



Regional Update EW 15, 2012

Influenza
(April 24, 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 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. Except in Dominican Republic, where an increased detection of parainfluenza and influenza A(H3N2) was reported.
- In South America, influenza 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) 15, 2012, influenza activity appears to have peaked and is declining. In EW 15, the influenza-like illness (ILI) consultation rate decreased as compared to the previous week, but remained within expected levels for this time of year. In EW 15, among the total samples analyzed (n=4,440), the proportion of samples positive for influenza (18.9%) decreased as compared to the previous week. Of the total cases positive for influenza, the percent positive for influenza B (63.4%) increased and continued to be greater than the percent positive for influenza A (36.6%). Concerning other respiratory viruses, the proportion of tests positive for RSV (7.0%) continued to decline, and influenza was the most prevalent among all respiratory viruses detected.

In the United States², in EW 15, influenza activity remained relatively low. At the national level, the proportion of ILI consultations (1.5%) was below the national baseline (2.4%). Region 10 (northwest part of the country) reported ILI activity above its' region-specific baselines but this week all states reported low to minimal ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 15 (7.0%) was below the epidemic threshold for this time of year (7.7%). In EW 15, two pediatric deaths associated with influenza were reported (1 with influenza A(H1N1)pdm09 and 1 with influenza A(H3)). Among all samples tested during EW 15 (n=3,730), the percentage of samples positive for influenza (17.5%) continued to decrease. Nationally, among the positive samples, 81.6% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 18.4% were influenza B. Of the antigenically characterized influenza B viruses (n=153), 41.8% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 58.2% were of the B/Yamagata lineage.

In Mexico, according to laboratory data, in EW 15, of the total samples analyzed, the proportion of samples positive for influenza remained low (6.1%), detecting few samples of influenza A(H1N1)pdm09 and influenza B.

Caribbean

CAREC*, in EW 15, received epidemiological information from 6 countries: Barbados, Belize, Jamaica, Suriname, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 15, the proportion of severe acute respiratory infection (SARI) hospitalization was 1.3%, lower as compared to the prior week (2.1%). Children aged < 6 months had the highest rate of SARI hospitalization (4.7% of hospitalized children in these age

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

groups were SARI cases). No SARI related deaths were reported in week 15, 2012. According to laboratory data, in the past four weeks, influenza A(H1N1)pdm09, influenza A(H3N2), RSV, adenovirus, parainfluenza and rhinovirus have been confirmed.

In Jamaica for EW 15, the proportion of consultations for acute respiratory illness (ARI) was 4.6% which was 0.4% less than the previous week. The proportion of admissions due to SARI was 0.5% which showed a 0.7% decrease compared to the previous week. There was no SARI death reported for EW 15. No influenza viruses were detected in EW 15.

In Cuba, according to laboratory data, in EW 15, among all samples tested (n=43), 16.3% were positive for respiratory viruses and 2.3% for influenza viruses (influenza B).

In Dominican Republic, in EW 16, among all samples tested (n=32), ~50% were positive for respiratory viruses and 31.2% were positive for influenza viruses. These proportions were higher than the previous weeks, because of an increased detection of parainfluenza and influenza A(H3N2).

Central America

In Costa Rica, in EW 15, according to laboratory data, among all samples tested (n=163), the percentage of positive samples for respiratory viruses was 21.3%, slightly higher than the previous week (19.7%), being detected adenovirus, influenza A(H3N2), SRV and parainfluenza.

In Guatemala, in EW 15, according to laboratory data, among all samples tested (n=23), the percentage of positive samples for respiratory viruses was 39.1%, higher than the previous week (22.7%), being detected influenza A(H1N1) pdm09 (88.9%), and influenza B (11.1%).

In Honduras, in EW 15, the proportion of ILI consultations (4.38%) presented an increased trend as comparison with the previous EW. The proportion of SARI hospitalizations (7.14%) was higher than the previous EW (4.6%). This week, there were reported 2 deaths in Tegucigalpa. According to laboratory data, in EW 15, among all samples tested (n=17), the percentage of positive samples to respiratory viruses was of 17.6%, being detected influenza A(H1N1)pdm09 and adenovirus.

In Nicaragua, in EW 15, no respiratory viruses were detected.

South America – Andean

In Bolivia, according to laboratory data from Santa Cruz (CENETROP laboratory), viral circulation in EW 15 was similar to what was observed in the prior five weeks, with a positivity of 40% among all samples analyzed (n=50), with a predominance of influenza B (80% among the positives). According to laboratory data from La Paz (INLASA laboratory), circulation in EW 15 in the Departments of La Paz, Oruro, Potosi, Tarija, Pando, Beni, and Chuquisaca showed a positivity of 12.9% among all samples analyzed (n=70), with a predominance of RSV (7/9). According to SARI surveillance, in the department of La Paz, since EW 11, there has been an increase in the proportion of SARI hospitalizations, to EW 15 (23.6%); besides, the proportion of SARI ICU admissions (22.6%) and the deaths due to SARI (6.3%) increased as compared to the prior week. Of samples from SARI cases (n=67), the predominant virus was RSV.

In Colombia, according to laboratory data, in EW 15, among all samples tested (n=59), the percentage of positive samples to respiratory viruses was of 23.2%, being detected influenza A(H1N1)pdm09 mainly. The increased of influenza A detection in EWs 14-15, was associated with an outbreak of influenza A(H1N1)pdm09 in an army battalion in Putumayo. The outbreak has been already controlled.

