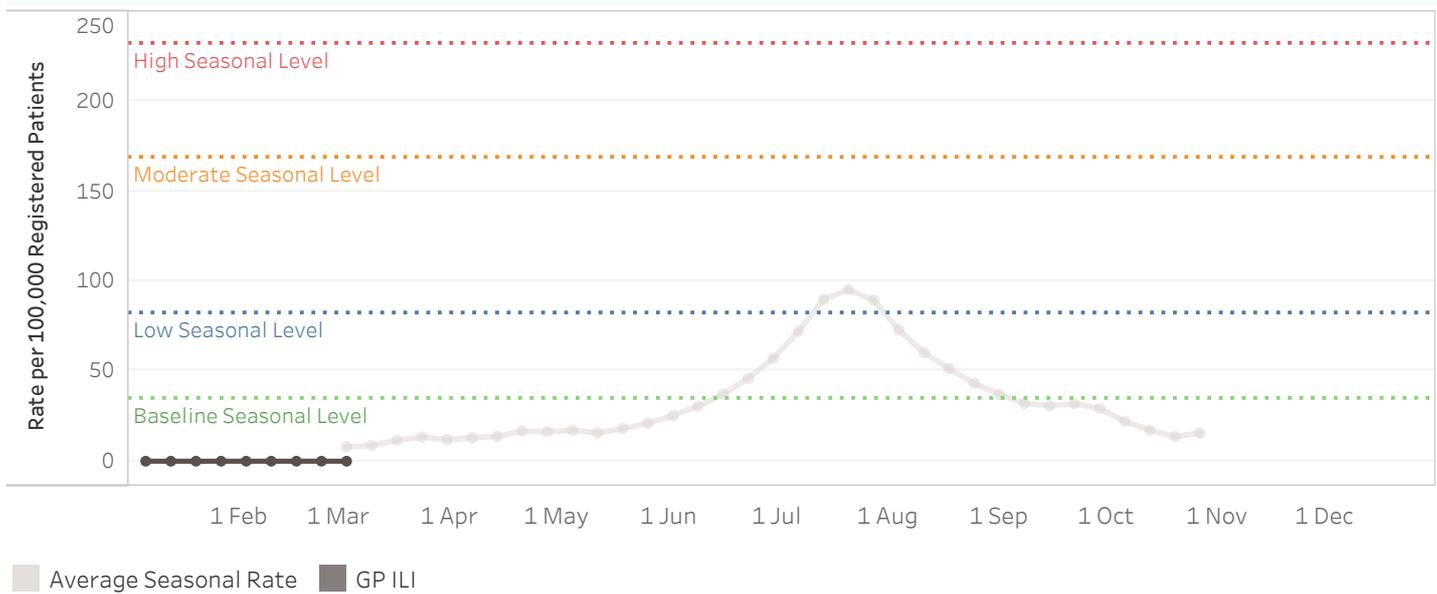


Month of February 2019

National Overview

Overall Influenza activity has remained at low, expected interseasonal levels in New Zealand, although there have been localised clusters of influenza reported in Hawke's Bay and Southern DHBs, as well as Canterbury and the Wellington region, recently. This Dashboard will be updated in May 2019 unless the out of season surveillance identifies influenza activity of interest.

Weekly General Practice Influenza-like Illness (ILI) Rates To 03 Mar 19



As expected for this time of year, indicators of community influenza-like illness activity (ILI) have remained low. ILI-related calls to HealthLine have been low in all DHBs, but there was a localised increase in calls from two Dunedin suburbs recently, associated with an influenza A outbreak among college students.

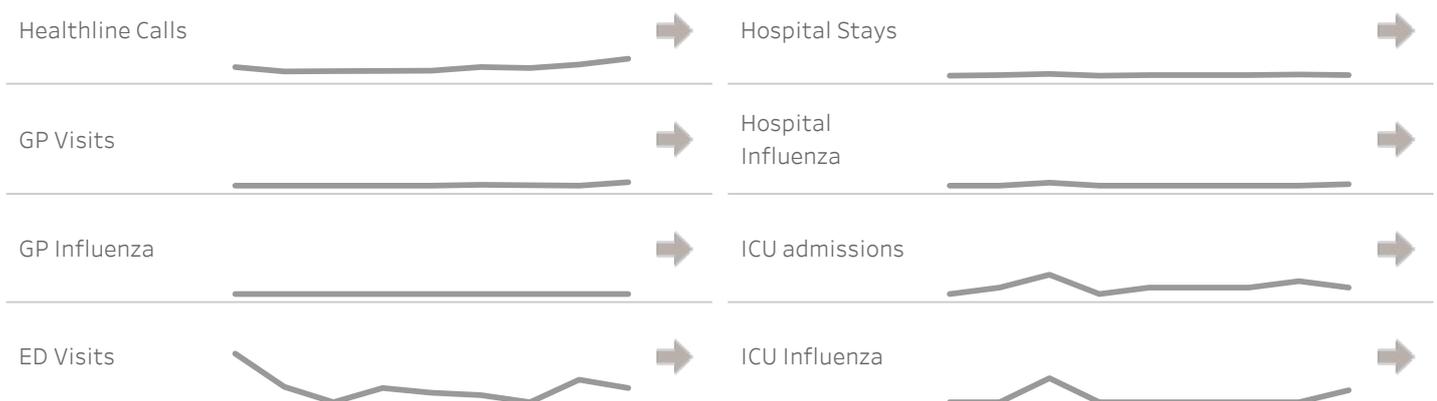
Severe acute respiratory infection (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs have remained low since the beginning of the year.

Influenza-like Illness (ILI) Activity to 03 Mar 19

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

Acute Hospital Activity (SARI) to 03 Mar 19

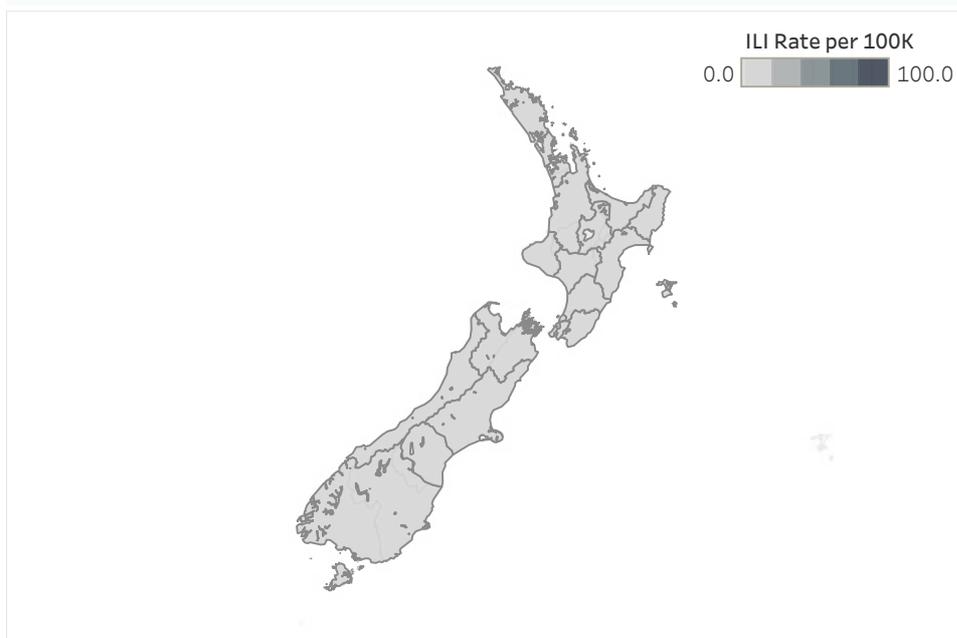
Arrow colour indicates whether the current weekly change is statistically significant.



Activity by DHB

As expected for this time of year, across all District Health Boards, rates of GP visits for ILI have remained low over the month. 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.

