Regional Update EW 39, 2012
Influenza
(October 9th, 2012 - 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.

WEEKLY SUMMARY

- North America: influenza activity remains low. In the U.S., from July 12 through October 4, 2012, a total of 305 infections with influenza A (H3N2) variant (H3N2v) viruses have been reported in 10 states, with one death reported, without evidence of ongoing human-to-human transmission. Also one case with influenza A(H1N1) variant (H1N1v) and 3 cases with influenza A(H1N2) variant (H1N2v) were reported in the same country, since July 2012. In the region, influenza B virus had predominance among reported influenza viruses.

- Central America and the Caribbean: a slight increase in respiratory infections activity in CAREC was observed. Co-circulation of different respiratory viruses was reported. Among the influenza viruses, influenza B predominated (Barbados, Costa Rica, Dominica, El Salvador, Jamaica, Nicaragua), with co-circulation of influenza A(H3N2) (Costa Rica, Nicaragua). Among other respiratory viruses, RSV was reported in several countries of the region.

- South America: severe acute respiratory disease activity remains low and with no significant changes. In current EW, co-circulation of influenza B virus (Argentina, Bolivia, Chile, Paraguay and Peru) and viruses influenza A(H3N2) and influenza A(H1N1)pdm09 (Brazil) was observed among reported influenza virus. Among the other respiratory viruses, parainfluenza (Argentina, Chile and Paraguay) and RSV (Chile and Paraguay) predominated.

Epidemiologic and virologic influenza update

North America

In the United States[1], in EW 39, nationally, the proportion of ILI consultations (1.1 %) was below the baseline (2.4%). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 39 (6.3%) was below the epidemic threshold for this time of year (6.5%). In EW 39, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 39 (n=2,476), the percentage of samples positive for influenza (3.59%) increased slightly as compared to the previous week. Nationally, among the positive samples, 55.1% were influenza B. From July 12 through October 4, 2012, a total of 306 infections with influenza A (H3N2) variant (H3N2v) viruses have been reported in ten states (Hawaii [1], Illinois [4], Indiana [138], Maryland [12], Michigan [6], Minnesota[4], Ohio [107], Pennsylvania [11], West Virginia [3], and Wisconsin [20]). So far during the current outbreaks, 16 confirmed cases have been hospitalized as a result of their illness; one death has occurred. The vast majority of cases have been associated with swine exposure, though likely instances of human-to-human transmission have been identified. At this time no ongoing human-to-human transmission has been identified. Public health and agriculture officials are investigating the extent of disease among humans and swine, and additional cases are likely to be identified as the investigation continues. One infection with influenza A (H1N1) variant (H1N1v) virus has been detected and three infections with influenza A(H1N2) variant (H1N2v) virus have been detected since July 2012.

In Mexico, according to laboratory data, in EW 39, of the samples analyzed (n=28), the percent of positive samples for respiratory viruses was of 14.3% with only one case of influenza B detected.

Caribbean

CAREC, in EW 39, received epidemiological information from 5 countries: Barbados, Dominica, Jamaica, St. Vincent & the Grenadines and Suriname. The SARI admission rate increased in Barbados, Dominica and Jamaica. In EW 39, the proportion of severe acute respiratory infection (SARI) hospitalizations was 3.8% which is higher than what was seen in the prior week (2.7%). The highest rate of SARI was among children 6 months to 4 years (12.2%). There was no SARI death reported for epidemiological week 39. In the last 4 weeks (EW 36 to 39) the following viruses have been laboratory confirmed in CAREC member countries:

influenza B (Barbados, Dominica and Jamaica), and RSV (Barbados and Dominica). To date in 2012, the overall percentage positivity for samples tested is 36%, with 19% positivity for influenza.

In Jamaica for EW 39, the proportion of consultations for ARI was 9.0% (2.9% higher than the previous EW). The proportion of admissions due to SARI was 1.6 % (0.1% increase when compared to the EW before). There was no SARI death reported for epidemiological week 39. According to laboratory data from EW 39, the percentage of positive samples for influenza virus was 38.1% among the tested samples (n=21). Influenza B was the only virus detected.

In the Dominican Republic, according to laboratory data from EW 40, among the samples analyzed (n=13), the percent positivity for respiratory viruses was 15.4% with no influenza viruses detected among all samples analyzed. RSV was the only detected virus.

Central America

In Costa Rica, in EW 39, according to laboratory data, among all samples tested (n=106), the percentage of positive samples for respiratory viruses increased to 35%. Among influenza viruses, an increased level of influenza B was reported during the last weeks; followed by influenza A(H3N2) and influenza A(H1N1)pdm09 to a lesser extent. Among other respiratory viruses, RSV, adenovirus and parainfluenza were also reported.

In El Salvador, according to laboratory data, through EW 38, of the total samples analyzed (n=75), the percentage of positive samples for respiratory viruses was 21%. Among the influenza viruses, influenza B has been the predominant virus in the last 12 EWs.

In Nicaragua, in EW 39, according to laboratory data, among all samples tested (n=57), the percentage of positive samples for respiratory viruses decreased to 21%, which was slightly lower than the previous EW. Co-circulation of influenza A(H3N2) and influenza B have been reported in the last weeks. Detection of RSV has been decreasing since EW 33.

In Panama, in EW 39, according to laboratory data, among all samples tested (n=43), the percentage of positive samples for respiratory viruses was 75%, with RSV predominating. This week, no influenza viruses were detected.

South America – Andean

In Santa Cruz, Bolivia, according to data from CENETROP in EW 39, only one positive sample (adenovirus) was reported among the 22 tested samples. In the Department of Santa Cruz, the proportion of SARI hospitalizations (8%) showed no significant changes as compared with the previous EW. No SARI-deaths were reported in this EW. In the Department of La Paz, viral circulation in EW 39, showed a percent positivity of 10% among the 20 tested samples, with 2 positive samples for influenza B. The proportion of SARI–hospitalizations reached 4.7%, with no significant changes as compared to the previous EW. No SARI-deaths were reported in this EW.

In Colombia, at the national level, in EW 39 the proportion of consultations and SARI hospitalizations remained unchanged with respect to last EWs. According to laboratory data from the national laboratory (INS) which includes data from the Departments of Antioquia, Bogota and Nariño, in EW 39, no respiratory viruses were detected among the tested samples (n=8)

In Ecuador, according to laboratory data at the national level and in EW 39, no respiratory viruses were detected among the 21 tested samples. In the same EW, according to the SARI surveillance system from sentinel units, the proportion of hospitalizations (2%) in EW 38 showed no significant changes with respect to previous EWs and no SARI-deaths were reported in this EW.

In Peru, at the national level and in EW 37, the cumulative number of pneumonias in children under 5 years reached a rate of 85.7/10,000 population remaining in the safety zone of endemic channel. At the subnational level, reports of this event in the same EW in Madre de Dios were significant higher as compared to previous EWs. Form the beginning of the year through EW 40 4723 samples for respiratory viruses diagnostic were tested showing percent of positive samples to respiratory viruses of 27.1% and to influenza viruses of 21.7%, with predominance of influenza B (10.8%), influenza A(H3N2) (5.4%) e influenza A(H1N1)pdm09 (3.0%). Among EW 25 and EW 39, increase related to influenza B virus was observed. According to laboratory data, in EW 39, the percentage of positive samples for respiratory viruses among

samples tested (n=40) was 17.5%, with no significant changes with respect to previous EW, with a predominance of influenza B virus (3/7).

South America –Southern Cone

In Argentina, at the national level, according to laboratory data in EW 39, percentage of positive samples for respiratory viruses showed no significant changes with respect to the previous EW, reaching 22.8% among the analyzed samples (n=316) with a predominance of influenza B (25%) and parainfluenza (22%) among the positive samples.

In Brazil, in EW 39, percentage of positive samples for influenza virus was 8.2% among the tested samples (n=61), with positive results for influenza A(H3) (3/5) and influenza A(H1N1)pdm09 (2/5) viruses.

En Chile, in EW 39, at the national level, ILI activity reached a rate of 8,2/100,000 population, with no change as compared to the previous EW and remained in the safety zone of the endemic cannel. According to laboratory data, at the national level and in EW 39, the percentage positivity for respiratory viruses was 22% among the tested samples (n=817), which no significant changes with respect to previous EW, and RSV (30%), parainfluenza (23%), and influenza B (17%) continued to predominate. According to the SARI surveillance system, in the EW 39, 2 samples were tested with positive results for parainfluenza virus in both. From the beginning of the year through EW 39, 103 SARI-deaths were reported in sentinel sites with 13.5% of those with confirmed etiology for processed respiratory virus with predominance of influenza A(H3N2) (9 cases).

In Paraguay[2], at the national level, in EW 39, the national ILI rate (125/100,000 population) and the proportion of ILI consultations (7%) in sentinel units showed no significant changes as compared to the previous EW. According to laboratory data in EW 39 at the national level, 37 samples were tested for respiratory viruses with a percent of positive samples of 21.6% with a predominance of RSV (4/8) and parainfluenza B virus (3/8) among the positive samples. In the SARI surveillance system, the proportion of hospitalizations (4.2%) showed no significant changes as compared to the previous EW. Since the beginning of the year, a total of 226 SARI-deaths were reported of which 18 were due to influenza A(H1N1)pdm09, 10 due to RSV and 4 due to other viruses. For EW 39, 6 samples were analyzed from SARI cases, with one positive sample for parainfluenza virus.

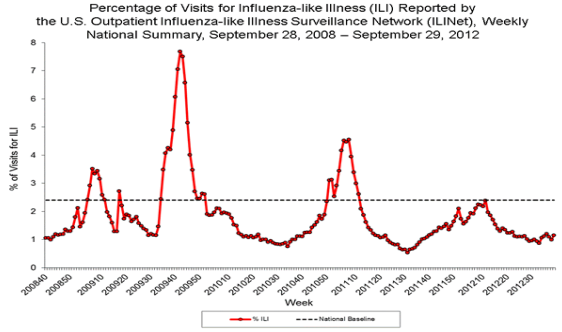
In Uruguay[3], at the national level, in EW 40, in the SARI surveillance system, the proportion of hospitalizations and ICU admissions did not show significant changes with respect to prior EWs. No SARI-deaths were reported in the same EW. According to laboratory data, at the national level in EW 39, no positive results were reported for respiratory viruses among tested samples (n=2).

Graphs

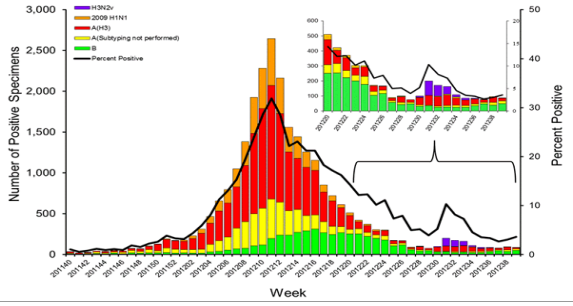
North America

United States

E.E.U.U. ILI Distribution (%) by EW, 2012

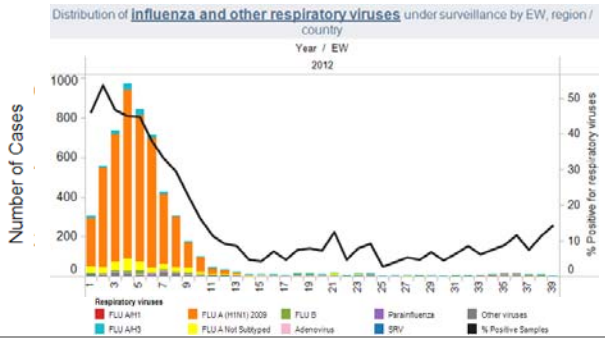


E.E.U.U. Influenza viruses distribution by EW, 2012



Mexico

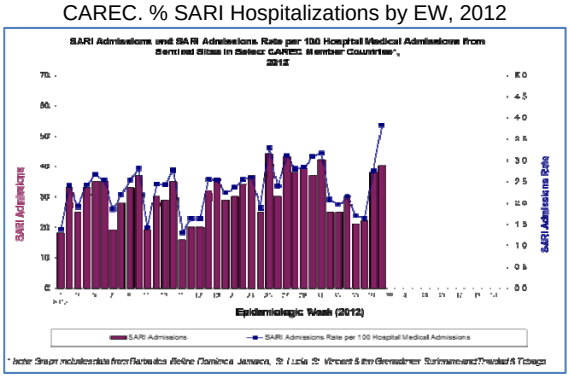
Mexico. Respiratory viruses distribution by SE, 2012



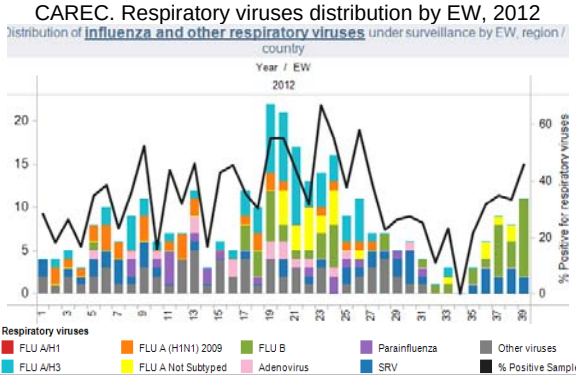
Caribbean

CAREC

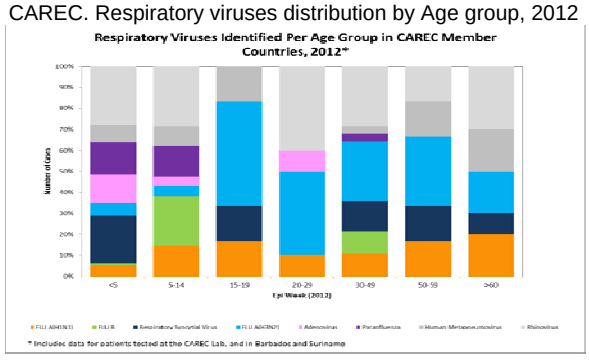
CAREC. % SARI Hospitalizations by EW, 2012



CAREC. Respiratory viruses distribution by EW, 2012

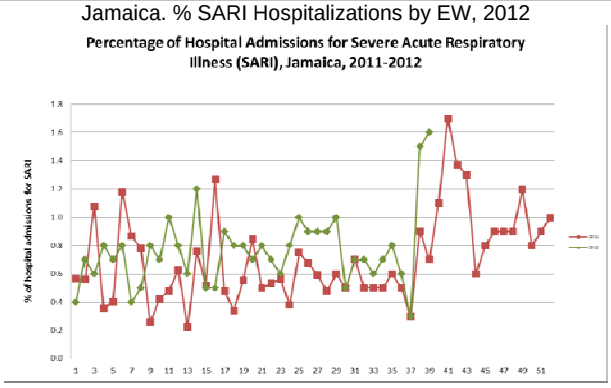


CAREC. Respiratory viruses distribution by Age group, 2012

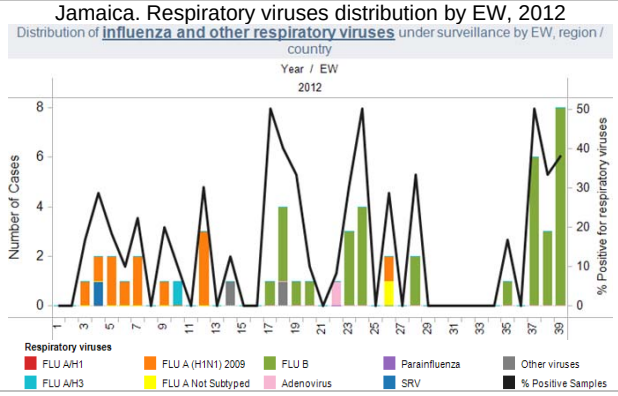


Jamaica

Jamaica. % SARI Hospitalizations by EW, 2012

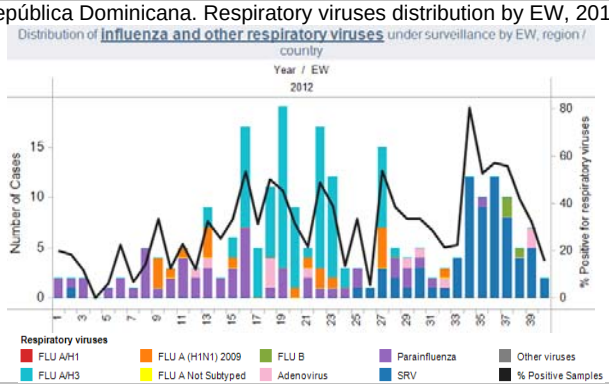


Jamaica. Respiratory viruses distribution by EW, 2012



República Dominicana

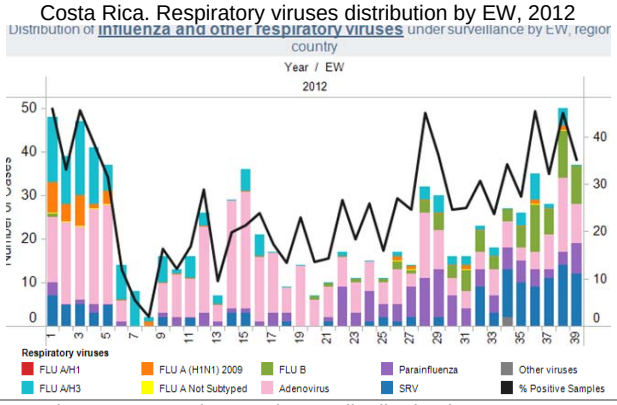
República Dominicana. Respiratory viruses distribution by EW, 2012



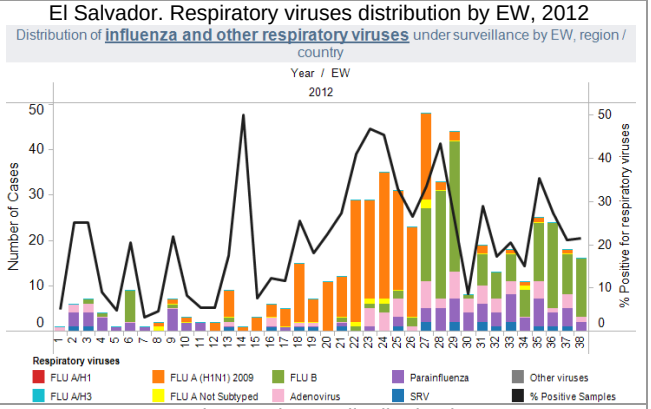
Central America

Costa Rica, El Salvador, Nicaragua and Panama

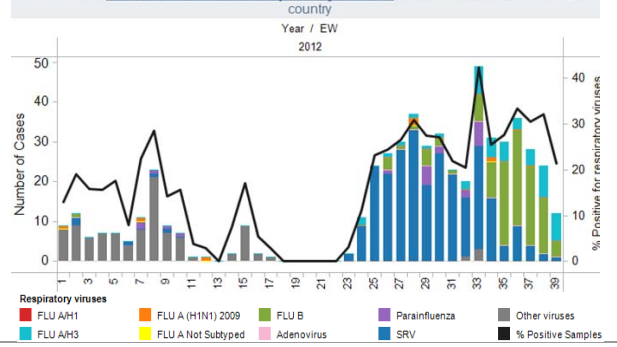
Costa Rica. Respiratory viruses distribution by EW, 2012



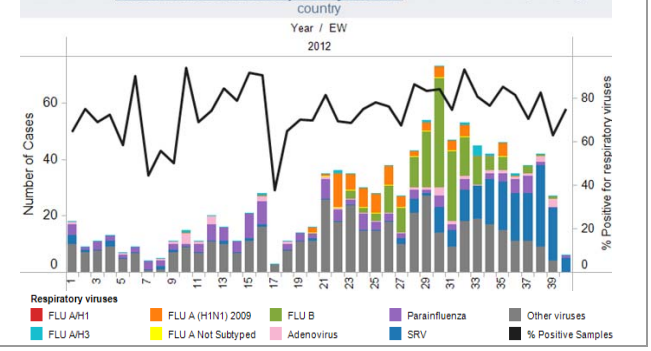
El Salvador. Respiratory viruses distribution by EW, 2012



Nicaragua. Respiratory viruses distribution by EW, 2012



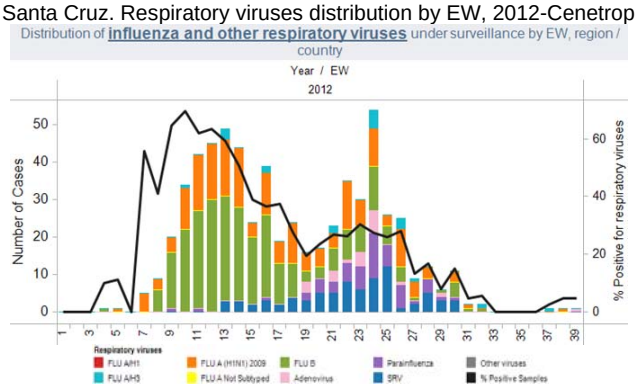
Panama. Respiratory viruses distribution by EW, 2012



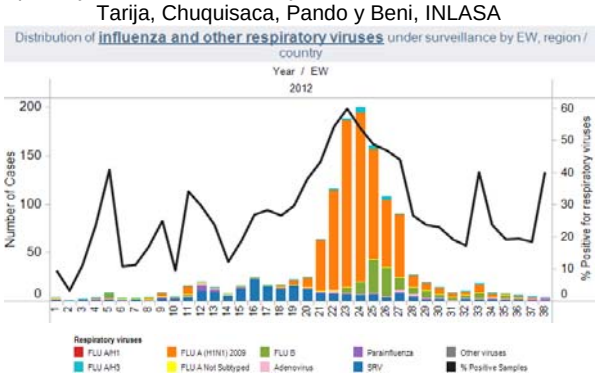
South America - Andean

Bolivia

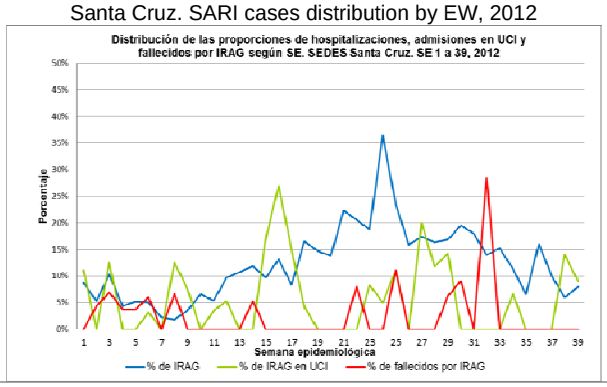
Santa Cruz. Respiratory viruses distribution by EW, 2012-Cenetrop



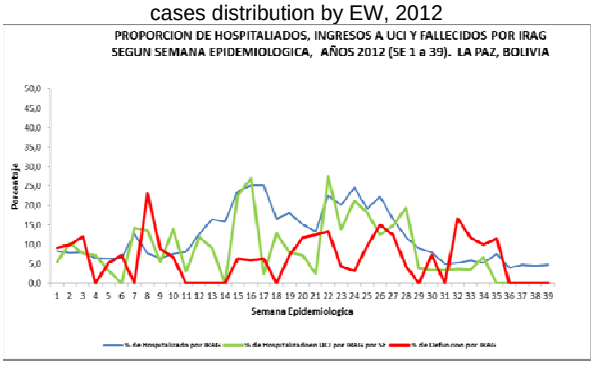
Respiratory viruses distribution by EW, 2012-La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni, INLASA



Santa Cruz. SARI cases distribution by EW, 2012

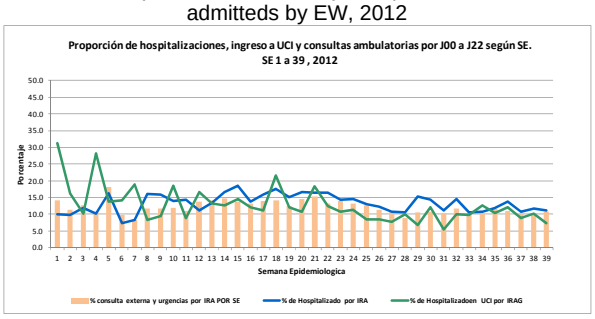


La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni. SARI cases distribution by EW, 2012

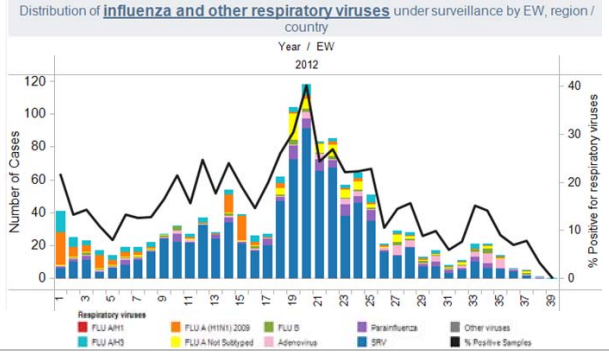


Colombia

Colombia. Proportion of ambulatory, Hospitalizations and ICU admitteds by EW, 2012

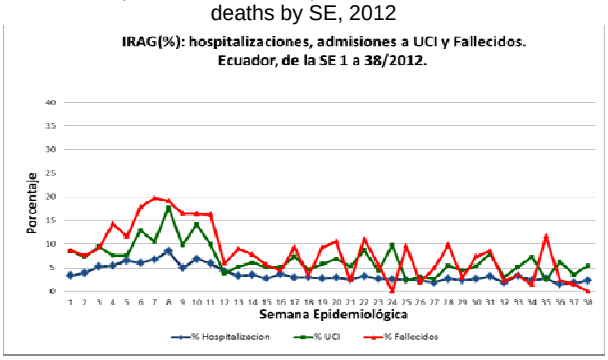


Colombia. Respiratory viruses distribution by EW, 2012

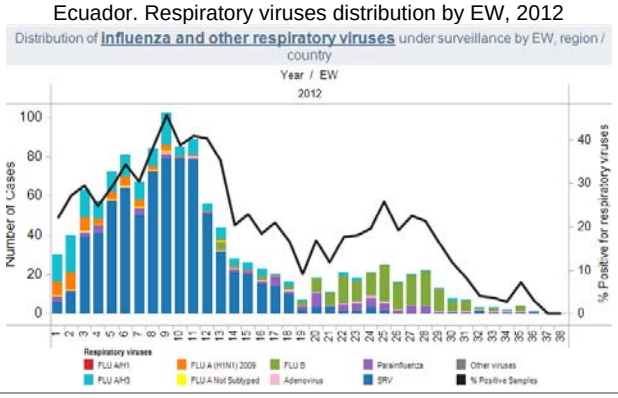


Ecuador

Ecuador. Proportion of SARi Hospitalizations, ICU admitteds and deaths by SE, 2012

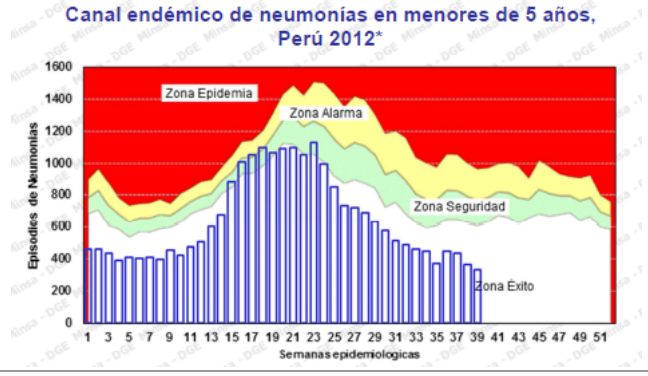


Ecuador. Respiratory viruses distribution by EW, 2012

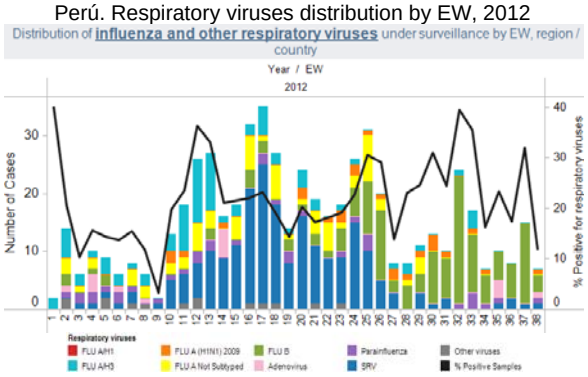


Peru

Peru. Endemic channel of pneumonía, 2012



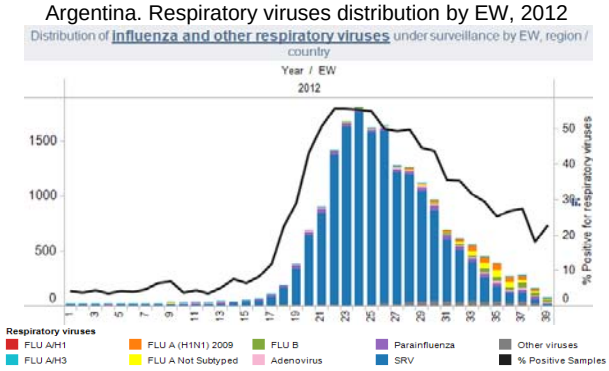
Perú. Respiratory viruses distribution by EW, 2012



South America, Southern cone

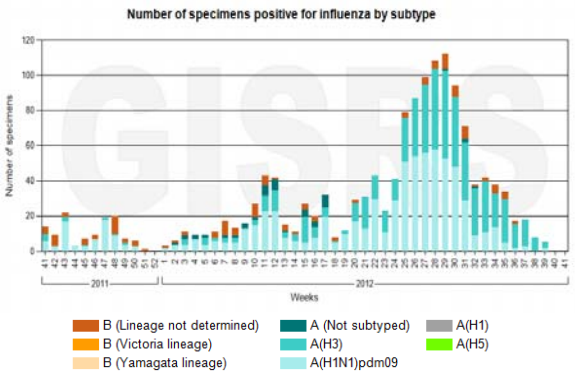
Argentina

Argentina. Respiratory viruses distribution by EW, 2012



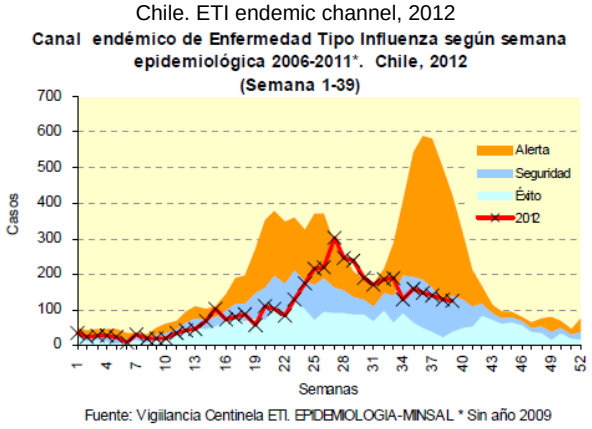
Brazil

Brazil. Influenza viruses distribution by EW, 2011 - 2012



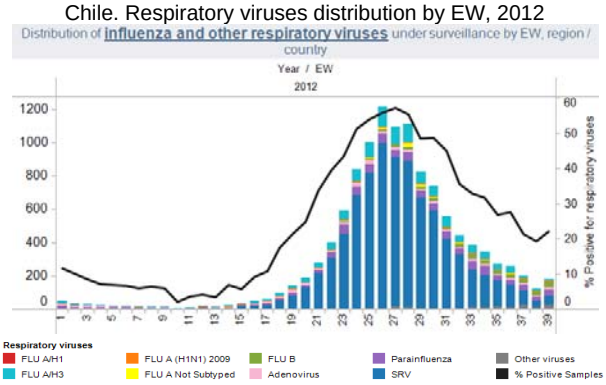
Chile

Chile. ETI endemic channel, 2012

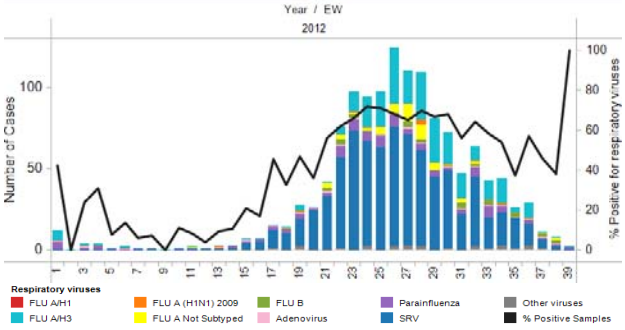


Fuente: Vigilancia Centinela ETI. EPIDEMIOLOGIA-MINSAL * Sin año 2009

Chile. Respiratory viruses distribution by EW, 2012

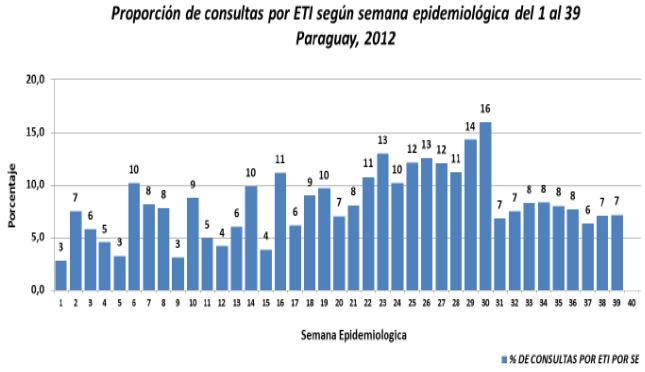


Chile. SARI Cases: respiratory viruses distribution by EW, 2012

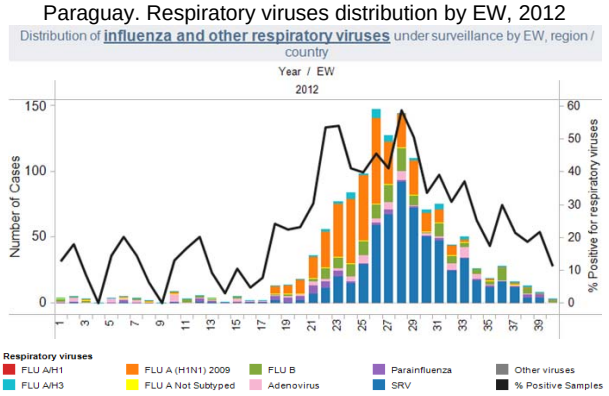


Paraguay

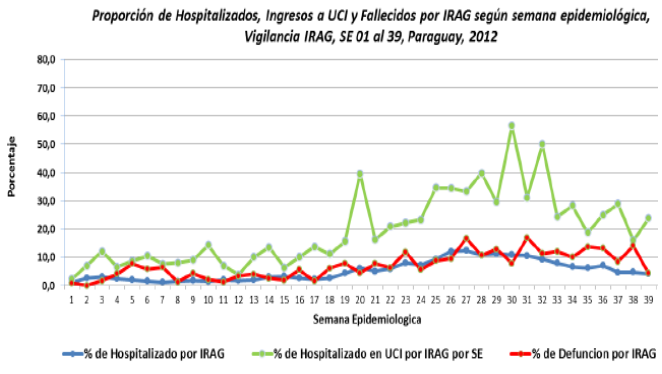
Paraguay. ILI consults (%) by EW, 2012



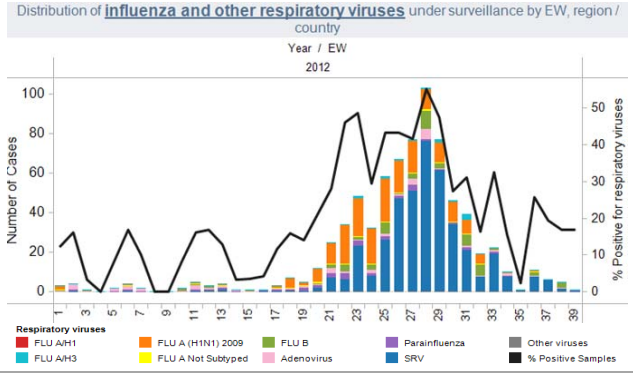
Paraguay. Respiratory viruses distribution by EW, 2012



Paraguay. SARI cases (%) by EW, 2012

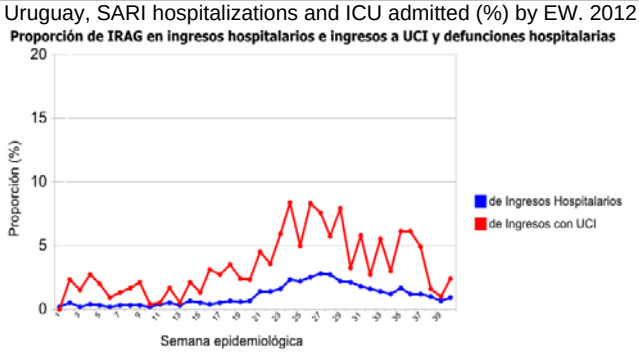


Paraguay. SARI Cases: Respiratory viruses distribution by EW, 2012

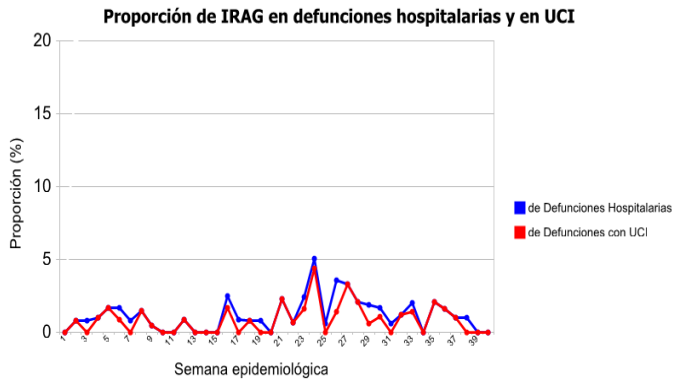


Uruguay

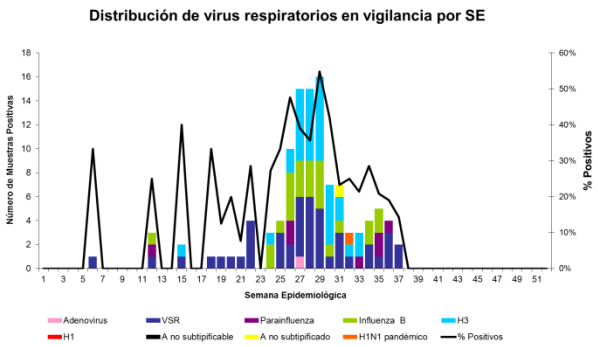
Uruguay, SARI hospitalizations and ICU admitted (%) by EW. 2012



Uruguay, SARI deaths distribution (%) by EW. 2012



Uruguay. Respiratory viruses distribution by EW, 2012



1 US Surveillance Summary. EW 39. Centers for Disease Control and Prevention
2 Paraguay. Boletín epidemiológico semanal SE 39. Available at: http://www.vigisalud.gov.py/index.php?option=com_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86
3 Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública