

# New Zealand National Influenza Centre

## Intelligence Report: Week 39

### (25 September–1 October 2017)

#### ACTIVITY

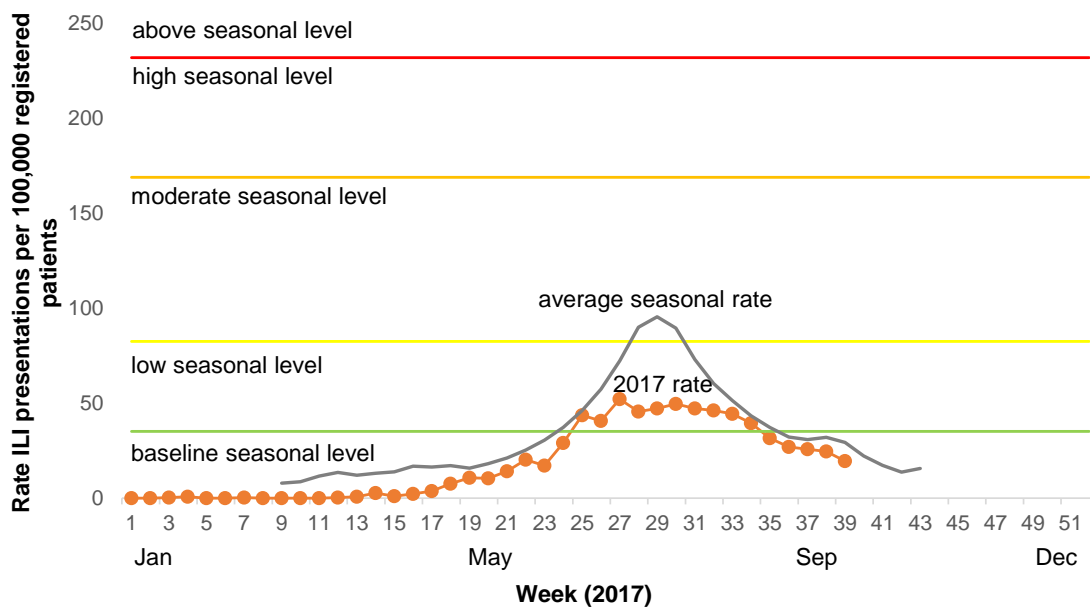
##### National overview

- Although increased compared to last year, influenza-like illness (ILI) activity remains low and below the seasonal average (Figure 1). Indicators suggest the season has peaked and is in decline.
- ILI and influenza in the community decreased slightly compared to last week (Figure 1 and Table 1).
- Hospitalisations due to acute respiratory illness are at a low seasonal level and are similar to last week (Table 1).
- Influenza-associated severe acute respiratory illness (SARI) hospitalisations were high this year but slightly lower than known high years (2012 and 2014). However, Intensive Care Unit (ICU) admissions were low or comparable to these years.

##### Notable local ILI activity

- None noted during this reporting period.

**Figure 1. New Zealand influenza-like illness activity by week, 2017**



**Table 1. Summary of community and hospital acute respiratory activity**

Activity in the community	Weekly change	
	Acute respiratory	Influenza
ILI calls to Healthline	↓	
ESR eILI visits to general practices	↓	-
HealthStat visits to general practices	↓	
Activity in hospitals		
Severe Acute Respiratory Infections (SARI) admissions to hospital	-	-

Note: Bold arrow (↓ or ↑) represents a statistically significant change. SARI data is from Auckland and Counties Manukau DHBs only.

## SEVERITY

- ICU admissions among respiratory patients have not changed significantly, and remain at a low level (Table 2).

**Table 2. Severity of SARI hospitalisations**

Severity	Weekly change	
	Acute respiratory	Influenza
SARI admissions to Intensive Care Units (ICU)	↓	-
SARI associated deaths	-	

Note: Bold arrow (↓ or ↑) represents a statistically significant change. (-) represents no change. SARI data is from Auckland and Counties Manukau DHBs only.

## CIRCULATING INFLUENZA STRAIN(S)

### Predominant influenza strains currently circulating

- A(H3N2) Typically highest burden in elderly
- B(Yamagata) Typically highest burden in school aged children

- An increase in ILI cases among those aged 65+ years has been noted and is expected when A(H3N2) is the predominant circulating strain.
- A(H3N2) viruses can change more quickly over time than the other human influenza viruses. The A(H3N2) viruses have recently changed genetically. This could account for the high influenza-associated SARI hospitalisation rates this season.
- Influenza B(Victoria) lineage viruses have also co-circulated with B(Yamagata) lineage viruses this season. The seasonal quadrivalent vaccine covered both B lineages; whereas, the trivalent vaccine (more widely used) only covers one lineage (B/Victoria). However, studies show cross-protection between the two B lineages can occur.

## ANTIVIRAL RESISTANCE

- Between 1 January 2017 and 1 September 2017, 100 influenza viruses were tested for resistance to neuraminidase inhibitors. No resistance to oseltamivir or zanamivir was detected.

## OVERSEAS RESPIRATORY ILLNESS SURVEILLANCE MONITORING

### Influenza

- Australia:** Influenza activity at the national level decreased this reporting fortnight after reaching a peak in mid-August. Seasonal activity in some states and territories has yet to reach a peak and moderate to high levels of influenza activity in the community are likely to continue for the next few weeks. Notification rates this year to date have been highest in adults aged 80 years or older, with a secondary peak in young children, aged 5 to 9 years. This is consistent with previous seasons where influenza A(H3N2) and influenza B, respectively, have predominated.<sup>1</sup>
- Europe and North America:** In Europe and North America little to no influenza activity has been reported.<sup>2-4</sup>
- Elsewhere:** In South East Asia, high levels of influenza activity were reported, with all seasonal influenza subtypes present in the region. High influenza like illness (ILI) and continued increasing severe acute respiratory infection (SARI) levels were reported in Bhutan, with influenza A(H1N1)pdm09 virus predominantly detected.<sup>1</sup>

### Other emerging respiratory diseases

- Middle East Respiratory Syndrome coronavirus (MERS-CoV):** Reported in the United Arab Emirates.<sup>5</sup>
- Avian influenza A(H7N9):** Four human cases were reported in China (18 August–4 September 2017). As of 13 September 2017, 1562 laboratory-confirmed human cases have been reported to WHO since early 2013. No sustained human-to-human transmission has been reported.<sup>6</sup>

For further information on overseas acute respiratory disease activity see:

1. Australia: [www.health.gov.au/flureport](http://www.health.gov.au/flureport)
2. WHO Global Influenza Update: [www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/)
3. Europe: [www.flunewseurope.org/](http://www.flunewseurope.org/)
4. United States: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)
5. WHO Emergency Preparedness, response: [www.who.int/csr/don/archive/year/2017/en/](http://www.who.int/csr/don/archive/year/2017/en/)
6. WHO Avian and other zoonotic influenza [http://who.int/influenza/human\\_animal\\_interface/en/](http://who.int/influenza/human_animal_interface/en/)