



Regional Update EW 09, 2012

Influenza
(March 13, 2012 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phis/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 increased in Canada and United States; but remained within the expected level for this time of year. Among influenza viruses, influenza A(H3N2) remained predominant in Canada and United States, however influenza A(H1N1)pmd09 was predominant in Mexico and has increased in United States.
- In Central America and the Caribbean, influenza activity remained low or within expected levels for this period of time, except in Guatemala, where influenza A(H1N1)pdm09 has increased and has been co-circulating with influenza B in the last EWs.
- In South America, influenza activity and acute respiratory illness activity remained low or within expected level for this period of time.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 09, 2012, influenza activity continued to increase. In EW 09, the influenza-like illness (ILI) consultation rate increased, but remained within expected levels for this time of year. In EW 09, among the total samples analyzed (n=4,886), the proportion of samples positive for influenza (17.9%) increased as compared to the previous week. The proportion of influenza virus detections by type this season to date is as follows: 63.5% influenza A [mainly influenza A(H3N2)] and 36.5% influenza B. Concerning other respiratory viruses, the proportion of tests positive for RSV (17.8%) declined as compared to the previous week, and influenza was the most prevalent among all respiratory viruses detected. The proportion of positive tests for the other respiratory viruses declined as compared to previous weeks (rhinovirus 5.7%, coronavirus 4.7%, hMPV-4.6%, adenovirus-2.1%, parainfluenza-1.3%).

In the United States², in EW 09, influenza activity remains relatively low, but is elevated in some parts of the country. At the national level, the proportion of ILI consultations (2.0%) remained below the national baseline (2.4%). Regions 5 (midwest part of the country) and 7 (northwest part of the country) reported ILI activity at or above their region-specific baselines and three states (Kansas, Missouri, and Oklahoma) reported high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 09 (7.6%) was below the epidemic threshold for this time of year (7.9%). In EW 09, one pediatric death associated with influenza/H3 was reported. Among all samples tested during EW 09 (n=4,776), the percentage of samples positive for influenza (21.3%) increased. Nationally, among the positive samples, 94.7% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 5.3% were influenza B. Of the antigenically characterized influenza B viruses (n=78), 46.2% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine and 53.8% were of the B/Yamagata lineage. Of the influenza A(H1N1)pdm09 isolates tested for resistance against oseltamivir (n=165), 0.6% (n=1) showed resistance.

In Mexico, according to laboratory data, in EW 09, of the total samples analyzed, the proportion of samples positive for influenza decreased to ~25%, which is the lowest that it has been in 2012. Influenza A(H1N1)pdm09 was the predominant circulating virus.

Caribbean

CAREC*, in EW 09, received epidemiological information from Barbados, Dominica, Jamaica, Suriname and Trinidad and Tobago. In EW 08, the severe acute respiratory infection (SARI) hospitalization rate was ~1%, which was lower than the previous week (2%). The highest SARI hospitalization rate was reported among children aged 6 months – 4 years (3.7% of hospitalized children in this age group were SARI cases). No SARI related deaths were reported in EW 08. According to laboratory data, in 2012, through EW 09, RSV has been the predominant respiratory virus detected, followed by influenza A(H1N1)pdm09 and influenza A(H3N2).

In Jamaica, in EW 09, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.9%, slightly lower as compared to the previous week. The proportion of SARI admissions was 0.8%, which was slightly higher than the previous week. In EW 09, no SARI deaths were reported. According to laboratory data, influenza A(H1N1)pdm09 virus has been the predominant circulating virus in 2012.

In Cuba, according to laboratory data, in EW 09, among all samples tested (n=59), 32% were positive for respiratory viruses. No influenza viruses were detected this week.

In Dominican Republic, in EW 10, among all samples tested (n=24), 12.5% were positive for respiratory viruses. In 2012, through EW 10, parainfluenza has been the predominant respiratory virus detected. Influenza A(H1N1)pdm09 has been detected in the last 2 EWs.

Central America

In Costa Rica, in EW 08, according to laboratory data, among all samples tested (n=102), the percentage of positive samples for respiratory viruses (2%) was lower than the previous week. Influenza A(H1N1) pdm09 and influenza H3N2 viruses were detected.

In Guatemala, in EW 09, according to laboratory data, among all samples tested (n=53), the percentage of positive samples for respiratory viruses was 32.1%, being detected influenza A(H1N1) pdm09 (47.1%), influenza B (23.5%) and other virus (9.4%). The national laboratory stated that the increased detection of influenza A(H1N1) pdm09 observed in the EW 09, had been due to the inclusion of data from a cohort study.

In Honduras, in EW 09, the proportion of ILI consultations (5.6%) presented an increased trend in comparison with the previous EW. The proportion of SARI hospitalizations (3.6%) was lower than the previous EW (8.7%). In the EW 09, two SARI-related deaths were reported. According to laboratory data, in EW 09, among all samples tested (n=30), the percentage of positive samples to respiratory viruses was of 7.1%, being detected adenovirus and influenza A(H1N1) pdm 09.

In Nicaragua, in EW 09, among all samples tested (n=41), 4.9% were positive for other respiratory viruses. Influenza viruses were not detected.

South America – Andean

In La Paz, Bolivia, in EW 09, according to laboratory data, among all samples tested (n=14), the percentage of positive samples for other respiratory viruses was 21.4%. Influenza viruses were not detected. In Santa Cruz, in accordance to the report sent by the CENETROP during the EW 10, among all samples tested (n=4), there were detected influenza A(H1N1) pdm09 (50%) and influenza B (50%) viruses. In Colombia, according to laboratory data, in EW 09, among all samples tested (n=7), influenza viruses were not detected

In Peru³, in EW 08, at the national level, 336,713 episodes of ARI in children under 5 were reported, 1% (3,341) of which were pneumonias. According to the ARI and pneumonia epidemic channels in children under 5 years of age in EW 08, levels were within what is expected for this time of the year as compared to what was reported in previous years.

In Venezuela⁴, in EW 07, the ARI and pneumonia endemic channels show a decreasing trend in comparison with the previous EW; the children <7 year of age was the most affected group for acute respiratory illness. According to laboratory data, from 1 January up to 24 February, among all samples tested (n=279), the percentage of positive samples for respiratory viruses was 5.4%. Among the positive samples, 86.7% were influenza A(H3N2) and influenza A(H1N1) pdm09 (13.3%).

* Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago

South America – Southern Cone

In Argentina⁵, in EW 05, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained low and within what was expected for this time of year. According to the laboratory data, in EW 08, among all samples tested (n=54), 13% were positive for respiratory viruses. In 2012, through EW 8, RSV and adenovirus have been the predominant respiratory viruses circulating with sporadic detections of influenza A.

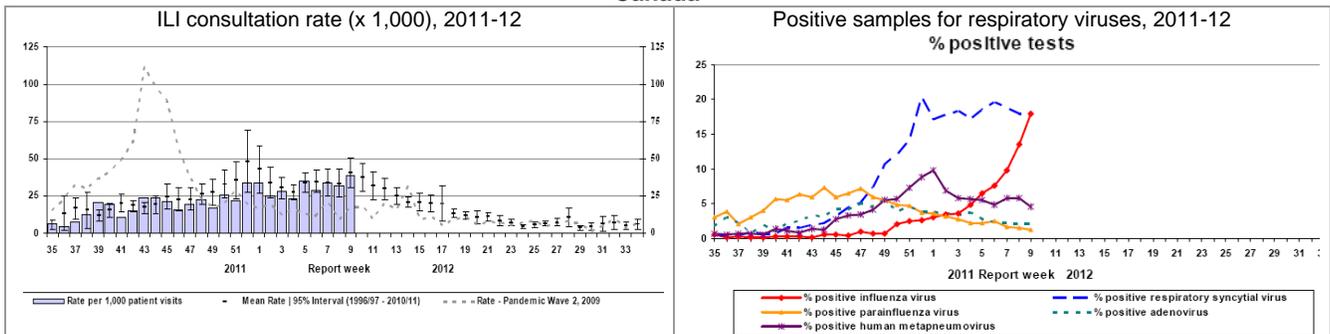
In Chile⁶, in EW 09, at national level, ILI activity remained in a low level and similar to the previous week and within what is expected for this time of the year (1 per 100,000 inhabitants). The percentage of consults in urgency services for respiratory reasons (12.7%) was similar to what was observed in the two previous years. In EW 09, the proportions of SARI hospitalization and SARI ICU admissions remained under 5%. In the SARI surveillance, two deaths were reported in EW 09 (6.9% among the total deaths). According to laboratory data, at national level, in EW 09, among all the samples tested (n=263), the percent of positivity for respiratory viruses was 6.1%; remaining adenovirus and parainfluenza as predominant viruses detected, followed by influenza A(H3N2).

In Paraguay⁷, in EW 09, the proportion of ILI consultations (2.9%) was lower than the previous weeks. The proportions of SARI hospitalization, SARI ICU admissions and deaths remained under 10%. According to laboratory data, in 2012, through EW 09, among all samples tested (n=100), low circulation of respiratory viruses was detected, mainly adenovirus and followed by influenza B, parainfluenza and influenza A(H1N1)pdm09.

