New Zealand Influenza Intelligence Report

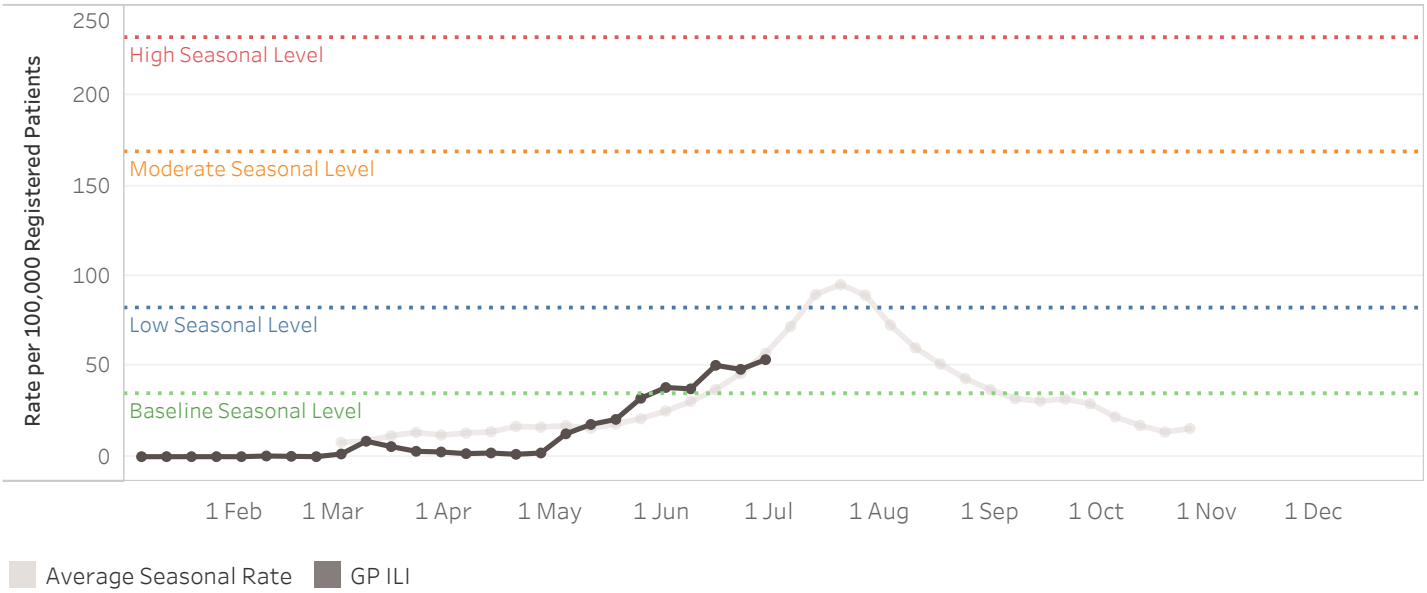
Week Ending 30 June 2019

National Overview

Influenza-like illness (ILI) activity in New Zealand has increased since last week and remains above the seasonal baseline threshold. A higher proportion of illness is due to influenza viruses than is usual at this time of year. Over 50% of samples tested in GPs and over 40% of samples tested in hospitals are influenza positive, which is one of the highest positivity rates for this period in recent years. Currently, influenza A(H3N2) and B/Victoria viruses are co-circulating, with B/Victoria predominating in the community and influenza A viruses predominating in hospitals. 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

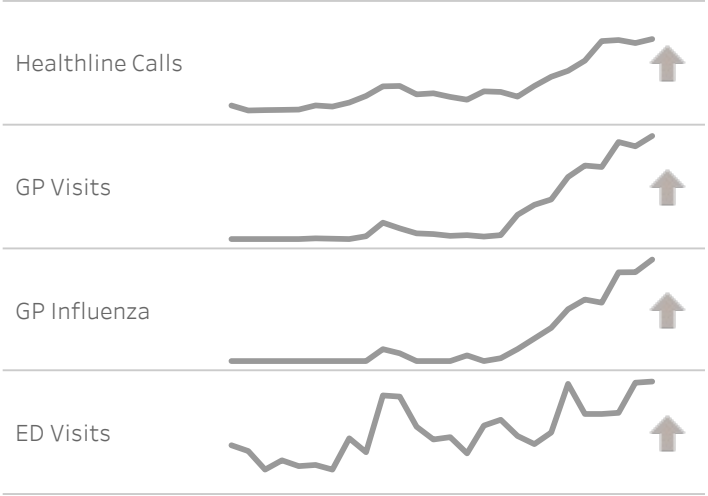
To 30 Jun 19



Community influenza-like illness (ILI) activity remains above the seasonal baseline threshold with a slight increase in ILI activity this week, following a slight decrease in activity the previous week.

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 just above the seasonal baseline levels.

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



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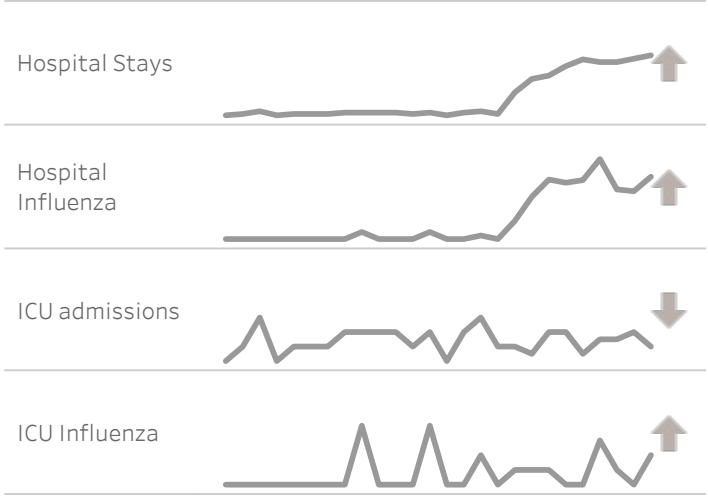
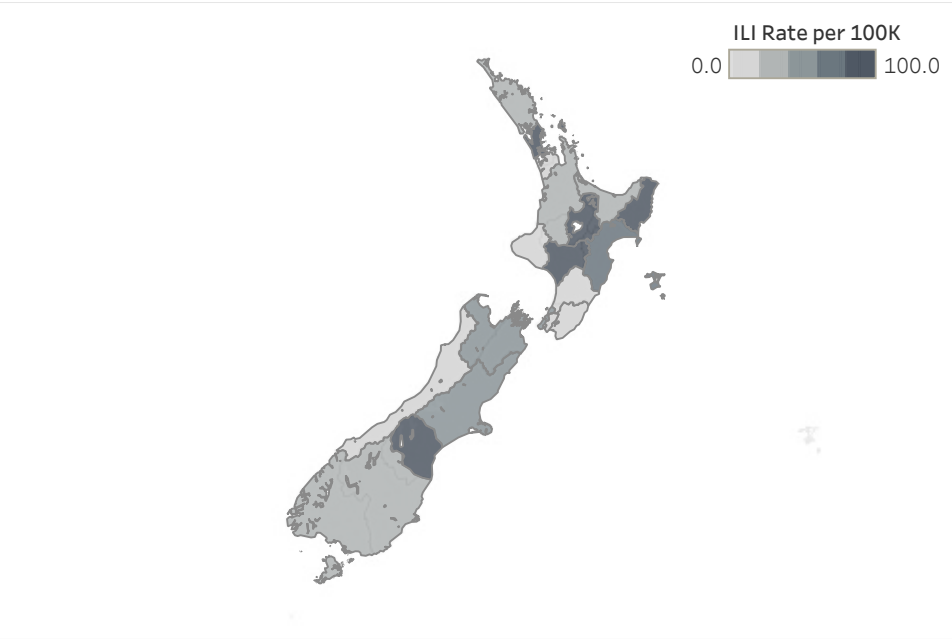


Activity by DHB

General Practice (GP) visits for influenza-like illness (ILI) remain above the baseline levels this week with an increase compared with the previous week. Lakes, Auckland, South Canterbury and Waitemata DHBs have recorded the highest ILI rates this week. Healthline calls for ILI remain at expected levels for this time of year, and the national rate has remained steady this week. Hutt Valley, Northland, MidCentral and Canterbury 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 New South Wales, Victoria, Tasmania, Western Australia and the Australian Capital Territory. Nationally, influenza A(H3N2) virus continues to predominate, with a substantial increase in the proportion of cases reported as influenza B. Clinical severity for the season to date is low. Circulating seasonal viruses are reportedly still a good match overall to the 2019 seasonal influenza vaccine strains. Influenza outbreaks continue to be reported in several Pacific Island Countries and Territories: influenza A in Fiji and New Caledonia, and influenza B in Vanuatu, Fiji and Wallis and Futuna.3
• Asia: Influenza activity was low across most of Asia.1 Activity decreased or was low in South East Asia, with predominantly A(H1N1)pdm09 and B viruses.
• South and Central America: Influenza activity continued to increase in temperate South America (A(H1N1)pdm09 predominance).1 Activity remained low overall in Central America, with the exception of Costa Rica (influenza A(H1N1)pdm09 and A(H3N2) co-circulating).
• Africa: Low influenza activity was reported across most of Africa except for 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 subsequently died.5,6 Investigations indicated that exposure most likely occurred at a live bird market. Outbreaks of highly pathogenic avian influenza A(H5N1) in poultry have been reported in Nepal in 2019 and in previous years.5 In March a case of human infection with avian influenza A(H9N2) was also reported in Oman.5 Low pathogenic avian influenza A(H9N2) virus has previously been detected in birds in Oman.6 The outbreak of MERS-CoV in the Kingdom of Saudi Arabia's Al-Kharfji city is reportedly over.7 A human case of influenza A(H1N1) variant virus infection was reported in the US on 31 May causing a mild illness and subsequent full recovery.8 The source of infection was unknown, although analysis found genes closely related to influenza viruses circulating in swine populations in the US in recent years. All five viruses (MERS-CoV, A(H7N9), A(H9N2), A(H5N1) and A(H1N1)variant) 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 3/07/19)
2. Australia: www.health.gov.au/flureport (accessed 3/07/2019)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 3/07/19)
4. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2019/en/ (accessed 3/07/19)
5. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 03/07/19)
6. Body et al. 2015: https://www.ncbi.nlm.nih.gov/pubmed/26473686 (accessed 15/05/19)
7. WHO EMRO: http://www.emro.who.int/pandemic-epidemic-diseases/mers-cov/mers-situation-update-may-2019.html (accessed 19/06/19)
8. WHO Influenza at the Human-Animal interface: https://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/ (accessed 3/07/2019)