Influenza Update N° 164
20 July 2012

Summary

- The influenza season is largely finished in the temperate countries of the northern hemisphere and most countries in the northern temperate zone have stopped weekly reporting or moved over to out of season surveillance schedules.

- In the tropical zone, the countries to report notable influenza activity are Bolivia, Brazil, and Honduras in the Americas; Ghana in sub-Saharan Africa; southern China, including Hong Kong Special Administrative Region, and Viet Nam in Asia.

- The influenza season has commenced in most temperate countries of the southern hemisphere. In Argentina, however, influenza remains nearly undetectable.

- Influenza A(H3N2) viruses were the most commonly reported type/sub-type in recent weeks in the Southern Hemisphere temperate region in Chile, South Africa, and Australia; however, significant numbers of influenza type B were also reported in South Africa and to a lesser extent, Australia. Very few influenza A(H1N1)pdm09 viruses have been reported with exception of Paraguay and some countries in Central and tropical South America.

Note: Global epidemiology and surveillance updates are periodically collected from data reported by National authorities or organizations responsible for these reporting these data. For further information on specific influenza virus activity in the world and scientific literature for practitioners and other professionals in the field, please visit the following pages (links are at the end of the document):

- Virological Update
- Peer-reviewed Literature: Household transmission of 2009 Pandemic Influenza A(H1N1) systematic review and meta-analysis.
Countries in the temperate zone of the northern hemisphere

Influenza transmission in all reporting countries in the temperate regions of the northern hemisphere is largely at inter-seasonal levels. Influenza activity has been limited to only sporadic cases in Canada, the United States of America, Europe, and northern Asia. In the countries of northern Africa and the eastern Mediterranean, Oman reported persistent very low numbers of both influenza A(H1N1)pdm09 and B viruses.

Countries in the tropical zone

Tropical countries of the Americas

Some active transmission of influenza has been reported in Central America, the Caribbean, and tropical South America.

In Central America, El Salvador continued to report elevated levels of influenza A(H1N1)pdm09 detections. Influenza A(H1N1)pdm09 has also been circulating recently in Honduras and Panama, though numbers of viruses detected were low.

In the Caribbean, after experiencing circulation of influenza A(H3N2) since early-May, the Dominican Republic reported a further lowering of levels of virus circulation, compared to previous weeks. In Cuba, detections of influenza B have been sustained for the past five weeks. Jamaica has also reported influenza B circulating in low levels since late May.

In the tropical zone of South America, the Plurinational State of Bolivia reported a sustained increase of positive influenza detections in the region of La Paz, where more than 50% of specimens collected in the past reporting week were positive for influenza. Almost all of the influenza viruses detected were influenza A(H1N1)pdm09. Peru has reported low levels of both influenza A(H3N2) and influenza B since early-May, and Ecuador reported circulation of influenza type B. Brazil has seen an increase in the number of influenza-like illness (ILI) and severe acute respiratory infection (SARI) cases due to predominantly influenza A(H1N1)2009 virus since May, primarily in the southern part of the country.
Sub-Saharan Africa
In Sub-Saharan Africa, limited available data indicate very low level or no influenza activity in most countries. In western Africa, transmission of influenza A(H3N2) and influenza B was reported in Ghana with increasing numbers over the last three weeks. In Madagascar, influenza activity continues with almost 50% of samples analysed (n=53) in week 27 testing positive for influenza. This season has been dominated by influenza A(H3N2) followed by influenza type B.

Tropical Asia
Most countries of tropical Asia reported influenza activity at a low or undetectable level. India continued to report co-circulation of influenza A(H1N1)pdm09 and influenza B consistent with inter-seasonal levels of virus circulation. Sri Lanka reported influenza A(H1N1)pdm09 and influenza B activity. In south China the percentage of ILI visits to national sentinel sites was only slightly elevated in comparison to the last three weeks values, and remained elevated (3.3%) in comparison to the same period of the previous two years. Influenza A(H3N2) was the most commonly detected virus, accounting for 86% of all subtype influenza viruses. Influenza activity in China, Hong Kong Special Administrative Region continued to decrease after an unusually persistent high level influenza activity. ILI activity has decreased to values reported for the previous two years. Vietnam has reported sustained influenza A(H3N2) activity for the past several weeks. In June, 39% (87/223) of ILI cases tested were positive for influenza of which 90% (n=78) were A(H3N2) and 10% (n=9) were influenza B. In addition, 26% (n=19) of SARI cases also tested positive for influenza, of which 47% (n=9) were A(H3N2) and 53% (n=10) were influenza type B virus. Singapore reported 54% of ILI samples testing positive for influenza in the past four weeks. Of all the positive samples tested in June 2012, influenza A(H3N2) constituted 46%, whilst influenza B and influenza A(H1N1)pdm09 constituted 30% and 25%, respectively.

Number of specimens positive for influenza by subtype in South East Asia

Data generated on 18/07/2012 16:55:18 UTC
Countries in the temperate zone of the southern hemisphere

Influenza activity continued to be reported in most temperate countries of the Southern Hemisphere.

Temperate countries of South America

Influenza activity in the southern cone of South America appears to have stabilised in Chile, increasing in Paraguay and remains low in Argentina. Chile reported a continued increase of ILI activity within the alert zone set by the country mainly due to an increase of detections of respiratory syncytial virus (RSV), which accounted for 81% of samples testing positive for respiratory viruses. The number of detections of influenza decreased compared to previous weeks. The percentage of emergency visits for respiratory disease increased as well and has now reached 34%, exceeding values reported for the same period in the last two years and the proportion of hospitalizations for SARI increased to 89% with 65% of specimen testing positive for RSV. Nearly all of the influenza viruses detected in Chile have been influenza A(H3N2) virus so far this season. In Paraguay, in the week from 24 to 30 June 2012 numbers of ILI consultations have surpassed the epidemic threshold and continue to show an increasing trend. This is also true for SARI hospitalizations and SARI mortality compared to the previous week. In contrast to Chile, 53% of samples testing positive for respiratory viruses were due to influenza A(H1N1)pdm09; 30% to RSV and much smaller proportions to influenza A(H3N2) virus and influenza type B virus. In Argentina, the influenza season still does not appear to have started. ILI activity continues to increase, but this is mainly due to RSV with sporadic detections of influenza.

Number of specimens positive for influenza by subtype in the temperate South America transmission zone

![Graph showing the number of specimens positive for influenza by subtype in the temperate South America transmission zone]


Temperate countries of Southern Africa

In South Africa, influenza activity continues. The number of specimens testing positive for influenza remained around 50% (viral Watch) at the end of June, with majority due to influenza A(H3N2) virus, followed by influenza type B.
**Oceania, Melanesia and Polynesia**

In Australia from the period 01 July to 07 July 2012, 30% (184/615) of ILI samples tested were positive for influenza. This is a two fold increase in the percent positive recorded from the previous period (15% positive in late-June). The majority (64%) of influenza viruses detected in Australia have been A(H3N2), with the remainder being influenza B. New South Wales, Queensland and South Australia are the states reporting the highest numbers of positive cases. In New Zealand, ILI activity has increased compared to previous weeks with a consultation rate of 51.9 per 100 000. This rate represents the first time in 2012 that the baseline of 50 ILI consultations per 100 000 population has been reached. The ILI activity curve is mirroring the one of last year. Of the 609 ILI samples tested from 02 July to 08 July 2012, 38% (n=235) were positive for influenza, of these 71% (n=167) were subtype influenza A(H3N2); the remainder were evenly mixed between A(H1N1)pdm09, unsubtyped influenza A, and influenza type B. In the past five weeks, there has been an increasing trend of SARI cases in New Zealand.

**Number of specimens positive for influenza by subtype in Oceania, Melanesia and Polynesia**

Data source: FluNet (www.who.int/flunet). Global Influenza Surveillance and Response System (GISRS)
Data generated on 18/07/2012 14:41:20 UTC
Source of data

The Global Influenza Programme monitors influenza activity worldwide and publishes an update every two weeks.

The updates are based on available epidemiological and virological data sources, including FluNet (reported by the Global Influenza Surveillance and Response System) and influenza reports from WHO Regional Offices and Member States. Completeness can vary among updates due to availability and quality of data available at the time when the update is developed.

Link to web pages

Epidemiological Influenza updates:
http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance
Epidemiological Influenza updates archives 2012:
http://www.who.int/influenza/surveillance_monitoring/updates/GIP_surveillance_2012_archives

Virological surveillance updates:
http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport
Virological surveillance updates archives:
http://www.who.int/influenza/gisrs_laboratory/updates

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