

Record number of influenza tests in 2019, not a “mutant flu crisis”

TO THE EDITOR: Mainstream media headlines have raised fears among the community and clinicians about the impact of influenza and likely effectiveness of the 2019 influenza vaccine. On Saturday, 6 July 2019, the front page of Sydney's *Daily Telegraph* reported “Mutant flu crisis” and “Exclusive: Jab fail fears as killer strain takes hold”.

The World Health Organization Collaborating Centre for Reference and Research on Influenza was quoted in the *Daily Telegraph* article, explaining that some drift among circulating strains from the vaccine strains is expected every year and that to date in 2019, drifted strains made up just a small portion of circulating virus. However, this did not quell the resulting media coverage.

A factor driving the intense media and community interest in influenza in 2019 has been the record number of notifications, but on further analysis, the raw numbers are less worrying.

New South Wales Health has collected influenza test counts from sentinel laboratories since 2004, and laboratory confirmed cases of influenza are notified under the *Public Health Act 2010*. Since 2010, the group of laboratories contributing test count data has changed little, providing a stable cohort for analysis over time. This group conducts the majority of influenza testing in public and private laboratories in all regions of NSW. During this period, the ratio of tests conducted in public compared with private laboratories has varied markedly, from a predominance in public laboratories (9:1) in the early years to mostly in the private sector (4:6) since 2015.

As shown in the [Box](#), respiratory viral testing has increased considerably in recent years in NSW, a phenomenon likely to be replicated in much of

Australia. Most states and territories, however, do not currently collect these data routinely. The shift from influenza diagnosis based mainly on serology to rapid, highly discriminatory polymerase chain reaction testing widely available in primary and acute services has resulted in annual increases in test numbers, from 29 232 in NSW sentinel laboratories in 2010 to 338 828 in just the first 6 months of 2019.

We need to look to other indicators to assess the burden of influenza rather than the raw notification numbers. One indicator is the influenza test positivity rate. This was highest in 2017 (an acknowledged severe season due to ineffectiveness of the vaccine against the predominant influenza A[H3N2] strain)¹ and is at a moderate level so far in 2019 ([Box](#)).

Also important to monitor as indicators are hospital admissions of people presenting to emergency departments with influenza-like illness, and mortality from influenza and pneumonia, both of which also show 2019 to be a moderately severe influenza season to date.²

Of course, influenza is a serious infection, with a mortality rate of around 1% in confirmed cases and most of the mortality burden affecting the vulnerable elderly. We are working to reduce the impact of influenza on the community;³ hopefully, we can achieve this without generating unfounded community concern.

Vicky Sheppeard 
Robin Gilmour
Sean Tobin

NSW Health, Sydney, NSW.

vicky.sheppeard@health.nsw.gov.au

Competing interests: No relevant disclosures. ■

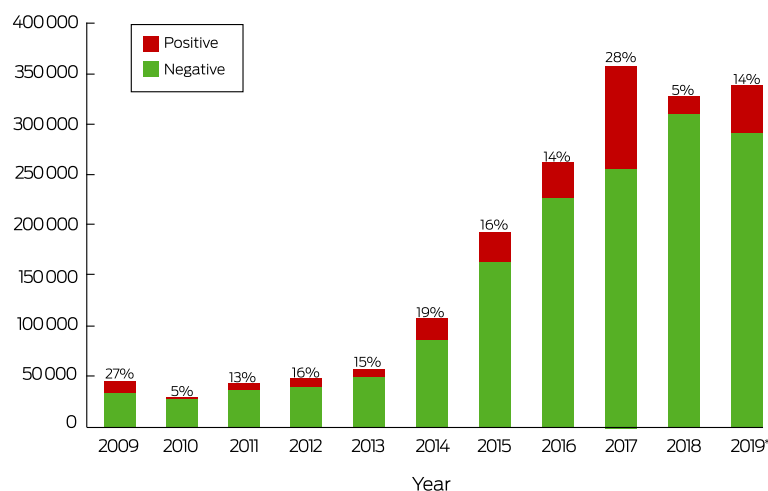
doi: [10.5694/mja2.50321](https://doi.org/10.5694/mja2.50321)

Podcast with Vicky Sheppeard available at <https://www.mja.com.au/podcasts>

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References are available online.

Number of influenza tests and positivity (%), New South Wales sentinel laboratories, 2009 to 30 June 2019



* Data at 30 June 2019. ♦

- 1 NSW Health. Influenza monthly epidemiology report, NSW, December 2017. <https://www.health.nsw.gov.au/Infectious/Influenza/Publications/2017/december-flu-report.pdf> (viewed July 2019).
- 2 NSW Health. Influenza surveillance weekly report. Week 26: 24 to 30 June 2019. <https://www.health.nsw.gov.au/Infectious/Influenza/Pages/reports.aspx> (viewed July 2019).
- 3 NSW Health. Don't spread flu. <https://www.health.nsw.gov.au/Infectious/Influenza/Pages/default.aspx> (viewed July 2019). ■