Regional Update EW 39

Influenza

(October 11, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phip/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.
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued (Cuba, CAREC, Costa Rica, Guatemala, Nicaragua, Panama, and the Dominican Republic). Among influenza viruses, influenza A/H3N2 (Cuba, Honduras and Nicaragua) and influenza A/H1N1 2009 (Nicaragua and Panama) predominated with variable co-circulation of influenza B (Dominican Republic).
- In the Southern Cone, in EW 38, an A/H1N1 2009 outbreak was reported in Bolivia, mainly in Santa Cruz. Variable co-circulation of influenza A/H1N1 2009 and influenza A/H3 was reported (Bolivia, Colombia and Paraguay). RSV circulation continues to decrease (Chile and Argentina).

Epidemiologic and virologic influenza update

North America

In the United States[1], in EW 39, at the national level, the proportion of Influence-like Illness (ILI) consultations (~1%) remained below the national baseline (2.5%). The proportion of deaths attributed to pneumonia and influenza for EW 39 (6%) was lower than its epidemic threshold for this time of year (6.5%). In EW 39, no pediatric deaths associated with influenza were reported. During EW 39, among all samples tested (n=1395), the percentage of samples positive for influenza continued to remain low (<2%), with sporadic detections of unsubtyped influenza A, influenza B, influenza A/H3 and influenza A/H1N1 2009.

In Mexico, in EW 39, according to laboratory data, of total samples received (n=30), no samples positive for respiratory viruses were detected. Since EW 17, influenza and other respiratory virus activity has remained low.

Caribbean

CAREC, in EW 39, received epidemiological information from Barbados, Dominica, Jamaica, and Tobago. The proportion of admissions for Severe Acute Respiratory Infection (SARI) among all hospitalizations (2.7%) was similar to the previous week (2.8%). Children aged 6-48 months had the highest rate of SARI hospitalizations (6.5%) followed by those 5-14 years old (6%). No SARI-related death were reported during EW 39. According to laboratory data, in EW 39 no samples positive for respiratory viruses were detected, however, RSV and rhinovirus were the primary viruses identified in recent weeks.

In Cuba, in EW 39, among all samples tested (n=145), ~80% were positive for respiratory viruses and ~10% of all samples tested were positive for influenza. Circulation of RSV has being increasing since EW 29, whilst influenza A/H3 seems to be decreasing since its peak in EW 37.

In the Dominican Republic, according to laboratory data, in EW 40, among all samples tested (n=35), the percentage of samples positive for respiratory viruses was ~40%, which was higher than the previous week. The primary virus in circulation was RSV, followed by influenza B.

In Jamaica, in EW 39, the proportion of Acute Respiratory Infection (ARI) consultations was 5.8%, which was higher than that reported for the previous week, but remained within the expected levels for this time of year. The proportion of admissions due to SARI was <1% and remained stable compared to the previous week. There were no SARI-related deaths reported for EW 39. According to laboratory data, no influenza viruses have been detected since EW 20.

Central America

In Costa Rica, in EW 40, among all samples tested (n=155), the percentage of samples positive for respiratory viruses (~45%) decreased in the last two weeks. RSV has been the predominant virus since EW 28, followed by adenovirus. In EWs 39-40, no influenza cases were detected.

In El Salvador, in EW 39, among all samples tested (n=26), the percent positivity for respiratory viruses was ~50%, and influenza A/H3, has been the predominant virus for the last 5 EWs, followed by RSV and influenza B.

In Guatemala, in EW 39, according to laboratory data, of all samples tested (n=22), ~32% were positive for RSV, which has been the only virus detected for two consecutive weeks, the predominant virus since EW 26, and has been decreasing since its peak in EW 32.

In Honduras, according to laboratory data, in EW 39, among all samples tested (n=13), the percent positivity for respiratory viruses was ~70%, and influenza A/H3 has been the predominant virus since EW 30, in co-circulation with RSV and influenza B.

In Nicaragua, in EW 38, circulation of influenza A/H1N1 2009 was reported. As of October 9, 2011[2], at the national level, 8 confirmed cases of influenza A/H1N1 2009 were reported, 7 of which were reported in Managua and 1 in Leon. No deaths related to this virus have been reported.

In Panama, in EW 39, among samples tested (n=9), a fluctuating and decreasing trend has been detected in the number of samples positive for RSV since its peak in EW 31. Among influenza viruses, influenza A/H1N1 2009 has been consistently the predominant virus detected since EW 27.

South America – Andean

In Bolivia, as of October 6 2011[3], the Ministry of Health has confirmed 540 influenza A/H1N1 2009 cases in 8 of 9 departments; 79% of the cases correspond to Santa Cruz (n=428 confirmed cases). Up to EW 40, 3 deaths associated with influenza A/H1N1 2009 have been reported between EWs 38 and 40. Regionally, according to Santa Cruz (CENETROP laboratory), a progressive increase of cases positive for influenza A/H1N1 2009 has been observed since EW 33. In EW 37, among all samples tested (n=126), ~50% were positive for influenza viruses, predominantly influenza A/H1N1 2009. In La Paz, in EW 39, according to the SARI surveillance, the proportion of SARI hospitalizations, SARI ICU admissions and SARI deaths remained ≤5%. In EW 40, according to INLASA laboratory data in La Paz, among all samples tested, ~25% were positive for influenza virus, mainly influenza A/H1N1 2009.

In Colombia, according to the national laboratory[4], in EW 38, of all samples tested (n=21), the percent positivity for respiratory viruses was <5%, and influenza A/H3 was the only detected virus in the last two EWs. During 2011, through EW 36, influenza A/H3 virus co-circulated with influenza A/H1N1 2009.

In Ecuador, in EW 39, according to laboratory data, among all samples tested (n=22), the percent positivity was <5%, and parainfluenza was the main detected virus this week. In October 9 2011, in Quito, one death associated with influenza A/H1N1 2009 was notified; the woman was 24 years old and had one co-morbidity.

In Peru[5], in EW 38, at the national level, the number of ARI and pneumonia cases in children less than 5 years old decreased and remained stable, respectively, compared to the previous EW, and remained below expected levels for this time of year. Through EW 38 of 2011, 283 pneumonia deaths were reported in children less than 5 years old (45% of which had between 2 and 11 months), which represents 18% less than the average reported in the last three years (2008-2010).

In Venezuela[6], in EW 38, ARI and pneumonia endemic channels showed a number of cases similar to the previous weeks and within the expected for this time of year; the highest incidence rate was observed in

children less than 1 year old. Concerning influenza viruses, in 2011 through September 24, among all samples tested (n=8,361) ~27% were positive for influenza A/H1N1 2009, ~4.5% was influenza A/H3 and <1% was influenza B.

South America – Southern Cone

In Argentina[7], ILI and SARI endemic channels showed that the number of ILI and SARI cases for EW 34 continued to decrease and remained at levels than what wasobserved during 2010. According to national laboratory data, for EW 39, RSV counts continued decrease since peaking in EW 26. Concerning influenza viruses, a decreasing trend of cases positive for influenza A was reported since its peak in EW 28. Among subtyped influenza A cases, co-circulation of influenza A/H3 and influenza A/H1N1 2009 continues to be observed.

In Brazil, according to Adolfo Lutz laboratory data, in EW 39, among all samples tested, RSV and parainfluenza were detected. This week no influenza viruses were detected. According to data reported by the Evandro Chagas Institute, through EW 40, no influenza cases have been detected since EW 34.

In Chile, in EW 39, according to the virologic data from the intensified national surveillance SARI surveillance program, among all samples tested (n=26), the percent positivity for respiratory viruses was ~20% and parainfluenza was the main virus detected. Concerning influenza viruses, unsubtyped influenza A predominated, as well as influenza A/H1N1 2009 among the subtyped viruses.

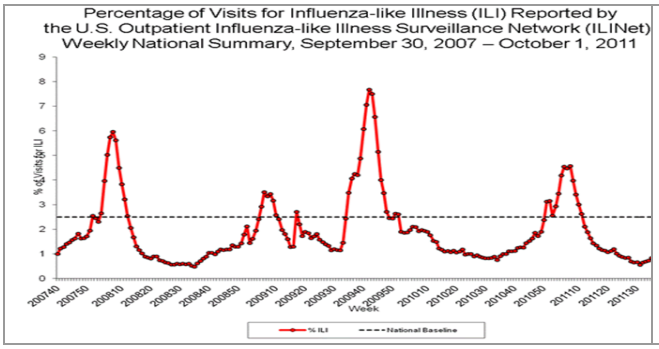
In Paraguay[8], in EW 39, the proportion of ILI consultations was 7.5%, which was similar to the previous week. The proportion of SARI hospitalizations, ICU admissions and deaths remained below 10%. According to laboratory data, in EW 39, of all samples tested, adenovirus and influenza A/H3 were detected.

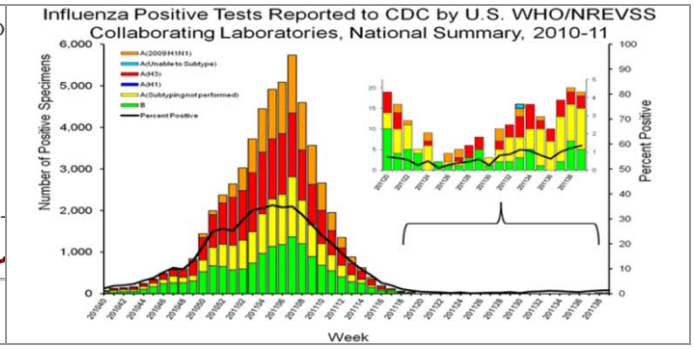
In Uruguay[9], in EW 40, the proportion of SARI hospitalizations, ICU admissions and deaths remained <5%. These proportions have continued to decrease since its peaking in EW 31.

Graphs

North America

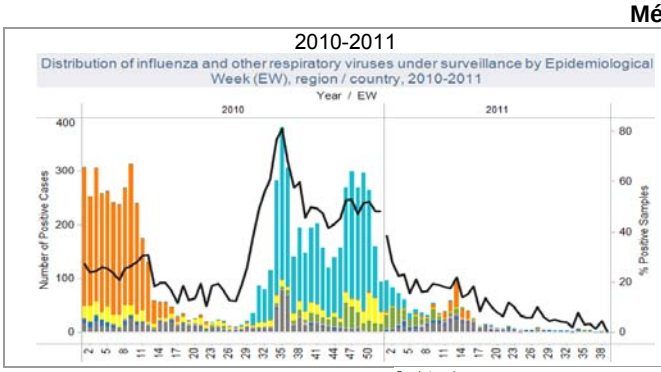
United States

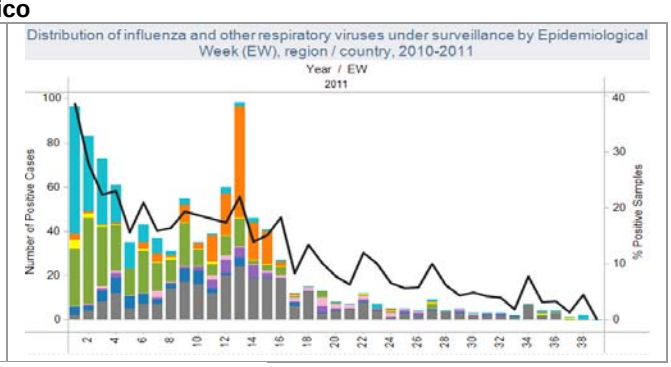


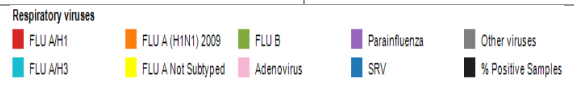


México

2010-2011

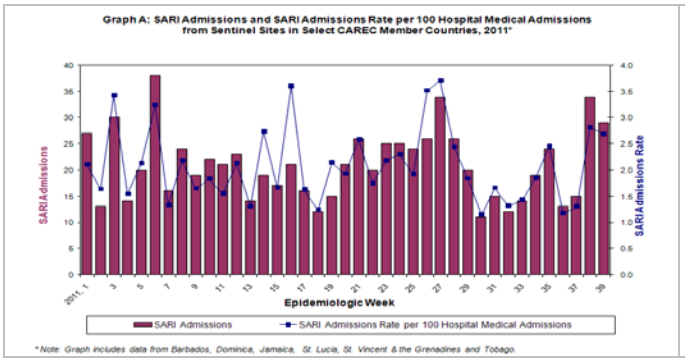


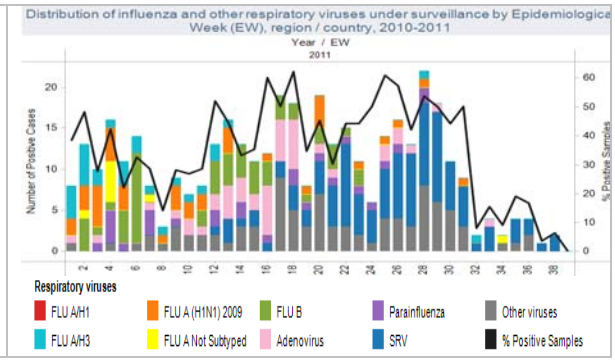




Caribbean

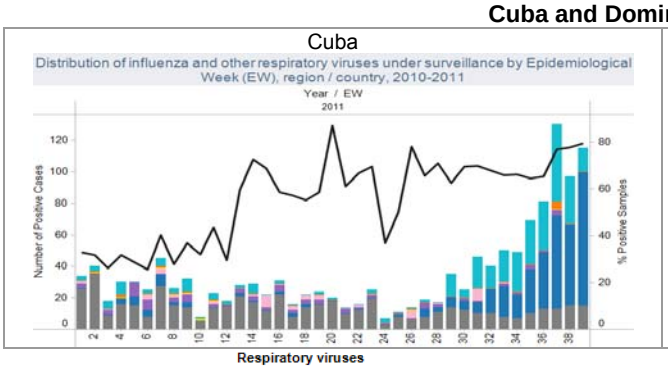
CAREC



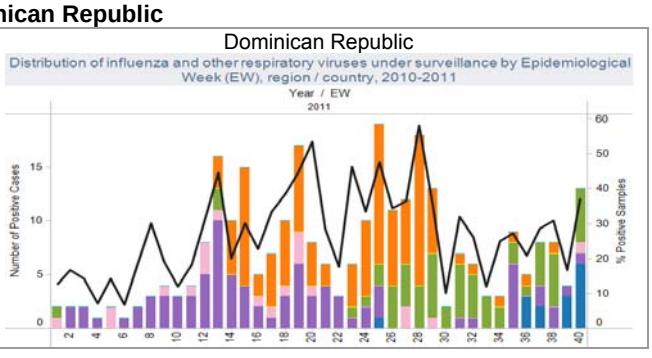


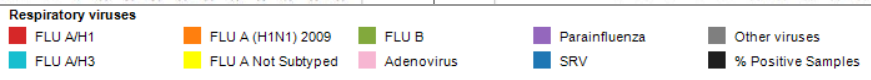
Cuba and Dominican Republic

Cuba

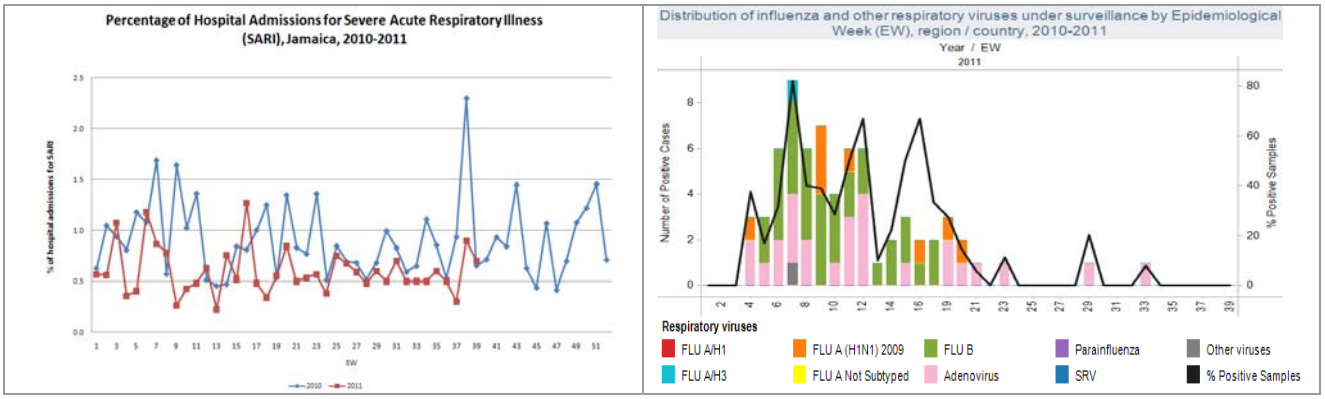


Dominican Republic



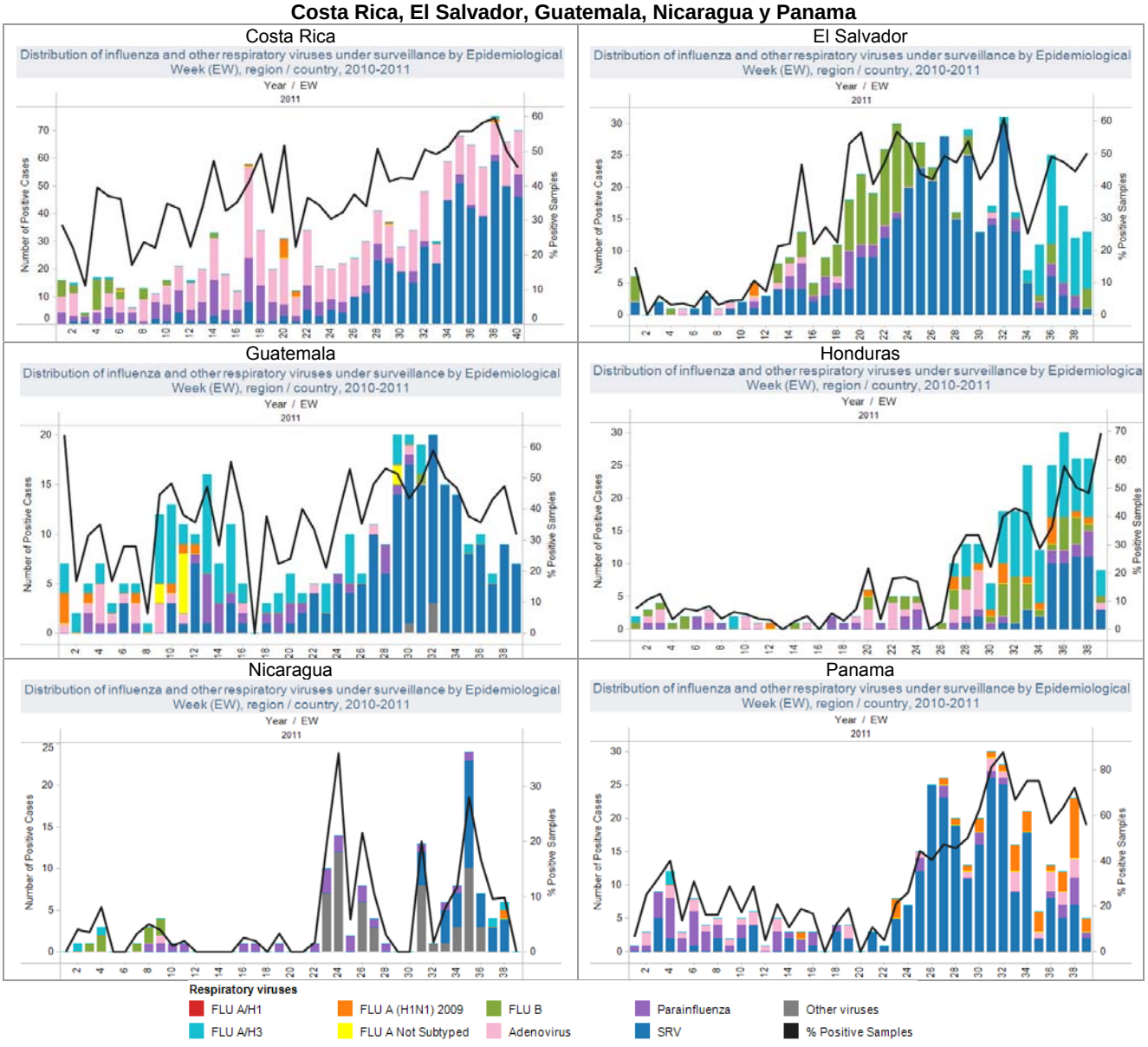


Jamaica



Central America

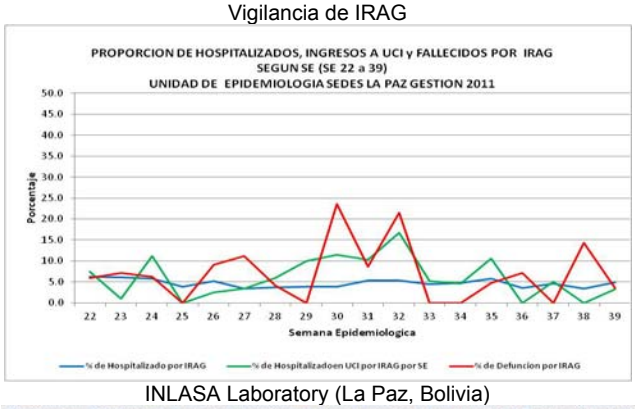
Costa Rica, El Salvador, Guatemala, Nicaragua y Panama