In Ecuador, SARI cases have been decreasing since EW 11. In EW 14, the proportion of SARI hospitalizations, ICU admissions, and deaths remained below 5%. According to laboratory data, among all samples tested (n=70), 19.5% were positive for respiratory viruses, being RSV (13/17) the predominant virus.

In Peru³, at the national level, in 2012 through EW 14, 609,436 ARI cases in children under 5 were reported, and were within what is expected for this time of the year. 64% of ARI deaths in children under 5 were reported in the departments of Loreto, Lima, Huanuco, Puno, Cusco, and Junin. There was reported an increase of pneumonias in children under 5 since EW 11 (second week of March), probably related to the intense rains occurred in several areas of the country. Among the total of pneumonia cases in children under 5 years old, 44% were hospitalized and 1% died, mainly in the departments of Loreto, Amazonas and Arequipa.

In Venezuela⁴, in the EW14, 131,287 ARI cases were reported, 18.5% less than the previous week (n=161,137), with higher incidence in the children <7 year of age, mainly in the federal entities of Zulia, Miranda and Carabobo. According to laboratory data, from January 1st up to April 7th, among all the samples tested (n=586), the percentage of positive samples for respiratory viruses was of 4.3%. Concerning the influenza viruses, the viruses reported were: influenza A(H3N2) (64%), RSV (24%) and influenza A(H1N1) pmd2009 (12.0%) .

South America – Southern Cone

In Argentina⁵, in EW 11, 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 2012, through EW 14, among all samples tested (n=6,316), low circulation of respiratory viruses was detected, mainly parainfluenza and followed by adenovirus and RSV.

In Chile, in EW 15, at the national level, ILI activity continued to increase, reaching the alert zone of the endemic channel in EW 15 (5.5/100,000 population). However, 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=573), the percent positivity for respiratory viruses was 5.2%, with a predominance of RSV. According to SARI surveillance data, in EW 14, the proportion of positive samples among the tested (n=17) was 11,8%; detecting adenovirus and parainfluenza.

In Paraguay⁶, the proportion of ILI visits, which has been increasing in the last weeks, in EW 15 (4.2%) decreased as compared to the prior week. The proportion of SARI hospitalizations remained similar to the prior week and the SARI ICU admission proportion decreased. No SARI deaths were reported in EW 15. According to laboratory data, in EW 15, among samples analyzed (n=32), the proportion of positives to respiratory viruses was 6,3%, being detected RSV and adenovirus.

Graphs

North America

Canada

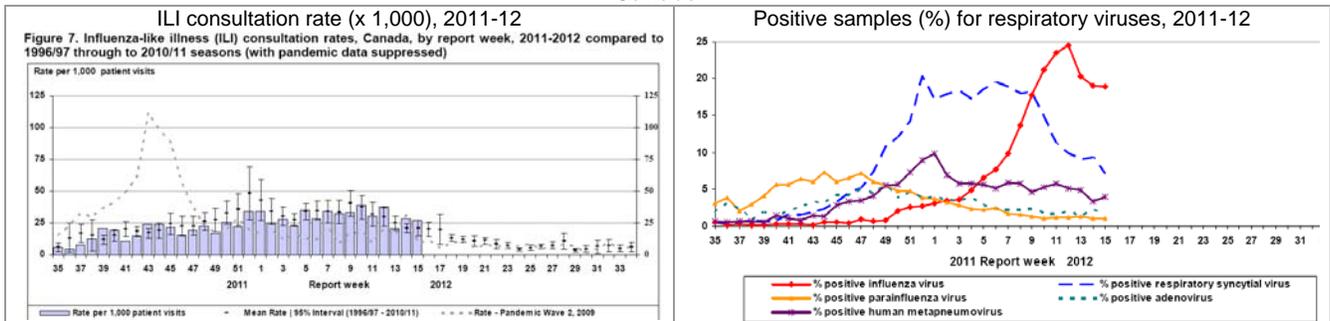
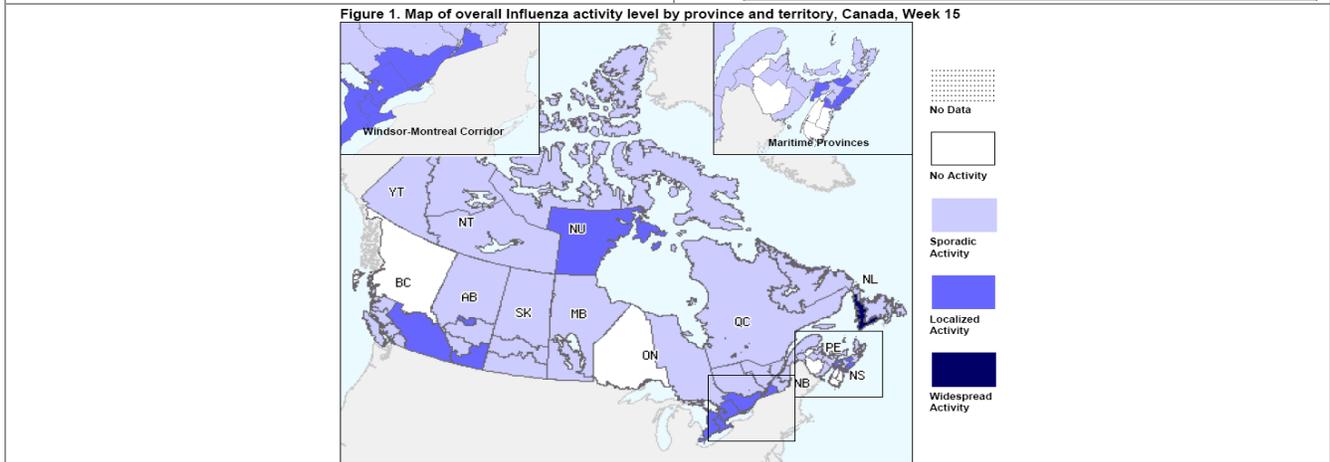
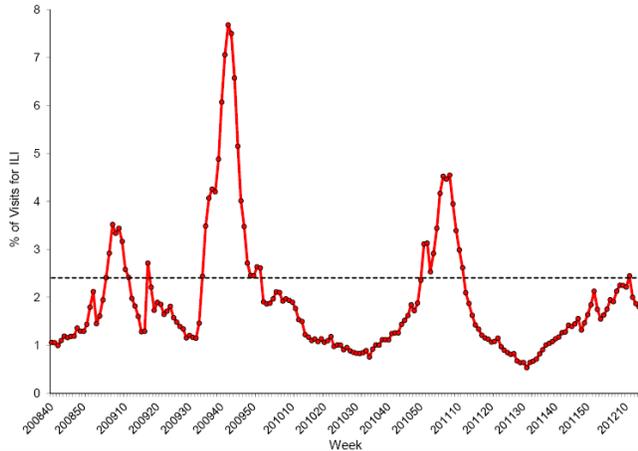


Figure 1. Map of overall Influenza activity level by province and territory, Canada, Week 15

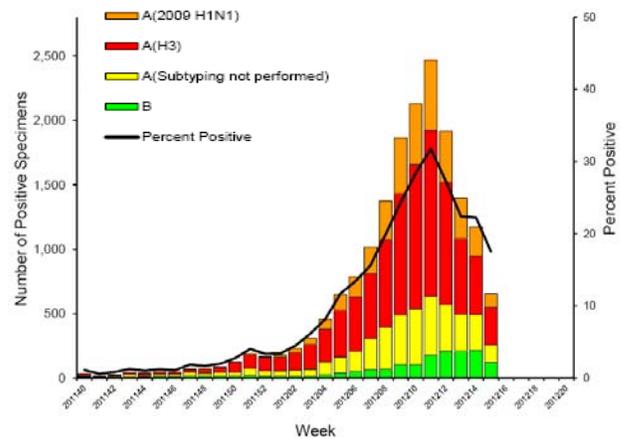


United States

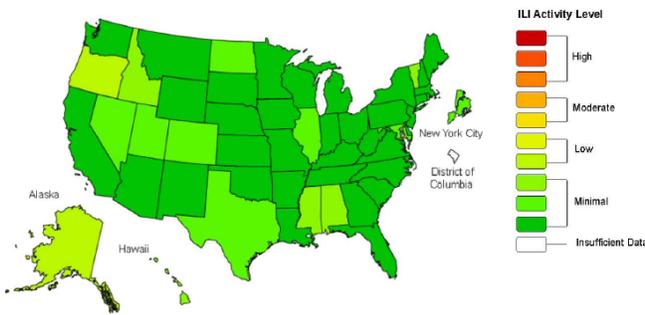
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – April 14, 2012



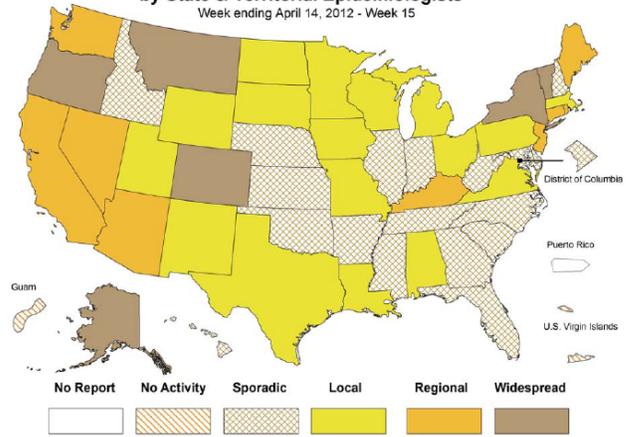
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2011-12 Influenza Season Week 15 ending Apr 14, 2012



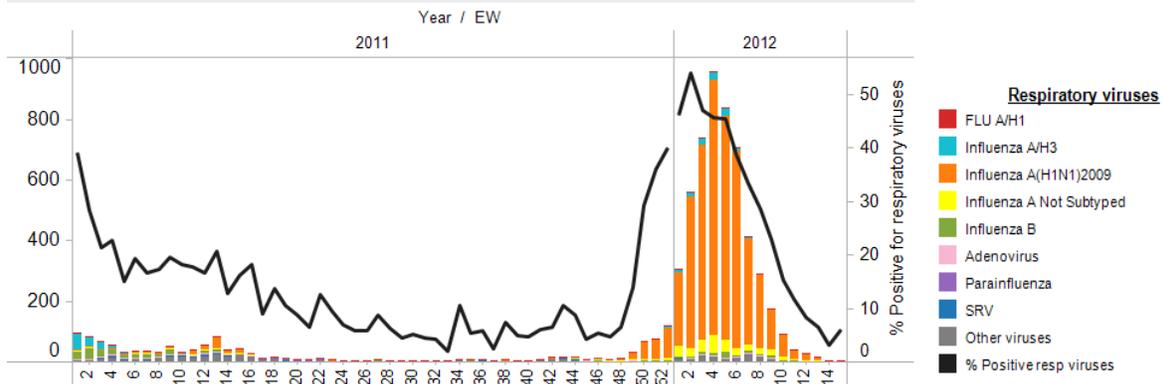
Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending April 14, 2012 - Week 15



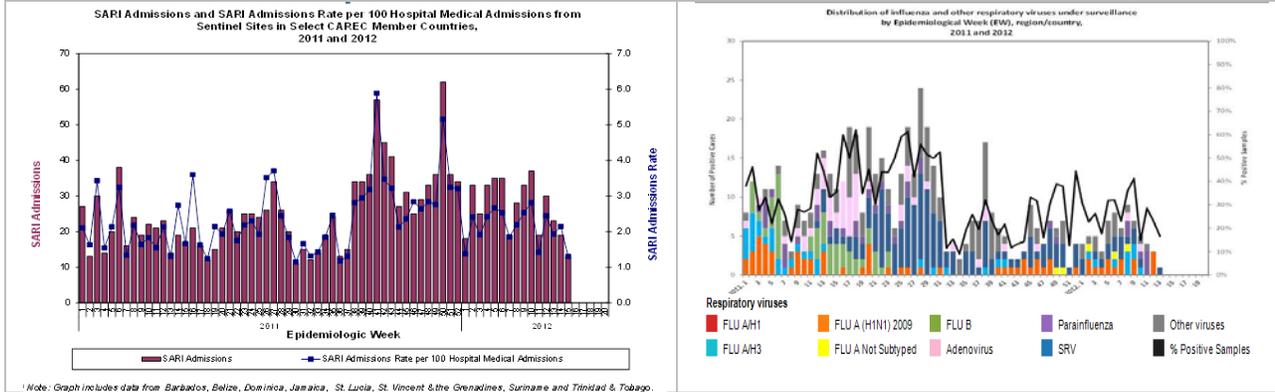
Mexico

Distribution of respiratory viruses by EW, 2011-2012

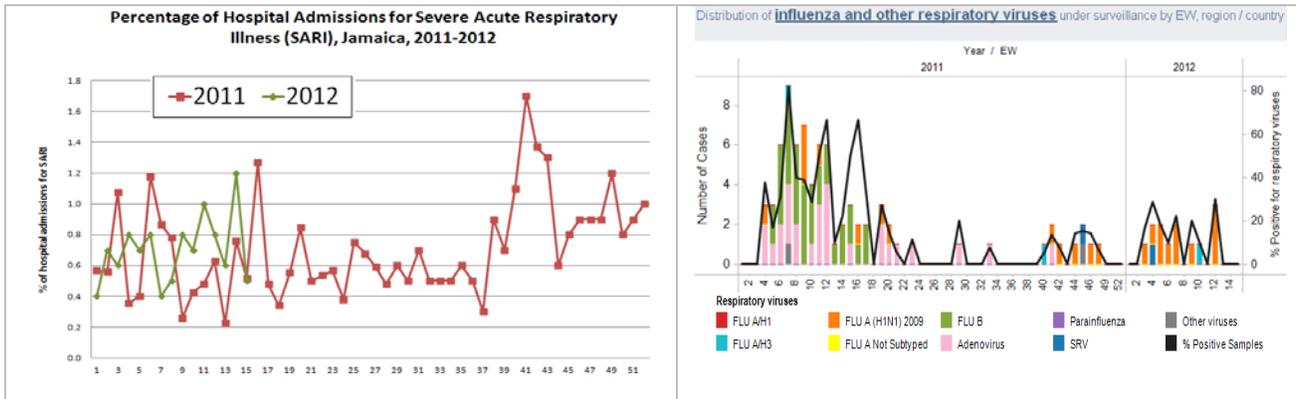
Distribution of influenza and other respiratory viruses under surveillance by EW, region / country



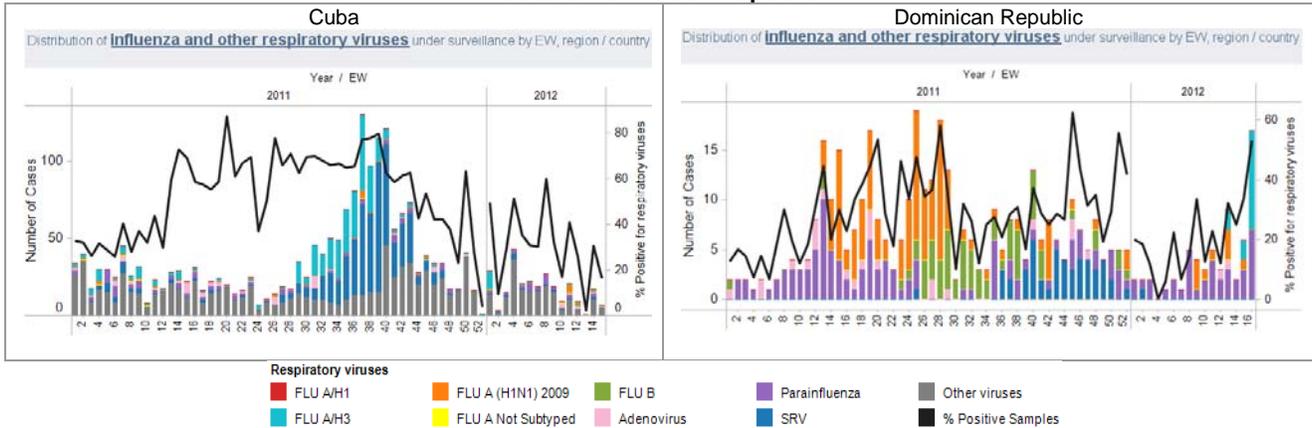
CAREC



Jamaica

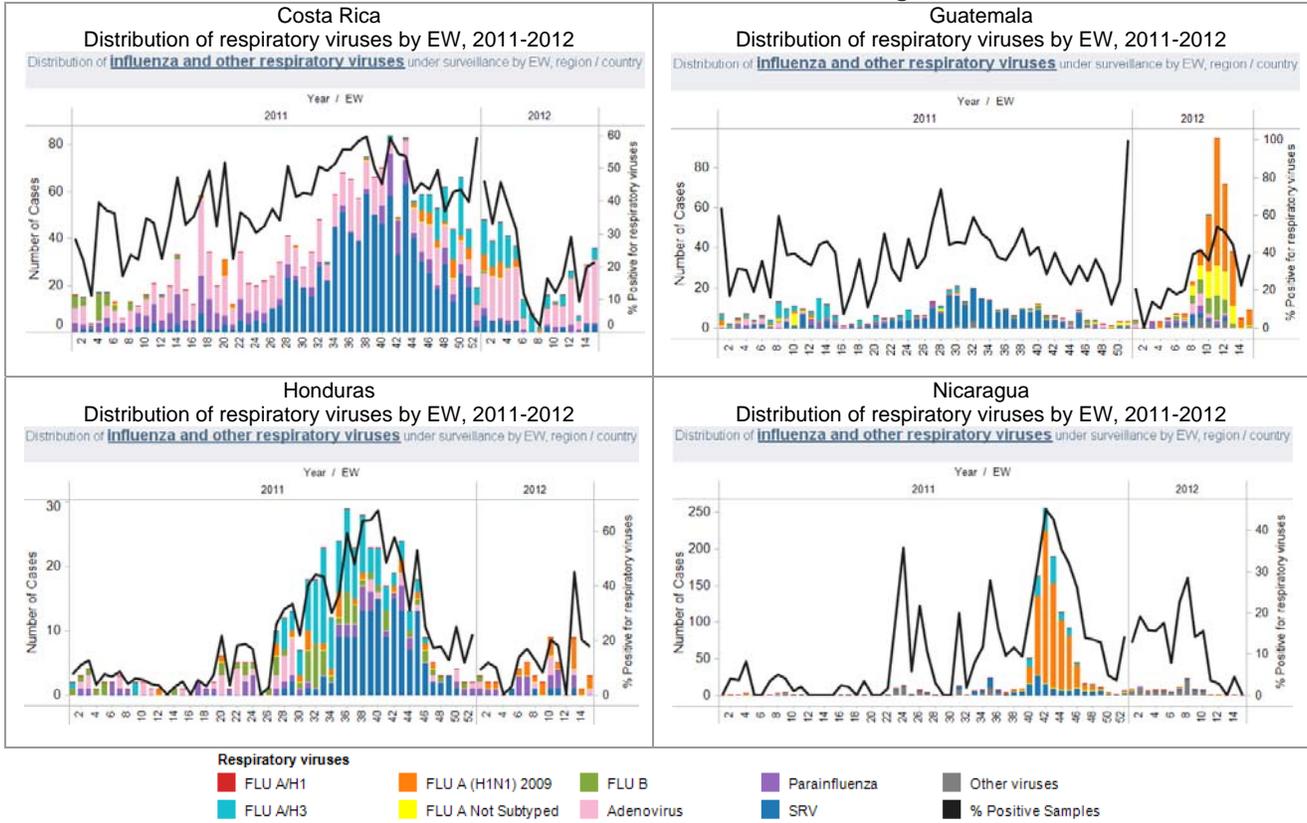


Cuba & Dominican Republic



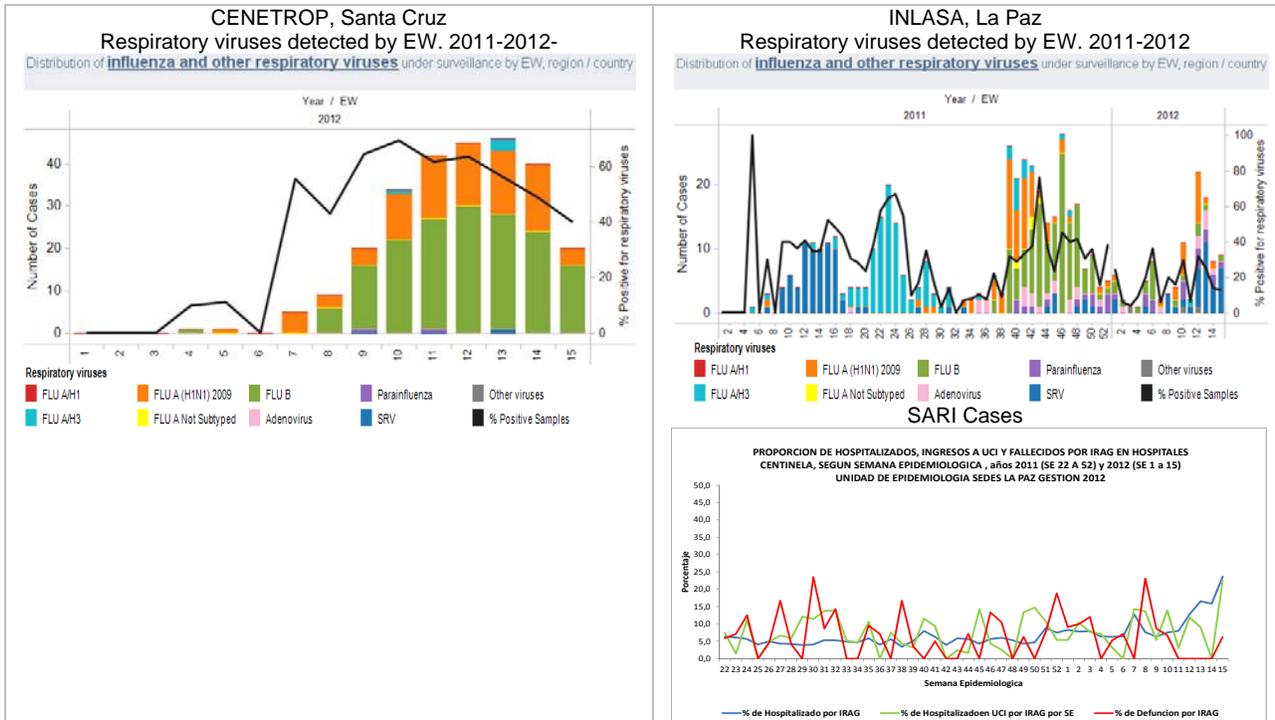
Central America

Costa Rica, Guatemala, Honduras and Nicaragua



South America - Andean

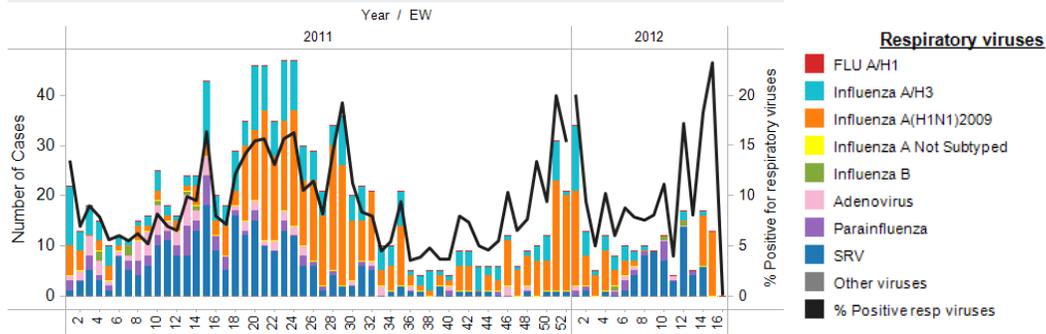
Bolivia



Colombia

Distribution of respiratory viruses by EW, 2011-2012

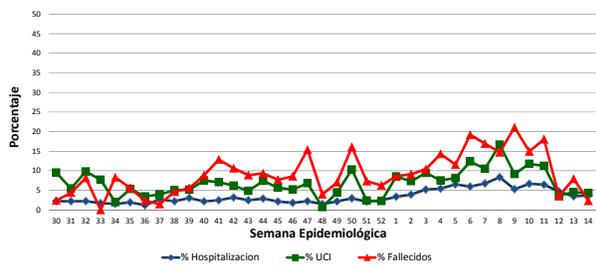
Distribution of **influenza and other respiratory viruses** under surveillance by EW, region / country



Ecuador

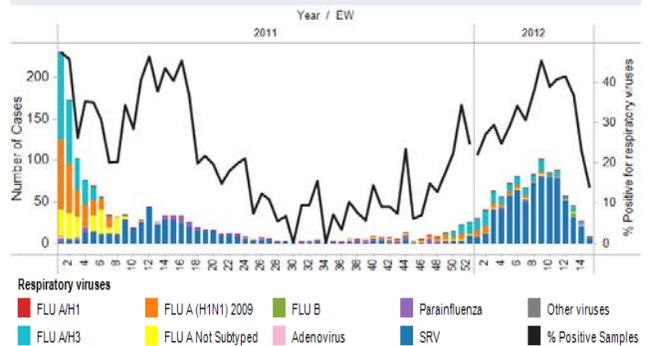
SARI Cases

IRAG(%): hospitalizaciones, admisiones a UCI y Fallecidos. Ecuador, de la SE 30/2011 a SE 14/2012.



Respiratory viruses detected by EW. 2011-2012

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



Peru

Pneumonia endemic channel. Children <5 years old. 2012

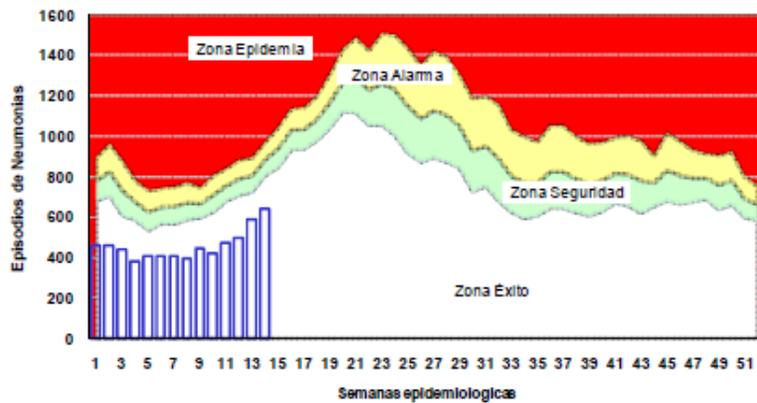
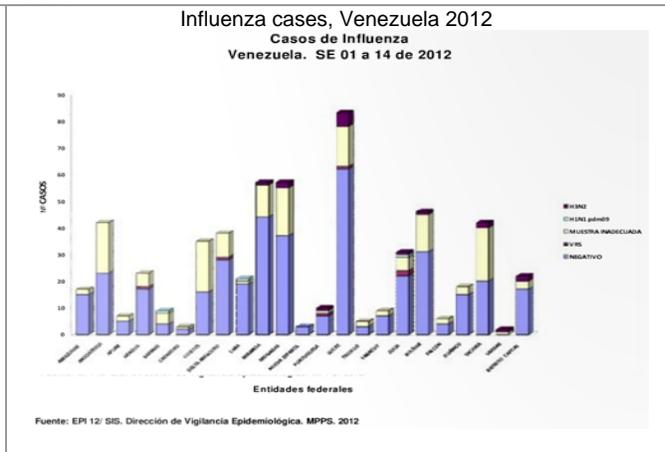
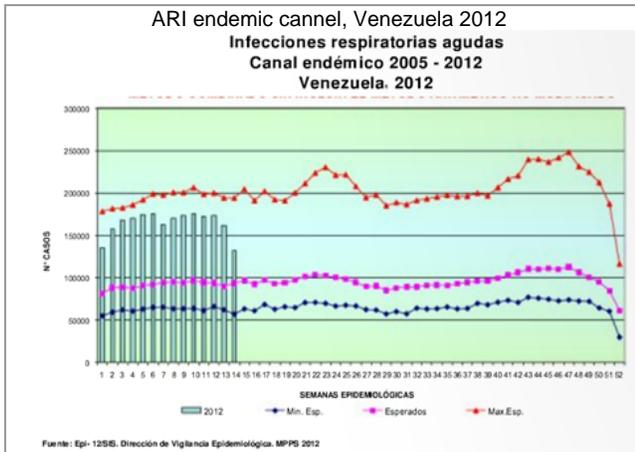


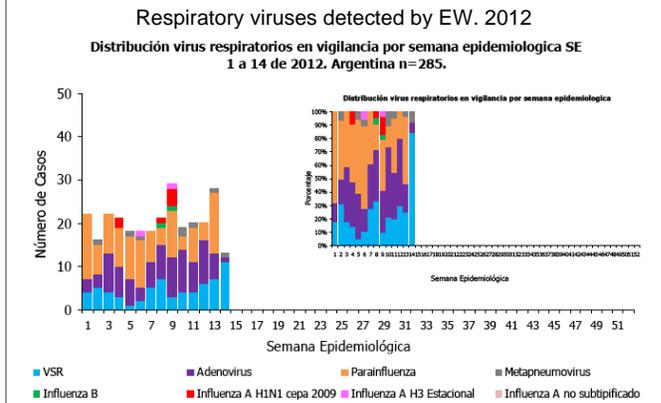
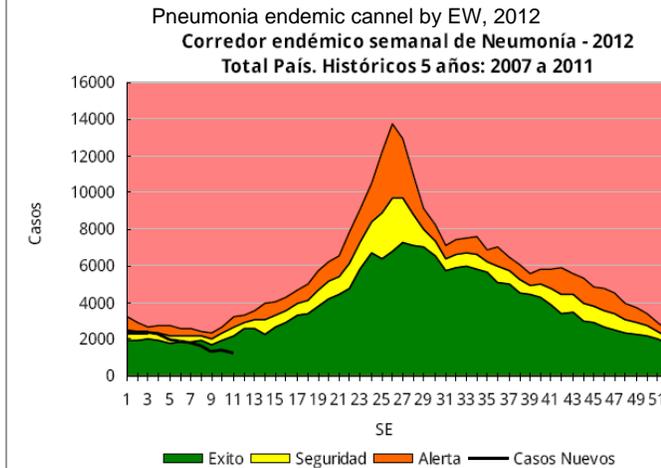
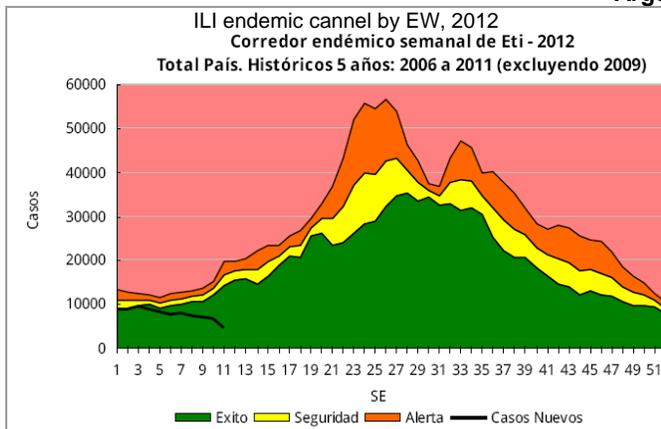
Figura 1: Canal Endémico episodios de neumonía en menores de 5 años, Perú 2012.

Venezuela

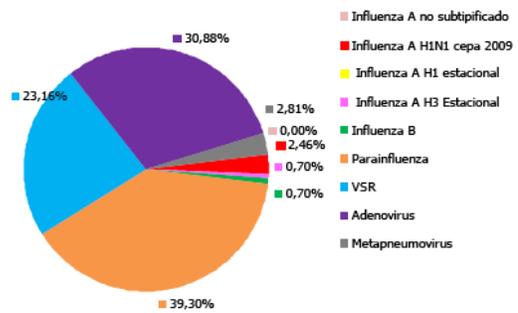


South America – Southern Cone

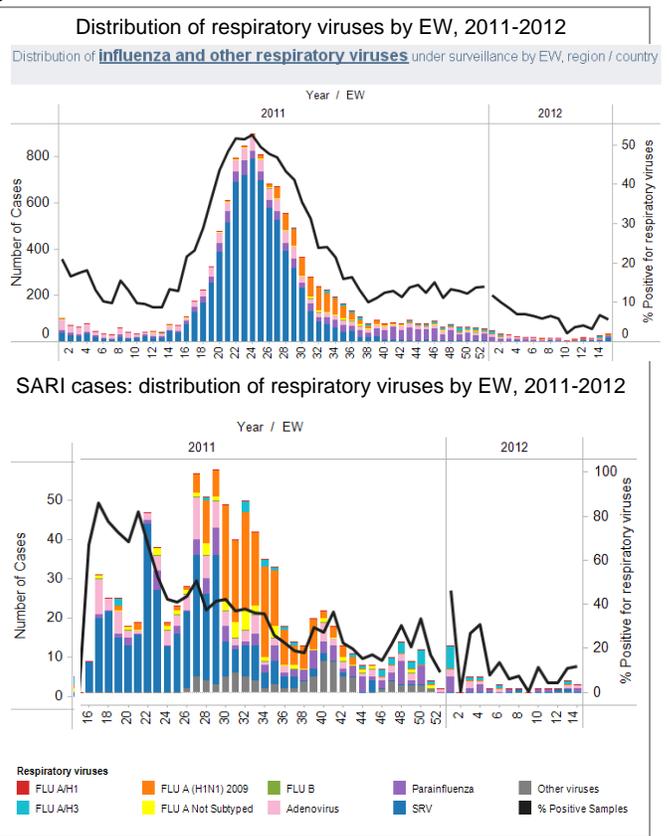
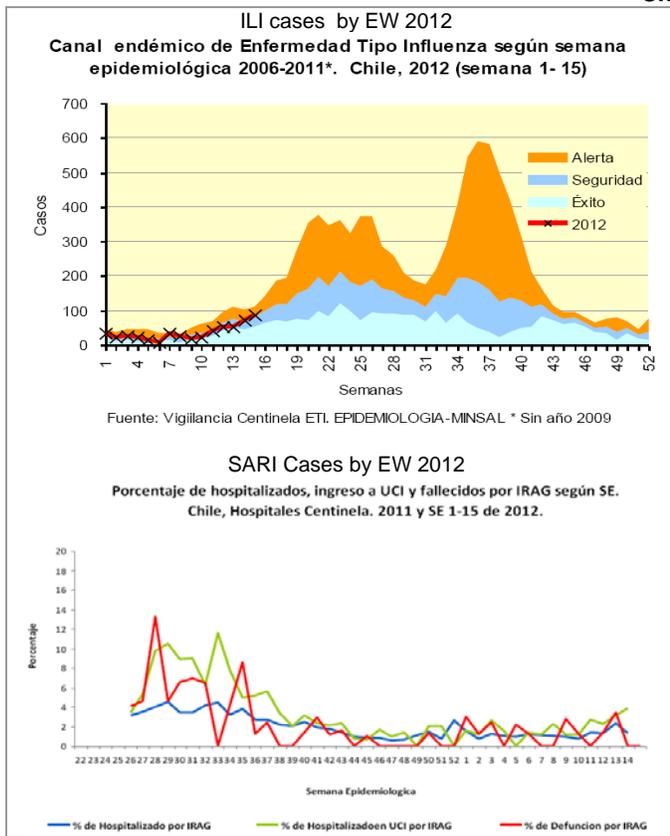
Argentina



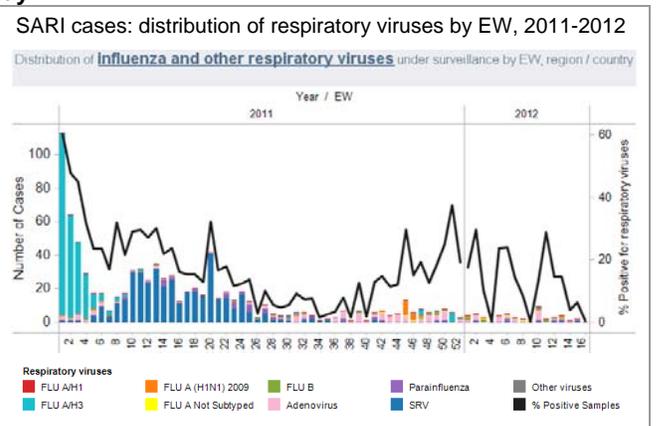
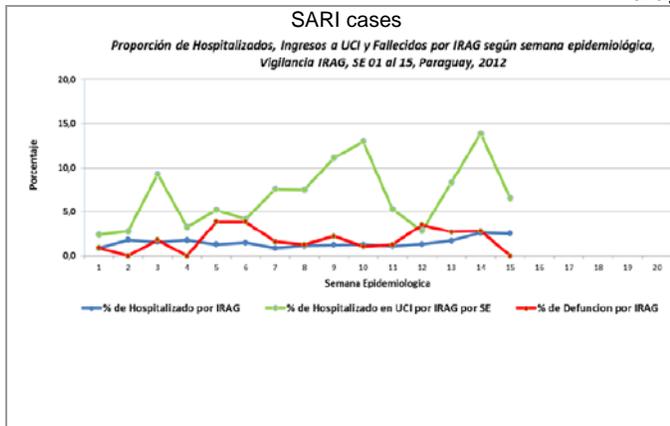
Cumulative respiratory viruses detected in 2012
Distribución porcentual de virus respiratorios identificados. Argentina. SE 1 a 14 de 2012. n=285.



Chile



Paraguay



¹ FluWatch Report. EW 15. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 15. Centers for Disease Control and Prevention

³ Perú. Sala de Situación de Salud. SE 14. Ministerio de Salud. Dirección General de Epidemiología

⁴ Venezuela. Boletín epidemiológico - SE 15. 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 15.

⁶ Paraguay. Boletín epidemiológico semanal SE 15. Available at:

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