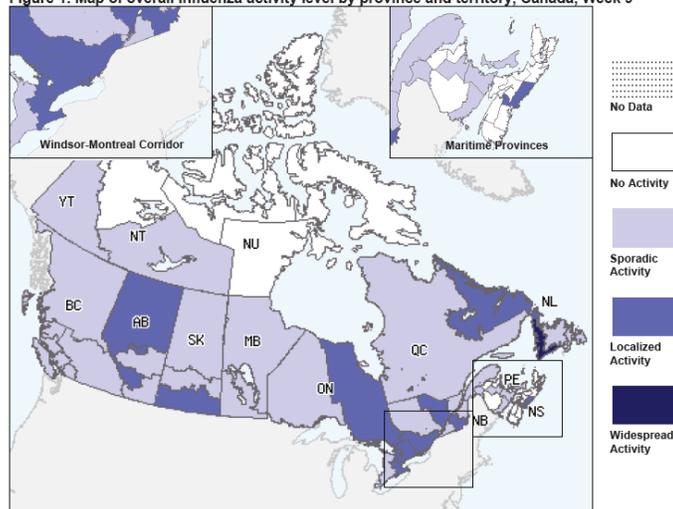
Graphs

North America

Canada

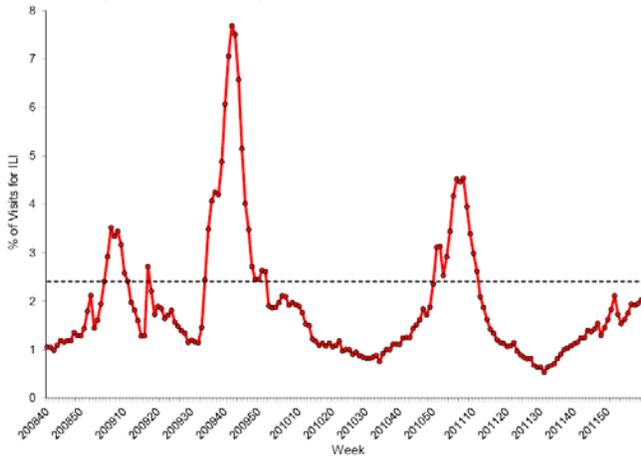


Influenza activity levels by Provincial and Territorial MoH
Figure 1. Map of overall Influenza activity level by province and territory, Canada, Week 9

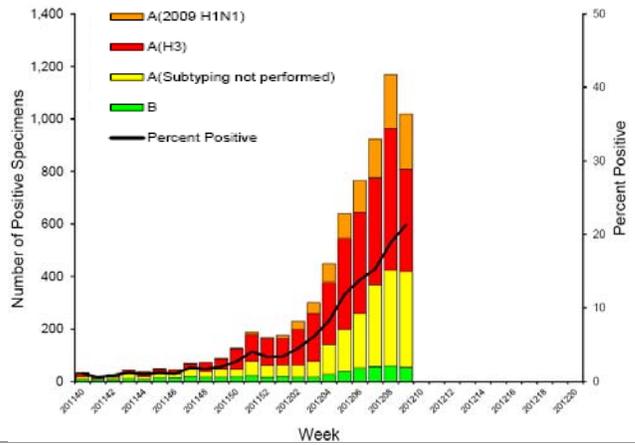


United States

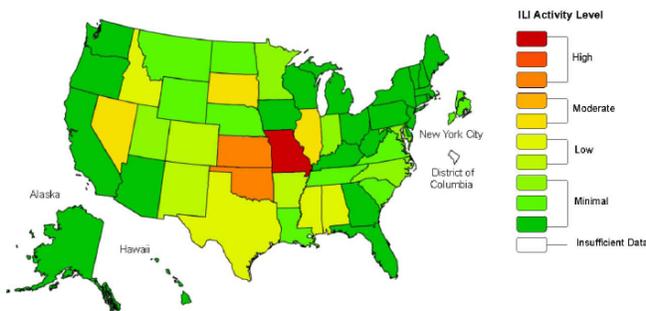
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – March 3, 2012



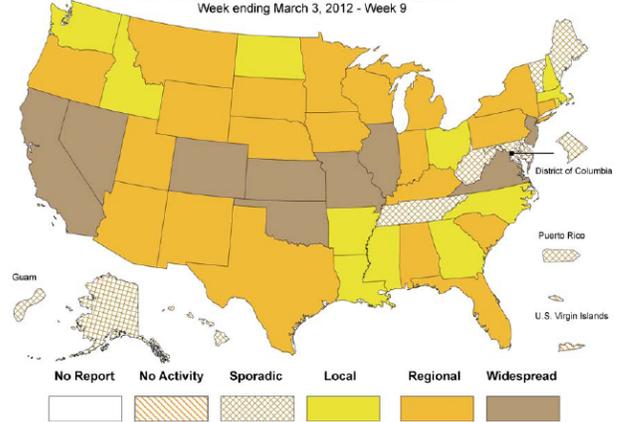
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2011-12 Influenza Season Week 9 ending Mar 03, 2012

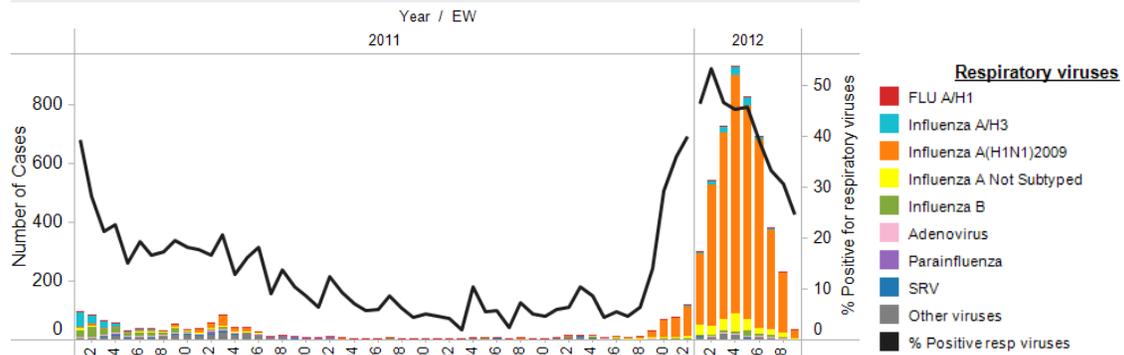


Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists* Week ending March 3, 2012 - Week 9



