



Regional Update EW 04, 2012

Influenza
(February 7, 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 but remained within the expected level for this time of year. Among influenza viruses, influenza A(H3N2) was predominant in Canada and United States and influenza A(H1N1)pmd09 in Mexico.
- In Central America and the Caribbean, influenza activity remained low or within the expected level for this period of time; except in Costa Rica, where acute respiratory illness increased (ILI and SARI cases) with predominance of adenovirus and influenza A(H3N2).
- In South America, influenza activity and acute respiratory illness activity remained low or within the expected level for this period of time. Increased RSV activity and co-circulation of influenza A(H3N2) and influenza A(H1N1)pmd09 were reported in Ecuador.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 04, 2012, influenza activity increased in several regions. In EW 04, influenza-like illness (ILI) consultation rate increased to 32.3 per 1,000 consultations and but remained within expected levels for this time of year. In EW 04, among the total samples analyzed (n=3,768), the proportion of samples positive for influenza (4.7%) increased as compared to previous weeks. The proportion of influenza virus detections by type this season to date is as follows: 78.8% influenza A [mainly influenza A(H3N2)] and 21.2% influenza B. Concerning other respiratory viruses, the proportion of tests positive for RSV (17.0%) decreased slightly as compared to the previous week, and RSV was the most prevalent among all respiratory viruses detected. The proportion of positive tests for the other respiratory viruses remained similar or declined as compared to previous weeks (coronavirus-6.4%, rhinovirus-5.7%, hMPV-5.5%, adenovirus-3.7%, parainfluenza-2.1%).

In the United States², in EW 04, influenza activity increased but remained relatively low for this time of year. At the national level, the proportion of ILI consultations (1.5%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 04 (7.5%) was below the epidemic threshold for this time of year (7.8%). In EW 04, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 04 (n=3,656), the percentage of samples positive for influenza (7.2%) increased as compared to the previous week, but remained relatively low. Nationally, among the positive samples, 94.3% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 5.7% were influenza B. Regionally, there have been some differences in circulating influenza A subtypes, with Region 6 (states of Arkansas, Louisiana, New Mexico, Oklahoma, Texas) detecting influenza A (H1N1)pdm09 more commonly.

In Mexico, From EW 1 through 5, 2012, a total of 2,815 influenza cases and 58 deaths associated with influenza have been reported. Of those, 90.4% of the cases and 93.1% of the deaths were associated with influenza A(H1N1)pdm09. The states with the highest number of cases of influenza (H1N1)pdm09 were Federal District (15.5%), Oaxaca (10.8%) and Hidalgo (9.4%); and the highest number of deaths were Federal District (26.0%), Mexico State (18.5%) and Oaxaca (11.1%). According to laboratory data, in EW

04, of the total samples analyzed, the proportion of samples positive for influenza (50%) was similar to the prior week. Influenza A(H1N1) pdm09 was the predominant circulating virus.

Caribbean

CAREC², in EW 04, received epidemiological information from Barbados, Belize, Jamaica and Tobago. In EW 04, the SARI hospitalization rate was 2.4%, which was higher than the previous week (1.9%). The highest SARI hospitalization rate was reported among children aged 6 months – 4 years (10.7% of hospitalized children in this age group were SARI cases). No SARI related deaths have been reported since EW 02, 2012. According to laboratory data, in EWs 03-04, no respiratory viruses were identified.

In Jamaica, in EW 04, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.7%, which was higher than reported for the previous week. The proportion of SARI admissions was 0.8%, decreasing slightly compared to previous week. In EW 04, no SARI deaths were reported. According to laboratory data, one influenza A(H1N1)pdm09 virus was identified.

In Cuba, according to laboratory data, in EW 04, among all samples tested (n=84), 51% were positive for respiratory viruses. No samples positive for influenza were detected this week.

In Dominican Republic, in EW 04, among the samples tested (n=17), 6% were positive for respiratory viruses. No samples positive for influenza have been detected in the last 4 weeks.

Central America

In Costa Rica³, unusual increase of acute respiratory illness was reported in the last month, with ILI and SARI activities above what is expected for this time of the year. Through EW 04, there have been reported 419 SARI hospitalized cases, 38 SARI ICU admissions and 6 SARI deaths; of which, 4 deaths were associated with influenza viruses (3 cases were A(H1N1)pdm2009 and 1 case was A(H3N2)). Most of cases were reported in the central southern region, mainly from the provinces of Cartago and San Jose. The most affected age groups included children under one year of age and young adults (15 to 39 years old age group). According to laboratory data, in EW 04, among the total of tested samples (n=106), the percentage of positive samples for respiratory viruses was 38.7% and for influenza viruses was 13%, both slightly lower than previous weeks. In EW 04, adenoviruses and influenza A(H3N2) were the predominant circulating viruses, followed by RSV, parainfluenza and influenza A(H1N1)pdm09.

In El Salvador, through EW 04, among the tested samples (n=45), 8.9% were positive for respiratory viruses and 2.2% for influenza. In the EW 02, the predominant virus was parainfluenza, followed by influenza B.

In Honduras⁴, in the EW 03, 4.2% of the total of outpatient care were ILI, slightly lower than the previous week (4.46%). The proportion of hospitalizations by SARI was 3.82%, less than what is observed in the EW 02 (9.58%). This week was recorded a death by SARI in Tegucigalpa. According to laboratory data in the EW 02 and 03, there was detected few positive samples to influenza A(H1N1) pdm09.

In Nicaragua, in the EWs 03 and 04, among the tested samples, no influenza viruses were detected.

In Panama, in EW 04, among all samples tested, some positive samples for RSV and parainfluenza were detected. No influenza viruses have been detected since EW 48, 2011.

South America – Andean

In Ecuador⁵, at the national level, in the EW 03, the proportions of SARI hospitalizations, SARI ICU admissions and SARI deaths, were higher as compared to the previous week; however, they remained <10%. According to laboratory data, the percentage of positive samples for respiratory viruses (29%) among SARI cases remained similar to the previous week. In EW 03, RSV was the predominant virus, with increasing trend in the last 3 weeks; mainly in the center and northern highland region and the coast region. Concerning the influenza viruses, co-circulation of influenza A(H3N2) and A(H1N1)pdm09 was reported and remained in similar levels as compared to previous weeks; being reported mainly in the center and northern highland region.

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

In Peru⁶, in the EW 03, at the national level, the number of cases by ARI and number of cases with pneumonia in children under 5, remained stable or diminished with regard to the previous EW, and continued under the value awaited for this time of the year.

South America – Southern Cone

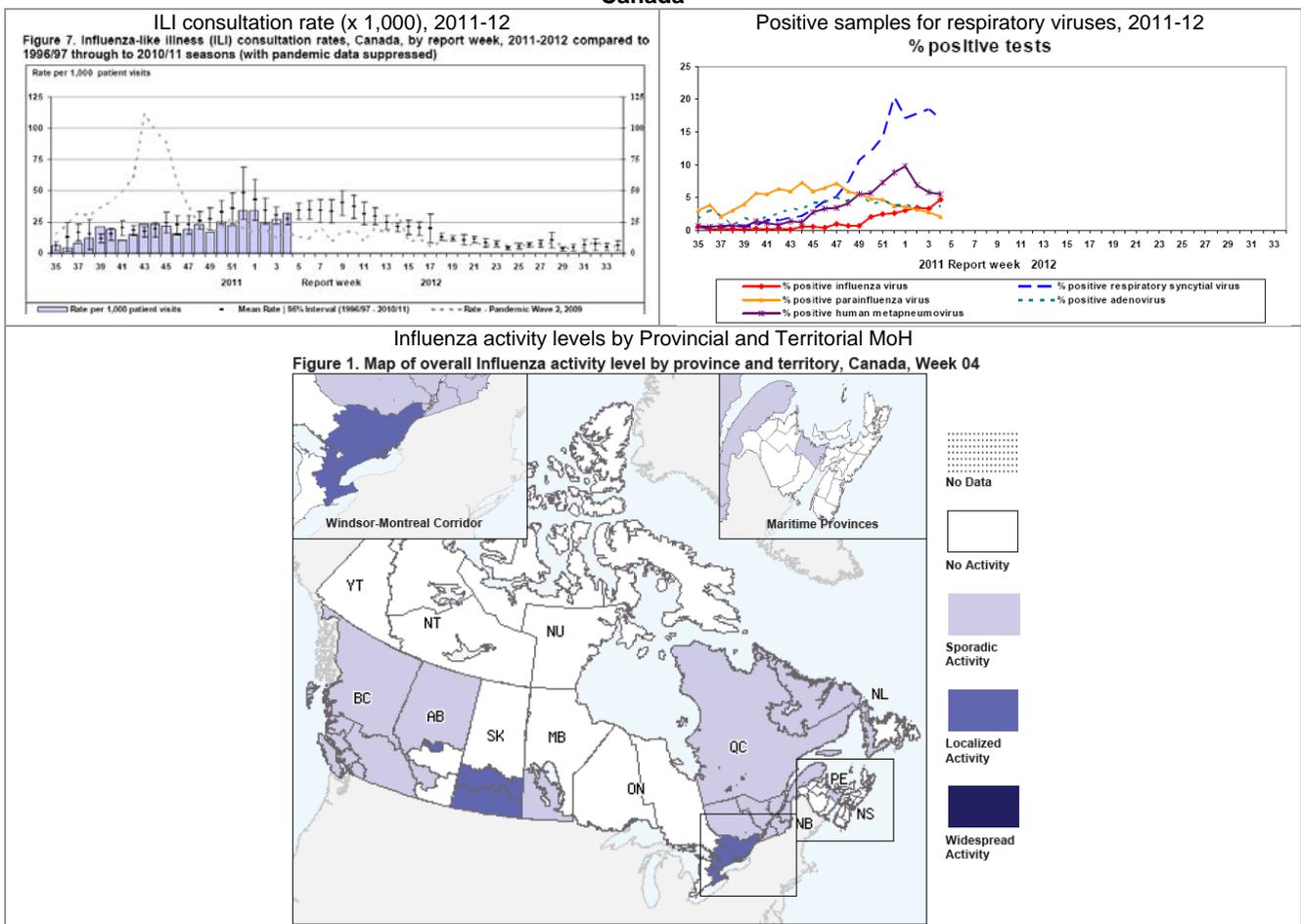
In Brazil, regionally, in Sao Paulo (Adolfo Lutz institute), in EW 03, no influenza viruses were detected. In Pará (Evandro Chagas institute) reported sporadic detection of influenza A(H1N1)pdm09.

In Chile, according to national laboratory data, in EW 04, among all samples tested (n=313), 7% were positive for respiratory viruses (mainly parainfluenza and adenovirus). Among the SARI cases, no samples positive for influenza have been detected since EW 01.

Graphs

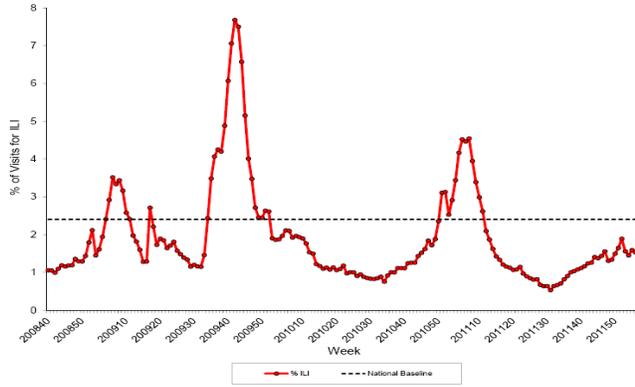
North America

Canada

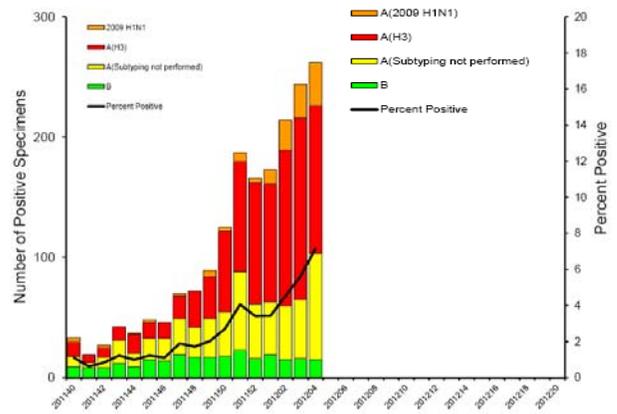


United States

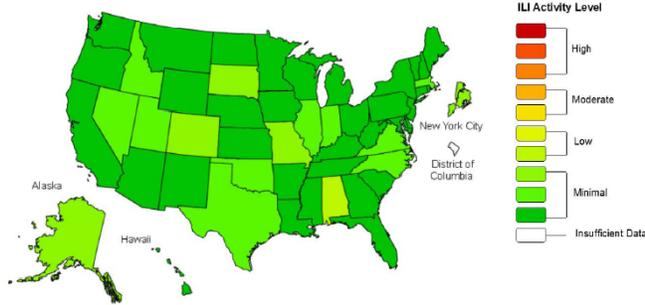
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – January 28, 2012



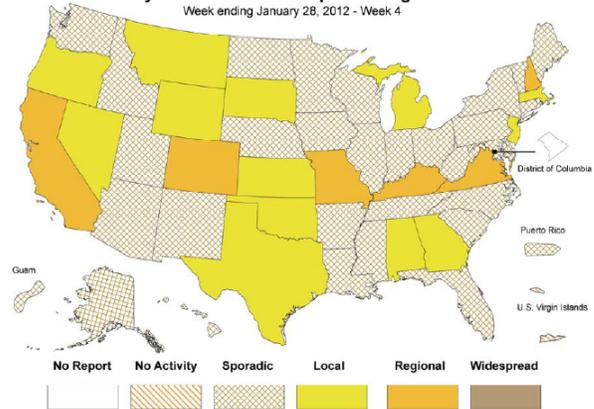
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-12 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2011-12 Influenza Season Week 4 ending Jan 28, 2012

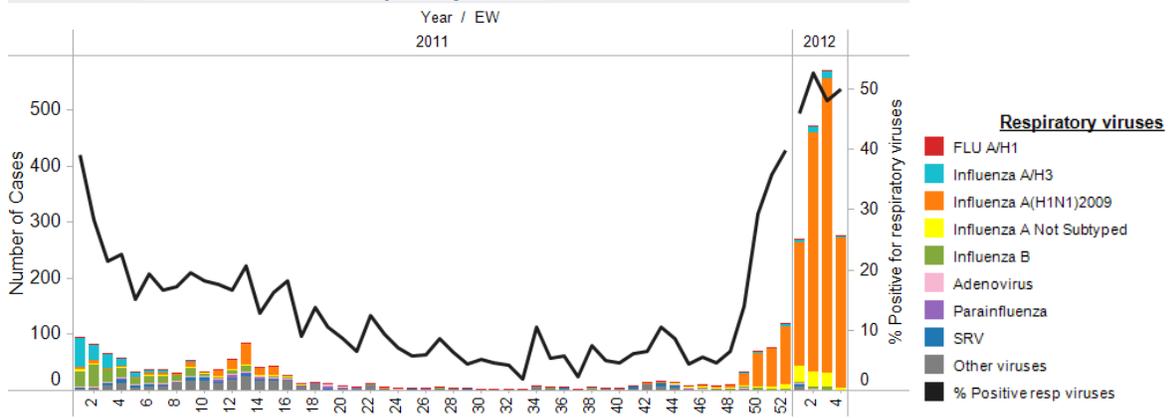


Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists* Week ending January 28, 2012 - Week 4



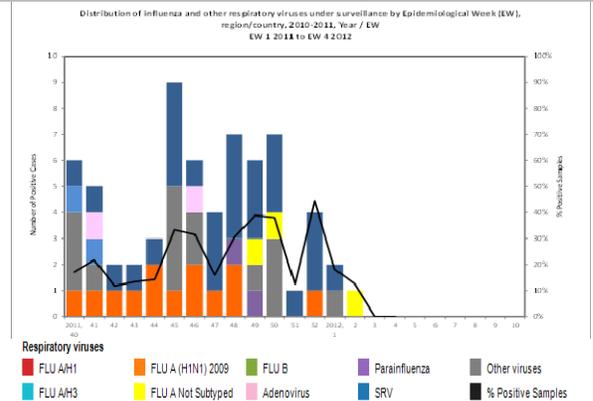
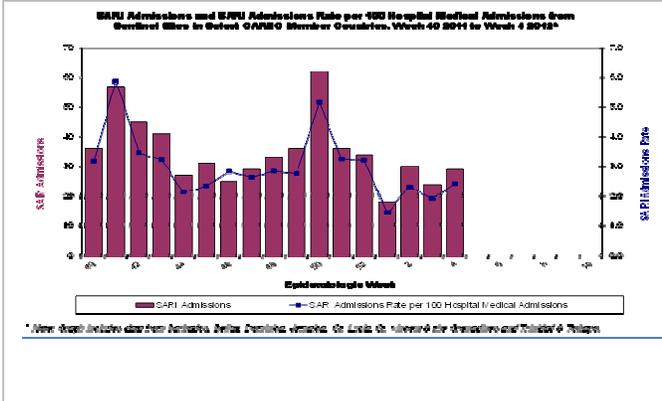
Mexico

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

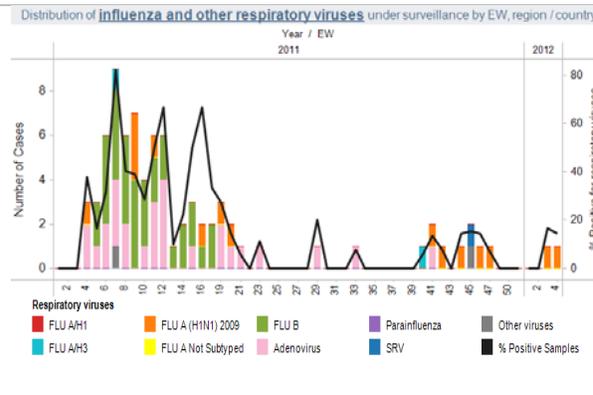
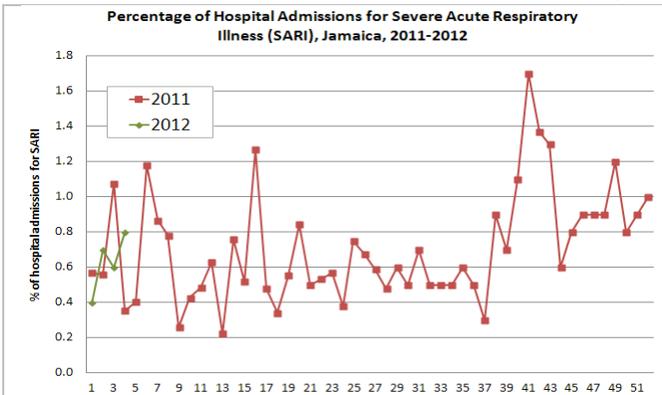


Caribbean

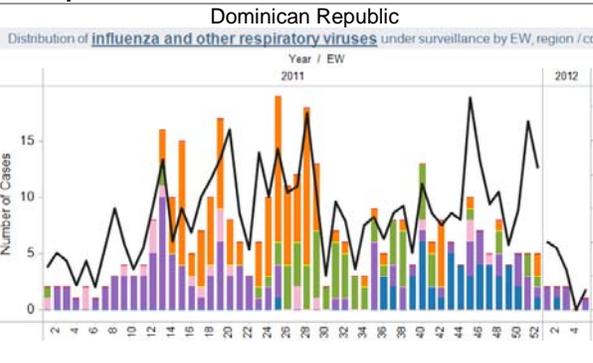
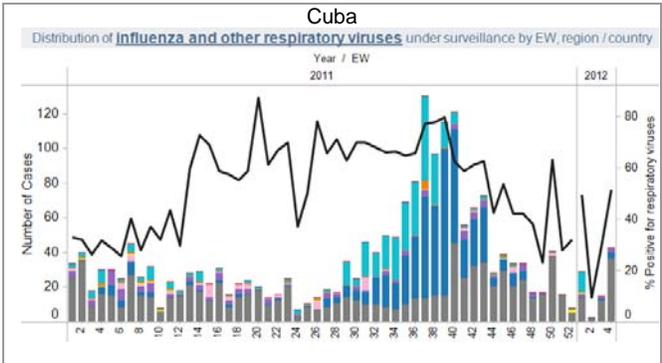
CAREC



Jamaica



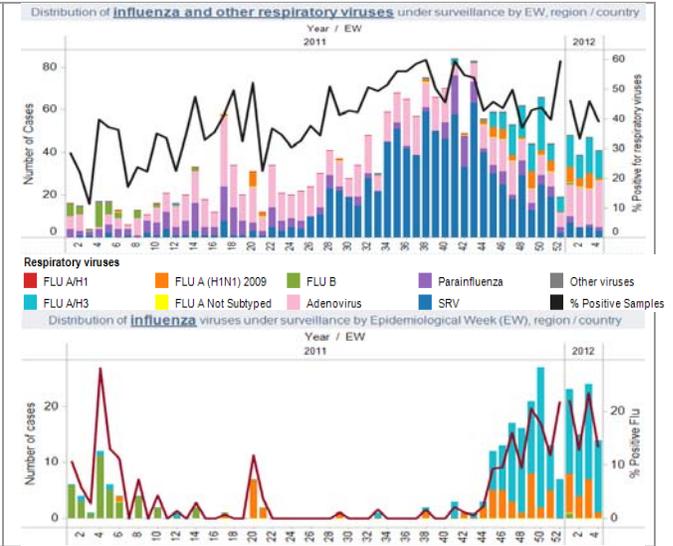
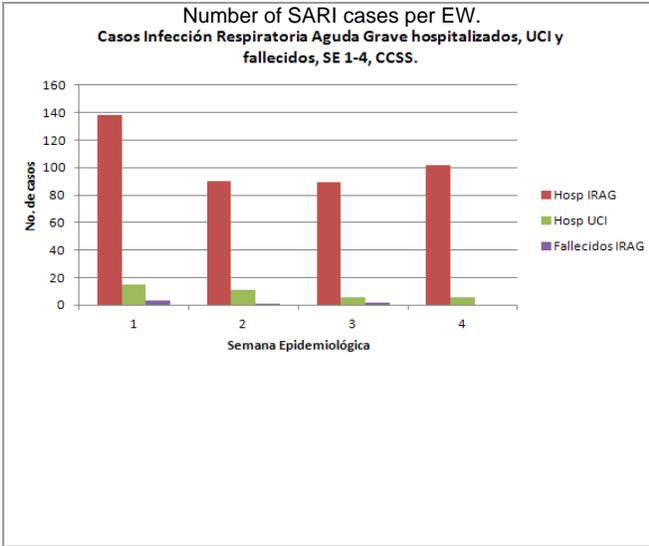
Cuba & Dominican Republic



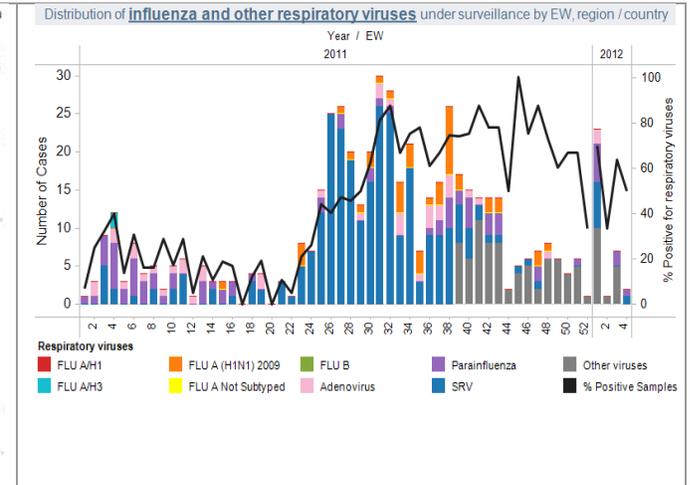
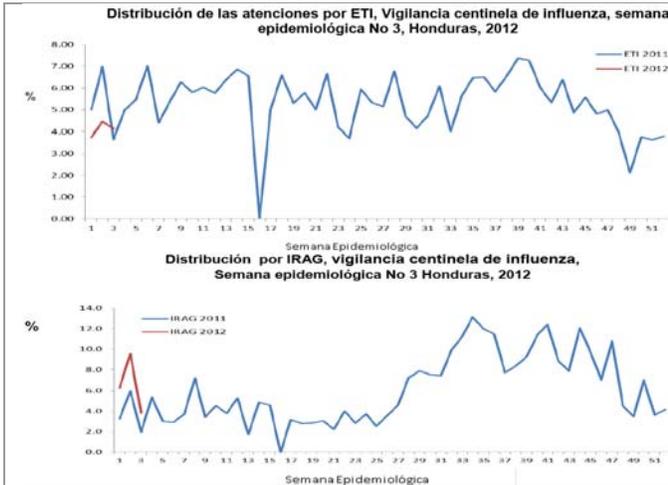
- Respiratory viruses**
- FLU A/H1
 - FLU A (H1N1) 2009
 - FLU B
 - Parainfluenza
 - Other viruses
 - FLU A/H3
 - FLU A Not Subtyped
 - Adenovirus
 - SRV
 - % Positive Samples

Central America

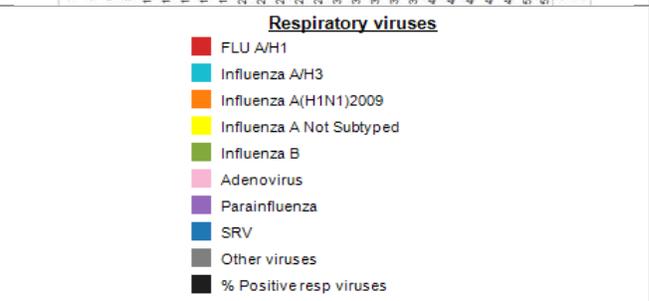
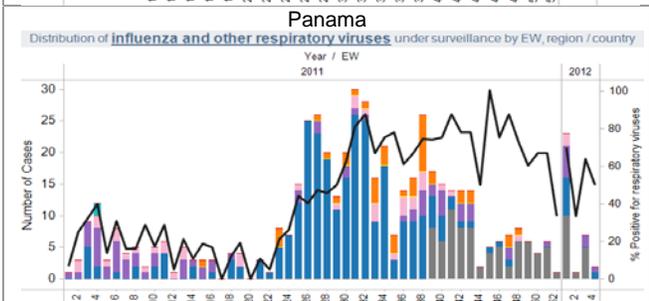
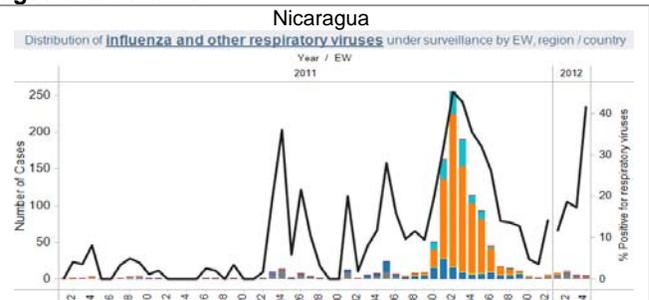
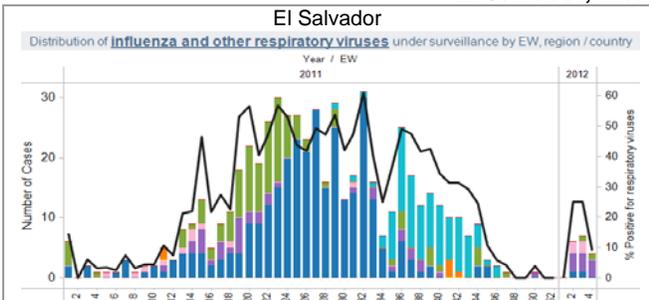
Costa Rica



Honduras

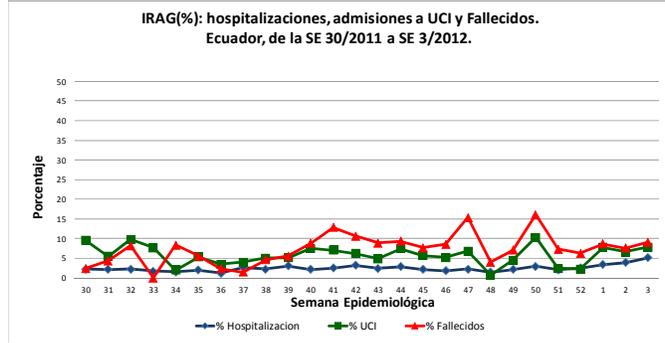


El Salvador, Nicaragua and Panama



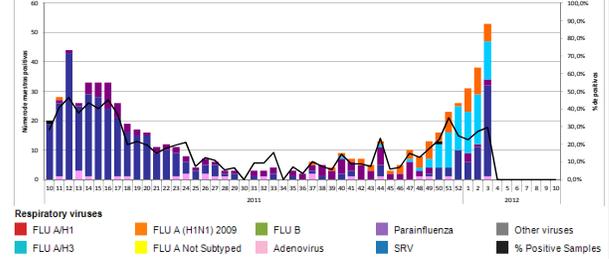
Ecuador

% SARI hospitalization, SARI ICU admissions, SARI deaths, 2011-12

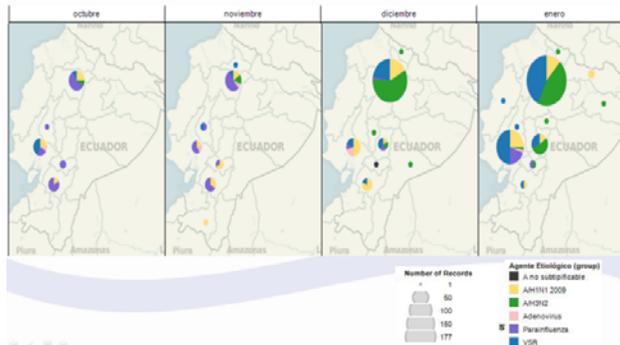


FUENTE: Sistema de Vigilancia Intensificada de IRAG
ELABORADO: Programa Ampliado de Inmunizaciones

Ecuador
Distribución de virus de influenza y otros virus respiratorios en vigilancia según semana epidemiológica, SE 10/2011- SE 03/2012



Número de Casos Positivos para Virus Respiratorios por provincias. Ecuador SE 40 (octubre/2011) a SE 3 (enero/2012)



Peru

ARI endemic channel in children <5 years by EW. 2012

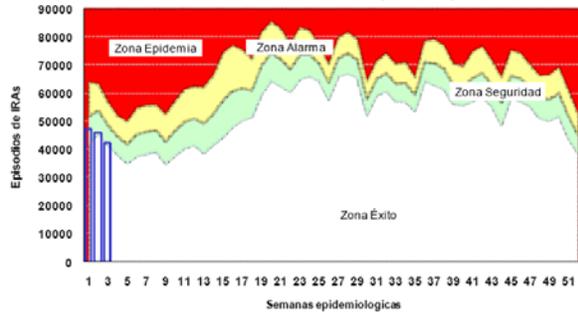


Figura 1: Canal endémico de Episodios de IRA en menores de 5 años. Perú 2012

Pneumonia endemic channel in children <5years by EW. 2012

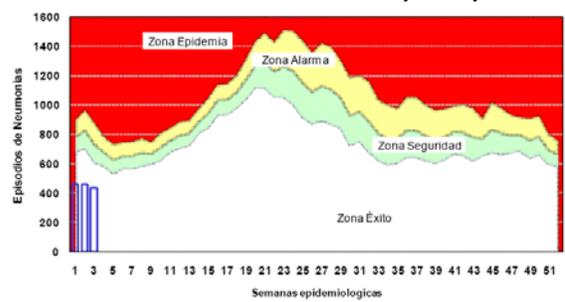
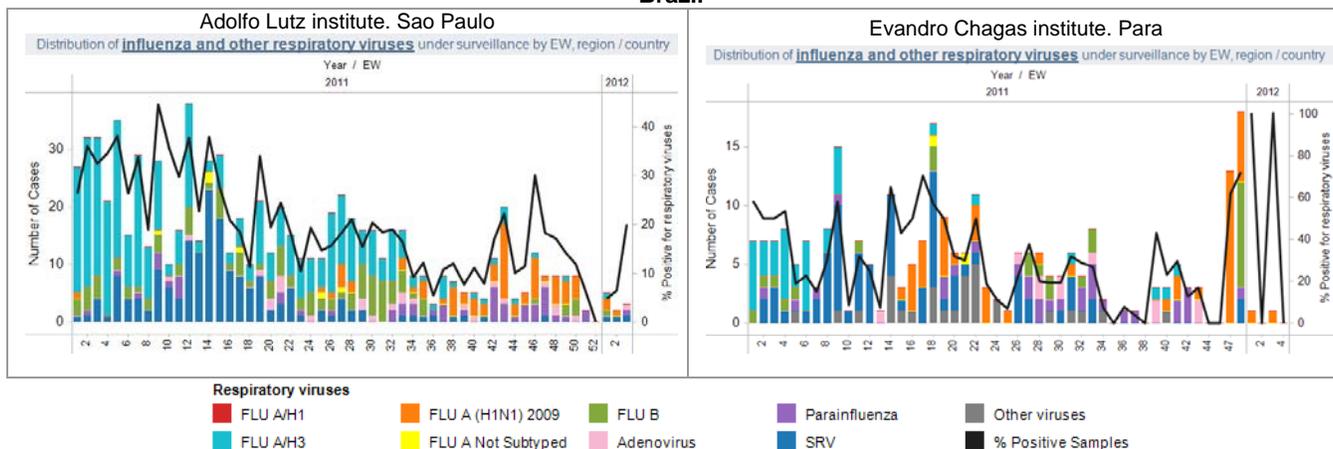


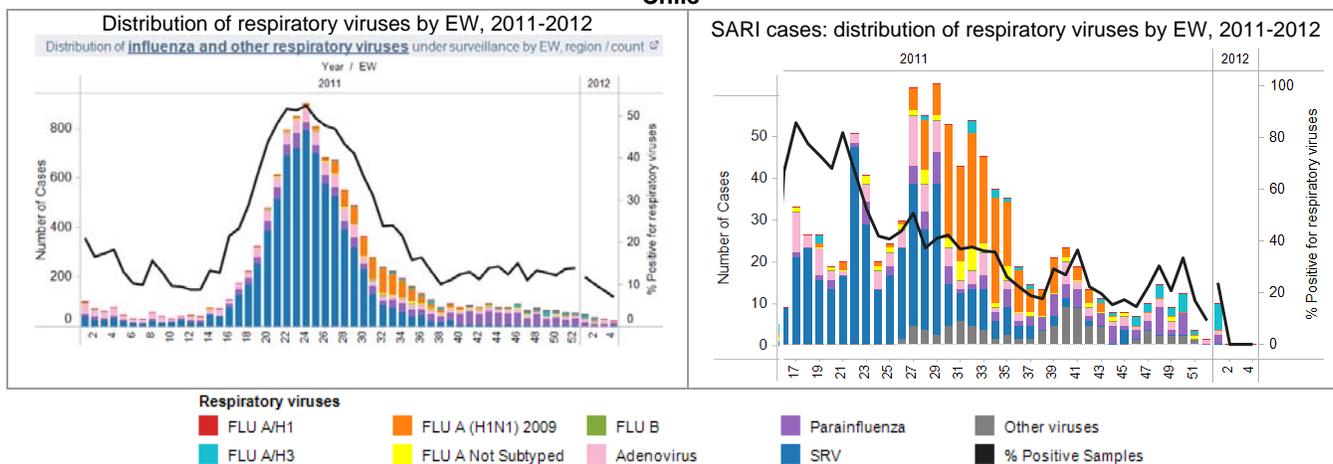
Figura 2: Canal endémico de Episodios de neumonías en menores de 5 años. Perú 2012

South America – Southern Cone

Brazil



Chile



¹ FluWatch Report. EW 04. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 04. Centers for Disease Control and Prevention

³ Costa Rica. Comportamiento influenza y otros virus respiratorios SE 1-4, 2012, Caja Costarricense de Seguro Social

⁴ Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 44

⁵ Ecuador. Vigilancia de IRAG en hospitales centinela. SE 03. Ministerio de Salud. Programa Ampliado de Inmunizaciones

⁶ Perú. Sala de Situación de Salud. SE 03. Ministerio de Salud. Dirección General de Epidemiología