

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 the United States.
- In Central America and the Caribbean, influenza activity increased. Influenza A(H1N1)pdm09 was circulating in some countries of Central America (El Salvador, Honduras and Guatemala), influenza A(H3N2) was circulating in Dominican Republic and influenza B in Jamaica and Cuba.
- In South America, acute respiratory illness activity has been increasing in some countries in the last weeks; but remained within the expected level for this time of year. Co-circulation of different types/subtypes of influenza (influenza A(H1N1)pdm09, influenza (H3) and influenza B) were reported in some countries (Bolivia, Peru, Brazil & Paraguay). Respiratory syncitial virus (RSV) remained increasing in the south cone (Argentina and Chile).

## Epidemiologic and virologic influenza update

## North America

In the United States<sup>1</sup>, in EW 23, nationally, the proportion of ILI consultations (0.9%) was below the baseline (2.4%), with all regions reporting ILI activity below their region-specific baselines. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 23 (6.3%) was below the epidemic threshold for this time of year (7.1%). In EW 23, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 23 (n=2,105), the percentage of samples positive for influenza (9.7%) decreased as compared to the previous week. Nationally, among the positive samples, 30.9% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 69.1% were influenza B.

In Mexico, according to laboratory data, in EW 23, there were no respiratory viruses detected.

## Caribbean

CAREC\*, in EW 23, received epidemiological information from 4 countries: Belize, Jamaica, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 23, the proportion of severe acute respiratory infection (SARI) hospitalizations was 1.4%, which is lower than the previous week (2.5%). Children aged 6 months – 4 years had the highest rates of SARI hospitalization (9.5% of all children admitted to hospital were for SARI). No SARI related deaths have been reported since week 16, 2012. In the past four weeks, influenza A(H3), influenza A(H1N1)pdm09 and influenza B have been confirmed.

In Jamaica for EW 23, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.8% which was similar to the previous week. The proportion of admissions due to SARI was 0.6% which was similar to the previous week. There was no SARI death reported for EW 23. There was laboratory detection of Influenza B in EW 23.

In Cuba, according to laboratory data, in EW 23, among all samples tested (n=63), the percentage of positives for respiratory viruses was 21% and the percentage of positives for influenza viruses was 20%. Influenza B has been detected in the last 5 weeks, and influenza A(H1N1)pdm09 and rhinovirus were detected in the last weeks.

 $<sup>^{*}</sup>$  Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago

In Dominican Republic, in EW 24, among all samples tested (n=22), 13.6% were positive for respiratory viruses; being influenza A(H3N2) the predominant circulating respiratory virus since EW 16. Among other respiratory viruses, influenza A(H1N1)pdm09 and parainfluenza were also detected in previous weeks.

#### **Central America**

In Costa Rica, in EW 24, according to laboratory data, among all samples tested (n=58), the percentage of positive samples for respiratory viruses was 25.9%, with adenovirus, parainfluenza and SRV. No influenza viruses were detected.

In El Salvador, in EW 22, among all samples tested (n=71), the percentage of positive samples for respiratory viruses increased to 40.8%. Influenza A(H1N1)pdm09 has been the predominant circulating virus since EW 12 and showed an increasing trend. Influenza B was also detected.

In Guatemala, in EWs 23, according to laboratory data, among all samples tested (n=18), the percentage of positive samples for respiratory viruses increased to 44%. Influenza A unsubtyped, SRV, parainfluenza and adenovirus were detected circulating.

In Honduras<sup>2</sup>, in EW 22, the proportion of ILI consultations (3.9%) was lower than what was observed last year in the same period of time (6.6%). The proportion of SARI hospitalizations (4.9%) was higher than the previous year (4%). In the EW 22, seven SARI-related deaths were reported in San Pedro Sula. According to laboratory data, in EW 22, according to laboratory data, among all samples tested (n=14), the percentage of positive samples for respiratory viruses was 14%, being influenza A(H1N1)pdm09 the only virus detected.

