

Queensland Weekly Influenza Surveillance Report

Reporting Period: 1 January to 11 September 2022

Table 1: Summary of laboratory-confirmed influenza notifications in Queensland.

Influenza group	Subtype/Lineage	Recent week: (5 Sep - 11 Sep)	Previous week: (29 Aug- 4 Sep)	YTD
Group A	H1N1	1	10	448
Group A	H3N2	0	5	2,832
Group A	Subtype unavailable	143	191	38,988
Group B	Lineage unavailable	5	3	70
Total	-	149	209	42,338

Figure 1: Laboratory-confirmed influenza notifications in Queensland, by week and month of onset, 1 January 2017 to 11 September 2022.

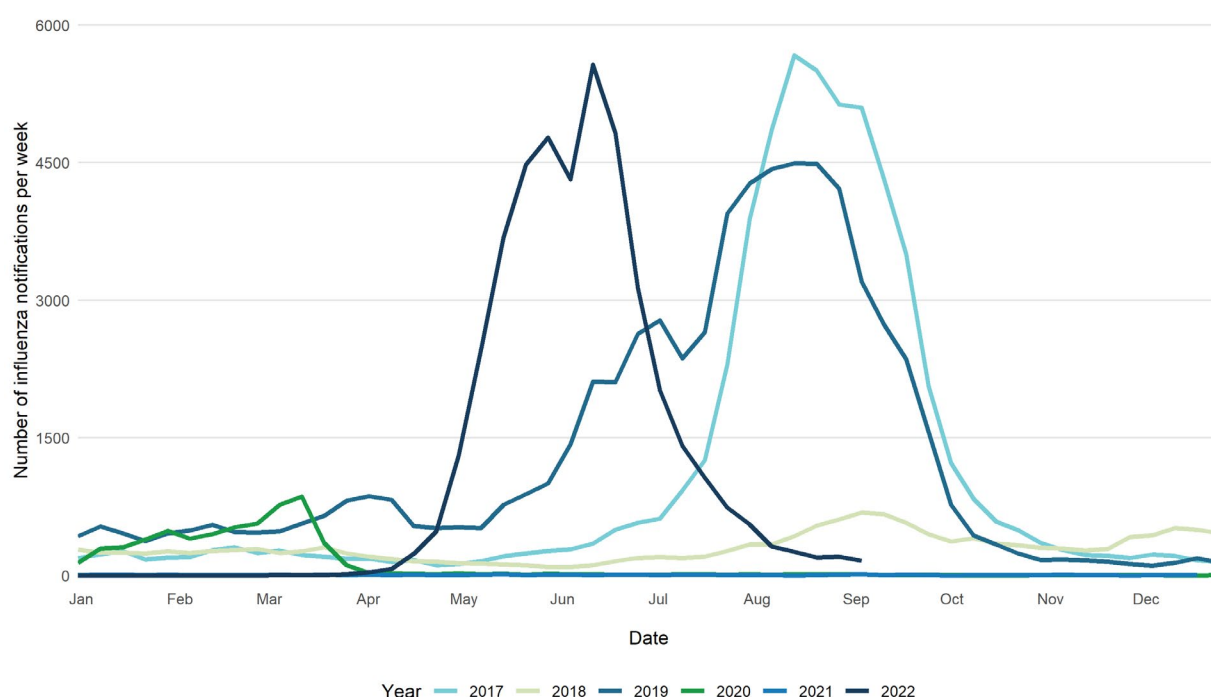


Figure 2: Laboratory-confirmed influenza notifications by sex and age groups from 1 January to 11 September 2022.

