

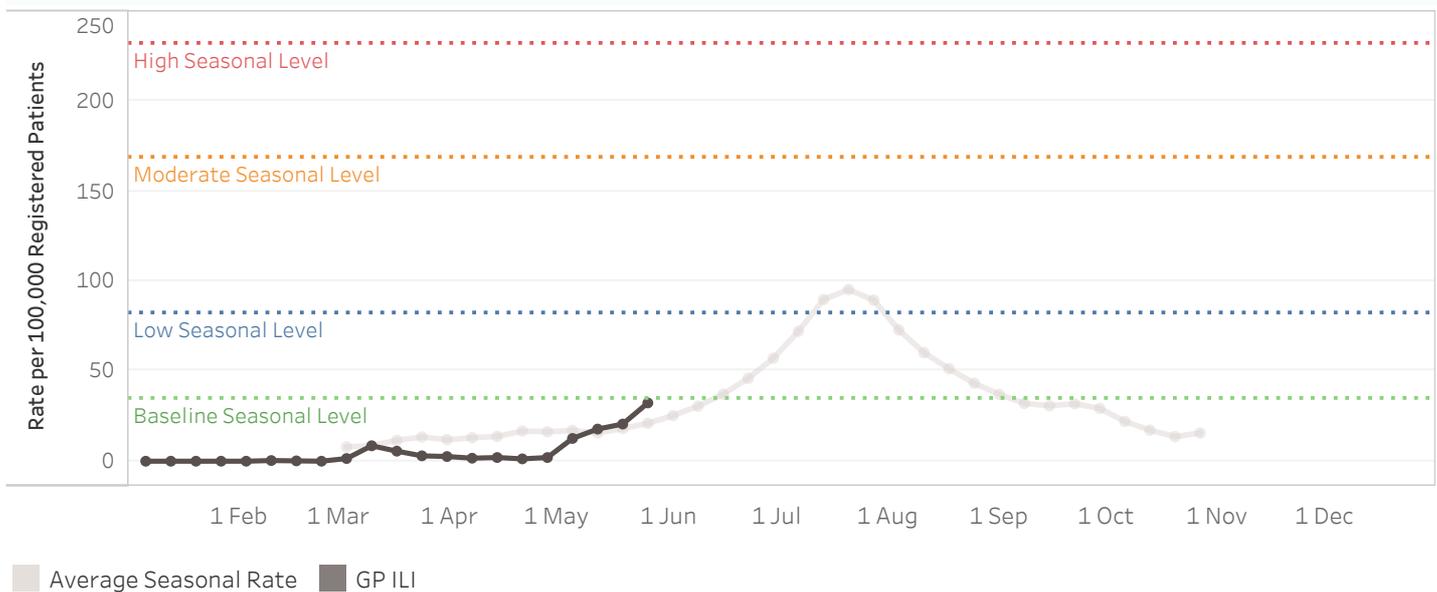
Week Ending 26 May 2019

National Overview

Influenza-like illness (ILI) activity in New Zealand continues to increase. Activity remains within baseline levels but is higher than usually expected for this time of year. Indicators of seasonal severity remain low. A higher proportion of illness is due to influenza viruses than usual at this time of year. Over 40% of samples tested in GPs and hospitals so far 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 26 May 19

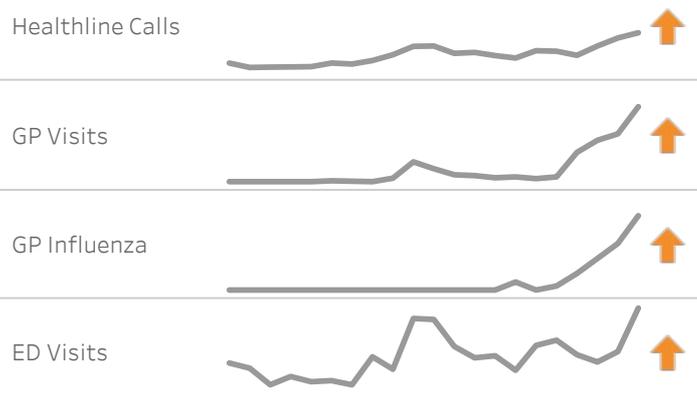


Community influenza-like illness (ILI) activity is approaching seasonal baseline levels, with a significant increase in ILI activity since last week. Three outbreaks have been reported in the North Island in the past week (in Northland, the Waikato and Capital and Coast DHBs) involving longterm care facilities and one school.

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.

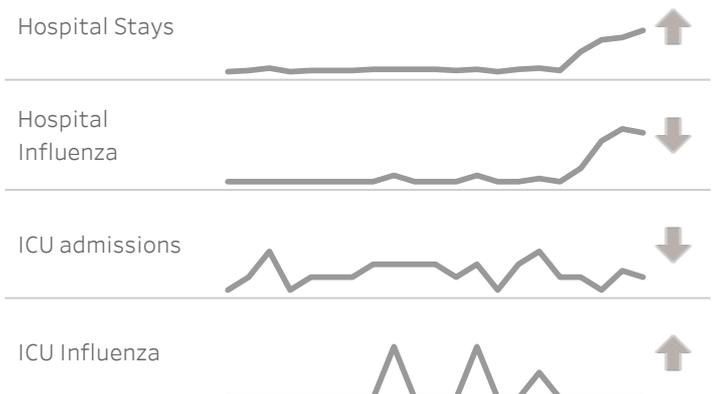
Influenza-like Illness (ILI) Activity to 26 May 19

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



Acute Hospital Activity (SARI) to 26 May 19

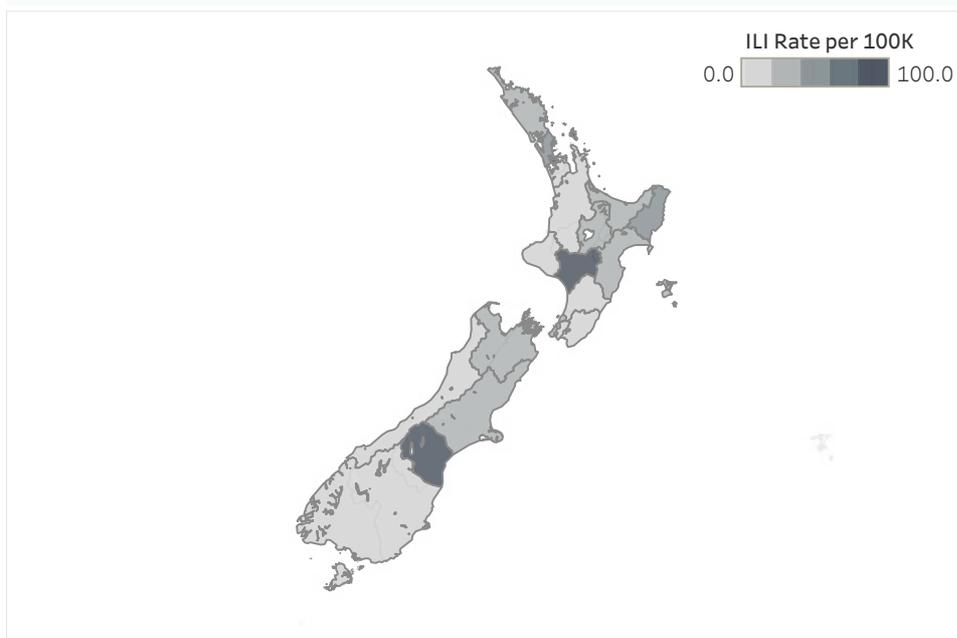
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

General Practice (GP) visits for influenza-like illness (ILI) have been increasing towards seasonal baseline levels this week. South Canterbury and Auckland DHBs have recorded the highest ILI rates this week. Healthline calls for ILI remain at expected levels for this time of year, though have increased significantly this week. Hutt Valley, Whanganui, Canterbury and Nelson Marlborough 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, at high levels for this time of year in most states and territories.^{1,2} This follows above expected activity during the inter-seasonal months (Jan-Apr) this year.² Compared to the previous fortnight, activity has increased in the Australian Capital Territory, Victoria, New South Wales, and areas of Western Australia and the Northern Territory. Nationally, notifications of laboratory-confirmed influenza increased, with influenza A(H3N2) virus continuing to predominate. 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 (A(H1N1)pdm09 and B viruses predominate) and New Caledonia (A(H1N1)pdm09 virus predominates).^{1,3} Influenza B outbreaks are reported in the Northern Mariana Islands, Guam, the Federated States of Micronesia, the Marshall Islands, Vanuatu and Fiji.

• Asia: In East Asia, influenza activity continues to decrease with predominantly influenza B viruses detected.¹ B/Victoria lineage viruses are reportedly circulating in China.¹ In Southern Asia, influenza activity was low overall with predominantly A(H1N1)pdm09 virus detected there. In South East Asia, influenza activity was low overall except slightly increased activity in Thailand (influenza B predominating). Influenza activity has been low in most of West Asia, however influenza A and B viruses continue to circulate on the Arabian Peninsula.¹

• South and Central America: Influenza activity increased above baseline in South America with A(H1N1)pdm09 predominating. Influenza activity was low overall in Central America.¹

• Africa: Low influenza activity across most of Africa except increased detections in South Africa with A(H3N2) predominating ¹.

• Northern Hemisphere: Currently low influenza activity overall. A(H1N1) predominated at the start of the season, followed by A(H3N2) predominance later.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} More recently, the first case of human infection with avian influenza A(H5N1) ever detected in Nepal was reported in a case who presented in March and subsequently died.⁷ Outbreaks of highly pathogenic avian influenza A(H5N1) in poultry have been reported in Nepal in 2019 and in previous years.⁷ A case of human infection with avian influenza A(H9N2) was also reported in Oman in a child with illness onset in March. Low pathogenic avian influenza A(H9N2) virus has previously been detected in birds in Oman.⁸ 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.⁹ Recent clusters of MERS-CoV cases have been reported in Alkhafji, Alkharji and Alderb cities in Saudi Arabia.⁴ 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 29/05/19)
2. Australia: www.health.gov.au/flureport (accessed 29/05/2019)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 29/05/19)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2019/en/ (accessed 29/05/19)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 29/05/19)
6. WHO Nepal: http://www.searo.who.int/nepal/documents/emergencies/Avian_Influenza_A_In_Human/en/ (accessed 22/05/19)
7. OIE Nepal: http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=30047 (accessed 22/05/19)
8. Body et al. 2015: <https://www.ncbi.nlm.nih.gov/pubmed/26473686> (accessed 15/05/19)
9. WHO EMRO: http://www.emro.who.int/images/stories/csr/documents/MERS-CoV_April_2019_003.pdf?ua=1 (accessed 22/05/19)