GP Visits (ILI) Rate by DHB - Current Week



Control Measures

The 2018 publically funded seasonal influenza vaccine contained the following four components (i.e. this was 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)

The 2019 publically funded seasonal influenza vaccine will be available in April. It includes a change to the A(H3N2) and B/Victoria strains.

Overseas acute respiratory disease surveillance

• Pacific region: Australian influenza activity has been higher than expected in some parts of the country during this inter-seasonal period.^{1,2} Although activity is still low, it has been reported as above the inter-seasonal threshold in some states and territories – particularly Queensland, New South Wales (NSW), Western and South Australia (based on data reported to 31 December 2018, 2, 3 and 23 February 2019, respectively).² Queensland reported a low season in 2018 but with two peaks of activity, most recently in December (outside the typical flu season) with the highest flu positivity occurring in the final weeks of the year. NSW report a spike in activity in January above the inter-seasonal threshold and higher than usual acute respiratory ED presentations (although not hospital admissions) associated with circulating influenza A strains covered by the 2018 seasonal vaccine. NSW attribute increasing influenza activity in January and February in recent years to international travel from the Northern Hemisphere. South and Western Australia most recently report decreasing influenza activity since the end of last year. Nationally, influenza A(H1N1)pdm09 followed by A(H3N2) predominate. Non-influenza virus detections are low but rhinovirus has been the most commonly detected where reported.²

In Micronesia, there are influenza A outbreaks reported in Guam and the Federated States of Micronesia.³ Increasing influenza-like illness has also been reported in the Northern Mariana Islands within seasonally expected levels.³

• Asia: Influenza activity decreased in East Asia where A(H1N1)pdm09 has predominated, including a return to baseline levels in Japan.¹ In Southeast Asia, all seasonal flu strains have been detected. Influenza activity has been recently increasing in the Philippines with predominantly A(H1N1)pdm09 and B/Victoria strains detected there. Increasing influenza activity has also been reported in Thailand (all seasonal strains detected).

• Northern Hemisphere: In the USA, influenza activity has been increasing to moderate or high levels in most states.⁴ Influenza A(H1N1)pdm09 and A(H3N2) predominate (A(H3N2) increasing most, lately), with the majority of strains tested having a good antigenic match to the Northern Hemisphere seasonal influenza vaccine strains (which were the same as the Southern Hemisphere 2018 vaccine for A virus strains). Indicators of flu season severity are lower than last season in the USA, so far. In Canada, the influenza season appears to have peaked, with A(H1N1) predominating.⁵ In the UK, influenza activity is at low levels, with A(H1N1)pdm09 and A(H3N2) co-circulating.⁶ Recent reports from the WHO are that globally circulating seasonal strains are antigenically covered by seasonal vaccine strains, overall.

• 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(H9N2) in China have been reported (associated with exposures to camels and birds, respectively).^{7,8} The Kingdom of Saudi Arabia is currently investigating an outbreak of MERS-CoV in Wadi Aldwasir city involving 39 cases (4 deaths) including 9 healthcare workers, as of 13 February.⁷ Both MERS-CoV and A(H9N2) viruses 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.⁸

Further information on overseas acute respiratory disease activity:

1. Australia: www.health.gov.au/flureport (accessed 06/03/19)
2. WHO Global Flu Update: www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/ (accessed 06/03/19)
3. Pacific: www.spc.int/phd/epidemics/ (accessed 06/03/19)
4. US CDC: US CDC: www.cdc.gov/flu/weekly/ (accessed 06/03/19)
5. Canada: www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-reports-2018-2019-season.html (accessed 06/03/19)
6. UK: www.gov.uk/government/statistics/weekly-national-flu-reports-2018-to-2019-season (accessed 06/03/19)
7. WHO Emergency Preparedness, response: www.who.int/csr/don/archive/year/2019/en/ (accessed 06/03/19)
8. WHO Avian and other zoonotic influenza: www.who.int/influenza/human_animal_interface/en/ (accessed 12/03/19)