

Queensland Weekly Influenza Surveillance Report

Reporting Period: 1 Jan - 13 Dec 2020

Table 1: Summary of influenza notifications in Queensland.

	Recent Week (7-13 Dec)	Previous week (30 Nov-6 Dec)	2020 YTD	5 year mean (2015-2019)	Ratio YTD to 5YM
Influenza A	1	2	5315	26787.6	0.2
A (H1N1)	0	0	319	-	-
A (H3N2)	0	0	42	-	-
Subtype Unavailable	1	2	4954	-	-
Influenza B	0	0	719	10871	0.1
Victoria	0	0	3	-	-
Yamagata	0	0	0	-	-
Lineage Unavailable	0	0	716	-	-
All influenza notifications	1	2	6034	37849.2	0.2

Table 2: Summary of Queensland public hospital episodes and public laboratory percentage of positive tests.

	Recent Week (7-13 Dec)	Previous week (30 Nov-6 Dec)	2020 YTD	5 year mean (2015-2019)	Ratio YTD to 5YM
Emergency department presentations (+ve result)	0	0	991	3330	0.3
Total hospital admissions	0	0	309	3144	0.1
NON-ICU admissions	0	0	281	2740.2	0.1
ICU admissions	0	0	28	403.8	0.1
Percentage of tests positive	0	0	-	-	-

