

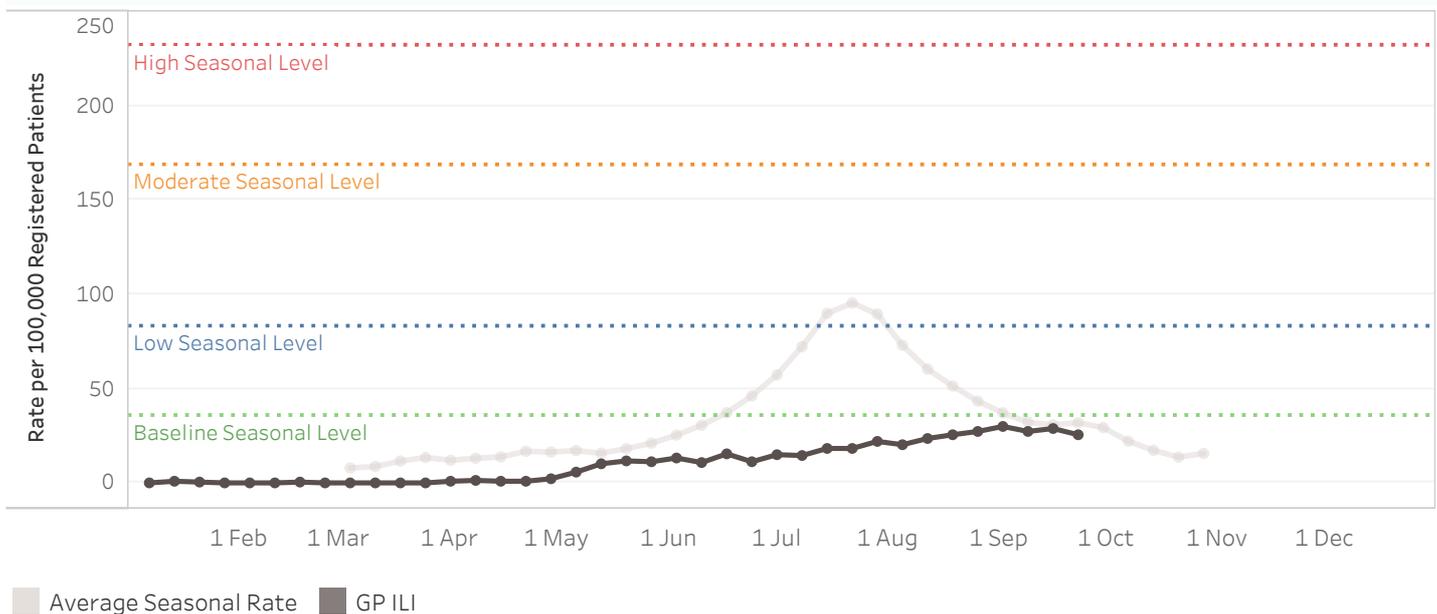
Week Ending 23 September 2018

National Overview

Although flu activity has been low this season, respiratory virus surveillance will continue into October to see how the season progresses. This extension is due to ongoing influenza-like illness (ILI) and influenza activity in the community. Hospital activity has already peaked this season but will continue to be monitored for potential late increases. In the community, measures of activity could be starting to signal that the end of the season is approaching -- Healthline ILI calls significantly decreased, GP ILI visits decreased slightly, and the percentage of flu viruses being detected in GP ILI samples dropped slightly in the past week.

Weekly General Practice Influenza-like Illness (ILI) Rates

To 23 Sep 18

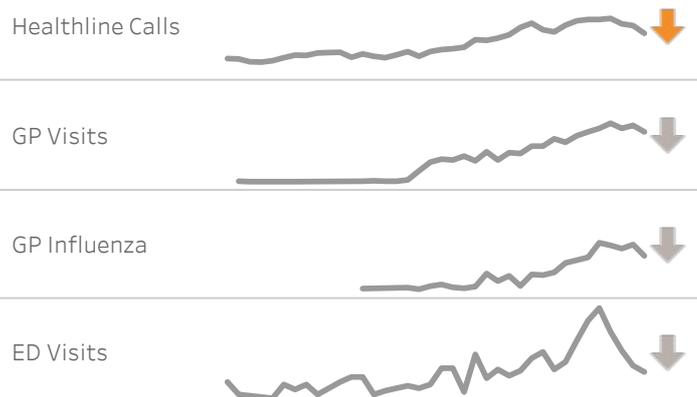


Last week, community indicators for influenza-like illness (ILI) and influenza-positive ILI all decreased compared to the prior week with a significant decrease in Healthline calls for ILI. The rate of GP visits for ILI still has not crossed the threshold that defines the influenza season in New Zealand, which is quite unusual compared to recent years.

Severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs, including those tested positive for influenza, decreased a few weeks ago. Although severe acute respiratory hospitalisations are low compared to previous years, influenza-positive hospital and ICU admission rates this season are comparable to those from other Flu A(H1N1) predominant seasons.

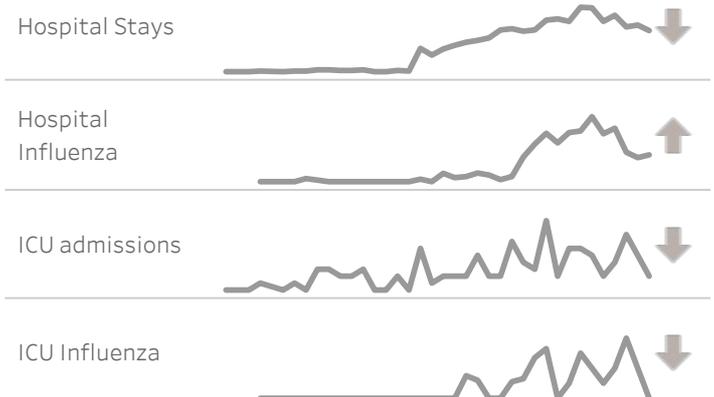
Influenza-like Illness (ILI) Activity to 23 Sep 18

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



Acute Hospital Activity (SARI) to 23 Sep 18

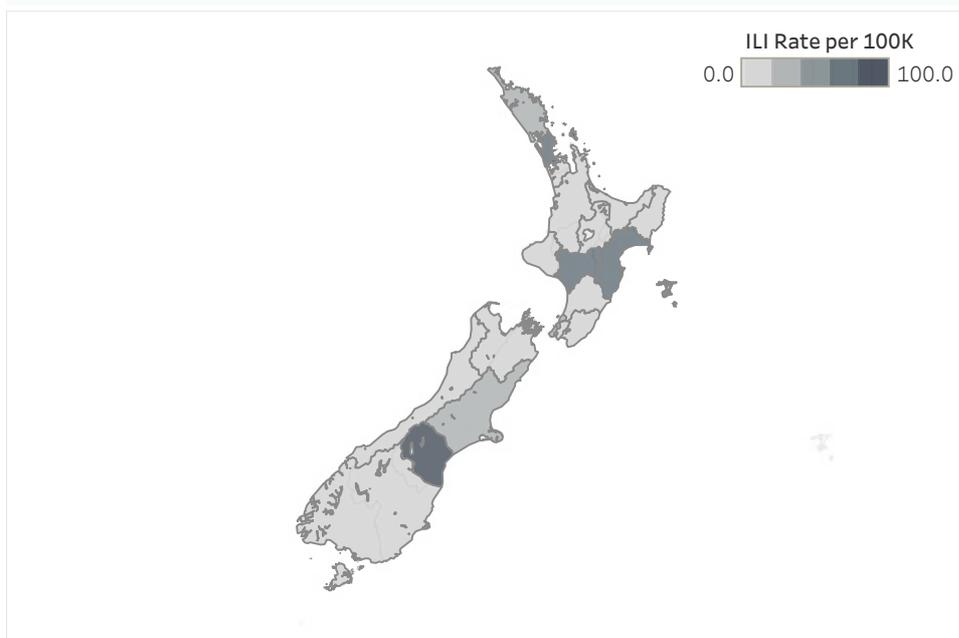
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

Across most District Health Boards, rates of GP visits decreases slightly last week. However, Hawkes Bay GP ILI visit rates reached their peak for the season. Healthline calls for ILI decreased significantly nationally last week, but West Coast DHB saw an increase in these calls. 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. Cumulative rates for Healthline ILI calls in 2018 do not vary greatly across DHBs.

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 has been slowly increasing but was still reportedly low, with regional variation including widespread activity in New South Wales (based on data reported to 09 Sept 2018).^{1,2} Indicators of severity have remained low. Flu A viruses predominate, particularly A(H1N1)pdm09, but rhinovirus has been the most commonly detected respiratory virus in the community.¹
- Southern and South East Asia: Influenza activity has been generally low among reporting countries but remained elevated in Cambodia (A(H1N1) and B/Yamagata virus predominance) and Lao, with decreasing activity in the Philippines (where A(H3N2) virus has predominated).²
- Elsewhere in the tropical zone of the Southern Hemisphere: Influenza activity has been decreasing in most countries in South America, where influenza A(H1N1)pdm09 virus predominates. Influenza activity is generally low in most reporting countries in tropical Africa. Activity has been low in Central America, but RSV detection has been increasing in Guatemala and Panama.²
- Elsewhere in the temperate zone of the Southern Hemisphere: Influenza activity has been decreasing in South Africa, with predominantly B/Victoria virus detections later in the season following on from A(H1N1). Activity remains elevated in Chile and Paraguay where A(H3N2) and B viruses predominate, and decreasing flu virus detection is reported in Brazil. Influenza activity has been increasing in Uruguay with influenza A(H1N1)pdm09 predominating.²
- Northern Hemisphere: Low influenza activity at inter-seasonal levels.² An outbreak of Legionellosis involving 405 cases (as of 17 Sept 2018) has been reported in Lombardy, Northern Italy. Legionella-positive cooling towers have been implicated. This is currently a regional community contained outbreak with no known international travel related cases.⁴
- Emerging diseases: In 2018, ongoing detections of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in the Middle East, with sporadic cases imported elsewhere (1 case each to England and South Korea), and human infection with avian influenza A(H7N9) in China have been reported (associated with exposures to camels and birds, respectively).^{5,6} In February, the world's first reported case of human avian influenza A(H7N4) infection was detected in China.⁴ 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.^{5,6}

Further information on overseas acute respiratory disease activity:

1. Australia: www.health.gov.au/flureport (accessed 26/09/18)
2. WHO Global Flu Update (data to 02 Sept 2018): www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 26/09/18)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 26/09/18)
4. ECDC Communicable Disease Threats Report: www.ecdc.europa.eu/en/publications-data (accessed 26/09/18)
5. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2018/en/ (accessed 26/09/18)
6. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 26/09/18)