

FluTAS 2020 Report 5 - 7 September

Public Health Services produce the fluTAS Report to provide information about the level of influenza (flu) in Tasmania. Several surveillance data sources are used to obtain measures of influenza activity in the community. This surveillance report describes influenza activity in Tasmania during the period 1 January 2020 to 30 August 2020 (week 35).

Data considerations

It is important to note that due to the COVID-19 epidemic in Australia, data reported from the various influenza surveillance systems may not represent an accurate reflection of influenza activity. Results should be interpreted with caution, especially where comparisons are made to previous influenza seasons. Interpretation of 2020 influenza activity data should take into account, but is not limited to, the impact of social distancing measures, likely changes in health seeking behaviour of the community including access to alternative streams of acute respiratory infection specific health services, and focussed testing for COVID-19 response activities. Current COVID-19 related public health measures and the community's adherence to public health messages are also likely having an effect on transmission of acute respiratory infections, including influenza.

2020 summary to date: 1 January to 30 August

- There have been 161 laboratory-confirmed influenza notifications in Tasmania to date this year.
- There were relatively high notifications at the beginning of the year compared to previous years before decreasing in mid-March and remaining low.
- This decline in notifications coincided with the physical distancing policies, implemented by the Commonwealth and Tasmanian Governments during March 2020 in response to the COVID-19 pandemic.
- A similar decline in influenza notifications has been observed nationally.
- Influenza A has been the predominant circulating influenza virus with 140 notifications (87 per cent) to date.
- 8 407 polymerase chain reaction (PCR) tests for influenza have been conducted, reflecting intensive testing in response to COVID-19.
- Despite intensive testing, only two per cent of these PCR tests have been positive for influenza.

Notifications of laboratory-confirmed influenza to Public Health Services

Influenza notifications are based on positive laboratory tests. Many people with influenza-like illness choose not to attend medical care or are not tested when they attend. Notifications therefore represent a small proportion of the total influenza cases in the community.

From 1 January to 30 August 2020 (week 35), Public Health Services received 161 laboratory confirmed notifications of influenza. This is 87 per cent lower than the 4-year (2016-2019) average of 1 247 notifications received over the same time period.

Monthly influenza case numbers were relatively high during January and February of 2020 compared to previous years before decreasing in mid-March and remaining low (Figure 1). This decline coincided with the social distancing policies, implemented by the Commonwealth and Tasmanian Governments during March 2020 in response to the COVID-19 pandemic. Since the last FluTAS Report (for the period ending 2 August 2020) only one laboratory-confirmed influenza notification has been received in Tasmania. A similar decline and pattern of low influenza notifications has been observed nationally.

