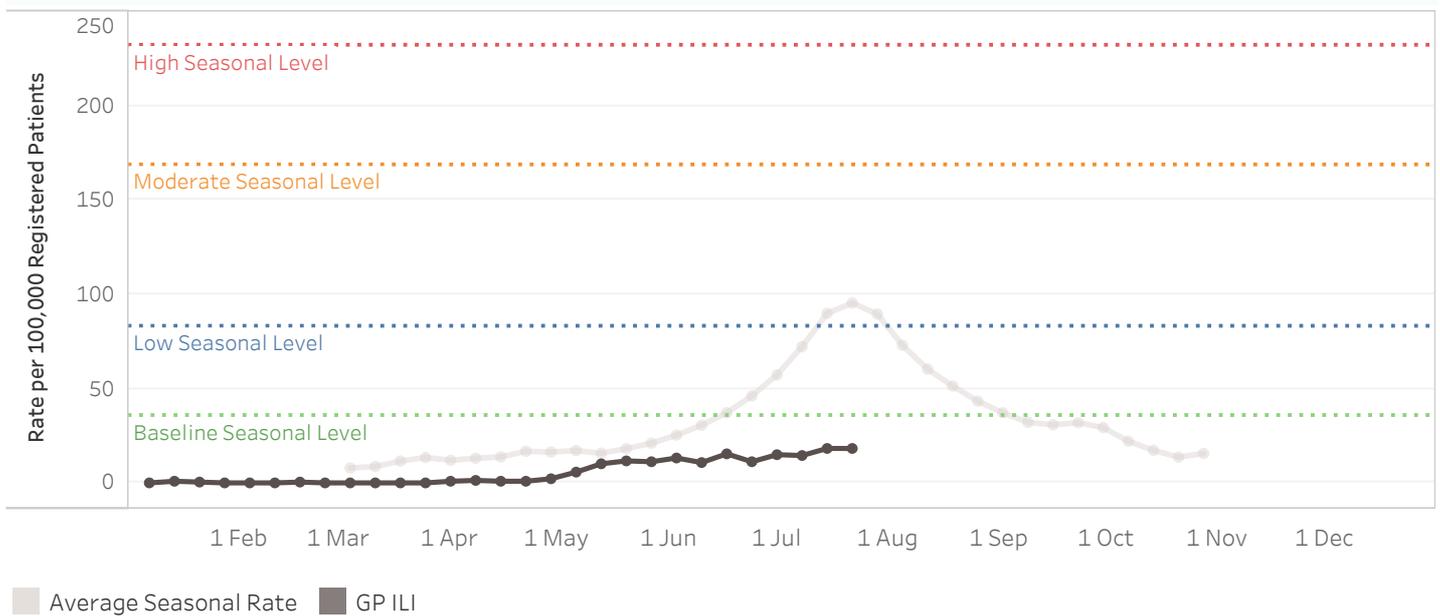


Week Ending 22 July 2018

National Overview

Flu and other respiratory virus activity is still unseasonably low but is slowly increasing in New Zealand and in some parts of the Southern Hemisphere. We would expect influenza virus circulation in NZ to increase in the next few weeks. Where detected, influenza A(H1N1) virus is predominant in the community and sentinel hospitals. Non-influenza viruses, Human Metapneumovirus (HMPV) and Adenovirus, were also predominant in sentinel hospitals in the past week.

Weekly General Practice Influenza-like Illness (ILI) Rates To 22 Jul 18

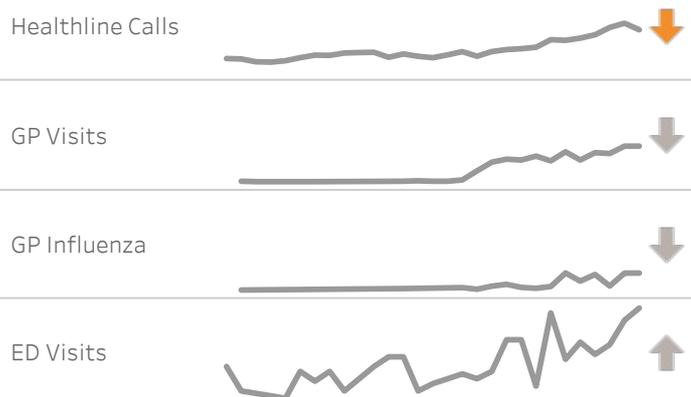


Indicators of community respiratory virus activity are still at low levels, although slightly more elevated in recent weeks. These trends and laboratory test positivity suggest the start of more widespread influenza transmission in the community.

Severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs have remained fairly stable for the past few weeks. Mostly non-influenza respiratory viruses are being detected in SARI surveillance. Where detected, influenza A(H1N1) predominates.

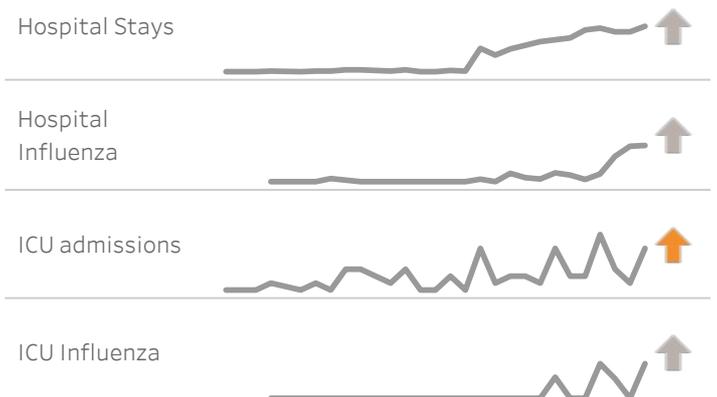
Influenza-like Illness (ILI) Activity to 22 Jul 18

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



Acute Hospital Activity (SARI) to 22 Jul 18

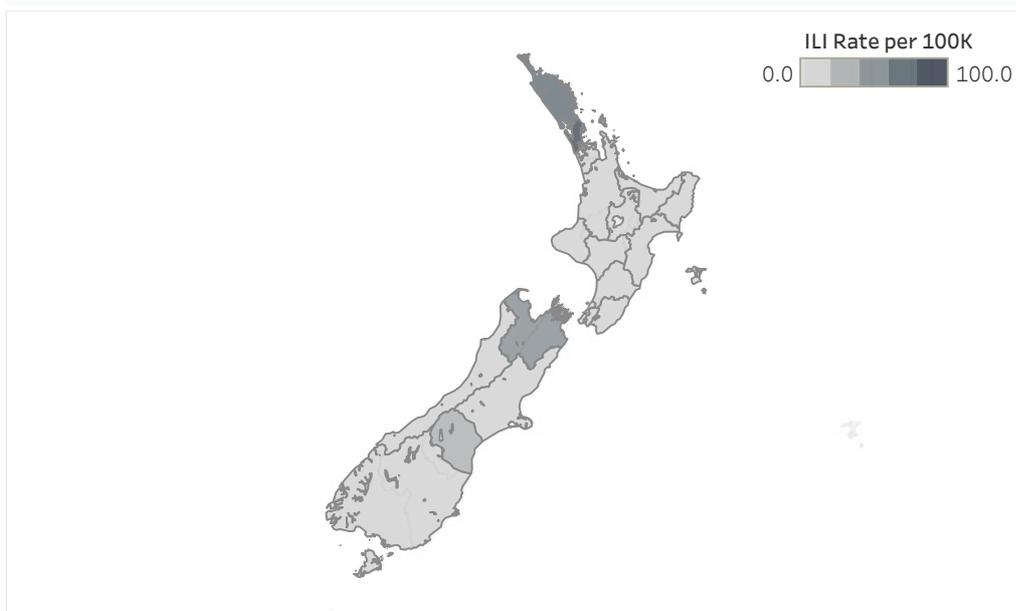
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

National GP visits for ILI have increased in recent weeks. Auckland and Waitemata DHBs had high rates recently, 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. 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.

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 15 July 2018).¹ Where influenza is detected, A viruses predominate, but rhinovirus has been the most commonly detected respiratory virus so far.^{1,2} An influenza A outbreak is decreasing in French Polynesia.^{2,3}
- Southern and South East Asia: Influenza activity has been low among reporting countries. Cambodia has been detecting A(H1N1)pdm09 and B viruses.²
- Elsewhere in the tropical zone of the Southern Hemisphere: Influenza activity varies in South America, including elevated activity in Colombia and Peru, where predominantly influenza A(H1N1)pdm09 virus predominates, particularly affecting young children. Influenza A(H1N1)pdm09 and B viruses predominate where reported in Western Africa. Activity is reportedly low in Central America except Guatemala and Honduras where influenza A(H1N1)pdm09 virus predominates.²
- Elsewhere in the temperate zone of the Southern Hemisphere: Influenza activity may have peaked at moderate levels in South Africa where influenza A(H1N1)pdm09 predominates. Increasing activity is reported in Chile where A(H3N2) predominates, and decreasing flu virus detection is reported in Brazil where A(H1N1)pdm09 then 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

Further information on overseas acute respiratory disease activity:

1. Australia: www.health.gov.au/flureport (accessed 25/07/18)
2. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 25/07/18)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 25/07/18)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2018/en/ (accessed 25/07/18)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 24/07/18)