Regional Update EW 28
Influenza
(July 26, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phi/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, co-circulation of influenza A (subtype H1N1 2009 and H3N2) and influenza B have been reported in some countries (Dominican Republic and Honduras); as well as an increase in the detection of respiratory syncytial virus (RSV) in some countries of Central America (El Salvador and Costa Rica)
- In the Southern Cone, even though it continues to be a lower activity than expected for this period, some increase activity of severe acute respiratory infections (SARI) have been reported (Uruguay) and a slight increase in influenza virus detection (Chile and Argentina). RSV continues to be the primary respiratory virus in circulation in the Southern Cone.

Epidemiologic and virologic influenza update

North America

Canada\(^1\), in epidemiological weeks (EWs) 27 and 28, experienced influenza activity at inter-seasonal levels. Influenza-like illness (ILI) consultation rates were 15.3 (EW 27) and 11 (EW 28) per 1000 consultations; the rate for EW 27 was higher than expected, however, it returned to expected levels in EW 28. Few detections of influenza were reported in EWs 27 and 28. Circulation of other respiratory viruses continues, primarily rhinovirus.

In the United States\(^2\), in EW 28, at the national level, the proportion of consultations for ILI (0.6%) remained below the national baseline. The proportion of deaths attributed to pneumonia and influenza (6.2%) was below the epidemic threshold. This week one pediatric death associated with influenza B was reported. During EW 28, no positive samples for influenza were detected.

In Mexico, in EW 28, no samples positive for influenza or other respiratory viruses were found.

Caribbean

CAREC\(^*\), in EW 28, reported that the proportion of severe acute respiratory infections (SARI) hospitalizations was slightly lower than the previous week and remains <5%. No SARI deaths have been reported since EW 26. Between EWs 21-26 RSV and rhinovirus were the primary viruses in circulation.

In the Dominican Republic, in EW 29, among all samples tested, the percentage of samples positive for influenza decreased to 32%, influenza A/H1N1 2009 has been the primary virus in circulation since EW 13, co-circulating with influenza B, which has been progressively increasing since EW 23.

In Jamaica, in EW 28, the proportion of consultations for acute respiratory illness (ARI) was similar to the previous week. The proportion of admissions due to SARI was less than 1% and remained stable compared

\(^*\) Includes Barbados, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, and Trinidad and Tobago
to the previous week. In EW 28, no SARI deaths were reported. According to laboratory data, no influenza or other respiratory viruses have been detected since EW 21.

Central America

In Costa Rica, in EW 29, the percentage of samples positive for respiratory viruses decreased slightly to ~40%. The number of detections of RSV has increased progressively since EW 21, and RSV has been the primary virus in circulation during the last two weeks, followed by adenovirus. Sporadic detections of influenza A/H1N1 2009 were reported.

In Honduras3, in EW 28, at the national level, the percent of admissions for ILI was slightly higher than the previous week, remaining <10%, and less than observed during the same period in 2010. The proportion of SARI hospitalizations increased compared to the previous week but remains below 10% and similar to the observed level during 2010. In EWs 27 and 28, the percentage of samples positive for respiratory viruses was similar (~15%) with a predominance of influenza A/H3N2.

In El Salvador, in EW 27, the proportion of samples positive for respiratory viruses increased to ~50%. RSV has been the predominant virus since EW 21. Between EWs 23-27, an increase in the proportion of positives for RSV (from 30% to 55%) was observed as well as a decrease in the proportion of positives for influenza B (from 30% to 0%).

Panama reported an increase in the detection of RSV from EW 22-27. In EW 28, RSV continued to be the predominant respiratory virus. Sporadic detections of influenza A/H1N1 2009 also have been reported.

South America – Andean

In Bolivia, in EW 28, in the department of La Paz (west of the country), the percentage of samples positive for influenza was 25%, with a predominance of influenza A/H3N2 since EW 18. In the department of Santa Cruz (east of the country), few respiratory viruses were detected, with detection of influenza A/H3N2 and influenza A/H1N1 2009 in the last weeks.

In Peru4, in EW 27, ARI and pneumonia activity indicators (number of ARI cases in those less than 5 years of age and the number of pneumonia cases in those less than 5 years of age, respectively) were slightly higher than the previous week; however, these remain below what is expected for this time of the year. In 2011 to date, the departments of Loreto, Amazonas, Junin, Lima and Arequipa show the highest number of deceased children less than 5 years old with pneumonia, compared to the previous years.

South America – Southern Cone

In Argentina5, the ILI endemic channel for EW 24 showed a continued decreasing trend and ILI activity was less than expected for this time of year. According to national laboratory data for EW 27, RSV predominance continues; however, the overall number of cases positive for respiratory viruses has continued to decrease since its peak in EW 23. This week, even though an increase was reported in the number of influenza cases (unsubtyped influenza A and influenza A/H3) the overall level was less than expected for this time of year.

In Brazil, according to data of the laboratory FIOCRUZ (Rio de Janeiro), in EW 28, no influenza viruses were detected. Between EWs 20-27, the primary virus in circulation was A/H1N1 2009, followed by influenza A/H3N2.

In Chile6, in EW 28, ILI activity (6.6 consultations per 100,000 inhabitants) at the national level was similar to the previous week (6.9 per 100,000 inhabitants) and remained low and within the expected levels for this period. This week, the percentage of emergency department admissions for respiratory disease in children less than 15 years old (46%), remained similar to the previous week. In EW 28, no deaths associated with influenza were reported. According to laboratory data, the number of respiratory viruses has been decreasing since EW 24 due to the decrease in the number of RSV cases; however, an increase in cases positive for influenza A/H1N1 2009 was reported. A low detection of adenovirus and parainfluenza was reported.

In Paraguay7, in EW 28, the proportion of ILI consultations among all consultations increased to 13.4%, which was the highest proportion to date this year. Among SARI hospitalizations, the proportion of: SARI admissions among all admissions and SARI ICU admissions among all ICU admissions, and the percentage of SARI deaths among all deaths were less than the previous week and remain below 10%. In EW 28, the
percentage of samples positive for respiratory viruses remained at ~5%, with few detections of respiratory viruses. No influenza viruses have been detected since EW 13.

In Uruguay, in EWs 28 and 29, an increase was reported in the proportion of SARI hospitalizations (~3%), SARI ICU admissions (~13%) and SARI deaths (~3% in EW 28); however, these proportions decreased during EW 30. According to laboratory data, there was an increase in the percentage of positives for respiratory viruses from EW 25 (14%) to EW 28 (35%) and the percentage of positives for influenza viruses from EW 25 (1.2%) to EW 28 (18%). Such increase is associated with higher detections of influenza A/H1N1 2009 and RSV (I don’t understand what this means).

Graphs

North America

Canada

United States

Mexico
Caribbean

CAREC

% SARI Admissions

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

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

* Note: Graph includes data from Barbados, Dominica, Jamaica, St. Lucia, St. Vincent & the Grenadines and Tobago.

República Dominicana

Dominican Republic

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

Jamaica

SARI Cases from Sentinel Sites in Jamaica 2010-2011

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

No. of SARI Cases

Other viruses

% Positive Samples

FLU A(H1)

FLU A(H3)

FLU A (H1N1) 2009

Parainfluenza

SRV

FLU B

Adenovirus

Respiratory viruses
Central America

Honduras

Costa Rica, El Salvador and Panama

Costa Rica

El Salvador

Panama
South America - Andean

Bolivia

Acute Respiratory Illness, in children <5 years old. Peru, 2011
IRA notificadas en niños menores de 5 años. Perú - 2011

Pneumonias, in children <5 years old. Peru, 2011
Neumonías notificadas en niños menores de 5 años. Perú - 2011


South America – Southern Cone

Argentina

ILI endemic channel
Corriente Endémica Semanal de 2011
Enfermedades de Línea Base (ILI). Argentina

SARI endemic channel
Corriente Endémica Semanal de 2011
Neumonías. Argentina

Distribution of respiratory viruses by EW
Distribución virus respiratorios en vigilancia por semana epidemiológica 26 de 2011. Argentina n=11081

Distribution of influenza viruses by FluNet 2011
FluNet: Distribución de virus de la influenza por EW 2011
Brazil

Laboratorio Nacional FIOCRUZ

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

FluNet

Brazil

Distribution of influenza Viruses by EW, 2011

Chile

ILJ endemic channel

Canal endémico de Enfermedad Tipo Influenza según semana epidemiológica 2005-2010. Chile, 2011 (semana 28)

Distribution of respiratory viruses in SARI cases by EW, 2011. 2010-2011

SARI cases, 2011

Distribution of virus of influenza and other viruses in cases of IRAD, según semana epidemiológica, CHILE, DE 1 a 20 de 2011. (se 256)

FluNet- Distribution of influenza Viruses by EW, 2011

% emergency service consultations. Children <15 years old

Atenciones de Urgencias por causa respiratoria en niños, (< 15 años). Chile 2009-2010 y 2011 (SE 1-29)
Paraguay

ILI cases

Distribution of respiratory viruses in SARI cases by EW, 2011.

Uruguay

SARI hospitalizations, ICU admissions and deaths

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

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2 US Surveillance Summary. Week 28. Centers for Disease Control and Prevention
3 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 28
6 Chile. Informe de situación. SE 28. www.pandemia.cl