Queensland Weekly Influenza and Respiratory Syncytial Virus (RSV) — Surveillance Report

Reporting Period: 1 January - 3 September 2023

Executive Summary

Influenza continues to circulate in the community, but virus activity levels indicate that the 2023 season has ended.

Year to date, a total of 64,881 persons have been diagnosed with influenza and 23,657 with RSV.

Influenza B continues to be the predominant type in adults aged under 50 years.

New hospital admissions for influenza have been lower than RSV since mid-August.

Table 1: Summary of influenza and RSV notifications in Queensland, public laboratory percentage of positive tests and hospital admissions to Queensland Public hospitals.

	Recent Week (28 Aug-3 Sep)	Previous Week (21-27 Aug)	2023 YTD	5 year mean (2018-2022)	Ratio YTD to 5YM
Influenza A	294	384	36,998	11,019.6	3.4
A (H1N1)	0	1	2,087	-	-
A (H3N2)	0	0	103	-	-
Subtype Unavailable	294	383	34,808	-	-
Influenza B	595	880	27,251	2,274.4	12
Victoria	0	0	690	-	-
Yamagata	0	0	0	-	-
Lineage Unavailable	595	880	26,561	-	-
Co-infection of A & B	2	1	628	-	-
Type unavailable	0	0	4	-	-
All influenza notifications	891	1,265	64,881	22,643.2	2.9
All RSV notifications	517	565	23,657	-	-
Laboratory results					
Percentage positive influenza	7%	8%	-	-	-
Percentage positive RSV	5%	5%	-	-	-
Hospital admissions					
Influenza	81	67	4,910	-	-
RSV	88	93	3,500	-	-



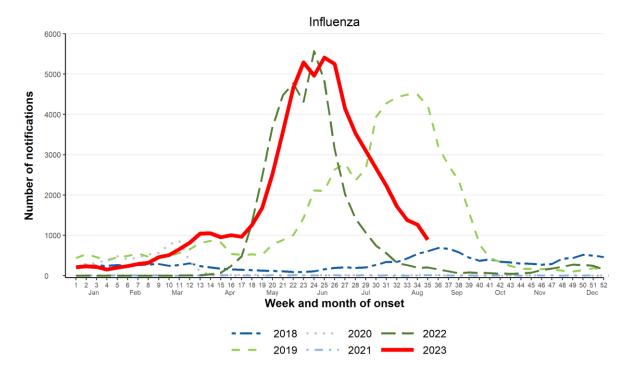


Figure 1: Influenza notifications in Queensland, by week and month of onset, 1 January 2018 to 3 September 2023.

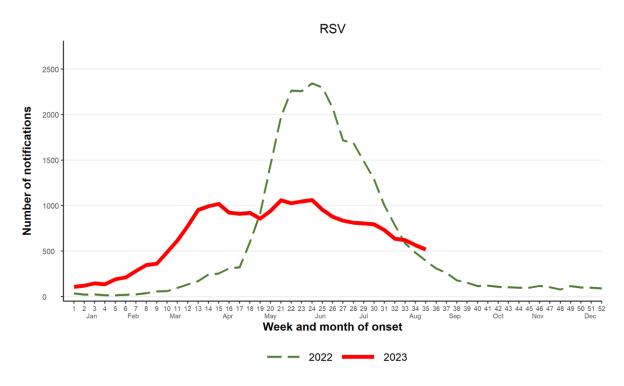


Figure 2: RSV notifications in Queensland, by week and month of onset, 1 January 2022 to 3 September 2023.

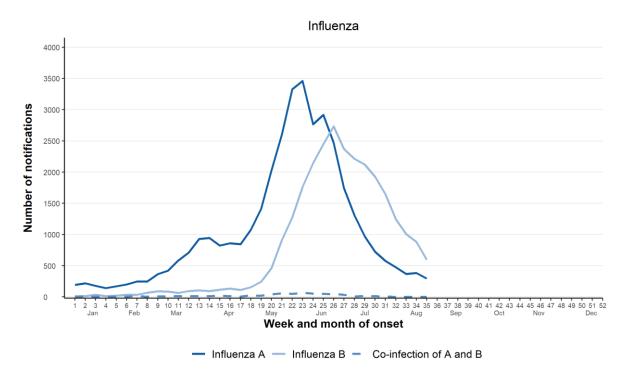


Figure 3: Queensland weekly influenza notifications by type, week and month of onset, 1 January to 3 September 2023.

