influenza and Influenza-like Illnesses

## Sentinel and Routine Influenza and Influenza-like-Illness detections



The rate of ILI seen at sentinel GPs decreased slightly this week. Of 348 routinely collected specimens, 46 (13%) tested positive for influenza virus; 24 specimens were collected at sentinel GP sites, 6 (25%) of which tested positive for influenza virus.

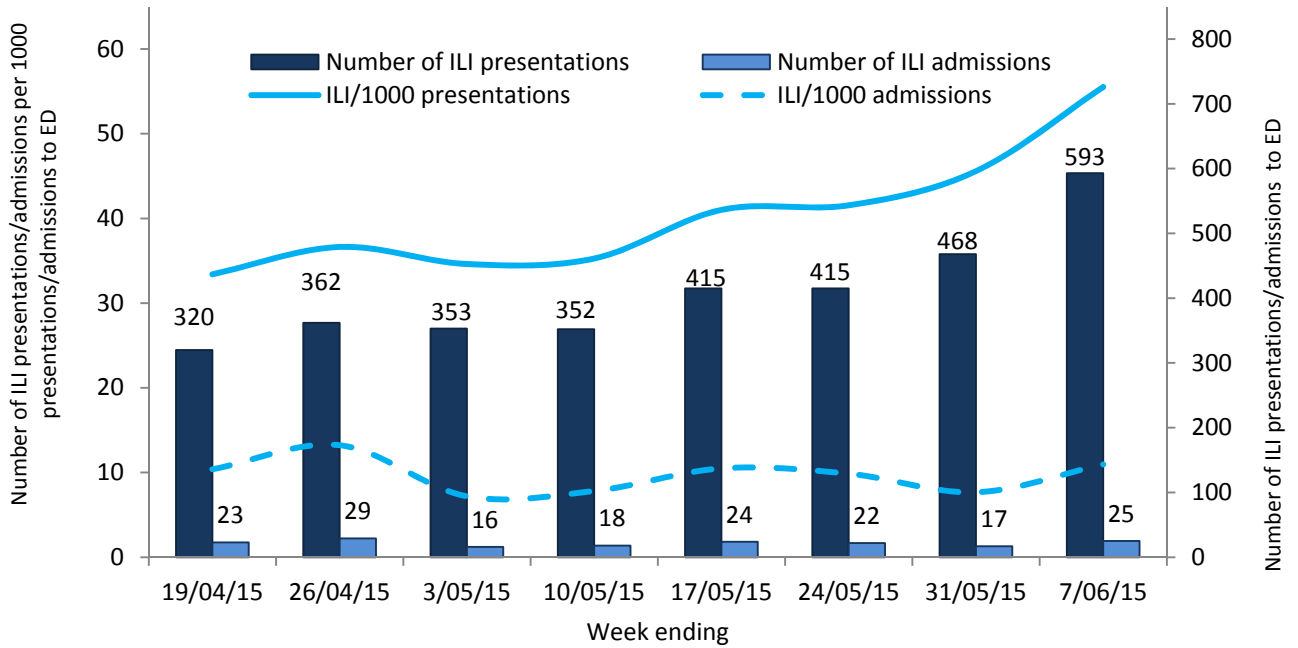
## Sentinel Practitioner Network of WA - GP surveillance Rate of ILI per 1000 consultations, 2011 - 2015



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

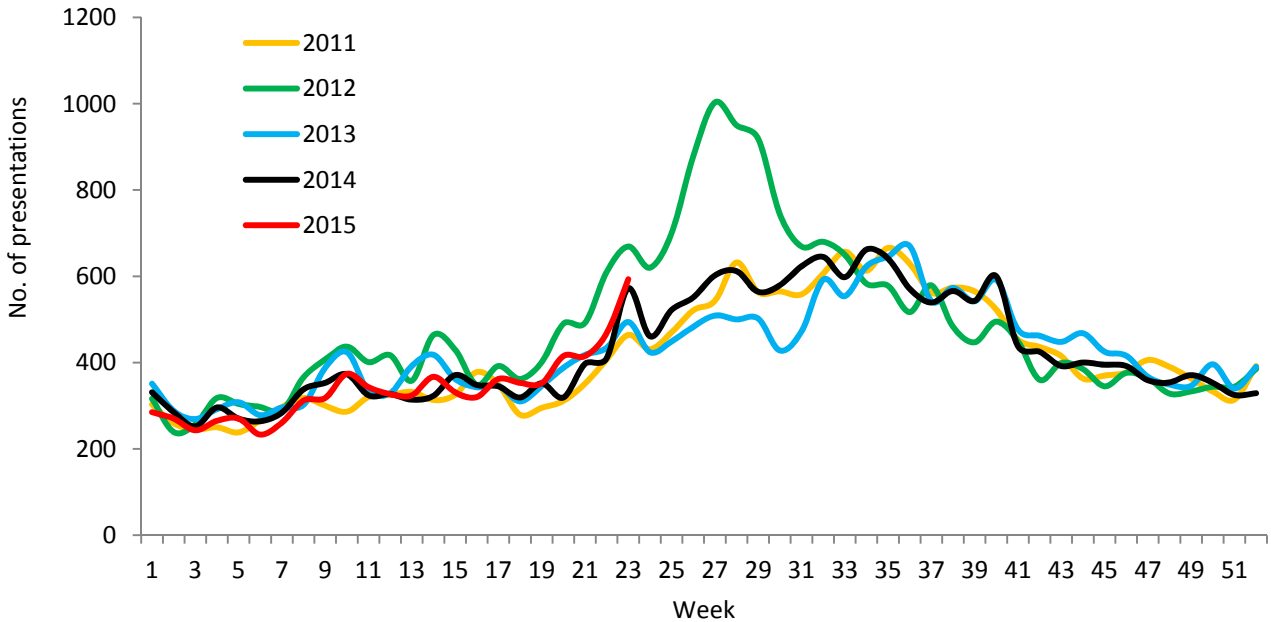
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

