Regional Update EW 04, 2012
Influenza
(February 7, 2012 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phi/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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.

Epidemiologic and virologic influenza update

**North America**

In Canada\(^1\), in epidemiological week (EW) 04, 2012, influenza activity increased in several regions. In EW 04, influenza-like illness (ILI) consultation rate increased to 32.3 per 1,000 consultations and but remained within expected levels for this time of year. In EW 04, among the total samples analyzed (n=3,768), the proportion of samples positive for influenza (4.7%) increased as compared to previous weeks. The proportion of influenza virus detections by type this season to date is as follows: 78.8% influenza A [mainly influenza A(H3N2)] and 21.2% influenza B. Concerning other respiratory viruses, the proportion of tests positive for RSV (17.0%) decreased slightly as compare to the previous week, and RSV was the most prevalent among all respiratory viruses detected. The proportion of positive tests for the other respiratory viruses remained similar or declined as compared to previous weeks (coronavirus -6.4%, rhinovirus-5.7%, hMPV-5.5%, adenovirus-3.7%, parainfluenza-2.1%).

In the United States\(^2\), in EW 04, influenza activity increased but remained relatively low for this time of year. At the national level, the proportion of ILI consultations (1.5%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 04 (7.5%) was below the epidemic threshold for this time of year (7.8%). In EW 04, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 04 (n=3,656), the percentage of samples positive for influenza (7.2%) increased as compared to the previous week, but remained relatively low. Nationally, among the positive samples, 94.3% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 5.7% were influenza B. Regionally, there have been some differences in circulating influenza A subtypes, with Region 6 (states of Arkansas, Louisiana, New Mexico, Oklahoma, Texas) detecting influenza A (H1N1)pdm09 more commonly.

In Mexico, From EW 1 through 5, 2012, a total of 2,815 influenza cases and 58 deaths associated with influenza have been reported. Of those, 90.4% of the cases and 93.1% of the deaths were associated with influenza A(H1N1)pdm09. The states with the highest number of cases of influenza (H1N1)pdm09 were Federal District (15.5%), Oaxaca (10.8%) and Hidalgo (9.4%); and the highest number of deaths were Federal District (26.0%), Mexico State (18.5%) and Oaxaca (11.1%). According to laboratory data, in EW
of the total samples analyzed, the proportion of samples positive for influenza (50%) was similar to the prior week. Influenza A(H1N1) pdm09 was the predominant circulating virus.

**Caribbean**

CAREC* in EW 04, received epidemiological information from Barbados, Belize, Jamaica and Tobago. In EW 04, the SARI hospitalization rate was 2.4%, which was higher than the previous week (1.9%). The highest SARI hospitalization rate was reported among children aged 6 months – 4 years (10.7% of hospitalized children in this age group were SARI cases). No SARI related deaths have been reported since EW 02, 2012. According to laboratory data, in EWs 03-04, no respiratory viruses were identified.

In Jamaica, in EW 04, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.7%, which was higher than reported for the previous week. The proportion of SARI admissions was 0.8%, decreasing slightly compared to previous week. In EW 04, no SARI deaths were reported. According to laboratory data, one influenza A(H1N1)pdm09 virus was identified.

In Cuba, according to laboratory data, in EW 04, among all samples tested (n=84), 51% were positive for respiratory viruses. No samples positive for influenza were detected this week.

In Dominican Republic, in EW 04, among the samples tested (n=17), 6% were positive for respiratory viruses. No samples positive for influenza have been detected in the last 4 weeks.

**Central America**

In Costa Rica, unusual increase of acute respiratory illness was reported in the last month, with ILI and SARI activities above what is expected for this time of the year. Through EW 04, there have been reported 419 SARI hospitalized cases, 38 SARI ICU admissions and 6 SARI deaths; of which, 4 deaths were associated with influenza viruses (3 cases were A(H1N1)pdm2009 and 1 case was A(H3N2)). Most of cases were reported in the central southern region, mainly from the provinces of Cartago and San Jose. The most affected age groups included children under one year of age and young adults (15 to 39 years old age group). According to laboratory data, in EW 04, among the total of tested samples (n=106), the percentage of positive samples for respiratory viruses was 38.7% and for influenza viruses was 13%, both slightly lower than previous weeks. In EW 04, adenoviruses and influenza A(H3N2) were the predominant circulating viruses, followed by RSV, parainfluenza and influenza A(H1N1)pdm09.

In El Salvador, through EW 04, among the tested samples (n=45), 8.9% were positive for respiratory viruses and 2.2% for influenza. In the EW 02, the predominant virus was parainfluenza, followed by influenza B.

In Honduras, in the EW 03, 4.2% of the total of outpatient care were ILI, slightly lower than the previous week (4.46%). The proportion of hospitalizations by SARI was 3.82%, less than what is observed in the EW 02 (9.58%). This week was recorded a dead by SARI in Tegucigalpa. According to laboratory data in the EW 02 and 03, there was detected few positive samples to influenza A(H1N1) pdm09.

In Nicaragua, in the EWs 03 and 04, among the tested samples, no influenza viruses were detected.

In Panama, in EW 04, among all samples tested, some positive samples for RSV and parainfluenza were detected. No influenza viruses have been detected since EW 48, 2011.

**South America – Andean**

In Ecuador, at the national level, in the EW 03, the proportions of SARI hospitalizations, SARI ICU admissions and SARI deaths, were higher as compared to the previous week; however, they remained <10%. According to laboratory data, the percentage of positive samples for respiratory viruses (29%) among SARI cases remained similar to the previous week. In EW 03, RSV was the predominant virus, with increasing trend in the last 3 weeks; mainly in the center and northern highland region and the coast region. Concerning the influenza viruses, co-circulation of influenza A(H3N2) and A(H1N1)pdm09 was reported and remained in similar levels as compared to previous weeks; being reported mainly in the center and northern highland region.

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* Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago
In Peru\(^6\), in the EW 03, at the national level, the number of cases by ARI and number of cases with pneumonia in children under 5, remained stable or diminished with regard to the previous EW, and continued under the value awaited for this time of the year.

**South America – Southern Cone**

In Brazil, regionally, in Sao Paulo (Adolfo Lutz institute), in EW 03, no influenza viruses were detected. In Pará (Evandro Chagas institute) reported sporadic detection of influenza A(H1N1)pdm09.

In Chile, according to national laboratory data, in EW 04, among all samples tested (n=313), 7% were positive for respiratory viruses (mainly parainfluenza and adenovirus). Among the SARI cases, no samples positive for influenza have been detected since EW 01.

**Graphs**

**North America**

![ILI consultation rate (x 1,000), 2011-12](image1)

*Positive samples for respiratory viruses, 2011-12*

![Influenza activity levels by Provincial and Territorial MoH](image2)
United States


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

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending January 28, 2012 - Week 4

Mexico

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

Respiratory viruses
- FLU A/H1
- Influenza A/H3
- Influenza A/H1N1/2009
- Influenza A Not Subtyped
- Influenza B
- Adenovirus
- Paramyxovirus
- SRV
- Other viruses
- % Positive respir viruses
Caribbean

**CAREC**

Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI), Jamaica, 2011-2012

**Jamaica**

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

**Cuba & Dominican Republic**

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

**Dominican Republic**

Distribution of influenza and other respiratory viruses under surveillance by EW, region / country
**South America - Andean**

**Ecuador**

% SARI hospitalization, SARI ICU admissions, SARI deaths, 2011-12

IRAG(%): hospitalizaciones, admisiones a UCI y fallecidos.

FUENTE: Sistema de Vigilancia Intensificada de IRAG
ELABORADO: Programa Ampliado de Inmunizaciones

**Peru**

ARI endemic channel in children <5 years by EW. 2012

Pneumonia endemic channel in children <5 years by EW. 2012

Figura 1: Canal endémico de Episodios de IRA en menores de 5 años. Perú 2012

Figura 2: Canal endémico de Episodios de neumonías en menores de 5 años. Perú 2012
South America – Southern Cone

Brazil

Adolfo Lutz institute. Sao Paulo

Evandro Chagas institute. Para

Chile

Distribution of respiratory viruses by EW, 2011-2012

SARI cases: distribution of respiratory viruses by EW, 2011-2012

2 US Surveillance Summary. EW 04. Centers for Disease Control and Prevention
3 Costa Rica. Comportamiento influenza y otros virus respiratorios SE 1-4, 2012, Caja Costarricense de Seguro Social
4 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 44
6 Perú. Sala de Situación de Salud. SE 03. Ministerio de Salud. Dirección General de Epidemiología