Regional Update EW 01, 2012
Influenza
(January 17, 2012 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/php/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 North America, influenza activity remained low. There has been increased activity in some states/regions of Canada (western provinces, Ontario and Quebec), United States (Colorado and New Hampshire) and Mexico (Oaxaca, Puebla y Nuevo Leon). Among influenza viruses, influenza A(H3N2) was predominant in Canada and USA and influenza A(H1N1)pdm09 in Mexico.

In Central America and the Caribbean, influenza activity remained low or within the expected level for this period of time. Among influenza viruses, the three influenza strains (influenza A(H3N2), influenza A(H1N1)pdm09 e influenza B) in this subregion.

In South America, influenza activity and acute respiratory illness activity remained low or within the expected level for this period of time. Concerning influenza viruses, low levels of influenza A(H3N2) (Ecuador, Venezuela y Chile) and influenza A(H1N1)pdm09 (Ecuador) were reported. Paraguay reported an increased number of samples positive for influenza A(H3N2).

Epidemiologic and virologic influenza update

North America

In Canada, in epidemiological week (EW) 01, 2012, influenza activity remained similar to previous weeks with only certain regions reporting increased activity (western provinces, Ontario and Quebec). Localized influenza activity was reported in three regions of two provinces (within British Columbia and Quebec) and sporadic influenza activity was reported in eighteen regions of five provinces (within Alberta, British Columbia, Ontario, Saskatchewan and Quebec). In EW 01, Influenza-like Illness (ILI) consultation rates were 35 per 1,000 consultations; which was similar to the previous EW and within the expected levels for this time of year. In EW 01, among the total samples analyzed (n=3,697), the proportion of positive influenza tests increased slightly to 2.9%. The proportion of influenza virus detections by type this season to date is as follows: 82.3% influenza A (mainly influenza A(H3N2)) and 17.7% influenza B. Concerning other respiratory viruses, the proportion of tests positive for RSV decreased slightly (16.6%); but it remained the most prevalent among the other respiratory viruses being detected. The proportion of positive tests for the other respiratory viruses remained similar to previous weeks (rhinovirus-6.2%; parainfluenza-3.5%; adenovirus-3.7%; hMPV-9.0%; coronavirus-4.3%).

In the United States, in EW 01, influenza activity increased, but remained relatively lower than expected for this time of year. At the national level, the proportion of ILI consultations (1.4%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 01 (7.2%) was lower than the epidemic threshold for this time of year (7.6%). In EW 01, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 01 (n=3,199), the percentage of samples positive for influenza remained low (3.4%). Among the positive samples, 94% were influenza A (mainly influenza A(H3N2)) and 6% influenza B.

In Mexico, in EW 01, at the national level, an increase in the proportion of ILI/SARI cases (~13%) was observed as compared to the previous week (~8%). Between the EW 50 and 52, an increase in the proportion of ILI/SARI deaths was reported, but that proportion decreased in EW 01. At the regional level, the states with highest proportion of ILI/SARI consultations were Oaxaca (5.8%), Puebla (1.6%), Nuevo Leon
(1.2%), Tlaxcala (0.8%) and Baja California (0.7%). In EW 01, of the total samples analyzed (n=121), 50% were positive for respiratory viruses, with influenza A(H1N1) pdm09 being the predominant circulating virus.

**Caribbean**

CAREC*, in EW 01, received epidemiological information from Dominica, Jamaica and Tobago. In EW 01, the SARI hospitalization rate was 0.9%, which was slightly lower than the previous week (2.2%). The highest SARI hospitalization rate was reported among children aged 5-14 (3.2% of hospitalized children in this age group were SARI cases). No SARI related deaths have been reported since EW 47, 2011. In EW 01, no respiratory viruses were identified among SARI cases. RSV has been identified in the past four weeks.

In Jamaica, in EW 01, the proportion of consultations for Acute Respiratory Illness (ARI) was 4%, which was lower than observed in the previous week (5%). The proportion of SARI admissions was 0.6%, decreasing slightly compared to previous EW. In EW 01, no SARI deaths were reported. According to laboratory data, there were no influenza viruses identified.

In Cuba, according to laboratory data, in EW 01, among all samples tested (n=59), 49% were positive for respiratory viruses and 22% for influenza (mainly influenza A(H3N2)).

**Central America**

In Costa Rica, in EW 02, according to laboratory data, among all samples tested (n=118), the percentage of samples positive for respiratory viruses was 33% and for influenza was 13%; both proportions were slightly lower than the previous week. Adenovirus has been the predominant virus in the last 2 weeks, followed by influenza A(H3N2), influenza A(H1N1)pmd09 and RSV.

In Honduras^3, in EW 52, the proportion of Ili was (~4%) similar to the previous week and to what was observed in 2010. The proportion of SARI hospitalizations (4.2%) was slightly higher than the previous EW. According to laboratory data, in EW 52, among all samples tested (n=10), 20% were positives for respiratory viruses (adenovirus and influenza B).

In Panama, in EW 01, among all samples tested, the percent positivity for respiratory viruses was 20%, with no positive samples for influenza viruses.

**South America – Andean**

In Bolivia, in Santa Cruz (CENETROP laboratory), between EW 01 and 02, among the samples tested (n=16), no positive samples for respiratory viruses were detected.

In Ecuador, in EW 01, at the national level, the percentage of SARI hospitalizations, SARI ICU admissions, and SARI deaths remained under 10%, being the Highlands the region with the highest SARI activity reported. According to laboratory data, in EW 01, among all samples tested (n=95) the percent positivity for respiratory viruses was 22%; influenza A(H3N2), influenza A(H1N1)pmd09 and parainfluenza were detected.

In Peru^4, in EW 52, at the national level, pneumonia indicator activity in children under 5 years old was similar to the previous week and remained below expected for this time of the year. At the regional level, in EW 52, pneumonia activity in children under 5 years old increased in Ayacucho, Cajamarca, Huánuco, Ica and Loreto. Through EW 52, 359 deaths due to pneumonia in children under 5 years old were reported, which was lower than the observed average of the three previous years (2008-2010).

In Venezuela^5, in EW 52, the ARI and pneumonia endemic channels continued to show a decreasing trend in the number of cases since ~EW 47. In 2011 through EW 52, among all samples tested (n=9,485), the percentage of samples positive for respiratory viruses was ~40%. Concerning influenza viruses, of the total number of samples tested, ~24% of samples tested were positive for influenza A(H1N1)pmd09, ~7% were influenza A(H3N2) and <1% were influenza B. Between EW 49 and 52, influenza A not sub-typed circulated, influenza A(H3N2) and influenza A(H1N1)pmd09 were detected among the samples that were sub-typed in the mentioned weeks.

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* Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago
South America – Southern Cone

In Argentina, in EW 49, ILI and SARI endemic channels showed that the number of ILI and pneumonia cases have continued to decrease since peaking in EW 27 and within the expected level for this period of the year. According to laboratory data, in EW 01, among all samples analyzed, 5% were positive samples for respiratory viruses. No influenza viruses have been detected in the last 3 weeks.

In Chile, in EW 52, the national ILI activity (2.2 consultations for 100,000 inhabitants) was lower than the rate of the previous weeks and within what was expected for this time of the year. In the regions of Los Lagos and Los Ríos, an increase in the notification of ILI cases was observed. The percentage of patients seeking emergency services for respiratory reasons accounted for 17% of the visits, decreasing since peaking in EW 33, and at a similar level as compared to the previous year. Low level of SARI hospitalizations was also reported as expected for this time of year. According to laboratory data, in EW 52, among all the samples tested at national level, the percent of positivity for respiratory viruses was 12.7%; parainfluenza and adenovirus were the predominant viruses detected. No influenza viruses were detected in EW 52.

In Paraguay, according to laboratory data, in EW 51 and 52, an increase in the number of samples positive for influenza A(H3N2) was reported (54% of the total of samples tested).

Graphs

North America

Influenza activity levels by Provincial and Territorial MoH, EW 01, 2011

Figure 1. Map of overall influenza activity level by province and territory, Canada, Week 01

Note: Influenza activity levels, as represented on this map, are assigned and reported by Provincial and Territorial Ministries of Health, based on laboratory confirmations, sentinel surveillance (oral swabs and nasal washes), and reported outbreaks. Please refer to detailed definitions on the next page. For areas where no data is reported, test results from those provinces and territories will appear on the NPHS website.
United States

% of Visits ILI

Graph 1: hospitalizations/deaths. Graph 2: per age group.

Mexico

Graph 1: hospitalizations/deaths. Graph 2: per age group.

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region/country, 2010-2011
Central America

Costa Rica and Panama

Costa Rica

Distribution of influenza and other respiratory viruses, 2011

Panama

Distribution of influenza and other respiratory viruses, 2011

Honduras

Distribution of respiratory viruses, 2011

South America - Andean

Bolivia (Santa Cruz)

Distribution of influenza and other respiratory viruses, 2011
Peru

Pneumonia cases in children under 5 years old. Peru – 2011

Ecuador

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

Venezuela

ARI endemic channel, Venezuela, 2011

Pneumonia endemic channel, Venezuela, 2011
**South America – Southern Cone**

**Argentina**

ILI endemic channel by EW, 2011

Pneumonia endemic channel by EW, 2011

Distribution of respiratory viruses by EW, 2011

**Chile**

ILI endemic channel. Chile, 2011

Distribution of SARI cases, 2011

Distribution of respiratory viruses by EW, 2011

Emergency attentions by respiratory infection in children under 15 years old. Chile, 2009-11.

Atenciones de Urgencias por causa respiratoria en niños. ( < 15 años). Chile 2009-2010 y 2011 (SE 1-52)
Paraguay
Distribution of respiratory and influenza viruses by EW, 2011

1 FluWatch Report. EWs 52. Available at http://www.phac-aspc.gc.ca/fluwatch/
2 US Surveillance Summary. Week 52. Centers for Disease Control and Prevention
3 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 51
6 Argentina. Actualización situación de enfermedades respiratorias 2012. SE 01.
7 Chile. Informe de situación. SE 50. Available at: www.pandemia.cl