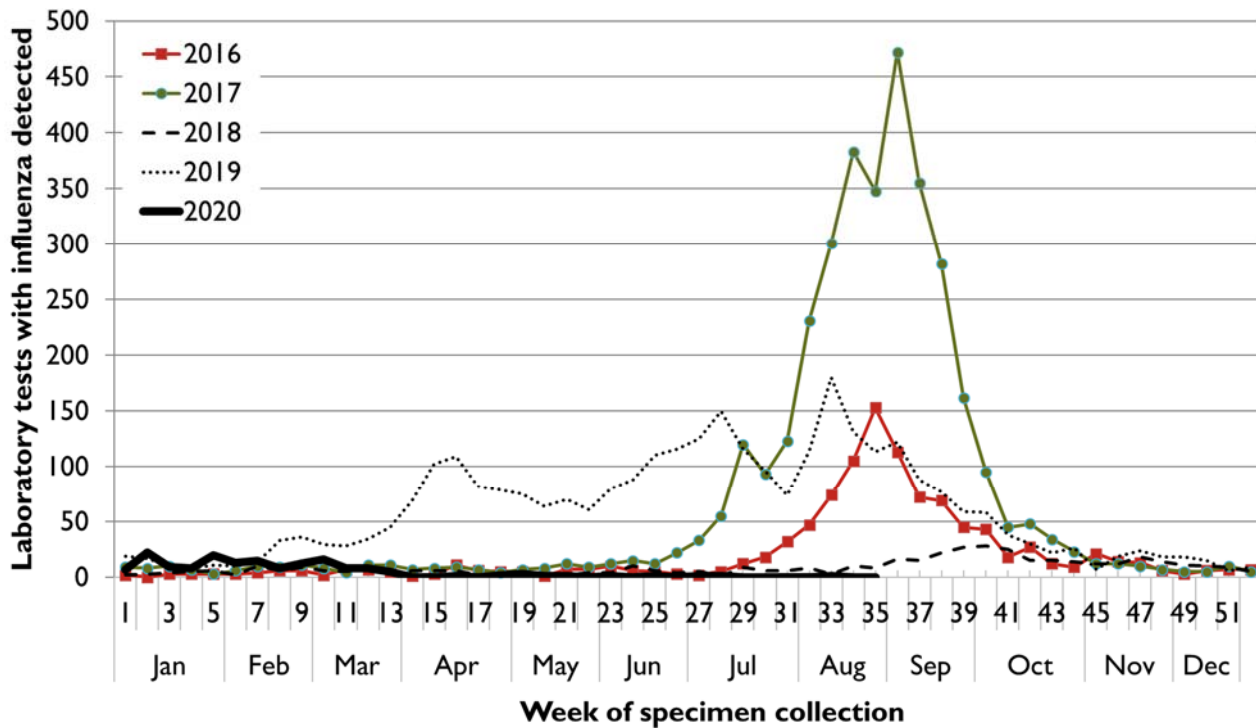


Figure 1: Notifications of influenza in Tasmania, by week, 1 January 2016 to 30 August 2020 (week 35).

Influenza testing

There has been an increased focus on laboratory testing this year in response to the COVID-19 pandemic with 8 407 polymerase chain reaction (PCR) tests conducted between 1 January and 30 August 2020. As shown in Figure 2, influenza testing increased dramatically in March and peaked in early May with 648 tests conducted in week 19. Since the last FluTAS Report (for the period ending 2 August 2020) 658 PCR tests have been conducted.

Proportion of tests positive for influenza

Despite this increased focus on testing, the average weekly proportion of tests positive for influenza so far this year is only two per cent, ranging from 0 to 14 per cent. As shown in Figure 2, the percentage of positive tests peaked in week 2 at 14 per cent and week 5 at 13 per cent before gradually declining to 0 per cent. There have been no positive PCR tests in Tasmania since March 29 (week 13).

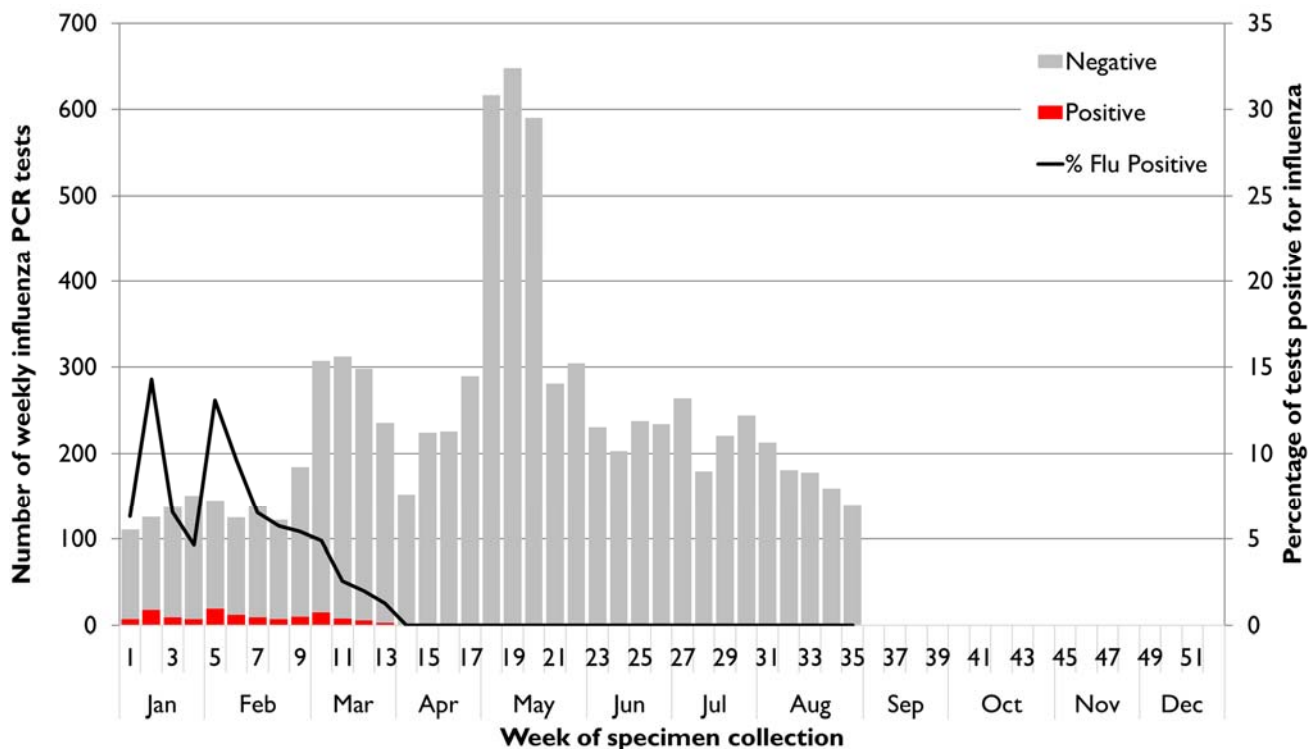


Figure 2: State-wide influenza PCR testing, 1 January 2020 to 30 August 2020 (week 35).

Other circulating respiratory illness

Many viruses cause the ‘common cold’ and ‘influenza-like illnesses’. The Royal Hobart Hospital (RHH) laboratory performs a PCR test that detects influenza A and influenza B viruses, as well as seven other respiratory pathogens commonly associated with respiratory illness.

RHH performed 3 810 PCR tests between 1 January and 30 August 2020. The most commonly detected respiratory viruses this year are rhinovirus (69 per cent), adenovirus (9 per cent) and parainfluenza (8 per cent). Since the last FluTAS Report (for the period ending 2 August 2020), rhinovirus has accounted for 87 per cent and adenovirus for 13 per cent of respiratory viruses detected.

Geographical distribution of activity

Of the 161 notified cases of influenza in Tasmania so far this year, 94 cases (58 per cent) were from the South, 34 cases (21 per cent) from the North and 28 cases (17 per cent) from the North-West. Three overseas visitors and two interstate residents have been diagnosed with influenza in Tasmania this year.

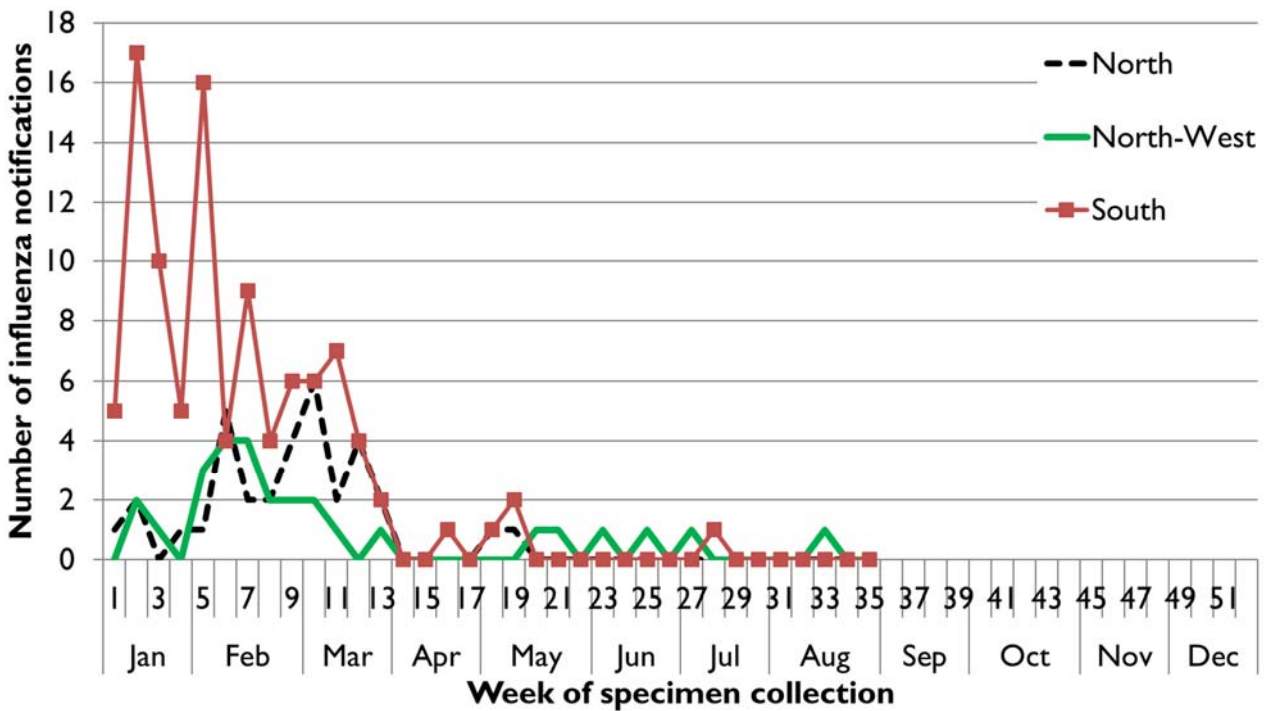


Figure 3. Weekly notifications in Tasmania by region from 1 January to 30 August 2020 (week 35).

Virology

Influenza A has been the predominant circulating influenza virus so far this year with 140 notifications (87 per cent). A small proportion of influenza A viruses undergo further subtyping. Of the 44 cases that were subtyped, 42 (95 per cent) were influenza A (H1N1) and two were influenza A (H3N2). The remaining 21 cases (13 per cent) are attributed to influenza B.

At-risk populations

So far this year, notification rates have been highest in adults aged 50-54 years (68 notifications per 100 000 population) and lowest in children aged 5-9 years (13 notifications per 100 000 population). Influenza A accounts for the greatest number of notifications across all age groups with 26 notifications per 100 000 population.

Influenza-like illness

FluTracking (Community Syndromic Surveillance)

FluTracking is a national, weekly online survey that asks participants to report whether they have had fever and/or cough in the preceding week. It is a joint initiative of the University of Newcastle, Hunter New England Population Health and the Hunter Medical Research Institute. FluTracking information is available at <https://info.flutracking.net/> and on Facebook at www.facebook.com/Flutracking

Annual Influenza Vaccine

Composition of 2020 influenza vaccines

The annual influenza vaccine is reviewed late each year, aiming to produce vaccines for the following year that provide protection from influenza strains likely to be common during winter. Advice on the formulation of annual influenza vaccines is provided to the Therapeutic Goods Administration (TGA) by the Australian Influenza Vaccine Committee (AIVC): www.tga.gov.au/committee/australian-influenza-vaccine-committee-aivc

This AIVC recommendation for the composition of influenza vaccines for Australia in 2020 introduces a new A (H1N1) like virus strain, a new A (H3N2) like virus strain and a new strain for the B Victoria lineage when compared to the composition of the trivalent and quadrivalent vaccines for Australia in 2019.

Further information on the composition of influenza vaccines is available at www.tga.gov.au/aivc-recommendations-composition-influenza-vaccine-australia-2020

Is vaccination recommended?

Annual influenza vaccination is the most important measure to prevent influenza and its complications and is recommended for all people ≥ 6 months of age. Annual vaccination can help to reduce the spread of influenza and protect vulnerable members of the community.

Influenza vaccines in 2020 are free[#] in Tasmania for people at greater risk of contracting and developing severe complications from influenza. Free vaccine is available through General Practitioners for the following people:

- All children aged from six months to under five years
- All Aboriginal and Torres Strait Islander people aged 6 months and over
- Adults aged 65 and over
- Pregnant women at any stage in their pregnancy
- Adults and children aged from 6 months with chronic medical conditions such as heart, lung, liver or kidney diseases, asthma, diabetes, cancer, impaired immunity and neuromuscular conditions

For more information see flu.tas.gov.au or beta.health.gov.au/topics/immunisation

[#] Please note there may be a consultation fee for the healthcare provider to administer the vaccine.

Further Information

For the latest information on influenza in Tasmania visit flu.tas.gov.au

Past FluTAS reports are available at dhhs.tas.gov.au/publichealth/communicable_diseases_prevention_unit