



Regional Update EW 46

Influenza
(November 29, 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 and Quebec). In USA (Iowa), 3 cases of swine-origin triple reassortant influenza A(H3N2) were notified with limited human to human spread.
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued (CAREC, Costa Rica, Honduras, Dominican Republic y Panamá). Among influenza viruses, the circulation of influenza A(H1N1)pmd09 and influenza A/H3N2 (Costa Rica and Honduras) continued.
- In the Southern Cone, influenza activity remains low. In the last weeks, low circulation of influenza viruses was reported.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 46, influenza activity was sporadic in five regions (in the provinces of British Columbia, Alberta, Quebec), but remained at inter-seasonal levels in the rest of the country. In EW 46, Influenza-like Illness (ILI) consultation rates were 15.7 per 1,000 consultations; slightly lower than the previous EW (21.9) and within the expected levels for this time of year. Compared to other age groups, in EW 46, a higher ILI consultation rate was observed in children under 5 years old (~60/1,000 consultations). In EW 46, among the total samples analyzed (n=2,337), the percentage of samples positive for respiratory viruses remained lower than 1%, which was similar to the previous week. The percentage of samples positive for influenza continued to decrease since peaking in EW 44. Concerning influenza viruses, in EW 46, influenza A/H3, influenza A(H1N1)pmd09 and influenza B were detected.

In the United States², in EW 46, at the national level, the proportion of ILI consultations (1.3%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 45 (6%) was lower than the epidemic threshold for this time of year (7%). In EW 46, two pediatric deaths associated with influenza were reported. Among all samples tested during EW 46 (n=2,276), the percentage of samples positive for respiratory viruses continued low (<2%), with sporadic detections of influenza A/H3, untyped influenza A and influenza B. On 22 November, the United States of America - International Health Regulation National Focal Point (USA IHR-NFP) reported a cluster of influenza like illness cases in Iowa among three children (3 years, 11 months, and 2 years), positive to swine-origin triple reassortant influenza A(H3N2) virus³. The children were all in contact with each other and none had a known recent exposure to swine, indicating limited human-to-human transmission. Through EW 46, no further cases have been identified among contacts of these children⁴. Since 2009, a total of 18 cases of swine origin triple reassortant influenza A(H3N2) (S-OrtH3N2) virus infection had been identified⁵. The most recent 10 cases, were infections with S-OtrH3N2 viruses containing the matrix (M) gene from the pandemic 2009 influenza A (H1N1) virus (pH1N1).

In Mexico, in EW 46, according to laboratory data, of the total samples received (n=69), the percent positivity remained <2%, and samples positives for A(H1N1)pmd09 and influenza B were detected.

Caribbean

CAREC⁵, in EW 46, received epidemiological information from Barbados, Dominica, Jamaica and Tobago. The proportion of admissions for Severe Acute Respiratory Infection (SARI) among all hospitalizations (2.9%) increased slightly compared to the prior week (2.3%). Concerning age groups, among children between 6 months and 4 years old, highest SARI hospitalization rate was reported (5.6%). Since EW 38, no SARI deaths were reported. According to laboratory data, in the last four weeks, positive samples for influenza A(H1N1)pmd09, RSV and rhinovirus were detected.

In Jamaica, in EW 46, the proportion of consultations for Acute Respiratory Illness (ARI) was 4%, which was slightly higher than the previous week (5.1%). The proportion of SARI admissions was slightly higher than the previous week and the previous year; however, it remained <2%. In EW 46, no SARI-related deaths were reported. According to laboratory data, in EW 46, samples positive for influenza A(H1N1)pmd09 virus were detected.

In Cuba, according to laboratory data, in EW 46, among all samples tested (n=47), ~40% were positive for respiratory viruses and ~3% of all samples tested were positive for influenza; both percentages were slightly lower than the previous week. In EW 46, RSV, adenovirus and influenza A/H3 were detected.

In the Dominican Republic, according to laboratory data, in EW 47, among all samples tested (n=16), the percentage of samples positive for respiratory viruses was ~30%, which was lower than the previous week. The primary virus in circulation was RSV, followed by adenovirus.

Central America

In Costa Rica according to laboratory data, in EW 47, among all samples tested (n=107), the percentage of samples positive for respiratory viruses (~50%) was slightly higher than the previous week. RSV has been the predominant virus since EW 28, followed by adenovirus. Since EW 44, an increase trend of the percentage of samples positive for influenza was reported, mainly influenza A/H3 and followed by influenza A(H1N1)pmd09.

In Honduras⁶, in EW 46, the proportion of ILI consultations (~5%) similar to the previous EW and than what was observed during the same period in 2010. The proportion of SARI hospitalizations (~7%) was slightly lower than the previous EW (~10%) and what was observed in 2010. In EW 46, no SARI-related death was reported. According to laboratory data, in EW 46, among all samples tested (n=17), the percentage of samples positive for respiratory viruses remained at ~35%. RSV predominated since EW 35. Concerning influenza viruses, influenza A/H3, influenza A(H1N1)pmd09 and influenza B were detected.