## South America – Andean

In Bolivia, in Santa Cruz, according to the data from Cenetrop lab, viral circulation has shown a decreasing trend since EW 13, with a positivity of 22.2% for EW 23 among all samples analyzed (n=81), with no virus predominating. Conversely, according to data from Inlasa, the departments of La Paz, Oruru, Potosi, Tarija, Pando, Beni, and Chuquisaca, showed an increasing positivity since EW 15, reaching 55.4% in EW 23, among all samples analyzed (n=112), with a predominance of influenza A (H1N1)pdm09 (93.5%). According to the SARI surveillance system, in EW 23, in the department of La Paz, there were no changes observed in the proportion of hospitalizations (20.1%) as compared to the previous week; one SARI-associated death was reported.

In Colombia, according to laboratory data, in EWs 21-22, no influenza viruses were detected.

In Ecuador, SARI activity and viral circulation have shown a decreasing trend since EW 09. In EW 23, the proportion of hospitalizations for SARI and ICU admission for SARI remained low and unchanged as compared to the previous week; there were no SARI-deaths reported in the last three weeks. Of SARI samples analyzed (n=67), the positivity was 13.4% and unchanged as compared to the previous week with a predominance of influenza type B (5/9).

In Peru<sup>3</sup>, at the national level, through EW 22, reports of ARI cases in children less than five years of age reached a rate of 394/100,000 population, which was less than expected for the same period. The ARI endemic channel in children less than five years of age has shown an increasing trend since EW 09, remaining in the safe zone in EW 22. The same pattern was seen for pneumonias in this age group. At the sub-national level, since the beginning of the year and through EW 22, all departments reported ARI rates in children less than five years of age to be below expected levels.

## South America – Southern Cone

In Brazil, according to laboratory data (flunet), in EWs 21-22, among all samples tested, the percentage of positive samples for influenza viruses was 18%. An increased number of positive samples for influenza viruses were reported in the last 3 weeks, with co-circulation of influenza A(H3) and influenza A(H1N1)pdm09.

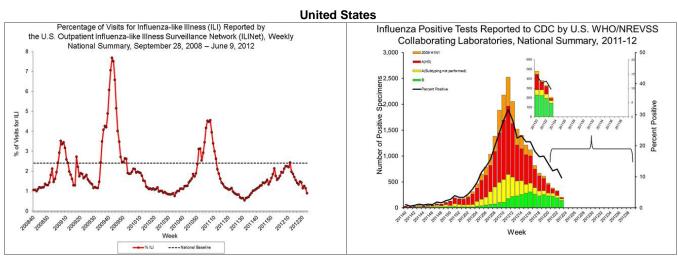
In Argentina<sup>4</sup>, at the national level, in EW 19, the endemic channels showed that the number of ILI and pneumonia cases remained below expected levels for this time of year. In the hospitalized ARI surveillance, through EW 19, the cumulative number of cases (n=7,167), was less than what was reported in the same time last year; however, the regions of Cuyo, Northeast, and South showed rates higher than expected for this time of year. According to the laboratory surveillance system, there was an increase in the positivity for respiratory viruses since EW 14, coincident with an increase in the circulation of RSV. In EW 22, there was a positivity of 55.9%, with RSV being the most prevalent.

In Chile<sup>5</sup>, in EW 23, at the national level, ILI activity was within the safe zone of the endemic channel (rate: 7.3/100,000), showing an increasing trend. There has been a progressive increase since EW 11 in the percent of acute visits for respiratory causes, but has been within expected levels, reaching 29% in EW 23. According to laboratory data, at the national level, among samples analyzed (n=1,265), the percent positivity for respiratory viruses was 43%, higher than last week, with a prevalence of RSV (79%). According to the SARI surveillance system, the proportion of hospitalizations has shown a gradual increase since EW 11, reaching 3.2% in EW 22, with no deaths reported in the last two weeks. There has been an increase in the percent of SARI samples positive in the last few weeks, reaching 66.7% in EW 22 among all samples analyzed (n=69), with a prevalence of RSV (80.4%).

