

Statewide Weekly Influenza Surveillance Report

Reporting Period: 1 January to 19 October
2014

Influenza Surveillance Report

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An electronic version of this document is available at http://www.health.qld.gov.au/ph/cdb/sru_influenza.asp

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1. Summary

	2014 Year to Date*	Recent Week (13 – 19 October)
All Influenza Notifications	16,951	168
Influenza A [†]	14,642	109
A(H1N1)pdm09 [‡]	2,032	7
A/H3N2	550	4
Subtype unavailable	12,060	98
Influenza B	2,309	59
Type unavailable	0	0
Influenza Hospitalisations [§]	2,115 (ICU: 261)	14 (ICU: 1)

* Includes recent week

[†] Subtype counts/proportions may be subject to change as further laboratory results become available

[‡] World Health Organization (WHO) standard abbreviation for the influenza strain associated with the 2009 pandemic, also known as A/California/7/2009 (H1N1)

[§] Queensland public hospitals only

^{||} New admissions to ICU during the recent week

**Australian Influenza Vaccine Committee (AIVC)
decision on the influenza vaccine composition for
Australia 2014**

[http://www.influenzacentre.org/surveillance_vaccines.
htm](http://www.influenzacentre.org/surveillance_vaccines.htm)

A (H1N1): an A/California/7/2009 (H1N1) - like virus, 15 µg HA per dose

A (H3N2): an A/Texas/50/2012 (H3N2) - like virus, 15 µg HA per dose

B: a B/Massachusetts/2/2012 - like virus, 15 µg HA per dose

2. Influenza notifications

Recent week onset (13 October to 19 October): 168 notifications.

- 109 (65%) were typed as influenza A and 59 (35%) influenza B.
 - 11 influenza A were subtyped: 7 (64%) were A(H1N1)pdm09; 4 (36%) were A/H3N2
 - Subtype was unavailable for 98 influenza A.

YTD 2014 (1 January to 19 October) there have been 16,951 notifications, which is 1.7 times the five year YTD mean (10,255.6) for the same period.

- 14,642 (86%) were typed as influenza A and 2,309 (14%) influenza B
 - 2,582 influenza A have been subtyped: 2,032 (79%) were A(H1N1)pdm09; 550 (21%) were A/H3N2
 - Subtype is unavailable for 12,060 influenza A.

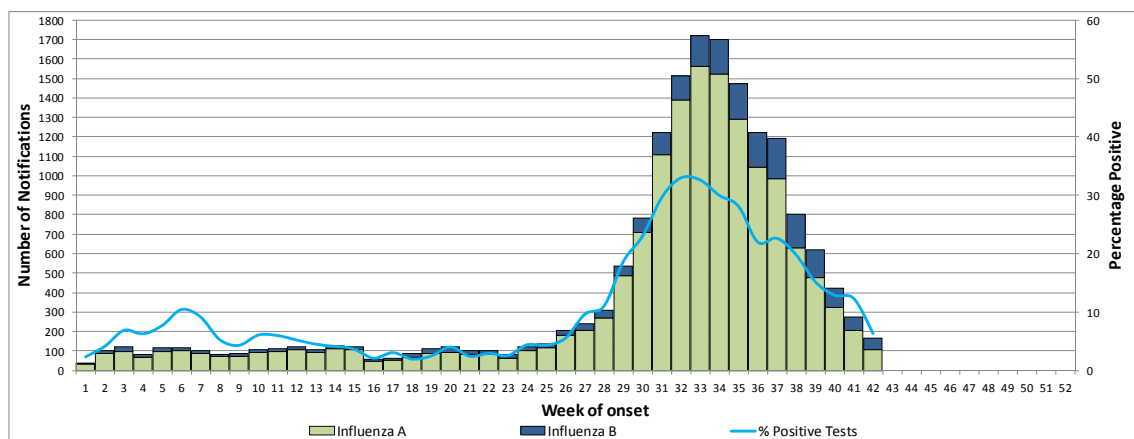


Figure 1 Weekly influenza notifications in Queensland by type and percentage of positive tests (public laboratory system only) by week of testing, 1 January 2014 to 19 October 2014. *Data extracted from NOCS 21 October 2014 and AUSLAB 22 October 2014.*

- Figure 1 shows the statewide notification counts by week and type, and the percentage of positive influenza tests (public laboratory system only).
- Notification counts and percentage of positive tests both show a sustained decreasing trend over recent weeks, following a peak in weeks 33 and 34 (11 August to 24 August).
- YTD 2014 notification counts are summarised by region in Figure 2 and by region and Hospital and Health Service (HHS) in Table 1.
- Figure 3 shows the age and gender distribution of notifications.
- Overall notifications were higher in females (53%) than males (47%).
- Median age was 35 years, with a range of less than 12 months to 104 years.

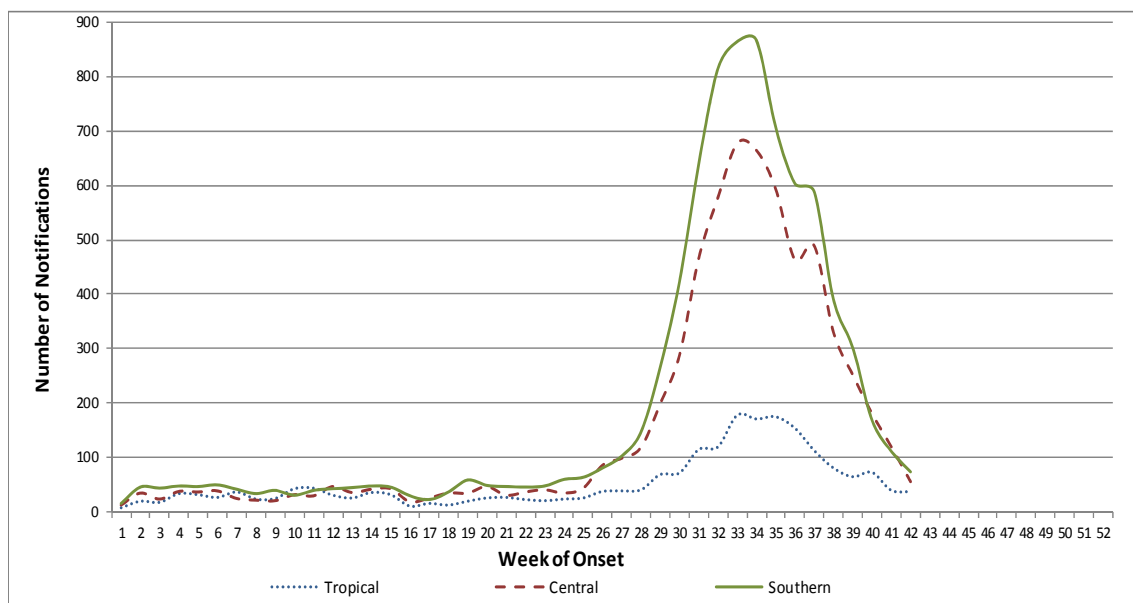


Figure 2 Weekly influenza notifications by region, 1 January 2014 to 19 October 2014. Data extracted from NOCS 21 October 2014.

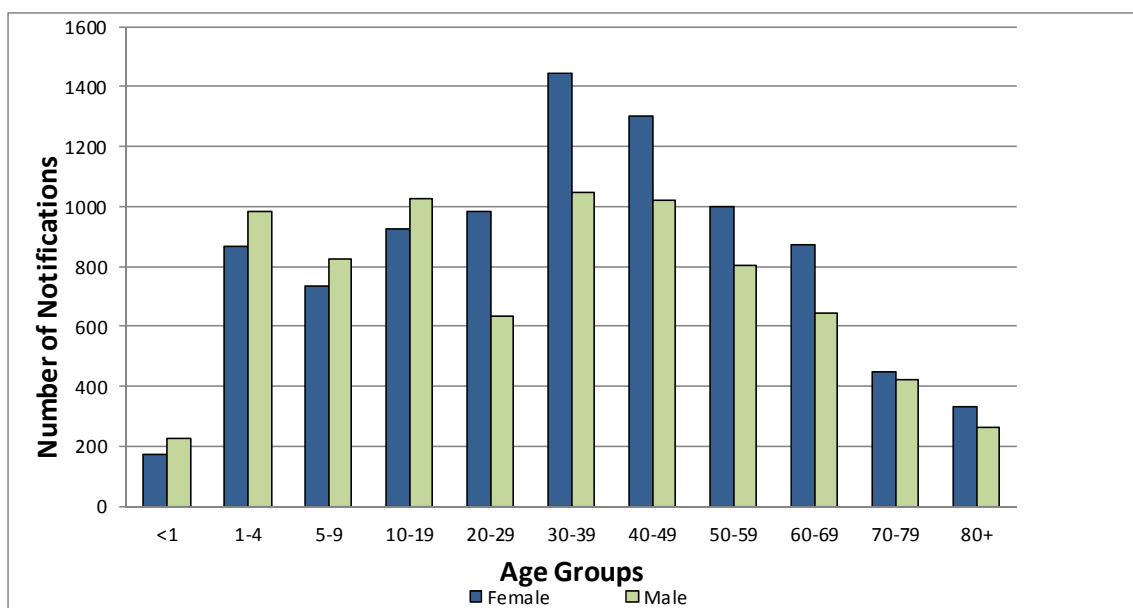


Figure 3 YTD influenza notifications in Queensland by age group and gender, 1 January 2014 to 19 October 2014. Data extracted from NOCS 21 October 2014.

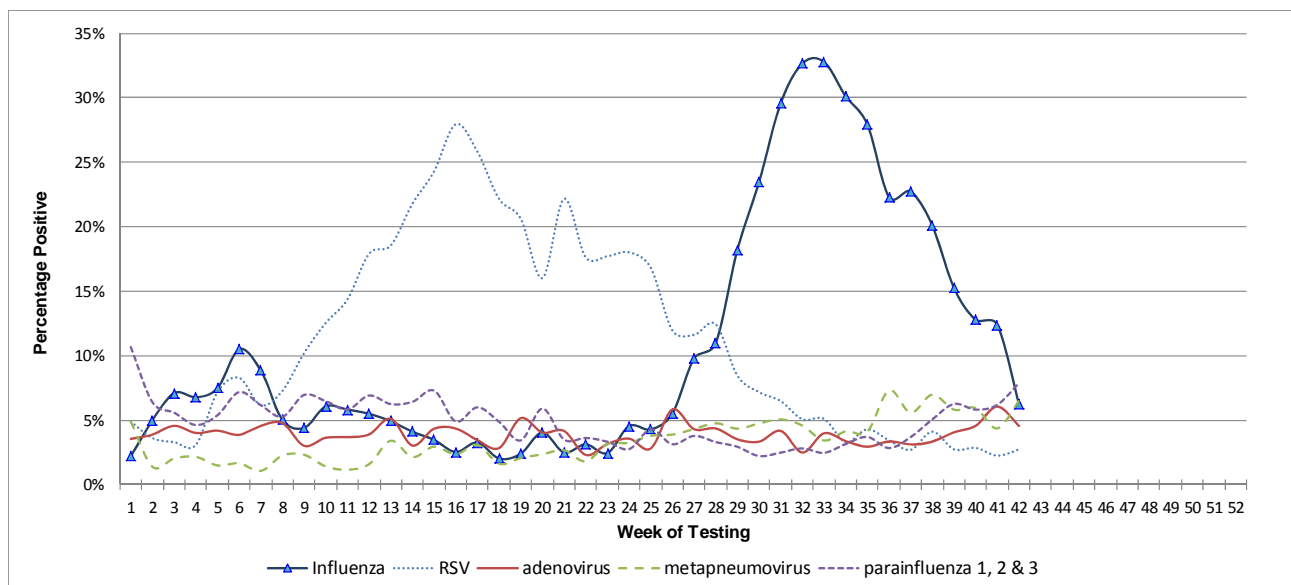


Figure 4 Percentage of positive influenza, respiratory syncytial virus (RSV), adenovirus, metapneumovirus and parainfluenza tests (public laboratory system only) by week of testing, 1 January 2014 to 19 October 2014. *Data extracted from AUSLAB 22 October 2014.*

- Figure 4 shows the percentage of positive tests for influenza as well as non-notifiable respiratory viruses, which are important causes of influenza like illness (ILI).

