



Regional Update EW 05, 2012

Influenza
(February 14, 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)pdm09 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)pdm09 were reported in Ecuador.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 05, 2012, influenza activity continued to increase gradually. In EW 05, the influenza-like illness (ILI) consultation rate increased to 35.8 per 1,000 consultations, but remained within expected levels for this time of year. In EW 05, among the total samples analyzed (n=3,595), the proportion of samples positive for influenza (6.4%) increased as compared to previous week (4.7%). The proportion of influenza virus detections by type this season to date is as follows: 75.8% influenza A [mainly influenza A(H3N2)] and 24.2% influenza B. Concerning other respiratory viruses, the proportion of tests positive for RSV (18.2%) was similar 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 declined as compared to previous weeks (coronavirus-5.9%, rhinovirus-5.4%, hMPV-5.2%, adenovirus-2.7%, parainfluenza-2.0%).

In the United States², in EW 05, influenza activity increased but remained relatively low for this time of year. At the national level, the proportion of ILI consultations (1.7%) remained below the national baseline (2.4%). Regions 7 (northwest part of the country) and 10 (midwest part of the country) reported ILI activity above their region-specific baseline. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 05 (7.3%) was below the epidemic threshold for this time of year (7.8%). In EW 05, one pediatric deaths associated with an unsubtype influenza A virus was reported. Among all samples tested during EW 05 (n=3,586), the percentage of samples positive for influenza (10.5%) increased as compared to the previous week (7.2%), but remained relatively low. 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. Regionally, there have been some differences in circulating influenza A subtypes, with Region 6 (states of Arkansas, Louisiana, New Mexico, Oklahoma, Texas) and Region 9 (states of Arizona, California, Hawaii, Nevada) detecting influenza A (H1N1)pdm09 more commonly.

In Mexico, from EW 1, 2012 through February 10, 2012, a total of 3,882 influenza cases and 89 deaths associated with influenza have been reported. Of those, 90.7% of the cases and 91.0% of the deaths were associated with influenza A(H1N1)pdm09. According to laboratory data, in EW 05, of the total samples analyzed, the proportion of samples positive for influenza remained similar to the prior week (45%). Influenza A(H1N1)pdm09 was the predominant circulating virus.

Caribbean

CAREC*, in EW 04, received epidemiological information from Jamaica, Tobago and Surinam. In EW 05, the severe acute respiratory infection (SARI) hospitalization rate was 1.6%, which was slightly lower than the previous week (2.5%). The highest SARI hospitalization rate was reported among children aged 6 months – 4 years (4.7% 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 2012, through EWs 05, low circulation of respiratory viruses was detected, mainly influenza A(H1N1)pdm09, influenza A(H3N2) and RSV.

In Jamaica, in EW 05, the proportion of consultations for Acute Respiratory Illness (ARI) was 5.6%, which was higher than reported for the previous week. The proportion of SARI admissions was 0.7%, similar as compared to previous week. In EW 05, no SARI deaths were reported. According to laboratory data, influenza A(H1N1)pdm09 virus was detected for the second consecutive week.

In Cuba, according to laboratory data, in EW 05, among all samples tested (n=60), 21% were positive for respiratory viruses and 2% for influenza viruses, one positive sample for influenza A(H3N2).

In Dominican Republic, in 2012, through EW 05, parainfluenza has been the predominant respiratory virus detected.

Central America

In Costa Rica³, in 2012, through EW 04, unusual increase of acute respiratory illness was reported; ILI activity and SARI activity were above what is expected for this time of the year. According to laboratory data, in EW 05, among the total of tested samples (n=118), the percentage of positive samples for respiratory viruses was 31.4% and for influenza viruses was 7.6%, both slightly lower than previous weeks. Of the total of identified respiratory viruses, adenovirus and influenza A(H3N2) were the predominant viruses, followed by RSV, parainfluenza and influenza A(H1N1) pmd09.

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

In Honduras, according to laboratory data, in the EW 04, no respiratory viruses were detected.

In Nicaragua, through EW 05, among the tested samples (n=31), 22.6% were positive for respiratory viruses. Influenza viruses were not detected.

In Panama, in EW 05, among all samples tested (n=5), 40% of the samples were positive for respiratory virus, being detected parainfluenza and other virus.

South America – Andean

In La Paz, Bolivia, in EW 04, of the total of hospitalizations, 10% were by SARI, slightly less than what was reported in the previous EW (12%); of the total of hospitalized patients, 31% was under 2. Among ICU admissions, 9% were admitted by SARI, being the more affected age group the adults between 40 and 59 years old. In 2012, through EW 04, 22% of the SARI ICU admissions presented chronic heart diseases as principal risk factor. No SARI deaths were reported this EW. According to laboratory data, during EW 04, in La Paz there were no samples positive for influenza. In Santa Cruz (CENETROP laboratory), of the total of tested samples (n=9), only 1 was positive for influenza B.

In Colombia, according to laboratory data in EW 05, no respiratory viruses were detected.

In Ecuador, at the national level, in EW 04, among the total of tested samples (n=188), the percentage of positive samples for respiratory viruses was 24% and for influenza viruses was 4.3%, both slightly lower than previous weeks. RSV predominated among respiratory viruses identified, followed by influenza A(H3N2), parainfluenza and influenza A(H1N1) pmd09.

In Peru⁴, at the national level, in 2012, through EW 04, 178,011 ARI cases in children under 5 years old were reported, 1% (1,736) of which were pneumonias. According to the ARI and pneumonia epidemic channels in children under 5 years old, in EW 04, the numbers of ARI and pneumonia cases were within what is expected for this time of the year and does not become evident increasing trend in comparison with what was reported in previous years.

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

In Venezuela⁵, in the EW 04, 160,867 ARI cases were reported, 4.4% less than the previous EW (n=168,307). The same trend was observed in the report of pneumonias, with a decline of 5.5% with respect to the previous EW. The children <1 year of age was the most affected group for acute respiratory illnesses. According to laboratory data, from 1 January up to 2 February there were analyzed 184 samples, of which, 8.2% (n=15) were positive. Among the positive samples, 53% were influenza A (mainly influenza A(H3N2) and followed by influenza A(H1N1) pdm09).

In the French Territories (Guyana, Martinique and Guadeloupe), in the EW 04, of the total of tested samples (n=30), 40% were positive for influenza. The predominant viruses are Influenza A(H1N1)pdm09 and influenza B.

South America – Southern Cone

In Argentina⁶, in EW 05, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained low and within was expected for this time of year. According to laboratory data, through EW 02, low circulation of respiratory viruses was detected (RSV, parainfluenza and adenovirus).

In Brazil, regionally, in Para (Evandro Chagas institute), between EWs 01-05, sporadic positive samples for influenza A(H1N1)pdm09 were detected.

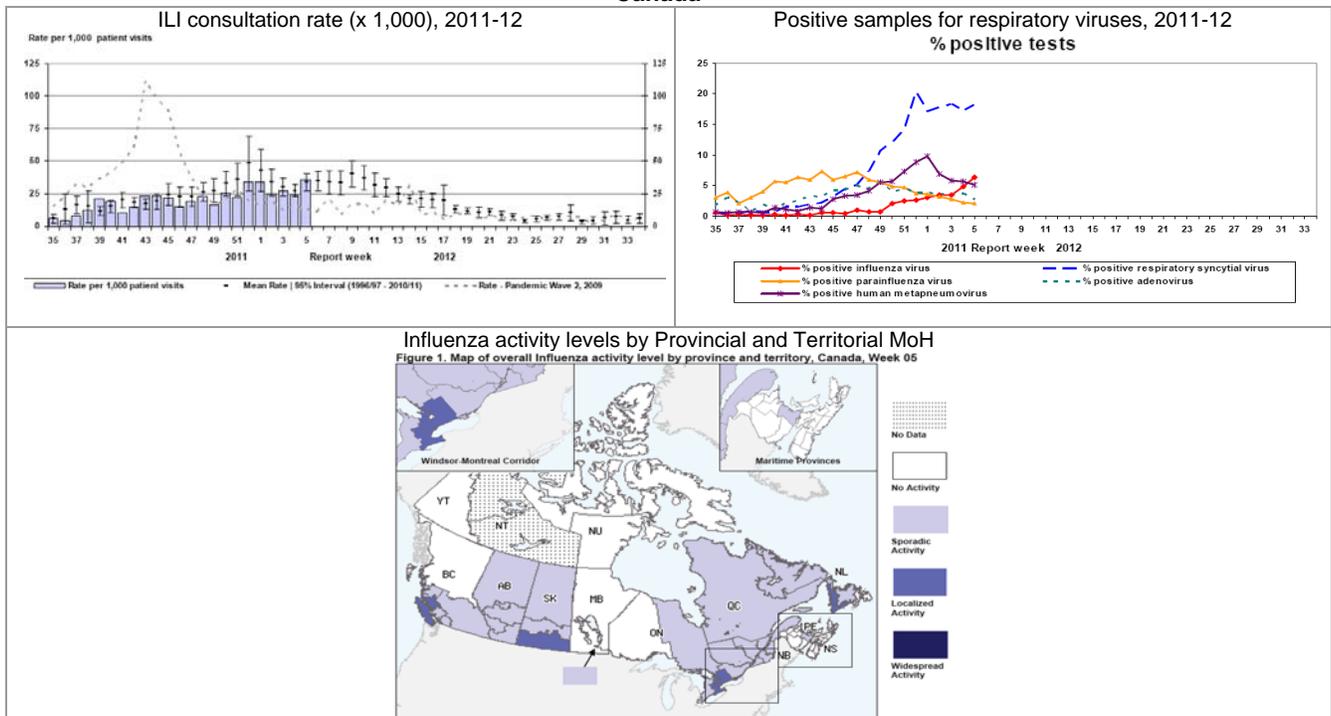
In Chile⁷, in EW 05, at national level, the ILI activity remained in a low level and within what is expected for this time of the year. In EW 05, the percentage of attention in urgency services for respiratory reasons (12.7%) was similar to what was observed in the two previous years. Though EW 05, no deaths were registered associated with influenza. According to laboratory data, at national level, between EWs 01-05, among all the samples tested (n=1479), the percent of positivity for respiratory viruses was 8%; being adenovirus and parainfluenza the predominant viruses detected. Among the SARI cases, between EWs 01-05, the percent of positivity for respiratory viruses was 7% (9/113), being influenza A(H3N2) the predominant virus detected.

In Paraguay⁸, in EW 05, ILI activity remained similar to previous years for this time of year. The proportion of ILI consultation (5.8%) showed a decreasing trend since EW 02. In EW 05, the proportions of SARI hospitalization, SARI ICU admissions and deaths remained under 10%. According to laboratory data, in 2012, through EW 05, among all samples tested, low circulation of respiratory viruses was detected (mainly influenza A(H1N1)pdm09, influenza A(H3N2), adenovirus and parainfluenza).

Graphs

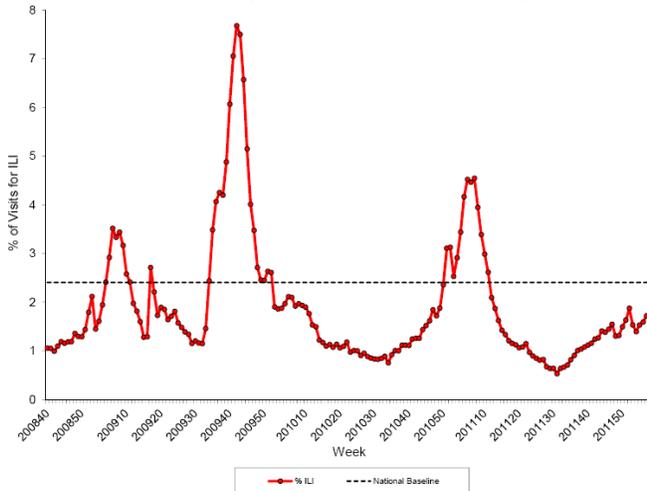
North America

Canada

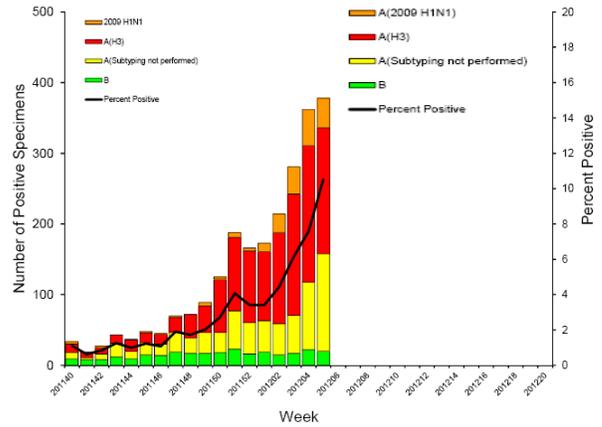


United States

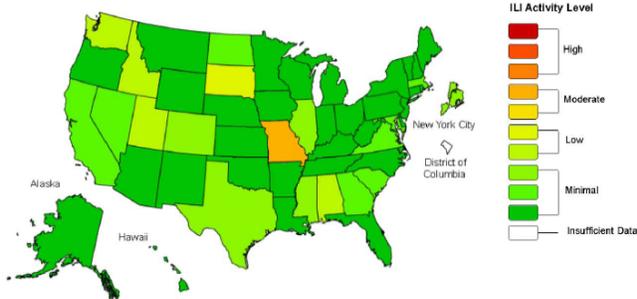
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – February 4, 2012



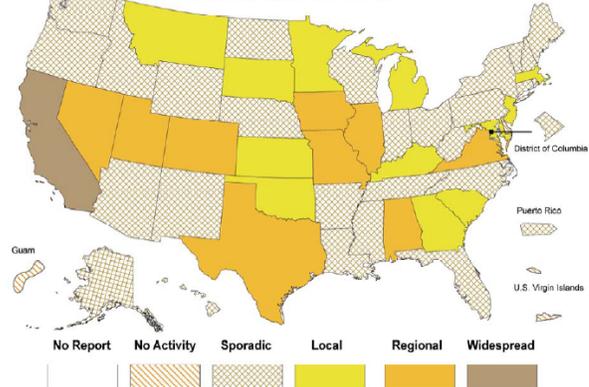
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2011-12 Influenza Season Week 5 ending Feb 04, 2012

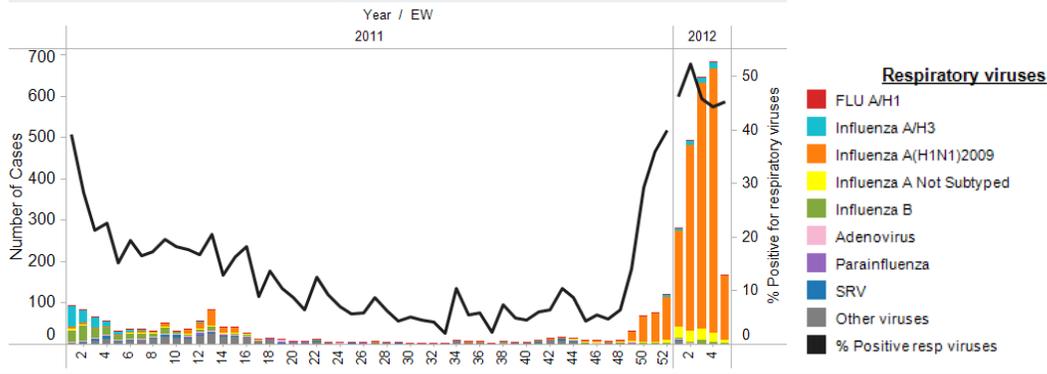


Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists* Week ending February 4, 2012 - Week 5



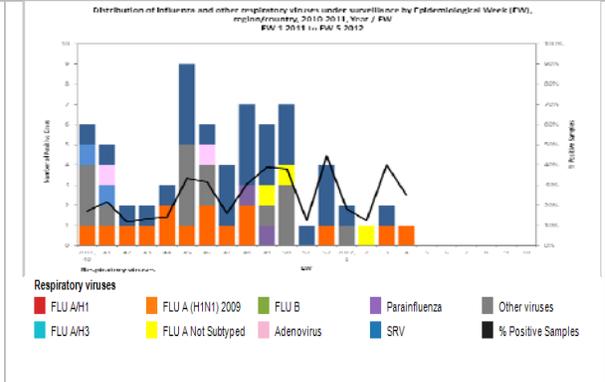
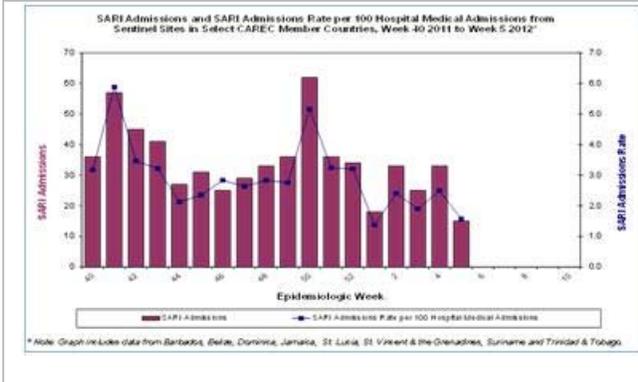
Mexico

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

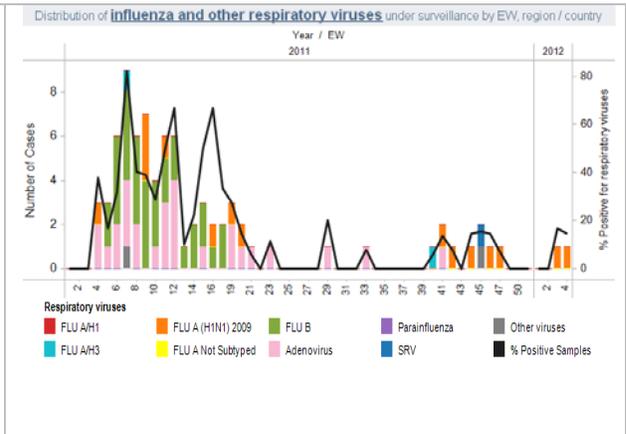
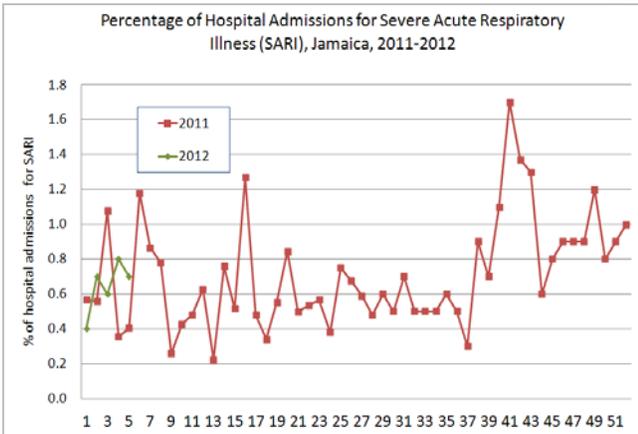


Caribbean

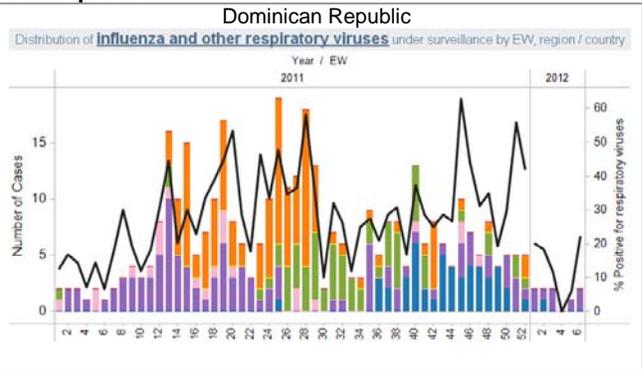
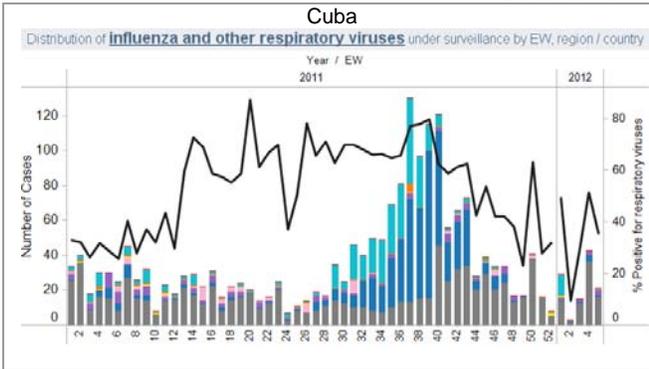
CAREC



Jamaica



Cuba & Dominican Republic



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

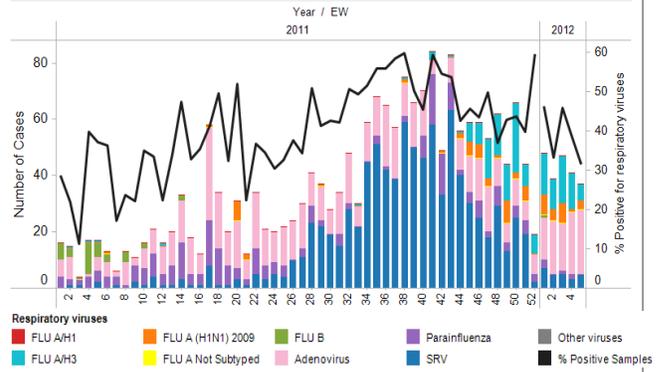
Central America

Costa Rica

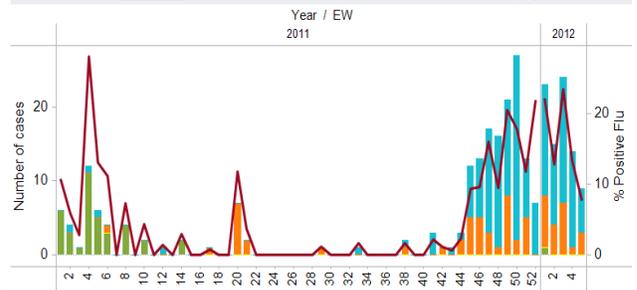
Number of cases positive for influenza, 2012 through EW 04



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

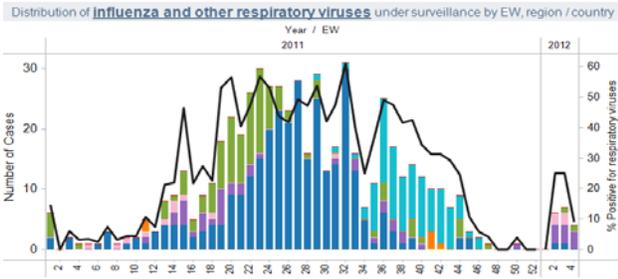


Distribution of **influenza** viruses under surveillance by Epidemiological Week (EW), region / country

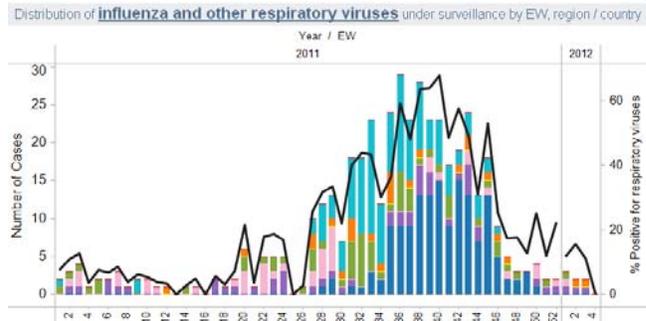


El Salvador, Honduras, Nicaragua and Panama

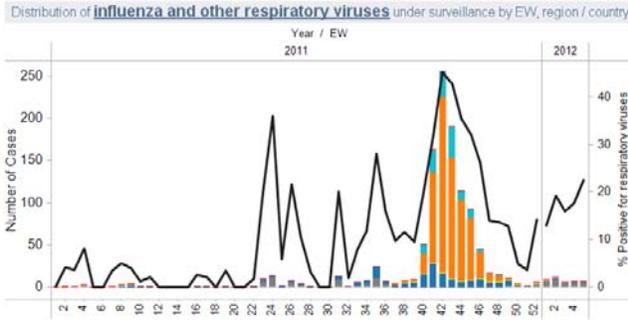
El Salvador



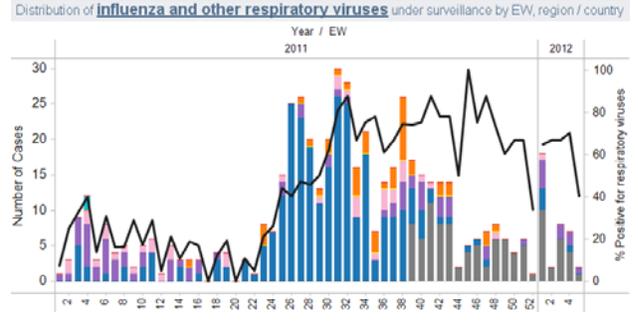
Honduras



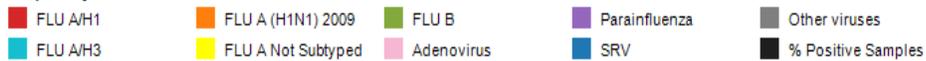
Nicaragua



Panama

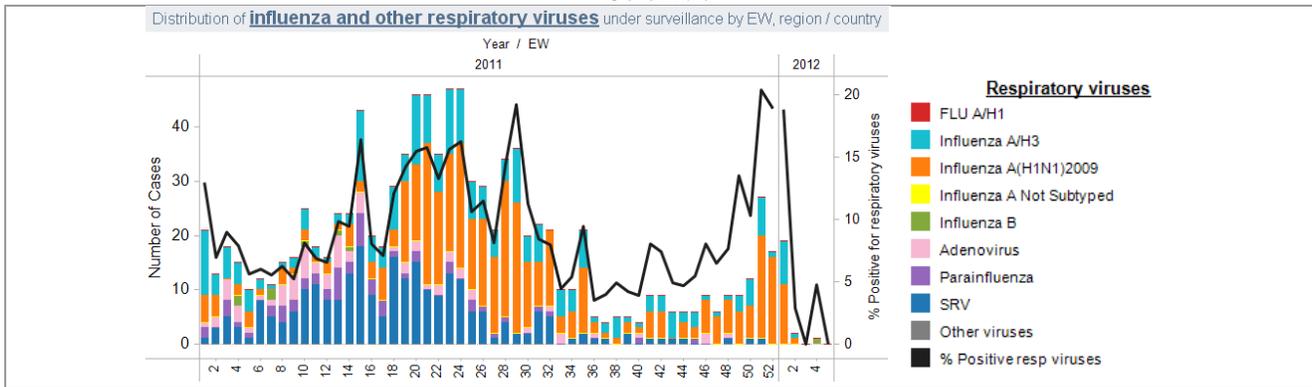


Respiratory viruses

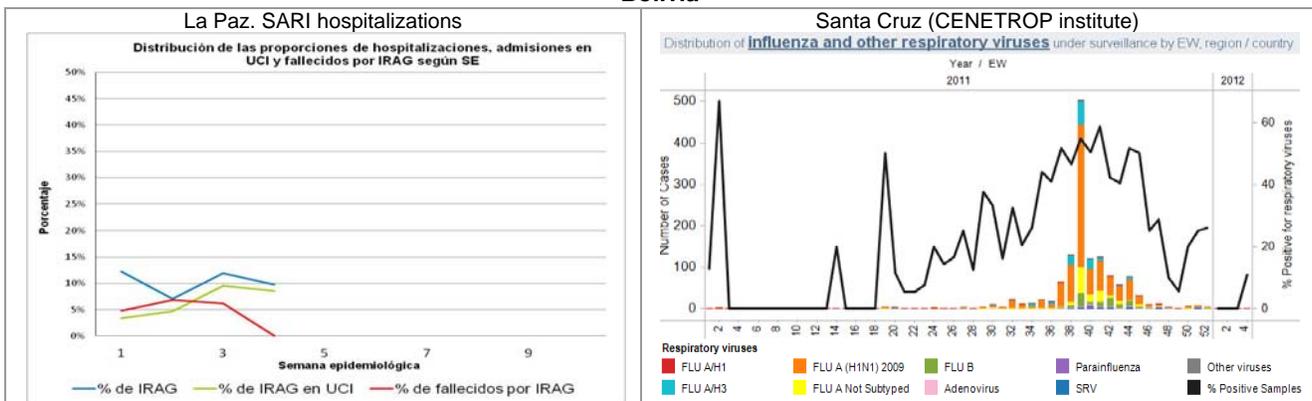


South America - Andean

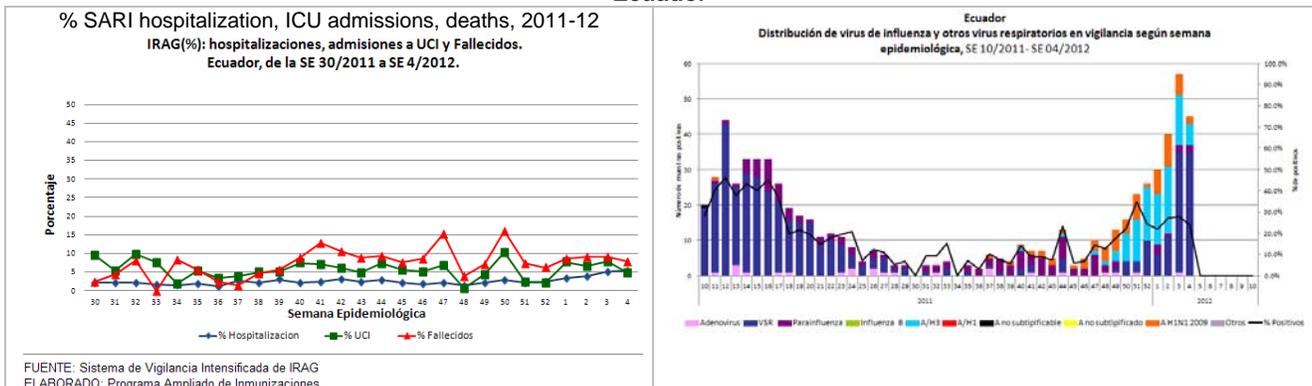
Colombia



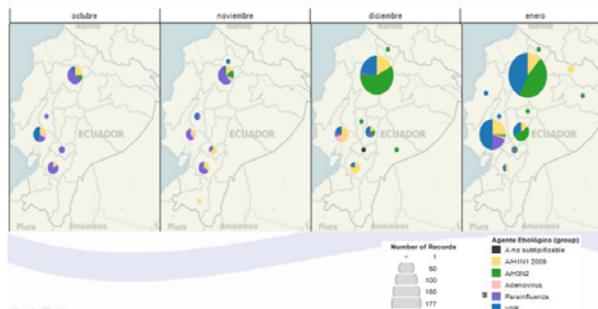
Bolivia



Ecuador



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

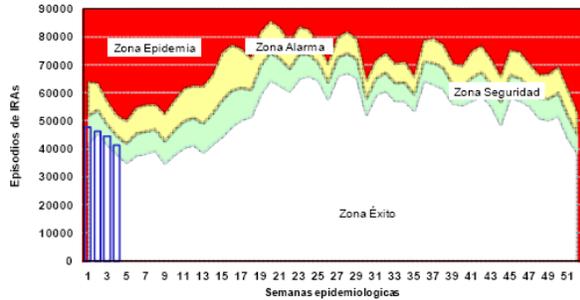


Figura 1: Canal endémico de Episodios de IRA en menores de 5 años. Perú 2012

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

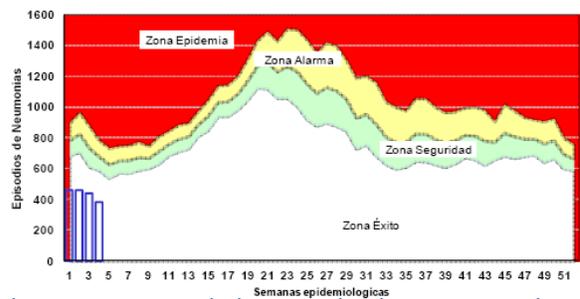
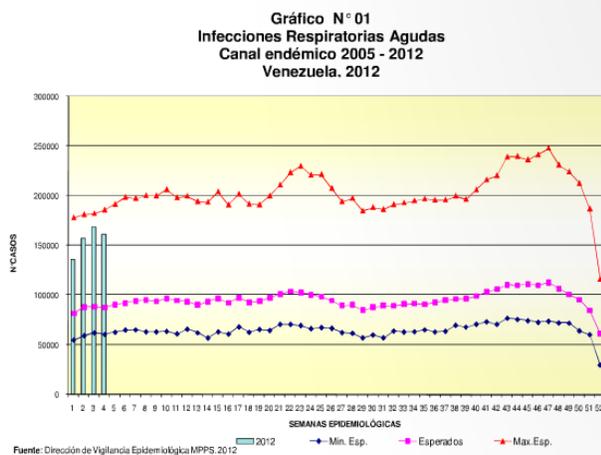


Figura 2: Canal endémico de Episodios de neumonías en menores de 5 años. Perú 2012

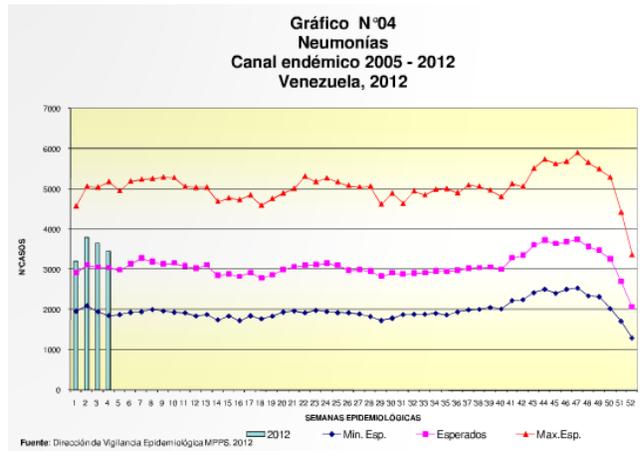
Venezuela

IRA endemic channel by EW. 2012



Fuente: Dirección de Vigilancia Epidemiológica MPPS, 2012

Pneumonia endemic channel by EW. 2012



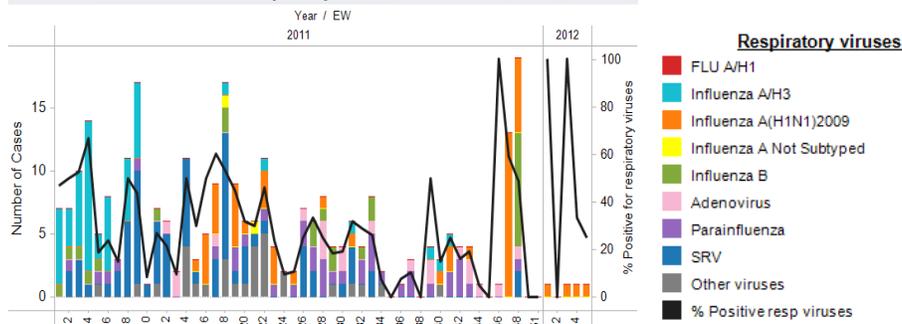
Fuente: Dirección de Vigilancia Epidemiológica MPPS, 2012

South America – Southern Cone

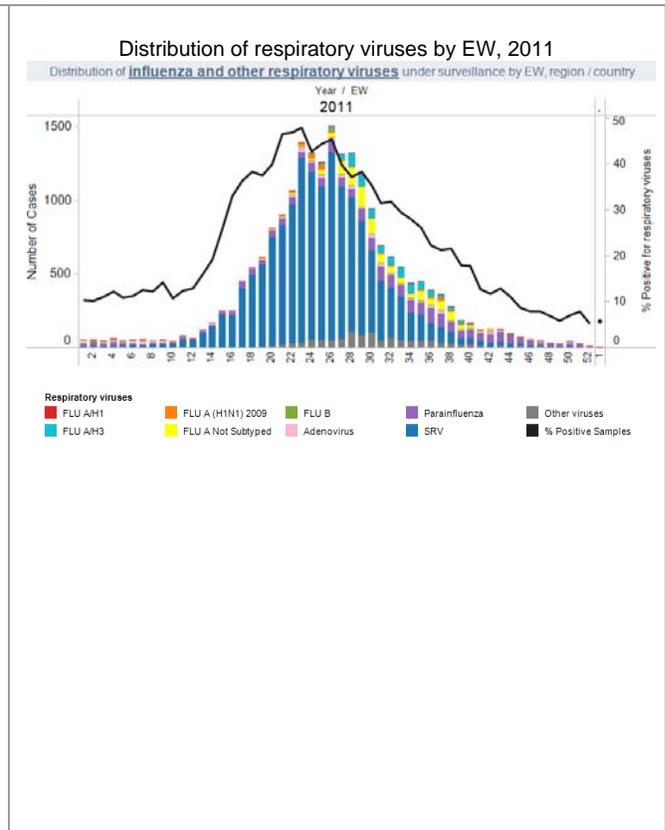
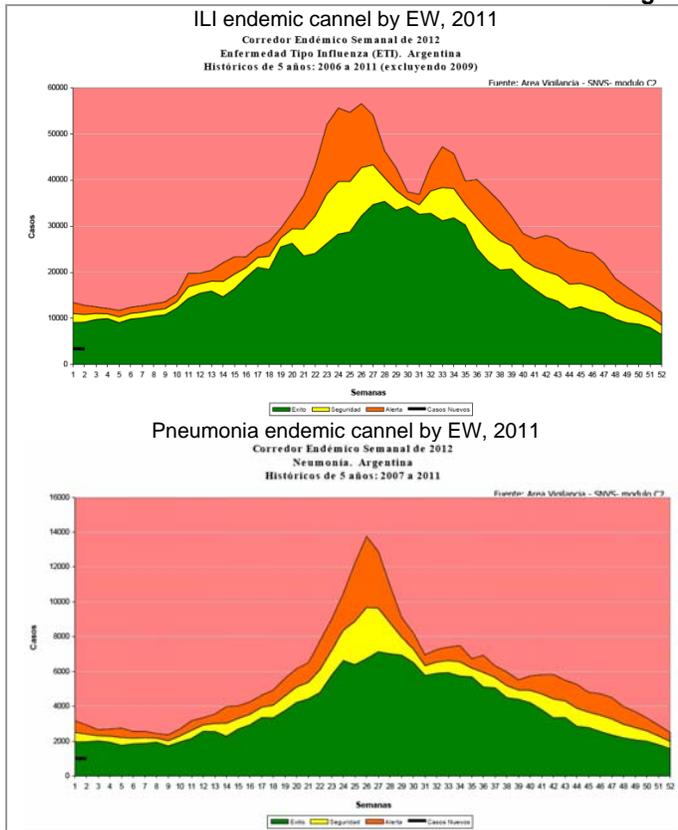
Brazil

Evandro Chagas institute. Para

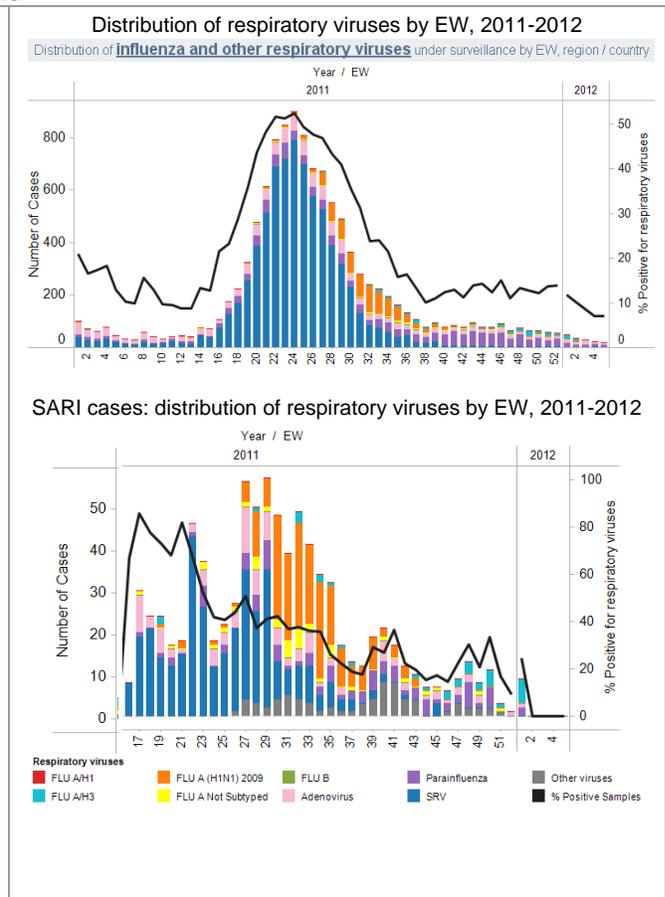
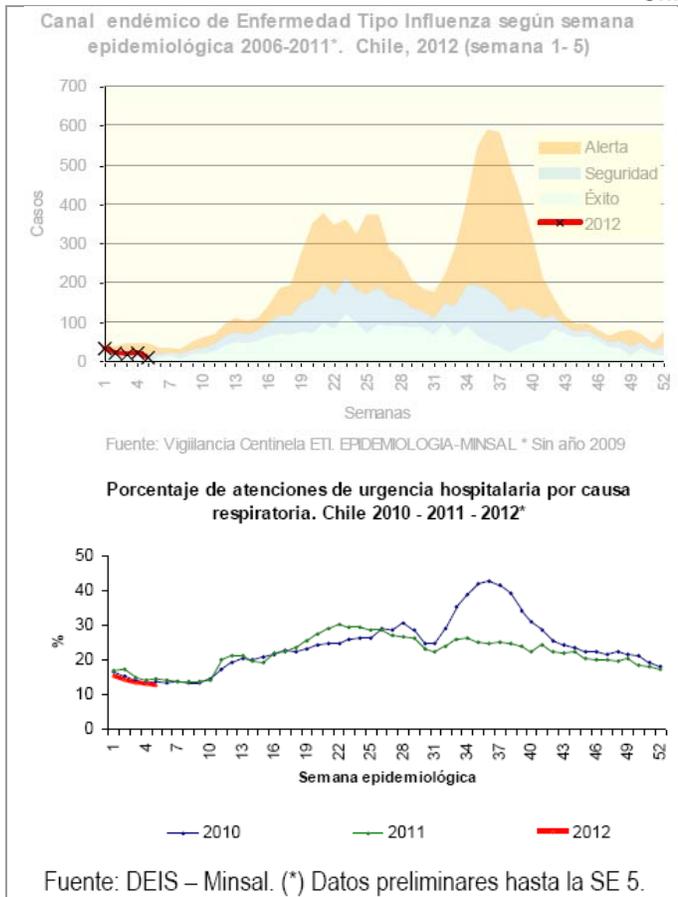
Distribution of Influenza and other respiratory viruses under surveillance by EW, region / country



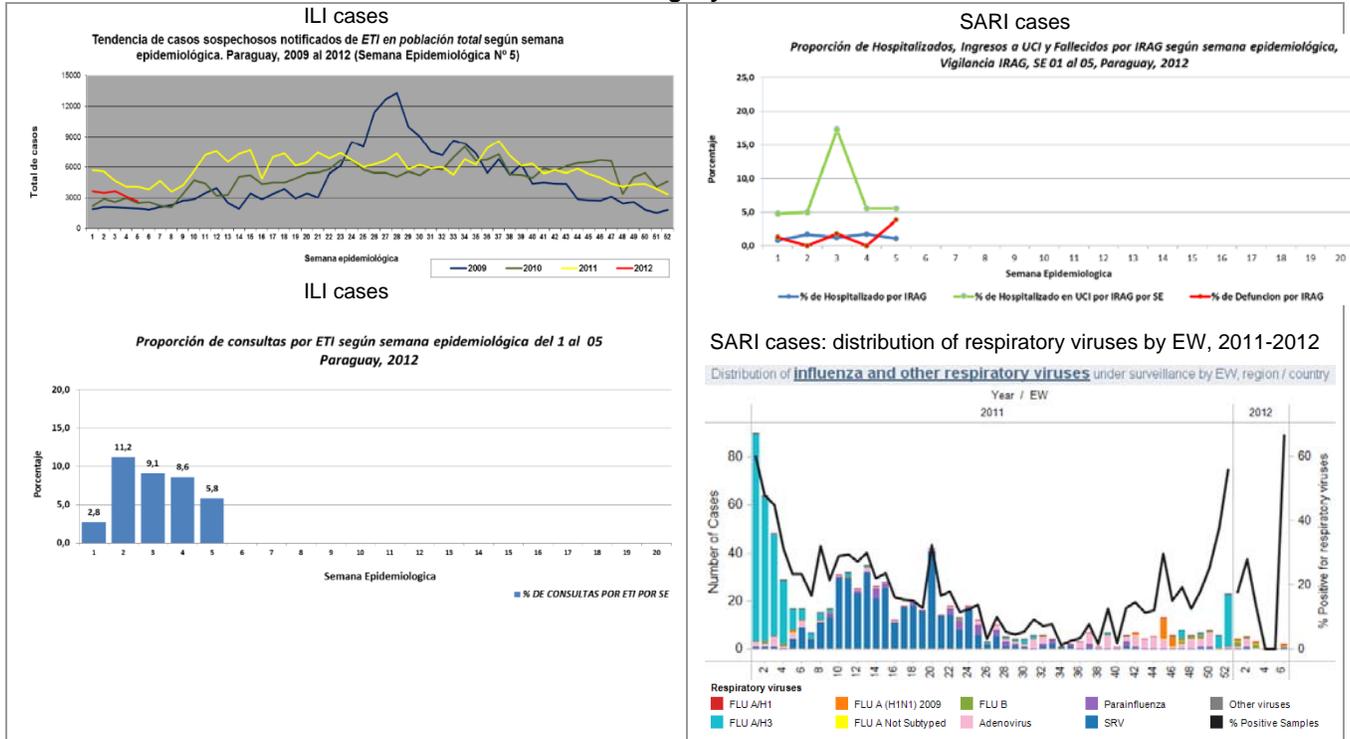
Argentina



Chile



Paraguay



¹ FluWatch Report. EW 05. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 05. 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 Perú. Sala de Situación de Salud. SE 04. Ministerio de Salud. Dirección General de Epidemiología

⁵ Venezuela. Boletín epidemiológico - SE 04. 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

⁶ Argentina. Actualización situación de enfermedades respiratorias 2012. SE 05.

⁷ Chile. Informe de situación. SE 05. Available at: www.pandemia.cl

⁸ Paraguay. Boletín epidemiológico semanal SE 05. Available at:

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