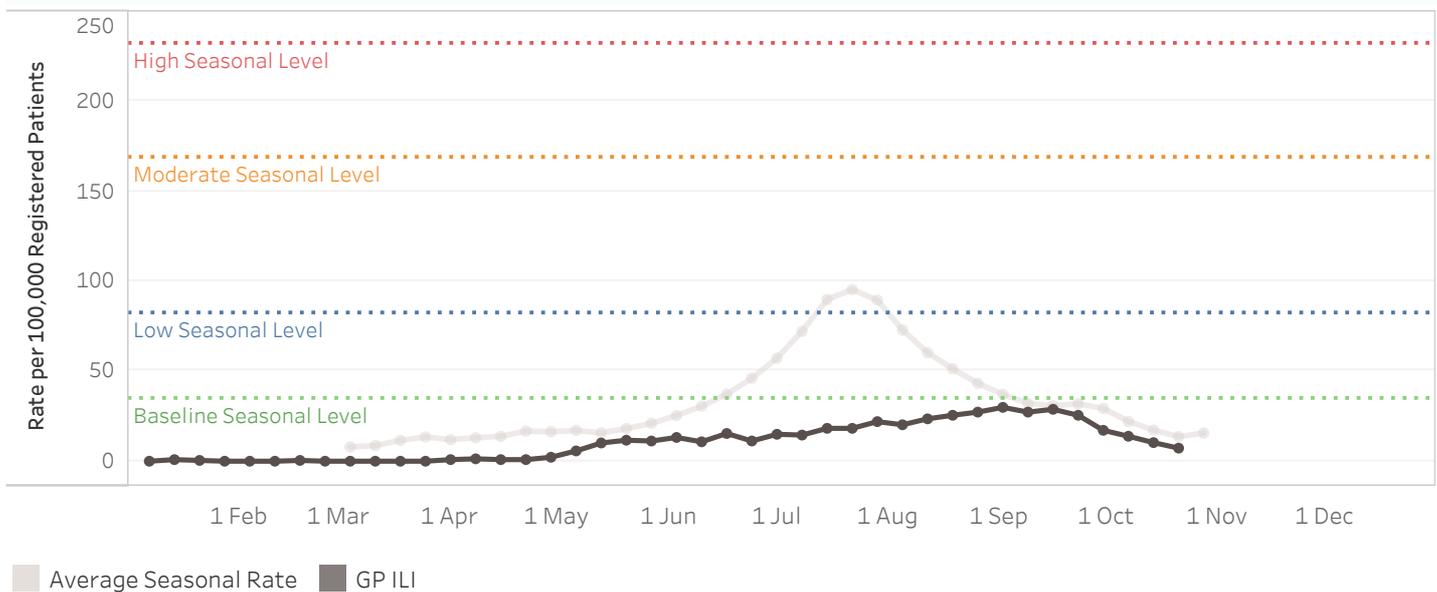


## Week Ending 21 October 2018

### National Overview

Despite continued decreases in Influenza-like illness (ILI) and severe acute respiratory illness (SARI) visits recently, influenza positivity increased at least slightly last week in both systems. At the same time, detection of other respiratory viruses decreased, which could account for ILI and SARI rate decreases. Non-ICU SARI surveillance and respiratory virus testing in GP ILI visits will conclude on 28th October. The dashboard and report will be updated monthly.

### Weekly General Practice Influenza-like Illness (ILI) Rates To 21 Oct 18



In the past week, indicators of community influenza-like illness (ILI) activity remained similar to the previous week except for a significant decrease in ILI visits.

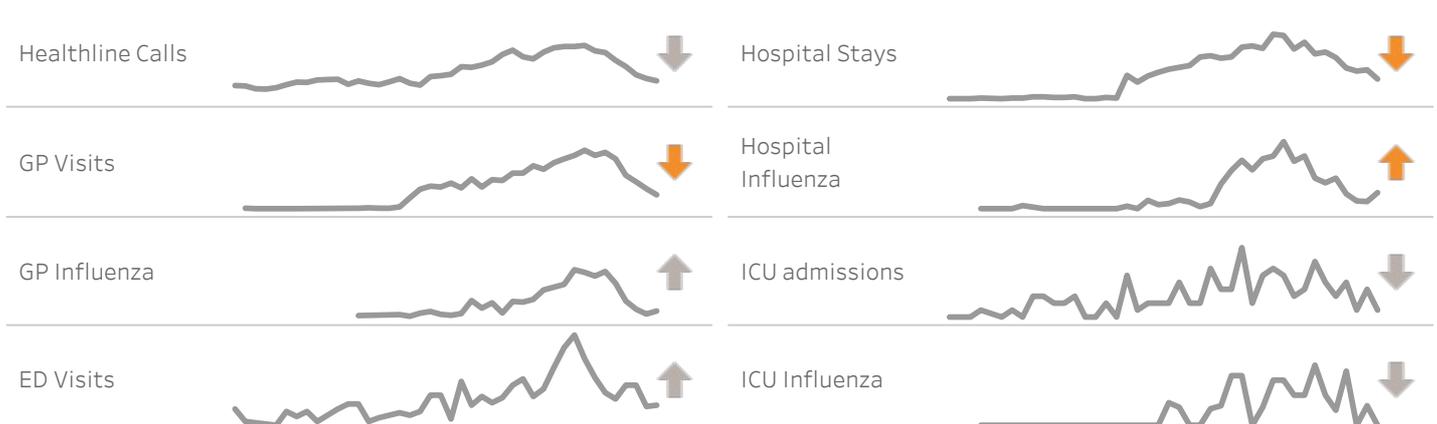
Despite severe acute respiratory illness (SARI) admissions to sentinel hospitals in Auckland and Counties Manukau DHBs peaking weeks ago, a small increase in influenza (mostly Influenza A) was seen last week. Although SARI hospitalisations are low compared to previous years, influenza-positive SARI hospital and ICU admission rates this season are comparable to those from other Flu A(H1N1) predominant seasons.

### Influenza-like Illness (ILI) Activity to 21 Oct 18

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

### Acute Hospital Activity (SARI) to 21 Oct 18

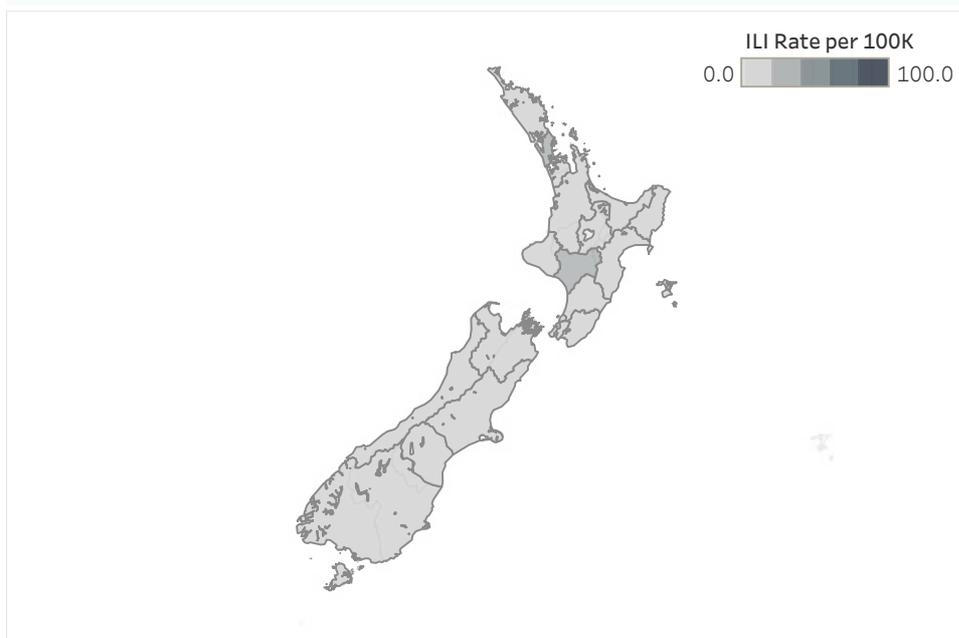
Arrow colour indicates whether the current weekly change is statistically significant.



## Activity by DHB

Across nearly all District Health Boards, rates of GP visits and Healthline calls for ILI decreased last week. Many South Island DHBs had small increases in Healthline ILI call rates. 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. Cumulative rates for Healthline ILI calls in 2018 do not vary greatly across DHBs.

## 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 has been low this season and is continuing to decline after a late peak in September (based on data reported to 07 Oct 2018). Flu A viruses continue to predominate, particularly A(H1N1)pdm09, and children less than 10 years old are the age group most commonly affected. Overall, the Australian season has been of moderate severity (measured by proportion of direct admissions to ICU, and deaths).<sup>1</sup>
- Southern and South East Asia: Influenza activity is still being reported in some countries - Cambodia (A(H1N1) and B/Yamagata), Lao (A(H1N1) predominance) and Thailand (A(H1N1) predominance). Activity has been increasing in India, with A(H1N1) predominance.<sup>2</sup>
- Elsewhere in the tropical zone of the Southern Hemisphere: Influenza activity has been decreasing in most countries in South America, where influenza A(H1N1)pdm09 virus has predominated. Influenza activity is generally low in most reporting countries in tropical Africa. Activity has been low in Central America, but increased in Cuba and Haiti and remained high in El Salvador and Nicaragua, with A(H1N1) predominating in all.<sup>2</sup>
- Elsewhere in the temperate zone of the Southern Hemisphere: Influenza activity has resurged with a second wave in South Africa, with predominantly B viruses (both lineages) following on from A(H1N1). Activity has been decreasing in South America, including Chile and Paraguay where activity recently peaked with A(H3N2) and B viruses predominating, but activity remains high in Uruguay with all seasonal flu viruses circulating.<sup>2</sup>
- Northern Hemisphere: Low influenza activity at inter-seasonal levels.<sup>2</sup> The CDC is investigating an increase in Acute Flaccid Myelitis (AFM), associated with enterovirus infection, in the USA. There have been 62 cases of this potentially debilitating neurological condition, mostly affecting children, in 22 states in 2018 (to Sept 30th). AFM may commence with acute respiratory or gastrointestinal symptoms, and has previously been associated with enterovirus D68 infections.<sup>4</sup>
- Emerging diseases: In 2018, ongoing detections of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in the Middle East, with sporadic cases imported elsewhere (1 case each to England and South Korea), have been reported associated with exposure to camels in the Middle East.<sup>5</sup> In China, further sporadic cases of human infection with avian influenzas A(H9N2), A(H7N9), A(H5N6) have been reported, associated with exposures to birds.<sup>5,6</sup> In February, the world's first reported case of human avian influenza A(H7N4) infection was detected in China.<sup>4</sup> These five viruses (MERS-CoV, avian influenza A(H9N2), A(H7N9), A(H5N6) 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.<sup>5,6</sup>

Further information on overseas acute respiratory disease activity:

1. Australia: [www.health.gov.au/flureport](http://www.health.gov.au/flureport) (accessed 24/10/18)
2. WHO Global Flu Update (data to 30 Sept 2018): [www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/) (accessed 24/10/18)
3. Pacific: [www.spc.int/phd/epidemics/](http://www.spc.int/phd/epidemics/) (accessed 24/10/18)
4. CDC USA: [www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html](http://www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html) (accessed 24/10/18)
5. WHO Emergency Preparedness, response: [www.who.int/csr/don/archive/year/2018/en/](http://www.who.int/csr/don/archive/year/2018/en/) (accessed 24/10/18)
6. WHO Avian and other zoonotic influenza: [www.who.int/influenza/human\\_animal\\_interface/en/](http://www.who.int/influenza/human_animal_interface/en/) (accessed 24/10/18)