Summary

- Seasonal influenza transmission has not been picked up yet in the northern temperate zone. Most countries in this zone have started or are yet to begin seasonal reporting.

- In the tropical areas most countries are reporting low or decreasing trends of influenza detections. The exceptions are Nicaragua in the Americas and India and Thailand in Asia.

- Influenza activity decreased in most of the temperate countries of the southern hemisphere. Australia, Chile, New Zealand, Paraguay and South Africa continue to report declines in influenza indicators. On the other hand, Argentina has reported some late influenza activity.

- WHO has recommended the influenza vaccine composition for use in the 2013 southern hemisphere influenza season following technical consultations in September 2012. More information can be found at: http://www.who.int/influenza/vaccines/virus/recommendations/201209_recommendation.pdf

Note: Global epidemiology and surveillance updates are periodically collected from data reported by National authorities or organizations responsible for reporting this 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 links provided at the end of this document.
Countries in the temperate zone of the northern hemisphere

Influenza transmission in all reporting countries in the temperate regions of the northern hemisphere is minimal, that is, at inter-seasonal levels.

In the United States of America, few additional laboratory-confirmed human cases of influenza A(H3N2)v infection were reported since the last update but no on-going human-to-human transmission has been identified. As a result of enhanced surveillance activities for H3N2v, one case with influenza A (H1N1)v virus infection and three cases with influenza A(H1N2)v virus infection have been detected in patients who became ill after contact with swine. More information can be found at: http://www.cdc.gov/flu/swineflu/variant.htm

Countries in the tropical zone

Tropical countries of the Americas

Transmission in Central America, the Caribbean, and tropical South America continues to be at low levels in most reporting countries.

Across Central America, influenza B continues to be commonly detected.

El Salvador continue to report low levels of influenza B virus, while Honduras has reported low levels of A(H1N1)pdm09. On the other hand, Costa Rica has reported some influenza B and A(H3N2) activity in the past two weeks. Nicaragua continues to report increases in both influenza B and A(H3N2) virus detections over the past month.

In the Caribbean, Cuba has reported decreasing levels of influenza B virus activity.

In the tropical zone of South America, influenza activity is low. In Brazil, the levels of influenza activity continue to decrease. In 2012, influenza viruses were detected in 15% (1029/6821) of all respiratory viruses. For distribution of respiratory viruses identified in sentinel ILI sites by age, influenza A contributed to 10% of cases between 0 and 4 years, 41.2% of cases between 5 and 14 years, 50.8% of cases between 15 and 24 years, 43.3% of cases between 25 and 59 years, and 36.7% of cases 60 years or greater.

In 2012, influenza viruses were detected in 21% (3706/17318) of Severe Acute Respiratory Infection (SARI) cases. Of these, 68% (2522/3706) were influenza A(H1N1)pdm09. In 2012, 1549 SARI deaths were reported, of which 406 (26%) were positive for an influenza virus. Of these, 330 (81%) were positive for influenza A(H1N1)pdm09. Of the total deaths from SARI, 51% (789/1549) were male and the median age was 46 years (range 0-99 years); 56% were reported to have at least one comorbidity.
Number of specimens positive for influenza by subtype in the tropical South America transmission zone


Sub-Saharan Africa

Of countries in Sub-Saharan Africa that have reported influenza data, Kenya continues to report low level of influenza type B activity. Ghana has reported a decrease in influenza type B virus detections in the past two weeks. After predominant influenza A(H3N2) transmission in mid-June, Madagascar is now reporting influenza B at low levels.

Tropical Asia

A few areas of tropical Asia have experienced recent significant influenza virus circulation most notably in Thailand, and India. Nepal experienced recently some influenza outbreaks with influenza A(H1N1) and B infections.

India has reported persistent levels of influenza A(H1N1)pdm09 and influenza type B. Thailand has reported an increase of mainly influenza A(H1N1)pdm09 and influenza type B, with few detections of influenza A(H3N2). Sri Lanka continues to report influenza type A and influenza type B viruses.

In southern China influenza activity continues to decline. The percentage of outpatient visits that were due to ILI at sentinel sites remained at 2.6% during the most recent reporting week. Of ILI specimens tested, 11.9% (119/1004) were positive for influenza and 86% (102/119) of the southern China subtyped influenza viruses were A(H3N2).

In Cambodia and Vietnam influenza activity seems low.
Countries in the temperate zone of the southern hemisphere

Influenza activity has continued to decline in all temperate countries of the southern hemisphere.

**Temperate countries of South America**

Influenza activity in the southern cone of South America continues to decrease in Chile, Paraguay and Uruguay. Despite a mild influenza season up to now, Argentina is reporting late influenza activity with both influenza A(H1N1)pdm09 and influenza B viruses. ILI and SARI cases have remained at constant levels since the last reporting week.

ILI consultation rate in Chile remain low with 9.4 per 100 000 after a moderate season with maximum ILI consultation rate of 19.4 per 100 000 beginning of July. In week 37, of all subtyped influenza viruses, influenza B accounts for 77% (20/26) and influenza A(H3N2) for 23%. The majority of SARI samples testing positive for influenza were due to influenza A (H3N2) virus.

Since the beginning of 2012, the distribution of influenza A(H3N2) has occurred largely in the age strata 60 years and above and 2 years and below, accounting for 37% and 25% of all A(H3N2) respectively. Of the 92 SARI deaths reported in 2012, 14 were confirmed with respiratory viruses. Of these, 64% (n=9) were influenza A(H3N2).

In Paraguay, influenza activity remains at almost undetectable levels. SARI hospitalization and ILI consultation rates continued to decrease since early August. Of the SARI fatalities in 2012 with laboratory confirmed respiratory viruses (n=31), 18 (58%) were confirmed influenza A(H1N1)pdm09.
Temperate countries of southern Africa

In South Africa, influenza virus detections continue to decrease, but still remain in high numbers after a peak in late July. Influenza B was the main virus being reported after a predominant influenza A(H3N2) season. ILI and SARI cases are also decreasing, with influenza B making up the majority of detections in SARI samples positive for influenza.
Oceania, Melanesia and Polynesia

Both Australia and New Zealand continued to report decreases in most influenza indicators in the recent reporting period, continuing the trend seen since mid-August.

Although some jurisdictions of Australia have reported influenza activity above baseline levels, all surveillance systems continued to report a decrease in activity compared to the previous reporting period, which represents a six week period of sustained decrease in influenza activity. Nationally, there was 5054 laboratory confirmed notifications of influenza in the past reporting fortnight (n=7077), a decrease from the previous reporting period, with almost 58% (n=2921) coming from Queensland, which has recorded its first decrease in influenza virus detections, the last jurisdiction to do so. In 2012 with the predominance of influenza A(H3N2), the age distribution of influenza notifications represented a bimodal trend with peaks in the age strata 0 – 4 years and 70 years and above with a smaller peak in the 30 – 44 years strata.

The number of hospital admissions for influenza continued to decrease after peaking in mid-July. 75% of all hospitalized cases have known medical co-morbidities. In the period 1 July – 31 August 2012, there were 28 paediatric hospitalizations associated with severe complications of influenza, including eight ICU admissions. More than 60% of these hospitalizations were associated with influenza A (not subtyped) with the remainder attributed as influenza B. More than a third of the cases had an underlying chronic condition.

So far in 2012, 43 influenza associated deaths have been notified to the National Notifiable Diseases Surveillance System (NNDSS), with a median age of 80 years. Almost all cases were reported as having influenza A (not subtyped) and are likely to be attributable to A(H3N2) infections.

Nationally, influenza A(H3N2) continues to be the predominant circulating virus with some co-circulation of influenza B. Of the influenza A(H3N2) viruses analyzed by The WHO Collaborating Centre for Reference & Research on Influenza (WHO CC), almost all were of a more recent strain that differs from the A(H3N2) strain in the 2012 Southern Hemisphere seasonal influenza vaccine. However, it is expected that the vaccine will still offer significant protection. Additionally there is some co-circulation of two influenza B lineages, with the majority being of the B/Victoria lineage, similar to the strain in the current vaccine. Some cross-protection against influenza viruses of the B/Yamagata lineage is expected in adults, though less so for children.

In New Zealand, ILI consultation rates were recorded below baseline level for the third consecutive reporting week. A weekly ILI consultation rate of 34.2 per 100 000 was reported. The number of SARI cases and incidence per 100 000 population has also continued to decrease, following a peak in late July.

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:

Contact
fluupdate@who.int