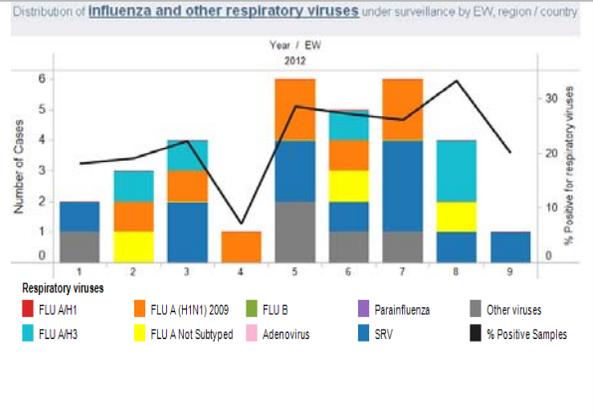
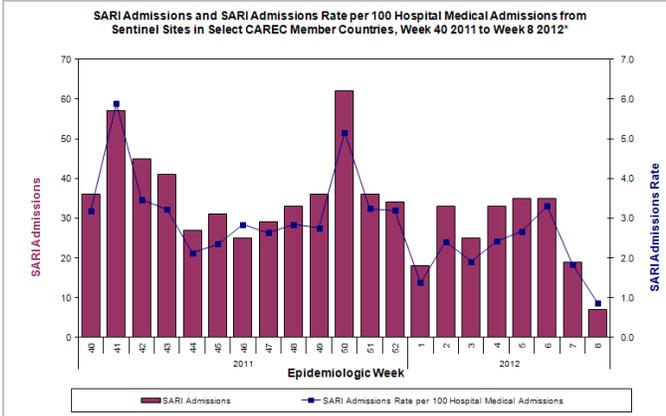
Mexico

Distribution of influenza and other respiratory viruses under surveillance by EW, region / cour

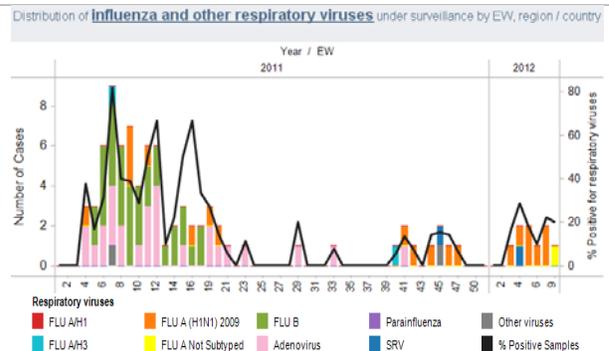
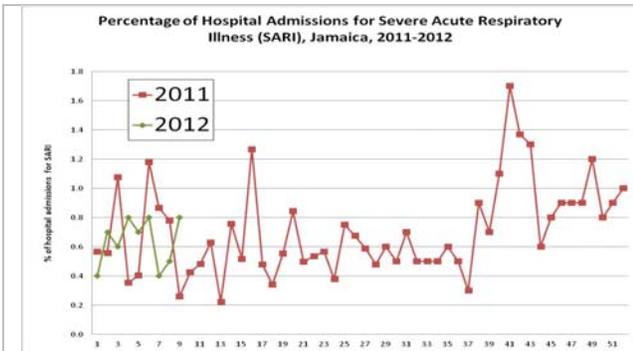


Caribbean

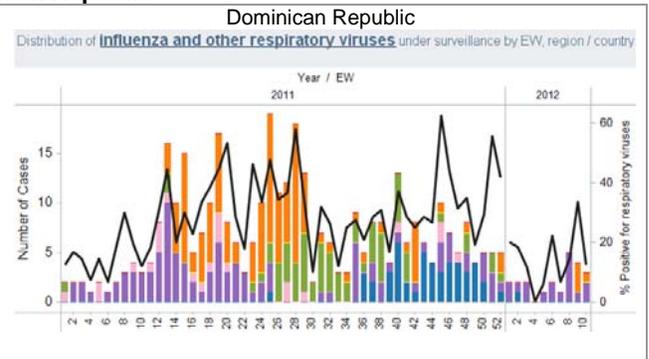
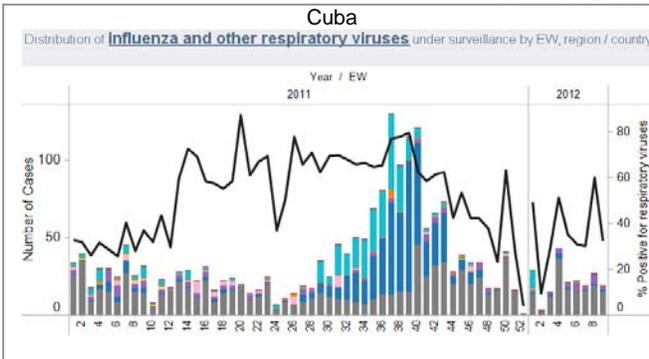
CAREC



Jamaica



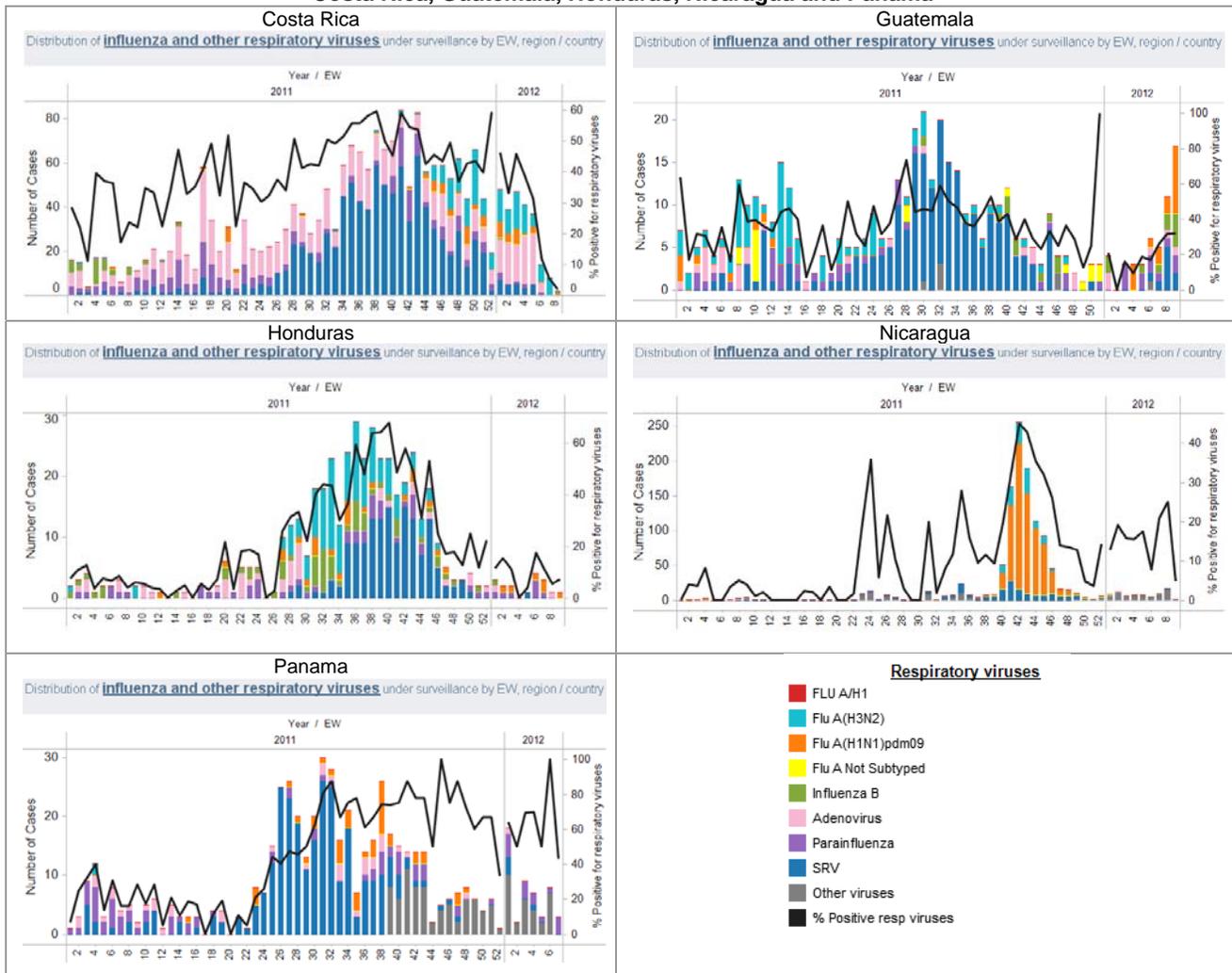
Cuba & Dominican Republic



- Respiratory viruses**
- FLU A/H1
 - FLU A (H1N1) 2009
 - FLU B
 - Parainfluenza
 - Other viruses
 - FLU A/H3
 - FLU A Not Subtyped
 - Adenovirus
 - SRV
 - % Positive Samples

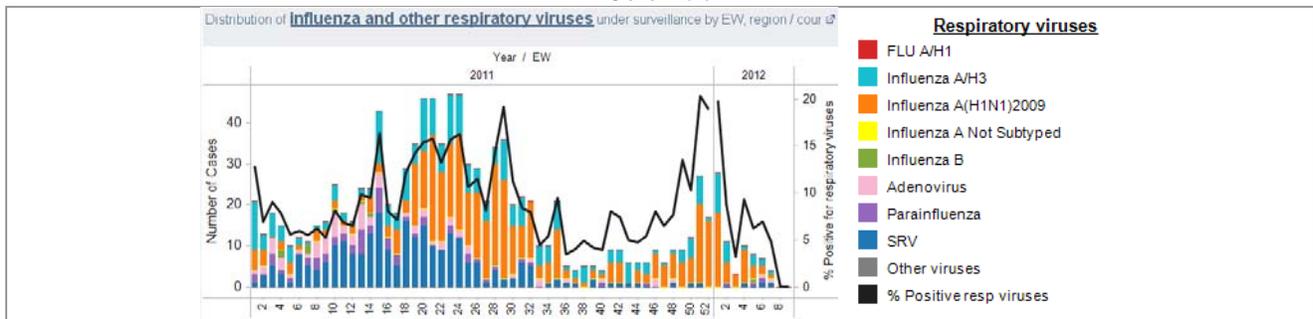
Central America

Costa Rica, Guatemala, Honduras, Nicaragua and Panama

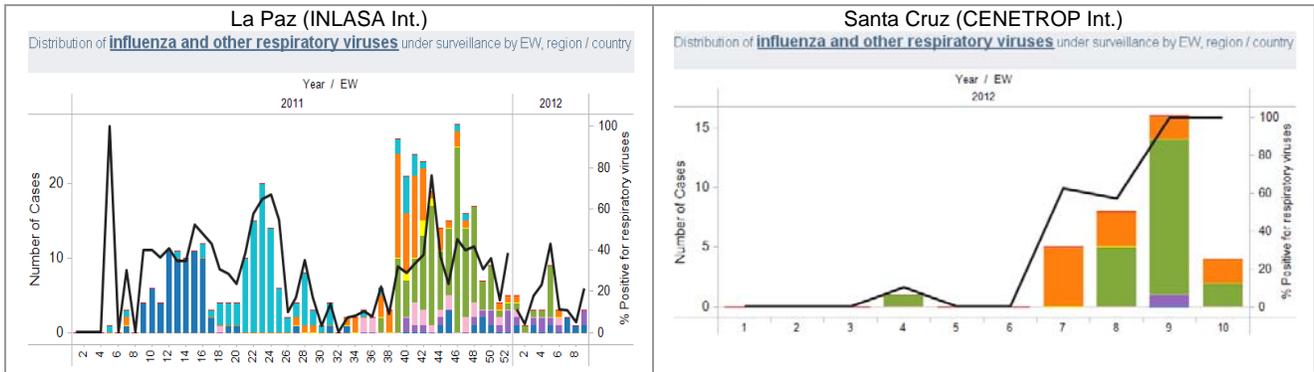


South America - Andean

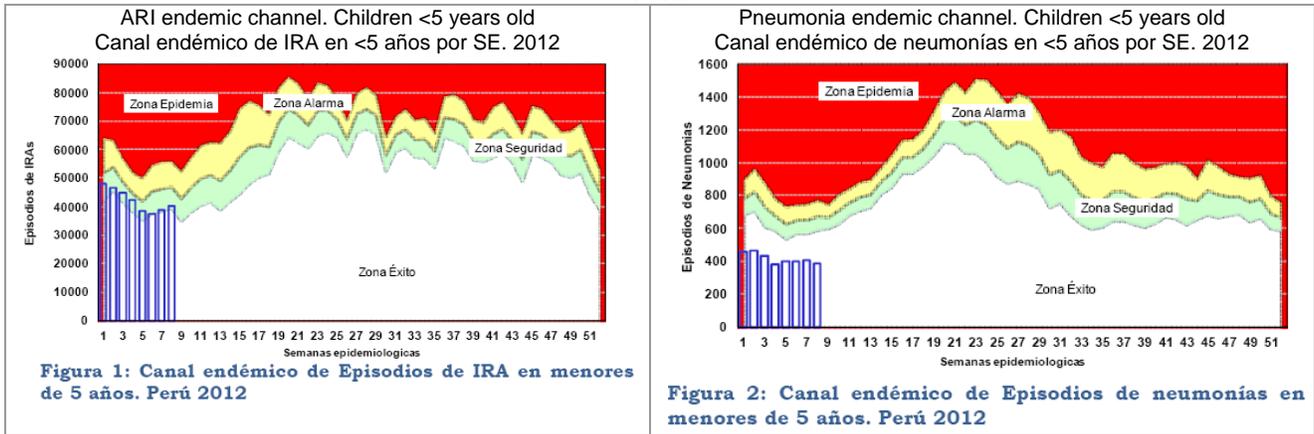
Colombia



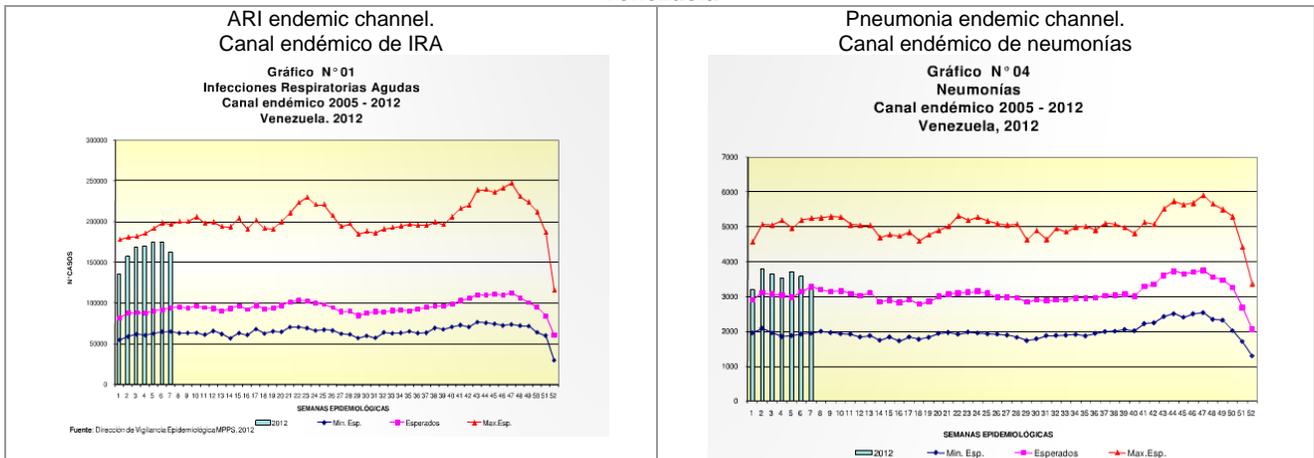
Bolivia



Peru

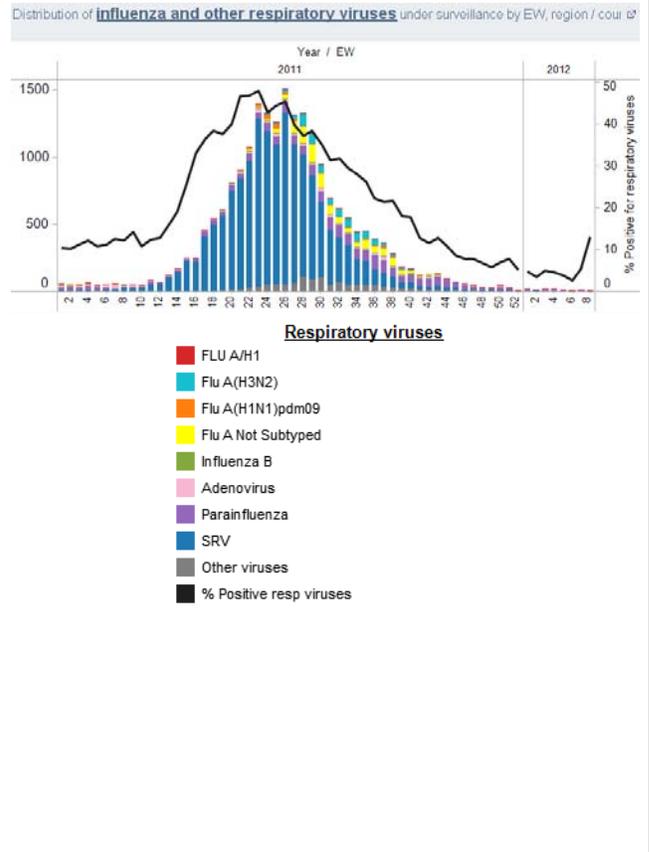
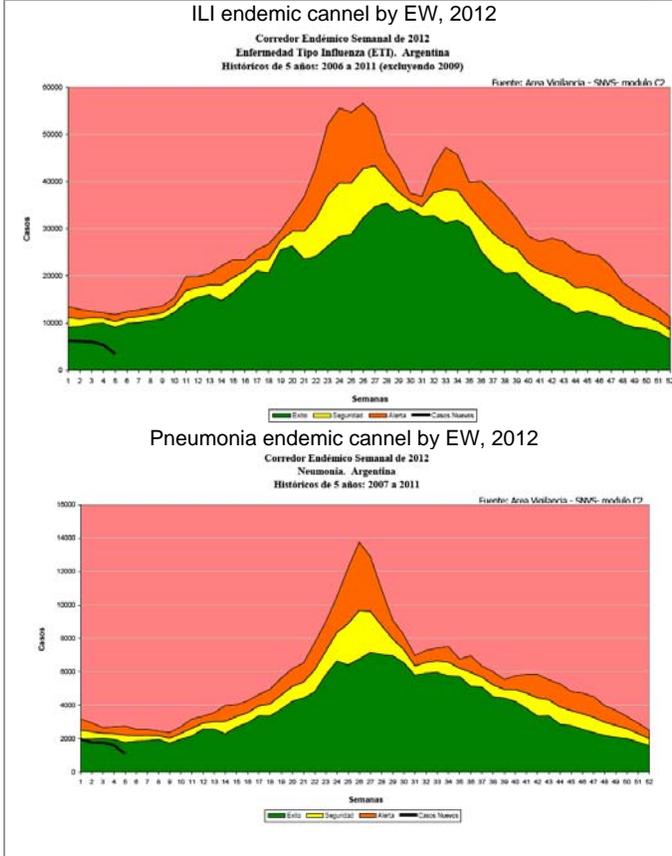


Venezuela

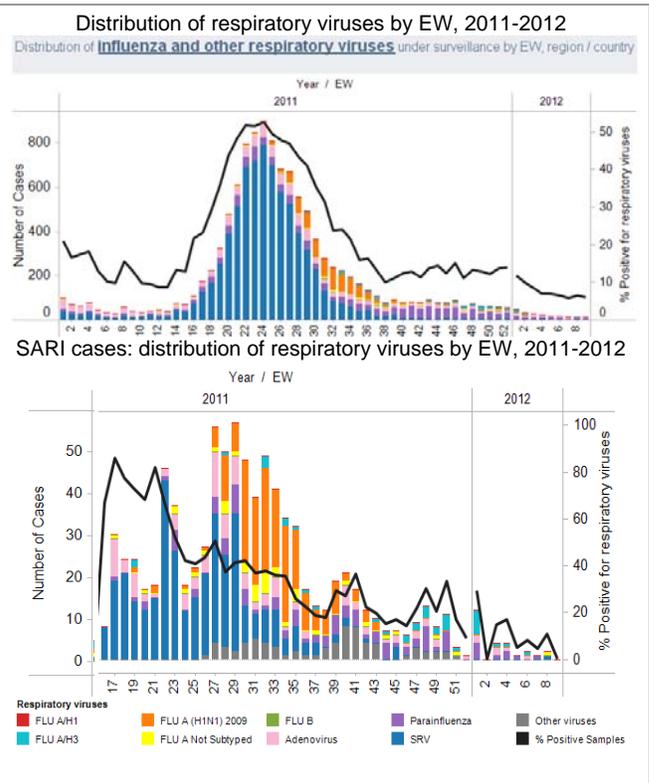
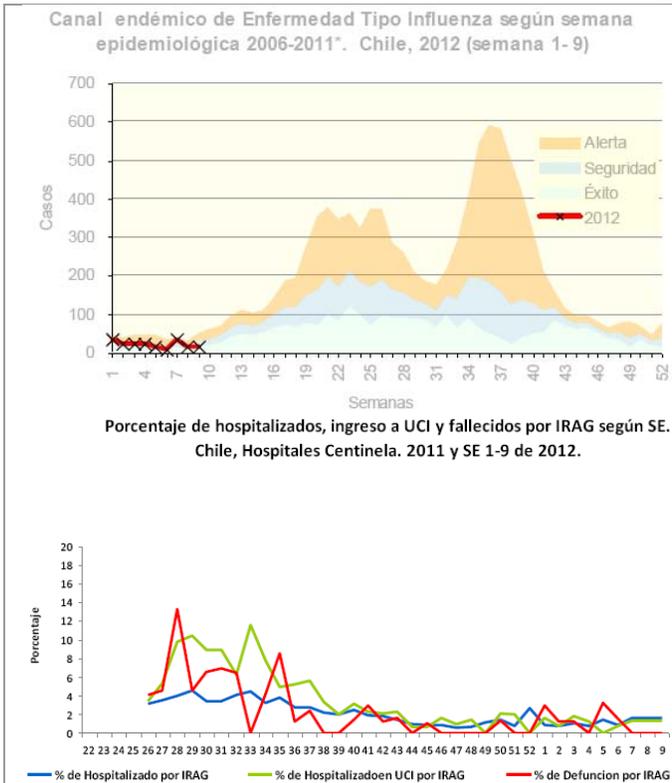


South America – Southern Cone

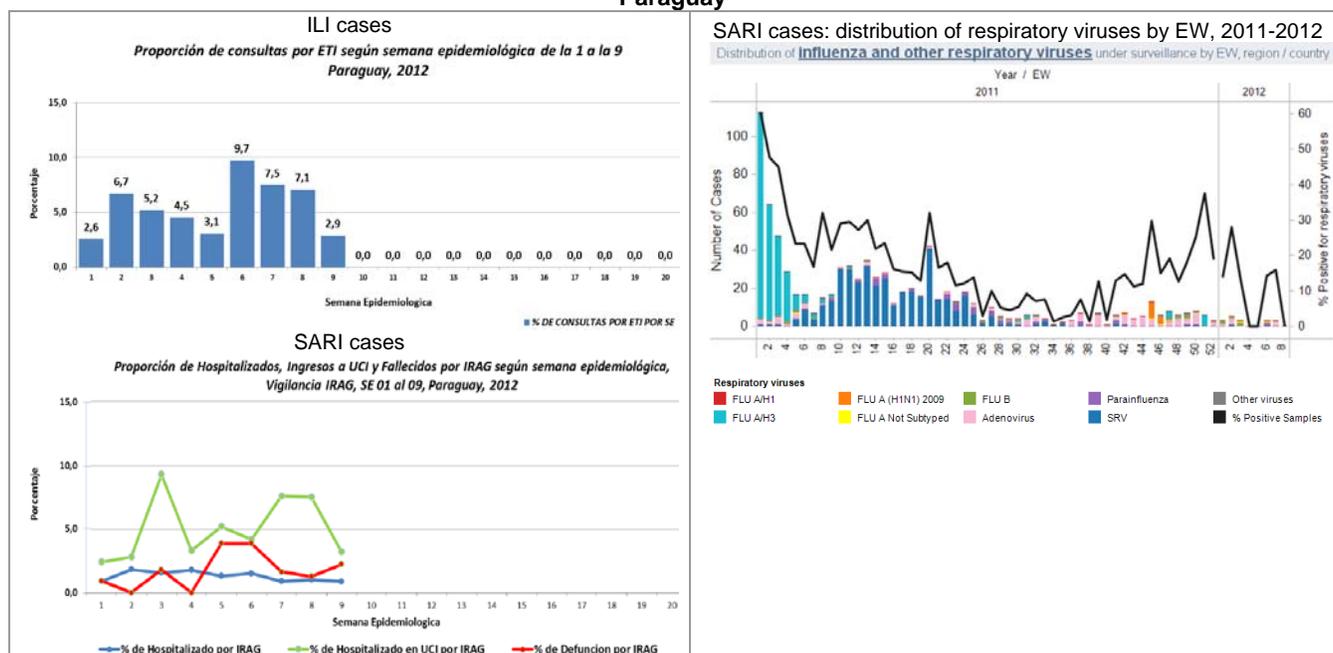
Argentina



Chile



Paraguay



¹ FluWatch Report. EW 09. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 09. Centers for Disease Control and Prevention

³ Perú. Sala de Situación de Salud. SE 06. Ministerio de Salud. Dirección General de Epidemiología

⁴ Venezuela. Boletín epidemiológico - SE 07. Ministerio del Poder Popular para la Salud. Disponible en: http://www.mpps.gob.ve/index.php?option=com_content&view=article&id=549&Itemid=915

⁵ Argentina. Actualización situación de enfermedades respiratorias 2012. SE 09.

⁶ Chile. Informe de situación. SE 09. Available at: www.pandemia.cl

⁷ Paraguay. Boletín epidemiológico semanal SE 09. Available at:

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