

Report No. 18: Week ending 8 September 2019

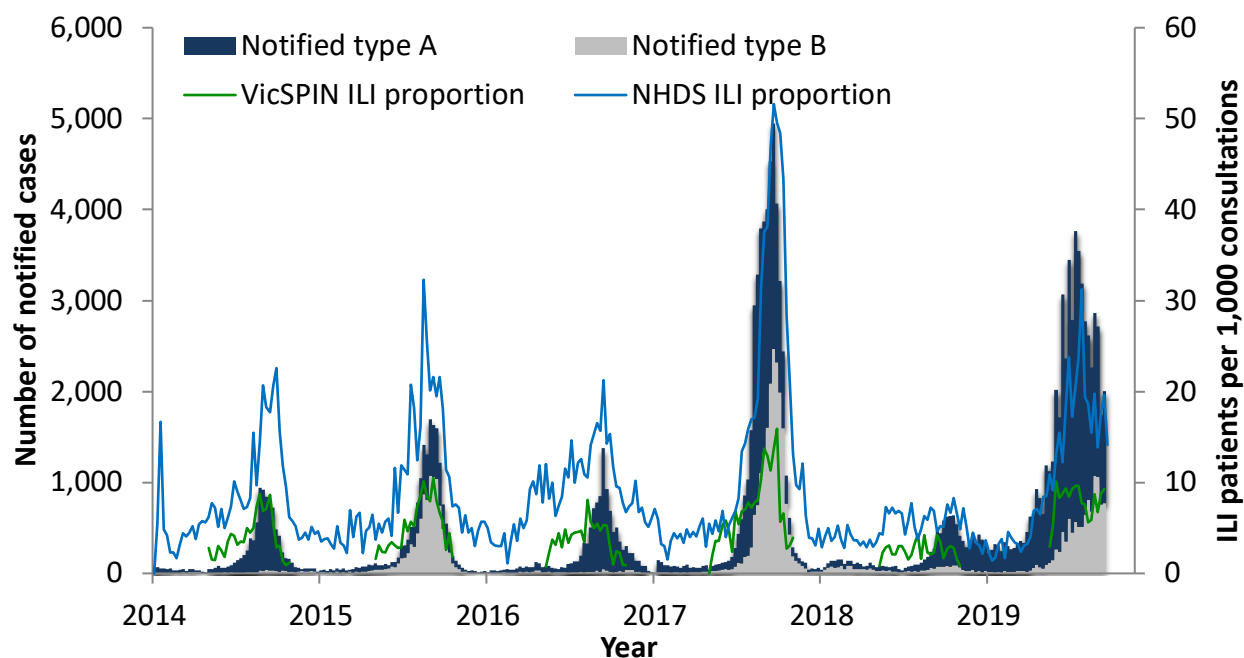
Overview: The 2019 influenza season so far

Influenza-like illness (ILI) activity remains within the **average** threshold. The total ILI proportion measured by VicSPIN this week increased slightly and is similar to levels observed earlier in the season but lower than the same time in 2017.

The number of **notified cases of laboratory confirmed influenza is 12 times higher than by the same time in 2018 and almost 2 times higher than in 2017**. The majority of notified cases over the season have been type A (80%), and type A cases are older than type B cases. However, the ratio of type A to B has shifted, with type A decreasing to 60% of notifications in the last 4 weeks, and type B comprising 40%.

Twenty-nine swabs were received from VicSPIN this week, of which **41% were positive for influenza**. This is higher than the average for the season (34%). To date, influenza A(H3) was co-detected with A(H1N1)pdm09 in one case. In seven additional cases, influenza was co-detected with another respiratory virus.

Figure 1. Routinely notified influenza cases and VicSPIN and National Home Doctor Service (NHDS) ILI consultation proportions, Victoria, 2014-2019



National Home Doctor Service (Victoria)

- The ILI proportion for the week decreased from 19.6 to 14.1 ILI cases per 1,000 patients seen (Figure 1).
- ILI activity remains within the average activity threshold range of 10-35 ILI cases per 1,000 patients seen.

Victorian Sentinel Practice Influenza Network

- The ILI proportion measured by VicSPIN is higher than for the same time in 2018, but lower than in 2017. The proportion remains within the average activity level, with 9.3 ILI cases per 1,000 patients seen, which is slightly higher than that observed over the last few weeks and similar to proportions observed earlier in the season. (Figures 1 & 2).
- Twenty-nine swabs were received this week, of which 12 (41%) were positive for influenza (two of A(H1), six A(H3), one A(Hx) and three B). H5N1 was detected in two swabs, and coronavirus, picornavirus and RSV were detected in one swab each. (Figure 3).

