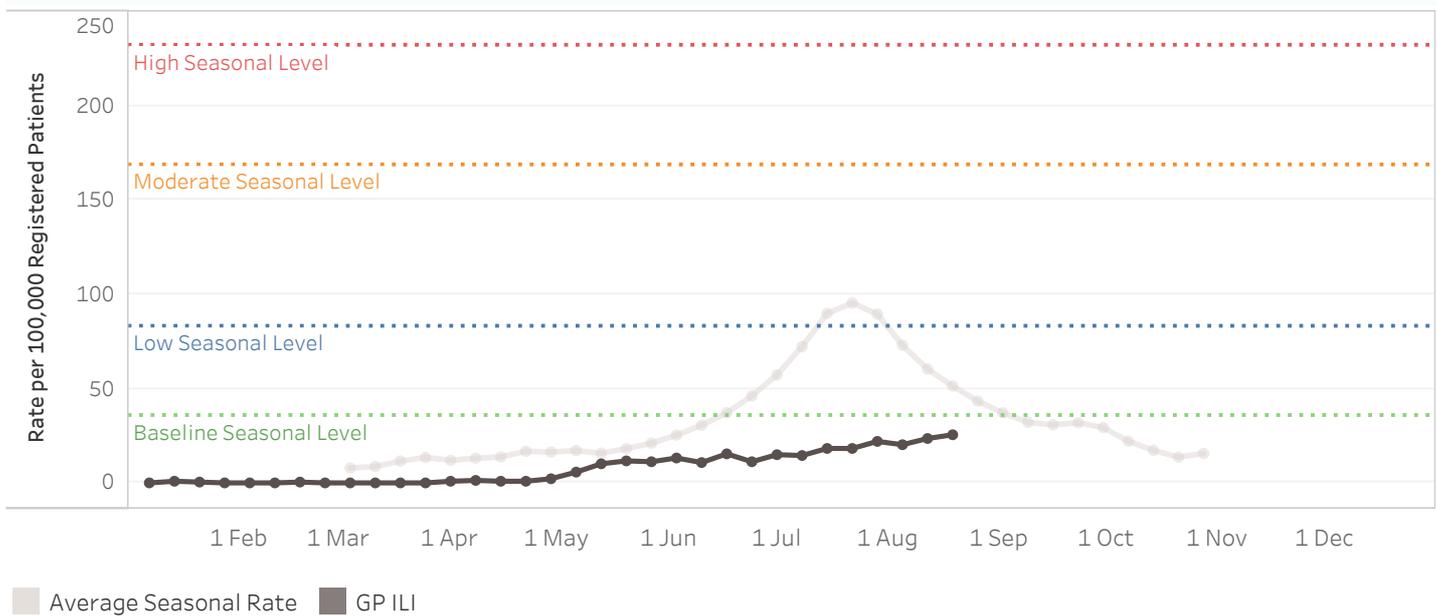


Week Ending 19 August 2018

National Overview

Flu and other respiratory virus activity is still unseasonably low in New Zealand, although activity is continuing to slowly increase. Flu A(H1N1) is the predominant flu virus in the community and sentinel hospitals in New Zealand. Despite limited flu activity this late in the respiratory virus surveillance season, there is still potential for increases over the next few weeks.

Weekly General Practice Influenza-like Illness (ILI) Rates To 19 Aug 18

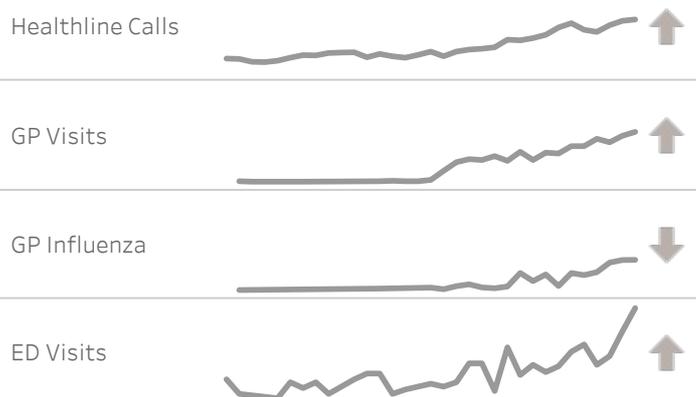


Indicators of community respiratory virus activity are still at low levels, although slightly more elevated in recent weeks. These trends and laboratory test positivity suggest there is increasingly more widespread influenza transmission in the community.

Severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs have remained fairly stable. Over the season, more non-influenza respiratory viruses than influenza viruses have been detected in SARI surveillance. SARI influenza virus detection rates are lower than 2017 rates as well. Where influenza is detected, A(H1N1) predominates this season.

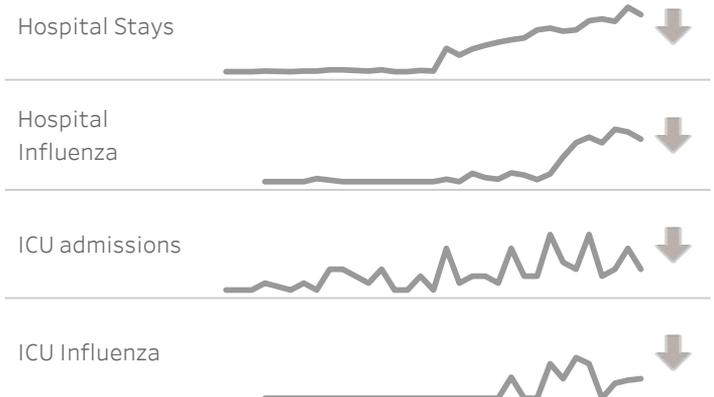
Influenza-like Illness (ILI) Activity to 19 Aug 18

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



Acute Hospital Activity (SARI) to 19 Aug 18

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

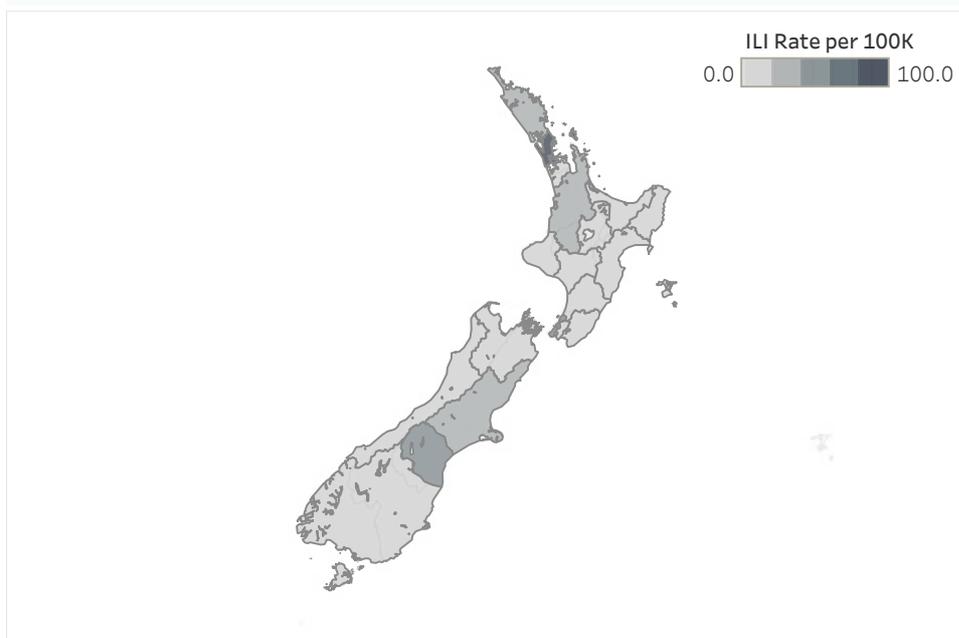


Activity by DHB

National GP visits for ILI have generally increased in recent weeks. Upper North Island DHBs are reporting the highest GP visit rates in these recent weeks. Wellington and Canterbury are also seeing increases in ILI GP visits.

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 increased again in the past week. The cumulative rates for these calls in 2018 do not vary greatly across DHBs. We have received reports of institutional (schools and early care centres) outbreaks from the greater Wellington region this week.

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 12 Aug 2018).^{1,2} Where influenza is detected, A viruses predominate, but rhinovirus has been the most commonly detected respiratory virus so far.¹ An influenza A outbreak is decreasing 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}

Further information on overseas acute respiratory disease activity:

1. Australia: www.health.gov.au/flureport (accessed 22/08/18)
2. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 22/08/18)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 22/08/18)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2018/en/ (accessed 22/08/18)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 22/08/18)