Regional Update EW 30
Influenza
(August 9, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phip/viz/ed_flu.asp
Influenza Regional Reports: http://new.paho.org/hq/index.php?option=com_content&task=view&id=3352&Itemid=2469&to=2246

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, respiratory syncytial virus (RSV) remained the primary virus in circulation (Costa Rica and Panama) and there has been variable detection of influenza A (subtypes H1N1 2009 and H3N2) and influenza B.
- In the Southern Cone, RSV circulation continues to decrease (Argentina, Chile and Paraguay) and among influenza viruses, circulation of influenza A/H1N1 2009 increased (Chile and Uruguay), but at lower levels than expected for this time of year; co-circulating with influenza A/H3 in this region (Bolivia, Argentina, Brazil) and with little detection of influenza B.

Epidemiologic and virologic influenza update

Canada¹, in epidemiological weeks (EWs) 29 and 30, reported influenza activity at inter-seasonal levels. Influenza-like Illness (ILI) consultation rates were 5.3 (EW 29) and 9.7 (EW 30) per 1000 consultations; these rates were within and above expected levels, respectively. Few detections of influenza in EWs 29 and 30 were reported, and during both weeks the percentage of positive samples for influenza was less than 1%.

In the United States², in EW 30, at the national level, the proportion of ILI consultations (0.6%) remained below the national baseline. The proportion of deaths attributed to pneumonia and influenza (6.4%) was below the epidemic threshold. This week no pediatric deaths associated with influenza were reported. During EW 30, the percentage of samples positive for influenza among all samples tested remained at low levels (< 1%).

In Mexico, in EW 30, of all samples received (n=29) no samples tested positive for respiratory viruses.

Caribbean

CAREC*, in EW 30, received information from Jamaica, Saint Vincent and the Grenadines, Saint Lucia and Tobago. The rate of severe acute respiratory infection (SARI) (1.7%) was less as compared to the previous week (2.6%). No SARI-related deaths have been reported since EW 27. According to laboratory data, in EW 30, among samples tested, no samples were positive for respiratory viruses. Respiratory syncytial virus (RSV) was the primary virus in circulation between EWs 26-29.

In Cuba, in EW 30, among all samples tested (n=36), the percentage of samples positive for respiratory viruses remained similar to the previous week (~65%); and the percentage of positives for influenza was 14%. The primary viruses in circulation were RSV and influenza A/H3N2.

In the Dominican Republic, in EW 30, among all samples tested (n=22), the percentage of samples positive for influenza increased to 30%. Co-circulation of influenza A/H1N1 2009 and influenza B has been reported since EW 23.

In Jamaica, in EW 30, the proportion of Acute Respiratory Illness (ARI) consultations was 0.3% less than the previous week. The proportion of SARI admissions was less than 1% and remained stable compared to the

* Includes Barbados, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, and Trinidad and Tobago
previous week. No SARI-related deaths were reported in EW 30. There have been sporadic detections of adenovirus with no detection of influenza viruses since EW 21.

Central America

In Costa Rica, in EW 30, among all samples tested (n=66), the percentage of samples positive for respiratory viruses remained similar to the previous week (~40%). RSV has been the predominant virus detected since EW 28. Sporadic detections of influenza A/H1N1 2009 were reported.

In Honduras\(^3\), in EW 30, at the national level, the proportion of ILI consultations decreased slightly compared to the previous week and remained below 10%—slightly above that observed in 2010 for this period. This week, five SARI-related deaths were reported. According to laboratory data, in EW 30, the percentage of samples positive for respiratory viruses was 23%, slightly less than in EW 29 (33%). In EW 30, the predominant virus detected was influenza A/H3N2, followed by influenza A/H1N1 2009.

In Guatemala\(^4\), through EW 27, the number of ARI, pneumonia and bronchopneumonia cases were lower than in 2010 for this period and in EW 27, showed a decreasing trend. Between January and May 2011 a total of 772 ARI, pneumonia, and bronchopneumonia deaths were reported, 23% of which took place in the department of Kiche.

In Nicaragua, in EW 29 and 30, no respiratory viruses were detected. No influenza viruses have been detected since EW 09.

In Panama, in EW 30, among all samples tested (n=36), 22% were positive for respiratory viruses, and 5.6% for influenza viruses. RSV has continued to be the primary virus in circulation since EW 21. Sporadic detections of influenza A/H1N1 2009 and parainfluenza were reported.

South America – Andean

In Bolivia\(^5\), in EW 30, at the national level, ARI activity remained within the expected for this time of year. Regionally, ARI activity remained near the epidemic threshold in the departments of La Paz, Cochabamba, Tarija, Oruro and Chuquisaca. According to laboratory data, through EW 30, co-circulation of influenza A/H3N2 and influenza A/H1N1 2009 was observed.

In Colombia\(^6\), according to the SARI surveillance system of Bogota, in EW 30, the percentage of SARI hospitalizations remained <5% and the percentage of ICU admissions remained at 5%. Among SARI cases in Bogota, the predominant virus detected during EW 7 was RSV, with low detection of influenza viruses (influenza A/H1N1 2009). According to the national laboratory\(^7\), in EW 29, the positivity percentage for influenza was 23%, with influenza A/H1N1 2009 being the predominant virus.

In Peru\(^8\), in EW 28, 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) were slightly lower than the previous week, remaining below the expected for this time of year. To date this year, 192 deaths associated with pneumonia were reported in those less than 5 years old, which represents a lower count than observed in years 2008-2010 for the same period. Regionally, during 2011, the departments of Loreto, Amazonas, Junin, Lima and Arequipa reported a higher number of deceased children less than 5 years old due to pneumonia, in comparison to previous years. According to laboratory data, between EWs 29 and 30, the predominant virus was RSV, with sporadic detections of influenza A/H3N2.

South America – Southern Cone

In Argentina\(^9\), ILI and SARI endemic channels showed that the number of ILI and SARI cases for EW 27 continued to show a decreasing trend and were less than observed during 2010. According to national laboratory data, for EW 30, the predominance of RSV persisted but with a decreasing trend since its peak in EW 23. Concerning influenza virus, in EW 29, among all the tested samples (n=810), 9% were positive to influenza, mainly influenza A unsubtyped, followed by influenza A/H3N2.

In Brazil, data from Adolfo Lutz (San Pablo) showed that in EW 30, among all samples tested (n=29), the percentage of samples positive for influenza remained similar to the previous week (14%). Between EWs 27-
30 co-circulation of influenza A/H3N2, as the predominant virus, with influenza A/H1N1 2009 was reported. According to data from FIOCRUZ Institute (Rio de Janeiro), between EWs 21-27 influenza A/H1N1 2009 predominated and in EWs 28-29 no samples were positive for influenza.

In Chile\textsuperscript{10}, in EW 30, ILI activity (10 consultations per 100,000 inhabitants) at the national level was slightly higher than previous week (6.2 per 100,000 inhabitants), but remained at a low intensity and within the expected levels for this period. This week, the percentage of emergency department admissions for respiratory cases in children less than 15 years old decreased as compared to the previous week and was less than what was observed during 2009. As of EW 20 no deaths associated with influenza had been reported. According to laboratory data, in EW 30, among all samples tested at the national level (n=1011), 34\% were positive for some respiratory virus; of these, RSV was the predominant virus (64\%) with a decreasing trend compared to the previous weeks. Concerning influenza viruses, among all the tested samples, 7.1\% were positive to influenza, being influenza A/H1N1 2009 the predominant virus; regionally, influenza A/H1N1 2009 was detected in Copiapó, La Serena, Viña del Mar, Rancagua, Concepción and Santiago.

In Paraguay\textsuperscript{11}, in EW 30, the proportion of ILI consultations among all consultations was similar to the previous week (~7.5\%). The proportion of SARI hospitalizations and the proportion of SARI ICU admissions decreased slightly in the last two EWs, remaining below 5\% and 15\% respectively. In EW 30, the percentage of SARI deaths increased for the second consecutive week; even though it remained below 10\%. To date this year, a total of 115 SARI-associated deaths have been reported. In EW 30, the percentage of samples positive for respiratory viruses remained at ~5\%, with little detection of respiratory viruses.

In Uruguay\textsuperscript{12}, between EWs 22-31, the proportion of SARI hospitalizations (~4\%) and the proportion of SARI ICU admissions (~14\%) sustained an increasing trend. The proportion of SARI deaths continued to fluctuate and was below 5\%. According to laboratory data, for SARI cases, between EWs 25-30, the percentage of samples positives for respiratory viruses increased from 14\% to 50\%, and the percentage of samples positives for influenza increased from 1\% to 36\%. En EWs 29 and 30, influenza A/H1N1 2009 was the principal virus in circulation, with the highest predominance among adults >25 years of age. RSV predominated in children <5 years of age and adults >64 years.

\begin{center}
\textcolor{blue}{Alert about influenza A/pandemic H1N1 2009 deaths in persons at high-risk for influenza complications such as pregnant women}
\end{center}

To date in 2011, there have been several reported deaths associated with influenza A/pandemic H1N1 2009 occurring in persons at high-risk for influenza complications, such as pregnant women. These deaths are of particular concern, given that the influenza vaccine containing the pandemic influenza virus strain has been recommended for these risk-groups for the last two years, as is the early use of antiviral therapy. While, there are limited data available about the clinical course in each individual case, these deaths serve as a reminder to clinicians and public health officials of the importance of adhering to the following recommendations.

\begin{itemize}
\item Annual influenza vaccine is recommended by the World Health Organization (WHO) for persons at high-risk of influenza complications including: nursing-home residents (the elderly or disabled); people with chronic medical conditions; elderly individuals; and other groups such as pregnant women, health care workers, those with essential functions in society, as well as children from ages six months to two years*
\item WHO recommends that antiviral therapy be utilized immediately in persons with influenza infection who are at high-risk for complications such as pregnant women**
\end{itemize}

* http://www.who.int/influenza/vaccines/use/en/
** http://www.who.int/csr/resources/publications/swineflu/h1n1_guidelines_pharmaceutical_mngt.pdf
Graphs

North America

Canada

United States

Mexico

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

CAREC

Cuba and Dominican Republic

Jamaica

% SARI Admissions

Respiratory virus characterization by EW, 2011

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

% SARI cases

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

Note: Data includes data from Barbados, Dominica, Jamaica, St. Lucia, St. Vincent & the Grenadines and Tobago.
Central America

Honduras

Respiratory virus characterization by EW, 2011

Distribution of influenza and other respiratory viruses under surveillance by Epidemiologist 11

Week (EW), region / country, 2010-2011

Guatemala

Number of ARI. Guatemala

Infecciones respiratorias agudas hasta semana No. 26, 2010-2011. República de Guatemala

Costa Rica, Nicaragua and Panama

Costa Rica

Distribution of influenza and other respiratory viruses under surveillance by Epidemiologist 11

Week (EW), region / country, 2010-2011

Nicaragua

Distribution of influenza and other respiratory viruses under surveillance by Epidemiologist 11

Week (EW), region / country, 2010-2011

Panama

Distribution of influenza and other respiratory viruses under surveillance by Epidemiologist 11

Week (EW), region / country, 2010-2011
**Bolivia**

SARI endemic channel (La Paz, Bolivia)

Respiratory virus characterization by EW, Bolivia, 2011.

CENETROP Laboratory (Santa Cruz, Bolivia)

Respiratory virus characterization by EW, 2011.

**Colombia**

Respiratory virus characterization by EW, Colombia 2011.

**Peru**

SARI reported in children ≤ 5 years. Peru – 2011

Respiratory virus characterization by EW, Peru 2011.
Uruguay

% SARI hospitalizations, UCI admissions and deaths.
Proporción de IRAG en ingresos hospitalarios, ingresos a UCI y defunciones hospitalarias

Respiratory virus characterization by EW,, 2011

Respiratory virus characterization by age, 29 EW 2011

2 US Surveillance Summary. Week 30. Centers for Disease Control and Prevention
3 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 30
4 Guatemala. Situación epidemiológica SE 26, 2011
5 Bolivia. Parte Epidemiológico. 4 de agosto, 2011.
7 Colombia. Instituto Nacional de Salud.
10 Chile. Informe de situación. SE 30. www.pandemia.cl
https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu