Total Notifications | 4510
---|---
Influenza A* | 3590
A(H1N1)pdm09† | 27
H3N2 | 921
Un-subtyped | 2642
Influenza B | 920
Un-typed | 0
Number of Confirmed Influenza Hospitalisations (Queensland Public Hospitals Only) | 447

*Subtype counts/proportions may be subject to change
†World Health Organisation (WHO) standard abbreviation for the influenza strain associated with the 2009 pandemic, also known as A/California/7/2009 (H1N1)

Influenza vaccine virus composition for Australia 2012

http://www.influenzacentre.org/centre_vaccines.htm

- A (H1N1): an A/California/7/2009 (H1N1) - like strain, 15 µg HA per dose
- A (H3N2): an A/Perth/16/2009 (H3N2) - like strain, 15 µg HA per dose
- B: a B/Brisbane/60/2008 - like strain, 15 µg HA per dose

Influenza Notifications

Year to date (YTD) there have been 4510 notifications of influenza in Queensland. Subtype is recorded for 948 of the 3590 notifications of influenza A, comprising 27 A(H1N1)pdm09 and 921 H3N2. Twenty percent (920) of notifications have been influenza B.

Figure 1: Influenza notification counts in Queensland by type and week of onset and percentage of positive influenza tests (public laboratory system only) by week, from 1st January 2012 to 22nd July 2012. Data extracted from NOCS 23/07/2012 and AUSLAB 23/07/2012.

*Un-typed notifications have been excluded.
Figure 1 shows Queensland notifications for influenza A and B by week of onset. An increasing trend is apparent from around week 19 (week beginning Monday 7th May).

Figure 1 also shows the percentage of positive influenza tests, performed in the public laboratory sector in Queensland, by week of testing for the YTD 2012. The number of positive tests can be influenced by many factors including the amount of testing done. However, the percentage of positive tests may be an indicator of disease frequency in the population and would be expected to increase as the influenza season progresses. The increasing trend shown in Figure 1 is consistent with the evolving influenza season. The laboratory test data presented in Figure 1 should be interpreted with caution as they may not be representative of influenza testing across all laboratory sectors. In addition, there may be some inaccuracies associated with the extraction of data from the laboratory information system (AUSLAB).

The recent week’s data may be incomplete for both notifications and AUSLAB and will usually be an underestimate in data presented by date of disease onset.

The 2012 YTD notification count (4510) is approximately 1.3 times the five year mean (3470.6) for the same period. However, it is important to note that the profile of the influenza notifications is not the same each year, especially with regard to the start of the season. Comparison of YTD data, or counts during a particular week, across years may be misleading. In addition, there have been changes to diagnostic methods and test requesting practices in recent years, which may influence counts.

![Figure 2: Influenza notification counts and crude rates (per 100,000) in Queensland by age group and gender from 1st January 2012 to 22nd July 2012. Data extracted from NOCS 23/07/2012. (2010 Population Data were used for rates).](image-url)

Figure 2 shows the 2012 YTD influenza notifications by age group and gender. The highest influenza notification rate has been in the 1-4 age group (227.9 per 100,000 population) and the lowest rate in the 50-59 age group (59.4 per 100,000 population). The median age was 27 years and the age range was <1 to 102 years. Overall, there were slightly more notifications in females (51%) than males (49%).
Influenza Hospitalisations

Figure 3 shows the number of laboratory confirmed influenza admissions to public hospitals in Queensland, by week and admission type, detected through the EpiLog system. YTD 2012 there have been 447 admissions, including 44 to intensive care units (ICU). A rising trend is apparent from around week 24, with admissions during the last four weeks (270) accounting for 60% of the total.

Hospitalisations are considered a proxy measure of illness severity, with the most severely affected of all notified cases (Figure 1) requiring hospital care.

Figure 3: Admission of laboratory confirmed influenza cases, to Queensland public hospitals, by week and type of admission, with admission from 1st January 2012 to 22nd July 2012. Data extracted from EpiLog 23/07/2012.

Figure 4: Laboratory confirmed influenza admission counts, in Queensland public hospitals, by age group and gender, with admission from 1st January 2012 to 22nd July 2012. Data extracted from EpiLog 23/07/2012.

1 EpiLog is a web based application developed by Queensland Health, which generates admission records for confirmed influenza cases through interfaces with the inpatient information and public laboratory databases. Records can also be generated manually.
Figure 4 shows the age and gender distribution of the YTD confirmed influenza admissions to public hospitals, as detected by the EpiLog system. Overall, the highest number of hospitalisations (62) occurred in the 70-79 year age group, with 50% male and 50% female. The median age of hospitalised cases was 43 years and the range was <1 to 102.

Figure 5 shows the geographical distribution of the 2012 YTD hospitalisations by Health Service District (HSD). The weekly notification counts by HSD, together with the YTD totals, are shown in Table 1.

Figure 5: Laboratory confirmed influenza admissions to public hospitals in Queensland by Health Service District, from 1st January to 22nd July 2012. Data extracted from EpiLog 23/07/2012.

Figure 6 shows the number of inpatients in public hospitals, with laboratory confirmed influenza, during each week since 1st January 2012. The data are a function of admissions as well as lengths of stay. This is distinct from the data in Figure 3 which shows new admissions during each week.

Figure 6: Hospital occupancy: Number of patients with laboratory confirmed influenza in public hospitals in Queensland by week from 1st January to 22nd July 2012. Data extracted from EpiLog 23/07/2012.
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).

General practitioners (GP) participating in the ASPREN program contribute data on the proportion of consultations which are ILI related. Currently there are 43 Queensland GPs registered with ASPREN, although weekly participation rate may vary. YTD 2012 GP participation has ranged from 30 - 60 %.

The number of ILI presentations per 1000 GP consultations has shown a consistent rising trend over the last 5 weeks. During the most recent week there were 16.3 ILI presentations per 1000 GP consultations.

Further information about ASPREN can be found at http://www.racgp.org.au/aspren.
## Table 1: Influenza notifications by week of onset and Health Service District (HSD), Queensland, 2012 (as on 22\(^{nd}\) July 2012).

Data extracted from NOCS 23/07/2012.

| Health Service District | 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 |
|-------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Torres Strait - Northern Peninsula | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| Cape York               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 3  | 1  | 1  | 7  | 7  | 0  | 3  | 0  | 0  | 1  | 0  | 0  | -  | -  |
| Cairns And Hinterland   | 1  | 1  | 1  | 4  | 0  | 1  | 1  | 2  | 2  | 5  | 2  | 2  | 2  | 0  | 3  | 4  | 3  | 5  | 7  | 1  | 6  | 7  | 7  | 6  | 10 | 11 |
| Mount Isa               | 0  | 0  | 0  | 1  | 0  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 7  | 1  | 3  | 8  | 8  | 4  | 12 | 13 |
| Townsville             | 1  | 1  | 1  | 1  | 1  | 2  | 0  | 7  | 3  | 8  | 8  | 8  | 9  | 3  | 5  | 5  | 6  | 7  | 8  | 7  | 7  | 13 | 23 | 30 | 51 | 55 |
| Mackay                 | 1  | 2  | 1  | 1  | 1  | 0  | 0  | 2  | 1  | 0  | 2  | 1  | 1  | 1  | 0  | 2  | 0  | 7  | 1  | 1  | 1  | 2  | 0  | 0  | 1  | 4  |
| Central Queensland      | 0  | 3  | 0  | 2  | 0  | 0  | 1  | 1  | 3  | 0  | 3  | 2  | 0  | 1  | 0  | 1  | 0  | 0  | 2  | 3  | 2  | 2  | 3  | 0  | 5  | -  |
| Central West            | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3  |
| Wide Bay               | 1  | 3  | 3  | 1  | 1  | 2  | 2  | 2  | 0  | 2  | 1  | 0  | 2  | 5  | 0  | 1  | 2  | 0  | 1  | 1  | 2  | 3  | 1  | 6  | -  | -  |
| Sunshine Coast          | 0  | 4  | 2  | 1  | 6  | 1  | 4  | 2  | 0  | 6  | 3  | 3  | 4  | 6  | 1  | 3  | 0  | 2  | 4  | 3  | 3  | 7  | 7  | 3  | 13 | 15 |
| Metro North             | 10 | 3  | 3  | 6  | 7  | 5  | 9  | 6  | 12 | 9  | 6  | 19 | 9  | 17 | 6  | 11 | 7  | 9  | 12 | 14 | 31 | 68 | 71 | 75 | 97 | 131|
| Metro South             | 2  | 4  | 6  | 6  | 2  | 5  | 4  | 8  | 7  | 5  | 4  | 8  | 8  | 3  | 12 | 10 | 6  | 3  | 8  | 7  | 13 | 13 | 27 | 33 | 56 | 99 |
| Darling Downs           | 3  | 1  | 0  | 1  | 2  | 2  | 2  | 3  | 1  | 3  | 1  | 0  | 2  | 1  | 1  | 0  | 1  | 1  | 5  | 1  | 13 | 13 | 16 | 17 | 44 | 38 |
| West Moreton           | 0  | 1  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 0  | 3  | 2  | 1  | 1  | 0  | 1  | 4  | 4  | 3  | 9  | 13 |
| South West             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 1  | 2  | 0  | 4  | 11 | 8  | -  |
| Gold Coast             | 1  | 0  | 2  | 1  | 0  | 4  | 3  | 3  | 4  | 1  | 1  | 4  | 0  | 0  | 2  | 3  | 5  | 1  | 5  | 10 | 7  | 4  | 10 | 12 | 29 | 37 |

Queensland (Total) 21 23 19 24 21 23 28 37 36 40 31 50 37 32 36 47 34 45 67 47 94 142 178 198 336 436

Data presented in this report were the most accurate available at the time of extraction. Surveillance datasets are subject to change. Please direct any enquiries to EPI@health.qld.gov.au