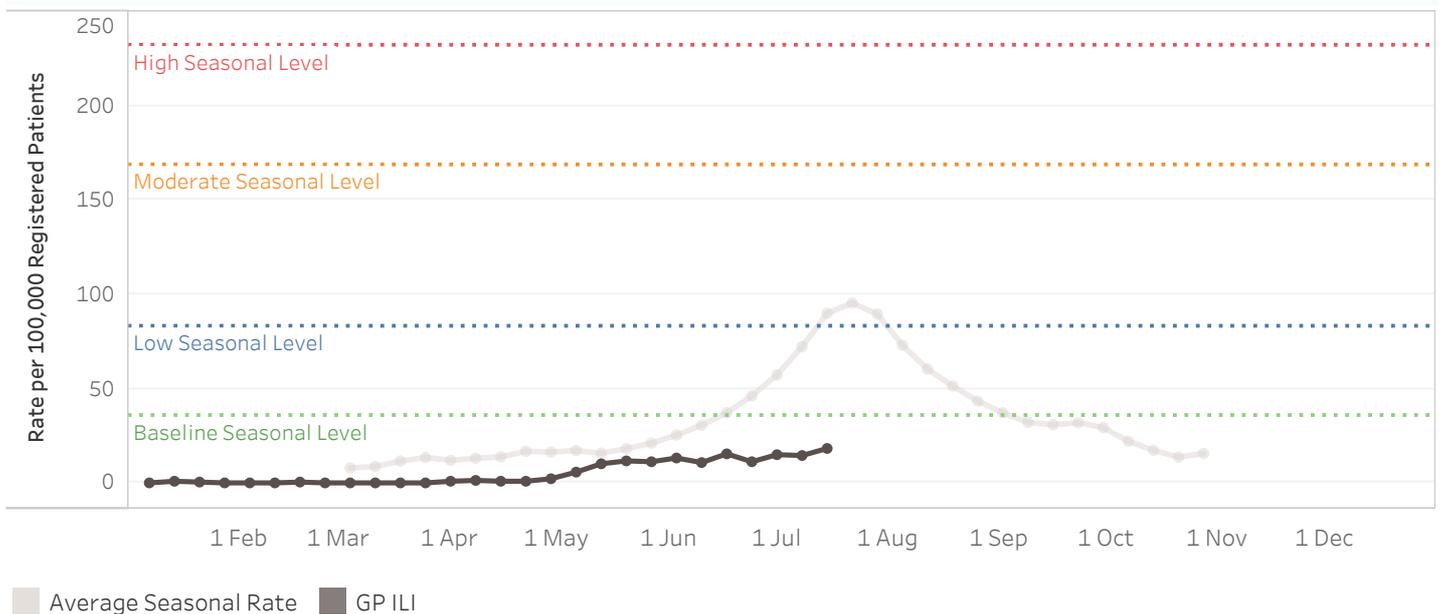


Week Ending 15 July 2018

National Overview

Flu and other respiratory virus activity is still unseasonably low but is starting to increase in NZ and in some parts of the Southern Hemisphere (click light bulb for more detail). We would expect influenza virus circulation in New Zealand to increase in the next few weeks. Rhinovirus is still the most commonly detected respiratory virus in the community; Adenovirus and Respiratory Syncytial Virus (RSV) are being detected at higher levels in the sentinel hospitals.

Weekly General Practice Influenza-like Illness (ILI) Rates To 15 Jul 18

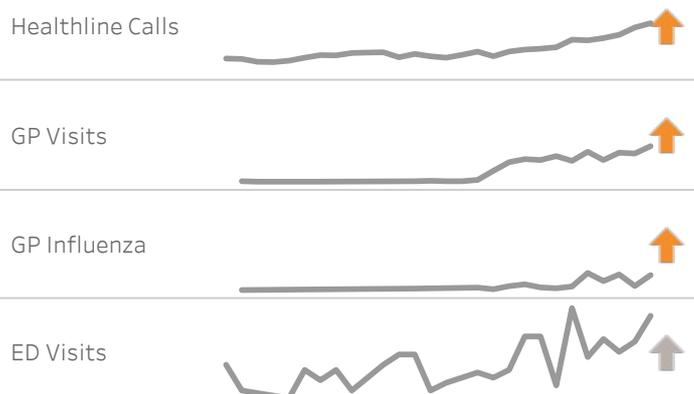


Indicators of community respiratory virus activity are still at low levels, but all increased last week compared to the previous week. These trends and laboratory test positivity suggest the start of more widespread influenza transmission in the community.

Severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs remained fairly stable last week. Mainly, non-influenza respiratory viruses are being detected in SARI surveillance.

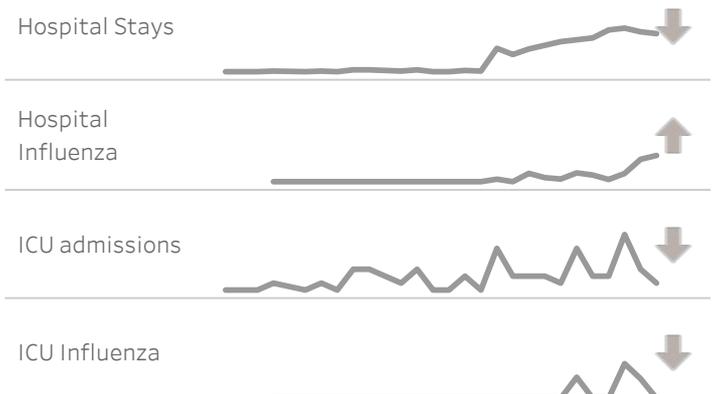
Influenza-like Illness (ILI) Activity to 15 Jul 18

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



Acute Hospital Activity (SARI) to 15 Jul 18

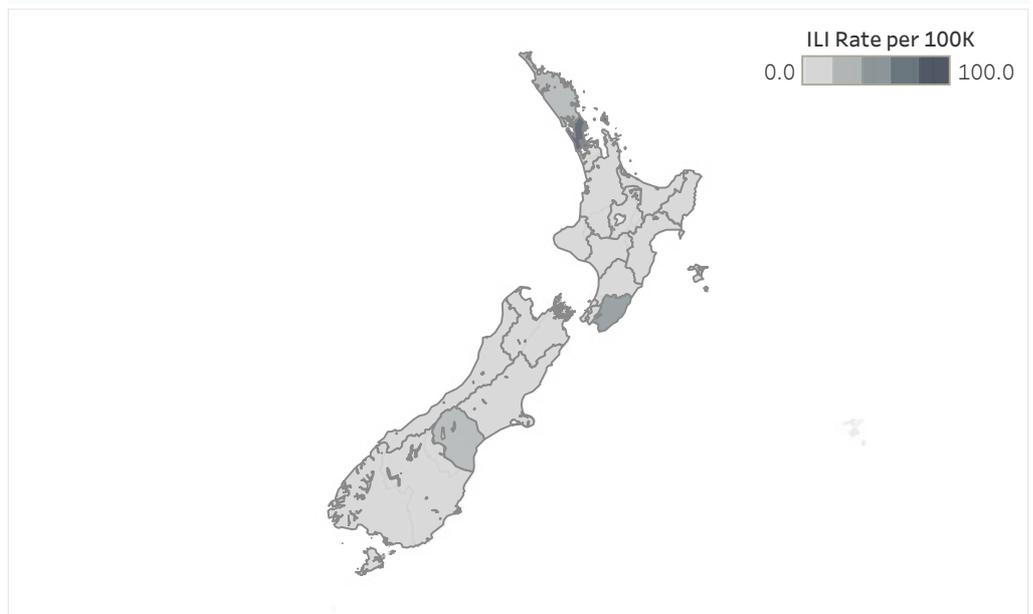
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

National GP visits for ILI increased significantly last week. Auckland and Waitemata DHBs both had high rates in this period, while rates in other areas were lower. These lower rates could be due to low ILI visits at GPs or sparse surveillance coverage in the area. Healthline calls for ILI also increased last week. The cumulative rates for these 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/INF16H-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 at inter-seasonal levels (based on data reported to 1 July 2018).¹ Where influenza is detected, A viruses predominate, but rhinovirus has been the most commonly detected respiratory virus so far.^{1,2} New Caledonia reports predominantly influenza B/Yamagata lineage virus detections.² An influenza A outbreak is ongoing in French Polynesia.³
- South East Asia: Influenza activity has been low among reporting countries.²
- Elsewhere in the temperate zone of the Southern Hemisphere: Low influenza activity except South Africa where influenza A(H1N1)pdm09 predominates, Chile where A(H3N2) predominates, and Brazil where A(H1N1)pdm09 and A(H3N2) predominate.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} In March the Netherlands detected the first case of a new seasonal genetic reassortant of influenza A(H1N2), producing mild ILI in a child. The public health risk of this virus was assessed by the WHO as comparable to other seasonal flu viruses currently circulating.⁴ There have been media reports from Indiana, USA, of a human case of influenza swine origin A(H3N2) variant virus infection associated with exposure to pigs at a county fair.⁶ Swine influenza viruses circulate in swine populations in various parts of the world and sporadic detections of this virus in humans are reported, usually causing a mild illness. The most recent WHO risk assessment of swine influenza viruses reports a low risk of international spread.⁷

Further information on overseas acute respiratory disease activity:

1. Australia: www.health.gov.au/flureport (accessed 18/07/18)
2. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 18/07/18)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 18/07/18)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2018/en/ (accessed 18/07/18)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 10/07/18)
6. Promedmail: www.promedmail.org/post/20180701.5884141
7. WHO Influenza at the human-animal interface, 25 January 2018 report: www.who.int/influenza/human_animal_interface/Influenza_Summary_IRA_HA_interface_25_01_2018_FINAL.pdf?ua=1 (accessed 04/07/18)