In Panama, in EW 45, positive samples for RSV and other respiratory viruses were detected. In EW 45, no influenza cases were detected for the second consecutive week. Influenza A(H1N1)pmd2009 circulated between EWs 42-43.

South America – Andean

In Bolivia (La Paz), in EW 47, the percentage of SARI hospitalization and ICU admissions remained under 10% and the proportion of SARI deaths increased as compared to the previous week. According to the national laboratory, the predominant circulatory virus was adenovirus followed by influenza A/H3N2, influenza A(H1N1)pmd09 and influenza B.

In Ecuador, in EW 47, at the national level the percentage of SARI hospitalizations, SARI ICU admissions and SARI deaths remained below 10%. According to laboratory data, in EW 47, of all samples tested (n=14), the percentage of samples positive for respiratory viruses was ~45%, being parainfluenza the predominant virus detected. Among influenza viruses, low circulation of influenza A(H1N1)pmd09 has been detected since EW 39.

In Colombia, according to the national laboratory⁷, in EW 45, no positives samples for respiratory viruses were detected. In the last weeks, influenza A(H1N1)pmd09 and influenza A/H3 had co-circulated.

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

In Venezuela⁸, in EW 44, ARI and pneumonia endemic channels showed an increasing trend in the number of cases since ~EW 38, but within expected levels for this time of year. The higher incidence rate was reported in children less than 7 years old. In 2011 through November 5, EW 44, of all samples tested (n=8,893), the percentage of positive samples for respiratory viruses was ~33%. Concerning influenza viruses, ~26% of samples tested were positive for influenza A(H1N1)pmd09, ~5% was influenza A/H3 and <1% was influenza B. In EW 47, the Regional Director of Epidemiology of Amazonas state reported an outbreak of acute respiratory infection, with a total of 30 cases in the Yanomami Indian Community at the Wireonawe municipality, Rio Negro. Of all the cases, 8 and 9 cases had SARI and pneumonia criteria, respectively; 40% of the cases were younger than 5 years old, and ~70% were women, including a pregnant 17 years old teenager. So far, no deaths associated with this outbreak were reported. Laboratory analysis are in process.⁹

South America – Southern Cone

In Argentina¹⁰, in EW 41, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases continued to decrease since peaking in EW 27 and lower than observed in 2010. According to national laboratory data, in EW 45, among respiratory viruses, RSV was the primary virus detected, which continued to decrease since peaking in EW 23, and co-circulated with parainfluenza virus. In EW 45, no samples positives for influenza viruses were detected.

In Brazil, according to Evandro Chagas Institute (Para), in EW 46, among all samples tested, no positive samples for respiratory viruses were detected for the second consecutive week. In EW 47, in Pedra Branca municipality, Ceara, a possible influenza outbreak in a high school was reported. So far, a total of 180 suspicious ILI cases had been detected, including just one hospitalized case, a 25 days old children. Among the suspicious cases, 18 samples were taken, 11 of them were positive to influenza A(H1N1)pmd09¹¹.

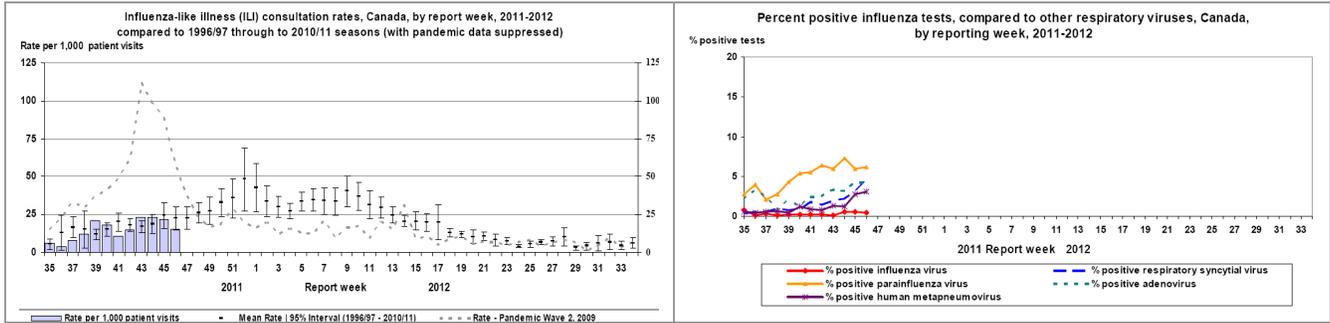
In Paraguay¹², in EW 45, the proportion of ILI consultations (3.7%) was similar to the previous week (3.6%). In EW 45, the proportion of SARI hospitalization, ICU admissions and SARI deaths remained under 10%. According to laboratory data, in EW 44, of all samples tested, adenovirus and parainfluenza were predominately detected. In EW 44, an outbreak associated with influenza A(H1N1)pmd09 was identified in a prison of Tamcumbu, with an incidence rate of 63.3 per 1,000 inhabitants.

In Uruguay¹³, in EW 47, the proportion of SARI hospitalizations, ICU admissions and deaths remained <5%. In general, these proportions have continued to decrease since peaking in EW 31.

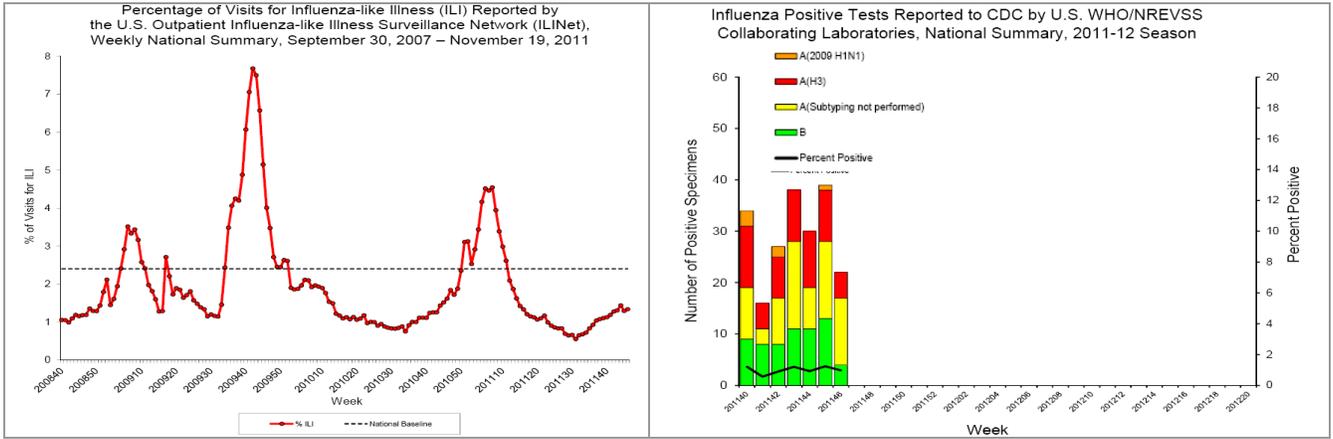
Graphs

North America

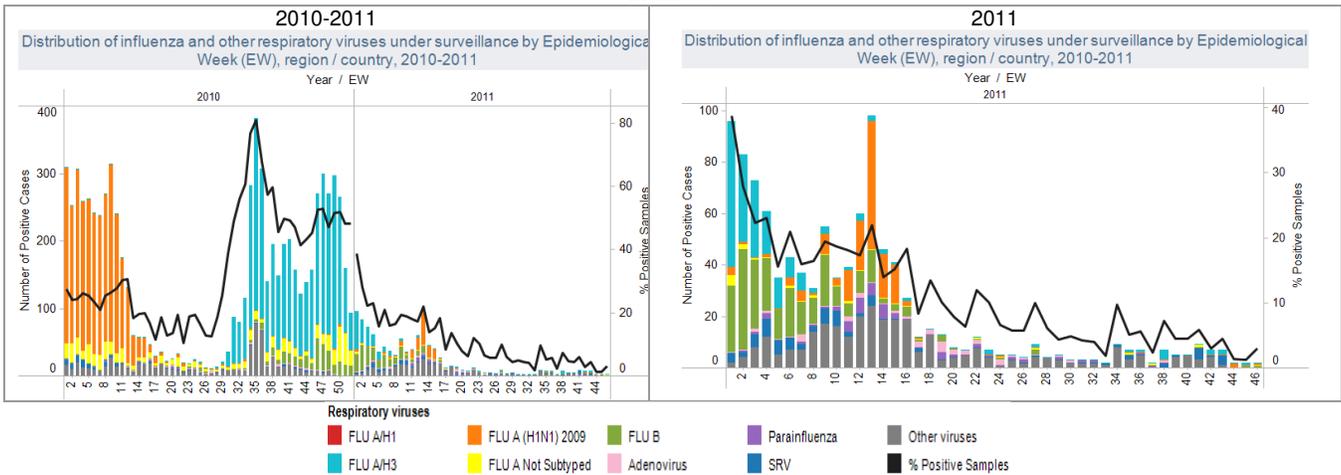
Canada



United States

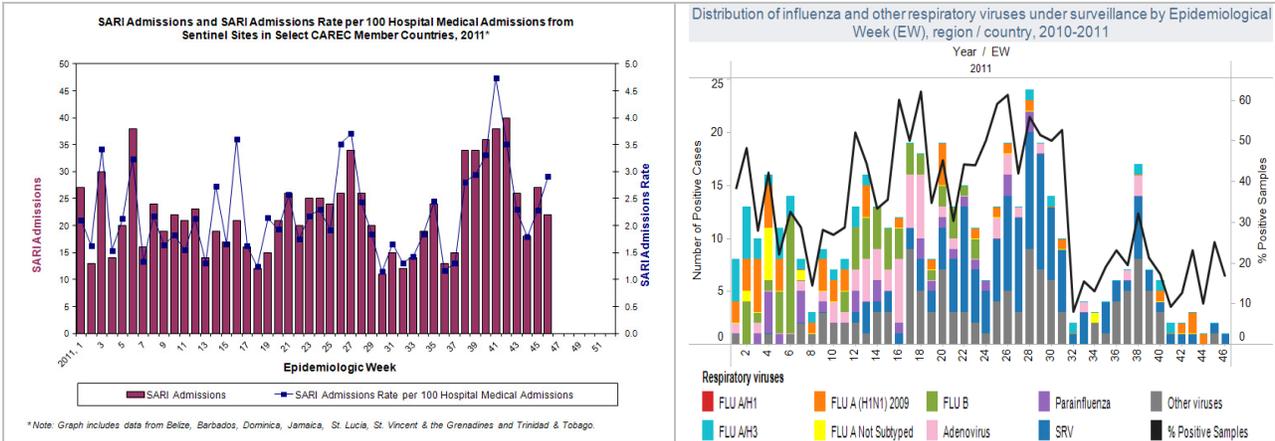


Mexico

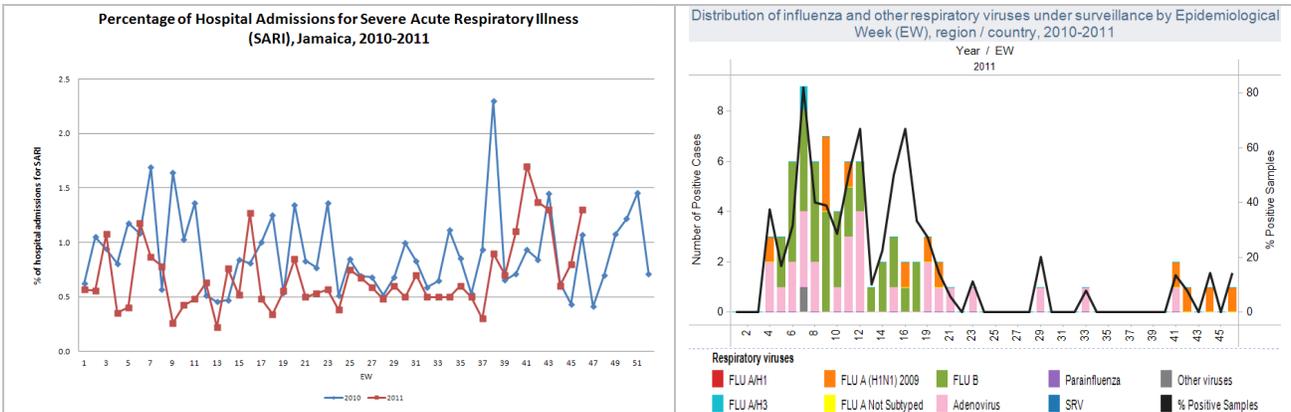


Caribbean

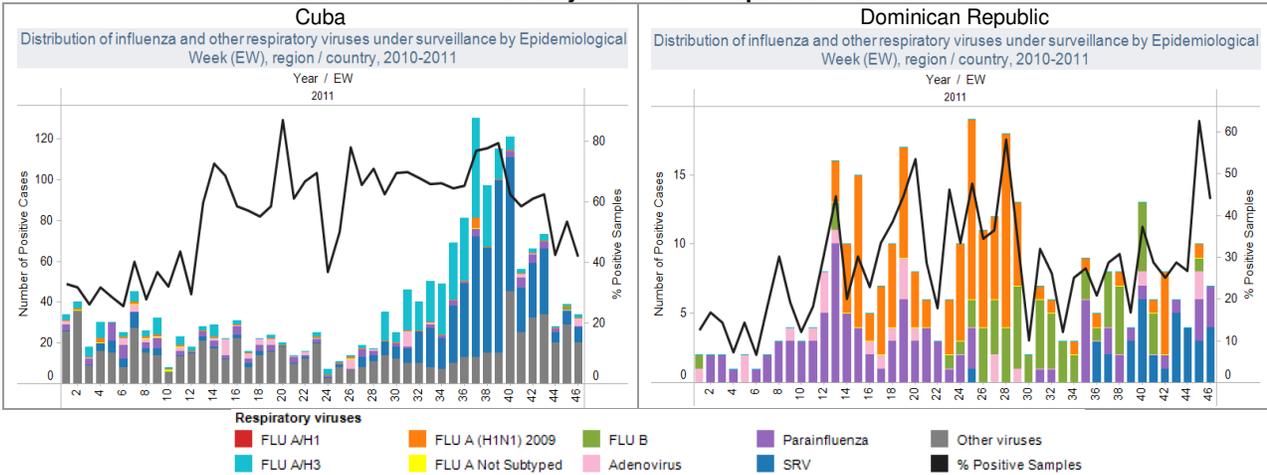
CAREC



Jamaica

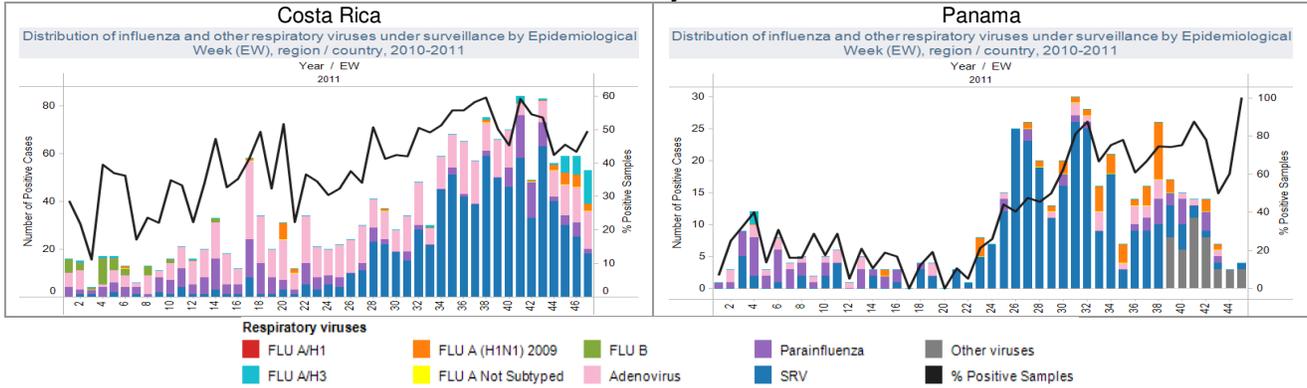


Cuba y Dominican Republic

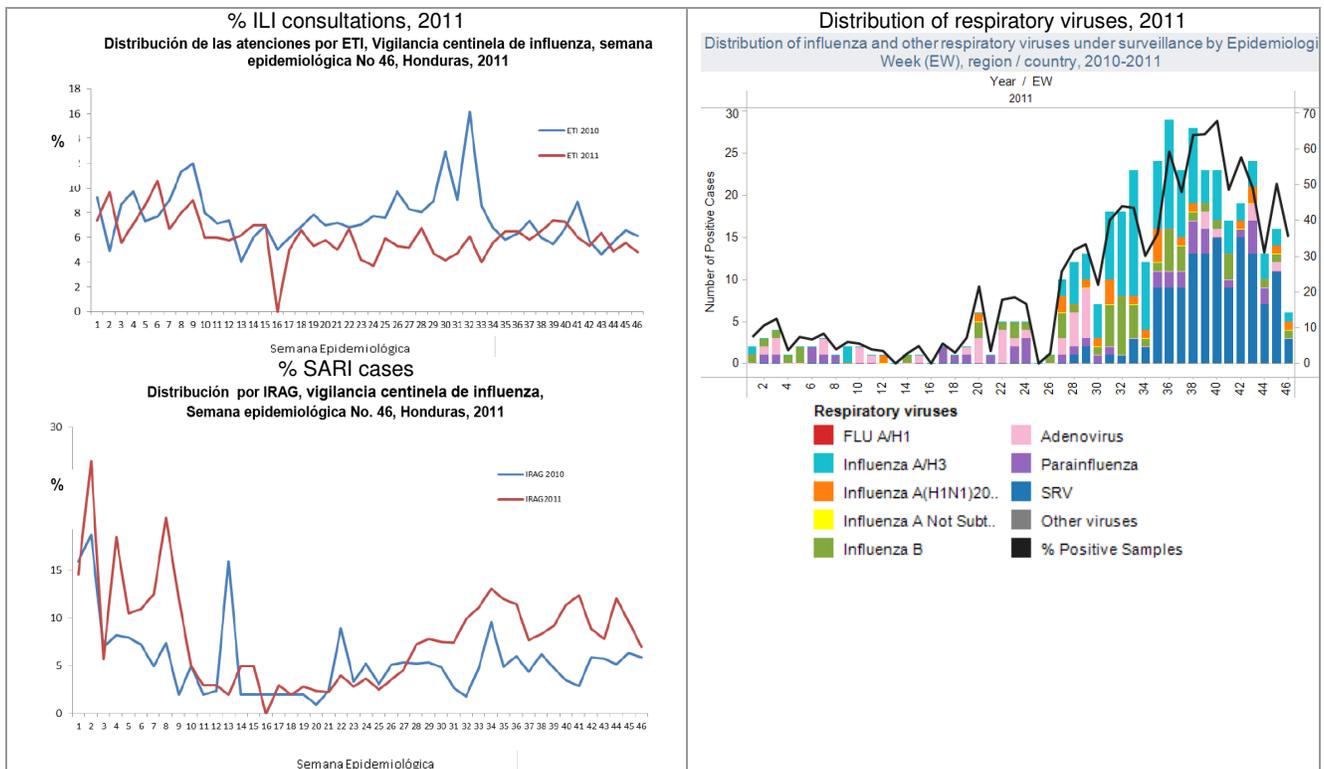


Central America

Costa Rica y Panama

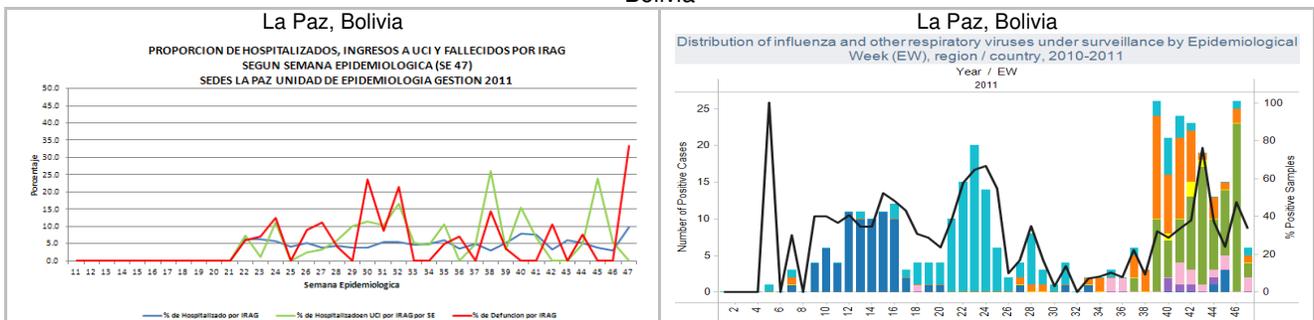


Honduras

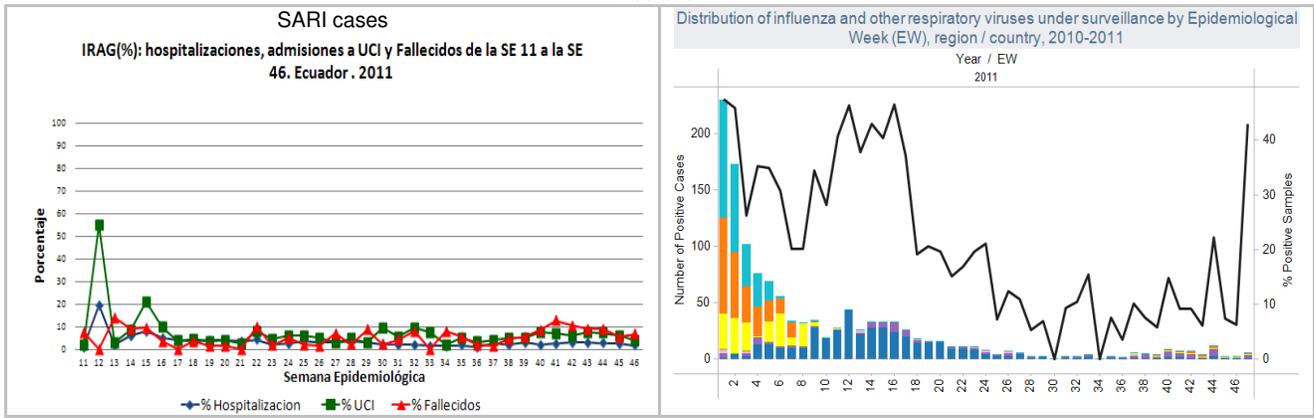


South America - Andean

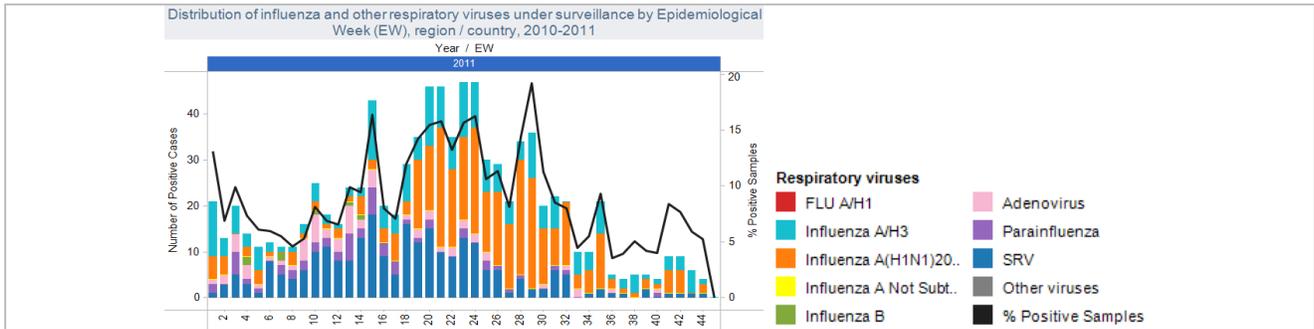
Bolivia



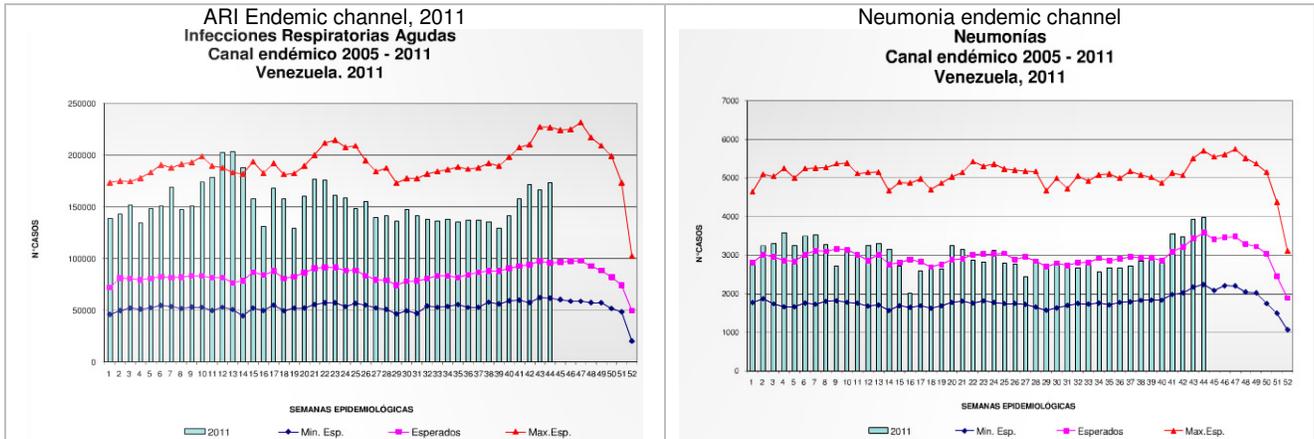
Ecuador



Colombia

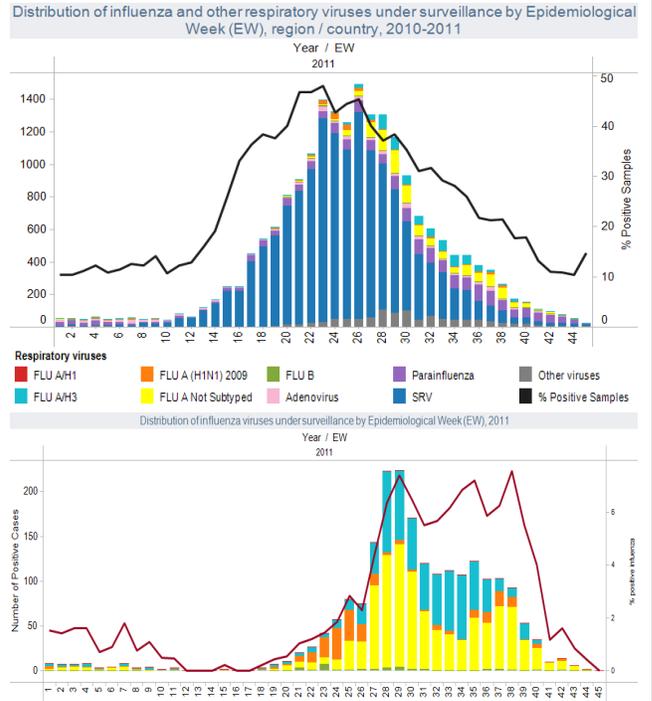
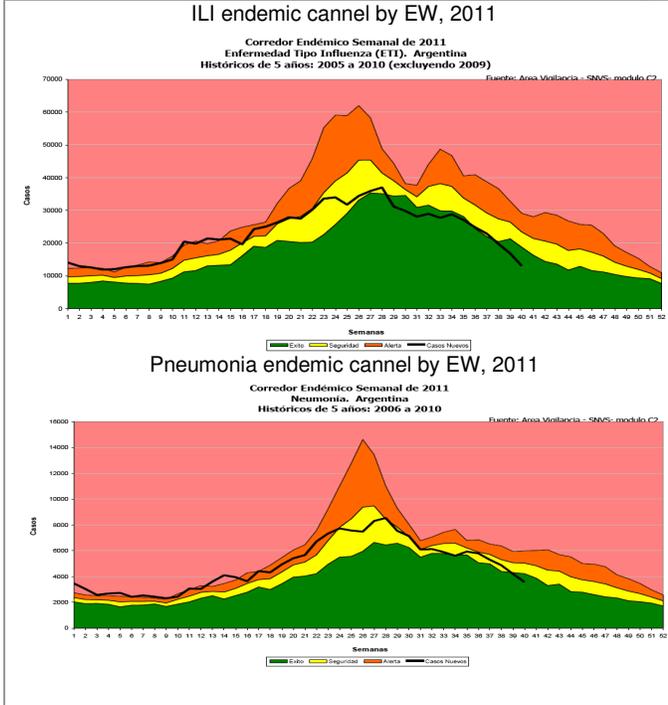


Venezuela

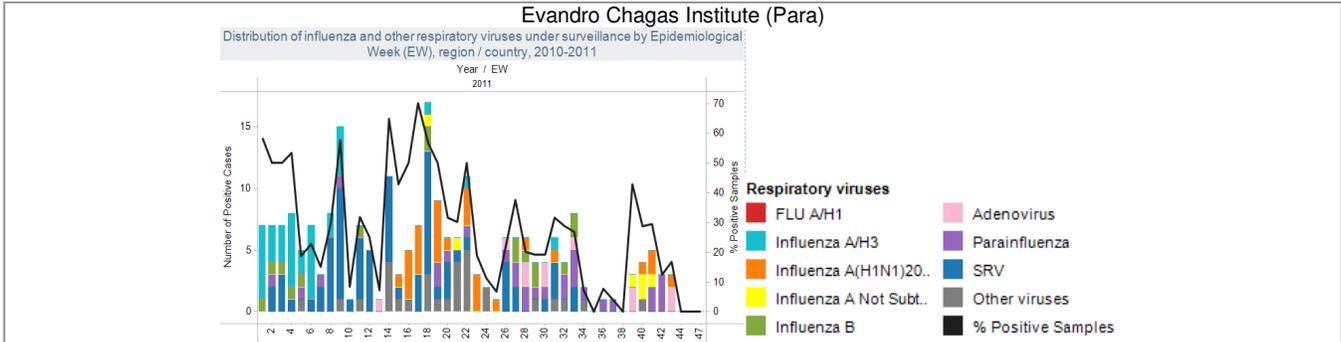


South America – Southern Cone

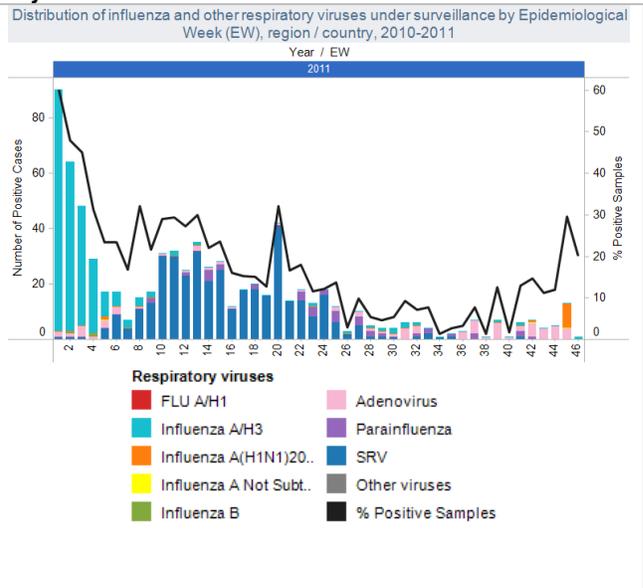
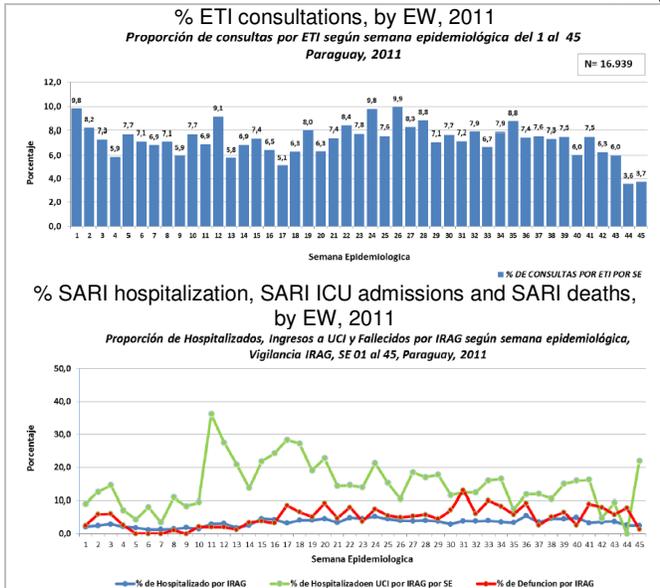
Argentina



Brasil

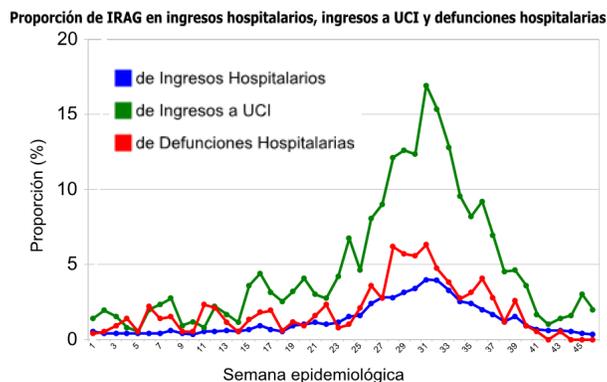


Paraguay



Uruguay

% hospitalization, ICU admissions and deaths for SARI



¹ FluWatch Report. EWs 46. <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. Week 46. Centers for Disease Control and Prevention

³ PAHO Epidemiologic alerta. November 25th.

http://new.paho.org/hq/index.php?option=com_content&task=view&id=6229&Itemid=2291&lang=en

⁴ CDC. Limited Human-to-Human Transmission of Novel Influenza A (H3N2) Virus — Iowa, November 2011.

Disponble en: <http://www.cdc.gov/mmwr/pdf/wk/mm60d1123.pdf>

⁵ CDC. Update: influenza activity—United States, 2009–10 season. MMWR 2010;59:901–8.

⁶ Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 46

⁷ Colombia. Instituto Nacional de Salud.

⁸ Venezuela. Boletín epidemiológico - SE 44. 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

⁹ Gobierno Bolivariano de Venezuela. Ministerio del Poder Popular para la Salud. Amazonas. Brote de infección respiratoria aguda. Población Yanomami.

¹⁰ Argentina. Actualización situación de enfermedades respiratorias 2011. SE 46.

¹¹ Ministerio da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância das Doenças transmissíveis Coordenação Geral de Doenças transmissíveis. Nota Técnica No. 62/2011-CGDT/DEVIT/SVS.

¹² Paraguay. Boletín epidemiológico semanal, SE 46. Ministerio de Salud Pública y Bienestar Social

¹³ Uruguay. Dirección General de la Salud. División Epidemiología. SE 47. Available at:

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