New Zealand Influenza Intelligence Report

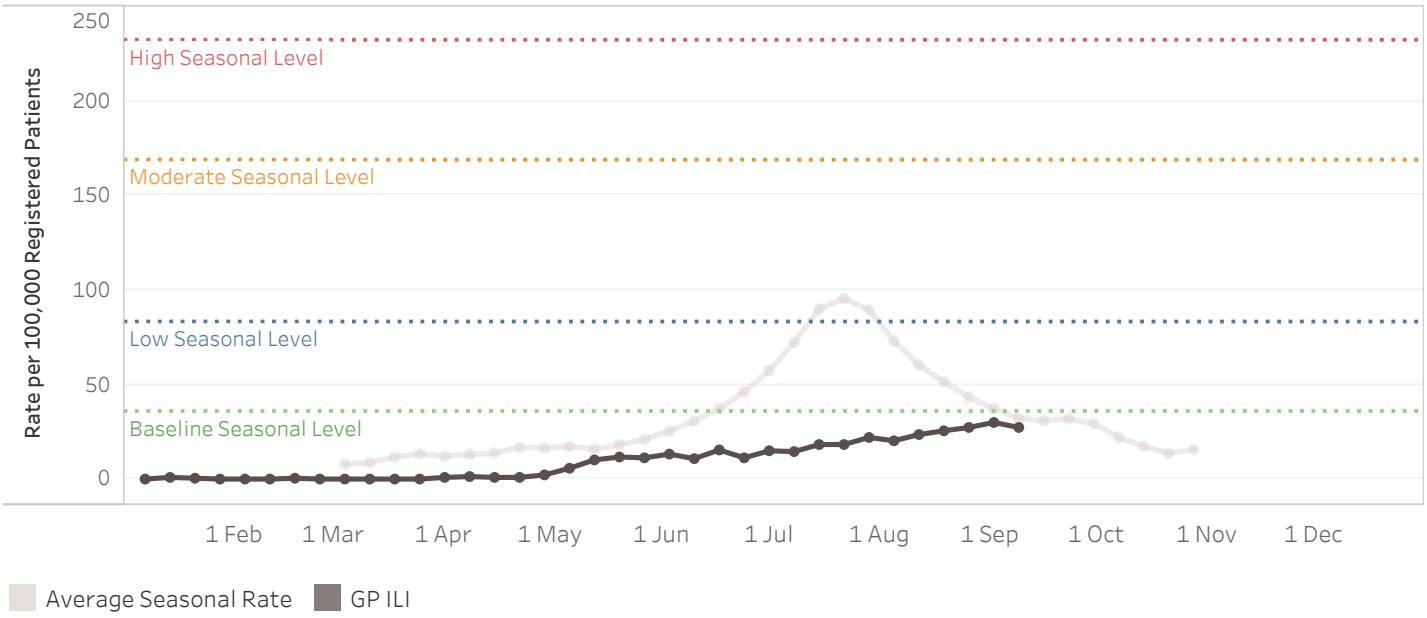
Week Ending 9 September 2018

National Overview

In the past week, indicators of respiratory virus activity and severity generally decreased, which could signal that we are approaching the end of the 2018 season. However, Influenza virus detection from samples taken during GP visits remained high (>40%), so a further increase in flu activity is possible. Flu A(H1N1) still predominates this season. We have not seen much Influenza B activity, which can increase later in the season. In the past week, no institutional respiratory virus outbreak were reported.

Weekly General Practice Influenza-like Illness (ILI) Rates

To 09 Sep 18

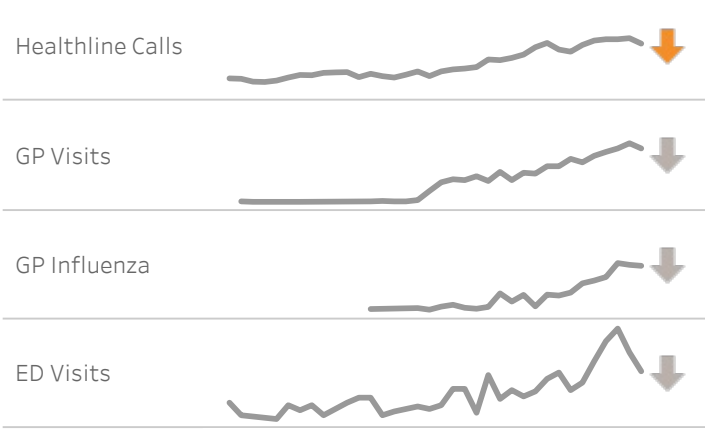


Last week, community indicators for influenza-like illness (ILI) and influenza positive ILI decreased slightly compared to the previous week. Compared to recent years, GP visits for ILI and influenza positive ILI are at the lower end of recorded rates.

Severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs, including those tested positive for influenza, continued to decline last week. Although severe acute respiratory hospitalisations are low compared to previous years, influenza-positive hospital and ICU admission counts are comparable to those from other Flu A(H1N1) predominant seasons.

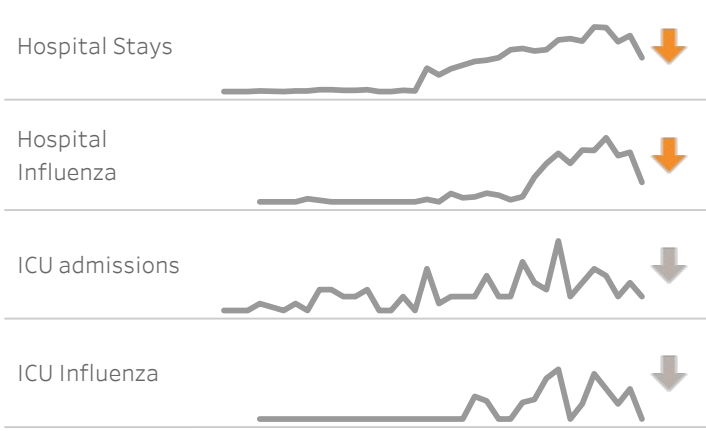
Influenza-like Illness (ILI) Activity to 09 Sep 18

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



Acute Hospital Activity (SARI) to 09 Sep 18

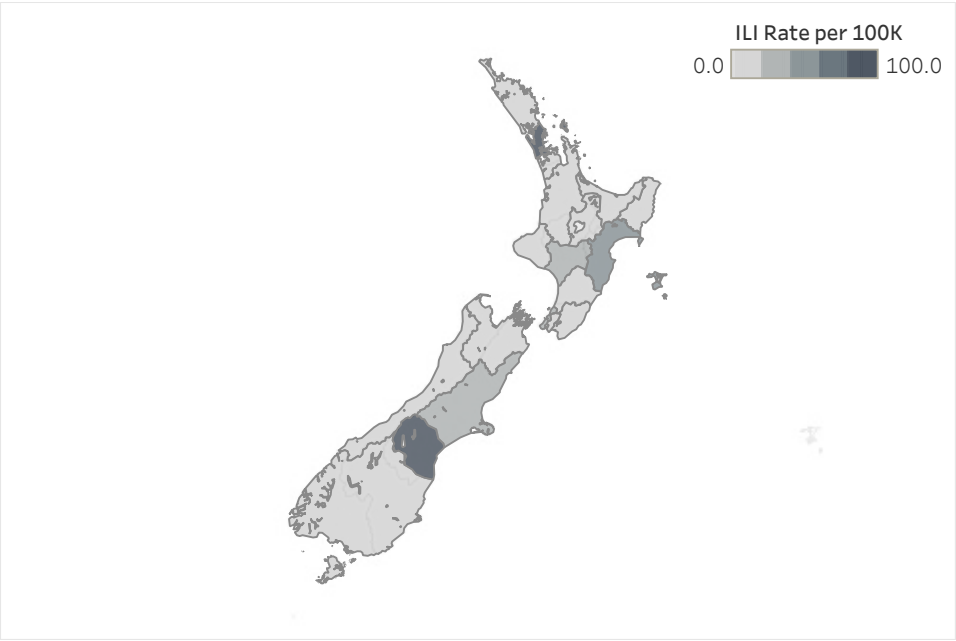
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

Across most District Health Boards, there were small decreases in GP visits for ILI last week. Only Waitemata and Canterbury had slight increases in GP ILI visit rates. 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. Decreases in Healthline calls for ILI were also seen across many District Health Boards. Whanganui and Northland had slight increases in these calls last week. 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 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
• Southern and South East Asia: Influenza activity has been generally low among reporting countries but increased in the Philippines (predominantly A(H3N2) virus) and Lao, recently. Influenza A(H1N1)pdm09 has been predominant in India, Bangladesh and Cambodia, and A(H1N1)pdm09 in Thailand.2
• Elsewhere in the tropical zone of the Southern Hemisphere: Influenza activity has been decreasing in most countries in in South America, where influenza A(H1N1)pdm09 virus predominates. Influenza activity is generally low in most reporting countries in tropical Africa, except Kenya. Activity has been reportedly low in Central America except Guatemala 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, 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
• Emerging diseases: In 2018, ongoing detections of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in the Middle East, with sporadic cases imported elsewhere, 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

Further information on overseas acute respiratory disease activity:
1. Australia: www.health.gov.au/flureport (accessed 12/09/18)
2. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 12/09/18)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 12/09/18)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2018/en/ (accessed 12/09/18)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 12/09/18)