Table 1 Influenza notifications by week of onset, Region* and Hospital and Health Service (HHS), 1 January 2014 to 19 October 2014. *Data extracted from NOCS 21 October 2014.*

Region	Hospital & Health Service	Week of onset																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Tropical	Torres and Cape	0	1	2	0	15	13	13	1	0	5	1	2	0	1	0	0	0	0	0	0	0	2	0	0	0	1
	Cairns and Hinterland	2	5	8	5	9	11	15	17	14	26	21	14	20	16	14	5	7	5	3	5	2	3	3	6	6	9
	North West	0	1	0	0	0	0	1	0	1	0	0	0	0	0	2	0	0	0	1	0	2	0	1	2	2	6
	Townsville	4	11	15	11	3	3	7	5	8	8	19	11	4	16	15	5	8	4	8	12	13	13	16	11	12	19
	Mackay	2	2	9	2	5	0	1	1	2	4	3	4	2	3	1	1	1	4	8	9	10	5	1	5	6	3
Central	Central Queensland	0	0	3	1	1	4	2	2	4	0	3	1	2	5	5	5	3	1	6	6	2	2	3	4	5	11
	Central West	0	0	0	1	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1
	Wide Bay	4	4	5	3	0	1	3	4	4	2	3	3	1	1	3	1	2	3	7	6	4	1	2	1	6	7
	Sunshine Coast	0	7	9	7	5	10	3	3	3	3	5	8	9	9	8	2	2	3	3	5	6	12	10	8	7	18
	Metro North	9	24	21	12	31	24	17	13	10	26	19	34	24	26	26	11	19	28	19	30	19	22	26	22	26	49
Southern	Metro South	9	18	26	17	22	26	23	21	16	17	21	23	25	27	33	17	13	19	31	32	21	32	37	33	40	50
	Darling Downs	2	11	7	7	4	4	4	6	6	2	4	9	7	7	3	8	4	6	8	6	16	7	4	7	6	5
	West Moreton	1	2	1	5	1	5	5	2	4	3	1	1	0	4	1	1	1	3	3	1	6	1	3	2	3	3
	South West	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	2	1	0	0	2	1	0	0	0	0	3
	Gold Coast	4	14	13	15	19	14	9	5	13	9	13	10	13	10	9	2	4	9	17	8	3	6	4	18	15	20
Queensland (Total)		37	101	120	86	116	116	104	80	86	106	114	121	107	126	121	60	65	85	114	122	105	106	110	119	134	205

Region	Hospital & Health Service	Week of onset																										YTD Total
		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
Tropical	Torres and Cape	1	0	2	2	2	1	3	7	15	19	8	4	3	9	5	6	-	-	-	-	-	-	-	-	-	-	144
	Cairns and Hinterland	12	6	10	11	31	29	65	78	67	53	35	18	8	6	7	8	-	-	-	-	-	-	-	-	-	-	695
	North West	2	10	18	10	13	8	16	1	4	5	3	3	2	2	0	3	-	-	-	-	-	-	-	-	-	-	119
	Townsville	20	18	30	38	60	67	78	66	63	55	51	39	42	38	25	14	-	-	-	-	-	-	-	-	-	-	965
	Mackay	4	7	9	11	9	15	16	19	26	22	16	17	10	18	3	7	-	-	-	-	-	-	-	-	-	-	303
Central	Central Queensland	9	17	33	24	47	45	72	51	49	44	66	47	34	21	15	8	-	-	-	-	-	-	-	-	-	-	663
	Central West	4	8	5	6	3	7	4	5	5	0	4	2	0	1	0	0	-	-	-	-	-	-	-	-	-	-	60
	Wide Bay	5	2	6	7	9	32	36	21	41	42	50	70	40	26	15	7	-	-	-	-	-	-	-	-	-	-	490
	Sunshine Coast	18	24	36	47	71	82	98	99	115	90	75	43	34	27	19	10	-	-	-	-	-	-	-	-	-	-	1,053
	Metro North	63	68	119	204	336	412	467	488	383	287	294	168	144	106	71	31	-	-	-	-	-	-	-	-	-	-	4,228
Southern	Metro South	57	80	139	221	345	432	424	461	403	319	315	205	147	101	67	41	-	-	-	-	-	-	-	-	-	-	4,406
	Darling Downs	4	13	24	27	61	86	141	149	106	120	120	86	70	26	18	14	-	-	-	-	-	-	-	-	-	-	1,225
	West Moreton	8	15	23	48	65	89	120	94	85	53	51	20	21	10	7	6	-	-	-	-	-	-	-	-	-	-	778
	South West	0	1	2	3	3	5	11	22	16	11	11	6	3	2	1	2	-	-	-	-	-	-	-	-	-	-	115
	Gold Coast	34	38	78	124	165	203	168	140	96	100	91	73	61	30	19	11	-	-	-	-	-	-	-	-	-	-	1,707
Queensland (Total)		241	307	534	783	1220	1513	1719	1701	1474	1220	1190	801	619	423	272	168	-	-	-	-	-	-	-	-	-	-	16,951

*Regions defined here are aggregates of HHS used for surveillance purposes only and are not official geographical areas

3. Influenza hospitalisations (public hospitals)

Public hospital admissions with confirmed influenza:

- In the recent week (13 October to 19 October) there were 14 admissions, including one to intensive care.
- **YTD 2014** there have been 2,115 admissions, including 261 to intensive care.

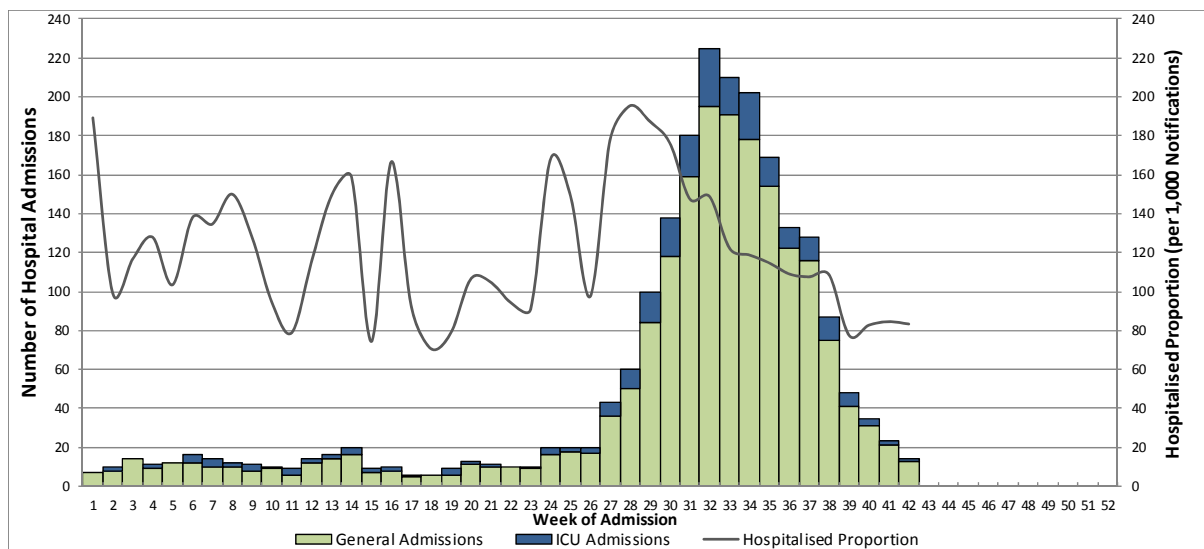


Figure 5 Laboratory confirmed influenza admissions, by week and type of admission, and weekly proportion of admitted patients (per 1,000 notifications) to Queensland public hospitals, 1 January 2014 to 19 October 2014. *Data extracted from EpiLog 21 October 2014.*

- Figure 5 summarises YTD confirmed influenza admissions to public hospitals.
- Figure 6 summarises admissions by influenza type (A and B) and influenza A subtype, obtained by linking EpiLog and NOCS data. The discrepancy between the total number of admissions in Figures 5 and 6, and Table 2, results from the linkage process, which excludes non Queensland residents who are hospitalised.
- Figure 7 summarises weekly bed occupancy for confirmed influenza by admission type.

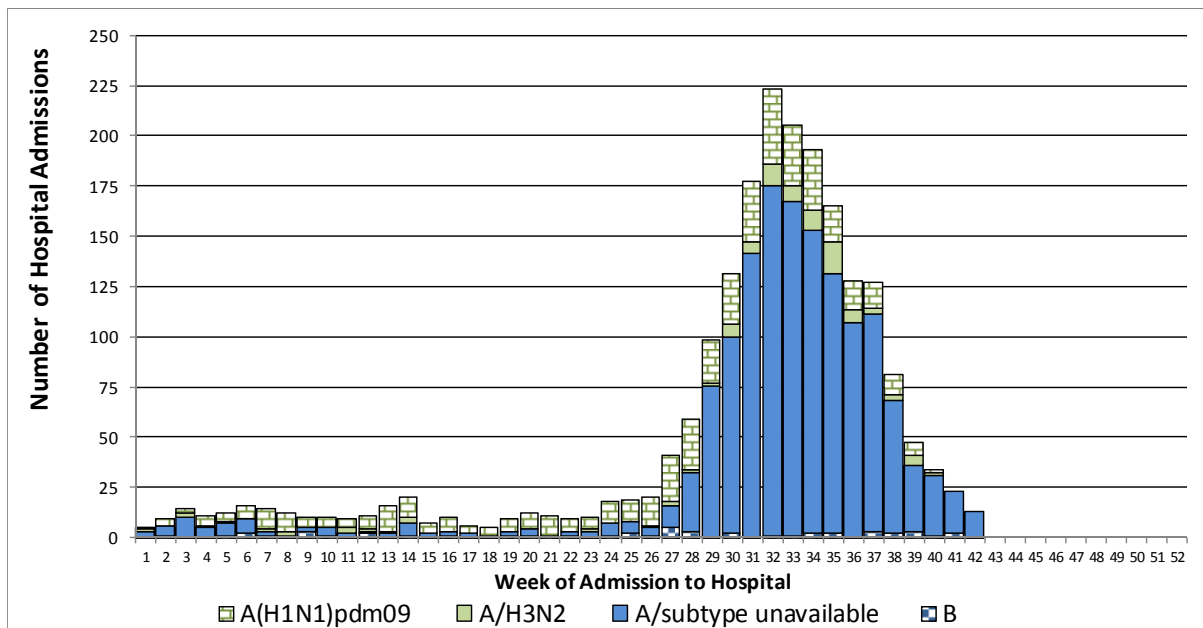


Figure 6 Laboratory confirmed influenza admissions, to Queensland public hospitals, by influenza type, subtype and week of admission, 1 January 2014 to 19 October 2014. Data extracted from NOCS and EpiLog 21 October 2014.

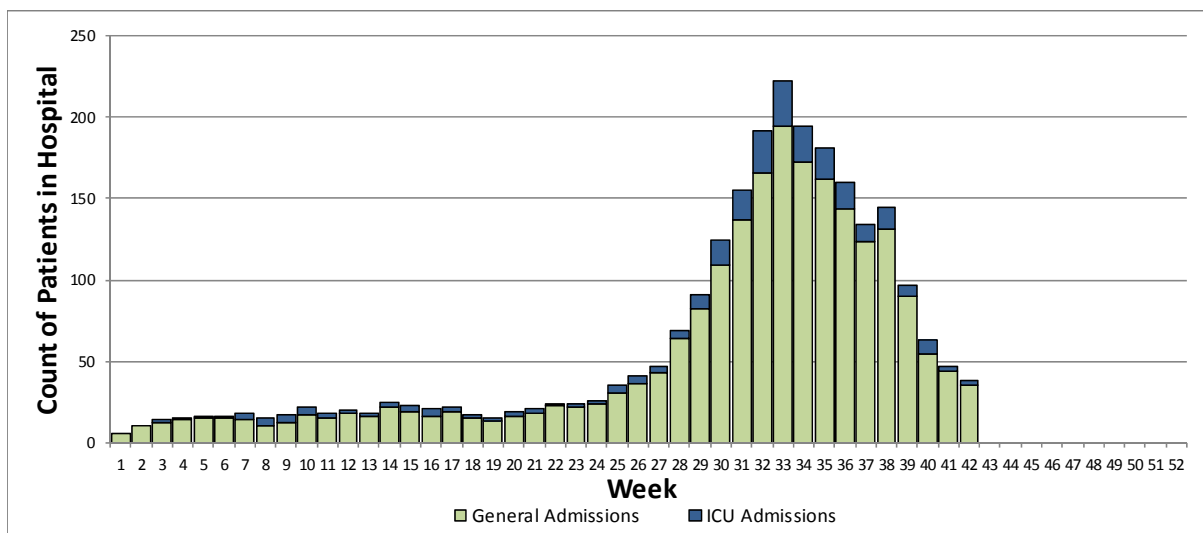


Figure 7 Weekly bed occupancy for patients with laboratory confirmed influenza in Queensland public hospitals by admission type, 1 January 2014 to 19 October 2014. Data extracted from EpiLog 21 October 2014.

