PAHO interactive influenza data: http://ais.paho.org/phiap/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, with an increase of rhinovirus circulation compared to the rest of respiratory viruses (Canada).
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued (Costa Rica, Honduras, Cuba and Dominican Republic). Among influenza viruses, continued the circulation of influenza A(H1N1)pdm09 and influenza A/H3N2 (Honduras and Nicaragua).
- In the Southern Cone, influenza activity remains low. Low co-circulation of influenza A(H1N1)pdm09, influenza A/H3 and influenza B was reported.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 43, influenza activity continued at inter-seasonal levels. Influenza-like Illness (ILI) consultation rates were 22.7 per 1,000 consultations; higher than the previous EW and slightly above the expected levels for this time of year. Compared to other age groups, in EW 43, a higher ILI consultation rate was observed among children less than 5 years old (~50/1,000 consultations). The percentage of samples positive for rhinovirus was much higher than the percentage positivity for respiratory viruses (including influenza) in the last weeks. Few influenza detections were reported in EW 43, and the percentage of samples positive for influenza was less than 1%, as was observed in previous EWs. The influenza viruses detected were influenza A/H3 and influenza B.

In the United States², in EW 43, at the national level, the proportion of ILI consultations (1.2%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 43 (6.5%) was lower than the epidemic threshold for this time of year (6.7%). In this week, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 42 (n=1,804), the percentage of samples positive for influenza continued to remain low (<1%), with sporadic detections of unsubtyped influenza A, influenza A/H3 and influenza B. In EW 42, two people infected with triple-reassortant influenza A(H3N2) of swine origin in Indiana and Maine were reported, whose illnesses were uncomplicated. Both patients had a history of contact with swine, but there was no epidemiologic link relationship between them. There was no evidence of person-to-person transmission of these cases³; in total, 15 cases of human infection for triple-reassortant influenza A(H3N2) of swine origin have been reported since 2005.

In Mexico, in EW 43, according to laboratory data, of total samples received (n=61), no samples positive for respiratory viruses were detected.

Caribbean

CAREC⁴, in EW 43, received epidemiological information from Barbados, Jamaica and Tobago. The proportion of admissions for Severe Acute Respiratory Infection (SARI) among all hospitalizations (3.2%) remained similar as compared to the previous week (3.3%). Children between 6 and 48 months of age had

¹ Includes Barbados, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, and Trinidad and Tobago
the highest percentage of SARI hospitalizations (6.5%), followed by the children between 4 and 15 years of age (6.1%). No SARI deaths have been reported since EW 38. According to laboratory data, between EWs 41 and 43, samples positive for influenza A(H1N1)pdm09 and influenza A/(H3N2) were detected. The viruses detected in the past weeks were RSV and rhinovirus.

In Jamaica, in EW 43, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.8%, which was lower than the previous week. The proportion of SARI admissions was <2% and slightly lower than the previous week and the previous year. In EW 43, no SARI related deaths were reported. According to laboratory data, in EW 41 and 42, few samples positive for influenza A(H1N1)pdm09 were detected.

In Cuba, according to laboratory data, in EW 43, among all samples tested (n=117), ~60% were positive for respiratory viruses and ~3% of all samples tested were positive for influenza; both percentages were similar to the previous week. In EW 43, RSV continues to be the predominant virus. Concerning influenza viruses, influenza A/H3 was the primary virus in circulation, with a decreasing trend since its peak in EW 37.

In the Dominican Republic, according to laboratory data, in EW 43, among all samples tested (n=15), the percentage of samples positive for respiratory viruses was 26%, which was similar to the previous week. The primary virus in circulation was RSV.

Central America

In Costa Rica according to laboratory data, in EW 44, among all samples tested (n=132), the percentage of samples positive for respiratory viruses (42%) was lower than the previous week. RSV has been the predominant virus since EW 28, followed by adenovirus which has been consistently detected in the last 2 weeks. Among the influenza viruses in EW 44, few influenza A(H1N1)pdm09 and influenza A/H3 cases have been detected.

In Honduras, in EW 42, the proportion of ILI consultations was slightly lower than the previous EW and below what was observed during the same period in 2010. The proportion of SARI hospitalizations (~9%) was lower than the previous EW but remained above that observed in 2010. In EW 42, two SARI related deaths were reported. According to laboratory data, in EW 43, the percentage of samples positive for respiratory viruses remained at ~45%. RSV predominated in EWs 35-43. Concerning influenza viruses, in EW 42 and 43, influenza A/H3, and influenza A(H1N1)pdm09 co-circulated.

In Nicaragua, in EW 44, influenza A(H1N1)pdm09 was detected in 13 out of 17 departments. Since EW 37, a progressive increase in the number of cases positive for influenza A(H1N1)pdm09 were reported, summing through EW 44 a total of 426 cases, ~75% of which were from Managua. In EW 44, a total of 14 people were hospitalized, most of whom recovered, and no deaths were reported. Co-circulation of influenza A/H3 and RSV were also detected.

In Panama, in EW 44, of all samples tested (n=11), the percentage positivity was ~35%, detecting only cases positive for RSV, parainfluenza, and adenovirus. In EW 44, no cases positive for influenza viruses were detected. Between EWs 27 and 39 influenza A(H1N1)pmd2009 circulated.

South America – Andean

In Bolivia, through EW 43, at the national level, 931 cases of influenza A(H1N1)pmd09 were confirmed, with a decreasing trend since peaking in EW 39 (n=324 cases); mainly in Santa Cruz (n=700), followed by Cochabamba (n=72), Chuquisaca (n=63), La Paz (n=53) and Tarija (n=25).

In Peru, in EW 42, at the national level, the number of ARI and pneumonia cases in children less than 5 years of age remained similar to the previous week and has remained at or below the expected levels for this time of year. Through EW 42 of 2011, 313 pneumonia deaths were reported in children less than 5 years of age, which represents 17% less than the average reported for the same period in the last three years (2008-2010).

In Venezuela, in EW 42, ARI and pneumonia endemic channels showed an increasing trend in the number of cases since ~EW 38, but within expected levels for this time of year, with a higher incidence rate in those less than 7 years old. In 2011 through October 26, EW 43, of all samples tested (n=8,470), the percentage positivity for respiratory viruses was ~31%. Concerning influenza viruses, ~27% of samples tested were positive for influenza A(H1N1)pdm09, ~4.5% was influenza A/H3 and <1% was influenza B.
**South America – Southern Cone**

In Argentina, ILI and SARI endemic channels demonstrated that the number of ILI and SARI cases for EW 39, continued to decrease and remained at lower levels than observed during the same period in the last 5 years. According to national laboratory data, in EW 43, RSV continued to decreases since peaking in EW 26. Concerning influenza viruses, a decreasing trend was reported in cases positive for influenza A since peaking in EW 28. Among influenza A subtyped cases the co-circulation of influenza A/H3 and A(H1N1)pmd09 continued.

In Paraguay, in EW 42, the proportion of ILI consultations was lower than the previous week. The proportions of SARI hospitalizations, ICU admissions and deaths remained below 10%. According to laboratory data, in EW 43, of all samples tested (n=43), the percentage positivity was ~13%, with detection of adenovirus only.

In Uruguay, in EW 44, the proportion of SARI hospitalizations, ICU admissions and deaths remained <5%. These proportions have continued to decrease since peaking in EW 31.
**Graphs**

**North America**

**Canada**

Influenza-like illness (ILI) consultation rates, Canada, by report week, 2011-2012 compared to 1996/97 through to 2010/11 seasons (with pandemic data suppressed)

- Rate per 1,000 patient visits
- Mean Rate: 95% bands: 1996/97 - 2010/11
- Rate: Pandemic Week 1, 2009

**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 28, 2008 – October 29, 2011

**México**

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

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

Costa Rica, Nicaragua and Panama

Costa Rica

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

Nicaragua

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

Panama

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

Honduras

% ILI consultations, 2011

Distribución de las atenciones por ETI, Vigilancia centinela de influenza, semana epidemiológica No. 42, Honduras, 2011

% SARI cases

Distribución por IRAG, vigilancia centinela de influenza, Semana epidemiológica No. 42, Honduras, 2011
**South America - Andean**

**Bolivia**

**National data**
Cumulative respiratory viruses surveillance (Jan-Oct 2011)

- Parainfluenza: 3, 0%
- Influenza A (H3N2): 310, 21%
- Flu B: 54, 4%
- Influenza A (H1N1): 931, 62%

**Peru**

ARI reported in children ≤ 5 years. Peru – 2011

Pneumonia reported in children ≤ 5 years. Peru, 2011

**Venezuela**

ARI endemic cannel
Infecciones Respiratorias Agudas
Canal endémico 2005 - 2011
Venezuela, 2011

Pneumonia endemic cannel
Neumonías
Canal endémico 2005 - 2011
Venezuela, 2011
South America – Southern Cone

Argentina

ILI endemic cannel, 2011
Corredor Epidemiológico Semanal de 2011
Enfermedad Tipo Influenza (ETI). Argentina
Historico de 5 años: 2006 a 2010

Distribution of respiratory viruses, by EW, 2011
Distribución virus respiratorios en vigilancia por semana epidemiológica SE
1 a 43 de 2011. Argentina n=20044

Paraguay

% ILI consultations by EW, 2011
Proporción de consultas por ETI según semana epidemiológica del 1 al 42
Paraguay, 2011
N= 59,148

% hospitalizations, ICU admission and deaths for SARI, by EW, 2011
Proporción de hospitalizaciones, ingresos a ICU y fallecimientos por SARI según semana epidemiológica,
Vigilancia SARI, SE 01 al 42, Paraguay, 2011
Uruguay

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<th>% hospitalization, ICU admissions and deaths for SARI</th>
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<tr>
<td>de Ingresos Hospitalarios</td>
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<td>Proportion (%)</td>
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<td>Semana epidemiológica</td>
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2 US Surveillance Summary. Week 43. Centers for Disease Control and Prevention
3 CDC. More information available: http://www.cdc.gov/media/haveyouheard/stories/H3N2_virus2.html
4 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 42
10 Paraguay. Boletín epidemiológico semanal. SE 44. Ministerio de Salud Pública y Bienestar Social
11 Uruguay. Dirección General de la Salud. División Epidemiología. SE 44. Available at: https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu