Regional Update EW 37
Influenza
(September 27, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phip/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.

- In North America, influenza activity remains low.
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) (Costa Rica, Guatemala, Panama, and Nicaragua), influenza A/H3N2 predominance (Cuba, El Salvador, and Honduras) and influenza B (Dominican Republic) continued.
- In the Southern Cone, RSV circulation continued to decrease (Argentina and Chile). Among influenza viruses, Bolivia reported an increase activity of influenza A/H1N1 2009; it was reported variable co-circulation of influenza A/H1N1 2009 and influenza A/H3 (Chile and Argentina).

Epidemiologic and virologic influenza update

North America

In the United States\(^1\), in epidemiological week (EW) 37, at the national level, the proportion of Influenza-like Illness (ILI) consultations (~1%) remained below the national baseline (2.5%). The proportion of deaths attributed to pneumonia and influenza for EW 37 (6%) remained below the epidemic threshold (6.4%). In EW 37 no pediatric deaths associated with influenza were reported. During EW 37, among all samples tested (n=870), the percentage of samples positive for influenza remained low (<1%), with sporadic detections of unsubtyped influenza A and influenza A/H3.

Caribbean

CAREC\(^2\), in EW 37, received epidemiological information from Barbados, Jamaica, St. Vincent and the Grenadines. The proportion of Severe Acute Respiratory Infections (SARI) among all hospitalizations (1.4%) was slightly higher than the previous week (1.2%). Children 6-48 months old had a higher percentage of SARI admissions (5.2% of all hospitalizations in this age group were for SARI). No SARI deaths have been reported since EW 35. According to laboratory data, in the last 4 weeks, RSV and rhinovirus were the primary viruses in circulation, with sporadic detection of influenza and adenovirus.Whilst RSV cases occur mainly in children <5 years old, rhinovirus cases were distributed in all age groups.

In Cuba, in EW 37, among all samples tested (n=169), ~75% were positive for respiratory viruses and 32% of all tested were positive for influenza. Between EWs 29-37, a sustained increase in the number of co-circulating viruses was detected (influenza A/H3 and RSV). Moreover, in EW 37, some influenza A/H1N1 2009 were reported.

In the Dominican Republic, through EW 36 of 2011, 1,717,144 SARI cases have been notified, a significant percentage increase (≥25) has been observed compared to the same period in 2010 in the provinces of Baoruco, Puerto Plata, Santiago Rodriguez, La Altagracia, San Jose de Ocoa, Sanchez Ramirez, Monte Cristi, La Romana, y Pedernales. According to laboratory data, in EW 38, among all samples tested (n=26), the percentage of samples positive for respiratory viruses was ~30%, similar to the previous week.

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\(^1\) Países miembros de CAREC que participan en esta evaluación conjunta: Barbados, Dominica, Jamaica, San Vicente y las Granadinas, Santa Lucia y Trinidad y Tobago
primary virus in circulation continued to be influenza B, followed by parainfluenza, and few detections of influenza A/H1N1 were reported.

In Jamaica, in EW 37, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.1% which was slightly higher than that reported for the previous week. The proportion of admissions due to Severe Acute Respiratory Illness (SARI) was less than 1% and remained stable compared to the previous week. In EW 37, there were no SARI deaths reported. According to the laboratory data, there has been no detection of influenza viruses since EW 20.

Central America

In Costa Rica, in EW 37, among samples tested (n=98), the percentage of samples positive for respiratory viruses (~55%) has continued to increase trend since ~EW 29. RSV has been the primary virus in circulation since EW 28 with adenovirus. No influenza detections have been reported since EW 33.

In El Salvador, in EW 36, of all samples tested (n=32), the proportion of samples positive for respiratory viruses was ~55%. Influenza A/H3 has been the predominant virus since EW 35. Between EWs 21-34 RSV was the respiratory virus with the highest incidence rate.

In Guatemala, in EW 37, according to laboratory data, of all samples tested (n=13), ~40% were positive for respiratory viruses; RSV has been the predominant virus since EW 26, with a decreasing trend since its peak in EW 32 and with sporadic detections of influenza A/H3.

In Honduras\(^2\), in EW 37, at the national level, the proportion of ILI consultations (~6%) increased slightly compared to EW 34 (~6.5%) and was similar to that observed in 2010 for this time of year. Since its peak in EW 34, the proportion of SARI hospitalizations showed a decreasing trend and remains below 10%. This week, one death associated with SARI was reported. According to laboratory data, in EW 37, of all samples tested (n=56), the positivity percentage for respiratory viruses was ~20%, influenza A/H3 has been predominating since EW 30, followed by influenza B and RSV, with low detection of influenza A/H1N1 2009.

In Nicaragua, in EW 37, of all samples tested (n=26), the percentage of samples positive for respiratory viruses was ~4%; RSV has been the predominant virus since EW 33. No influenza viruses have been detected since EW 09.

In Panama, in EW 37, among samples tested, RSV has been detected, since its peak in EW 31 a decreasing trend was observed in the number of samples positive for this virus. Concerning influenza viruses, influenza A/H1N1 2009 circulated at low levels.

South America – Andean

Bolivia reported an increased influenza A/H1N1 2009 activity in both laboratories. In La Paz (INLASA laboratory), in EW 38, of all samples tested (n=53), ~35% were positive for respiratory viruses, and both influenza A/H1N1 2009, influenza A/H3 and influenza B were detected. According to Santa Cruz (CENETROP) laboratory data, since EW 33 a progressive increase of positive cases for influenza A/H1N1 2009 has been observed. In EW 37, of all samples tested (n=126), ~50% were positive for influenza virus, predominantly influenza A/H1N1 2009. According to SARI surveillance, between EW 1 and 37, 166 cases of IRAG were reported, which were associated with influenza A/H1N 2009; of them ~50% were between 15 and 54 years old and ~35% were between 5 and 14 years old.

