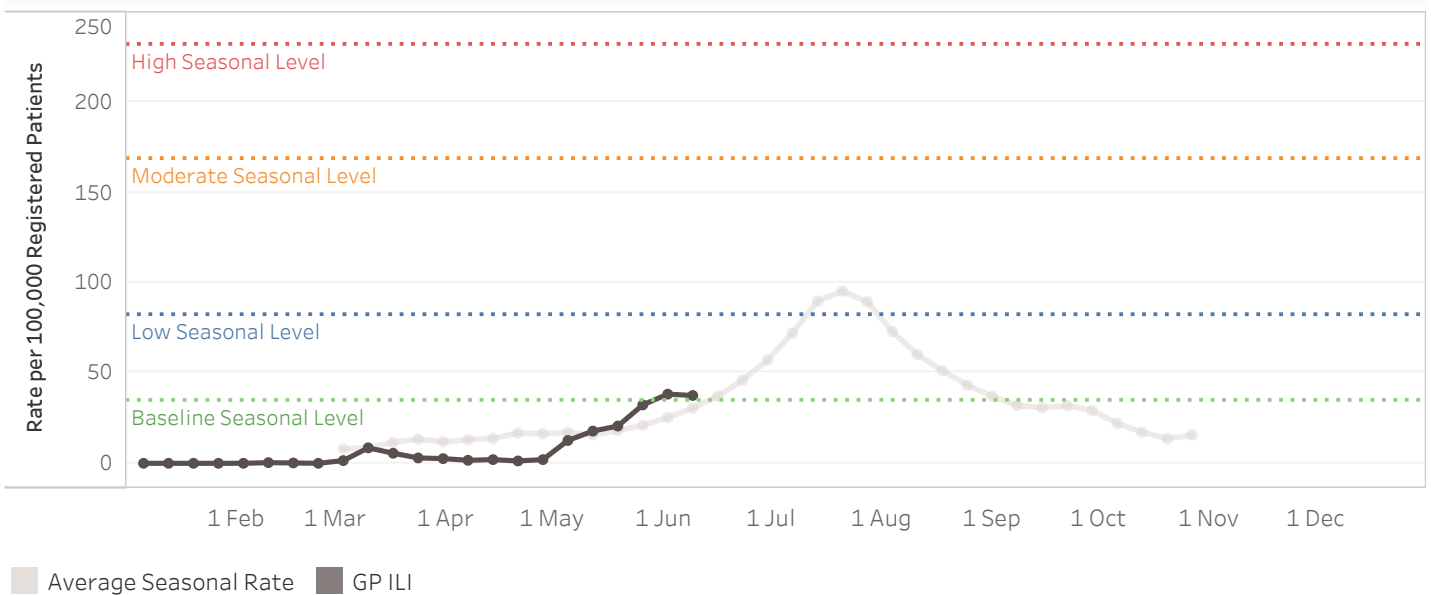


Week Ending 9 June 2019

National Overview

Influenza-like illness (ILI) activity in New Zealand is above the seasonal baseline threshold. Since last week there has been no increase. A higher proportion of illness is due to influenza viruses than usual at this time of year. Over 45% of samples tested in GPs and hospitals this year are influenza positive, which is one of the highest positivity rates for this period in recent years. Currently, A(H3N2) and B/Victoria viruses are circulating at similar levels. The 2019 seasonal influenza vaccine strains remain a good match to influenza viruses detected in New Zealand.

Weekly General Practice Influenza-like Illness (ILI) Rates To 09 Jun 19

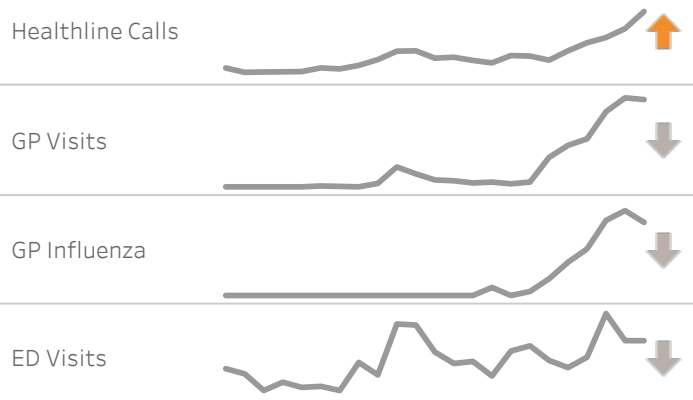


Community influenza-like illness (ILI) activity is above the seasonal baseline threshold, but with a slight decrease in ILI activity since last week. Two outbreaks have been reported in the past week from Nelson Marlborough and Canterbury DHBs.

Indicators of severity remain low. Severe acute respiratory infection (SARI) surveillance started on April 29th, but surveillance in intensive care units (ICU) for very severe or unusual presentations is year round. Activity in ICU is low. SARI activity is still below seasonal baseline levels.

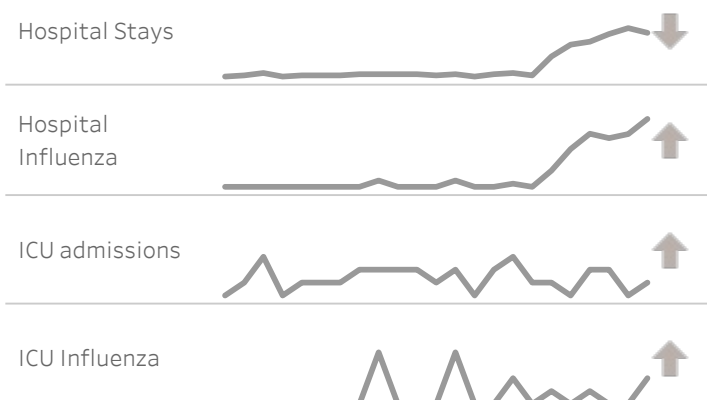
Influenza-like Illness (ILI) Activity to 09 Jun 19

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



Acute Hospital Activity (SARI) to 09 Jun 19

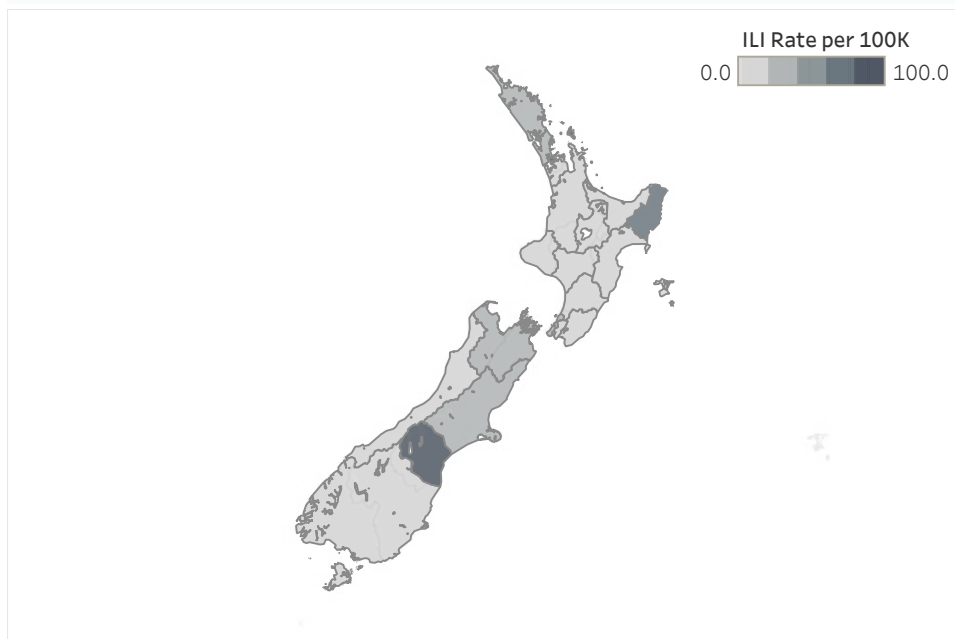
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

General Practice (GP) visits for influenza-like illness (ILI) is still above the baseline levels this week but showing a slight decrease from last week. Auckland, South Canterbury and Tairāwhiti DHBs have recorded the highest ILI rates this week. Healthline calls for ILI remain at expected level for this time of year, though have increased significantly this week. Tairāwhiti, Hutt Valley and Lakes DHBs have the highest rates this week.

GP Visits (ILI) Rate by DHB - Current Week



Control Measures

The 2019 publically funded seasonal Influenza vaccine contains the following four components (i.e. a quadrivalent vaccine):

- an A/Michigan/45/2015 (H1N1)pdm09-like virus;
- an A/Switzerland/8060/2017 (H3N2)-like virus;
- a B/Colorado/06/2017-like virus (B/Victoria/2/87 lineage); and
- a B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage).

Overseas acute respiratory disease surveillance

Pacific region: Australian influenza activity continues to increase and is at high levels for this time of year in most states and territories.^{1,2} Over the past two weeks, activity has increased in Western Australia, Victoria, New South Wales, the Australian Capital Territory and the Central and Southern regions of Queensland. Nationally, influenza A(H3N2) virus continues to predominate, with increasing proportions of influenza B since April. Circulating seasonal viruses are reportedly still a good match overall to the 2019 seasonal influenza vaccine strains. Several Pacific Island Countries and Territories have reported increasing influenza activity.³ Influenza A outbreaks are reported in Fiji and New Caledonia.^{1,3} Influenza B outbreaks are reported in the Northern Mariana Islands, Guam, the Federated States of Micronesia, the Marshall Islands, Vanuatu, Fiji and Wallis and Futuna.

- Asia: In East Asia, influenza activity continues to decrease with predominantly influenza B/Victoria lineage viruses detected.¹ Activity returned to baseline in China and the Republic of Korea.¹ In Southern Asia, influenza activity was low overall with predominantly A(H1N1)pdm09 virus detected there, with the exception of Bangladesh with increased activity, mainly influenza B/Victoria lineage. In South East Asia, influenza activity was low overall, except in Cambodia (A(H1N1) and B/Victoria lineage). Influenza activity has been low in most of West Asia, however influenza A and B viruses continue to circulate in Saudi Arabia.¹
- South and Central America: Overall, influenza activity remains low (A(H1N1)pdm09 predominating), with the exception of a recent sharp increase in activity in Chile.¹
- Africa: Low influenza activity across most of Africa except increased detections continuing in South Africa with A(H3N2) predominating.¹
- Northern Hemisphere: Currently low influenza activity overall.¹
- Emerging diseases: In 2019, ongoing detections of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in the Middle East and human infection with avian Influenza A(H7N9) and A(H9N2) in China have been reported (associated with exposures to camels and birds, respectively).^{4,5} In March the first case of human infection with avian influenza A(H5N1) ever detected in Nepal and the first in the world since 2017 was reported in a patient who has subsequently died.^{5,6} Investigations indicated that exposure most likely occurred at a live bird market. No symptomatic contacts have been detected. Outbreaks of highly pathogenic avian influenza A(H5N1) in poultry have been reported in Nepal in 2019 and in previous years.⁶ In March a case of human infection with avian influenza A(H9N2) was also reported in Oman. Low pathogenic avian influenza A(H9N2) virus has previously been detected in birds in Oman.⁷ The outbreak of MERS-CoV in the Kingdom of Saudi Arabia's Wadi Aldwasir city that commenced in January is reportedly over as no new cases were reported in April.⁸ All four viruses (MERS-CoV, A(H7N9), A(H9N2) and A(H5N1)) 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

Further information on overseas acute respiratory disease activity:

1. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 12/06/19)
2. Australia: www.health.gov.au/flureport (accessed 12/06/2019)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 12/06/19)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2019/en/ (accessed 12/06/19)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 12/06/19)
6. WHO Nepal: http://www.searo.who.int/nepal/documents/emergencies/Avian_Influenza_A_In_Human/en/ (accessed 22/05/19)
7. Body et al. 2015: <https://www.ncbi.nlm.nih.gov/pubmed/26473686> (accessed 15/05/19)
8. WHO EMRO: http://www.emro.who.int/images/stories/csr/documents/MERS-CoV_April_2019_003.pdf?ua=1 (accessed 22/05/19)