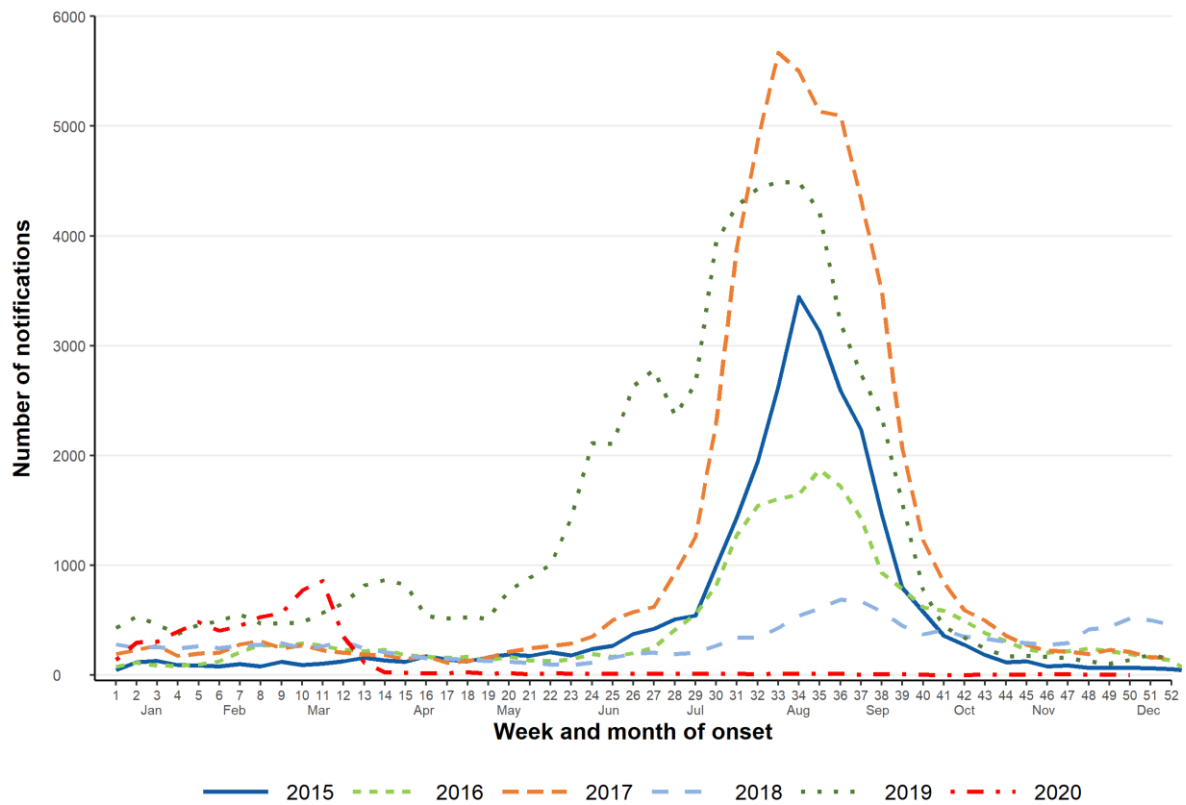


Figure 1: Laboratory confirmed influenza notifications in Queensland, by week and month of onset, 1 Jan 2015 to 13 Dec 2020.

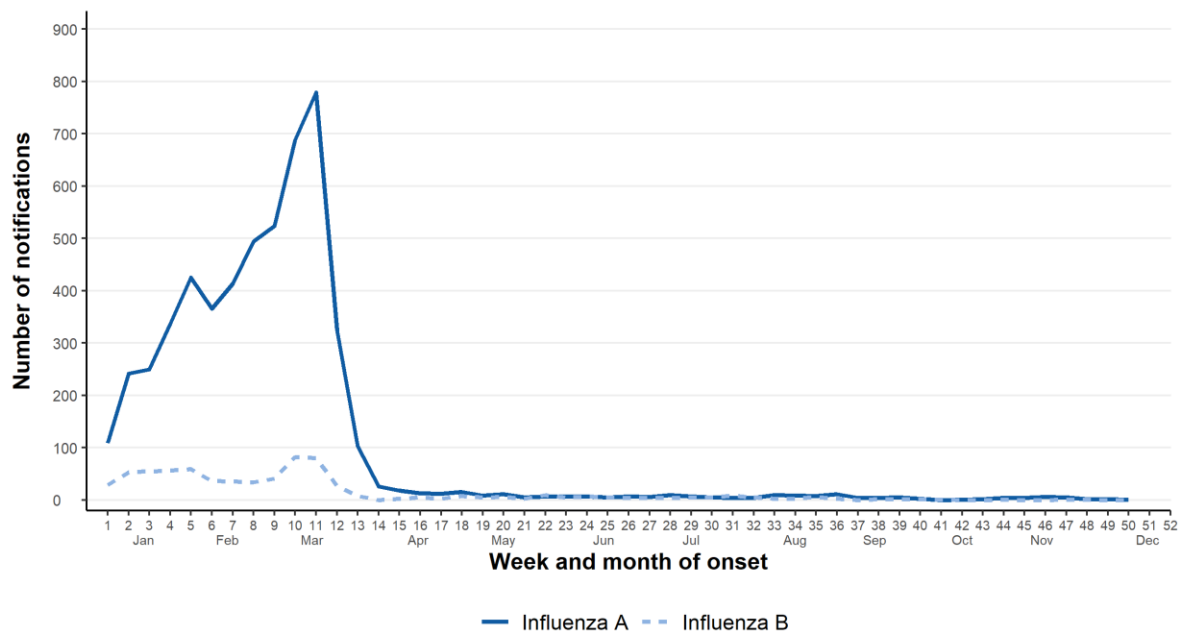


Figure 2: Queensland weekly influenza notifications by type, week and month of onset, 1 Jan to 13 Dec 2020.

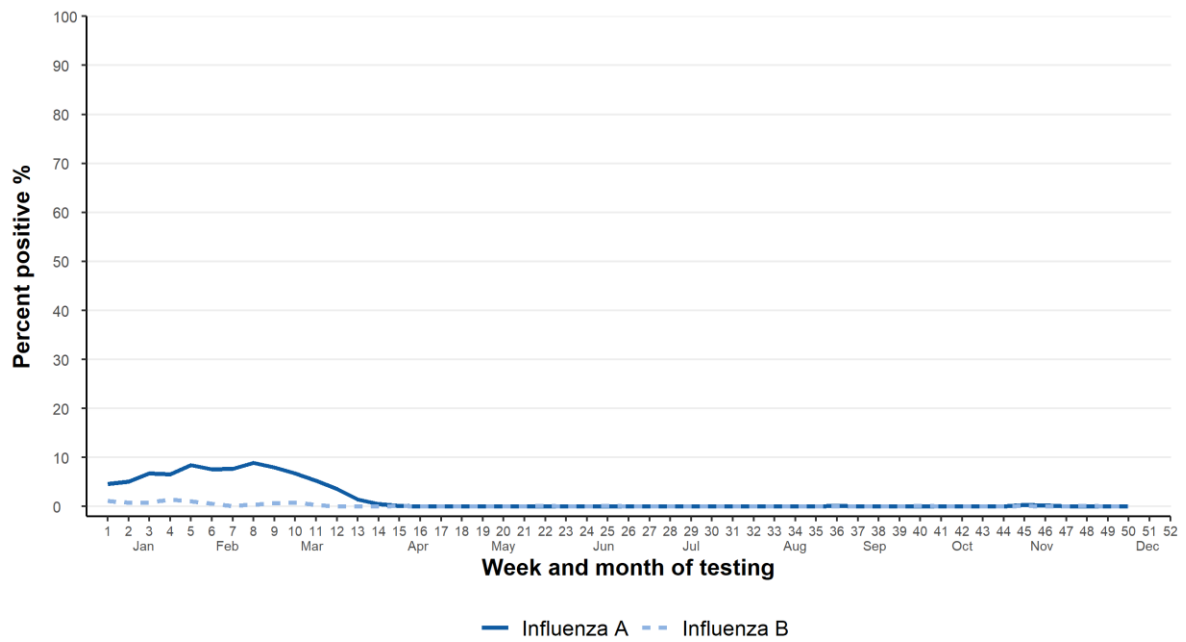


Figure 3: Percentage of positive influenza tests (public laboratory system only) by type, week and month of testing, 1 Jan to 13 Dec 2020.

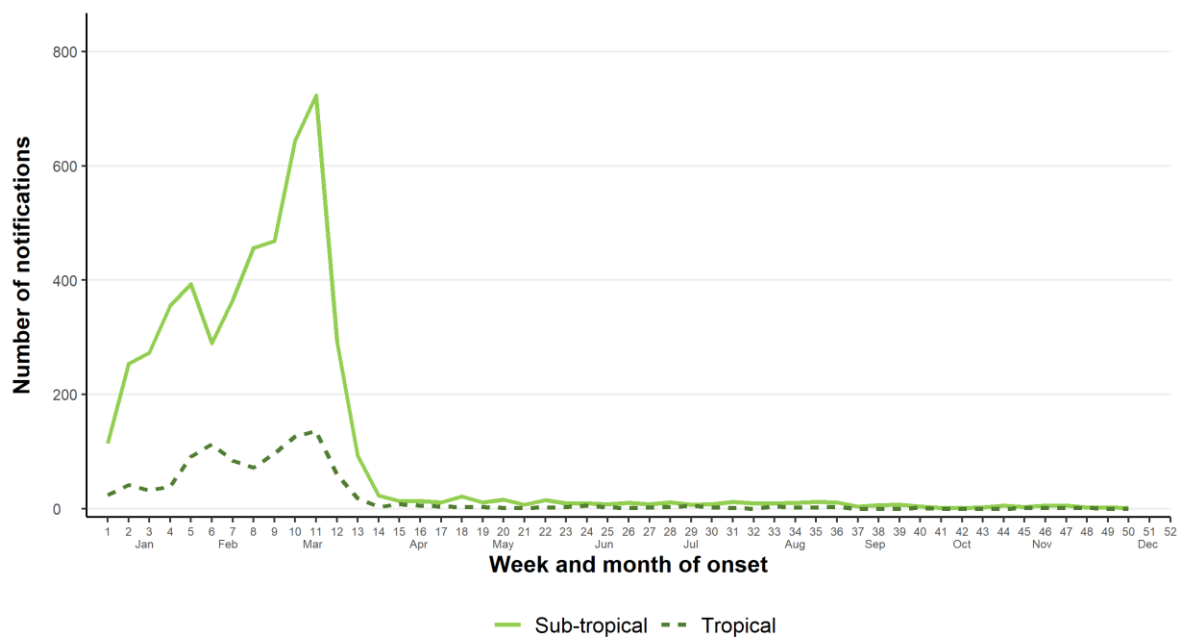


Figure 4: Queensland influenza notifications by tropical and sub-tropical regions, week and month of onset, 1 Jan to 13 Dec 2020.

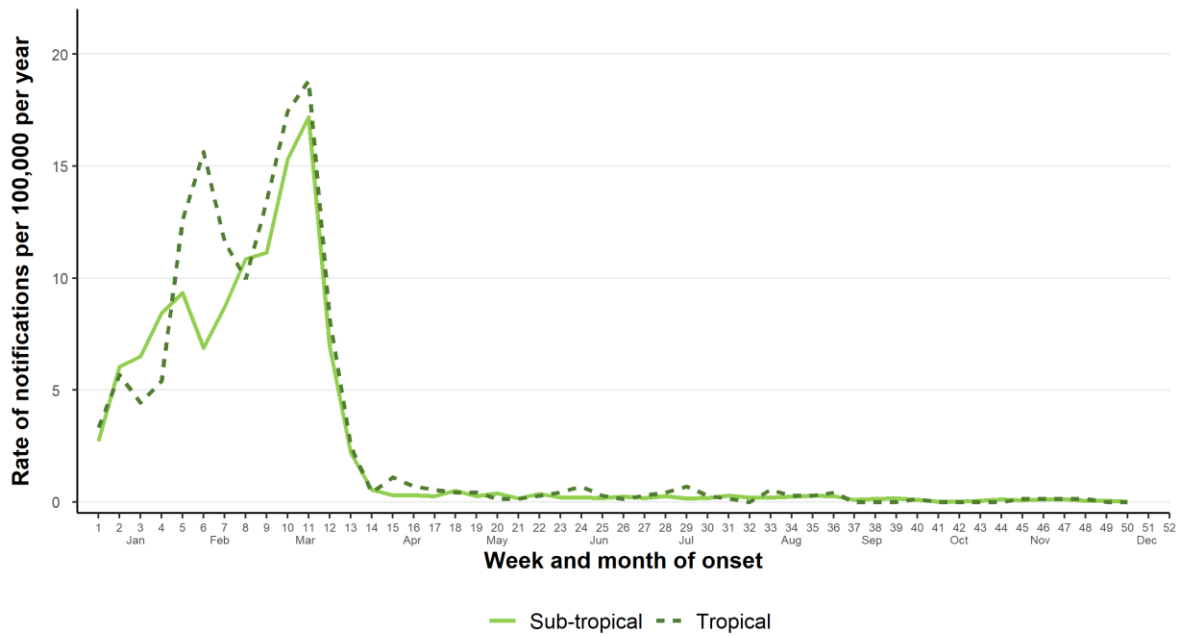


Figure 5: Queensland influenza notification rate by tropical and sub-tropical regions, week and month of onset, 1 Jan to 13 Dec 2020.

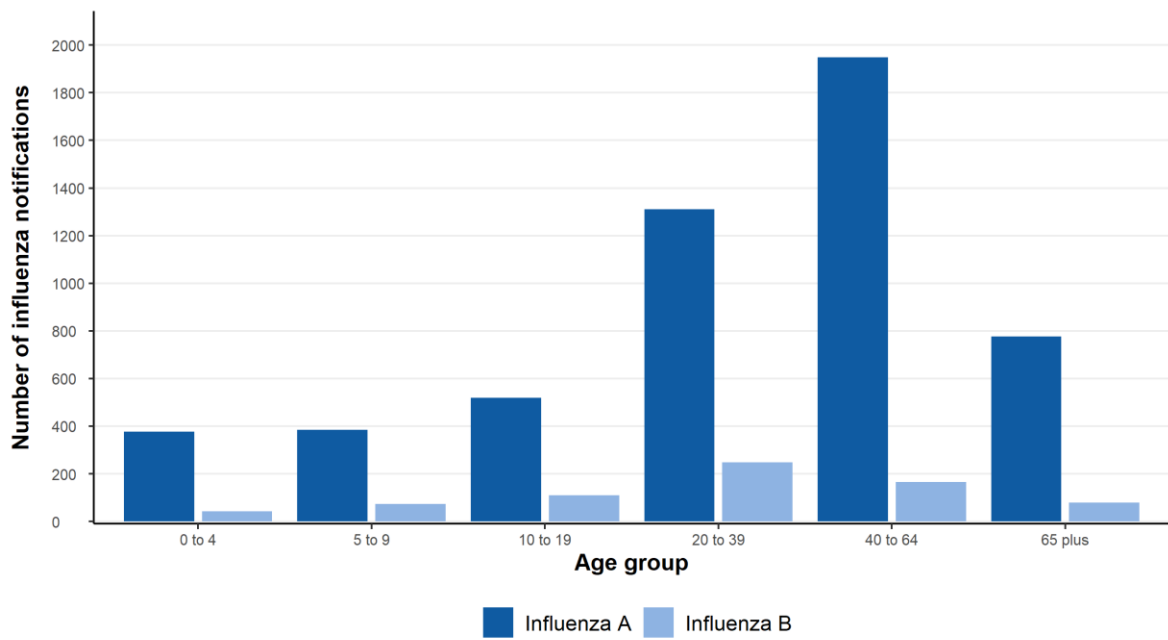


Figure 6: Influenza notifications by age group (years) and influenza type, 1 Jan to 13 Dec 2020.

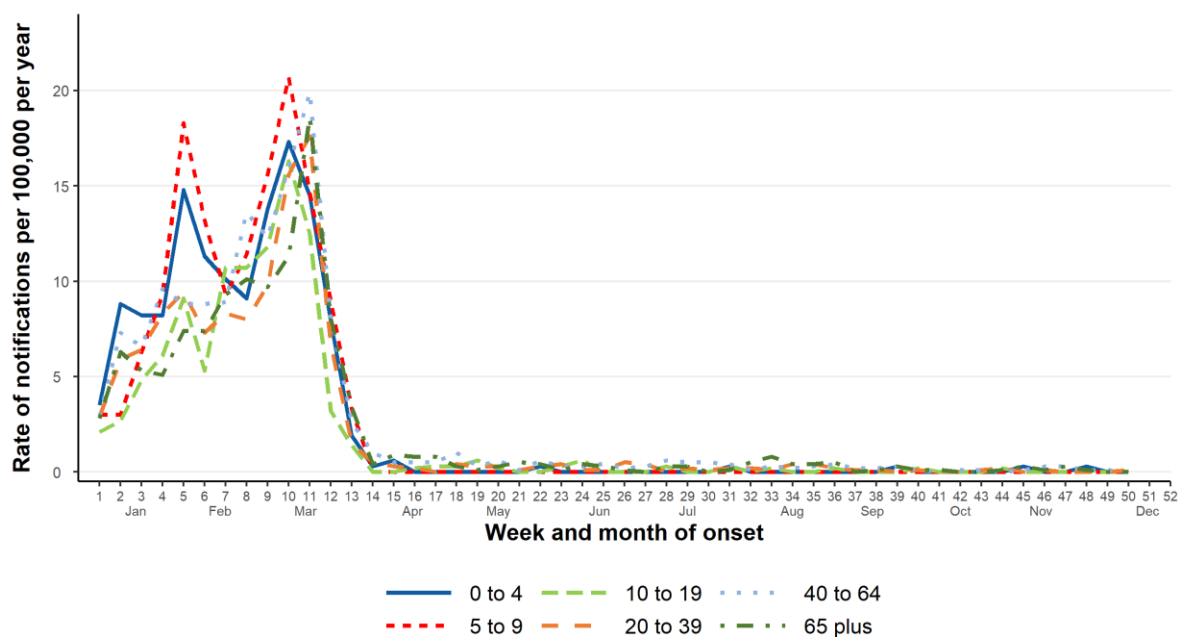


Figure 7: Influenza notification rate by age group (years), week and month of onset, 1 Jan to 13 Dec 2020.

Table 3: Influenza notification summary by Hospital & Health Service of residence, 1 Jan to 13 Dec 2020.

	Recent Week (7-13 Dec)	Previous week (30 Nov-6 Dec)	2020 YTD	5 YTD mean (2015-2019)	Ratio YTD to 5YM
Torres and Cape	0	0	17	280.4	0.1
Cairns and Hinterland	0	0	284	1540.8	0.2
North West	0	0	27	213.6	0.1
Townsville	0	0	496	2021.6	0.2
Mackay	0	0	178	918.6	0.2
Central Queensland	0	0	229	1852.2	0.1
Central West	0	0	11	102.2	0.1
Wide Bay	0	0	153	1136.6	0.1
Sunshine Coast	0	0	387	3053.4	0.1
Metro North	0	1	1490	8369.2	0.2
Metro South	1	1	1562	8909.8	0.2
Darling Downs	0	0	154	2645.6	0.1
West Moreton	0	0	296	2388.8	0.1
South West	0	0	20	262.6	0.1
Gold Coast	0	0	730	4153.8	0.2
Queensland	1	2	6034	37849.2	0.2

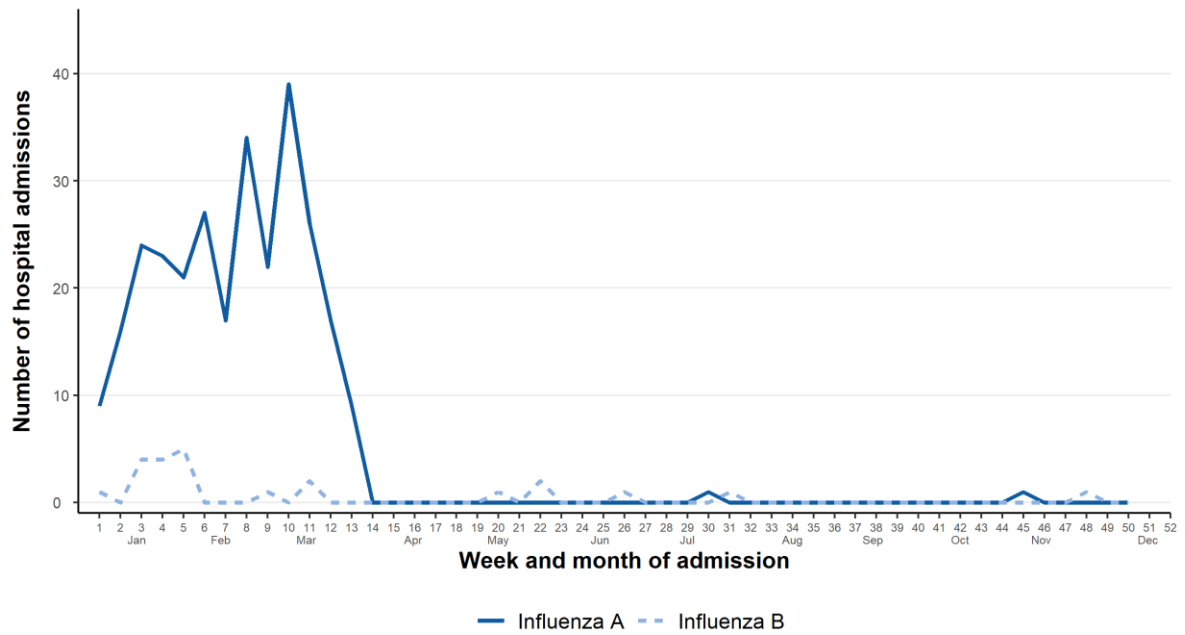


Figure 8: Laboratory confirmed influenza admissions to Queensland public hospitals by influenza type, week and month of admission, 1 Jan to 13 Dec 2020.

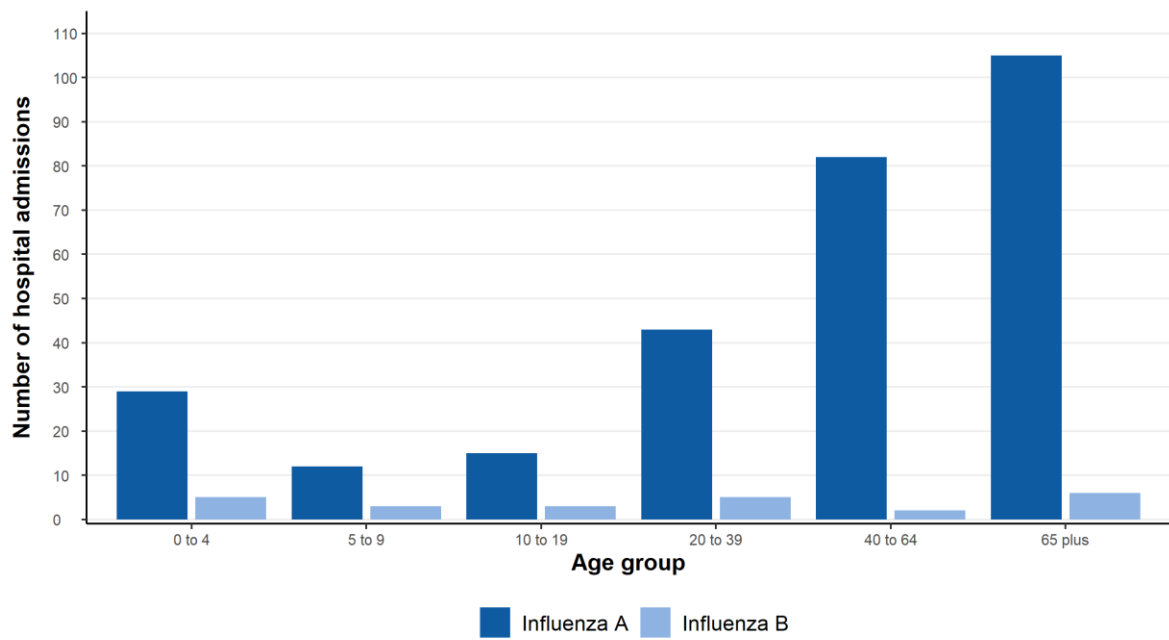


Figure 9: Laboratory confirmed influenza admissions to Queensland public hospitals by influenza type and age group (years), 1 Jan to 13 Dec 2020.

Table 4: Influenza hospital episode summary by Hospital & Health Service of hospitalisation, 1 Jan to 13 Dec 2020.

	Recent Week (7-13 Dec)	Previous week (30 Nov-6 Dec)	2020 YTD	5 YTD mean (2015-2019)	Ratio YTD to 5YM
Torres and Cape	0	0	2	16.2	0.1
Cairns and Hinterland	0	0	25	202.2	0.1
North West	0	0	2	33.4	0.1
Townsville	0	0	34	251.0	0.1
Mackay	0	0	12	104.6	0.1
Central Queensland	0	0	12	108.0	0.1
Central West	0	0	1	14.0	0.1
Wide Bay	0	0	6	108.6	0.1
Sunshine Coast	0	0	12	161.4	0.1
Metro North	0	0	53	701.6	0.1
Metro South	0	0	69	634.2	0.1
Childrens Health Queensland	0	0	18	147.0	0.1
Darling Downs	0	0	7	135.0	0.1
West Moreton	0	0	10	132.6	0.1
South West	0	0	1	20.0	0.1
Gold Coast	0	0	45	374.2	0.1
Queensland	0	0	309	3144.0	0.1

Appendix 1: General notes on the data and sources in this report

- The start date for this report is 1 January 2020. Where data for 2020 only is presented in graphs show weekly counts by ISO week, the first ISO week comprises data only from 1 January onwards.
- In Figure 1, which shows counts of Influenza notifications for the current year to date in comparison to the previous five years, complete seven day ISO weeks are graphed and each ISO week is assigned to one year only, following *ISO 8601. Data elements and interchange formats – Information interchange – Representation of dates and time*.
- This report excludes notifications from interstate residents who tested positive for influenza in Queensland, and includes notifications from Queensland and overseas residents who tested positive for influenza in Queensland.

Data sources

- **EpiLog**: is a state-wide clinical information system designed to collect data from patients admitted to Queensland Public Hospitals with laboratory-confirmed influenza.
- **Notifiable Conditions System (NoCS)**: is the database used in Queensland to record notifiable conditions (as per Schedule 1 of the Public Health Regulation, 2018).
- **AUSLAB**: an integrated laboratory information system used in pathology, clinical measurements, forensics and public health laboratories. It provides real-time results which are uploaded by the Queensland Health public pathology laboratories.

Appendix 2: Definitions

- **Positive emergency department presentations**: these are the number of laboratory-confirmed influenza test results from patients who presented to Queensland Public Hospital emergency departments. Data source: AUSLAB.
- **Total hospital episodes**: these are patients who had a laboratory-confirmed influenza test during an overnight stay of at least one night in a Queensland Health public hospital. Data source: EpiLog linked to AUSLAB.
 - **Intensive Care Unit admissions**: are the laboratory-confirmed influenza tests where the sample was collected from a patient who at some point during their admission were admitted to an intensive care or high dependency unit (ICU/HDU) in a Queensland Public Hospital.
 - **Non-Intensive Care Unit admissions**: are the laboratory-confirmed influenza tests where the sample was collected from a patient during their admission in a Queensland Public Hospital that did not include a stay in ICU/HDU.
- **Percentage of tests positive**: percentage of tests conducted in the Queensland public pathology system that were positive. Data source: AUSLAB.
- **Hospital and Health Service (HHS) of residence**: this represents the total number of influenza notifications in HHS catchment areas based on the residential address of the laboratory-confirmed influenza cases. It is not necessarily where persons acquired influenza, or where cases were hospitalised. Data source: NoCS.
- **Hospital and Health Service (HHS) of hospitalisation**: this is the HHS that a person with laboratory-confirmed influenza and an associated hospital episode was hospitalised in. It is

not necessarily where the person acquired influenza, or where the person lives. Data source: EpiLog.

- **Tropical and Subtropical Regions:** regions defined here are HHSs used for surveillance purposes only, and have been categorised to approximately reflect climatic zones (Subtropical Regions include some temperate areas). They are not official geographical areas.

Tropical	Subtropical
Torres and Cape	Central Queensland
Cairns and Hinterland	Central West
North West	Wide Bay
Townsville	Sunshine Coast
Mackay	Metro North
	Metro South
	Darling Downs
	West Moreton
	South West
	Gold Coast

Appendix 3: 2020 influenza vaccine composition

The Australian Influenza Vaccine Committee recommended that the following viruses be used for influenza vaccines in the 2020 southern hemisphere influenza season:

Quadrivalent influenza vaccine

- A/Brisbane/02/2018 (H1N1)pdm09-like virus;
- A/South Australia/34/2019 (H3N2)-like virus;
- B/Washington/02/2019-like (B/Victoria lineage) virus; and
- B/Phuket/3073/2013-like (B/Yamagata lineage) virus.

During 2020 the Australian Technical Advisory Group on Immunisation (ATAGI) advise that all vaccines available in Australia are quadrivalent influenza vaccines.

<https://www.health.gov.au/resources/publications/atagi-advice-on-seasonal-influenza-vaccines-in-2020>