



Regional Update EW 11, 2012

Influenza
(March 27, 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 B was the predominant virus in Canada, influenza A(H3N2) remained predominant in United States and influenza A(H1N1)pdm09 was predominant in Mexico.
- 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) 11, 2012, influenza activity continued to increase. In EW 11 the influenza-like illness (ILI) consultation rate decreased slightly compared to the previous week, but remained within expected levels for this time of year. In EW 11, among the total samples analyzed (n=5,207), the proportion of samples positive for influenza (23.4%) increased as compared to the previous week. Of the total cases positive for influenza, the percent positive for influenza B (57.3%) continued to be greater than the percent positive for influenza A (42.7%). Concerning other respiratory viruses, the proportion of tests positive for RSV (10.9%) declined as compared to the previous week, and influenza was the most prevalent among all respiratory viruses detected.

In the United States², in EW 11, influenza activity remained relatively low nationally, but was elevated in some parts of the country. At the national level, the proportion of ILI consultations (2.4%) was at the national baseline. Regions 5 (midwest part of the country), 6 (south central part of the country), 7 (midwest part of the country), 8 (northwest part of the country) and 10 (northwest part of the country) reported ILI activity at or above their region-specific baselines and four states (Alabama, Arkansas, Illinois, and Oklahoma) reported high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 11 (7.6%) was below the epidemic threshold for this time of year (7.9%). In EW 11, three pediatric deaths associated with influenza were reported (2 with influenza A(H1N1)pdm09 and 1 with influenza B). Among all samples tested during EW 11 (n=5,088), the percentage of samples positive for influenza (26.6%) decreased slightly. Nationally, among the positive samples, 93.3% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 6.7% were influenza B. Of the antigenically characterized influenza B viruses (n=117), 41.9% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 58.1% were of the B/Yamagata lineage.

In Mexico, according to laboratory data, in EW 11, of the total samples analyzed, the proportion of samples positive for influenza decreased to 11.9%, which is the lowest that it has been in 2012. Influenza A(H1N1)pdm09 was the predominant circulating virus.

Caribbean

CAREC*, in EW 11, received epidemiological information from Belize, Jamaica, Suriname and Trinidad and Tobago. In EW 11, the severe acute respiratory infection (SARI) hospitalization rate was 1.7%, which was lower than the previous week (2%). The highest SARI hospitalization rate was reported among children aged 6 months – 4 years (3.9% of hospitalized children in this age group were SARI cases). One SARI related death was reported in EW 11. In the past four weeks, influenza A(H1N1)pdm09, influenza A(H3N2), RSV, parainfluenza and rhinovirus have been confirmed.

In Jamaica, in EW 11, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.9%, slightly higher than the previous week. The proportion of SARI admissions was 1.0%, which was slightly higher than the previous week. In EW 11, one SARI death was reported. According to laboratory data, no influenza viruses were identified in EW 11.

In Cuba, according to laboratory data, in EW 10, among all samples tested (n=53), 17% were positive for respiratory viruses and 2% for influenza viruses (influenza A(H1N1)pdm09).

In Dominican Republic, in EW 12, among all samples tested (n=25), 12% were positive for respiratory viruses. In 2012, through EW 12, parainfluenza has been the predominant respiratory virus detected. Influenza A(H1N1)pdm09 were detected sporadically in the last EWs.

Central America

In El Salvador, in EW 12, among all samples tested (n=38), 5% were positive for respiratory viruses. In the last 3 EWs, parainfluenza and influenza A(H1N1)pdm09 were detected.

In Guatemala, in EW 09-10, ARI endemic channel showed that the number of ARI cases remained within what was expected for this time of year. In EW 11, according to laboratory data, among all samples tested (n=125), the percentage of positive samples for respiratory viruses was 48%, slightly higher than the previous week (32%), being detected influenza A(H1N1) pdm09 (60%), and other virus (16.7%).

In Honduras, in EW 11, the proportion of ILI consultations (3.8%) less in comparison with the previous EW(4.9%). The proportion of SARI hospitalizations (6.5%) was lower than the previous EW (8.4%). In the EW 11, the case-fatality from SARI was 50% (5/10), with 4 SARI-related deaths in Tegucigalpa and one in San Pedro Sula. According to laboratory data, in EW 11, among all samples tested (n=48), the percentage of positive samples to respiratory viruses was of 18.8%, being detected parainfluenza, influenza A(H1N1) pdm 09, adenovirus and SRV.

In Nicaragua, through EW 11, all the tested samples (n=28), 3.6% were positive for respiratory viruses. Influenza viruses were not detected.

In Panama, through EW 12, all the tested samples (n=4), 50% were positive for parainfluenza and other respiratory viruses. Influenza viruses were not detected.

South America – Andean

In Bolivia, in La Paz, according to INLASA laboratory data in EW 12, among all samples tested (n=69), 31.9% of the samples were positive for respiratory viruses; influenza A(H1N1)pdm09 (36.4%), SRV, parainfluenza, adenovirus and influenza B viruses were detected. In Bolivia, in Santa Cruz, according to CENETROP laboratory data in EW 11, among all samples tested (n=13), all of them were positive for respiratory viruses; influenza B (53.8%) and influenza A(H1N1)pdm09(46.2%) viruses were detected.

In Colombia, in EW 09, among all samples tested (n=27), 14,8% were positive for respiratory viruses (RSV). No influenza viruses were detected.

In Peru³, in 2012, through EW 10, at the national level, 417.877 ARI cases in children under 5 were reported, 27% less than the average reported in the last 5 years. According to the ARI and pneumonia epidemic channels in children under 5 years old in EW 10, 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.

In Venezuela⁴, in EW 10, the ARI and pneumonia endemic channels show a slight increasing trend in comparison with the previous EW; the children <7 year of age was the most affected group for acute respiratory illness, mainly in Zulia, Miranda and Carabobo federal states. According to laboratory data, from 1 January up to 14 March, among all samples tested (n=416), the percentage of positive samples for

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

respiratory viruses was 6.0%. Among the positive samples, 68% were influenza A(H3N2), 24% was SRV and influenza A(H1N1) pdm09 (8.0%).

South America – Southern Cone

In Brazil, in Sao Paulo (Adolfo Lutz institute) in 2012, through EW 11, among all the tested samples (n=501), 15.4% were positive for respiratory viruses, predominating RSV and followed by influenza A(H1N1)pdm09, influenza A(H3) and influenza B. In Para (Evandro Chagas institute) in 2012, through EW 10, among all the tested samples (n=42), 28.6% were positive for respiratory viruses, predominating influenza A(H1N1)pdm09.

In Argentina⁵, in EW 07, 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 10, among all samples tested (n=3,759), low circulation of respiratory viruses was detected, mainly parainfluenza and followed by adenovirus and RSV.

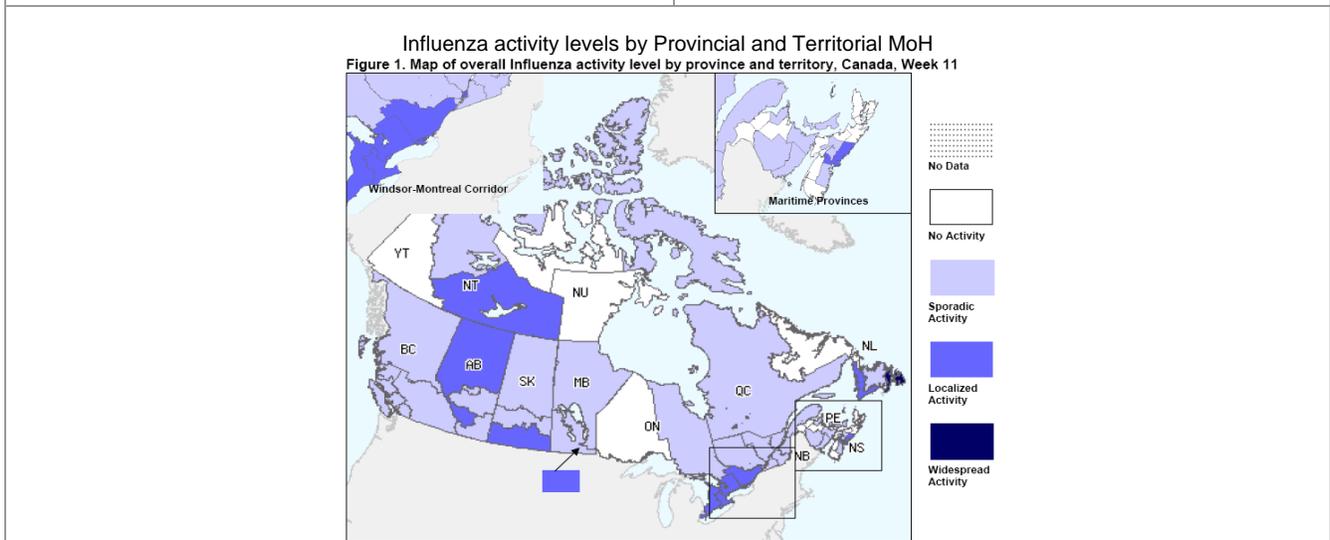
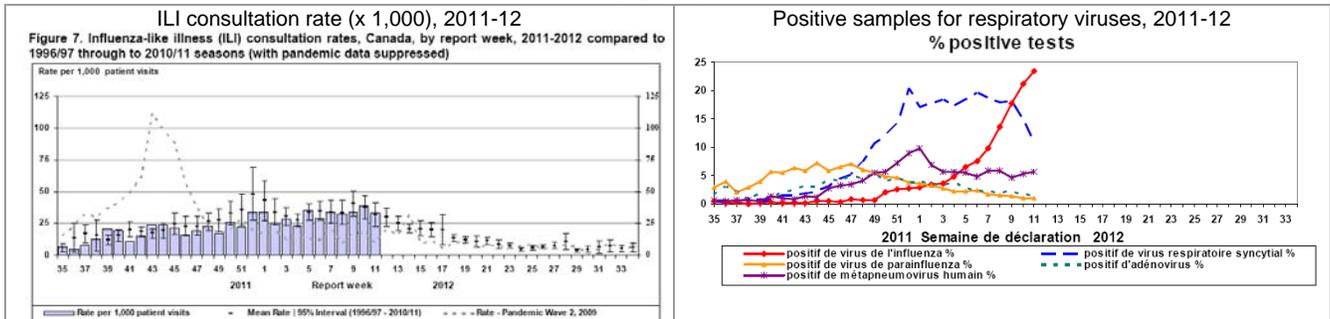
In Chile⁶, in EW 11, at national level, ILI activity remained in a low level and slightly higher than the previous week and within what is expected for this time of the year (2.1 per 100,000 inhabitants). The percentage of consults in urgency services for respiratory reasons (16.4%) increased as compared to the two previous years. In EW 11, the proportions of SARI hospitalization, SARI ICU admissions and SARI deaths remained under 5%. According to laboratory data, at national level, in EW 11, among all the samples tested (n=326), the percent of positivity for respiratory viruses was 3.7%; remaining adenovirus and parainfluenza as predominant viruses detected, followed by influenza A(H3N2).

In Paraguay⁷, in EW 11, the proportion of ILI consultations (4.5%) was lower than the previous weeks. The proportions of SARI hospitalization, SARI ICU admissions and deaths were under 10%. According to laboratory data, in 2012, through EW 11, among all samples tested (n=166), low circulation of respiratory viruses was detected, mainly adenovirus and followed by influenza B, parainfluenza and influenza A(H1N1)pdm09.

Graphs

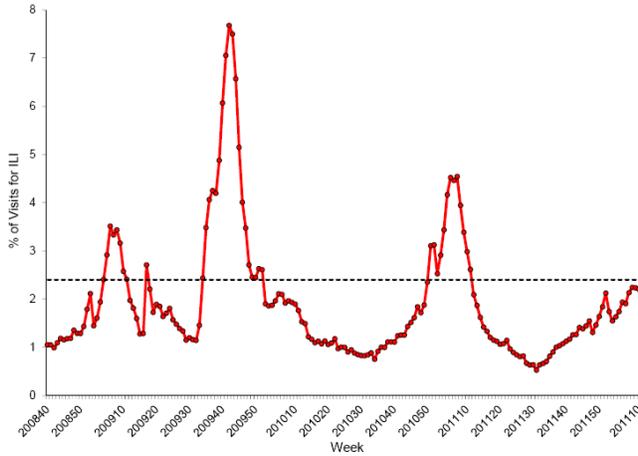
North America

Canada

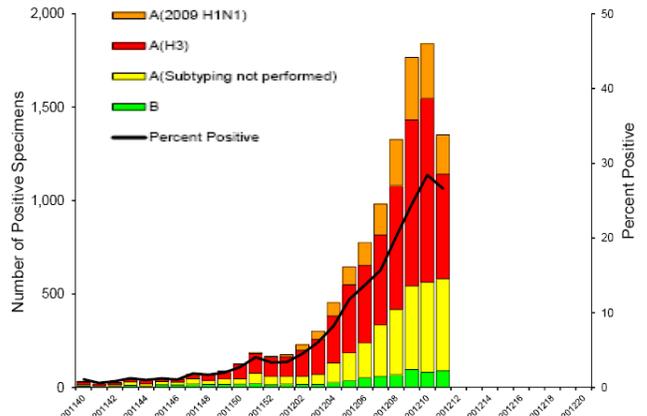


United States

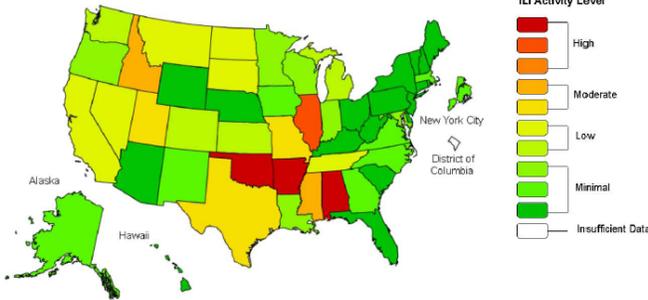
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – March 17, 2012



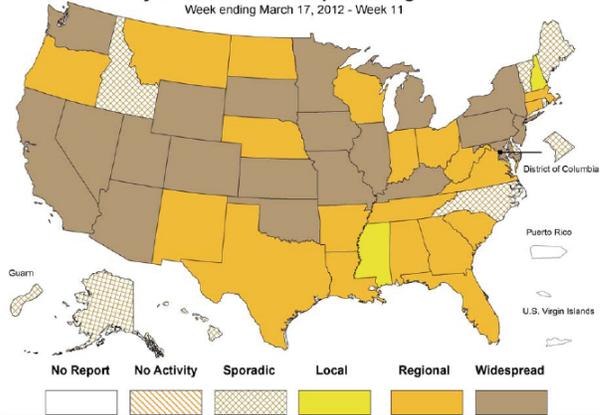
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2011-12 Influenza Season Week 11 ending Mar 17, 2012

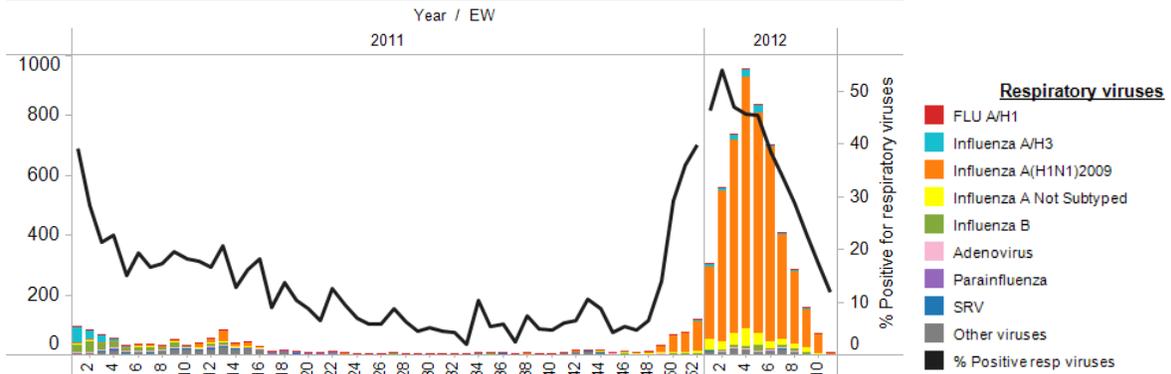


Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists* Week ending March 17, 2012 - Week 11



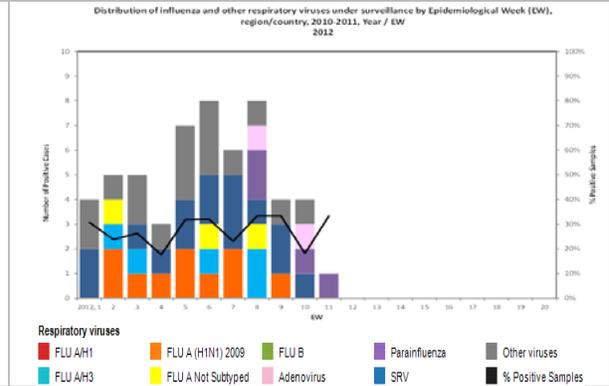
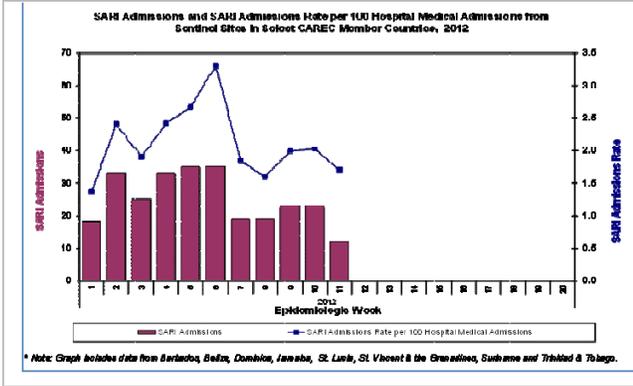
Mexico

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

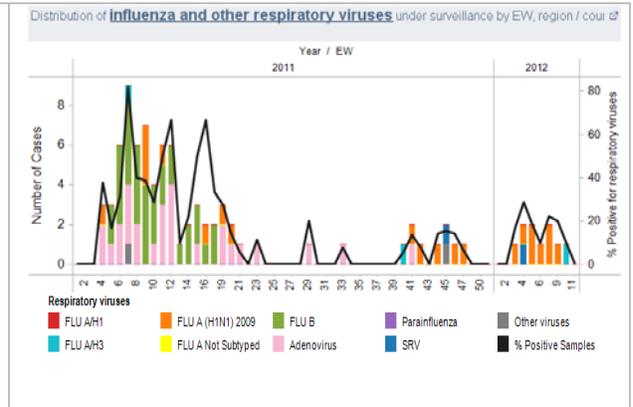
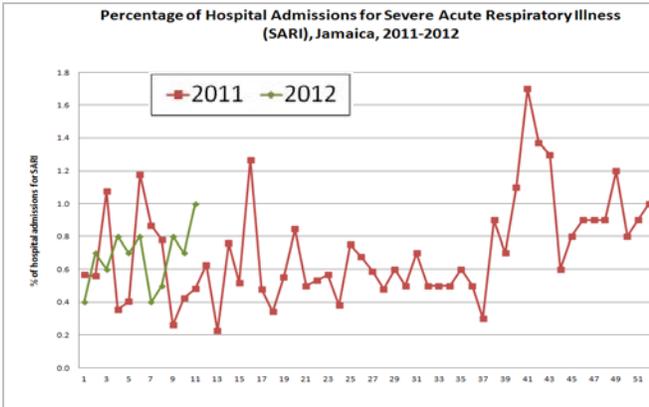


Caribbean

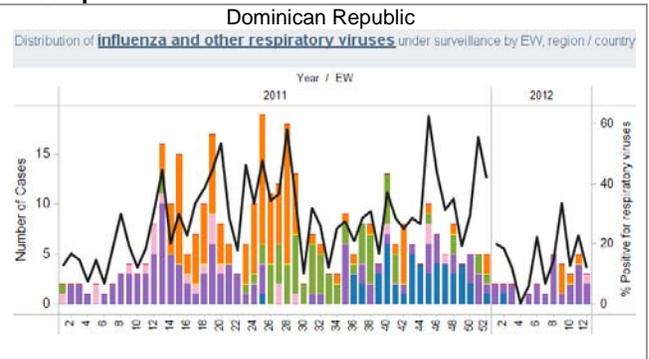
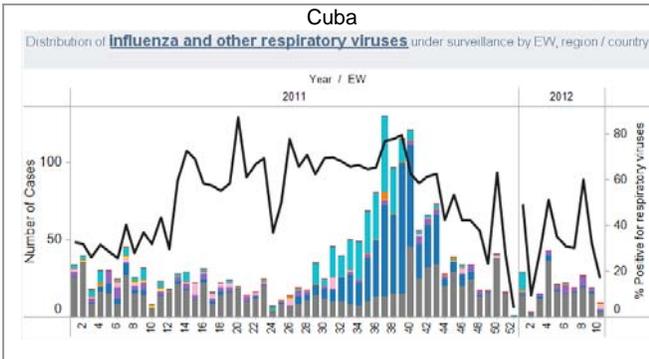
CAREC



Jamaica



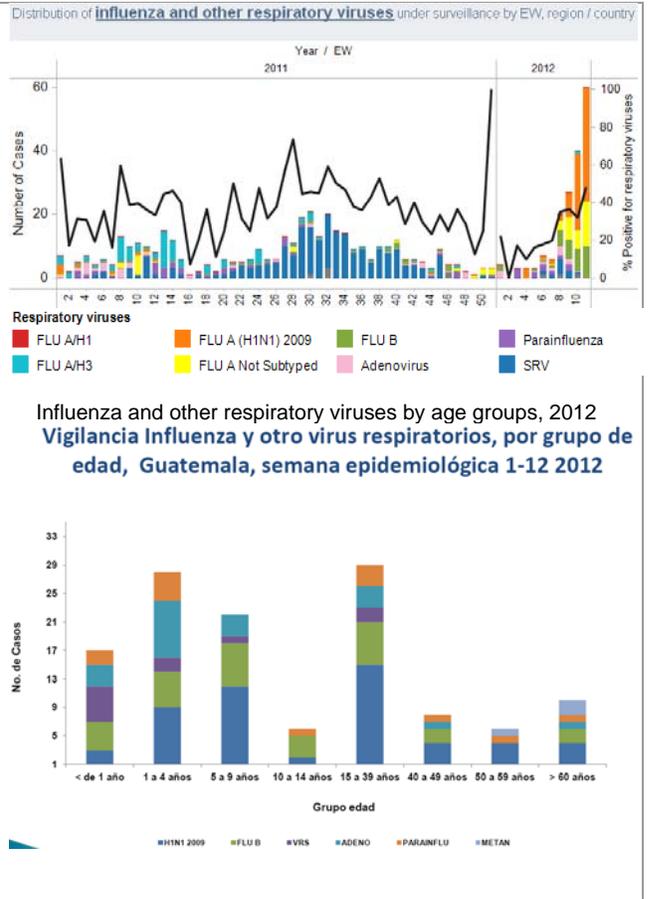
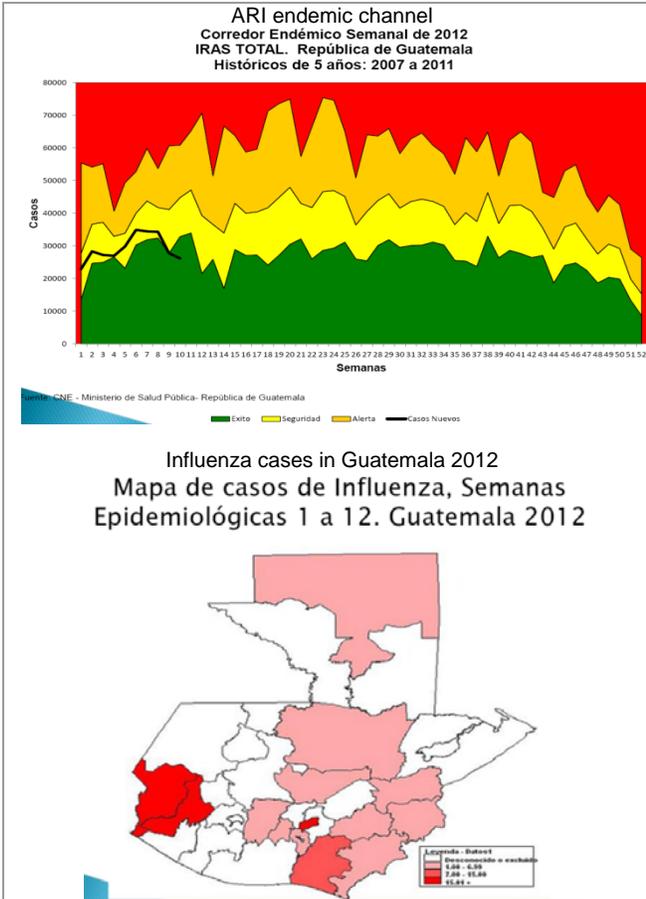
Cuba & Dominican Republic



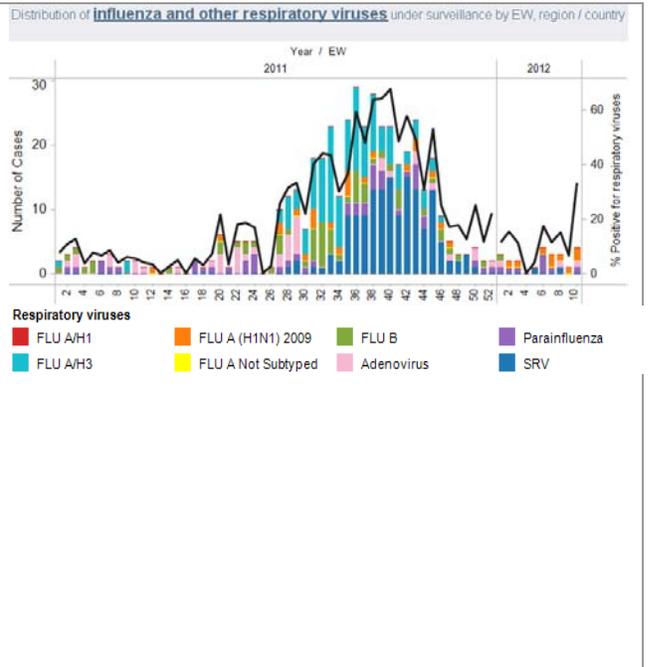
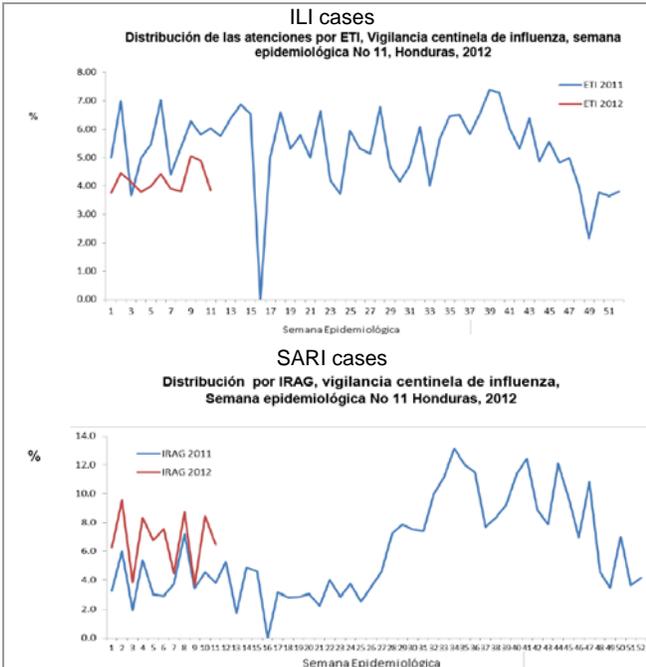
- Respiratory viruses**
- FLU A (H1N1) 2009
 - FLU B
 - Parainfluenza
 - Other viruses
 - FLU A (H3)
 - FLU A Not Subtyped
 - Adenovirus
 - SRV
 - % Positive Samples

Central America

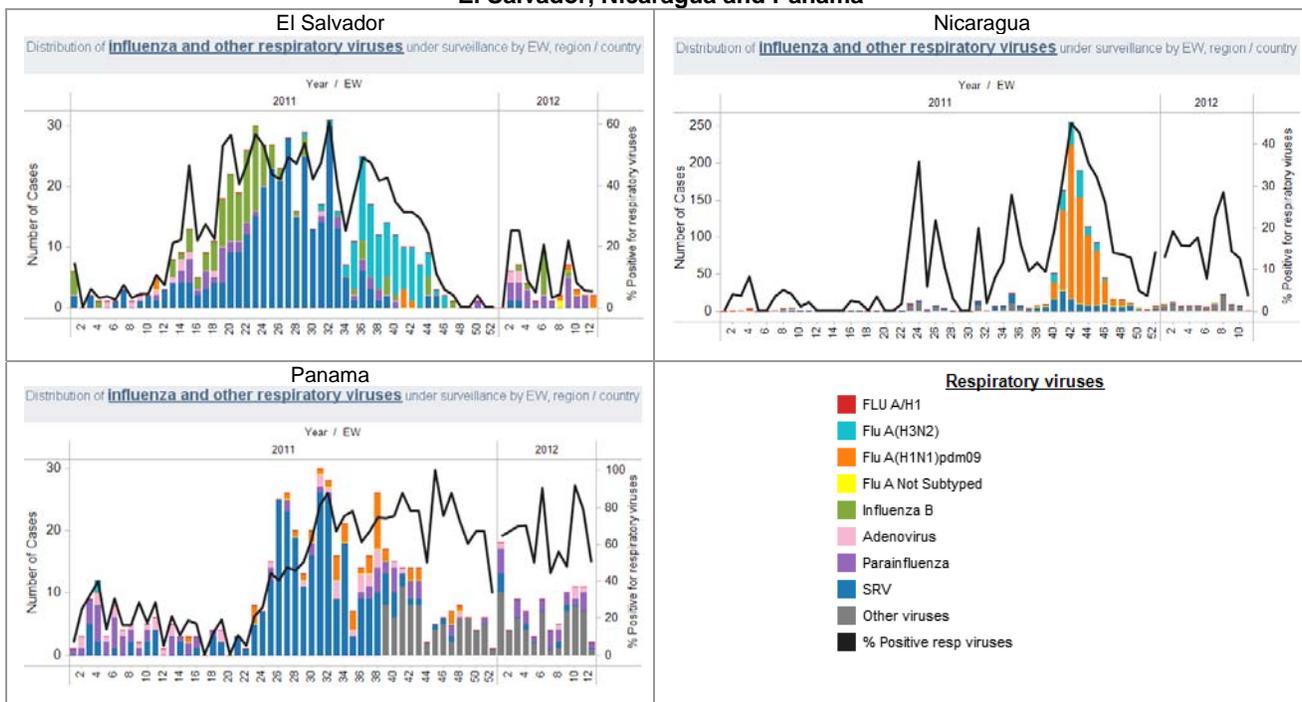
Guatemala



Honduras

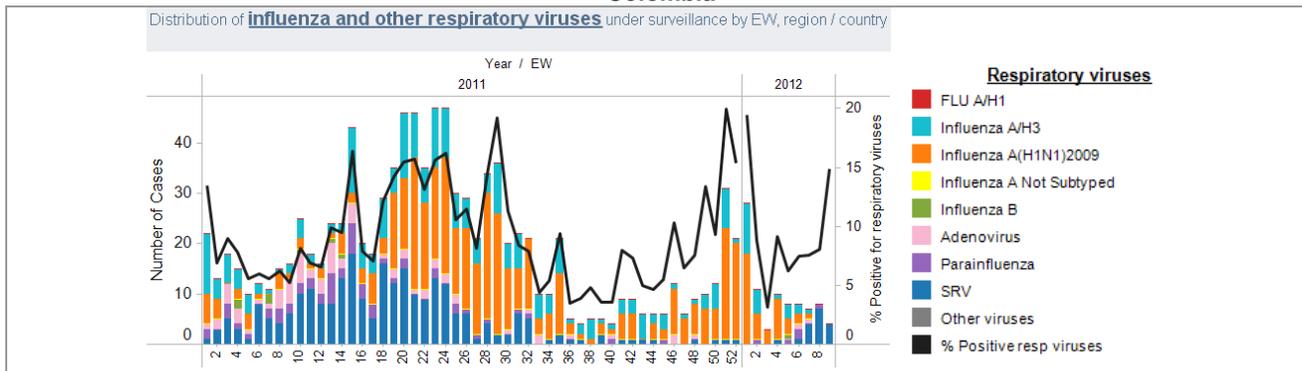


El Salvador, Nicaragua and Panama

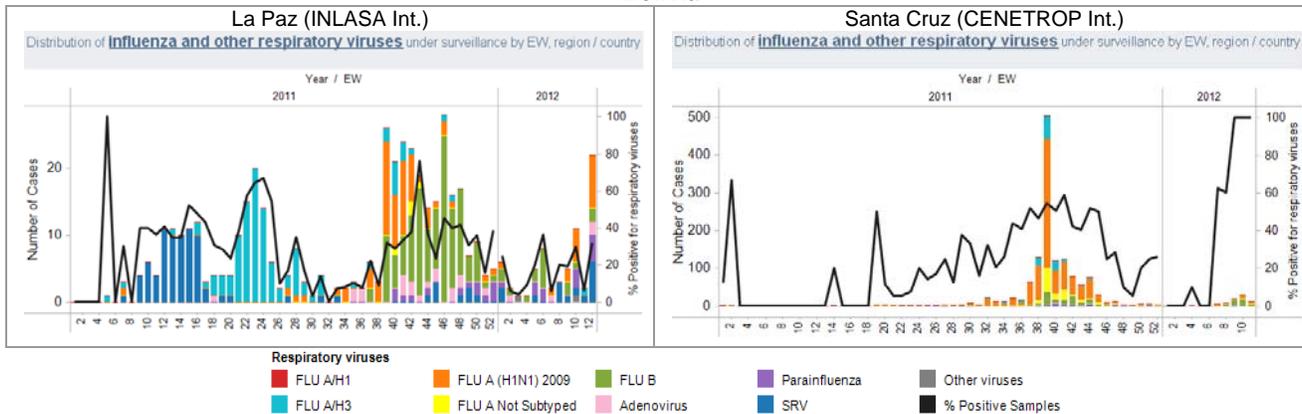


South America - Andean

Colombia



Bolivia



Peru

ARI endemic channel. Children <5 years old
Canal endémico de IRA en <5 años por SE. 2012

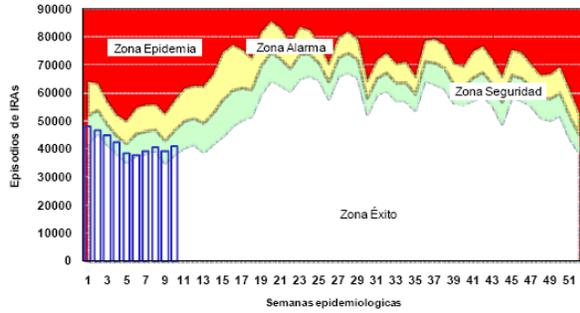


Figura 1: Canal endémico de Episodios de IRA en menores de 5 años. Perú 2012

Pneumonia endemic channel. Children <5 years old
Canal endémico de neumonías en <5 años por SE. 2012

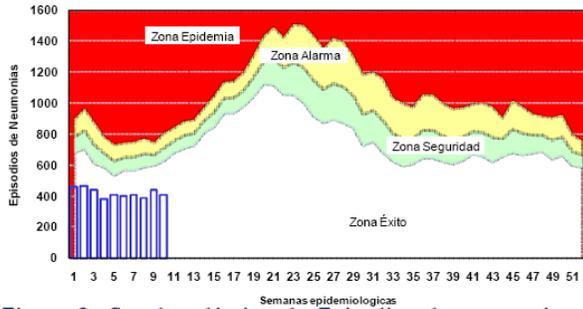
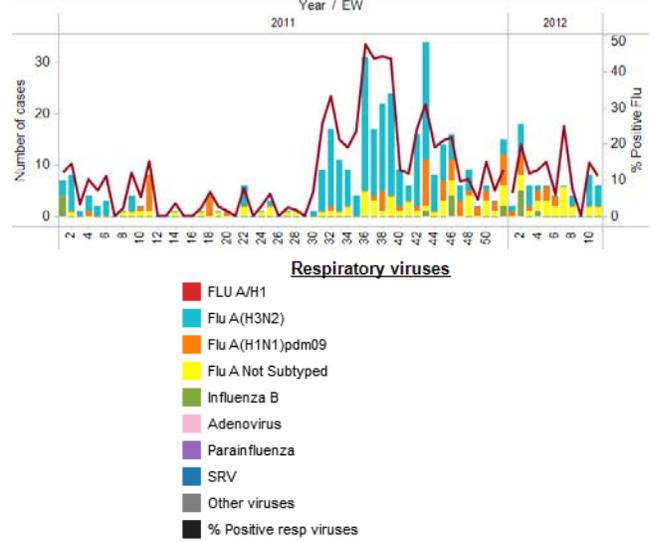


Figura 2: Canal endémico de Episodios de neumonías en menores de 5 años. Perú 2012

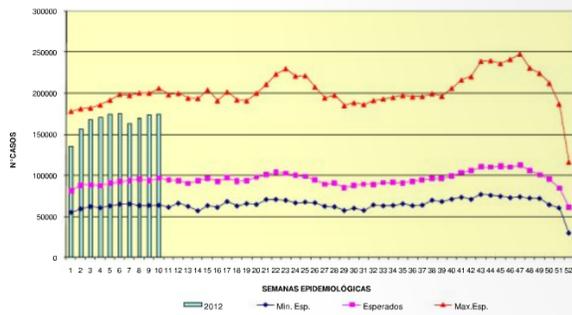
Distribution of influenza viruses under surveillance by Epidemiological Week (EW), region / country



Venezuela

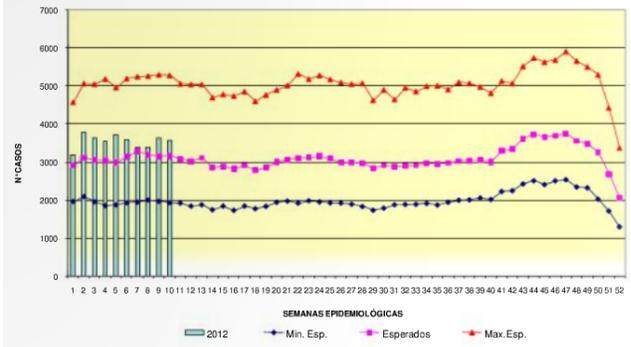
ARI endemic channel.
Canal endémico de IRA

Gráfico N° 01
Infecciones respiratorias agudas
Canal endémico 2005 - 2012
Venezuela. 2012



Fuente: EPI 12/ SIS Dirección de Vigilancia Epidemiológica, MPPS. 2012

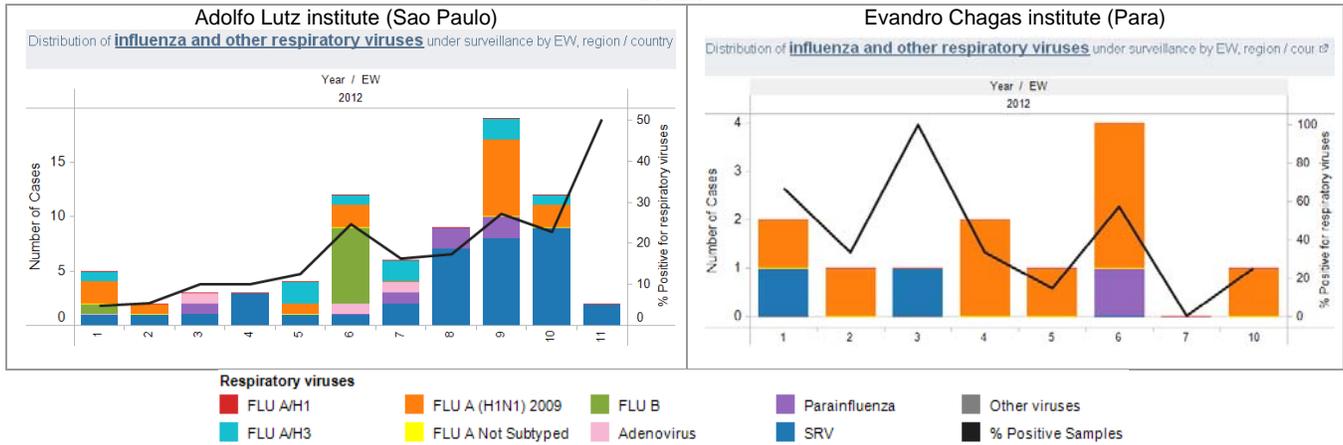
Pneumonia endemic channel.
Canal endémico de neumonías
Neumonías
Canal endémico 2005 - 2012
Venezuela, 2012



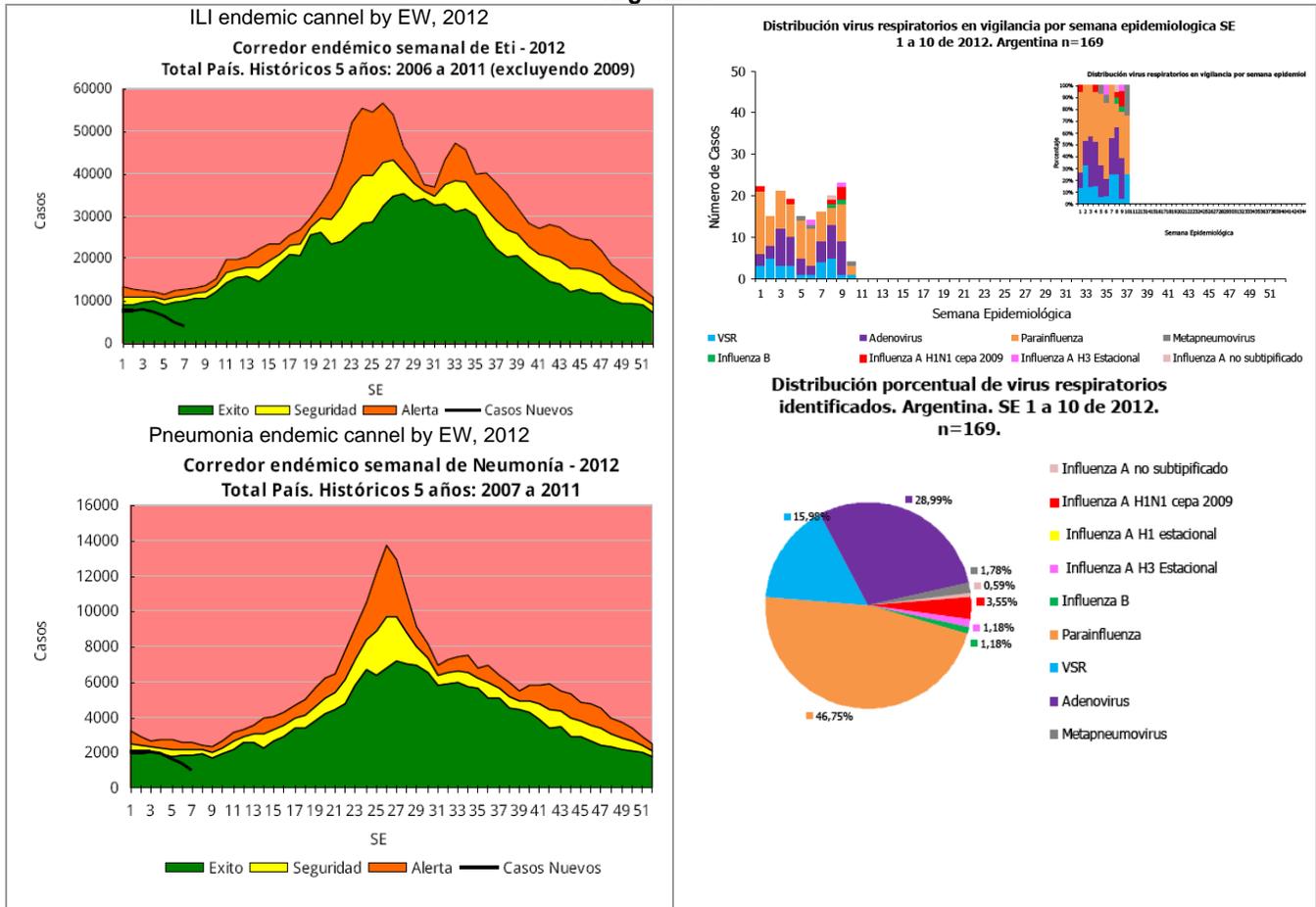
Fuente: EPI 12/ SIS Dirección de Vigilancia Epidemiológica, MPPS. 2012

South America – Southern Cone

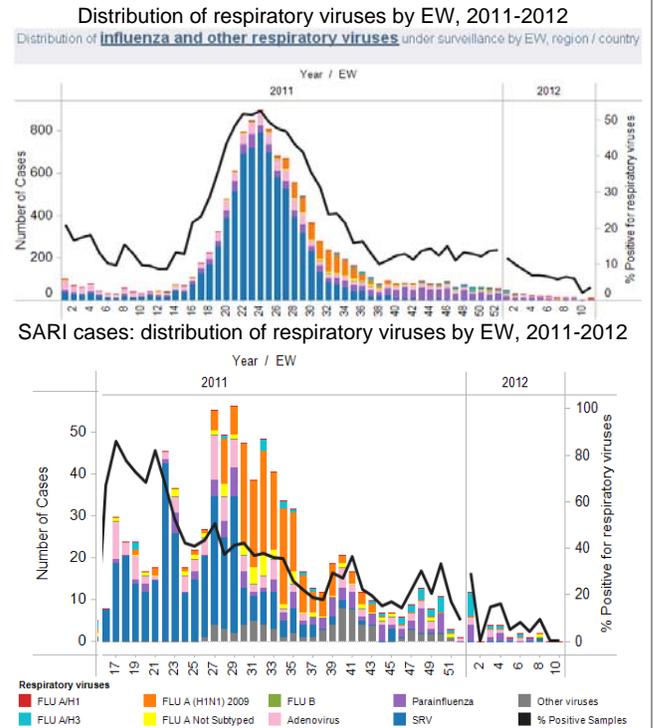
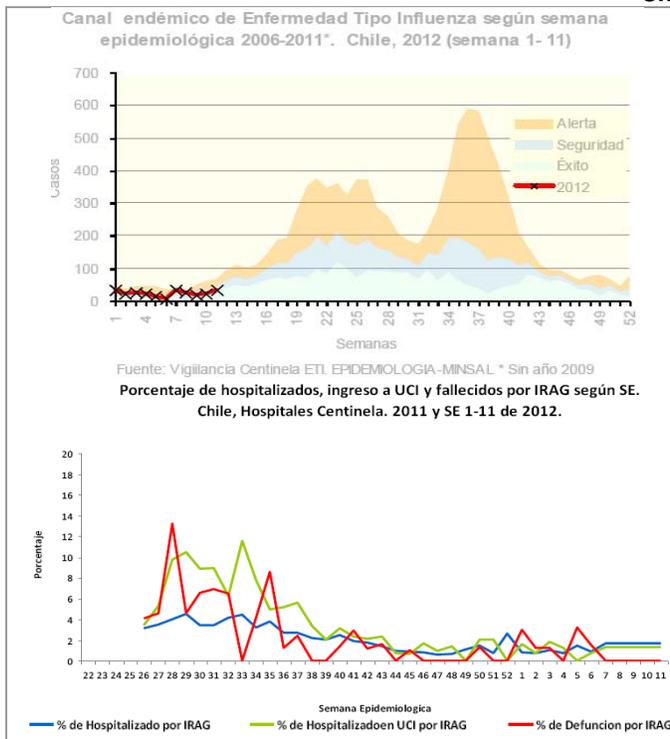
Brazil



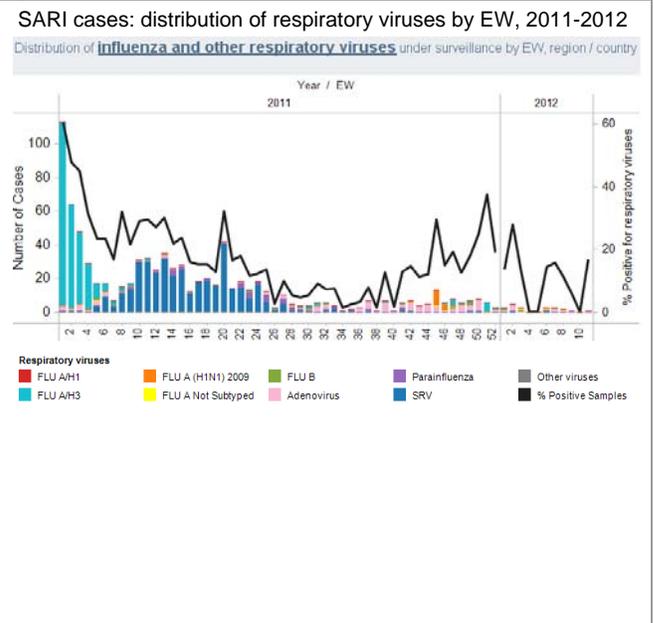
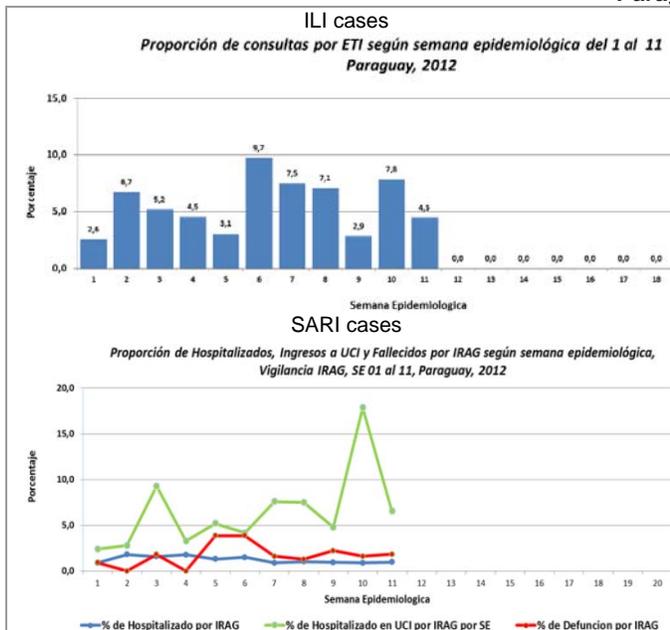
Argentina



Chile



Paraguay



¹ FluWatch Report. EW 11. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 11. Centers for Disease Control and Prevention

³ Perú. Sala de Situación de Salud. SE 10. Ministerio de Salud. Dirección General de Epidemiología

⁴ Venezuela. Boletín epidemiológico - SE 10. 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 11.

⁶ Chile. Informe de situación. SE 11. Available at: www.pandemia.cl

⁷ Paraguay. Boletín epidemiológico semanal SE 11. Available at:

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