Table 1. Summary of reporting from general practice sentinel sites, week ending 8 September 2019

	Week	Year-to-date
Number (%) of general practitioners reporting	84 (100%)	
Total patients seen	5724	110,143
Total patients with ILI	53	861
Consultation rate for ILI (per 1,000 patients)	9.3	7.8
Number of specimens received	29	623
Number (%) positive for influenza	12 (41%)	209 (34%)

Figure 2. VicSPIN ILI consultation proportions, Victoria, 2017, 2018 and 2019

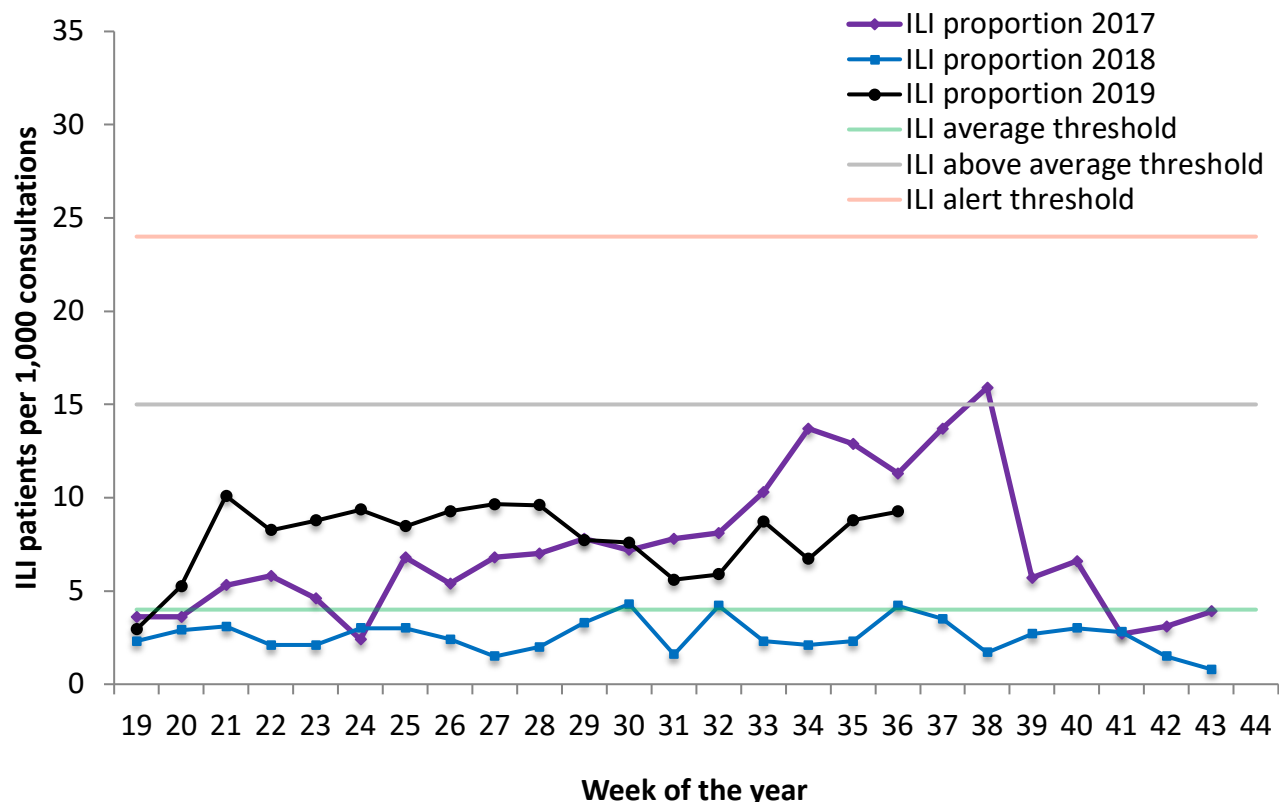
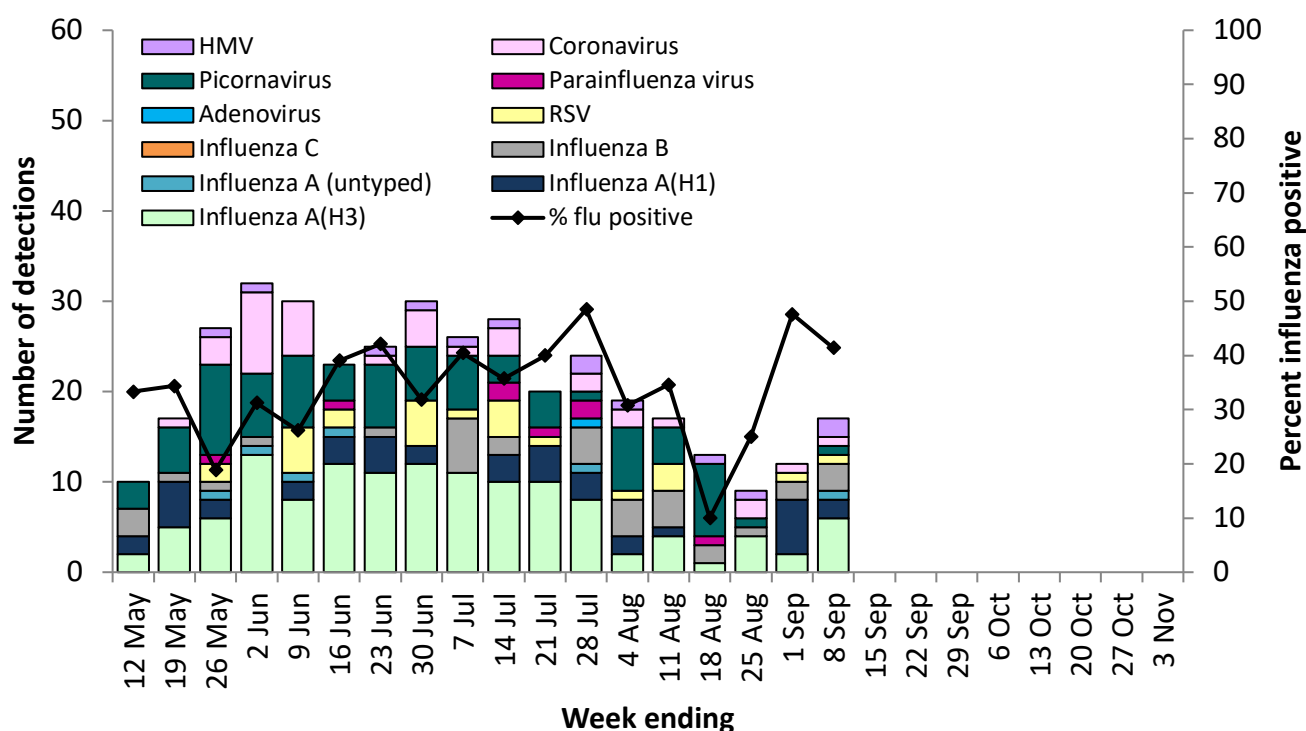


Figure 3. VicSPIN respiratory virus detections and percent influenza positive, Victoria, 2019



Observations from other influenza surveillance systems

Notified cases of laboratory confirmed influenza

- A total of 54,067 cases of laboratory confirmed influenza have been processed so far in 2019, twelve times the number of cases notified by the same time in 2018 and almost two times the number by the same time in 2017 (Figure 1). This number is subject to change as notifications are processed and entered.
- Year to date, 80% of notified cases have been type A (21% aged less than 10 years and 17% aged 65 years and over) and 20% have been type B (32% aged less than 10 years and 4% aged 65 years and over). However, there has been a shift in the ratio of type A to B, with 60% type A and 40% type B in the last 4 weeks.

World Health Organization Collaborating Centre for Reference and Research on Influenza

- The strains included in the 2019 quadrivalent influenza vaccine are: A/Michigan/45/2015-Like (H1N1)pdm09 virus; A/Switzerland/8060/2017-like (H3N2) virus; B/Colorado/06/2017-like virus with the quadrivalent vaccine including B/Phuket/3073/2013-like virus as well.
- A total of 268 Victorian isolates have been strain-typed by the WHO to date: 125 as A/Michigan/45/2015-Like; two as A/Michigan/45/2015-Low Reactor; 89 as A/Switzerland/8060/2017-Like; 25 as A/Switzerland/8060/2017-Low Reactor; 18 as B/Colorado/6/2017-Like; eight as B/Colorado/6/2017-Low Reactor; and one as B/Phuket/3073/2013-Like.
- One isolate has shown resistance to oseltamivir and one isolate has shown resistance to zanamivir, among the 2021 Australian isolates tested so far in 2019.