### Viral Respiratory ED Presentations and Admissions



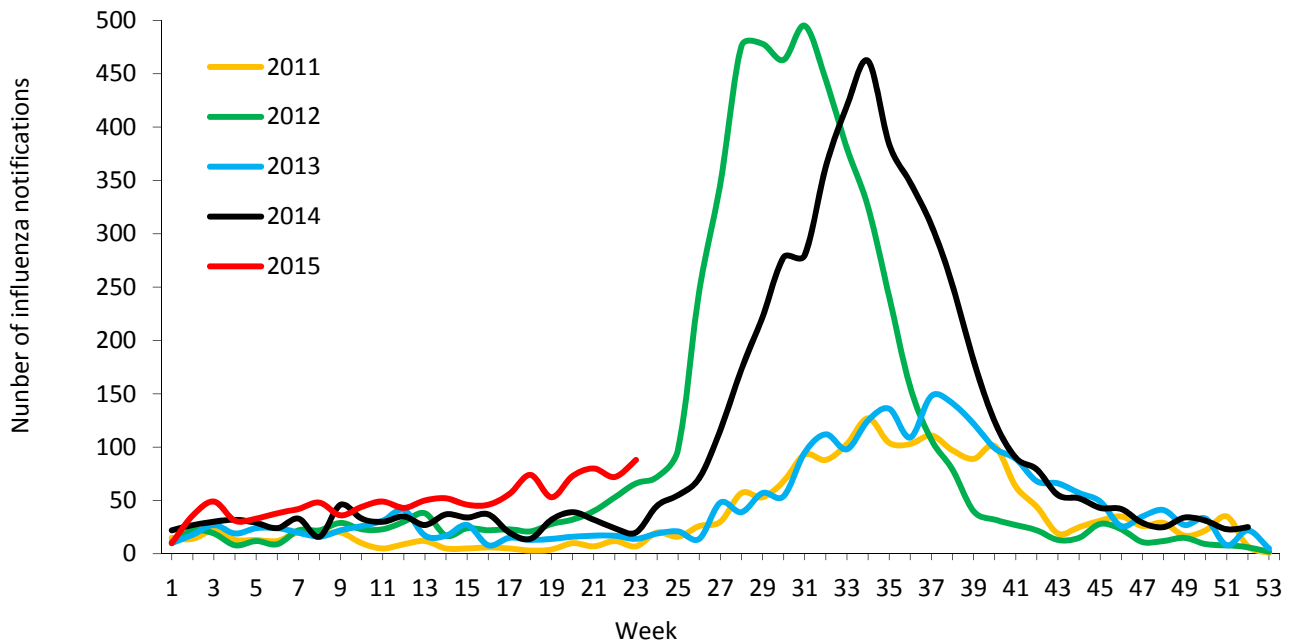
**Presentations and admissions to sentinel EDs for viral respiratory illness increased this week.**

