



WEEK ENDING 30TH JUNE 2019

KEY POINTS

INFLUENZA AND INFLUENZA-LIKE ILLNESSES (ILI)

Summary: Indicators of influenza activity decreased this week following sharp increases since early May, but remain well above levels usually reported at the peak of the influenza season in WA.

- ILI activity at sentinel GPs and EDs remains well above levels normally reported during influenza season.
- PathWest influenza detections and test percent positivity continue to be above levels usually seen at this time of year.
- Influenza A/H3N2 comprised the largest proportion of influenza detections at Pathwest this week (52%) followed by influenza A/not subtyped* (31%), and influenza B (17%).
- Overall non-influenza activity decreased this week, mostly due to a decrease in RSV detections.

GASTROENTERITIS

- The number of gastroenteritis presentations to sentinel EDs is in the higher range of values normally reported at this time of year.
- PathWest laboratory detections of norovirus and rotavirus remain at low levels.

OTHER VACCINE-PREVENTABLE DISEASES

- **Shingles and chickenpox:** Chickenpox and shingles activity at sentinel EDs was above baseline levels this week.
- **Measles:** No measles cases confirmed this week.
- **Mumps:** One mumps case notified this week.
- **Rubella:** No rubella cases notified this week.
- **Invasive meningococcal disease (IMD):** One meningococcal serogroup B case notified this week.

Current and archived issues of Virus Watch http://ww2.health.wa.gov.au/Articles/F_I/Infectious-disease-data/Virus-Watch

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. All figures and data were accurate at time of publication, but subject to change. The data collections used to create this publication include:

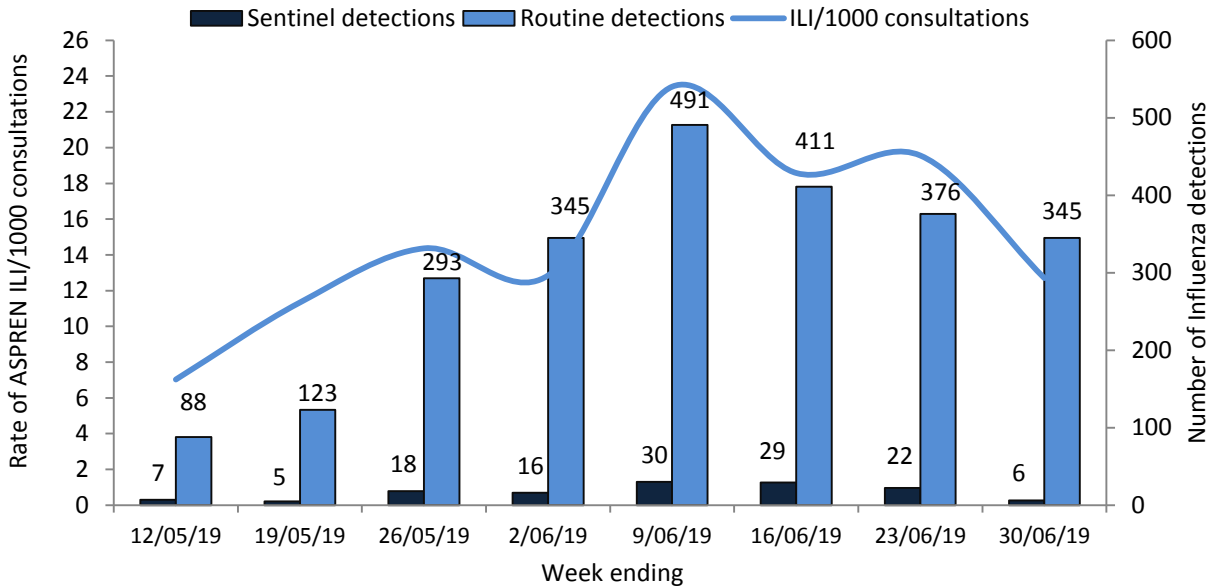
- Sentinel General Practice data collected by WA members of the Australian Sentinel Practices Research Network (ASPREN)
- Emergency Department data provided by the Emergency Department Information System (EDIS), which currently incorporates data from the following hospitals: Fiona Stanley Hospital, Sir Charles Gardiner Hospital, Royal Perth Hospital, Perth Children's Hospital, King Edward Memorial Hospital, St John of God Midland, Bunbury Hospital, Armadale Hospital, Joondalup Health Campus, and Rockingham General Hospital.
- Notification data derived from disease notifications received by CDCD, WA Department of Health from medical providers and public or private laboratories in WA. These data are updated routinely to include admission status for all public and public/private hospitals in WA and hospitalisation data are included in the report during the influenza season.
- Viral laboratory data obtained from PathWest laboratories at QEII Medical Centre, as well as via notification data sent by all WA laboratories to CDCD, WA Department of Health.

*these specimens have not been tested for subtype



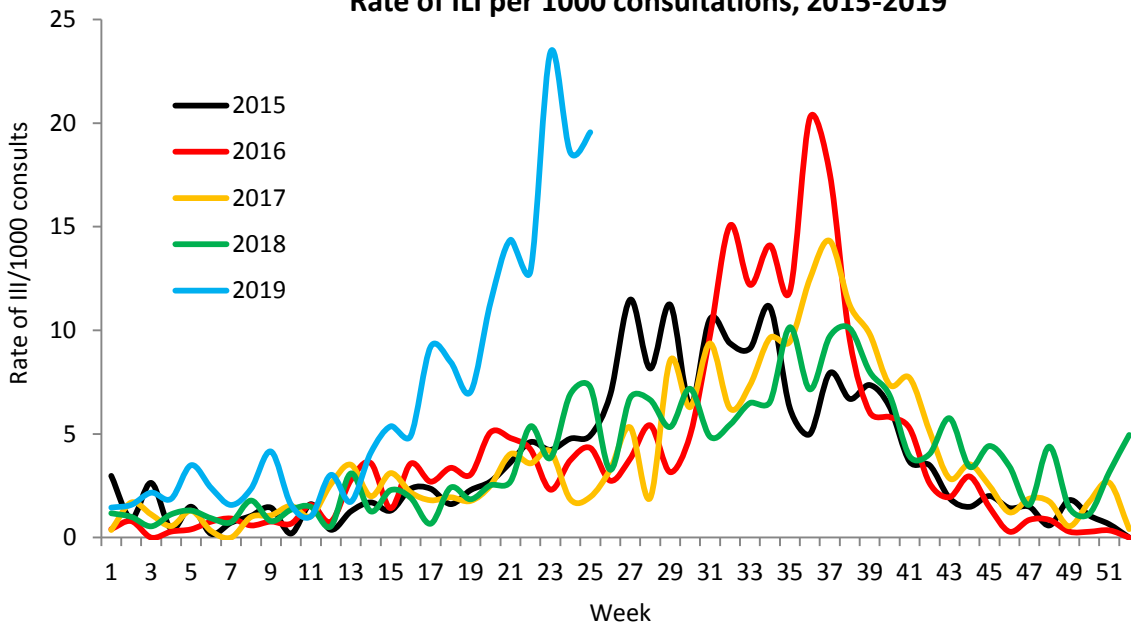
Influenza and Influenza-like Illnesses

Sentinel GP influenza-like illness presentations and PathWest influenza detections



The number of routine PathWest influenza detections continued to decline this week. six of the 14 samples (43%) submitted for influenza testing by sentinel GPs tested positive.

**Australian Sentinel Practices Research Network WA - GP surveillance
Rate of ILI per 1000 consultations, 2015-2019**

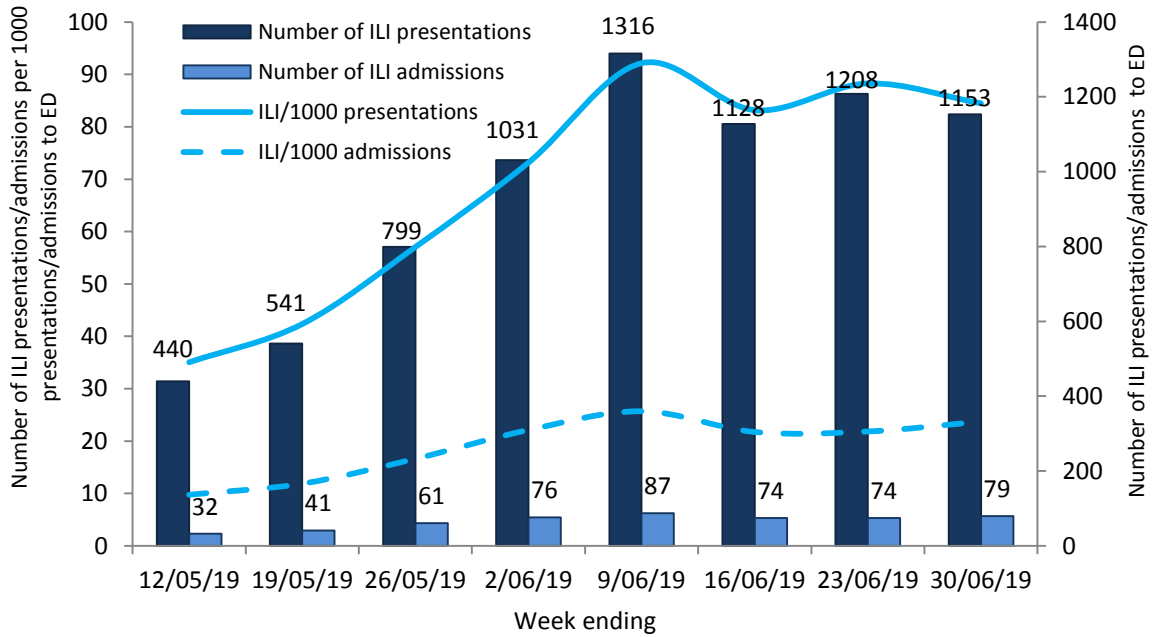


The rate of ILI presentations remains above levels usually reported during this time of year.



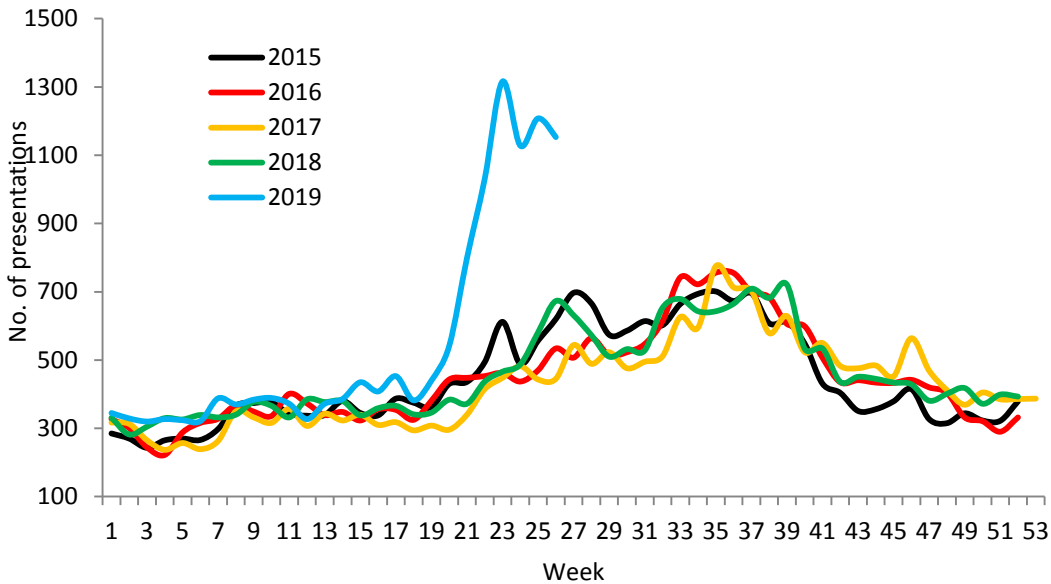
The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for respiratory viral presentations.

Viral Respiratory ED Presentations and Admissions



Respiratory presentations to sentinel EDs remain high.

ED Respiratory Viral Presentations, 2015-2019

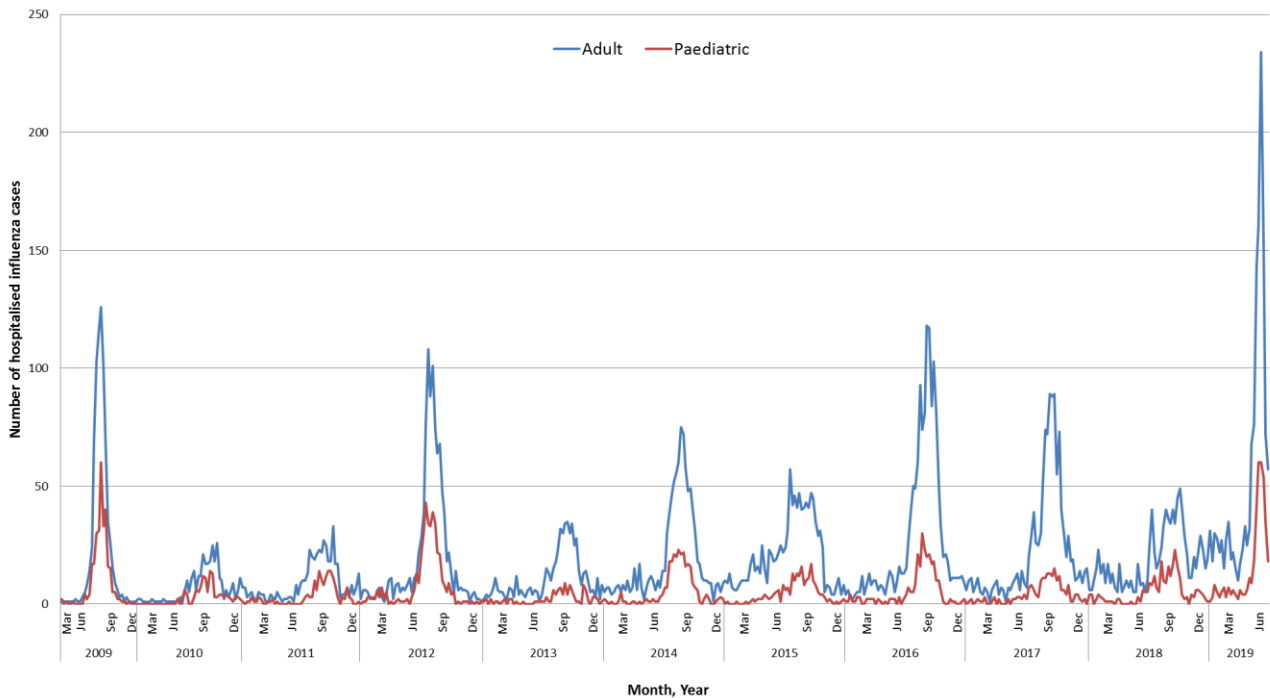


The number of respiratory viral presentations to sentinel EDs remains well above levels normally reported during influenza season.

This graph is a summary of presentations at Emergency Department sentinel surveillance (EDSS) sites. This data may differ from hospital attendance and admission data prepared by the Information and Performance Governance Unit using different ICD codes



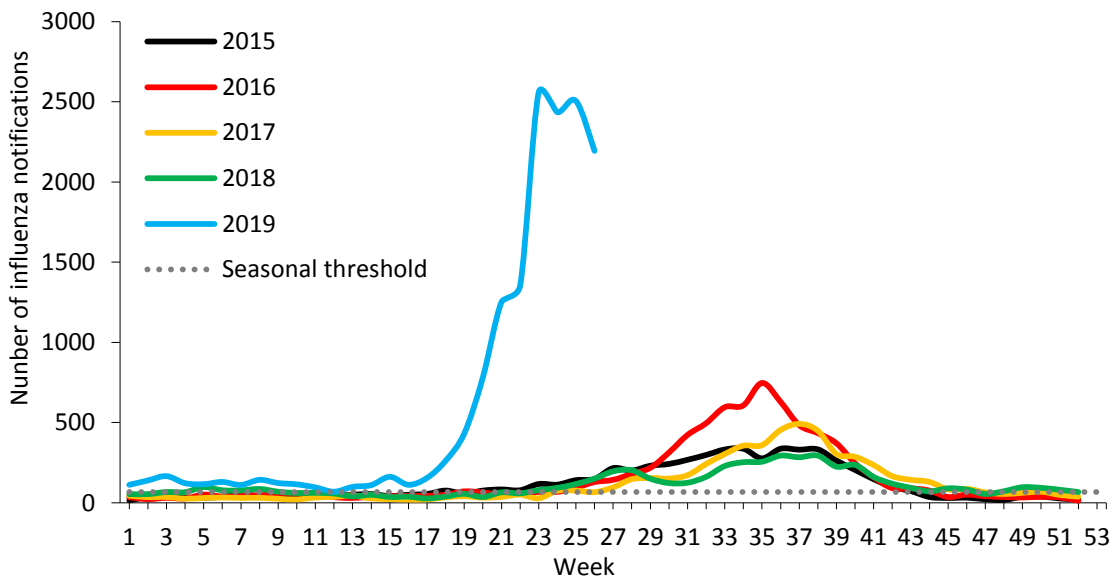
Laboratory confirmed influenza notifications hospitalised in Western Australia by week, 2009 to June 2019



The number of influenza hospitalisations declined again this week, following previous early high activity this season.

The graph is a summary of influenza notifications received by the DoH who were recorded as having a hospital admission to the end of the current reporting week, for which cases had a specimen collection date between 24/06/2019 and 30/06/2019. Paediatric notifications were defined as individuals less than 18 years of age.

Influenza notifications in Western Australia by week, 2015 to 2019

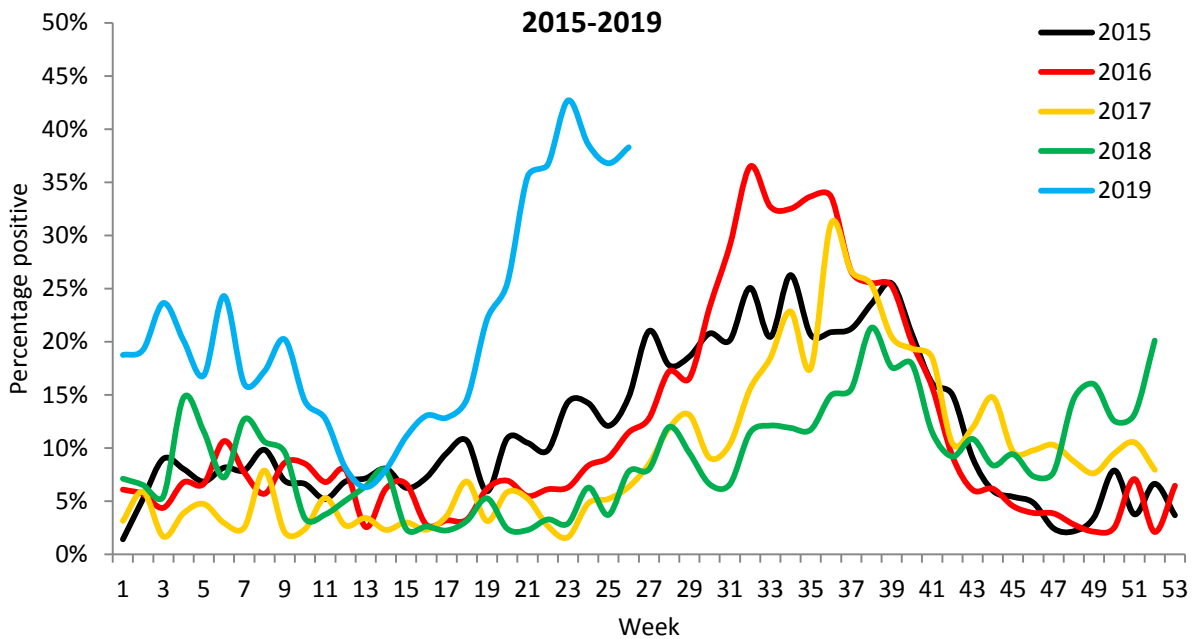


Influenza notifications reported to the Department of Health decreased this week, but remain much higher than peaks of previous seasons.

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 17/06/2019 and 23/06/2019. The seasonal threshold defines a value above which may indicate epidemic seasonal influenza activity. The threshold value is calculated based on analysis of seasonal influenza data from the past four years.



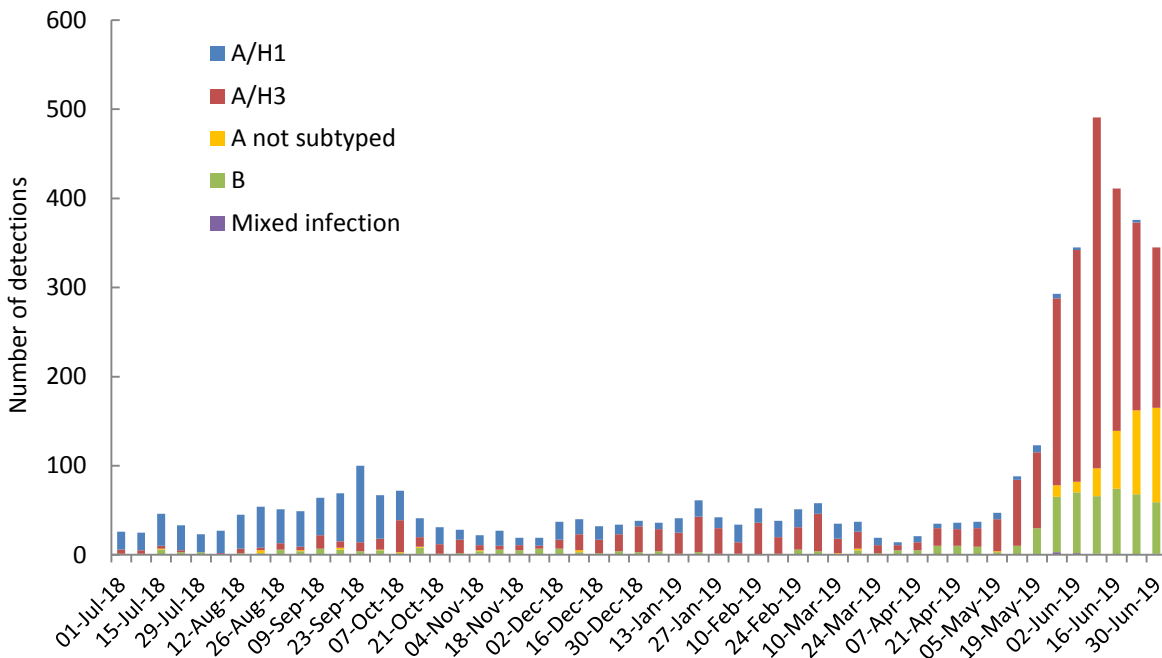
Proportion of PathWest Tests Positive for Influenza



The percentage of specimens positive for influenza virus at PathWest remains above levels typically reported at this time of year. Of 901 specimens, 345 (38%) tested positive in the past week.

The graph is a summary of all WA samples reported by PathWest as of Wednesday 03rd of July 2019, excluding samples referred by other private laboratories for influenza subtyping.

Influenza Types and Subtypes, 2018-2019



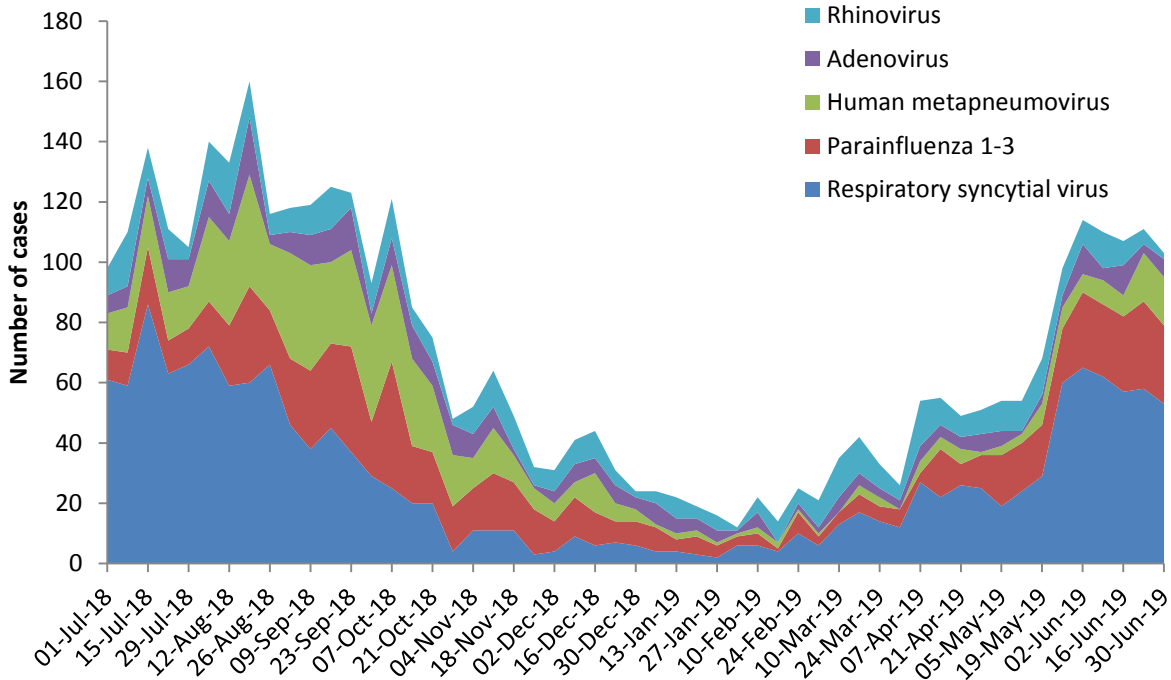
Three hundred and forty five samples were subtyped by PathWest during this reporting week; 180 (52%) influenza A/H3N2; 106 (31%) influenza A/not subtyped*; 58 (17%) influenza B; and 1 (<1%) mixed infection.

The graph is a summary of all WA samples positive for influenza reported at PathWest as of Wednesday 03rd of July 2019, excluding samples referred by other private laboratories for influenza subtyping

*these specimens have not been tested for subtype.



Non-Influenza Respiratory Viruses, 2018-2019

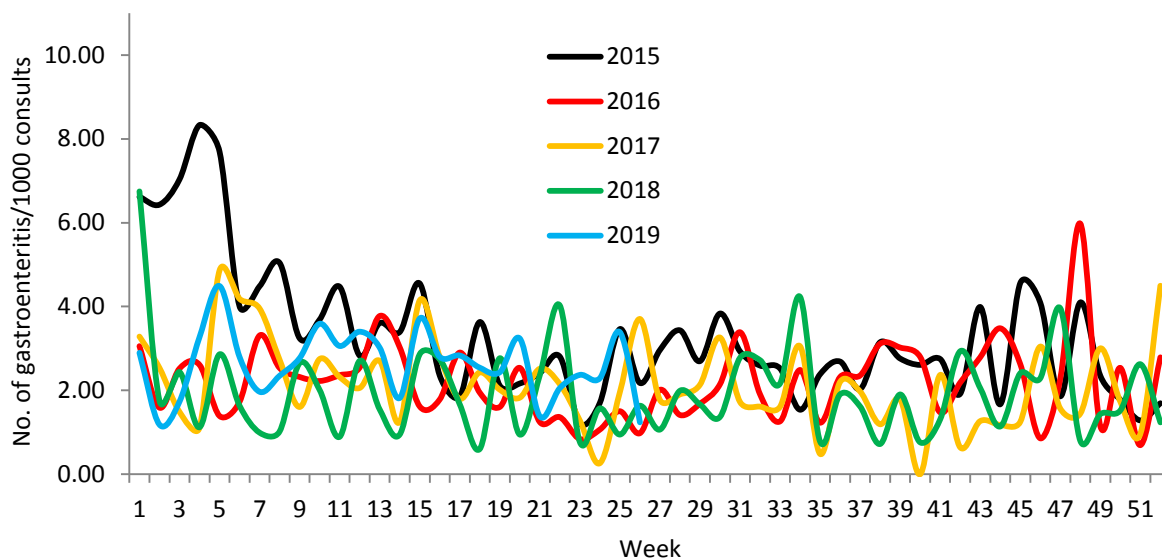


Overall non-influenza activity fell again this week, mostly due to a decrease in RSV detections. Parainfluenza detections have increased in recent weeks.

The graph is a summary of all WA samples positive for a common respiratory virus other than influenza reported at PathWest as of Wednesday 03rd of July 2019

Gastroenteritis

**Australian Sentinel Practices Research Network - GP surveillance
Rate of gastroenteritis per 1000 consultations, 2015-2019**

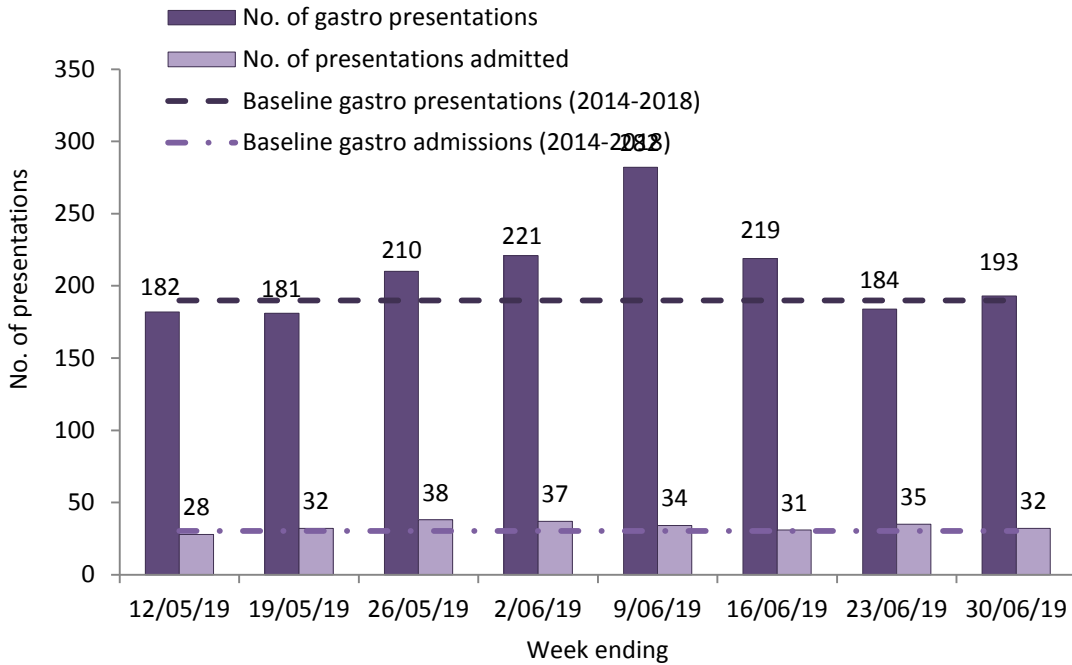


The number of gastroenteritis presentations to sentinel GPs is in the mid-range of values normally reported at this time of year.



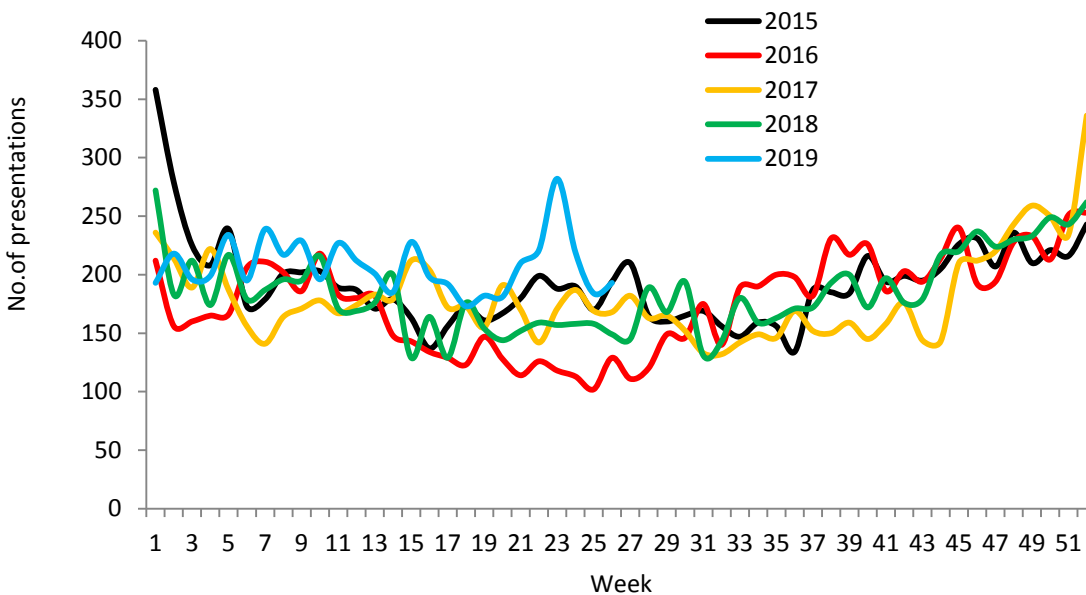
The following is a summary of current Emergency Department Sentinel Surveillance (EDSS) data for gastroenteritis presentations. Baseline levels for gastroenteritis presentations and admissions were calculated using the mean of weekly EDIS data from week 1, 2015 to week 52, 2018.

Gastroenteritis ED Presentations



Gastroenteritis presentations and admissions to sentinel EDs remains around baseline levels this week.

ED Gastroenteritis Presentations 2015-2019

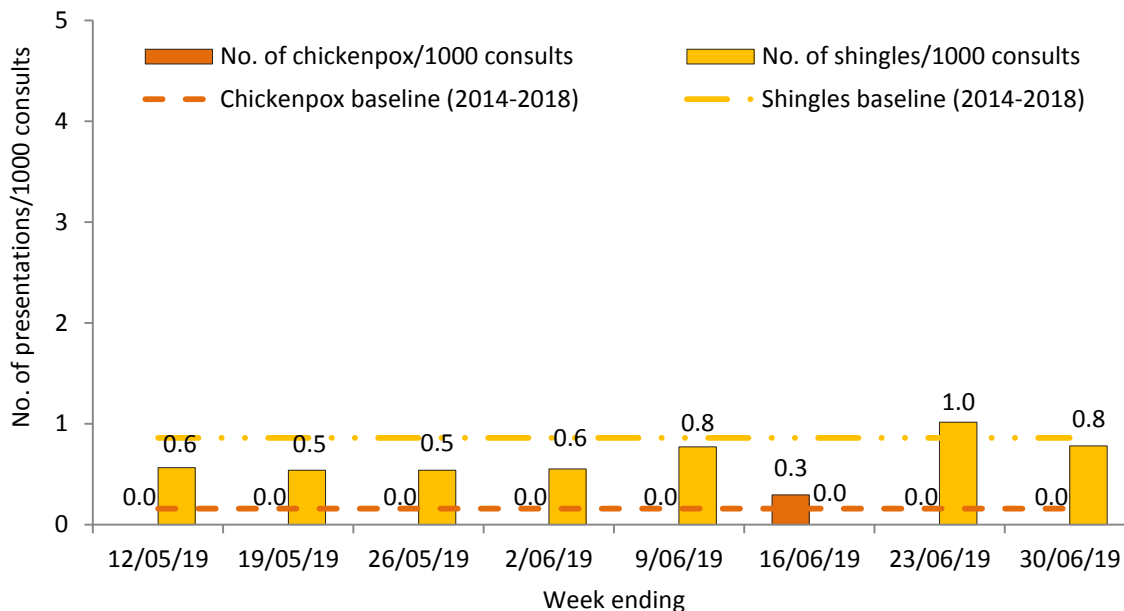


The number of gastroenteritis presentations to sentinel EDs is now in the mid- range of values normally reported at this time of year.



Viral Rashes

Varicella-Zoster Virus GP Presentations

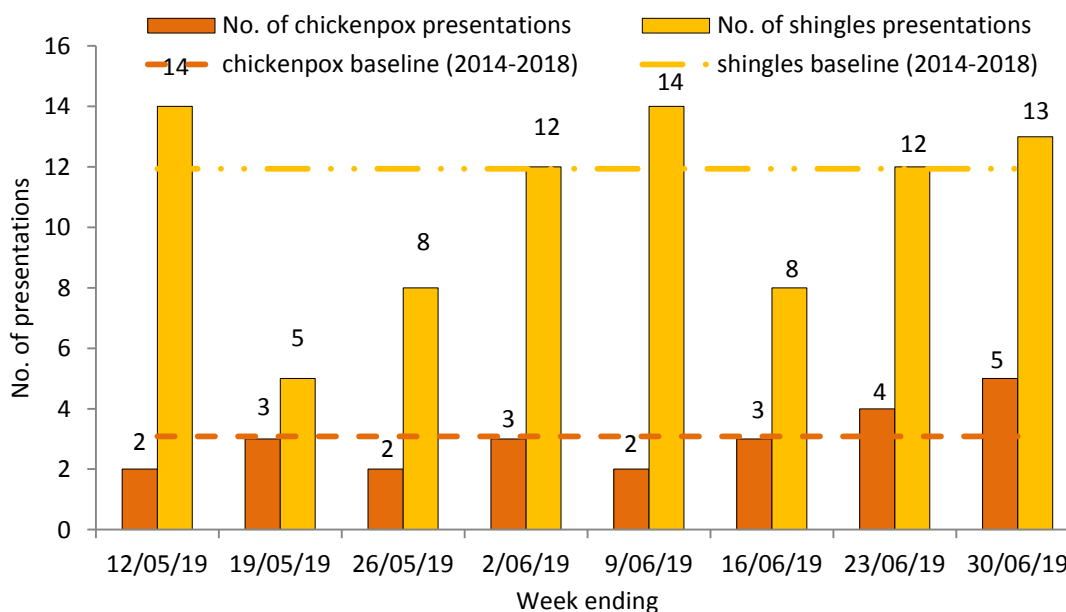


Shingles and chickenpox activity reported by WA ASPREN GPs was below baseline this week.

Baseline levels for chickenpox and shingles presentations to WA ASPREN GPs per thousand consultations were calculated using the mean of weekly WA ASPREN data from week 1, 2015 to week 52, 2018.

The following is a summary of current Emergency Department sentinel surveillance (EDSS) data for varicella-zoster virus presentations.

Varicella-Zoster virus ED Presentations



Chickenpox and shingles presentations at sentinel EDs were above baseline levels this week.

Baseline levels for varicella-zoster virus presentations were calculated using the mean of weekly EDIS data from week 1, 2015 to week 52, 2018.

