



Regional Update EW 49

Influenza
(December 20, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/hip/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 remains low; with slightly increase in some Canadian regions (Alberta, British Columbia, Quebec Ontario and Saskatchewan).
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued to circulate (Costa Rica, Nicaragua and Dominican Republic). Among influenza viruses, the circulation of influenza A(H1N1)pmd09 continued (Costa Rica, Honduras), in co-circulation with influenza A/H3N2 (Costa Rica).
- In South America, influenza activity remains low or within the expected level for this period of time. Influenza A(H1N1)pmd09 (Ecuador and Brasil) and influenza A/H3N2 (Ecuador and Chile) circulated in low amount.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 49, influenza activity continued to increase in more regions compared with the previous weeks, but influenza activity remained at inter-seasonal levels in the rest of the country. Localized influenza activity was reported in two regions of two provinces (within British Columbia y Saskatchewan) and sporadic influenza activity was reported in ten regions of four provinces (within Alberta, British Columbia, Ontario, and Quebec). In EW 49, Influenza-like Illness (ILI) consultation rates were 16.2 per 1,000 consultations; slightly lower than the previous EW (23.0) and within the expected levels for this time of year. Compared to other age groups, in EW 49, a higher ILI consultation rate was observed in children under 5 years old (48.2/1,000 consultations) and among children 5 to 19 years of age, the ILI consultation rate was (27.6/1,000). In EW 49, among the total samples analyzed (n=2,609), the percent positivity for respiratory viruses remained lower than 2%, which was slightly higher than the previous week. In EW 49, the proportion of RSV and metapneumovirus increased, and the remaining respiratory viruses remained stable or decreased compared to the previous weeks; rhinovirus, parainfluenza and adenovirus were the mainly viruses detected. Concerning influenza viruses, in EW 49, influenza A/H3N2 and influenza B were detected. In EW 49, two outbreaks by influenza in two long-term care facilities were reported.

In the United States², in EW 49, at the national level, the proportion of ILI consultations (1.2%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 49 (6.5%) was lower than the epidemic threshold for this time of year (7.2%). In EW 49, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 49 (n=2,480), the percentage of samples positive for influenza remained low (<2%), with sporadic detections of influenza A/H3, and influenza B.

Caribbean

CAREC^{*}, in EW 49, received epidemiological information from Tobago. In EW 49, no SARI hospitalization neither SARI deaths were detected for this EW in Tobago. So far, no samples tested from patients with symptoms onset in EW 48 or 49 have been reported. Since EW 42, RSV and influenza A(H1N1)pmd09 circulated in low an variable amount.

In Jamaica, in EW 49 the proportion of consultations for Acute Respiratory Illness (ARI) was 4,5%, which was similar to the previous week (4,7%). The proportion of SARI admissions remained <2%, increasing slightly compared to previous EW. In EW 49, no SARI deaths were reported. According to laboratory data, in EW 49, no samples positive for influenza viruses were detected.

In Cuba, according to laboratory data, in EW 49, among all samples tested (n=21), ~20% were positive for respiratory viruses. In 49, no samples positive for influenza viruses were detected.

In the Dominican Republic, according to laboratory data, in EW 49, among all samples tested (n=21), the percentage of samples positive for respiratory viruses was ~20%, which was lower than the previous week. RSV was the only virus detected in this EW. In EW 49, no positive samples for influenza viruses were detected.

Central America

In Costa Rica according to laboratory data, in EW 49, among all samples tested (n=152), the percentage of samples positive for respiratory viruses (~45%) was slightly higher than the previous week. RSV has been the predominant virus since EW 28, in variable co-circulation with adenovirus. Since EW 44, the percentage of samples positive for influenza showed an increasing trend, due to an increased detection of influenza influenza A/H3 and a variable co-circulation with A(H1N1)pmd09.

In Honduras³, in EW 48, the proportion of ILI was (~4%) slightly lower than the previous week (5%) and than what was observed in 2010. The SARI hospitalization (~5%) was lower than the previous EW (~11%), and what was observed in 2010. In EW 48, one SARI death was reported. According to laboratory data, in EW 48, among all samples tested (n=34), the percent of samples positive for respiratory viruses was ~15%. RSV was the predominant virus since EW 35. Concerning to influenza viruses, one sample positive for influenza A(H1N1)pmd09 another one for influenza B were detected.

In Guatemala, in EW 49, among all samples tested, the percent positivity was ~15%, one sample positive for influenza A no sub-typified was detected.

In Nicaragua, in EW 48, among all samples tested (n=79), the percent positivity for respiratory viruses was ~15%; RSV was the main virus detected, followed by influenza A(H1N1)pmd09. In EW 49, for the first time since EW 37, no positive samples for influenza were detected.

In Panama, in EW 49, among all samples tested, the percent positivity for respiratory viruses was ~55%, samples positives for respiratory viruses were detected, but not for influenza viruses.

South America – Andean

In Colombia, according to the national laboratory⁴, in EW 49, among all samples tested, no samples positive for respiratory viruses were detected.

In Ecuador, the percentage of SARI hospitalizations, SARI ICU admissions, and SARI deaths remained under 5%. According to laboratory data, in EW 48, among all samples tested (n=42) the percent positivity for respiratory viruses was ~20%; influenza A(H1N1)pmd09 and influenza A/H3 were detected.

In Peru⁵, in EW 48, ARI and pneumonia indicators activity (number of cases by ARI and pneumonia in children under 5 years old, respectively) were slightly lower and higher, respectively, than the previous week and remained below observed for this time of the year. Through EW 48 2011, 341 deaths by pneumonia in

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

children under 5 years old were reported, which was an amount lower than the observed average of the three previous years, 2008-2010.

In Venezuela⁶, in EW 48, ARI endemic channel continued to show an increasing trend in the number of cases since ~EW 38 showed an increasing trend in the number of cases since ~EW 38, matching the maximum expected for this time of the year. A higher incidence rate was reported in children less than 7 years old. In EW 48, the pneumonia endemic channel decreased compared to the previous week and remained within expected for this time of the year. In 2011 through December 9th, EW 49, among all samples tested (n=9,398), the percentage of positive samples for respiratory viruses was ~40%. Concerning influenza viruses, of the total number of samples tested, ~24% of samples tested were positive for influenza A(H1N1)pmd09, ~6% were influenza A/H3 and <1% were influenza B.

South America – Southern Cone

In Argentina⁷, in EW 45, ILI and SARI endemic channels showed that the number of ILI and pneumonia cases has continued to decrease since peaking in EW 27 and has remained lower than what was observed in the same period in 2010. According to laboratory data, in EW 49, among all samples tested (n=86), the percent of positivity for respiratory viruses was 9%, RSV and parainfluenza were the main viruses detected. In EW 49, no samples positive for influenza were detected.

In Brazil, according to Adolfo Lutz Institute (San Pablo), in EW 49, among the tested samples (n=20), the percentage of samples positive for respiratory viruses was ~5%; one sample positive for influenza A(H1N1)pmd09 virus was detected.

In Chile⁸, in EW 48, the ILI activity (4,9 consultation for 100,000 inhabitants), at national level, was slightly higher than the rate of the previous weeks and slightly above what was observed for this time of the year. In EW 48, the percentage of attention to children under 15 years old in urgency services for respiratory reasons was 33% lower than what was observed in the two previous years. Though EW 48, 17 deaths were registered associated with influenza A(H1N1)pmd09, of them 14 had at least one co-morbidity. According to laboratory data, in EW 49, among all the samples tested (n=496), at national level, the percent of positivity for respiratory viruses was ~12%, parainfluenza and adenovirus were the predominant viruses detected. Among influenza viruses, in EW 49, influenza A/H3 and influenza A no sub-typified were detected.

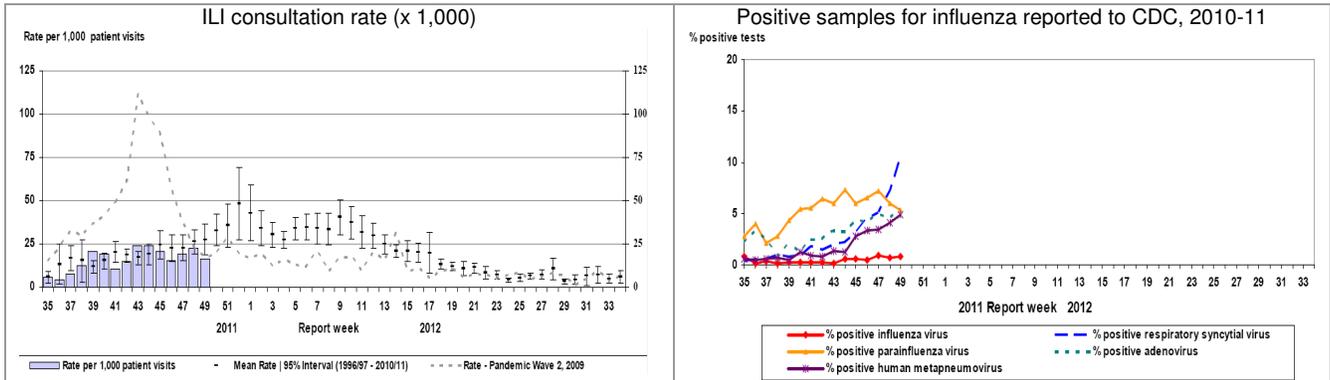
In Paraguay⁹, in EW 49, the proportion of ILI consultation (5%) was similar to the previous week (5.1%). In EW 49, the proportions of SARI hospitalization, SARI ICU admissions and deaths remained under 15%. According to laboratory data, in EW 49, among all samples tested, low circulation of respiratory viruses was detected, adenovirus and parainfluenza were the predominant viruses in circulation.

In Uruguay¹⁰, in EW 50 the proportion of SARI hospitalizations, SARI ICU admissions and SARI deaths remained <5%. In general, these proportions have continued to decrease since peaking in EW 31, with the exception of SARI ICU admission, that were slightly above to the SARI hospitalization and SARI deaths but below 5%, and with an increasing trend since EW 43.

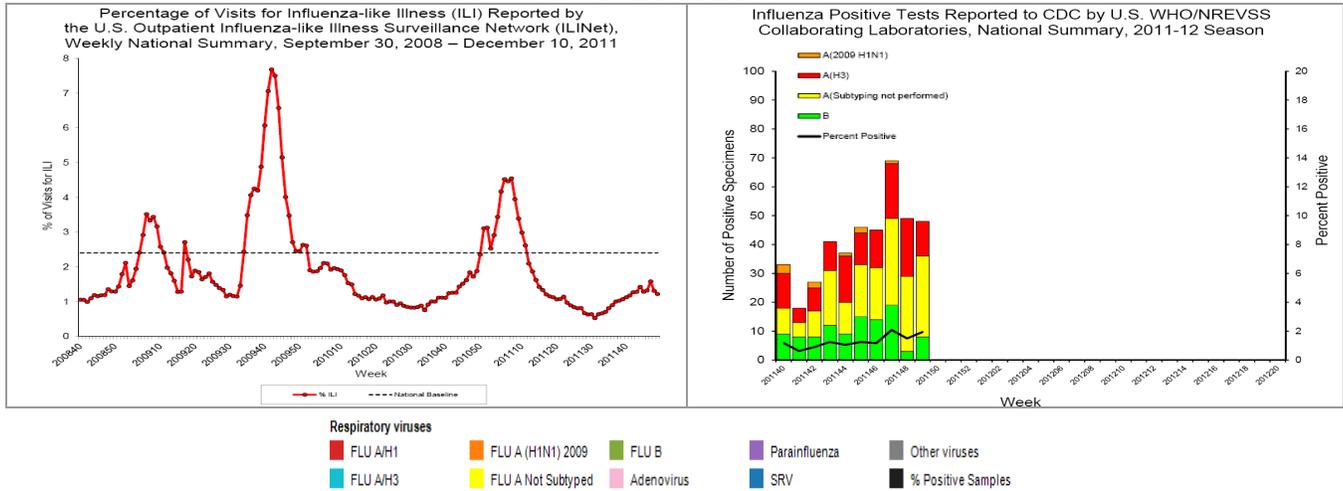
Graphs

North America

Canada

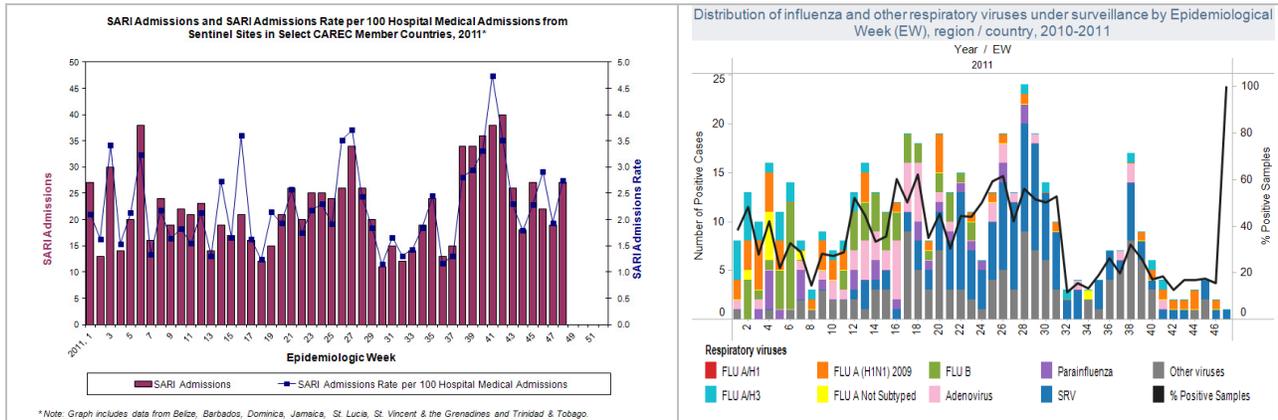


United States

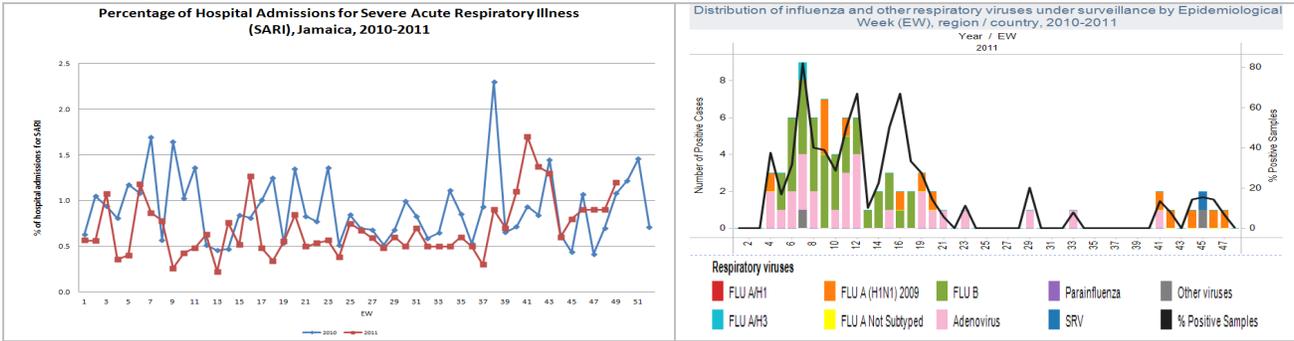


Caribbean

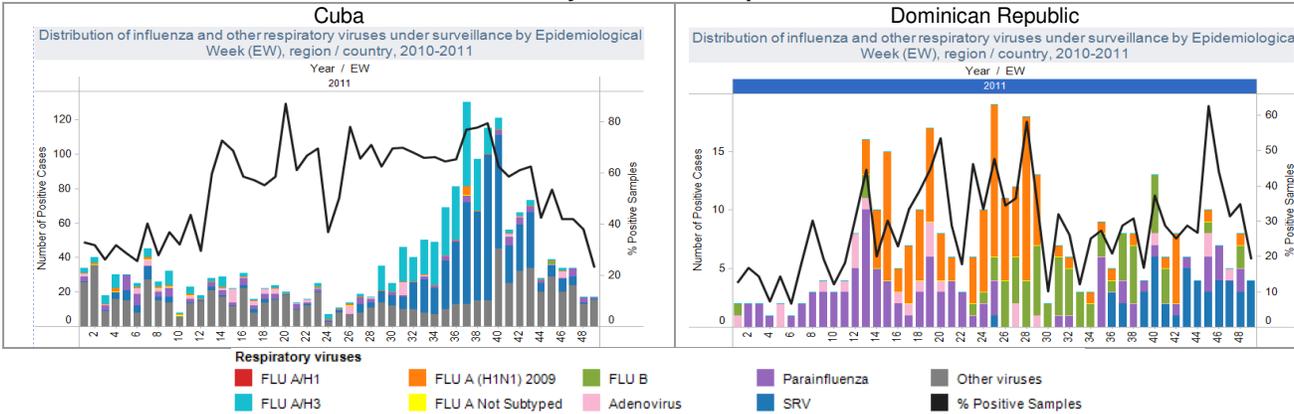
CAREC



Jamaica

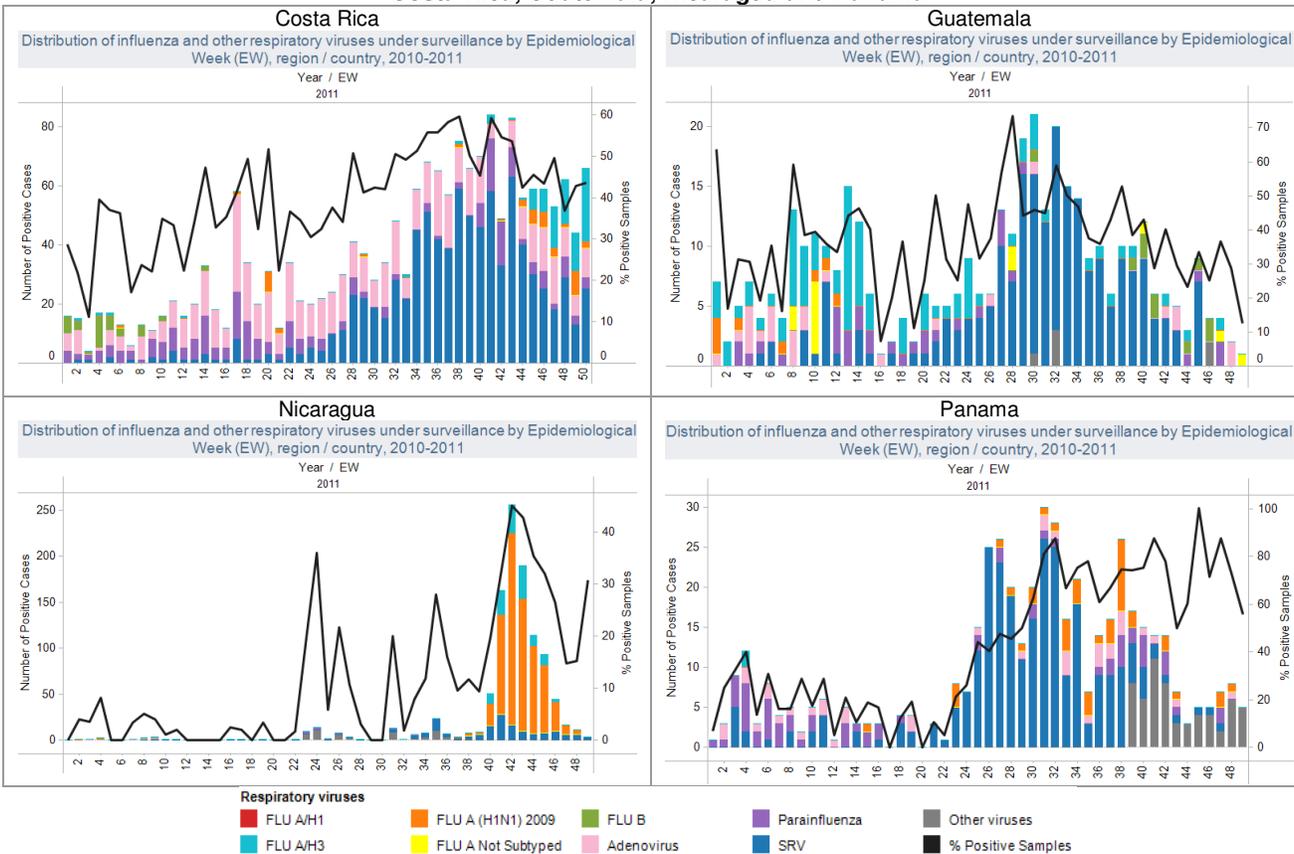


Cuba y Dominican Republic

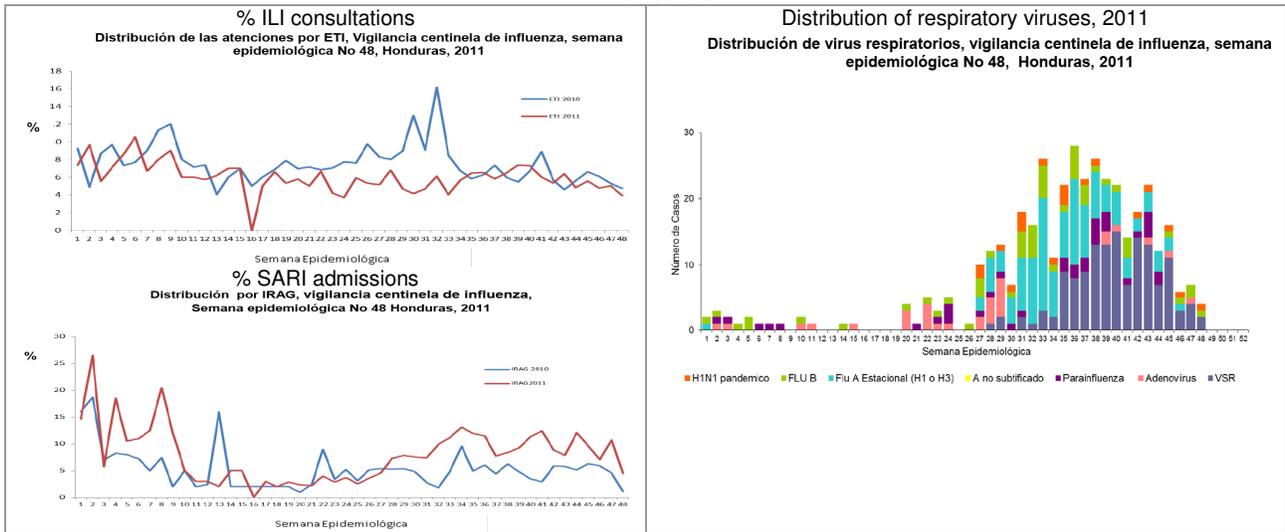


Central America

Costa Rica, Guatemala, Nicaragua and Panama

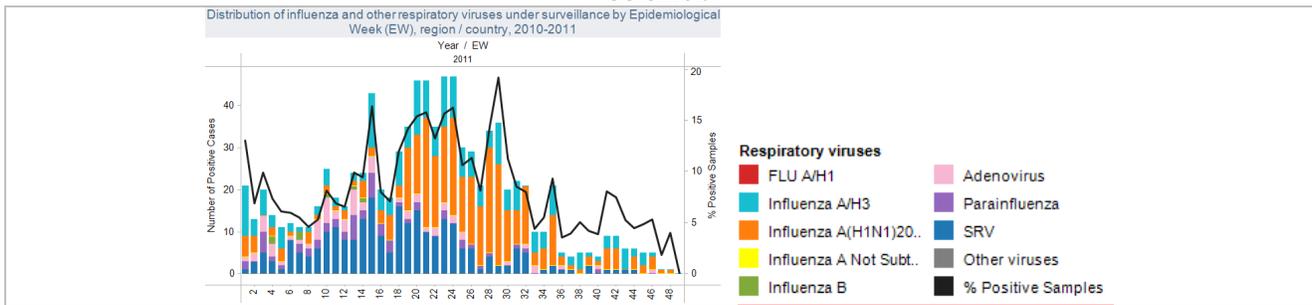


Honduras

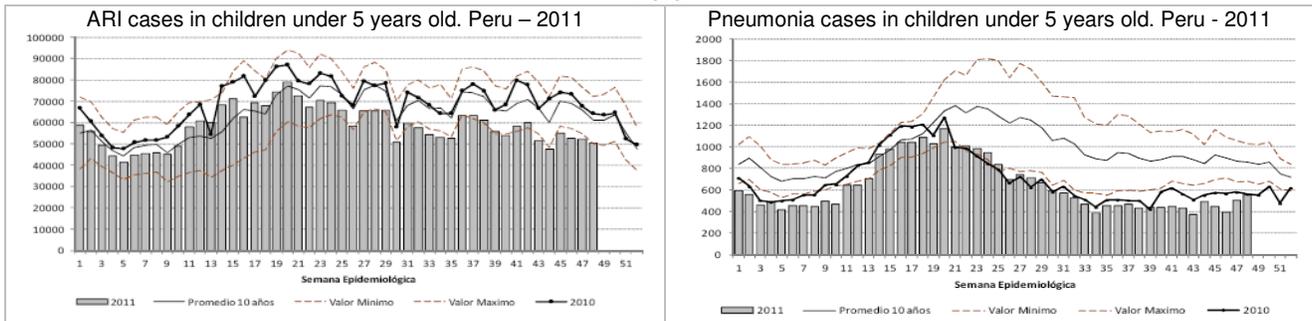


South America - Andean

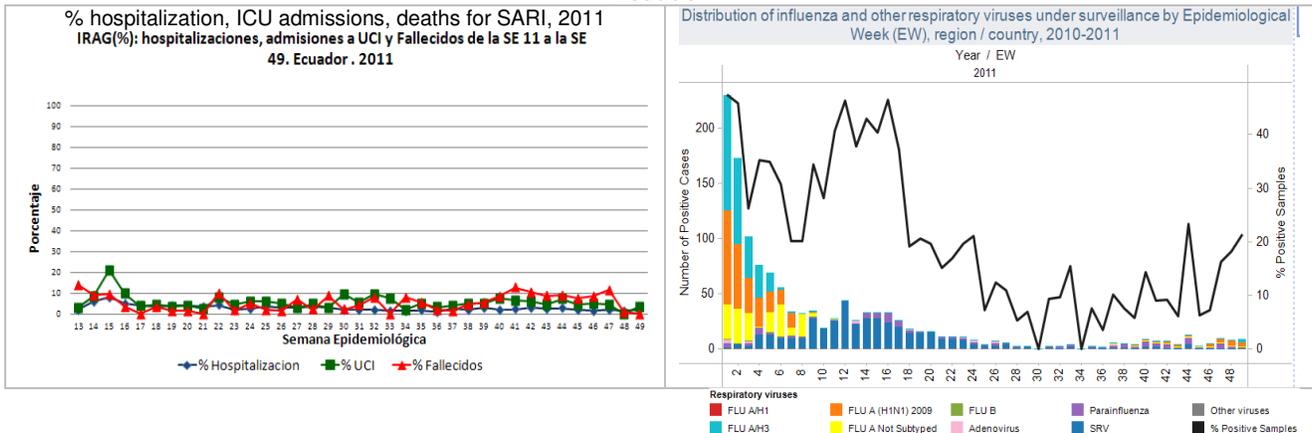
Colombia



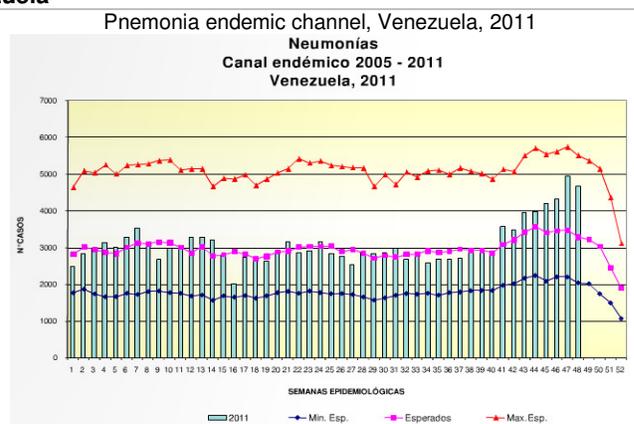
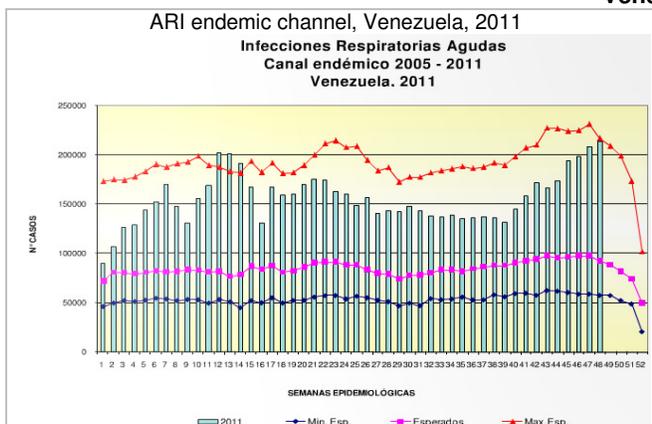
Peru



Ecuador

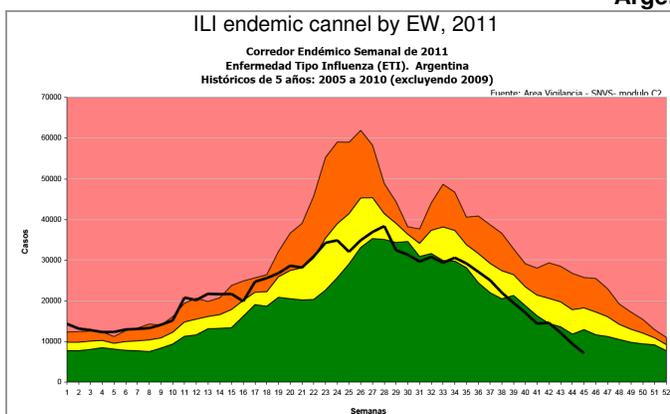


Venezuela

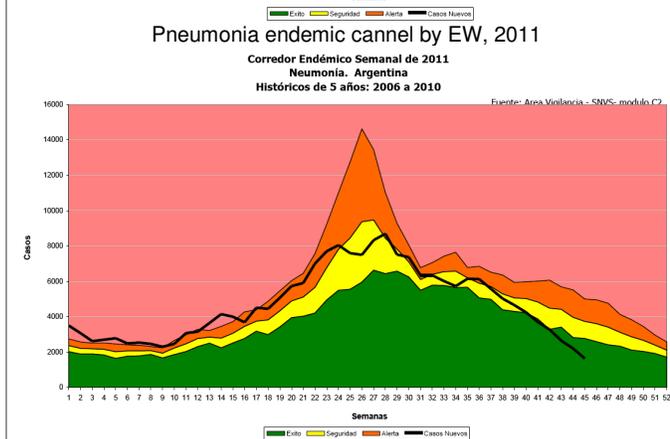
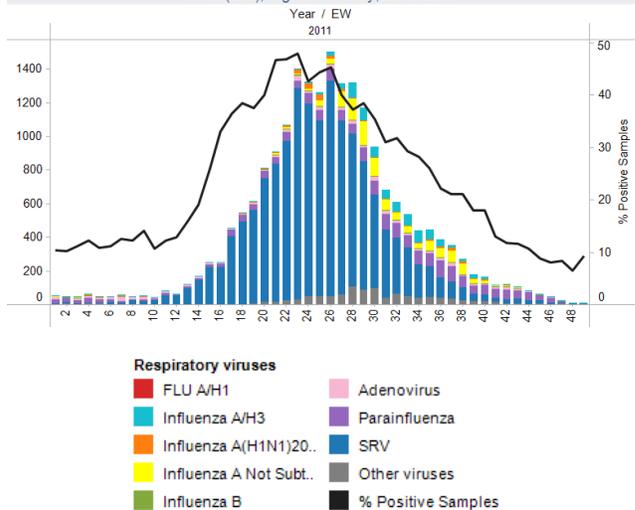


South America – Southern Cone

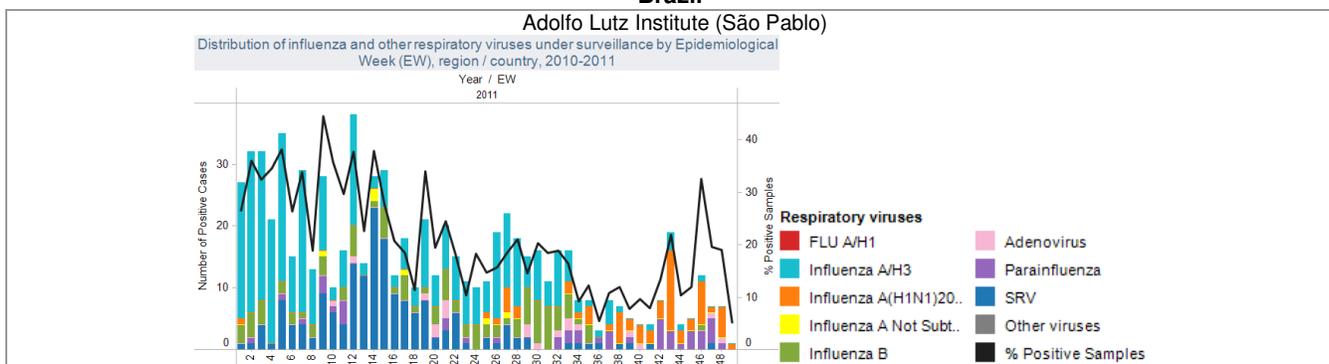
Argentina



Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011



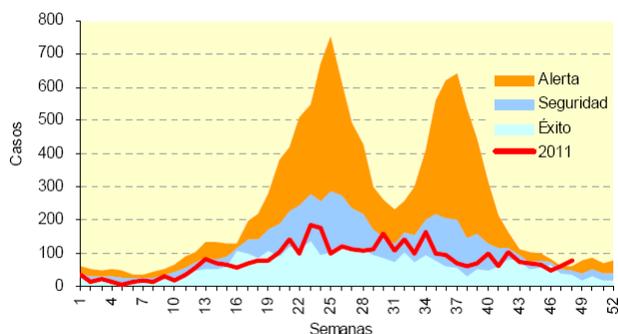
Brazil



Chile

ILI endemic channel. Chile, 2011

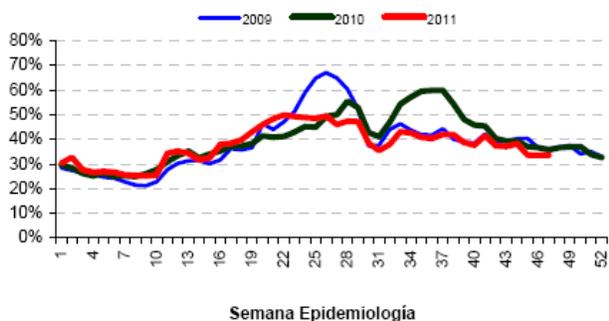
Canal endémico de Enfermedad Tipo Influenza según semana epidemiológica 2005-2010*. Chile, 2011 (semana 1-48)



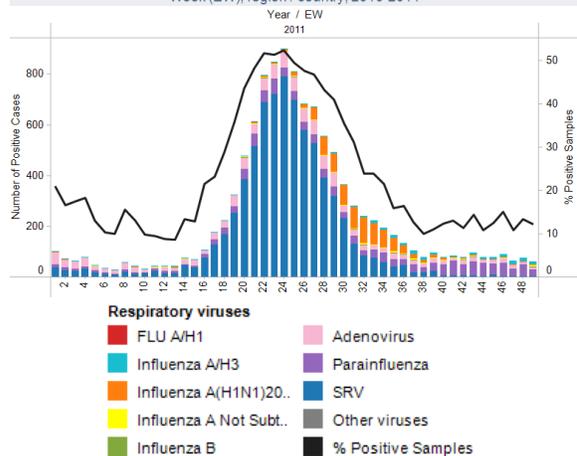
Fuente: Vigilancia Centinela ETI. EPIDEMIOLOGIA-MINSAL

Emergency attentions by respiratory infection in children under 15 years old. Chile, 2009-11.

Atenciones de Urgencias por causa respiratoria en niños (< 15 años). Chile 2009-2010 y 2011 (SE 1-48)



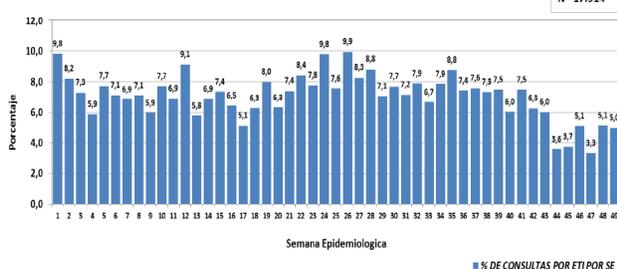
Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011



Paraguay

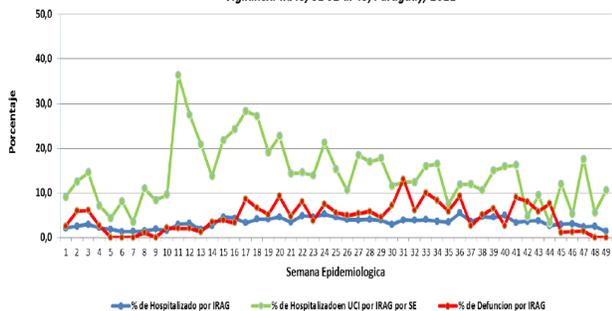
Proportion of ILI consultation, Paraguay, 2011.

Proporción de consultas por ETI según semana epidemiológica del 1 al 49 Paraguay, 2011

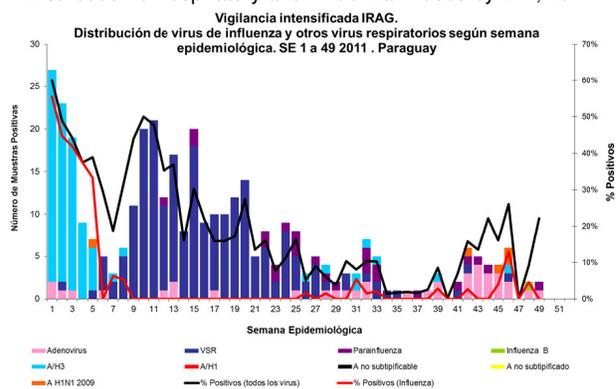


% SARI hospitalization, SARI ICU admissions and SARI deaths. Paraguay, 2011.

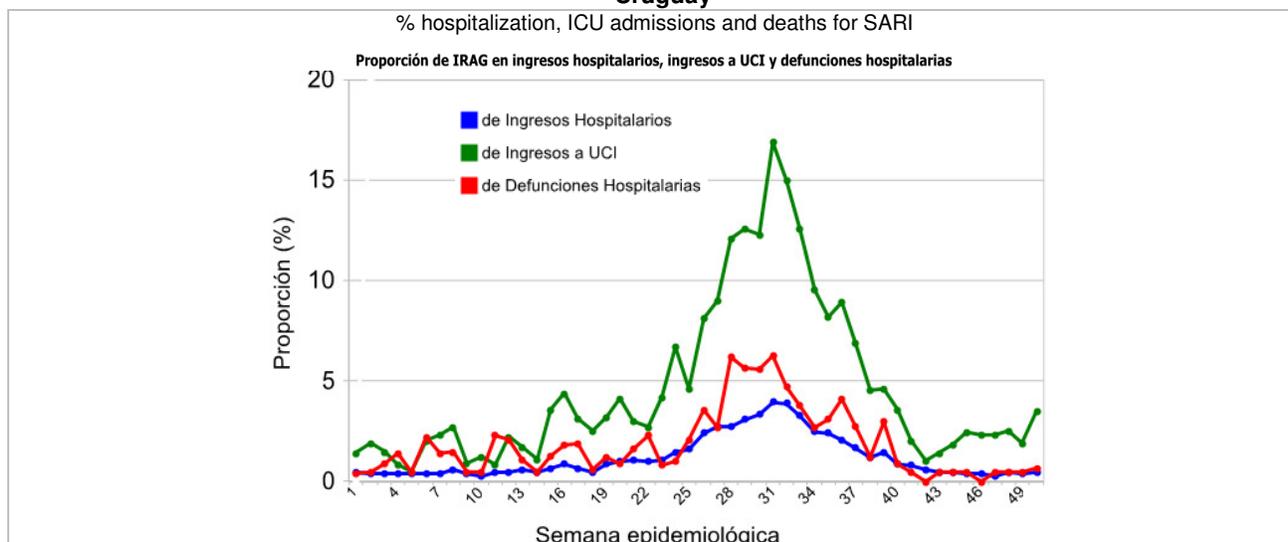
Proporción de Hospitalizados, Ingresos a UCI y Fallecidos por IRAG según semana epidemiológica, Vigilancia IRAG, SE 01 al 49, Paraguay, 2011



Distribution of respiratory and influenza viruses by EW, 2011



Uruguay



¹ FluWatch Report. EWs 49. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. Week 49. Centers for Disease Control and Prevention

³ Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 48

⁴ Colombia. Instituto Nacional de Salud.

⁵ Perú. Sala de Situación de Salud. SE 48. Ministerio de Salud. Dirección General de Epidemiología.

⁶ Venezuela. Boletín epidemiológico - SE 48. Ministerio del Poder Popular para la Salud. Available at:

http://www.mpps.gob.ve/index.php?option=com_content&view=article&id=549&Itemid=915

⁷ Argentina. Actualización situación de enfermedades respiratorias 2011. SE 50.

⁸ Chile. Informe de situación. SE 48. Available at: www.pandemia.cl

⁹ Paraguay. Boletín epidemiológico semanal SE 49. Available at:

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

¹⁰ Uruguay. Dirección General de la Salud. División Epidemiología. SE 50. Available at:

<https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu>