

PAHO interactive influenza data: <u>http://ais.paho.org/phip/viz/ed\_flu.asp</u> Influenza Regional Reports: <u>www.paho.org/influenzareports</u>

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 decreased. Among influenza viruses, influenza B was the predominant virus in Canada and influenza A in the United States
- In Central America and the Caribbean, influenza activity remained low or within expected levels for this
  period of time. An increased detection of influenza A(H3N2) was reported in Dominican Republic and
  influenza A(H1N1)pdm09 in El Salvador
- In South America, influenza activity remained low or within expected level for this period of time

#### Epidemiologic and virologic influenza update

#### North America

In Canada<sup>1</sup>, in epidemiological week (EW) 18, 2012, influenza activity decreased. In EW 18 the influenza-like illness (ILI) consultation rate decreased as compared to the previous week and was slightly higher than expected levels for this time of year. In EW 18, among the total samples analyzed (n=3,210), the proportion of samples positive for influenza (13.5%) decreased as compared to the previous week. In EW 18, of the total cases positive for influenza, the percent positive for influenza B (65.4%) decreased but continued to be greater than the percent positive for influenza A (34.6%). Concerning other respiratory viruses, the percent positive for rhinovirus (11.7%) increased over the last several weeks, the proportion of tests positive for RSV (4.4%) continued to decline, and influenza was the most prevalent among all respiratory viruses detected.

In the United States<sup>2</sup>, in EW 18, influenza activity declined nationally and the proportion of ILI consultations (1.4%) was below the national baseline (2.4%), with all regions reporting ILI activity below their regionspecific baselines. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 18 (6.9%) was below the epidemic threshold for this time of year (7.5%). In EW 18, two pediatric deaths associated with influenza were reported (one with influenza type B and one with an unsubtyped influenza A virus). Among all samples tested during EW 18 (n=2,118), the percentage of samples positive for influenza (13.7%) continued to decrease. Nationally, among the positive samples, 64.6% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 35.4% were influenza B, and the proportion of B virus detections has been increasing. Of the antigenically characterized influenza B viruses (n=252), 46.4% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 53.6% were of the B/Yamagata lineage. In total, 1.4% (n=16) of the influenza A(pdm)09 viruses tested this season have been resistant to oseltamivir. Of these oseltamivir-resistant cases, 81.3% (n=13) had no exposure to oseltamivir, although two of the thirteen had family members using oseltamivir. Of all the oseltamivir-resistant cases, 68.8% (n=11) were from Texas.

In Mexico, according to laboratory data, in EW 18, of the total samples analyzed (n=18), there were no respiratory virus detected.

#### Caribbean

CAREC\*, in EW 18, received epidemiological information from 7 countries: Barbados, Belize, Dominica, Jamaica, Suriname, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 18, the proportion of severe acute respiratory infection (SARI) hospitalizations was 2.7%, which is higher than the prior week (1.6%). Children aged 5 - 14 years and 6 months - 4 years had the highest rates of SARI hospitalization, respectively. No SARI related deaths were reported in week 18, 2012. According to laboratory data, in the past four weeks, RSV and rhinovirus have been confirmed. To date in 2012, the percentage positivity for samples tested is 28.8% (with 10.2% positive for influenza and 18.6% positive for other respiratory viruses).

In Jamaica for EW 18, the proportion of consultations for acute respiratory illness (ARI) was 4.4% which was similar to the previous week. The proportion of admissions due to SARI was 0.8% which was similar to the previous week. There was no SARI death reported for EW 18. Influenza B was detected in EWs 18 and 19.

In Cuba, according to laboratory data, in EW 18, among all samples tested (n=67), 6% were positive for respiratory viruses. No influenza viruses were detected.

In Dominican Republic, in EW 19, among all samples tested (n=42), ~45% were positive for influenza viruses. Higher detection of influenza A(H3N2) has been detected in the last 4 weeks as compared with previous weeks.

#### **Central America**

In Costa Rica, in EW 18, according to laboratory data, among all samples tested (n=67), the percentage of positive samples for respiratory viruses was 13.4%, being adenovirus the predominant circulating virus. No influenza viruses have been detected in the last 2 weeks.

In El Salvador, in EW 18, according to laboratory data, among all samples tested (n=59), the percentage of positive samples for respiratory viruses was 25.4%. Among the positives samples, influenza A(H1N1)pdm09 has been the predominant virus (86.7%), with increased detections during the last 5 weeks, and a sharp increase in the last week (EW 18). Among the other viruses, RSV and adenovirus were also detected.

In Guatemala, in EW 18, according to laboratory data, among all samples tested (n=23), the percentage of positive samples for respiratory viruses was 26.1%, parainfluenza virus was detected. Influenza viruses were not detected.

In Panama, in EW 18 according to laboratory data, among all samples tested (n=9), the percentage of positive samples for respiratory viruses was 55.6%, being detected parainfluenza and other respiratory viruses. Influenza viruses were not detected.

#### South America – Andean

En Bolivia, according to laboratory data from La Paz (INLASA laboratory), circulation in EW 17 in the Departments of La Paz, Oruro, Potosi, Tarija, Pando, Beni, and Chuquisaca showed a positivity of 30.2% among all samples analyzed (n=53), with a predominance of RSV (14/16 positives). According to SARI surveillance, in the department of La Paz, since EW 11, there has been an increase in the proportion of SARI hospitalizations; however, in EW 18 (16.7%) a decrease was reported as compared to the prior week. Of the samples from SARI cases (n=43), in the EW 18, percentage of positive samples was 32,6%; being RSV the predominant virus detected (10/14 positives) in the last four weeks.

In Ecuador, SARI cases have been decreasing since EW 11. In EW 18, the proportion of SARI hospitalizations, ICU admissions remained below 5%. No SARI deaths were reported. According to laboratory data, among all SARI samples tested (n=35), 17.1% were positive for respiratory viruses, being RSV (4/6) the predominant virus.

In Colombia, in EW 18, according to laboratory data, among all samples tested (n=6), the percentage of positive samples for respiratory viruses was 16.7%. RSV was the main virus detected. Influenza viruses were not detected.

 $<sup>\</sup>degree$  Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago

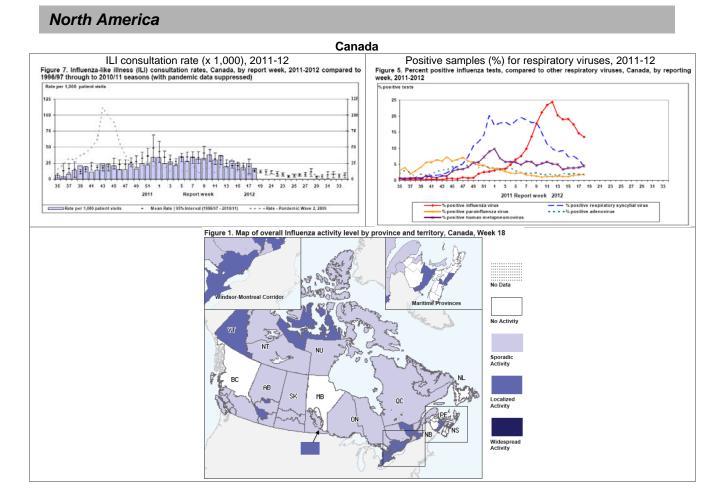
In Peru<sup>3</sup>, in the EW 16, at the national level, 61,660 episodes of ARI were reported. 982 episodes of pneumonia in children under 5 were notified, increasing 17% as compared to the previous week (n=837) and continuing with the increasing trend on the last 5 weeks. In the same week, 4 deaths were reported from pneumonia (0.4%), significantly less than the previous EW (1.4%).

#### South America – Southern Cone

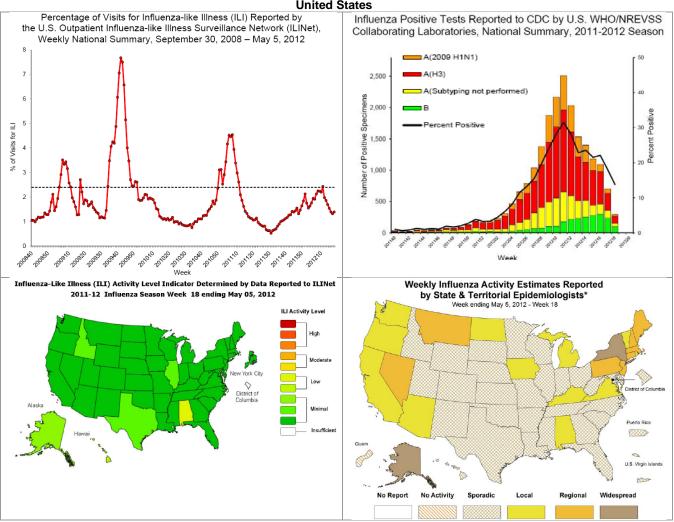
In Argentina<sup>4</sup>, in EW 14, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained low and below what was expected for this time of year. The hospitalized ARI surveillance showed a lower accumulated number of cases in 2012 through EW 14 (n=4740) than reported last year in the same period of time. According to laboratory data, in EW 18, among all samples tested (n=185), 19% were positive for respiratory viruses, mainly RSV. No influenza viruses were detected.

In Chile<sup>5</sup>, in EW 16, at the national level, ILI activity continued to increase since EW 11, reaching the alert zone of the endemic channel in EW 15. However, in EW 16, a decreased in number of cases was reported (4.5 per 100.000 inhabitants). The percent of urgent visits for respiratory causes (20%) remained similar with respect to the previous weeks. According to laboratory data at the national level, in EW 15, among all samples analyzed (n=507), the percent positivity for respiratory viruses was 8.9%, higher than prior weeks, with a predominance of RSV. According to SARI surveillance data, in EW 15, the proportion of positive samples among the tested (n=15) was 26.7%; detecting mainly RSV.

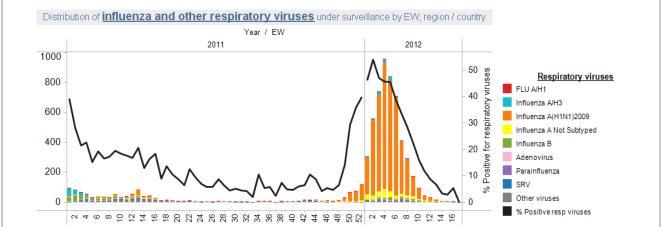
#### Graphs



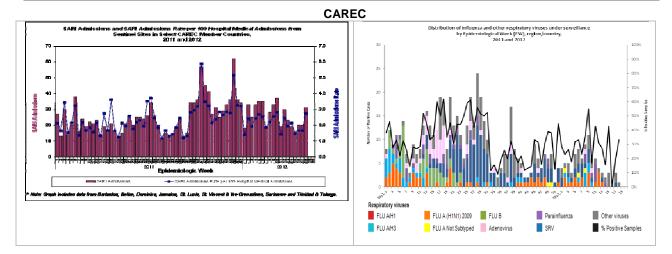




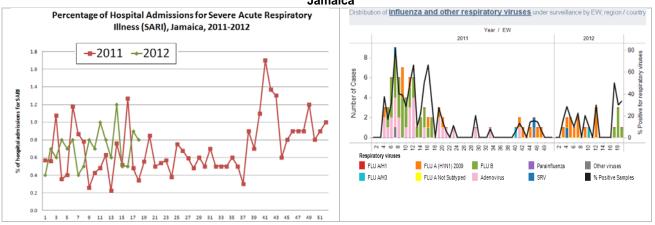




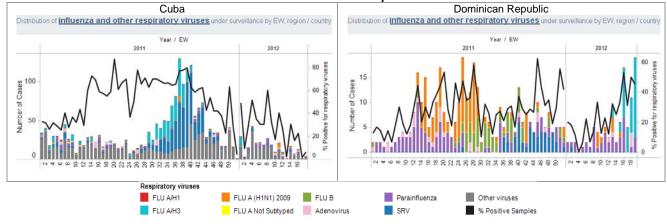
# Caribbean



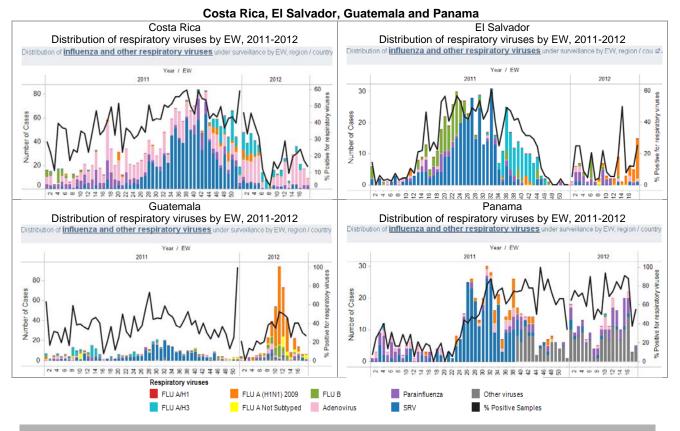
Jamaica



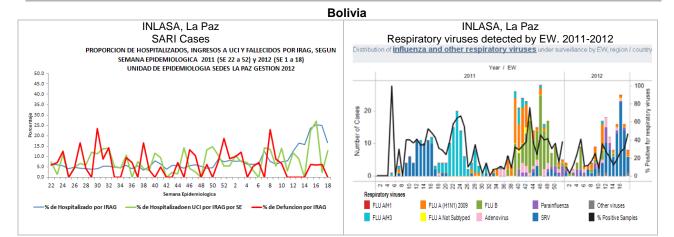




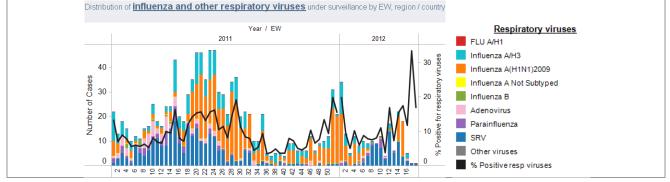
### **Central America**

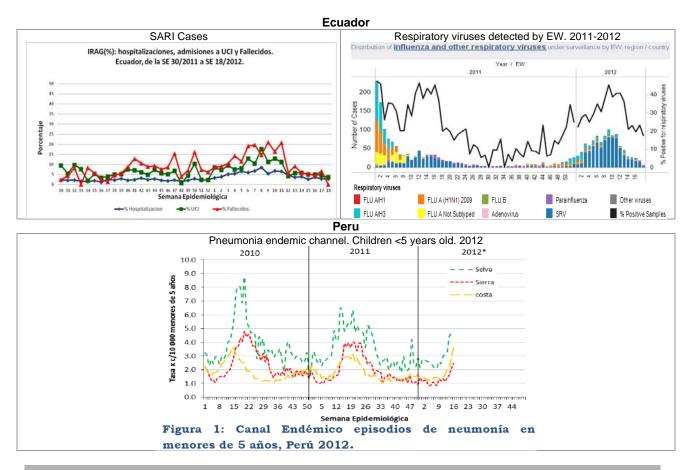


South America - Andean



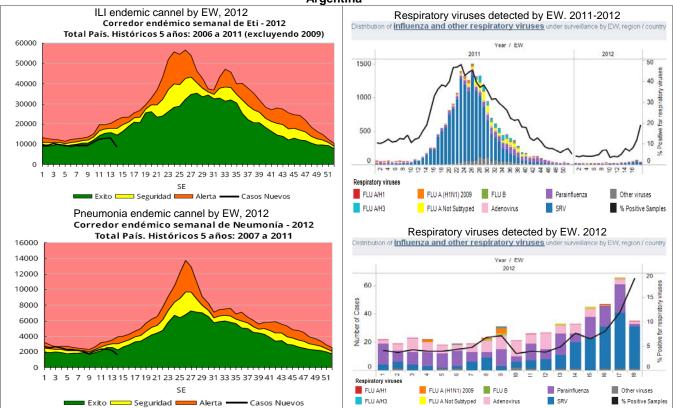
Colombia Distribution of respiratory viruses by EW, 2011-2012



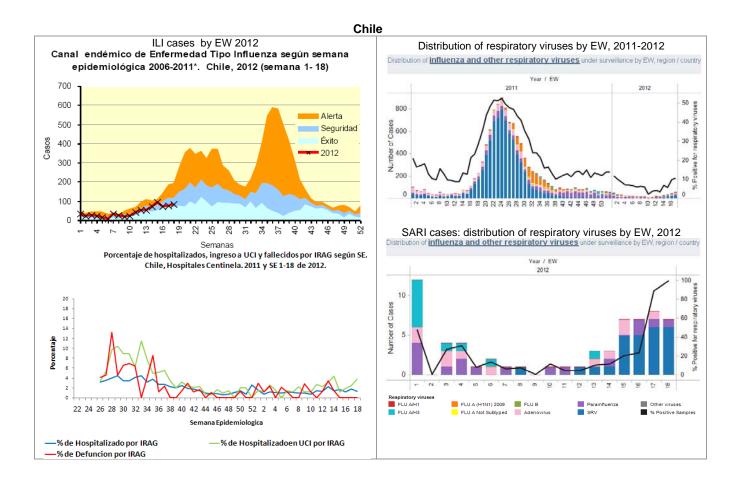


## South America – Southern Cone

Argentina



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- <sup>1</sup> FluWatch Report. EW 18. Available at http://www.phac-aspc.gc.ca/fluwatch/
- <sup>2</sup> US Surveillance Summary. EW 18. Centers for Disease Control and Prevention
- <sup>3</sup> Perú. Sala de Situación de Salud. SE 16. Ministerio de Salud. Dirección General de Epidemiología
- <sup>4</sup> Argentina. Actualización situación de enfermedades respiratorias 2012. SE 18.
- <sup>5</sup> Chile. Informe de situación. SE 18. Disponible en: www.pandemia.cl