

Report No. 20: Week ending 22 September 2019

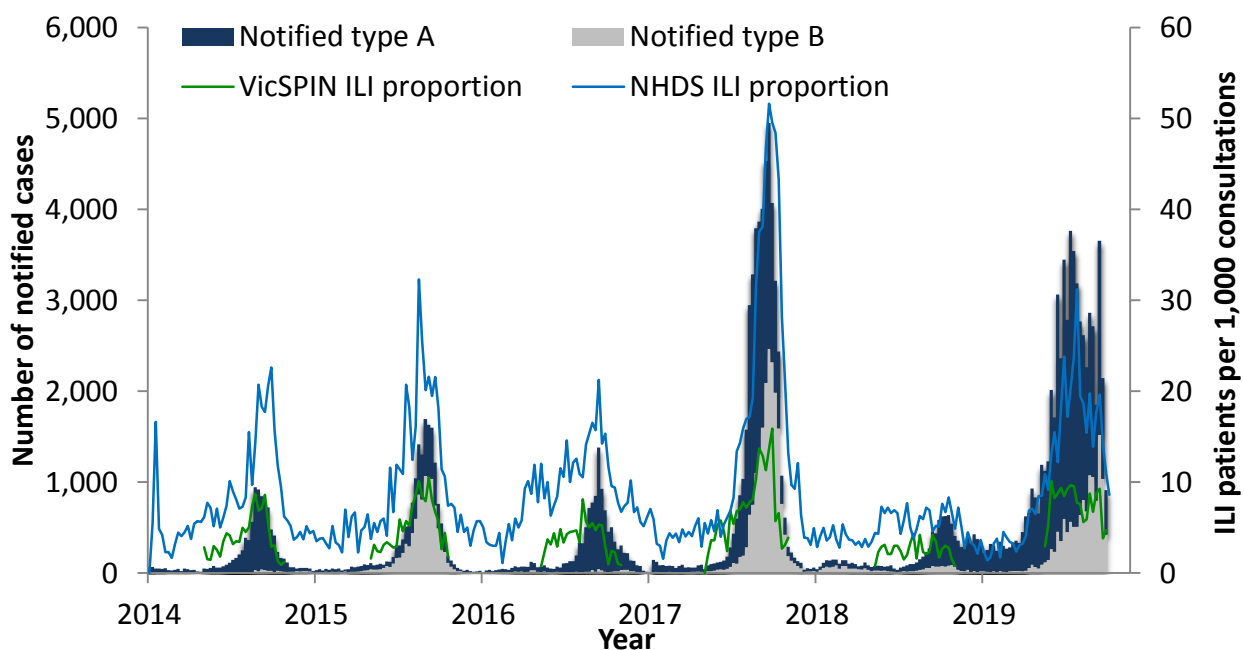
Overview: The 2019 influenza season so far

Influenza-like illness (ILI) is **just above the average** threshold this week. The total ILI proportion measured by VicSPIN this week is slightly higher than last week and higher than for the same time in 2018 but much lower than for the same time in 2017.

The number of notified cases of laboratory confirmed influenza is over **10 times higher** than by the same time in 2018 and **1.5 times higher** than in 2017. The majority of notified cases over the season have been **type A (78%)**, 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 56%** of notifications in the last 4 weeks, and **type B comprising 44%**.

Nineteen swabs were received from VicSPIN this week, of which **16% were positive** for influenza. This is lower than the average for the season (33%). To date, influenza A(H3) was co-detected with A(H1N1)pdm09 in one case. In eight 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 11.0 to 8.6 ILI cases per 1,000 patients seen (Figure 1).
- ILI activity is now **below** 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 now much lower than at the same time in 2017 but higher than that at the same time in 2018. The proportion is just above the ILI average threshold, with 4.7 ILI cases per 1,000 patients seen. (Figures 1 & 2).
- Nineteen swabs were received this week, of which 3 (16%) were positive for influenza (two A(H3) and one B). Picornavirus was detected in four swabs and RSV and parainfluenza were detected in one swab each. (Figure 3).

Table 1. Summary of reporting from general practice sentinel sites, week ending 22 September 2019

	Week	Year-to-date
Number (%) of general practitioners reporting	84 (100%)	
Total patients seen	5713	121,610
Total patients with ILI	27	910
Consultation rate for ILI (per 1,000 patients)	4.7	7.5
Number of specimens received	19	655
Number (%) positive for influenza	3 (16%)	217 (33%)

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

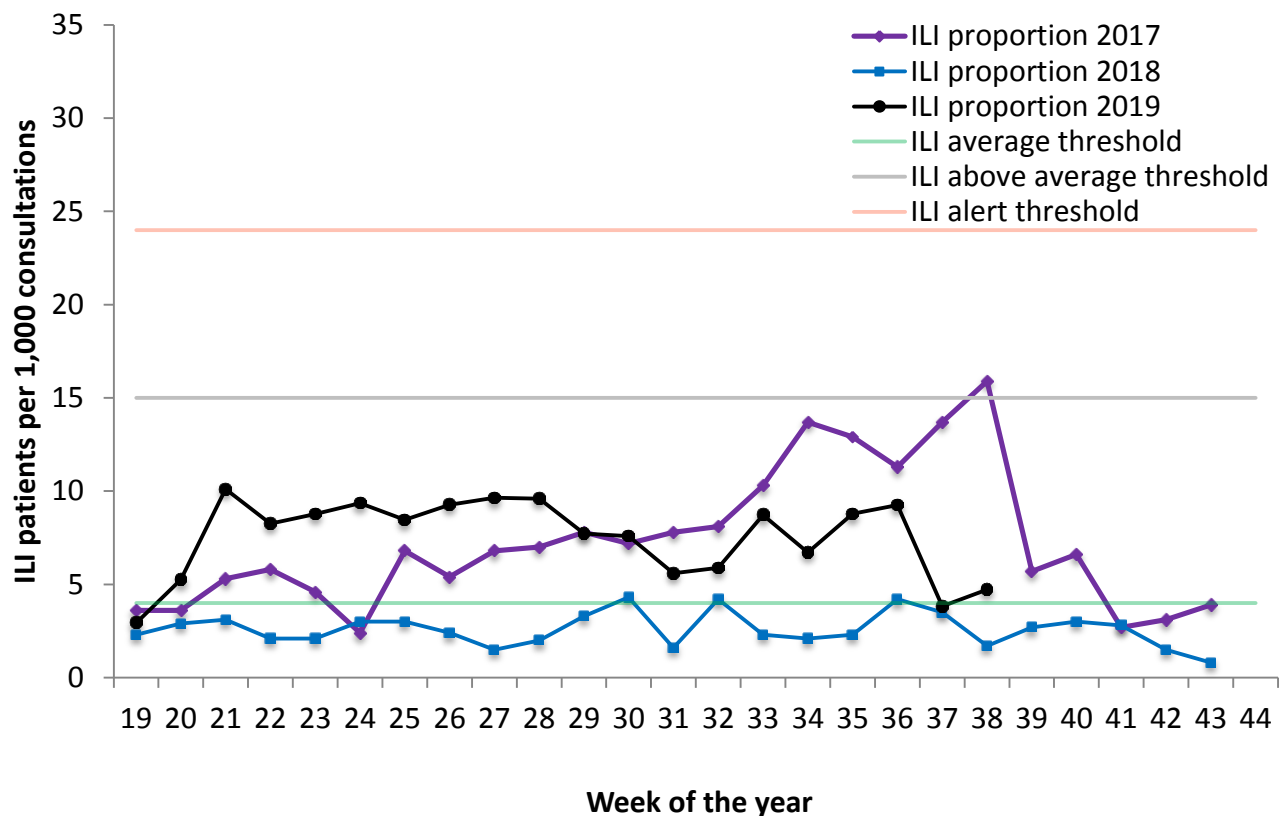
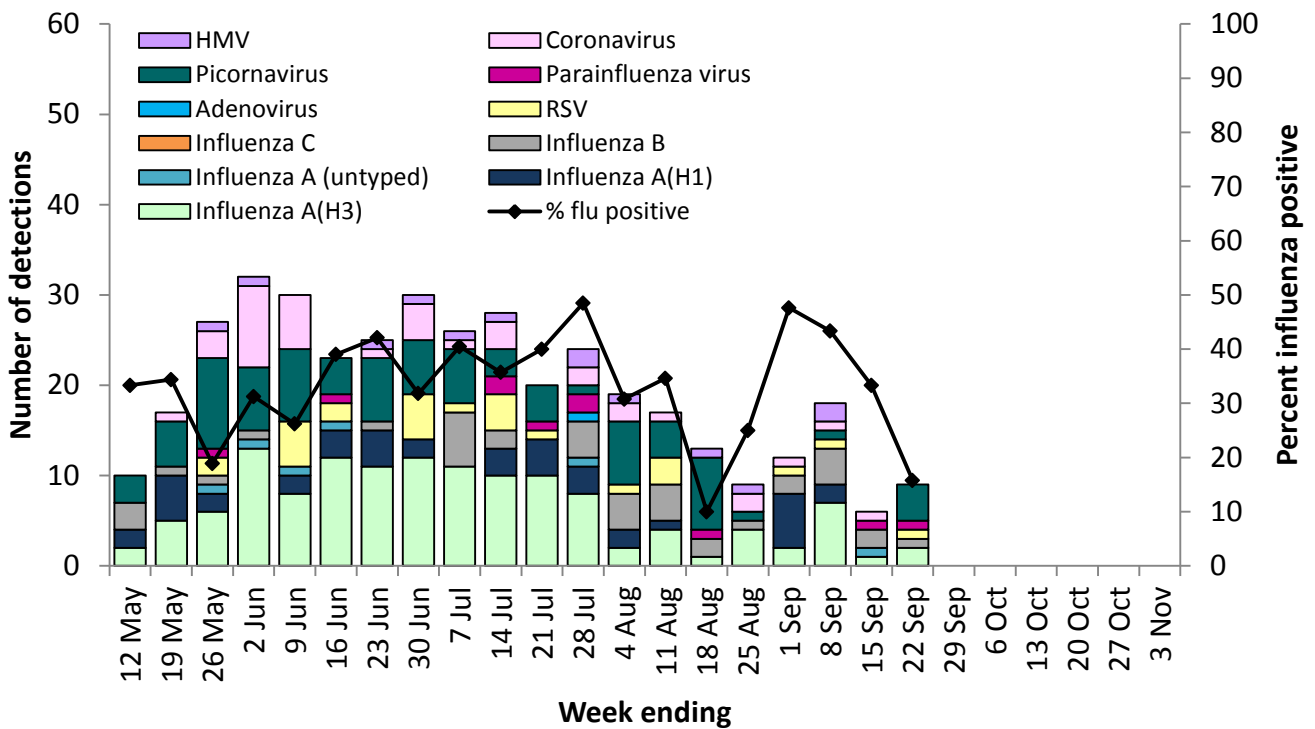


Figure 3. VicSPIN respiratory virus detections and percent influenza positive, Victoria, 2019



Observations from other influenza surveillance systems

Notified cases of laboratory confirmed influenza

- A total of 58,858 cases of laboratory confirmed influenza have been processed so far in 2019, over ten times the number of cases notified by the same time in 2018 and one and a half 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, 78% of notified cases have been type A (21% aged less than 10 years and 17% aged 65 years and over) and 22% have been type B (32% aged less than 10 years and 3% aged 65 years and over). However, there has been a shift in the ratio of type A to B, with 56% type A and 44% 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 296 Victorian isolates have been strain-typed by the WHO to date: 129 as A/Michigan/45/2015-Like; two as A/Michigan/45/2015-Low Reactor; 105 as A/Switzerland/8060/2017-Like; 27 as A/Switzerland/8060/2017-Low Reactor; 23 as B/Colorado/6/2017-Like; nine 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 2061 Australian isolates tested so far in 2019.