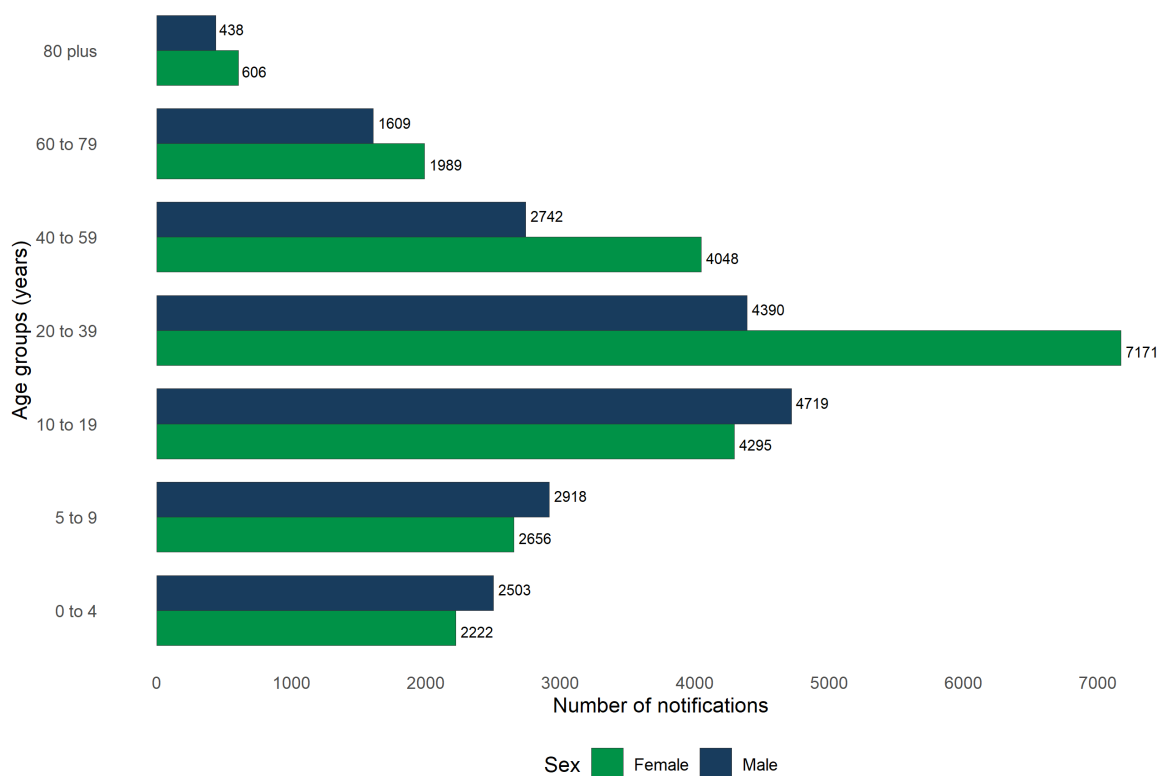


Figure 3: Proportion of laboratory-confirmed influenza notifications per 100,000 in Queensland by sex and age groups, 1 January to 11 September 2022.

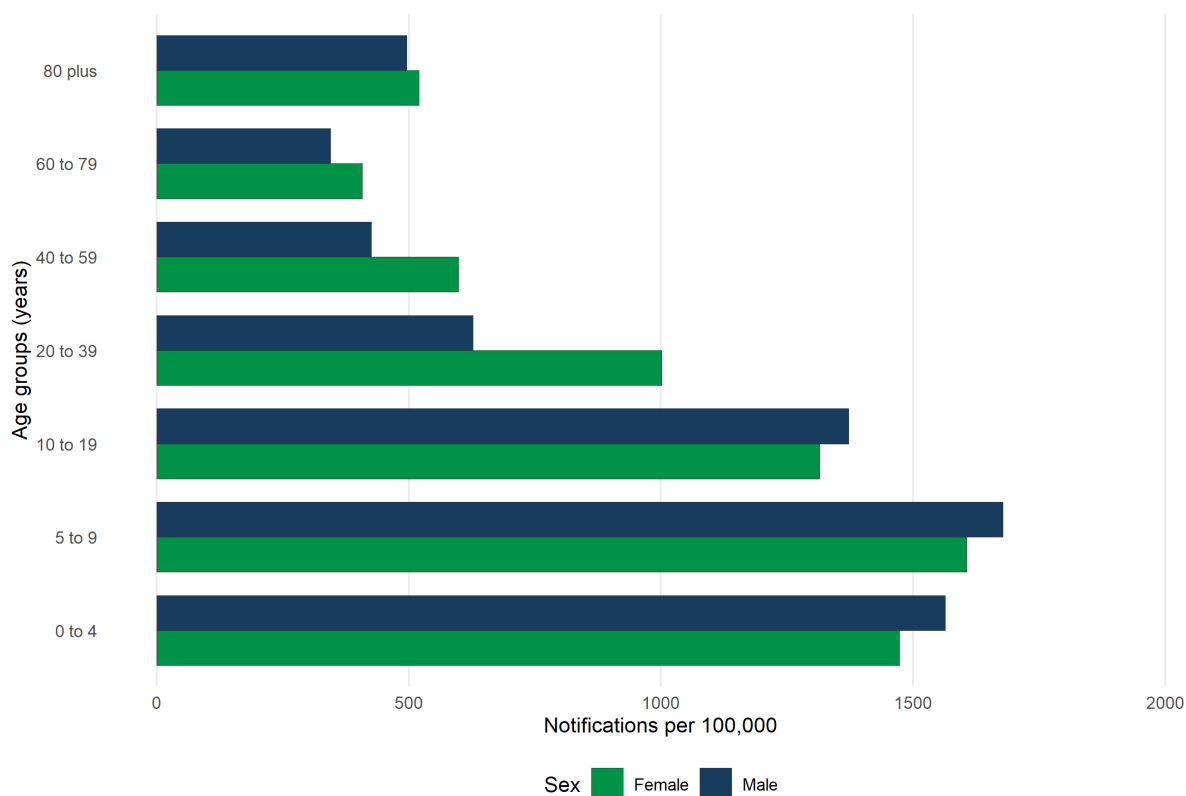


Figure 4: Percentage positivity (7-day moving average) of laboratory-confirmed influenza tests by age groups (public laboratories only), 1 January to 11 September 2022.

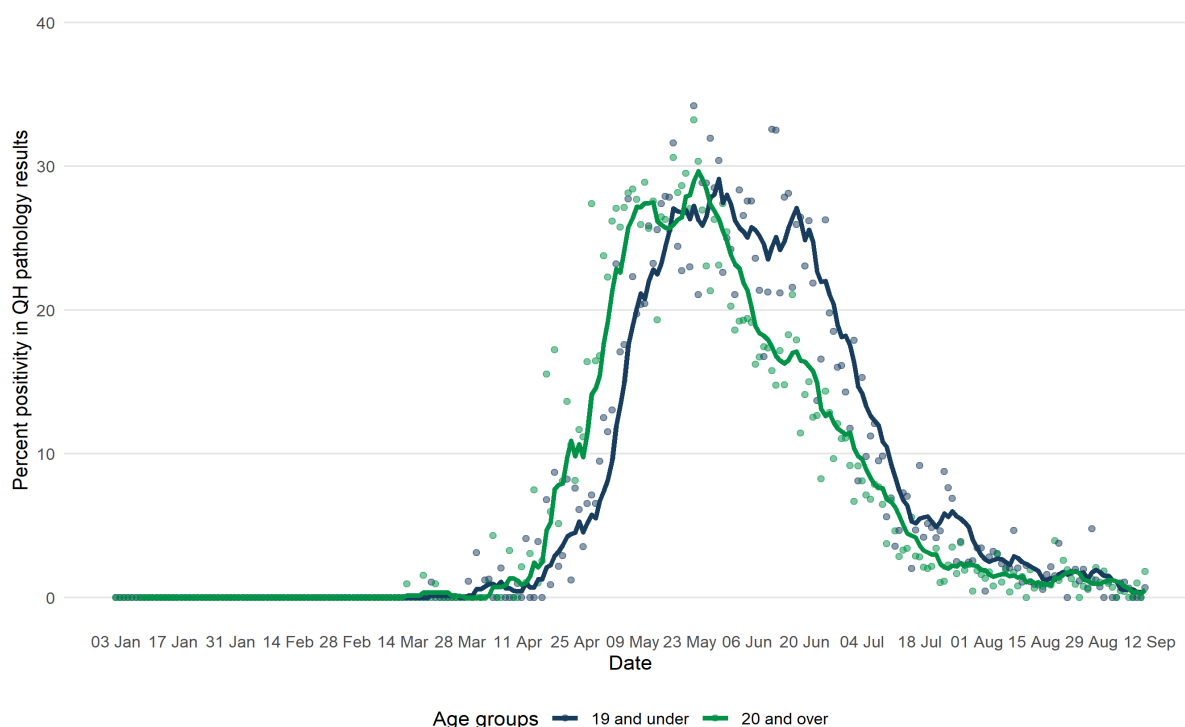


Figure 5: Laboratory-confirmed influenza notifications (7-day moving average) by region, 4 April to 11 September 2022.

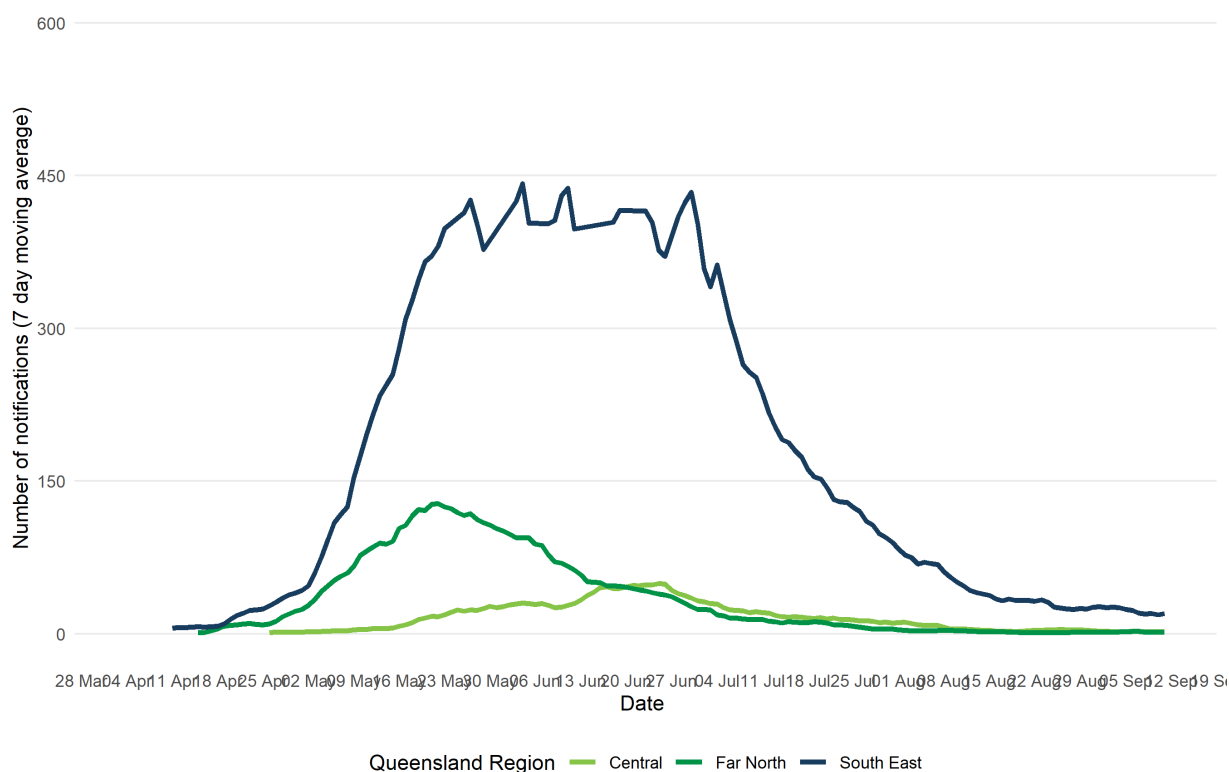


Table 2: Laboratory-confirmed influenza notifications by Hospital & Health Service of residence, 1 January to 11 September 2022.

Hospital & Health Service	Recent week: (5 Sep - 11 Sep)	Previous week: (29 Aug- 4 Sep)	2022 YTD	5 YTD mean (2017-2021)	Ratio YTD to 5 year mean
Cairns and Hinterland	4	9	1,502	1,022.2	1.5
Central Queensland	9	9	1,313	1,132.6	1.2
Darling Downs	25	48	2,863	1,754.6	1.6
Gold Coast	2	11	5,122	2,695.4	1.9
Mackay	4	1	1,176	599.0	2.0
Metro North	73	81	9,987	5,355.4	1.9
Metro South	22	26	10,361	5,755.6	1.8
Overseas	1	0	50	0.0	0.0
South West	1	3	419	164.0	2.6
West Moreton	5	7	3,153	1,679.2	1.9
Townsville	0	1	2,009	1,393.6	1.4
Wide Bay	0	4	936	739.4	1.3
Central West	-	-	114	64.2	1.8
North West	-	-	560	166.0	3.4
Torres and Cape	-	-	493	164.8	3.0
Sunshine Coast	3	9	2,280	1,934.4	1.2
Queensland total	149	209	42,338	24,620.4	1.7

Table 3: Laboratory-confirmed influenza hospital admissions by Hospital & Health Service of hospitalisation, 1 January to 11 September 2022.

Hospital & Health Service	Recent week: (5 Sep - 11 Sep)	Previous week: (29 Aug- 4 Sep)	2022 YTD	5 YTD mean (2017-2021)	Ratio YTD to 5 year mean
Cairns and Hinterland	-	-	40	150.0	0.3
Central Queensland	1	1	54	92.2	0.6
Central West	-	-	14	9.4	1.5
Children's Health	-	-	62	103.6	0.6
Darling Downs	0	5	142	96.6	1.5
Gold Coast	0	1	158	256.2	0.6
Mackay	1	1	52	84.8	0.6
Metro North	5	8	238	494.8	0.5
Metro South	2	4	314	454.0	0.7
North West	-	-	41	27.2	1.5
South West	-	-	20	20.6	1.0
Sunshine Coast	1	3	113	132.0	0.9
Torres and Cape	-	-	3	14.2	0.2
Townsville	0	2	43	193.2	0.2
West Moreton	-	-	133	79.2	1.7
Wide Bay	0	2	77	92.4	0.8
Queensland total	10	27	1,504	1,721.8	0.9

Admissions are counted as patients who were admitted for more than 12 hours.

Appendix 1: General notes on the data and sources

- The start date is 1 January 2022. Where data for 2022 only is presented in graphs show weekly counts by week date. The week date is calculated using the Notifiable Conditions System (NoCS) episode date, which is the earliest of date of specimen collection and date of notification.
- 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

- **Multiprac:** Is a state-wide healthcare-associated infection surveillance system. It is set up 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).

Appendix 2: Definitions

- **Hospital admissions:** These are patients who had a laboratory-confirmed influenza test during an admissions of at least 12 hours in a Queensland Health public hospital. Data source: Multiprac.
- **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: Multiprac.
- **Hospital and Health Service Regions:** Regions defined here are HHS's used for surveillance purposes only, and have been categorised to reflect geographic location in Queensland. They are administrative geographical areas.

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

Appendix 3: Influenza vaccine composition - 2022

The Australian Influenza Vaccine Committee recommended that the following viruses be used for influenza vaccines in the 2022 southern hemisphere influenza season:

The egg-based quadrivalent influenza vaccines contain the following four viral strains:

- A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- A/Darwin/9/2021 (H3N2)-like virus;
- B/Austria/1359417/2021-like (B/Victoria lineage) virus; and
- B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Cell-based quadrivalent influenza vaccines contain the following four viral strains:

- A/Wisconsin/588/2019 (H1N1)pdm09-like virus;
- A/Darwin/6/2021 (H3N2)-like virus;
- B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

The Australian Technical Advisory Group on Immunisation (ATAGI) has developed advice for immunisation providers regarding the administration of 2022 seasonal influenza vaccines.

<https://www.health.gov.au/resources/publications/atagi-advice-on-seasonal-influenza-vaccines-in-2022>