### ED Respiratory Viral Presentations, 2011 - 2015



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

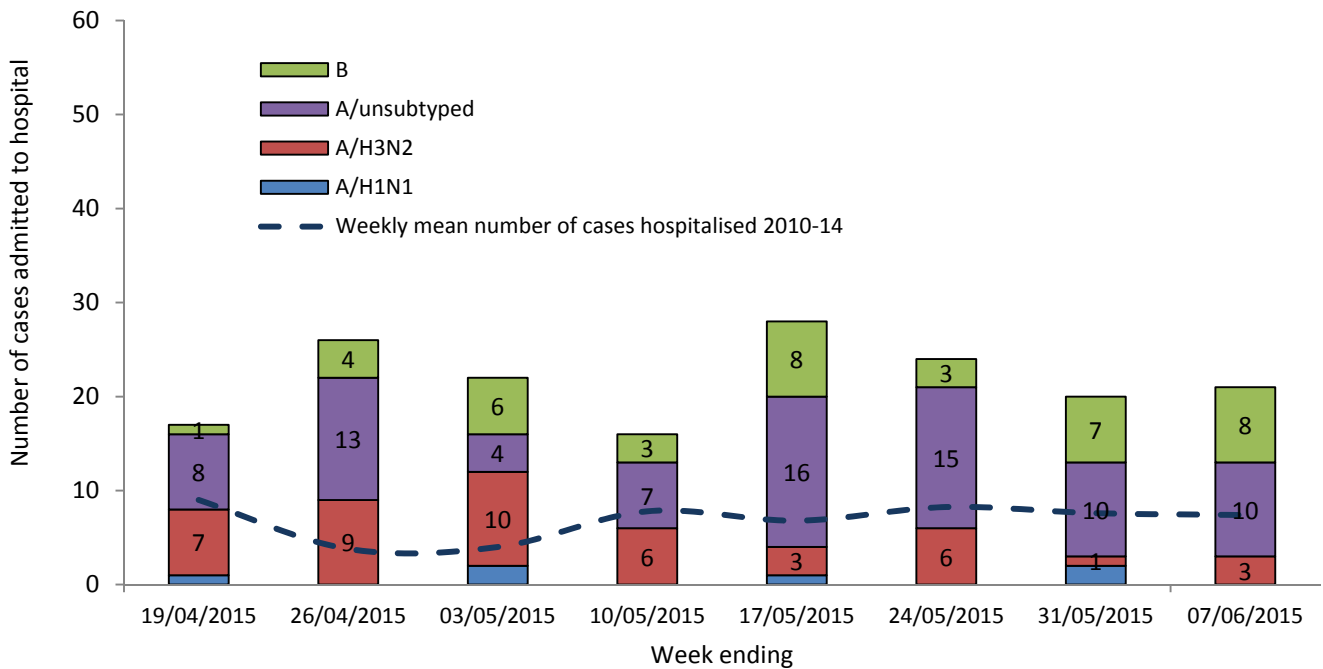
### Influenza notifications in Western Australia by week, 2011 to 2015



**Influenza notifications received by the Department of Health increased this week and are higher than previous years for this time period. There were 88 notifications for influenza this week.**

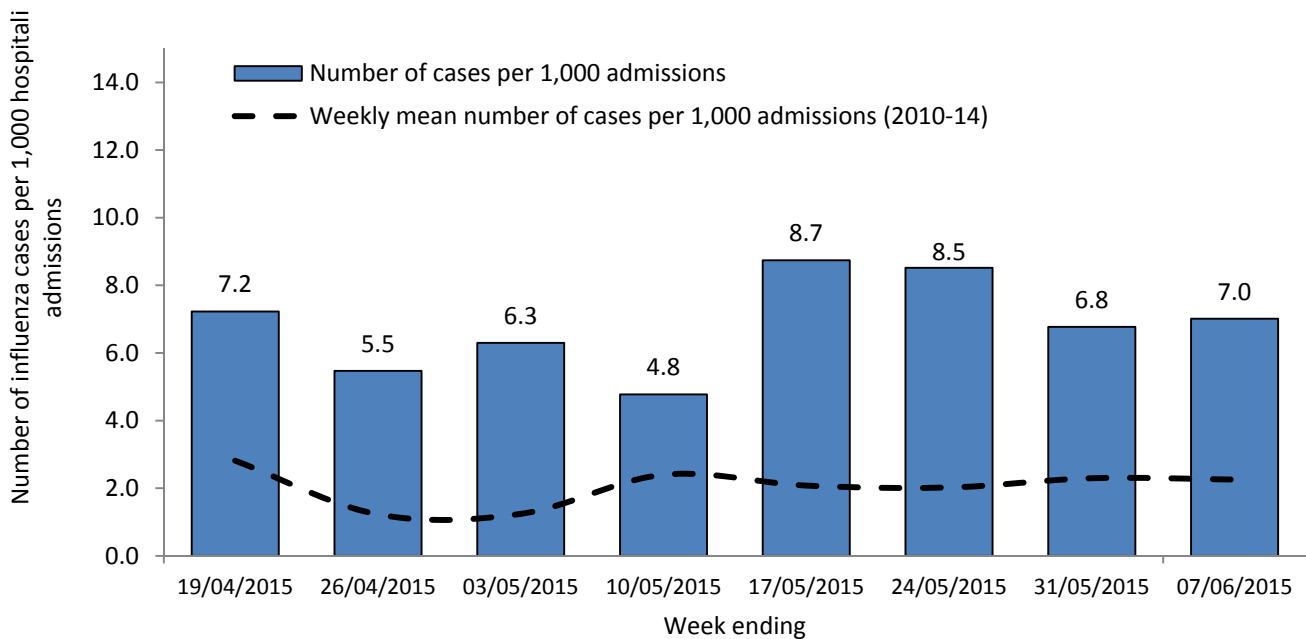
The graph is a summary of all influenza notifications received by the DoH, Western Australia to the end of the current reporting week, for which cases had date of symptom onset or specimen collection between 01/06/2015 and 07/06/2015.

### Number of influenza cases hospitalised



**Twenty one notified influenza cases were hospitalised in the past week; 3 (14%) with influenza A/H3N2, 10 (48%) with influenza A/untsubtyped and 8 (38%) with influenza B.**

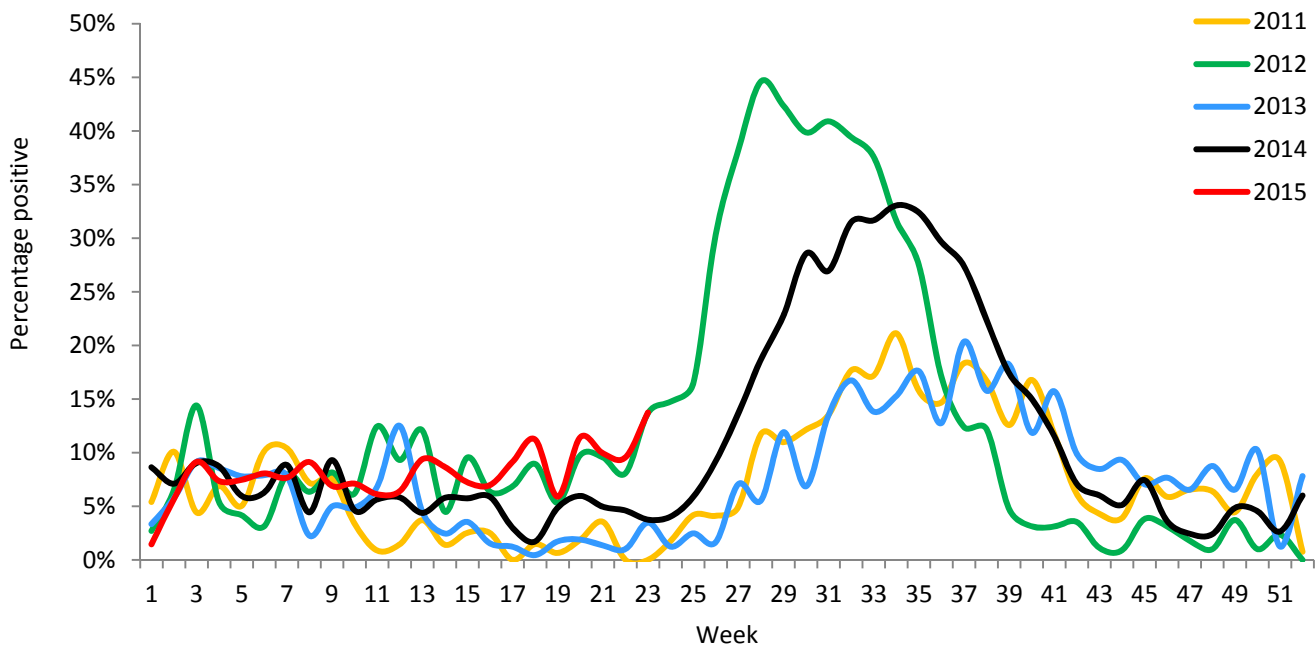
## Influenza cases per 1000 hospital admissions



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.

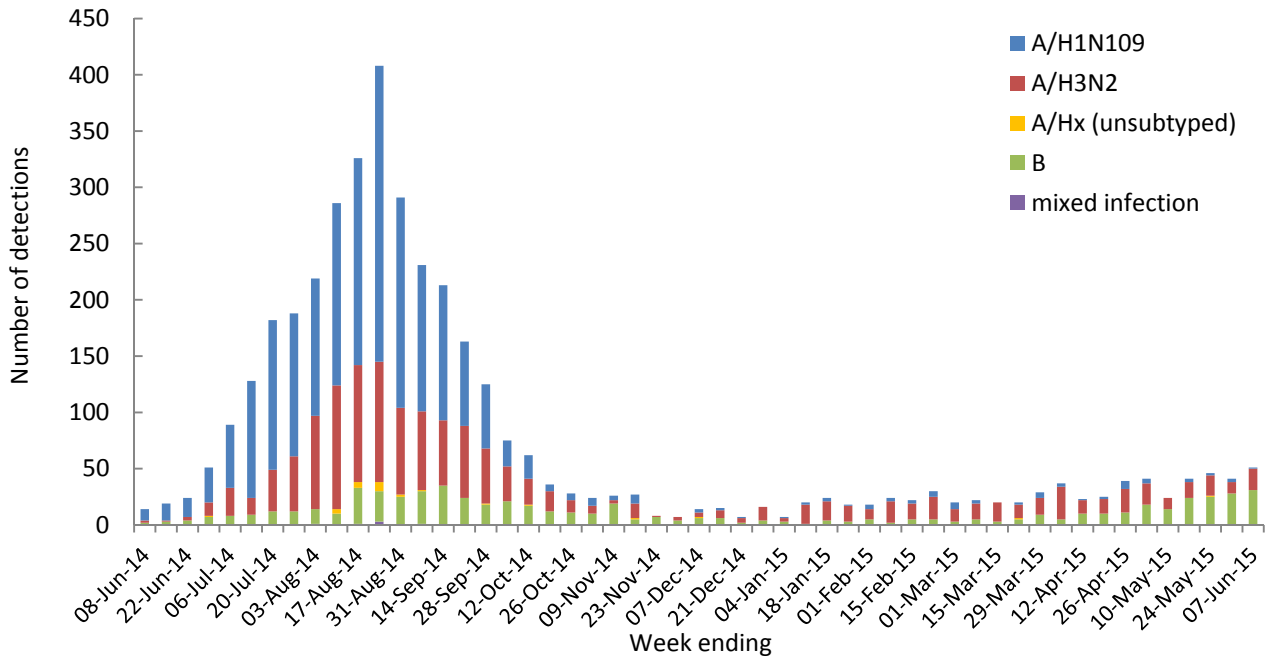
## PathWest-QEII-PMH influenza percentage positive 2011-2015



Among samples tested at PathWest this week, 13.7% were positive for influenza virus, which is at the upper margin of levels for this time period in recent years.



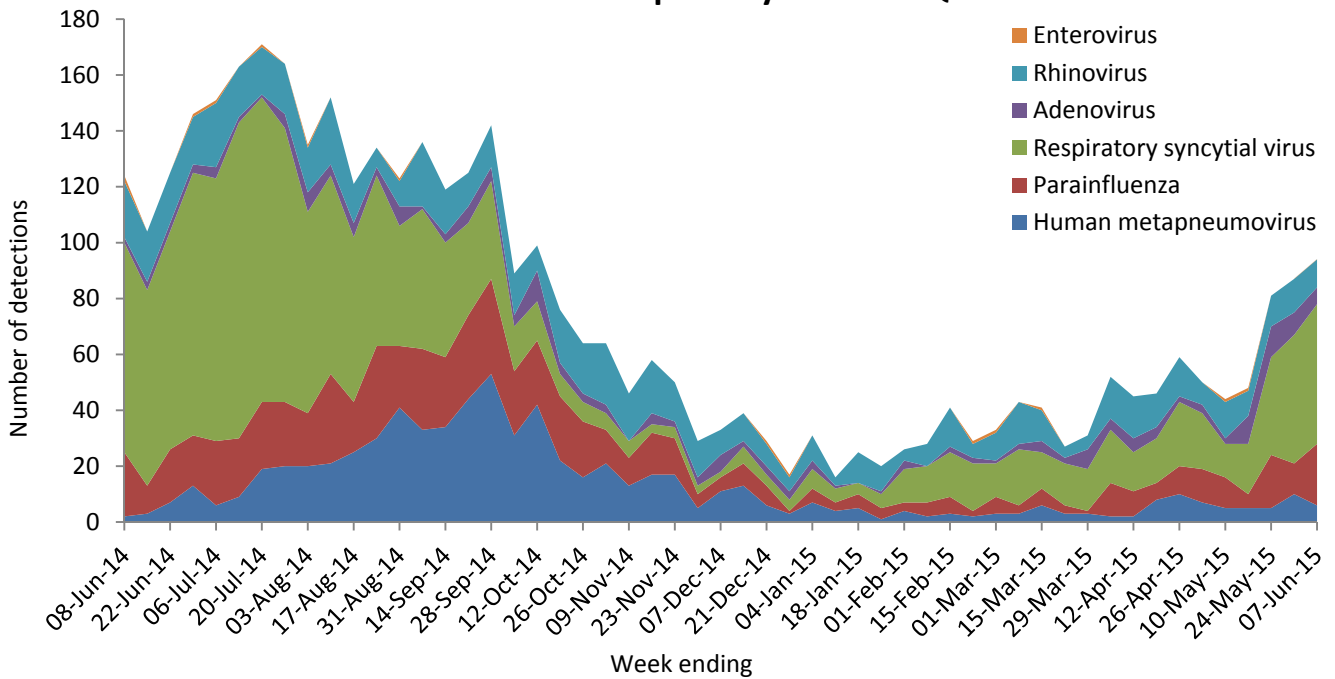
### PathWest-QEII-PMH 2014-2015 all influenza subtypes



**Fifty one influenza viruses were subtyped by PathWest, QEII and PMH during this reporting week; 19 (37%) were influenza A/H3N2, 1 (2%) were influenza A/H1N1, and 31 (61%) 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 10<sup>th</sup> June 2015. The number subtyped may not always correspond to the number of influenza detections.

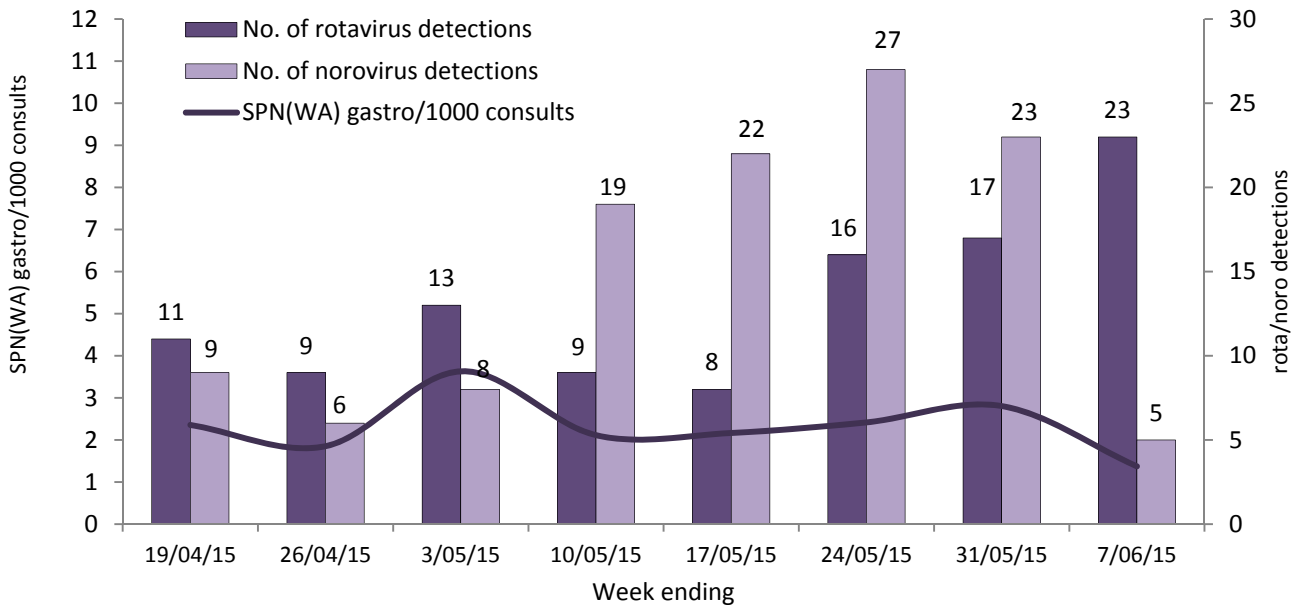
### 2014-2015 Non-influenza respiratory viruses - QEII and PMH



**Overall, non-influenza respiratory virus activity increased this week, particularly respiratory syncytial virus activity.**

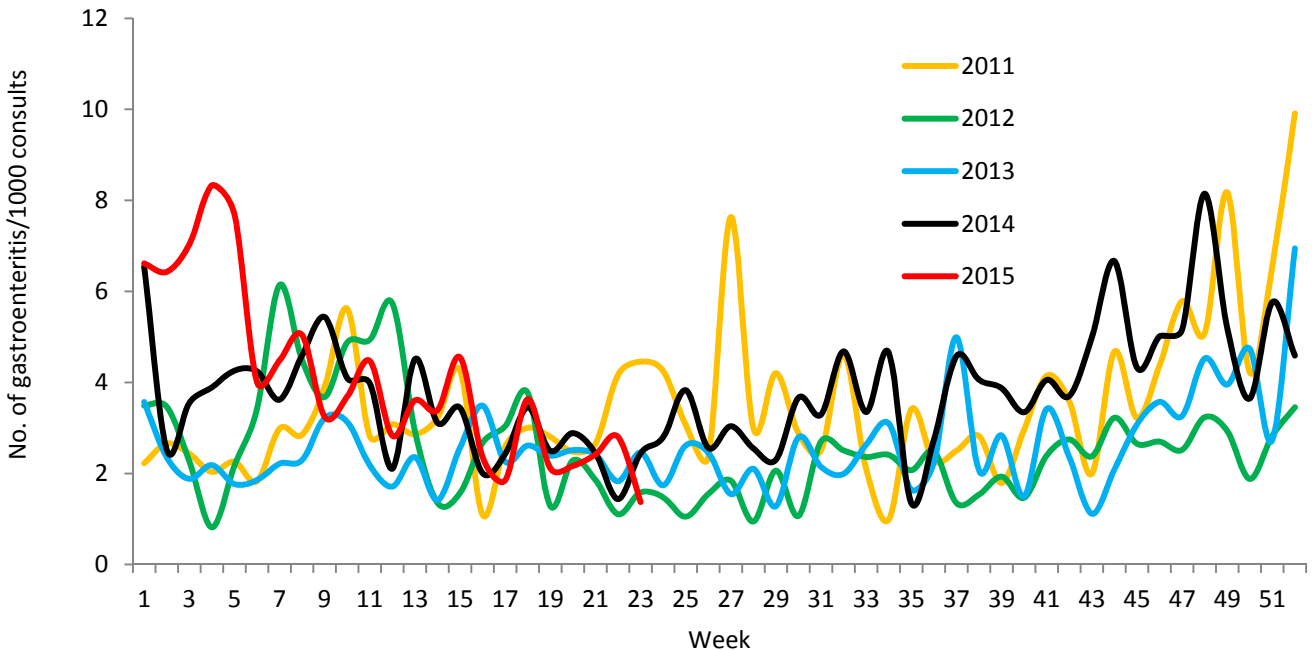
# Gastroenteritis

## Gastroenteritis GP Presentations



Gastroenteritis presentations to SPN(WA) decreased to 1 presentation per 1,000 consultations. Norovirus detections decreased; rotavirus detections increased this week.

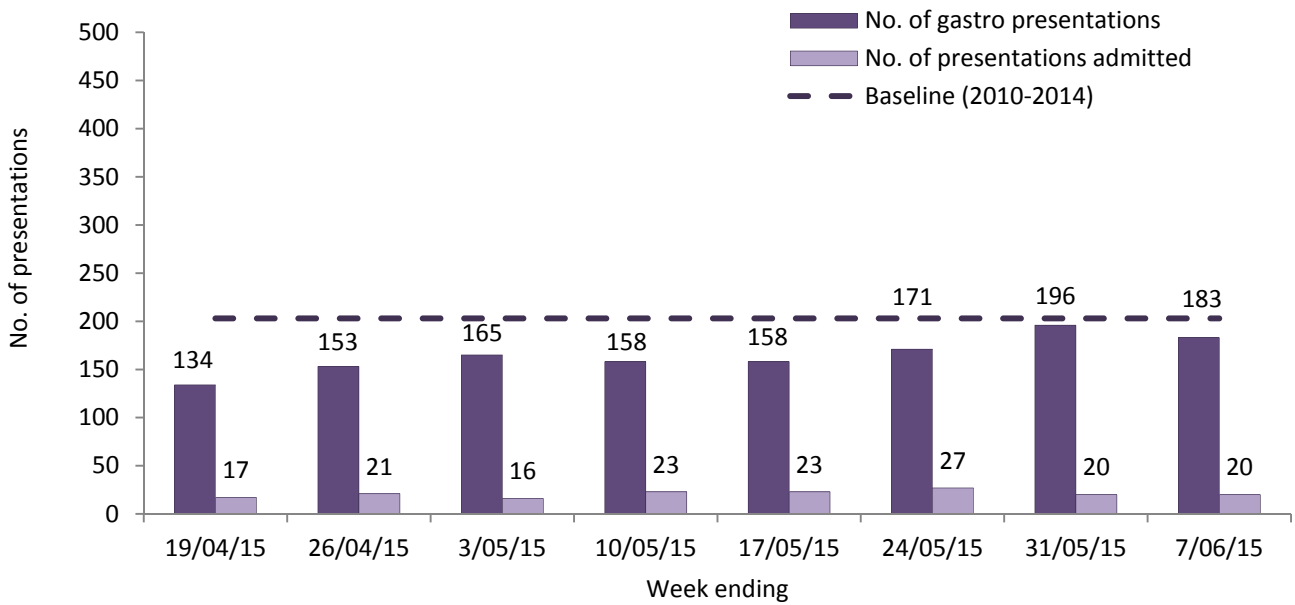
## Sentinel Practitioner's Network of WA SPN(WA) - GP surveillance Rate of gastroenteritis per 1000 consultations, 2011 - 2015



The rate of gastroenteritis presentations to sentinel GPs decreased this week and is lower than levels of presentations seen during this time period in recent years.

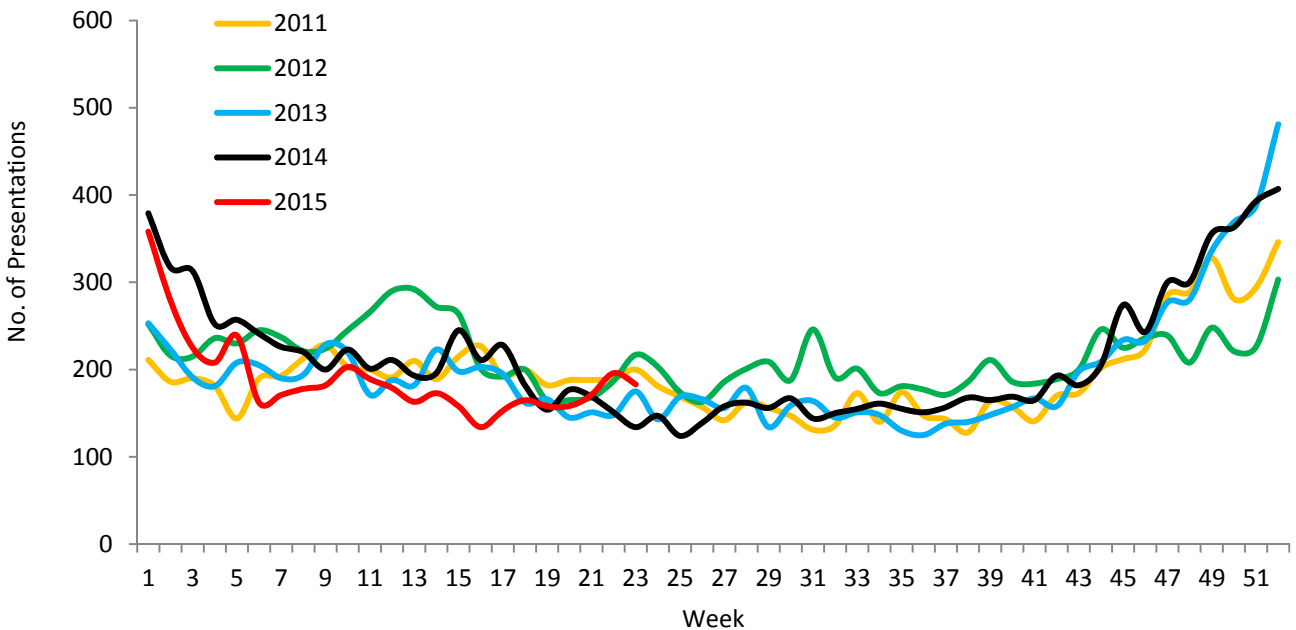
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations were calculated using the mean of weekly EDIS data from week 1, 2011 to week 52, 2014.

## Gastroenteritis ED Presentations



**Gastroenteritis presentations to sentinel EDs remain below baseline level.**

## ED Gastroenteritis Presentations 2011 - 2015

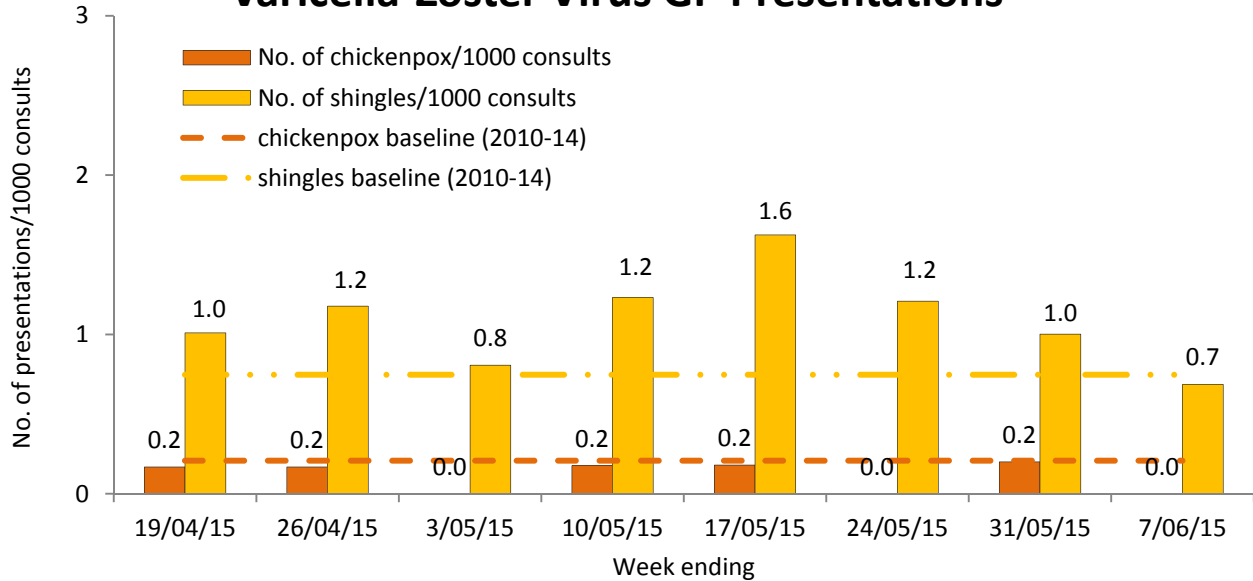


**The number of gastroenteritis presentations to sentinel EDs is within the expected range of values for this time period.**



# Viral Rashes

## Varicella-Zoster Virus GP Presentations

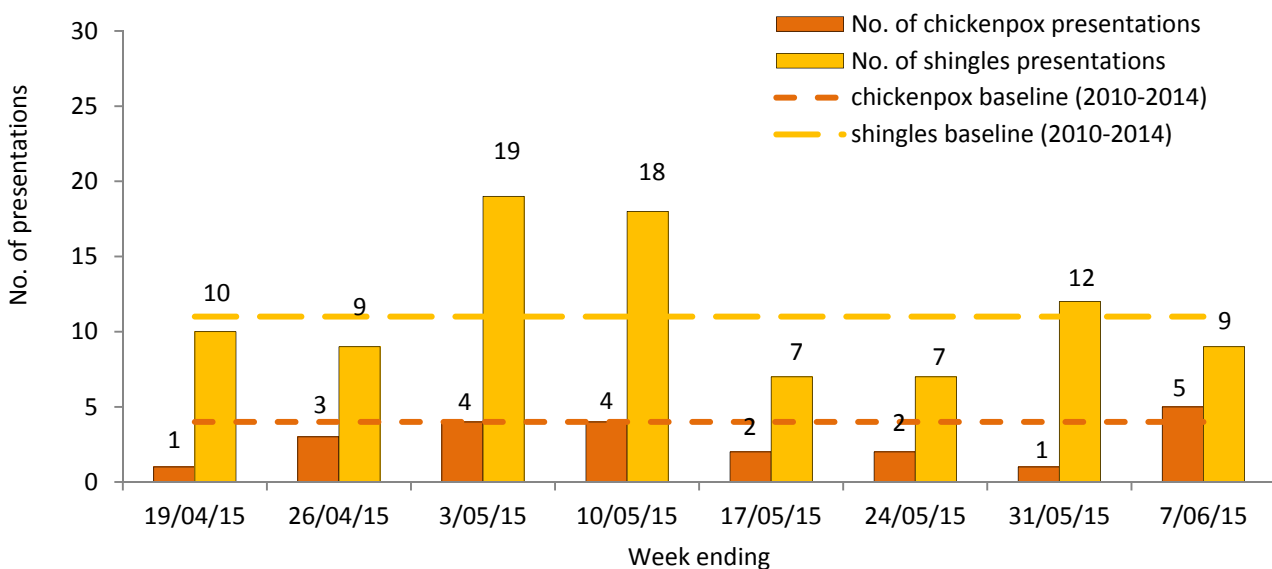


**Shingles presentations to sentinel GPs decreased below baseline level, and no chickenpox cases were reported this week. No rubella cases were reported this week. One case of imported measles was confirmed in a young adult who was infected in Bali. Several additional cases of mumps have been confirmed, as part of a continuing outbreak originating in highly vaccinated Aboriginal children in the Kimberley region.**

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



**Chickenpox and shingles presentations to sentinel EDs are near baseline levels this week.**