In Ecuador, in EW 36, at the national level, the percentage of SARI hospitalizations, SARI ICU admissions and SARI deaths remained <5%. According to the national lab, in the EW 37, of all samples tested (n=10), one case positive to influenza A/H1N1 2009 was detected. This virus (influenza A/H1N1 2009) was not detected since EW 11.

In Peru\(^3\), in EW 36, at the national level, ARI and pneumonia activity indicators (number of ARI cases in less than 5 years old and number of pneumonia cases in children less than 5 years old, respectively) remained below the expected levels for this time of year. Through EW 31 of 2011, 269 pneumonia related deaths were reported in children less than 5 years old (45% of which had between 2 and 11 months); this represents ~19% less than the average reported in the last three years (2008-2010).
In Venezuela, in EW 36, ARI and pneumonia endemic channels showed a number of cases similar to the previous weeks and within the expected levels for this time of year. In 2011 up to September 14th, of all samples tested (n=8,074), ~28% were positive for influenza A/H1N1 2009, ~4.5% for influenza A/H3 and <1% for influenza B. Up to EW 36, the federal entities with the highest morbidity rate for influenza A/H1N1 2009 in Venezuela compared to the national median were Merida, Vargas, Distrito Capital, Miranda, Trujillo and Yaracuy.

**South America – Southern Cone**

In Argentina, ILI and SARI endemic channels showed that the number of ILI and SARI cases for EW 33 continued to decrease and remained at lower levels than observed during 2010. According to national laboratory data, in EW 37, the predominance of RSV continued with a decreasing trend since its peak in EW 26. Concerning influenza viruses, a decreasing trend of cases positive for influenza A was reported since its peak in EW 28. Among those positive for influenza A, co-circulation of influenza A/H3 and influenza A/H1N1 2009 was observed.

In Chile, in EW 37, ILI activity (4.2 consultations per 100,000 inhabitants) at the national level was lower than the previous week (6.2 per 100,000 inhabitants), remaining within the expected levels for this time of year. In EW 37, 3 deaths associated with influenza A/H1N1 2009 were reported, 2 of these with a history of co-morbidity. According to laboratory data, in EW 37, among all samples tested at the national level, 12% were positive for some respiratory virus. Of these positives, RSV has been decreasing, since its peak in EW 22, co-circulating in low proportions with parainfluenza and adenovirus. In EW 37, influenza A represented 31% of detected viruses, influenza A/H1N1 2009 was the predominant virus with a decreasing trend since its peak in EW 32. According to SARI surveillance, between EWs 30-37, influenza A/H1N1 2009 virus was associated with the majority of SARI cases of which samples were extracted and tested, decreasing since its peaks in the EW 32.

In Paraguay, in EW 37, the proportion of ILI consultation was ~7.5% similar to the median proportion that has been observed to date this year. The proportion of SARI hospitalizations, ICU admissions and deaths decreased compared to the previous week, and remained below 15%. According to laboratory data, in EW 37, of all samples tested, ~4% were positive for respiratory viruses, adenovirus has been the only one detected in the last two weeks.

In Uruguay, in EW 38, the proportion of SARI hospitalizations, ICU admissions and deaths remained <5%, this proportion continued to decrease since its peak in EW 31.
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 30, 2007 – September 17, 2011

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2010-11

**Caribbean**

**CAREC**

Graph A: SARI Admissions and SARI Admissions Rate per 100 Hospital Medical Admissions from Selected Sites in Select CAREC Member Countries, 2011

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

**Cuba and Dominican Republic**

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

**Cuba**

**Dominican Republic**

**Jamaica**

Percentage of Hospital Admissions for Severe Acute Respiratory Illness (SARI), Jamaica, 2010-2011

Distribution of influenza and other respiratory viruses under surveillance by EW, region / country, 2010-2011
**Peru**

ARI reported in children ≤ 5 years, Peru – 2011

Pneumonia reported in children ≤ 5 years, Peru, 2011

**Venezuela**

ARI endemic channel, 2011

Pneumonia endemic channel, 2011

Influenza A/H1N1 2009 by states and EW, 2011

**South America – Southern Cone**

**Argentina**

ILI & Pneumonia endemic channel

Characterization of the respiratory viruses, 2011

Characterization of the influenza viruses, 2011
Chile

ILI endemic cannel by EW, 2005-10. Chile, EW 37

Characterization of respiratory viruses by EW, 2011

Characterization of influenza viruses by EW, 2011 (Flunet).

% Respiratory admissions in children ≤ 15 years, 2011

Paraguay

% ILI consultation by EW, 2011

Characterization of respiratory viruses by EW, 2011

% Hospitalizations, ICU admissions and death by EW, 2011

Paraguay

% ILI consultation by EW, 2011

Characterization of respiratory viruses by EW, 2011

% Hospitalizations, ICU admissions and death by EW, 2011

Paraguay
% hospitalization, ICU admissions and deaths for SARi

1 US Surveillance Summary. Week 37. Centers for Disease Control and Prevention
2 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 37
6 Chile. Informe de situación. SE 37. www.pandemia.cl
7 Paraguay. Boletín epidemiológico semanal. SE 38. Ministerio de Salud Pública y Bienestar Social