Regional Update EW 31, 2012
Influenza
(August 14, 2012 - 17 h GMT; 12 h EST)

The information presented in this update is based on data provided by Ministries of Health and National Influenza Centers of Member States to the Pan American Health Organization (PAHO) or from updates on the Member States’ Ministry of Health web pages.

- In North America, influenza activity remains low. In the U.S., from July 12 through August 9, 2012, a total of 153 infections with influenza A (H3N2) variant (H3N2v) viruses have been reported. All cases have reported contact with swine prior to illness onset.
- In Central America and the Caribbean, reported co-circulation of different respiratory viruses. Among influenza viruses, influenza B predominated in Cuba and increased detection in Costa Rica and Panama. Influenza A(H1N1)pdm09 predominated in Honduras.
- In South America, the acute respiratory disease activity remained low (Ecuador) or decreasing (Argentina, Bolivia, Brazil, Chile and Paraguay), associated in several cases to the decreased activity of RSV. Co-circulation of influenza viruses was observed with varying prevalence: influenza B predominates in Ecuador, Peru, influenza A (H3N2) in Chile and influenza A (H1N1)pdm09 in Brazil and Paraguay.

Epidemiologic and virologic influenza update

North America

In the United States, in EW 31, nationally, the proportion of ILI consultations (1.1%) was below the baseline (2.4%). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 31 (5.8%) was below the epidemic threshold for this time of year (6.5%). In EW 31, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 31 (n=345), the percentage of samples positive for influenza (6.69%) increased slightly as compared to the previous week. Nationally, among the positive samples, 66.7% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 33.3% were influenza B. From July 12 through August 9, 2012, a total of 153 infections with influenza A (H3N2) variant (H3N2v) viruses have been reported in four states (Hawaii [1], Illinois [1], Indiana [120], and Ohio [31]). So far during the current outbreaks, two persons have been hospitalized as a result of their illness; no deaths have occurred. At this time no ongoing human-to-human transmission has been identified and all cases have reported contact with swine prior to illness onset. Public health and agriculture officials are investigating the extent of disease among humans and swine, and additional cases are likely to be identified as the investigation continues.

Caribbean

CAREC*, in EW 31, received epidemiological information from 7 countries: Barbados, Belize, Dominica, Jamaica, St.Lucia, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 31, the proportion of severe acute respiratory infection (SARI) hospitalizations was 3.1%, which is the same as what was seen in the prior week. The SARI rate increased in 3 countries (Barbados, Dominica and St. Lucia). In the last 4 weeks (EWs 28- 31) the following viruses have been laboratory confirmed: influenza B (Jamaica), respiratory syncytial virus (RSV) ( Barbados), parainfluenza ( St. Vincent & the Grenadines), and rhinovirus (Dominica and St. Vincent & the Grenadines). To date in 2012, the overall percentage positivity for samples tested is 37%, with a 19% positivity for influenza.

In Jamaica for EW 31, the proportion of consultations for Acute Respiratory Illness (ARI) was 3.5% which was similar to the previous week. The proportion of admissions due to SARI was 0.7% which was also similar to the week before. There were no SARI deaths reported for EW 31. No influenza viruses were detected in EW 31.
In Cuba, according to laboratory data in EW 31, among the samples analyzed (n=34), the percent positivity for respiratory viruses was 25% and the percent positivity for influenza, among all samples analyzed, was 19%. Influenza B has been the predominant respiratory virus since EW 23.

In the Dominican Republic, according to laboratory data from EW 32, among the samples analyzed (n=32), the percent positivity for respiratory viruses was 3%. Influenza A(H1N1)pdm09, adenovirus and RSV were detected.

**Central America**

In Costa Rica, in EW 32, according to laboratory data, among all samples tested (n=90), the percentage of positive samples for respiratory viruses was 42.2%, which was higher than the previous week (31.4%). RSV, Influenza B, adenovirus, parainfluenza and influenza A(H3) were detected.

In Guatemala, in EW 30, according to laboratory data, among all samples tested (n=23), the percentage of positive samples for respiratory viruses was 8.7%, which was higher than the previous week (3.3%). Parainfluenza and other respiratory viruses were detected.

In Honduras, in EW 31, according to laboratory data, among all samples tested (n=22), the percentage of positive samples for respiratory viruses was 18.2%, which was higher than the previous week (16.1%). Parainfluenza and RSV were detected.

In Nicaragua, in EW 31, according to laboratory data, among all samples tested (n=61), the percentage of positive samples for respiratory viruses was 19.7%, which was lower than the previous week (26.5%). RSV was mainly detected, followed by influenza B.

In Panama, in EW 31, according to laboratory data, among all samples tested (n=24), the percentage of positive samples for respiratory viruses was 70.8%, which was lower than the previous week (85%). Influenza B, influenza A(H3), RSV, influenza A(H1N1)pdm09 and other respiratory viruses were detected.

In El Salvador, in EW 32, according to laboratory data, among all samples tested (n=75), the percentage of positive samples for respiratory viruses was 14.7%, which was lower than the previous week (28.8%). Influenza B, parainfluenza, adenovirus and RSV were detected.

**South America – Andean**

In Santa Cruz, Bolivia, according to data from CENETROP laboratory, viral circulation in EW 30 showed an increase with respect to previous EWs with a positivity of 16.7% among the 66 samples analyzed, and with detection of influenza B (4/11), RSV (4/11) and influenza A (H1N1)pdm09 (3/11). According to INLASA laboratory, which reports viral circulation from La Paz, Oruro, Potosí, Tarija, Pando, Beni and Chuquisaca there has been a decreasing percentage of positive samples since EW 24, reaching 13.3% in EW 30 among the 30 samples analyzed (similar viral pattern showed in Santa Cruz). In La Paz, SARI surveillance in EW 31 showed that the proportion of SARI hospitalizations (4.9%) continued to decrease, no SARI-deaths were reported and no respiratory viruses were detected among the samples analyzed (n=10).

In Ecuador, viral circulation shows a decreasing trend since EW 27, reaching a percentage of positive samples 8.9% among the tested samples for SARI (n=45) in EW 31 and with predominance of influenza B virus (3/4). In EW 31, the proportions of hospitalizations for SARI and UCI admitted remain low and without significant changes with respect to previous week, no SARI-deaths were reported on this week.

In Peru, according to laboratory data at the national level, through EW 31 among the samples analyzed (n=41), the percent positivity was 24.4%, which was lower than previous EW, with predominance of influenza B virus (7/10).

**South America – Brazil and Southern Cone**

In Argentina, at the national level, endemic channels showed that the number of ILI and pneumonia cases in EW 31 remained within the expected level for this time of year. The number of SARI cases in EW 31 was lower than what was observed in 2012 and 2011. At the sub-national level, the Norwestern provinces and Cuyo (San Luis, Catamarca and Tucumán) and Southern provinces (Santa Cruz) continued to report higher
rates than what is expected for this time of the year. According to laboratory data, the percentage of positive samples for respiratory viruses has shown a decreasing trend since EW 25, reaching 32.5% among the analyzed samples (n=652) in EW 31, with predominance of RSV (77%) among the positive samples.

In Brazil, in EW 31, the number of SARI cases continued to decrease since its peak in EW 26. Of the total cases this week, 94% were confirmed to be influenza of which 97% were confirmed to be the influenza A(H1N1)pdm09 virus. In 2012 through EW 31, 1063 SARI deaths were reported (85% of them associated with A(H1N1)pdm09 virus) mainly in the Southern and Southeastern regions, peaking in EW 25; since then there has been a decreasing trend through EW 31 (n=2).

In Chile, in EW 31 at the national level, ILI activity decreased as compared to the previous week, remaining in the alert zone of the endemic channel (10.8/100,000 population). The percent of emergency visits for respiratory causes, showed a decrease and reached 23.4% in EW 31. According to laboratory data at the national level, in the same week, among the samples analyzed (n=1230), the percent positivity for respiratory viruses was 43.9%, which was lower than the previous week, with a predominance of RSV (77.6%) among the positive samples. According to the SARI surveillance system, the proportion of hospitalizations has shown a decreasing trend since EW 27, reaching 3.4% in EW 30. Since the beginning of the year, 61 SARI deaths have been reported and in five, influenza A/H3 was confirmed.

Information for the National Influenza Centers:

**Identification of the virus of influenza A(H3N2)v**

The virus of influenza A(H3N2)v is the result of the incorporation of gene M of virus A(H1N1)pdm09 in the swine-origin triple reassortant influenza A(H3N2) virus. For the detection of the circulation of this virus it is necessary to test the influenza samples according to the following algorithm:

- Use the kit of the CDC for the typing of influenza viruses A/B (CDC Influenza Virus rRT-PCR TO/B typing panel (RUO) CDC # FluRUO-01).

- Evaluate all the positive samples for influenza A with the kits of the CDC for subtyping of influenza A, using the primers/probes with its controls for H1 and H3 seasonal, InfApdm and H1pdm for the virus of the pandemic of 2009, respectively (CDC Influenza Virus rRT-PCR A subtyping panel (RUO) CDC # FluRUO-04 & Pooled Influenza Positive Control (RUO ) CDC# VA2716).

**Interpretation of results:**

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¹ Send sample to CDC
Graphs

North America

**United States**
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 28, 2008 – August 4, 2012

**Mexico**
Distribution of respiratory viruses by EW, 2011-2012

**Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-12**
Caribbean

CAREC

Jamaica

Cuba and Dominican Republic

Cuba

Dominican Republic
Central America

Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama
**South America - Andean**

**Bolivia**

La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni (INLASA)

Distribution of influenza and other respiratory viruses under surveillance by EW, region / country

**Santa Cruz (CENETROP)**

Distribution of influenza and other respiratory viruses under surveillance by EW, region / country

**Ecuador**

SARI cases (%) by EW, 2012

**Peru**

Distribution of respiratory viruses by EW 2012
Argentina

Distribution of SARI according EW. Year 2010, 2011 and 2012 estimated since EW 27

Brazil

SARI cases by EW, 2012

Chile

ILI cases by EW 2012

SARI cases (%) by EW, 2012

Distribution of respiratory viruses by EW, 2011-2012

SARI cases: Distribution of respiratory viruses, 2012
Paraguay

1 US Surveillance Summary. EW 31. Centers for Disease Control and Prevention
5 Chile. Informe de situación. SE 31. Available at: www.pandemia.cl