New Zealand Influenza Intelligence Report

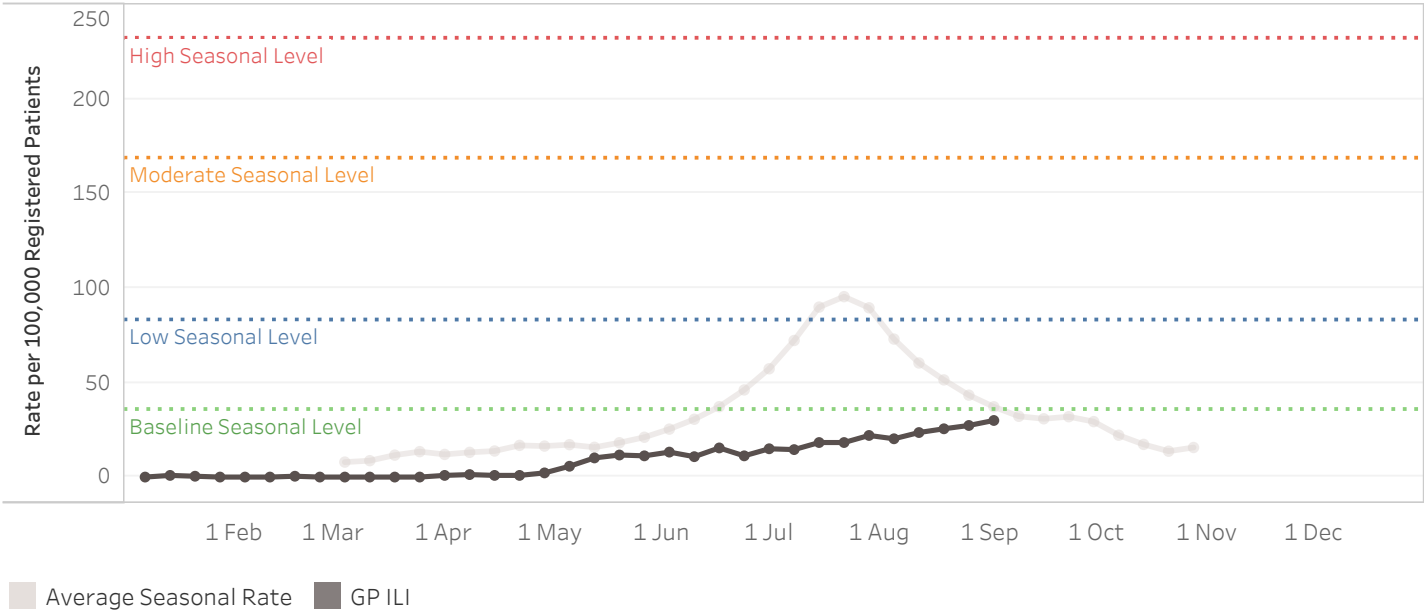
Week Ending 2 September 2018

National Overview

Although community flu activity is still unseasonably low,influenza-like illness (ILI) presentations to GPs have nearly reached the seasonal baseline rate in the past week. This is very late compared to previous seasons, which usually start in June. Last week, flu virus detection among GP visits and hospital admissions were very similar to the previous week. Flu A(H1N1) still predominates. In the past week, one institutional respiratory virus outbreak was reported from the Bay of Plenty. There were also anecdotal reports of increased influenza hospitalisations in Capital and Coast.

Weekly General Practice Influenza-like Illness (ILI) Rates

To 02 Sep 18

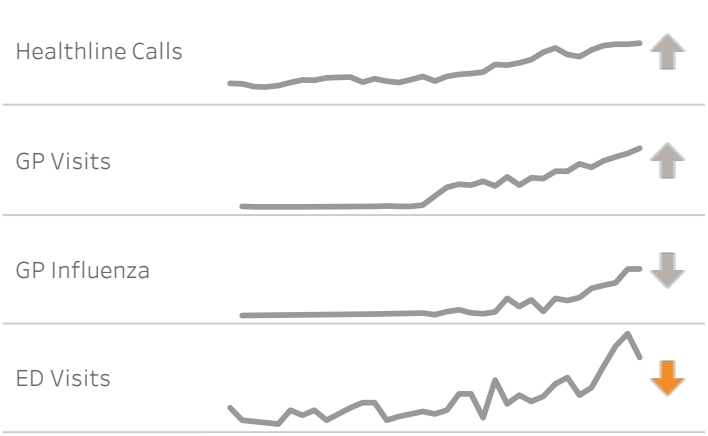


Last week, community indicators for influenza-like illness (ILI) and Influenza positive ILI were very similar to the previous week except for a decrease in ED ILI visits (note ED ILI reporting is limited to Capital and Coast). Compared to recent years, GP visits for ILI and influenza positive ILI are at the lower end of recorded rates.

Severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs, including those tested positive for influenza, were also very stable in recent weeks. Although severe acute respiratory hospitalisations are low compared to previous years, influenza positive hospital and ICU admission numbers are comparable to other Flu A(H1N1) predominant seasons.

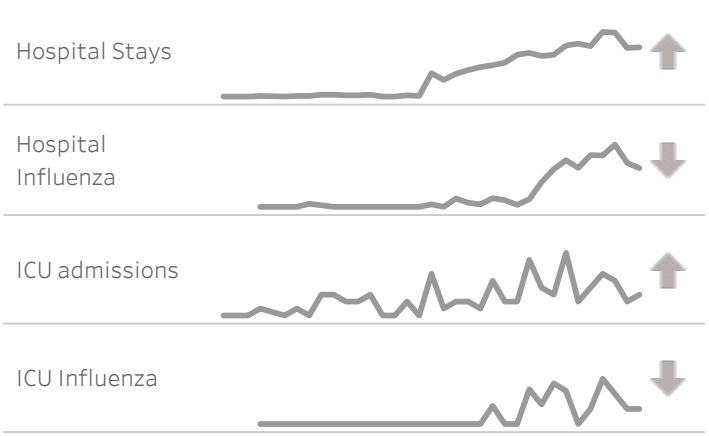
Influenza-like Illness (ILI) Activity to 02 Sep 18

Arrow colour indicates whether the current weekly change is statistically significant.



Acute Hospital Activity (SARI) to 02 Sep 18

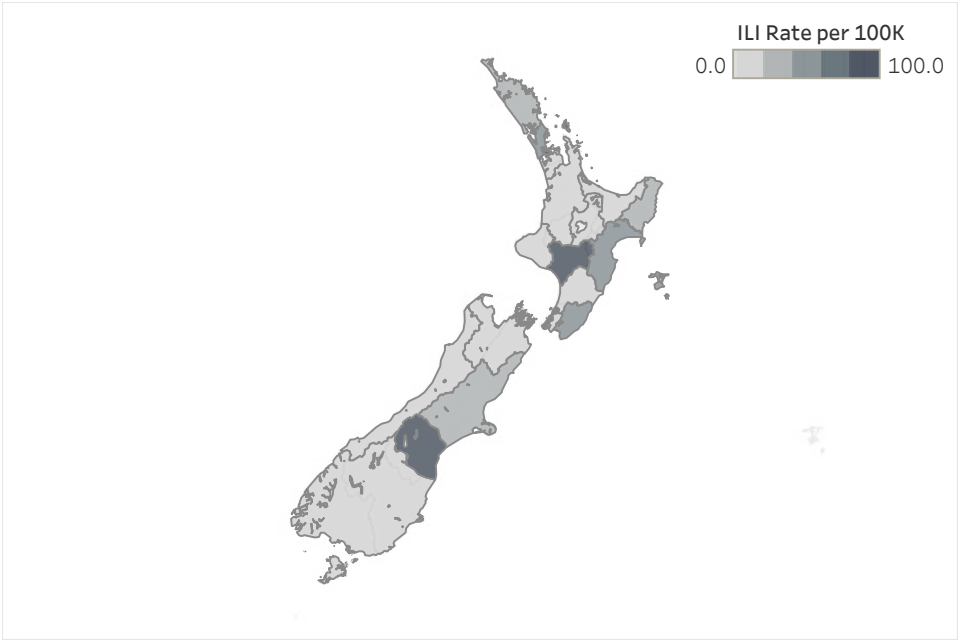
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

National GP visits for ILI continued to increase last week. DHBs in the Lower North Island and parts of the South Island have seen increases in GP visit rates in recent weeks. Interpretation of DHB-level GP ILI rates should be done with caution, because rates for an individual DHB are dependent on the number and size of participating practices in the DHB. Some DHBs have sparse ILI GP surveillance coverage. The national rate of Healthline calls for ILI were stable again last week. Lower North Island DHBs had increases in their ILI call rates last week, which fits with elevated GP visit rates and anecdotal reports of high numbers of hospitalisations due to influenza in the region. The cumulative rates for Healthline ILI calls in 2018 do not vary ..

GP Visits (ILI) Rate by DHB - Current Week



Control Measures

The 2018 publically funded seasonal influenza vaccine contains the following four components (i.e. this is a quadrivalent vaccine):
o A(H1N1): an A/Michigan/45/2015 (H1N1)pdm09-like virus
o A(H3N2): an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus
o B: a B/Phuket/3073/2013-like virus (belonging to B/Yamagata lineage)
o B: a B/Brisbane/60/2008-like virus (belonging to B/Victoria lineage)

Overseas acute respiratory disease surveillance

•Pacific region: Australian ILI activity is still reportedly low, with regional variation (based on data reported to 26 Aug 2018).1,2 Where influenza is detected, A viruses predominate, but rhinovirus has been the most commonly detected respiratory virus.1 An influenza A outbreak has been declared over in French Polynesia.3
• Southern and South East Asia: Influenza activity has been low among reporting countries. Influenza A(H1N1)pdm09 and B viruses have been recently predominant in India and Cambodia, A(H3N2) in the Philippines and A(H1N1)pdm09 in Thailand.2
• Elsewhere in the tropical zone of the Southern Hemisphere: Influenza activity has varied in South America, but is decreasing in Colombia and Peru where influenza A(H1N1)pdm09 virus predominates. Influenza activity varies in Africa where A(H1N1)pdm09, A(H3N2) or B/Yamagata variably predominate where detected. Activity has been reportedly low in Central America except Guatemala and Mexico where influenza A(H1N1)pdm09 virus predominates.2
• Elsewhere in the temperate zone of the Southern Hemisphere: Influenza activity has been decreasing in South Africa but with increasing B virus detections recently. Activity remains elevated in Chile and Paraguay where A(H3N2) predominates, and decreasing flu virus detection is reported in Brazil where A(H1N1)pdm09 then A(H3N2) predominate. Influenza activity has been increasing in Uruguay with influenza A(H1N1)pdm09 predominating.2
• Northern Hemisphere: Low influenza activity at inter-seasonal levels.2
• Emerging diseases: In 2018, ongoing detections of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in the Middle East and human infection with avian influenza A(H7N9) in China have been reported (associated with exposures to camels and birds, respectively). In February, the world's first reported case of human avian influenza A(H7N4) infection was detected in China. These three viruses (MERS-CoV, A(H7N9) and A(H7N4)) are not known to spread easily from person-to-person at present and are classified by the WHO as being of low risk of international spread.4,5 An imported case of MERS-CoV from the Middle East has been recently notified in Leeds, UK.6 This is the fifth case reported in England since 2012, and limited local transmission previously occurred in 2013.7 The USA has reported 14 novel influenza A infections associated with swine exposure in 2018, so far: 13 cases of variant A(H1N2) influenza infection and 1 case of variant A(H3N2).8 These viruses are currently associated with a less severe clinical illness in humans and poor person-to-person spread.5

Further information on overseas acute respiratory disease activity:
1. Australia: www.health.gov.au/flureport (accessed 05/09/18)
2. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 05/09/18)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 05/09/18)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2018/en/ (accessed 05/09/18)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 05/09/18)
6. UK Government alert: www.gov.uk/government/news/mers-cov-case-in-england (accessed 05/09/18)
7. WHO Emergency Preparedness, response archive: www.who.int/csr/don/2013_06_26/en/ (accessed 05/09/18)
8. US CDC: www.cdc.gov/flu/weekly/ (accessed 05/09/18)