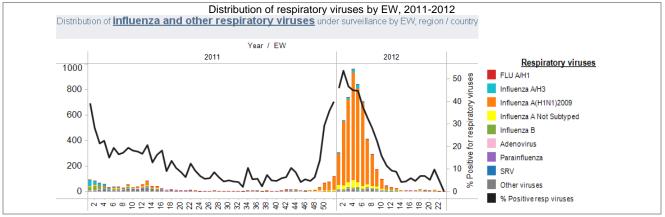
In Paraguay<sup>6</sup>, at the national level, in EW 23, the ILI rate (127.1/100,000 population) remained in the epidemic zone, trending upwards. The proportion of ambulatory ILI consultations (11.9%) also showed an increase in the last four weeks. According to laboratory data, at the national level, in EW 23, among all samples analyzed (n=108), the positivity was 50%, showing an increasing trend since EW 18, coincident with the detection of influenza A (H1N1) pdm 09, which continued to predominate this week (59%). According to the SARI surveillance system, the proportion of hospitalizations has been increasing gradually since EW 18, reaching 5.1% in EW 23; the same trend has been observed in ICU admissions and deaths. In EW 22, among all samples analyzed from SARI cases (n=40), the percent positivity for respiratory viruses was 42.5%, trending upwards, with a predominance of influenza A(H1N1) pdm 09 (13/17).

## Graphs

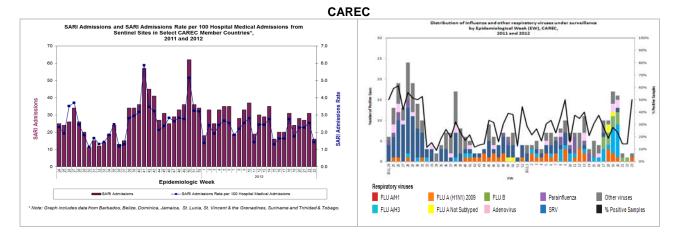
## North America

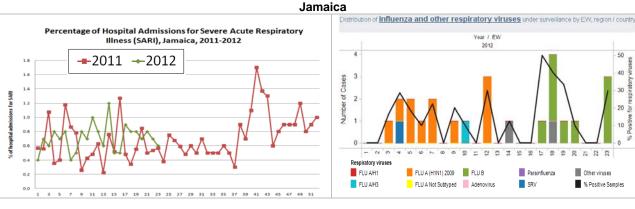


Mexico



# Caribbean





Cuba Dominican Republic Distribution of influenza and other respiratory viruses under surveillance by EW, region / cou @/ Distribution of influenza and other respiratory viruses under surveillance by EW, region / cou @ Year / EW Year / EW 2012 2012 60 40 viruses Number of Cases 10 2 Number of Cases 40 Lespiratory 30 20 Positive for 10 0 0 0 5 8 8 8 4 v o ⊳ ∞ o 04 3 Respiratory viruses FLU A/H1 FLU A (H1N1) 2009 FLU B Parainfluenza Other viruses

SRV

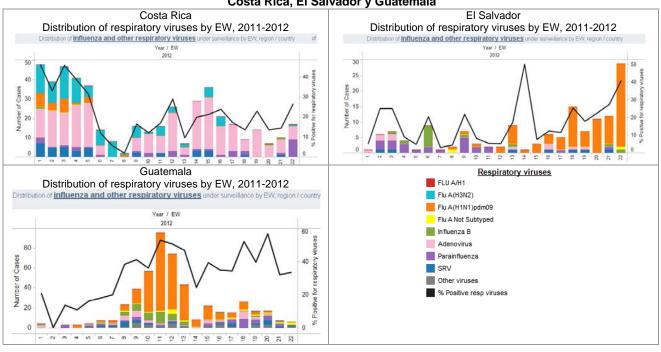
% Positive Samples

FLU A Not Subtyped 📃 Adenovirus

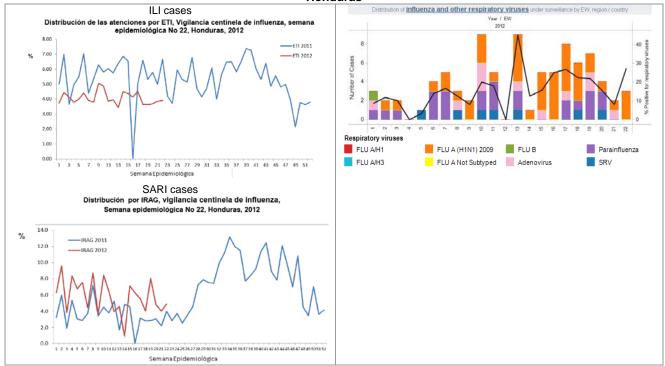
FLU A/H3

Cuba & Dominican Republic

## **Central America**

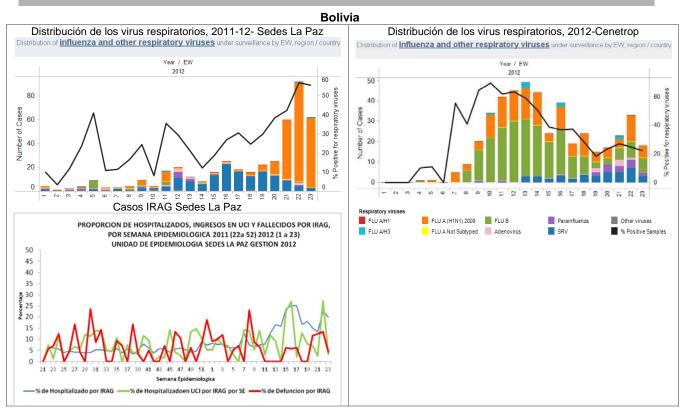


Honduras

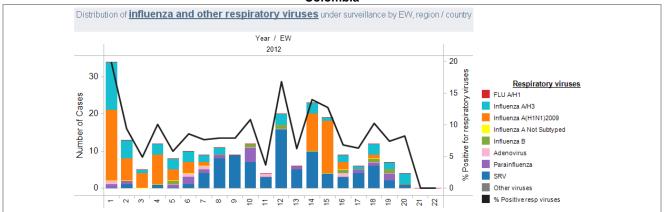


#### Costa Rica, El Salvador y Guatemala

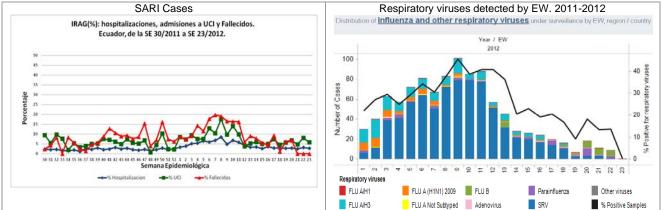
## South America - Andean

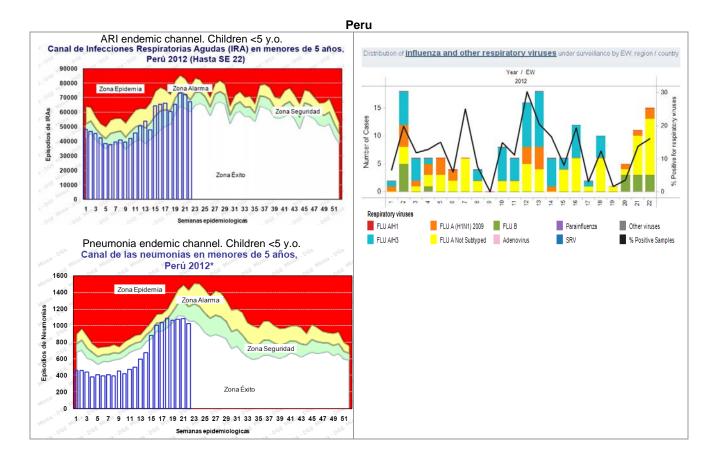


#### Colombia

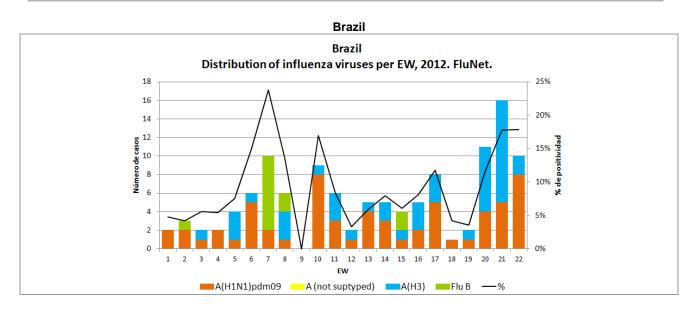


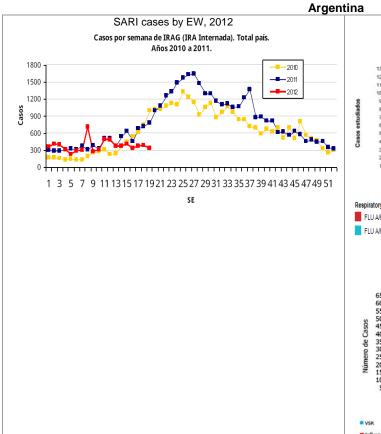
Ecuador

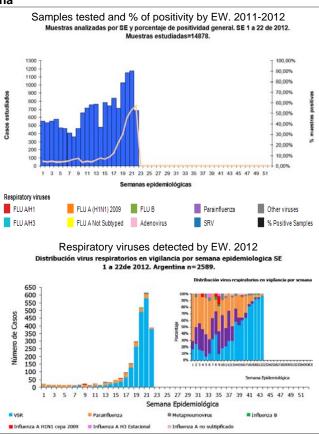


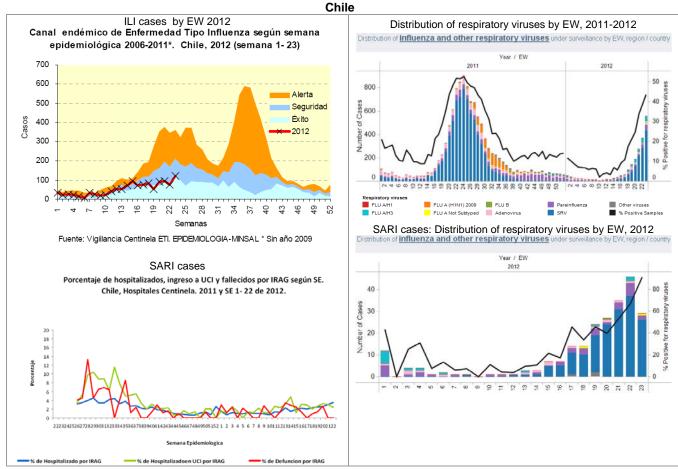


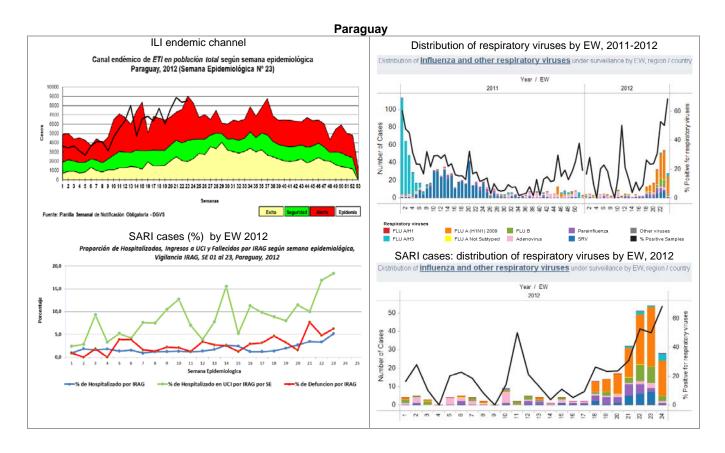
# South America – Southern Cone











- <sup>1</sup> US Surveillance Summary. EW 23. Centers for Disease Control and Prevention
- <sup>2</sup> Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 22
- <sup>3</sup> Perú. Sala de Situación de Salud. SE 22. Ministerio de Salud. Dirección General de Epidemiología
- <sup>4</sup> Argentina. Actualización situación de enfermedades respiratorias 2012. SE 23.
- 5 Chile. Informe de situación. SE 23. Disponible en: www.pandemia.cl

<sup>6</sup> Paraguay. Boletín epidemiológico semanal SE 23. Available at:

http://www.vigisalud.gov.py/index.php?option=com\_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86