Table 2 YTD 2014 laboratory confirmed influenza admissions to Queensland public hospitals by Region and Hospital and Health Service (HHS), 1 January 2014 to 19 October 2014. *Data extracted from EpiLog and NOCS 21 October 2014.*

Region	Hospital & Health Service	YTD Hospital Admissions	YTD Notifications	Admission Proportion (per 1,000 notifications)
Tropical	Torres and Cape	14	144	97.2
	Cairns and Hinterland	128	695	184.2
	North West	22	119	184.9
	Townsville	142	965	147.2
	Mackay	31	303	102.3
Central	Central Queensland	47	663	70.9
	Central West	9	60	150.0
	Wide Bay	46	490	93.9
	Sunshine Coast	88	1,053	83.6
	Metro North	555	4,228	131.3
Southern	Metro South	393	4,406	89.2
	Darling Downs	114	1,225	93.1
	West Moreton	95	778	122.1
	South West	9	115	78.3
	Gold Coast	343	1,707	200.9
	*Children's Health Queensland	83	n.a.	n.a.
Total		†2,119	16,951	125.0

* Children's Health Queensland is a hospital HHS, not a residential HHS.

† Admission total includes 4 patients who were admitted in 2013 who have been excluded from the YTD total shown in the summary table on page 1 and Figure 5

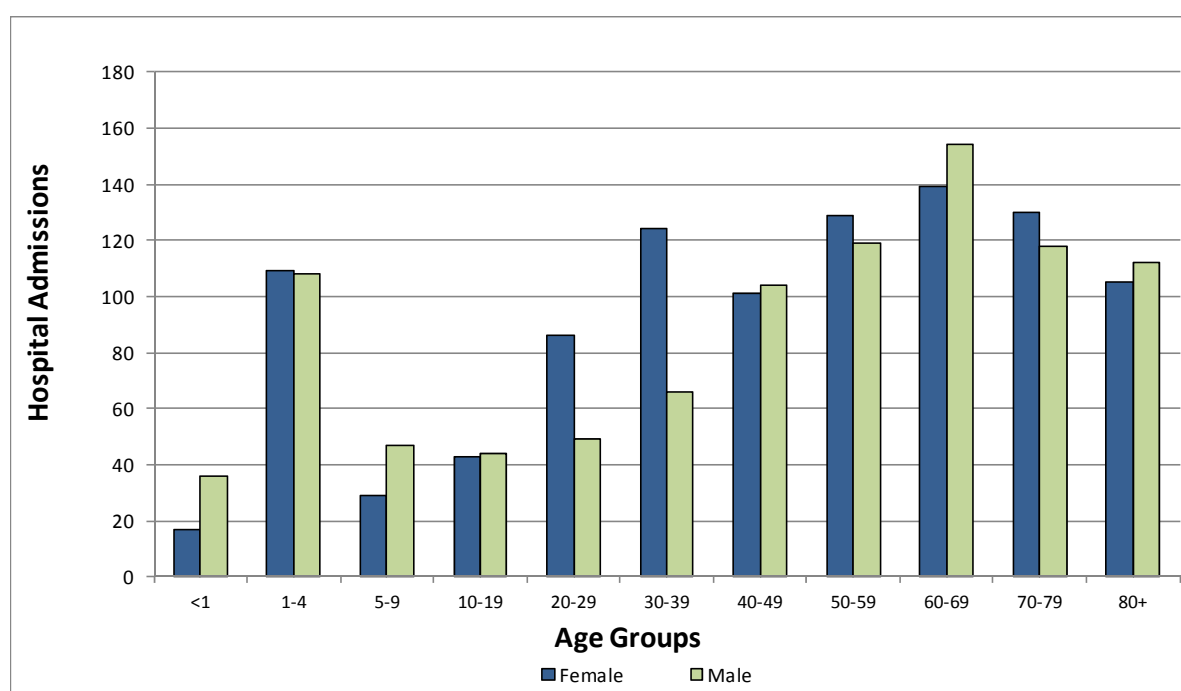


Figure 8 Laboratory confirmed influenza admissions, to Queensland public hospitals, by age group and gender, 1 January 2014 to 19 October 2014. *Data extracted from EpiLog and NOCS 21 October 2014.*

- The YTD proportion of hospitalised females (52%) was higher than males (48%).
- Median age was 51 years, with a range of less than 12 months to 97 years.

4. Australian Sentinel Practices Research Network (ASPREN)

ASPREN is a national syndromic surveillance program co-ordinated by the Discipline of General Practice at the University of Adelaide and The Royal Australian College of General Practitioners. One of the conditions under surveillance is influenza like illness (ILI).

Figure 9 shows the number of ILI presentations per 1,000 GP consultations by week. There were 1.2 presentations per 1,000 consultations in the most recent week. Further information about ASPREN can be found at

<https://www.dmac.adelaide.edu.au/aspren/asprenMISServlet?page=index>

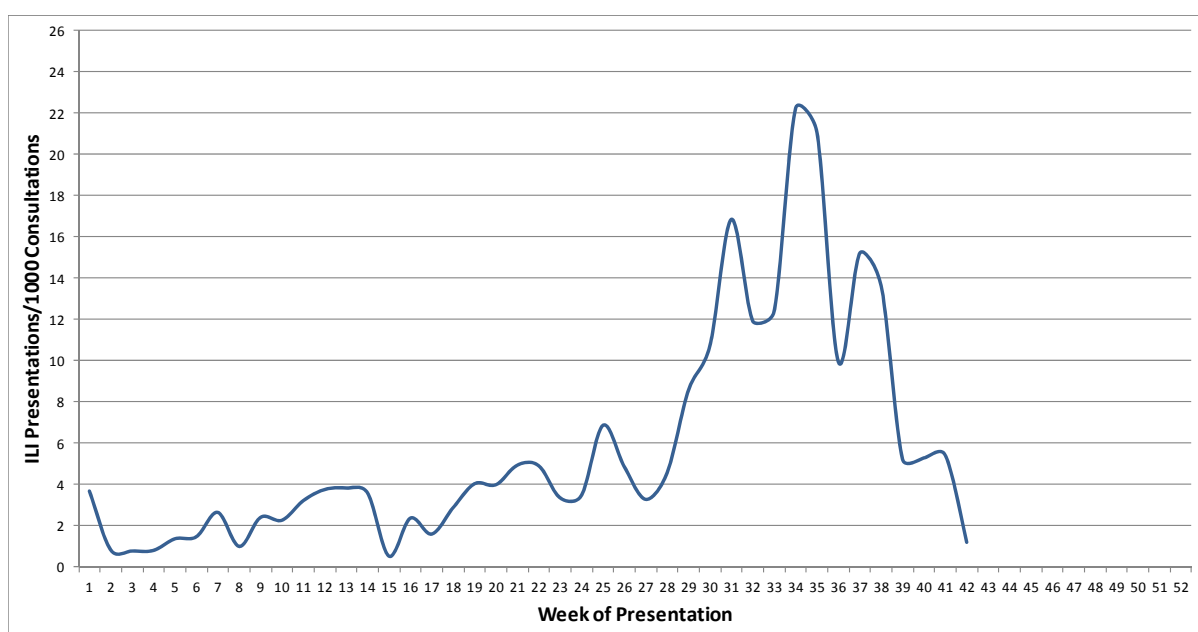


Figure 9 Influenza like illness (ILI) presentations per 1,000 GP consultations in Queensland by week, 1 January 2014 to 19 October 2014. *Data extracted from ASPREN 21 October 2014.*

5. Appendix: Hospital and Health Services (2014 edition) with Regions

**Hospital and Health Services, Queensland Health
by Recognised Public Hospitals**



Prepared by: Statistical Reporting and Coordination, Health Statistics Unit, 26 June 2014
Hospital and Health Services by recognised public hospitals to reporting purposes as at 1 July 2014

Regions and Hospital and Health Services		
Tropical	Central	Southern
Torres and Cape	Central Queensland	Metro South
Cairns and Hinterland	Central West	Darling Downs
North West	Wide Bay	West Moreton
Townsville	Sunshine Coast	South West
Mackay	Metro North	Gold Coast