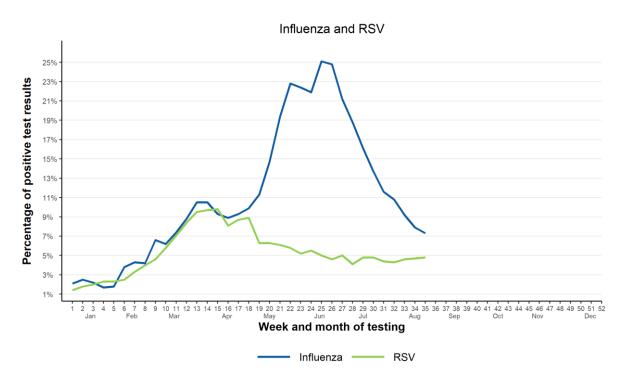


Figure 4: Percentage of positive influenza and RSV tests (public laboratory system only), week and month of testing, 1 January to 3 September 2023.

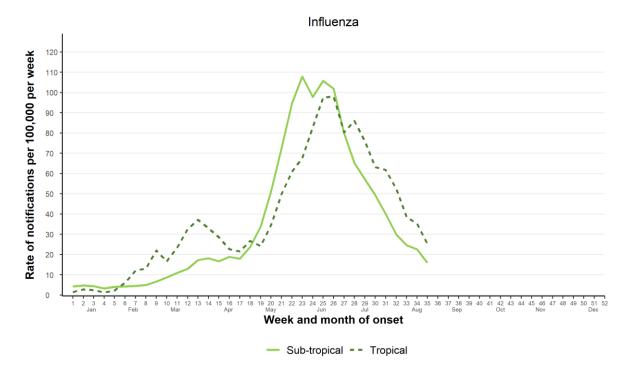


Figure 5: Queensland influenza notification rate by tropical and sub-tropical regions, week and month of onset, 1 January to 3 September 2023.

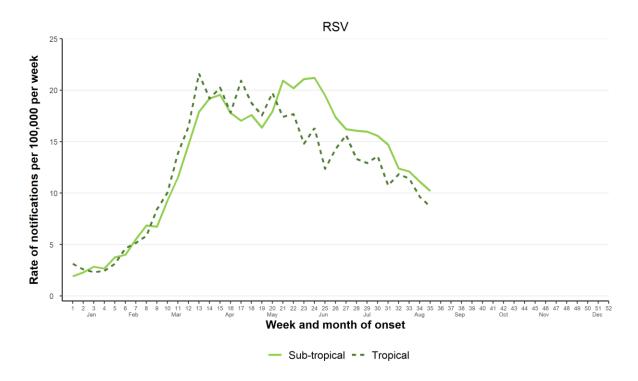


Figure 6: Queensland RSV notification rate by tropical and sub-tropical regions, week and month of onset, 1 January to 3 September 2023.

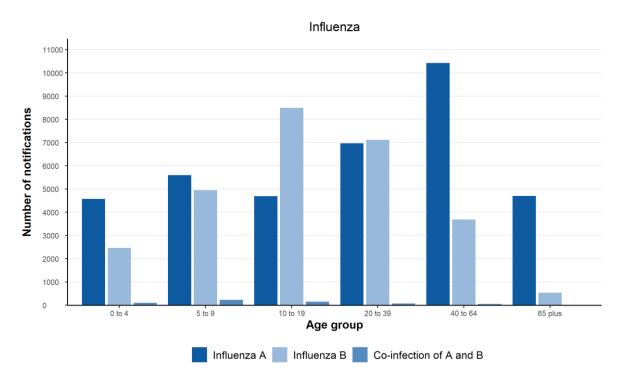


Figure 7: Influenza notifications by age group (years) and type, 1 January to 3 September 2023.

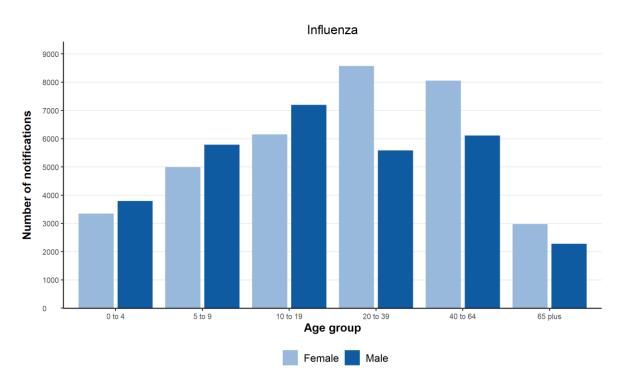


Figure 8: Influenza notifications by age group (years) and sex, 1 January to 3 September 2023.

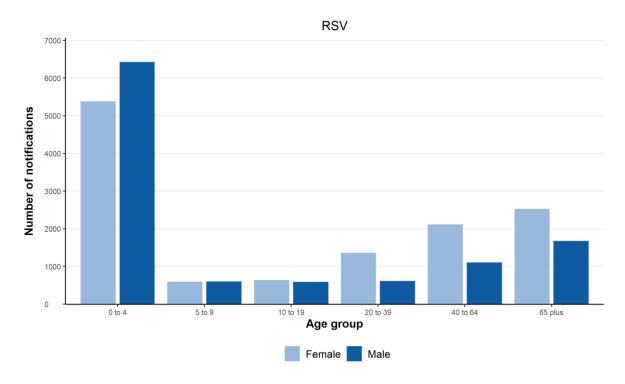


Figure 9: RSV notifications by age group (years) and sex, 1 January to 3 September 2023.

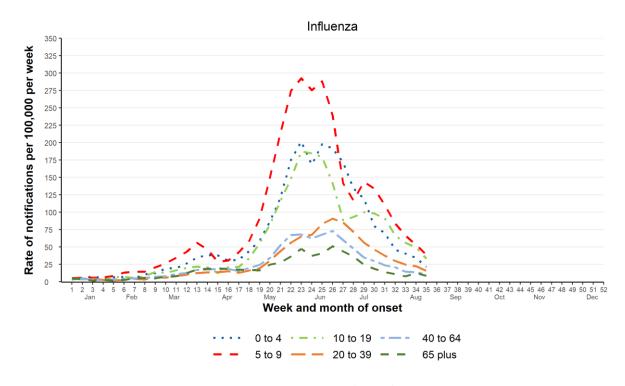


Figure 10: Influenza notification rate by age group (years), week and month of onset, 1 January to 3 September 2023.

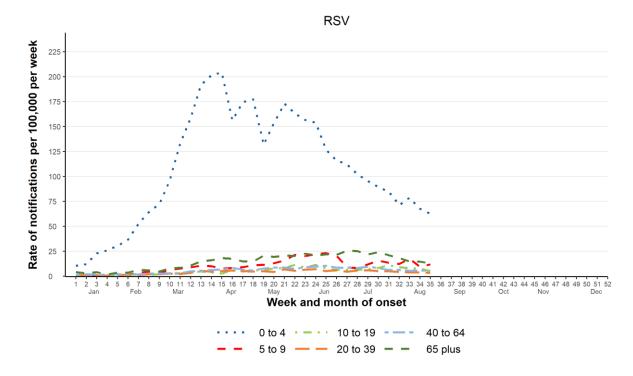


Figure 11: RSV notification rate by age group (years), week and month of onset, 1 January to 3 September 2023.

Table 2: Influenza notification summary by Hospital & Health Service of residence, 1 January to 3 September 2023.

	Recent Week (28 Aug-3 Sep)	Previous Week (21-27 Aug)	2023 YTD	5 year mean (2018-2022)	Ratio YTD to 5YM
Torres and Cape	27	34	882	219.6	4
Cairns and Hinterland	36	57	2,909	969.2	3
North West	9	25	623	194.4	3.2
Townsville	59	108	3,079	1291	2.4
Mackay	55	35	2,366	620.2	3.8
Central Queensland	37	47	2,971	974.4	3
Central West	2	4	118	55.6	2.1
Wide Bay	66	125	2,743	629.4	4.4
Sunshine Coast	51	62	4,269	1616.2	2.6
Metro North	139	191	12,843	5066	2.5
Metro South	170	233	16,356	5323.6	3.1
Darling Downs	80	122	3,944	1314.2	3
West Moreton	67	99	4,689	1625.8	2.9
South West	14	20	389	160	2.4
Gold Coast	79	102	6,603	2572.4	2.6
Overseas	0	1	97	-	-
Queensland	891	1,265	64,881	22643.2	2.9

Table 3: RSV notification summary by Hospital & Health Service of residence, 1 January to 3 September 2023.

	Recent Week (28 Aug-3 Sep)	Previous Week (21-27 Aug)	2023 YTD	2022 YTD
Torres and Cape	6	5	113	41
Cairns and Hinterland	4	7	932	453
North West	8	13	72	330
Townsville	25	27	1,048	1,278
Mackay	21	19	1,032	792
Central Queensland	34	20	889	933
Central West	0	0	18	80
Wide Bay	43	39	1,040	796
Sunshine Coast	31	46	1,390	1,829
Metro North	94	117	4,991	5,981
Metro South	121	125	5,598	6,761
Darling Downs	49	51	1,959	2,169
West Moreton	30	37	1,904	2,506
South West	2	1	246	188
Gold Coast	49	58	2,406	3,258
Overseas	0	0	19	14
Queensland	517	565	23,657	27,409

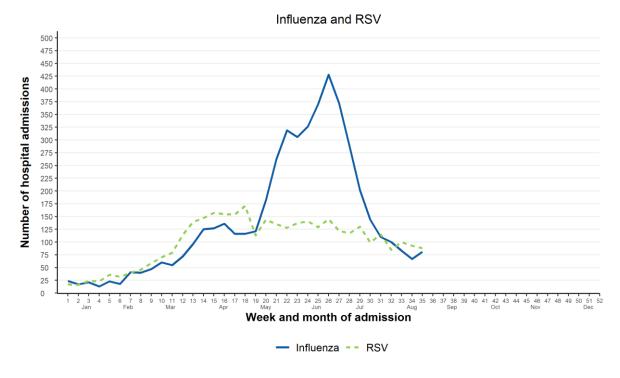


Figure 12: Influenza and RSV admissions to Queensland public hospitals by week and month of admission, 1 January to 3 September 2023.

Table 4: Influenza hospital admissions summary by Hospital & Health Service of hospitalisation, 1 January to 3 September 2023.

	Recent Week (28 Aug-3 Sep)	Previous Week (21-27 Aug)	2023 YTD
Torres and Cape	0	1	55
Cairns and Hinterland	11	6	448
North West	3	5	97
Townsville	8	12	300
Mackay	1	2	165
Central Queensland	1	3	237
Central West	0	0	7
Wide Bay	4	6	276
Sunshine Coast	3	7	361
Metro North	15	10	802
Metro South	10	5	836
Darling Downs	3	2	308
West Moreton	6	1	266
South West	1	0	28
Gold Coast	6	2	401
Children's Health Queensland	9	5	323
Queensland	81	67	4,910

Table 5: RSV hospital admissions summary by Hospital & Health Service of hospitalisation, 1 January to 3 September 2023.

	Recent Week (28 Aug-3 Sep)	Previous Week (21-27 Aug)	2023 YTD
Torres and Cape	0	0	14
Cairns and Hinterland	2	3	245
North West	2	1	15
Townsville	3	3	195
Mackay	2	3	111
Central Queensland	6	5	171
Central West	0	0	0
Wide Bay	6	10	153
Sunshine Coast	11	9	243
Metro North	11	18	581
Metro South	16	7	472
Darling Downs	8	13	255
West Moreton	4	2	231
South West	1	0	28
Gold Coast	6	7	324
Children's Health Queensland	10	12	462
Queensland	88	93	3,500

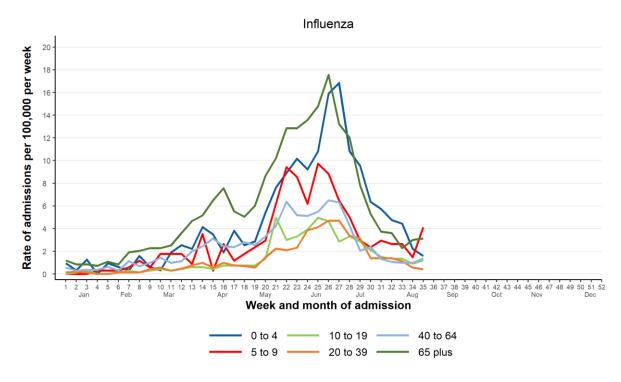


Figure 13: Influenza admissions to Queensland public hospitals by age group, week and month of admission, 1 January to 3 September 2023.

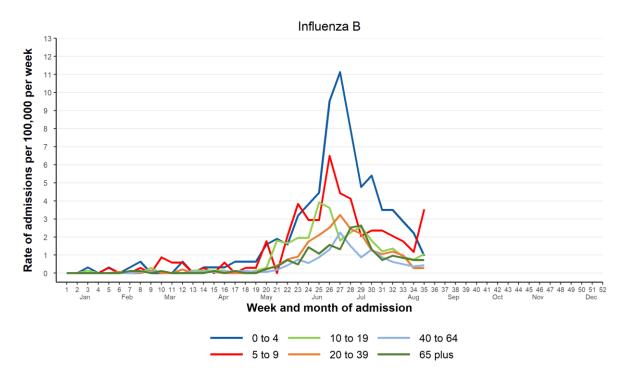


Figure 14: Influenza B admissions to Queensland public hospitals by age group, week and month of admission, 1 January to 3 September 2023.

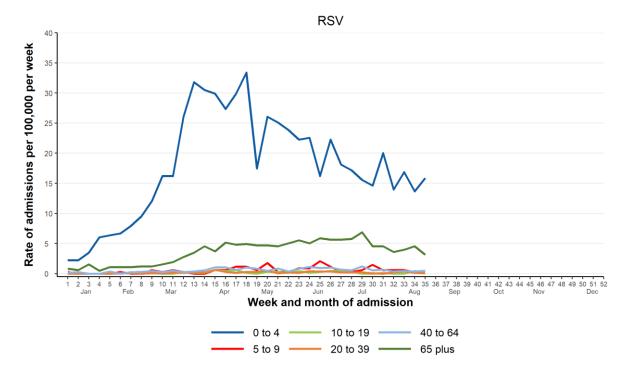


Figure 15: RSV admissions to Queensland public hospitals by age group, week and month of admission, 1 January to 3 September 2023.



FluTracking is an online health surveillance system used to detect the potential spread of influenza and COVID-19. Currently more than 70,000 Australians participate in the FluTracking weekly online survey across Australia.

The system gathers data on the emerging influenza season and COVID-19 in your community by collating and reporting responses to online weekly surveys. Participation is quick and easy, and open to any individual who is resident in Australia.

You can find out more about FluTracking at <u>About | Flutracking.net</u>, or register to participate <u>www.flutracking.net</u>.

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

- The start date for this report is 1 January 2023. Where data for 2023 only is presented in a graph, weekly counts are shown by ISO week (international standard ISO 8601). The first ISO week comprises data from 2 January onwards. 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 onset.
- Figures 1 and 2 show counts of influenza and RSV notifications for the current year to date in comparison to historical data. RSV became notifiable on 1 July 2021 so complete year data prior to 2022 cannot be shown.
- This report includes notifications for Queensland and overseas residents diagnosed with influenza or RSV in Queensland. Interstate residents diagnosed in Queensland are excluded from this report.

Data sources

- **ePADT**: is the enterprise Patients, Admission and Discharges and Tranfers database used in Queensland to record and manage public hospitalisation data.
- **Notifiable Conditions System (NoCS)**: fulfills the role of the Notifiable Conditions Register, legislated under the Public Health Act (2005).
- AUSLAB: is an integrated laboratory information system used in pathology, clinical measurements, forensics and public health laboratories.

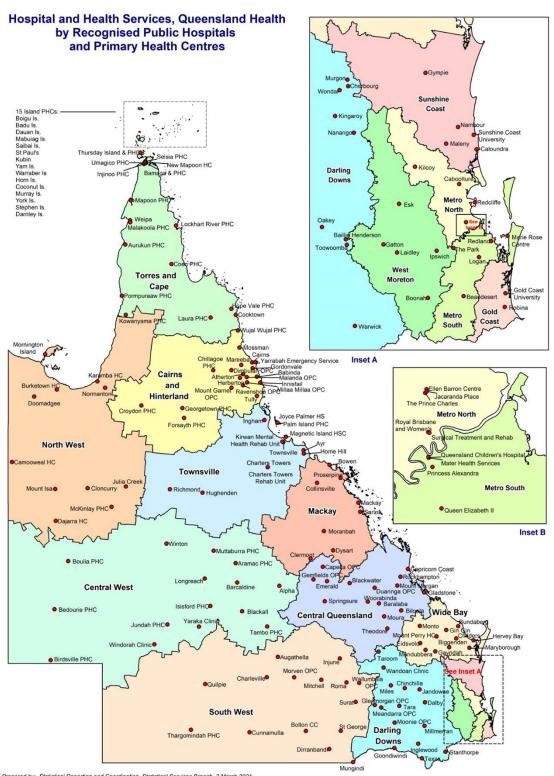
Page **12**

Appendix 2: Definitions

- **Hospital admissions**: the number of patients admitted to a Queensland Health public hospital, during a defined time interval, with an episode date of influenza or RSV either 14 days before their admission, or with an episode date while in hospital but up to 14 days following their admission. Data source: ePADT linked to NoCS.
- **Percentage of tests positive**: percentage of PCR tests conducted in the Queensland public pathology system that were positive. Data source: AUSLAB.
- Hospital and Health Services (HHSs): Queensland Health includes 16 HHSs, comprising 15 geographical areas and 1 statewide service (Children's Health Queensland). HHS of residence for notified cases of influenza or RSV may not be the same as their HHS of hospital admission(s). Data source: NoCS, ePADT.
- **Tropical and Subtropical Regions**: areas included in the list below are HHS aggregates used for surveillance purposes only. 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

Page **13**



Prepared by: Statistical Reporting and Coordination, Statistical Services Branch, 2 March 2021 Hospital and Health Services by recognised public hospitals and primary health centres as at October 2020

Appendix 3: 2023 influenza vaccine composition

The Australian Technical Advisory Group on Immunisation (ATAGI) recommends that the following viruses be used for influenza vaccines in the 2023 southern hemisphere influenza season:

Egg-based quadrivalent influenza vaccines:	Cell-based or quadrivalent influenza vaccines:
A/Sydney/5/2021 (H1N1) pdm09-like	A/Sydney/5/2021 (H1N1) pdm09-like
virus	virus
A/Darwin/9/2021 (H3N2)-like virus	A/Darwin/6/2021 (H3N2)-like virus
B/Austria/1359417/2021 (B/Victoria	B/Austria/1359417/2021 (B/Victoria
lineage)-like virus	lineage)-like virus
B/Phuket/3073/2013 (B/Yamagata	B/Phuket/3073/2013 (B/Yamagata
lineage)-like virus	lineage)-like virus

The Australian Technical Advisory Group on Immunisation (ATAGI) has developed advice for immunisation providers regarding the administration of 2023 seasonal influenza vaccines.

https://www.health.gov.au/resources/publications/atagi-advice-on-seasonal-influenza-vaccines-in-2023

Page **15**