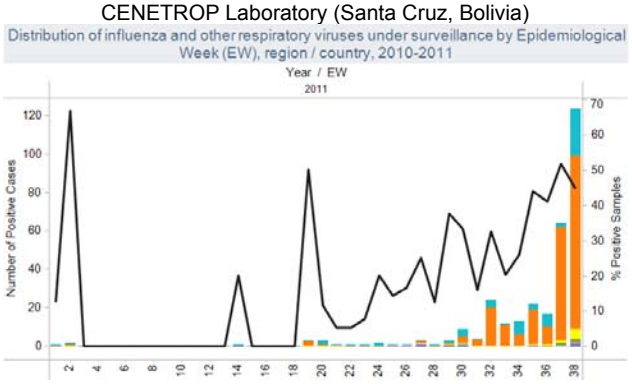
South America - Andean

Bolivia

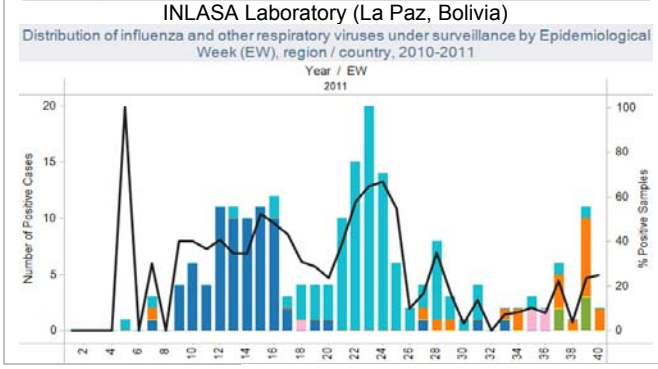
Bolivia – La Paz
Vigilancia de IRAG

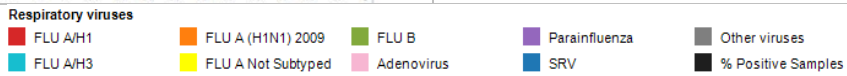


Bolivia – Santa Cruz
CENETROP Laboratory (Santa Cruz, Bolivia)



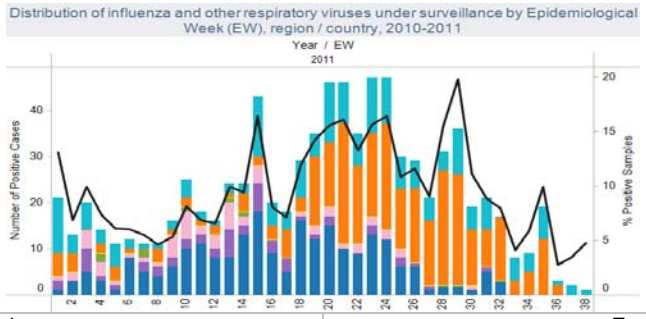
INLASA Laboratory (La Paz, Bolivia)



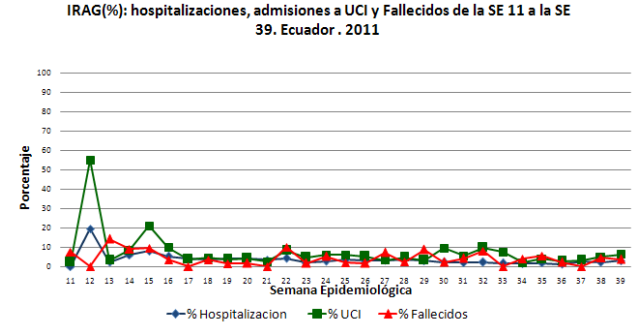


Colombia and Ecuador

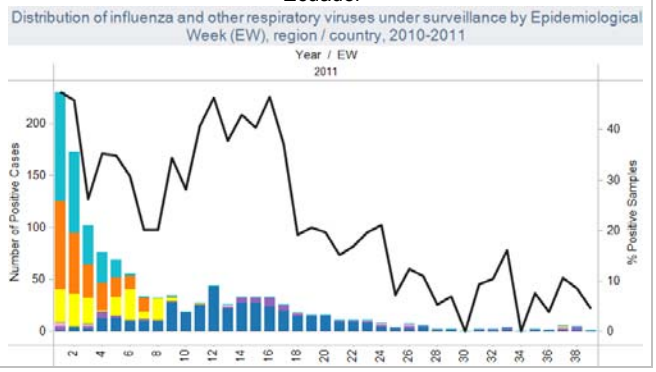
Colombia



Ecuador
% hospitalizations, ICU admissions, deaths, by EW, 2011

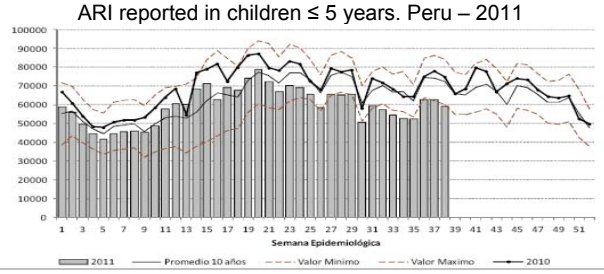


Ecuador

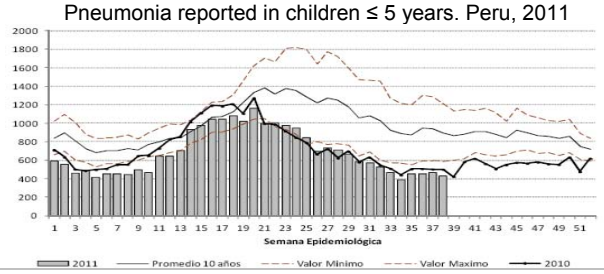


Peru

ARI reported in children ≤ 5 years. Peru – 2011

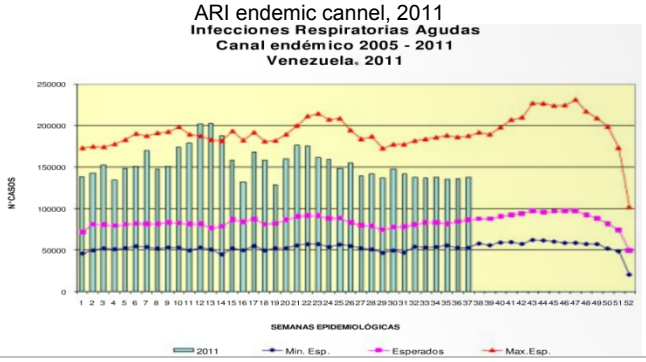


Pneumonia reported in children ≤ 5 years. Peru, 2011

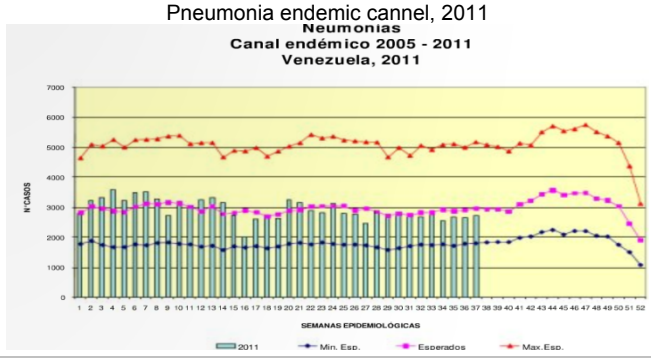


Venezuela

ARI endemic cannel, 2011



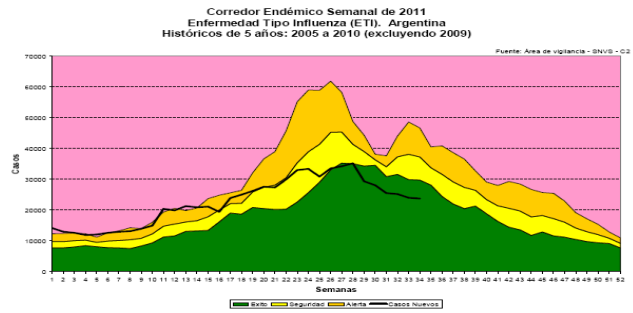
Pneumonia endemic cannel, 2011



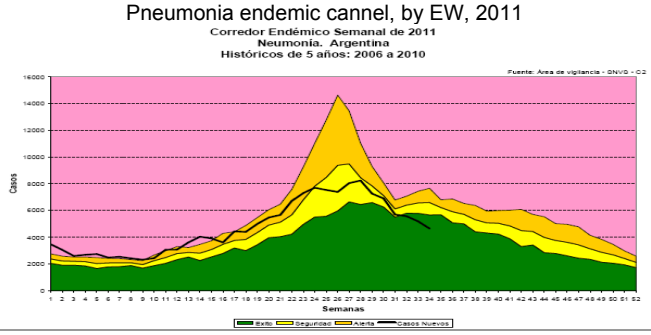
South America – Southern Cone

Argentina

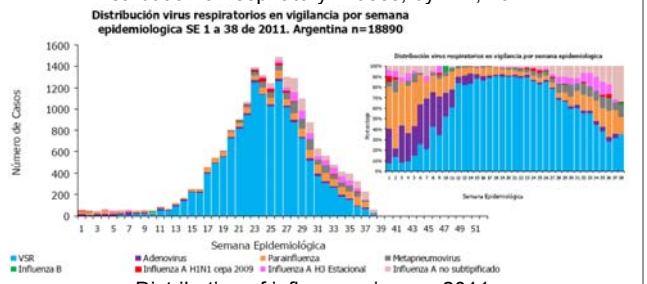
ILI endemic cannel, by EW, 2011



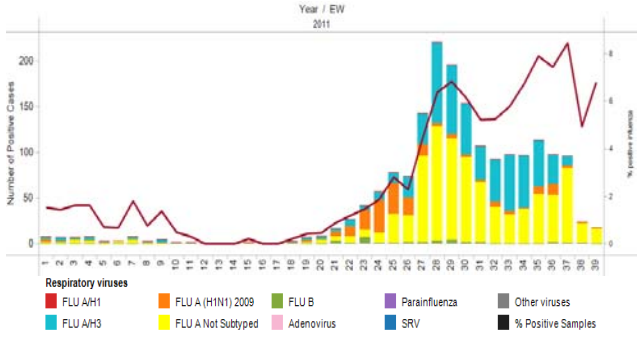
Pneumonia endemic cannel, by EW, 2011



Distribution of respiratory viruses, by EW, 2011

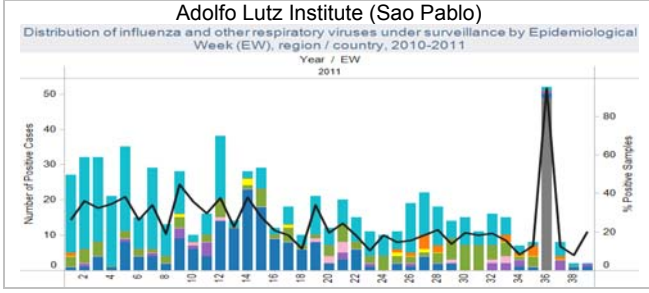


Distribution of influenza viruses, 2011

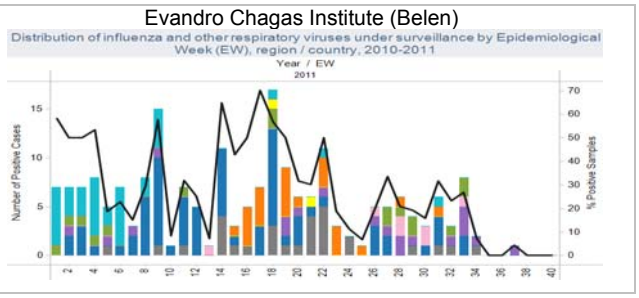


Brazil

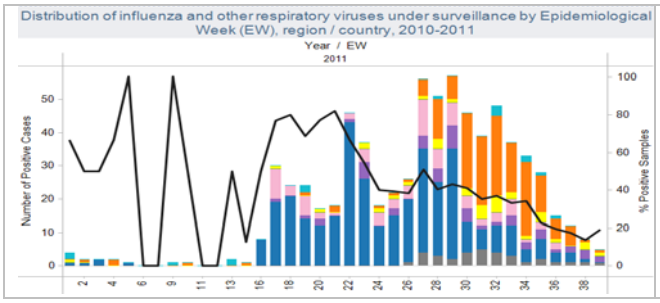
Adolfo Lutz Institute (Sao Pablo)

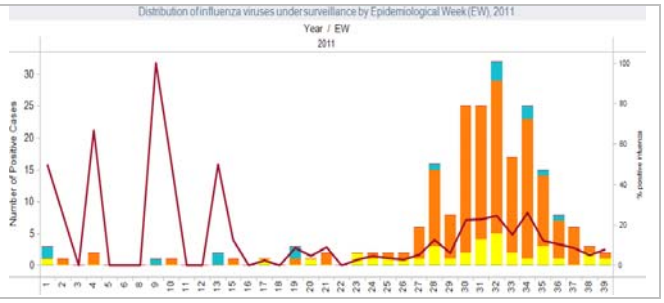


Evandro Chagas Institute (Belen)

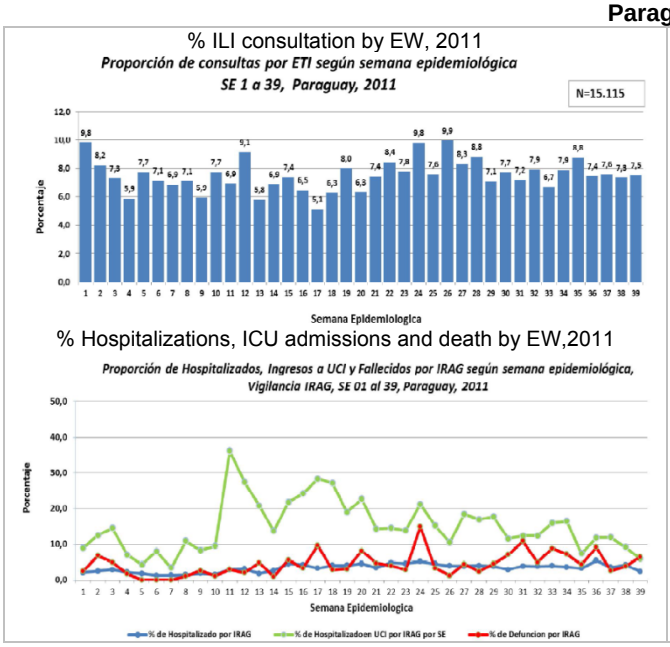


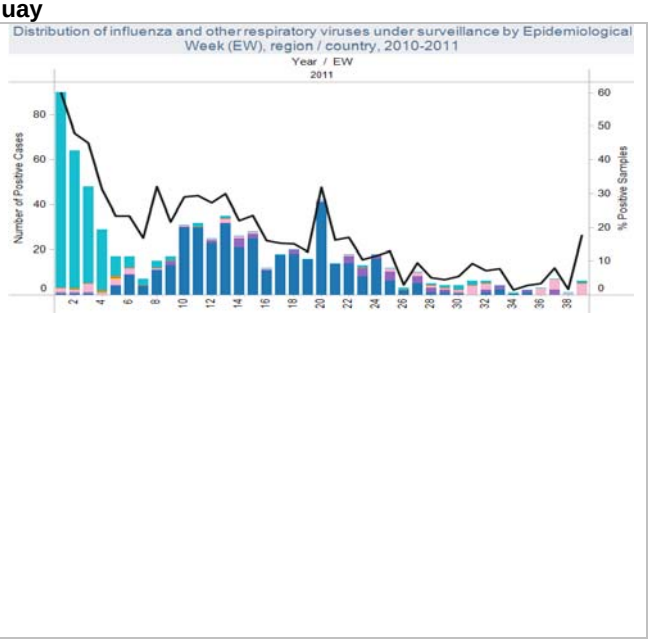
Chile



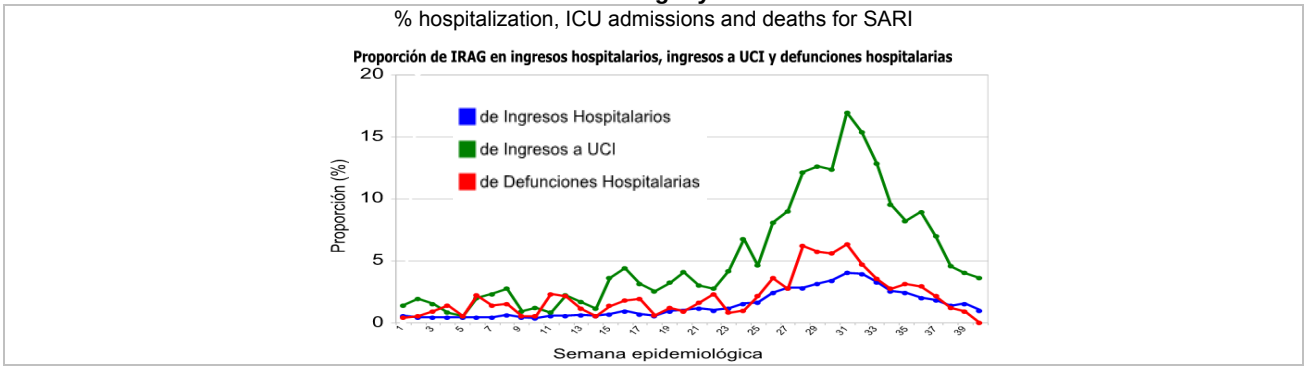


Paraguay





Uruguay



[1] US Surveillance Summary. Week 39. Centers for Disease Control and Prevention
[2] Minsa. Ministerio de Salud de Nicaragua. Disponible en: http://www.minsa.gob.ni/index.php?option=com_content&view=category&layout=blog&id=50&Itemid=5
[3] Bolivia. Ministerio de Salud y deportes. 540 casos confirmados de influenza A/H1N1 en 8 de los 9 departamentos. Disponible en: http://www.sns.gob.bo/index.php?ID=Inicio&resp=363
[4] Colombia. Instituto Nacional de Salud.
[5] Perú. Sala de Situación de Salud. SE 38. Ministerio de Salud. Dirección General de Epidemiología.
[6] Venezuela. Boletín epidemiológico - SE 38. 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
[7] Argentina. Boletín epidemiológico semanal. SE 39. Ministerio de Salud Presidencia de la Nación.
[8] Paraguay. Boletín epidemiológico semanal. SE 40. Ministerio de Salud Pública y Bienestar Social.
[9] Uruguay. Dirección General de la Salud. División Epidemiología. SE 40. Disponible en: https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu