Regional Update EW 41, 2012

Influenza and other respiratory viruses
(October 23, 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., one influenza-associated pediatric death was reported and there were no novel influenza A virus infections in this EW. I influenza A(H3), influenza A(H1N1)pdm09 and influenza B were detected in the region, among influenza positive samples.
- Central America and the Caribbean: No significant changes in respiratory infection activity were observed in the region except in Guadalupe and Martinique, where an epidemic of bronchiolitis was observed. No significant change of viral circulation was observed. Co-circulation of influenza B (CAREC, Costa Rica, El Salvador, Jamaica and Dominican R.), influenza A(H1N1)pdm09 (Cuba), influenza A(H3N2) (Costa Rica) was reported. Among other respiratory viruses, RSV was reported in several countries of the region.
- South America: Severe acute respiratory disease activity remains low and unchanged in the region. In Chile, ILI activity reached the alert zone in endemic channel. In the current EW, co-circulation of influenza B (Argentina, Brazil, Chile and Ecuador), influenza A(H3) (Argentina, Brazil, Bolivia and Paraguay) and influenza A(H1N1)pdm09 (Brazil) was observed among reported influenza detection. Among the other respiratory viruses, parainfluenza (Bolivia and Chile) and RSV (Colombia) predominated.

Epidemiologic and virologic influenza update

North America

In Canada[1], in epidemiological week (EW) 41, 2012, influenza activity remained low but has increased. In EW 41, the influenza-like illness (ILI) consultation rate declined and was below expected levels for this time of year. In EW 41, among the total samples analyzed, the proportion of samples positive for influenza was low (0.9%); of the influenza cases, 94% were influenza A (50% influenza A(H3) and 6.2% influenza A(H1N1)pdm09). Concerning other respiratory viruses, the percent positive for rhinovirus decreased but remained the highest (20.6%) as compared to other respiratory viruses.

In the United States[2], in EW 41, 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 41 (6.3%) was at the epidemic threshold for this time of year (6.3%). In EW 41, one pediatric deaths associated with an unsubtyped influenza A virus was reported. Among all samples tested during EW 41 (n=3,285), the percentage of samples positive for influenza (3.9%) increased slightly as compared to the previous week. Nationally, among the positive samples, 47% were influenza A [among the subtyped influenza A viruses, 86.7% were influenza A(H3)]. No novel influenza A virus infections were reported during EW 41, and since July 12, 2012, a total of 310 infections with influenza A (H3N2) variant (H3N2v) viruses have been reported from 10 states.

In México, according to laboratory data, in EW 41, 17 samples were tested showing a positivity to respiratory viruses of 17.6%. Only 3 samples were positive, all of them for influenza B.

Caribbean

CAREC, in EW 41, received epidemiological information from 7 countries: Barbados, Belize, Dominica, Jamaica, St. Vincent & the Grenadines, Trinidad and Tobago and Suriname. In EW 41, the proportion of severe acute respiratory infection (SARI) hospitalizations was 3.2% which is higher than what was reported during the prior week (2.3%). The SARI admission rate increased in 3 countries (Barbados, St. Vincent & the

Grenadines and Trinidad & Tobago). The highest rate of SARI was among children less than 6 months age (9.2% of hospital medical admissions were due to SARI). No SARI related deaths have been reported since EW 39, 2012. In the last 4 weeks (EW 38 to 41) the following viruses have been laboratory confirmed in CAREC member countries: influenza A not further typed (Barbados), influenza B (Barbados, Cayman Islands and Jamaica), parainfluenza type 2 (St. Vincent and the Grenadines) and RSV (Barbados and Dominica). To date in 2012, the overall percentage positivity for samples tested is 36%, with a 20% positivity for influenza.

In Cuba, in EW 41, according to laboratory data, the percentage of positive samples for respiratory viruses was 51.6% among the tested samples (n=93) with 7 influenza A(H1N1)pdm09 samples among the positives. RSV predominance was reported among the other respiratory viruses (23/48).

In Jamaica for EW 41, the proportion of consultations for ARI was 9.1% (0.5% higher than the previous EW). The proportion of admissions due to SARI was 1.7 % (0.6% increase when compared to the EW before). There was no SARI death reported for EW 41. According to laboratory data from EW 41, the percentage of positive samples for influenza virus was 33.3% among the tested samples (n=18). Influenza B was the only virus detected.

In the Dominican Republic, according to laboratory data from EW 42, among the samples analyzed (n=8), the percent positivity for respiratory viruses was 25% with only one positive influenza B sample among all samples analyzed. RSV was the only detected virus, among the other respiratory viruses.

In French Guyana[3], in EW 41, the number of ILI consultations has remained at a stable level, below the maximum level of expected cases. The circulation of other respiratory viruses different from influenza was reported. In Guadeloupe, in EW 41, the number of cases reported remained low and under the epidemic threshold. An epidemic of bronchiolitis was reported. In Saint-Martin and Saint-Barthélemy, in EW 41, the number of ILI cases reported remained low and below the epidemic threshold. In Martinique, in EW41, the number of cases reported has been stable during the last three EWs. An epidemic of bronchiolitis continued in Martinique, associated with RSV.

Central America

In Costa Rica, in EW 41, among all the hospitalizations, the percentage of SARI cases was 6.6%. Among the total number of deaths, 10,6% were associated to SARI; among them, 9 influenza confirmed cases (3 influenza A(H3N2), 2 Influenza B and 4 influenza A(H1N1)pdm09), mostly young adults with non-chronic comorbidities. According to laboratory data, in EW 41, among all samples tested (n=188), the percentage of positive samples for respiratory viruses continued to increase to 51.6%. Among influenza viruses, influenza B remained the predominant virus, followed by influenza A unsubtyped and influenza A(H3N2). Among other respiratory viruses, RSV circulation showed an important increase over the last 2 weeks, followed by adenovirus.

In El Salvador[4], according to data provided by the Ministry of Health, nationally, in EW 35, the number of ARI cases was lower than the previous EWs, but higher as compared to the same period in 2011; and the number of pneumonia cases was lower than the previous EWs, and lower as compared to the same period in 2011. The highest percentage of cases was reported in the children 1-4 years old group. Regionally, the highest pneumonia incidence rates were observed in Chalatenango, San Vicente, San Miguel y La Unión. According to laboratory data, through EW 42, of the total samples analyzed (n=39), the percentage of positive samples for respiratory viruses was 33%. Among the influenza viruses, influenza B has been the predominant virus in the last 3 months. Among the other respiratory viruses, adenovirus and parainfluenza were reported in the last weeks.

In Guatemala, according to laboratory data, in EW 40, of the total samples analyzed (n=29), the percentage of positive samples for respiratory viruses was 24%, associated mainly with the detection of RSV. Low circulation of influenza was observed.

In Honduras, according to laboratory data, in EW 41, of the total samples analyzed (n=11), the percentage of positive samples for respiratory viruses was 27%, with low detection of respiratory viruses.

In Panama, in EW 41, according to laboratory data, of the total samples analyzed (n=45), the percentage of positive samples for respiratory viruses was 66.7%, mainly associated with RSV. During the last 2 weeks, no influenza viruses were detected.

South America – Andean

In Santa Cruz, Bolivia, according to data from CENETROP in EW 41, three samples were positive among the 23 tested samples for respiratory viruses (2 parainfluenza, 1 influenza A H3). In the Department of Santa Cruz, the proportion of SARI hospitalizations was low but slightly higher than the value observed in the previous EW; and one SARI-death was reported in this EW. In the Department of La Paz, according to INLASA laboratory data, in EW 41, 5 positives samples were reported among 25 tested samples with no predominance of any respiratory virus. In La Paz, the proportion of SARI–hospitalizations reached 5.1%, which was lower as compared to the previous EW and no SARI-deaths were reported in this EW.

In Colombia, at the national level, in EW 41, the proportion of SARI hospitalizations (16%) and ICU admissions (13%) showed a slight increase as compared to the previous EW. According to laboratory data from the national laboratory (INS) which includes data from the Departments of Antioquia, Bogota and Nariño, in EW 41 only one positive sample for RSV were detected among the tested samples (n=10).

In Ecuador, according to laboratory data at the national level, in EW 41, only one sample was positive for any respiratory virus (Influenza B) among the 25 tested samples. According to the SARI surveillance system from sentinel units, the proportion of hospitalizations (2%) in EW 41 showed no significant changes with respect to previous EW and no SARI-deaths were reported in this EW. The 4 tested SARI-samples were negative for respiratory viruses.

In Peru, at the national level, according to laboratory data, in EW 41, the percentage of positive samples for respiratory viruses among samples tested (n=65) was 17%, which was higher with respect to previous EW, with no predominance of any virus.

South America –Southern Cone

In Argentina, at the national level, according to laboratory data in EW 41, the percentage of positive samples for respiratory viruses was higher as compared to the previous EW, reaching 39.8% among the analyzed samples (n=133) with a predominance of influenza B (49%) and influenza A(H3N2) (21%) among the positive samples.

In Brasil[5], in EW 41, the percentage of positivity for influenza viruses was 22.4% among the tested samples (n=107), which was higher as compared to the previous EW and with detection of influenza A(H3) (14/24), influenza A(H1N1)pdm09 (5/24) and influenza B (5/24) among the positive samples.

In Chile, in EW 41, at the national level, ILI activity (9.8/100,000 population) showed an increase with respect to previous EW reaching the alert zone of the endemic channel. According to laboratory data, at the national level and in EW 41, the percentage positivity for respiratory viruses was 17% among the tested samples (n=666), which was lower with respect to previous EW, and with a predominance of parainfluenza (30%) and influenza B (27%). In SARI surveillance, 5 samples were reported as positive among the 8 tested samples with no predominance of any virus.

In Paraguay[6], at the national level, in EW 41, the national ILI rate (99/100,000 population) and the proportion of ILI consultations (6%) in sentinel units showed no significant changes as compared to the previous EW. According to laboratory data in EW 41 at the national level, 42 samples were tested for respiratory viruses with 9 of them positive and with predominance of influenza A(H3) (6/9). In the SARI surveillance system in sentinel units, the proportion of hospitalizations (4.2%), ICU admissions (12%) and SARI-deaths (5.8%) showed lower values as compared to the previous EW. Since the beginning of the year, a total of 247 SARI-deaths were reported of which 18 were due to influenza A(H1N1)pdm09, 10 due to RSV and 5 due to other respiratory viruses.

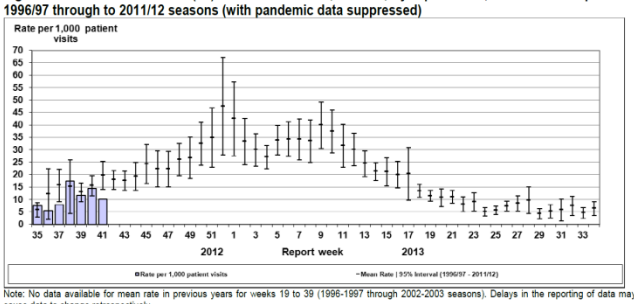
In Uruguay[7], at the national level, in EW 41, in the SARI surveillance system, the proportion of hospitalizations and ICU admissions did not show significant changes with respect to prior EWs. No SARI-deaths were reported in the same EW.

Graphs

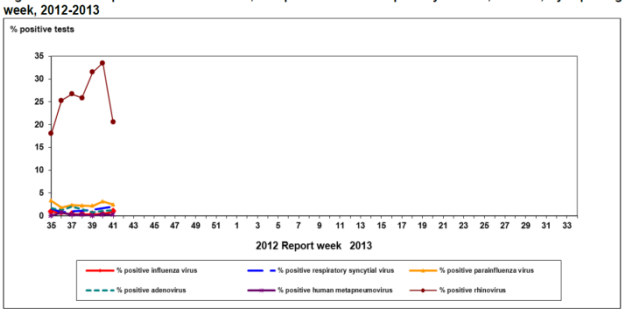
North America

Canadá

Canadá. ILI rate distribution by SE, 2012-2013

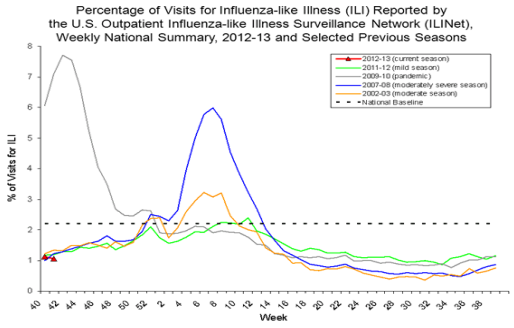


Canadá. Positive samples for respiratory viruses by SE, 2011-12 2012-2013

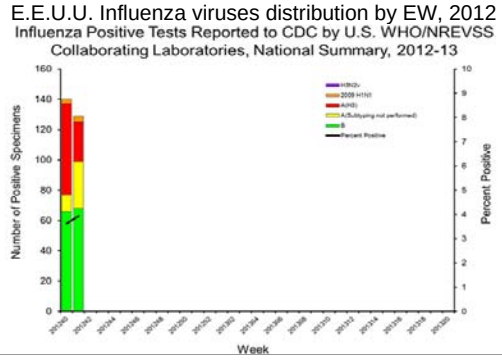


United States

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

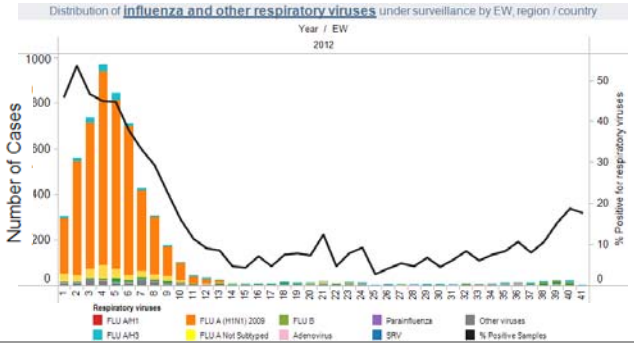


E.E.U.U. Influenza viruses distribution by EW, 2012



Mexico

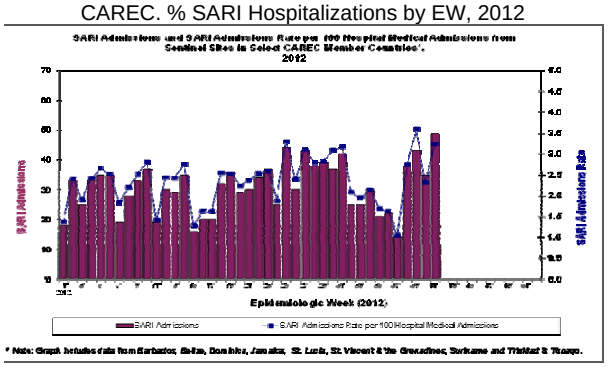
Mexico. Respiratory viruses distribution by SE, 2012



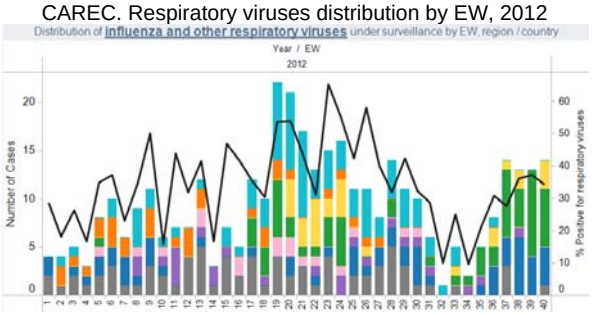
Caribbean

CAREC

CAREC. % SARI Hospitalizations by EW, 2012

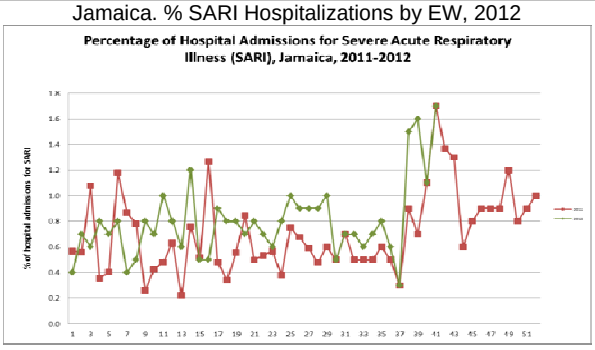


CAREC. Respiratory viruses distribution by EW, 2012

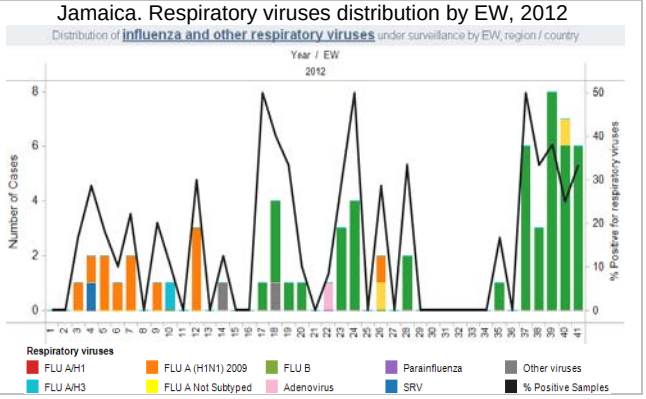


Jamaica

Jamaica. % SARI Hospitalizations by EW, 2012

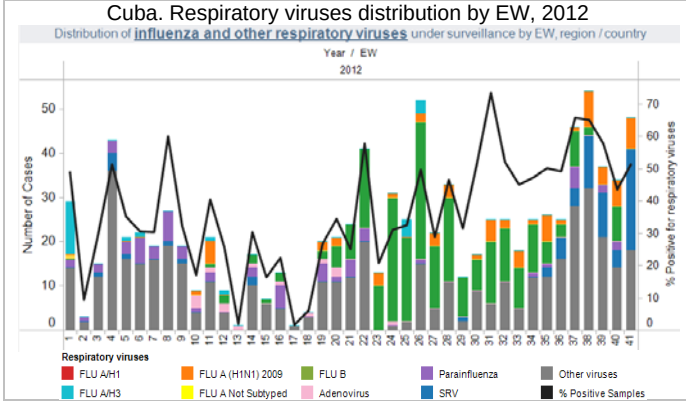


Jamaica. Respiratory viruses distribution by EW, 2012

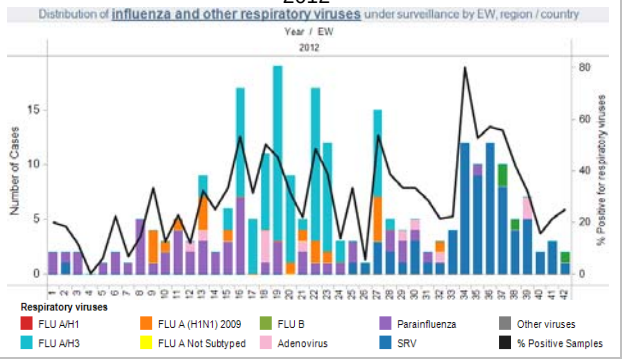


Cuba and Dominican Republic

Cuba. Respiratory viruses distribution by EW, 2012



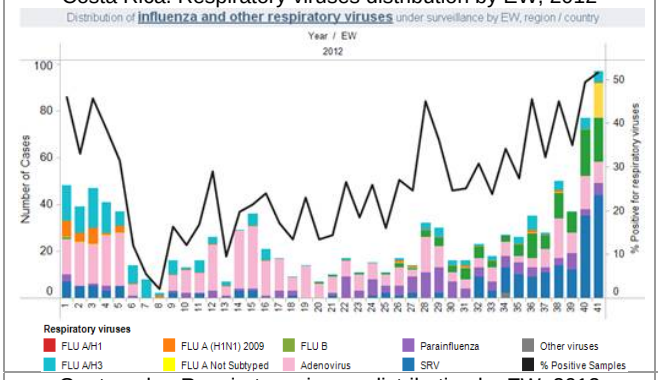
Dominican Republic. Respiratory viruses distribution by EW, 2012



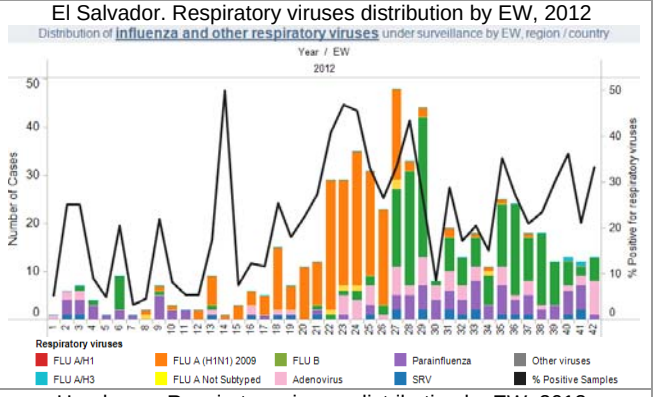
Central America

Costa Rica, El Salvador, Guatemala, Honduras and Panama

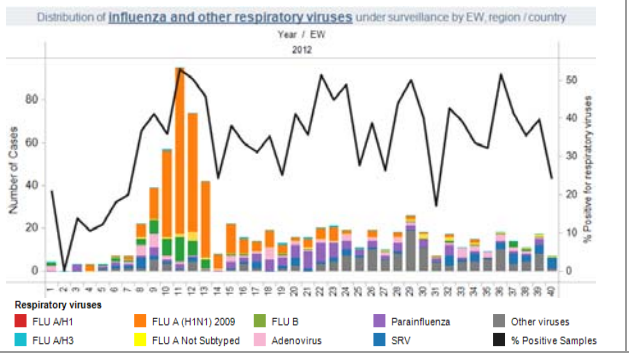
Costa Rica. Respiratory viruses distribution by EW, 2012



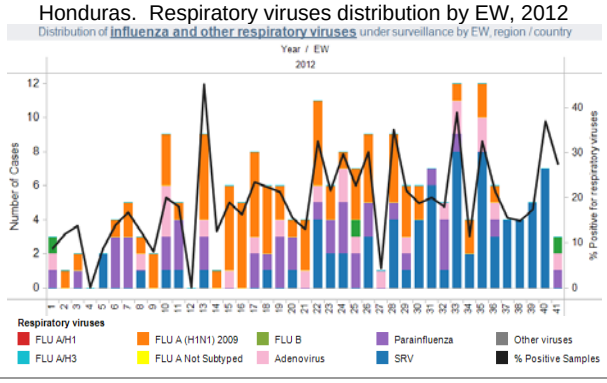
El Salvador. Respiratory viruses distribution by EW, 2012



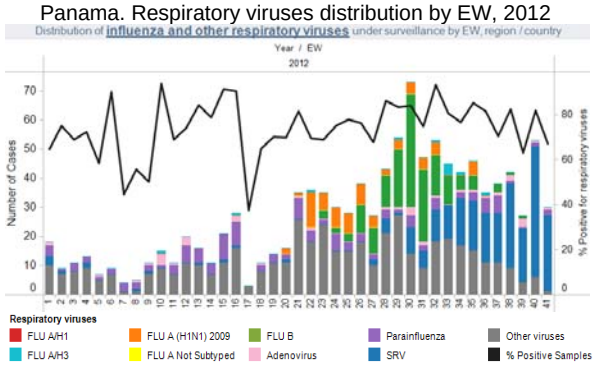
Guatemala. Respiratory viruses distribution by EW, 2012



Honduras. Respiratory viruses distribution by EW, 2012



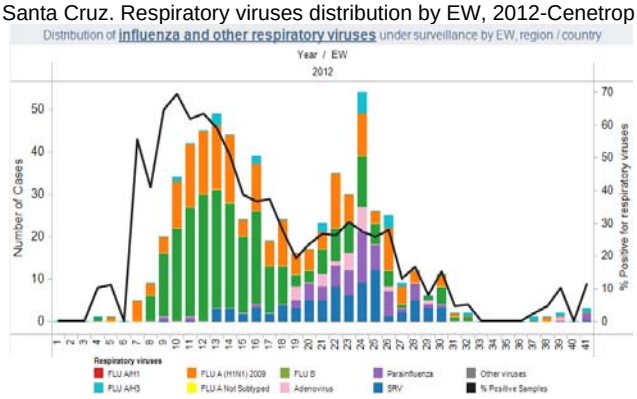
Panama. Respiratory viruses distribution by EW, 2012



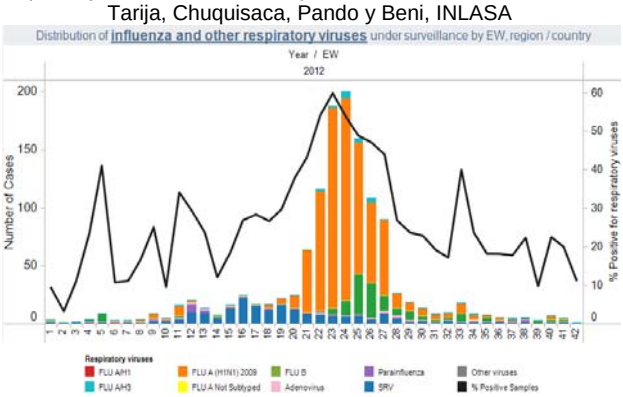
South America - Andean

Bolivia

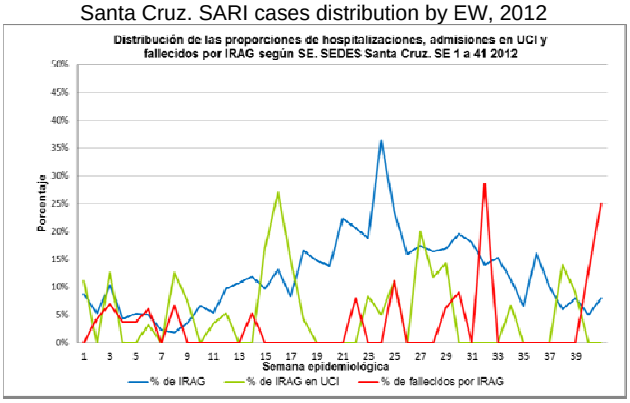
Santa Cruz. Respiratory viruses distribution by EW, 2012-Cenetrop



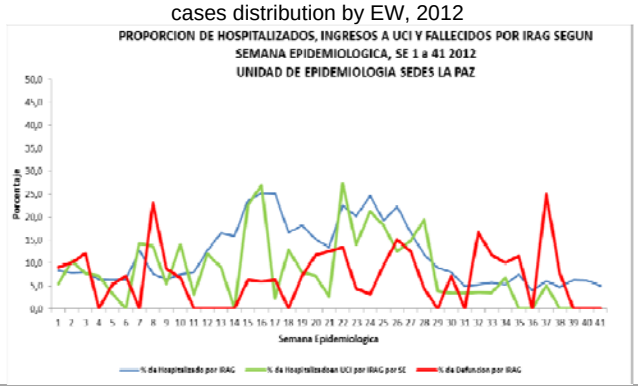
Respiratory viruses distribution by EW, 2012-La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni, INLASA



Santa Cruz. SARI cases distribution by EW, 2012

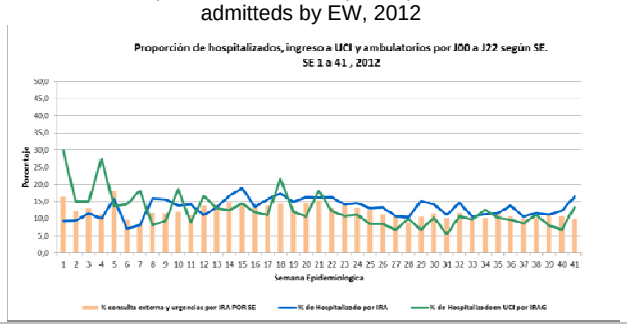


La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni. SARI cases distribution by EW, 2012

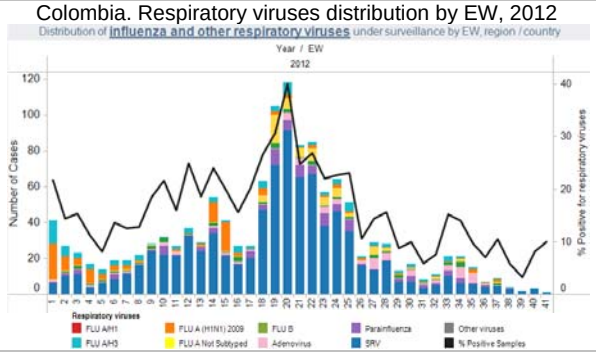


Colombia

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

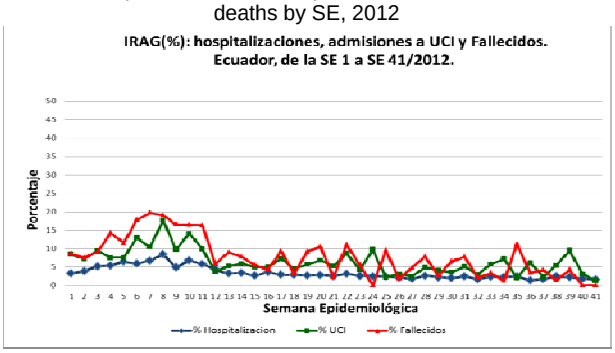


Colombia. Respiratory viruses distribution by EW, 2012

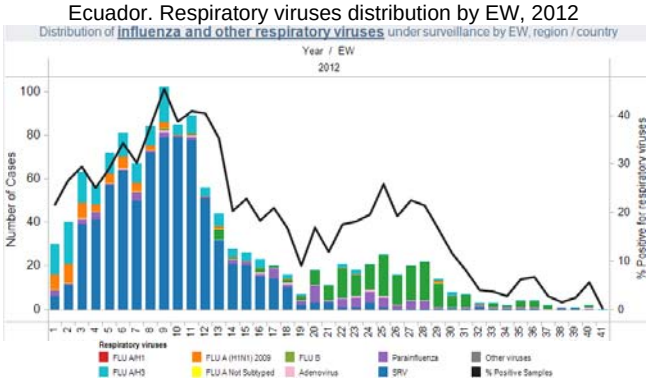


Ecuador

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

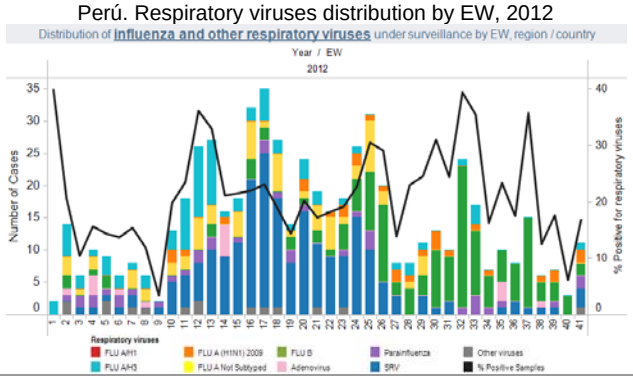


Ecuador. Respiratory viruses distribution by EW, 2012



Peru

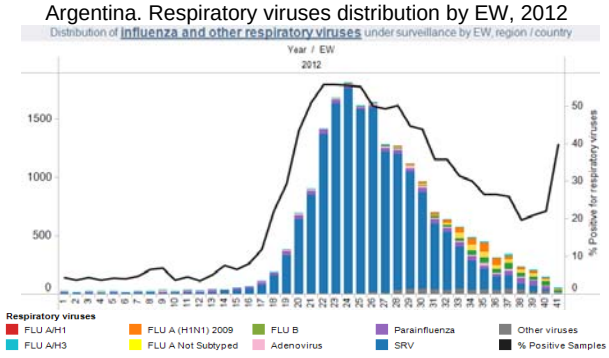
Perú. Respiratory viruses distribution by EW, 2012



South America, Southern cone

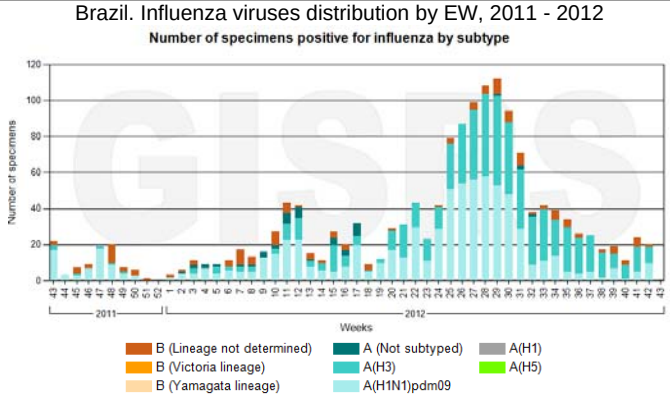
Argentina

Argentina. Respiratory viruses distribution by EW, 2012



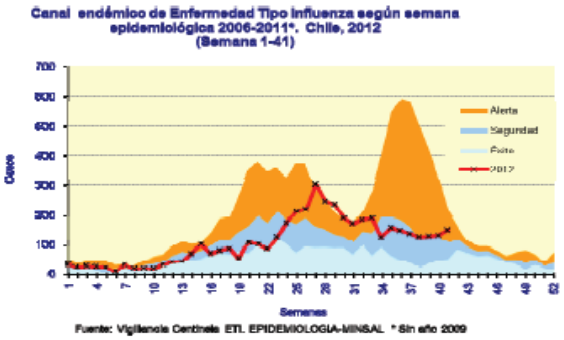
Brazil

Brazil. Influenza viruses distribution by EW, 2011 - 2012

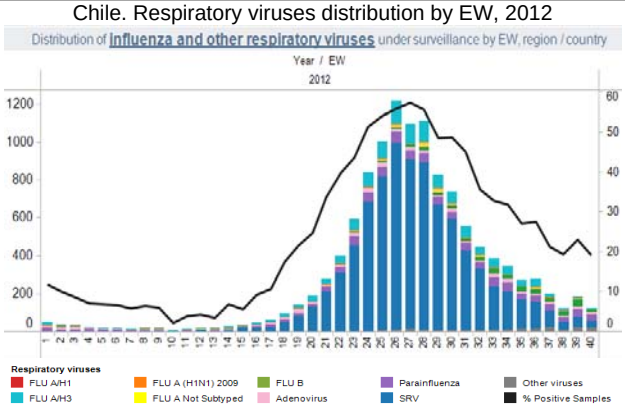


Chile

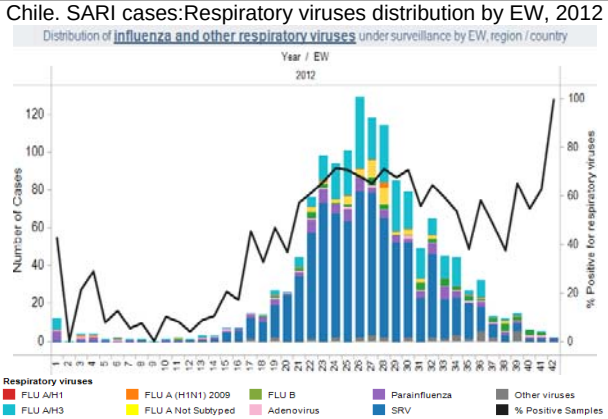
Chile. ETI endemic channel, 2012



Chile. Respiratory viruses distribution by EW, 2012

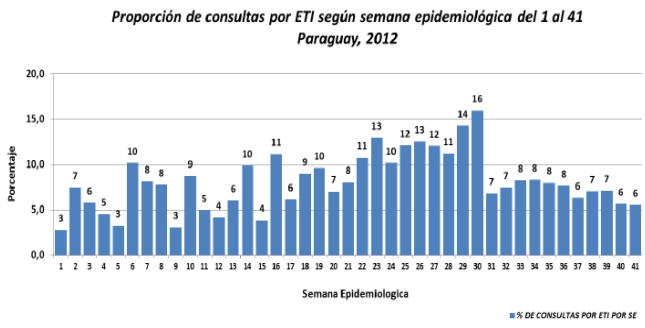


Chile. SARI cases:Respiratory viruses distribution by EW, 2012

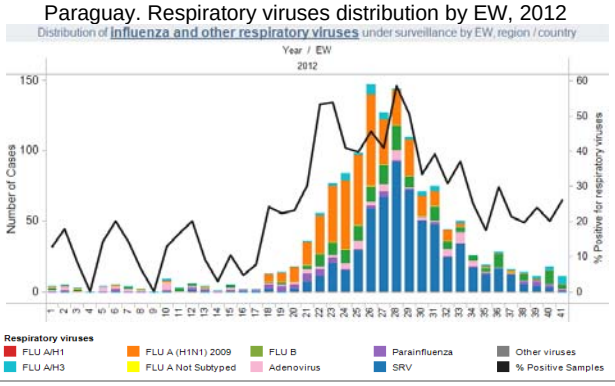


Paraguay

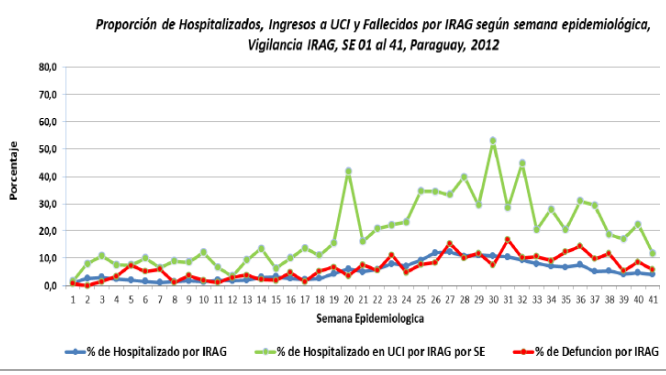
Paraguay. ILI consults (%) by EW, 2012



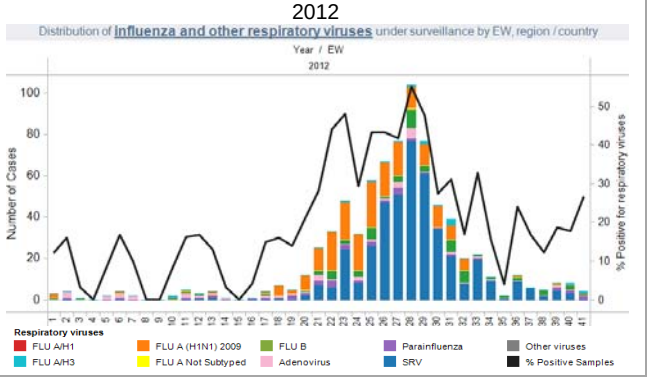
Paraguay. Respiratory viruses distribution by EW, 2012



Paraguay. SARI cases (%) by EW, 2012

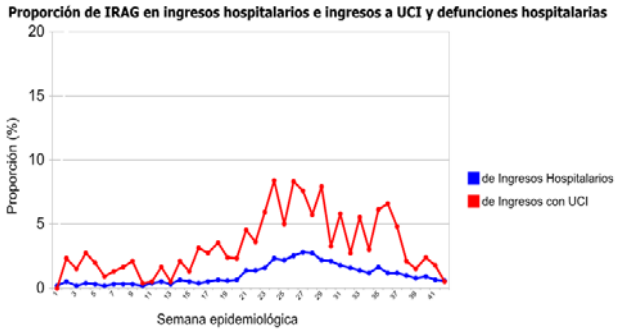


Paraguay. SARI Cases: Respiratory viruses distribution by EW, 2012

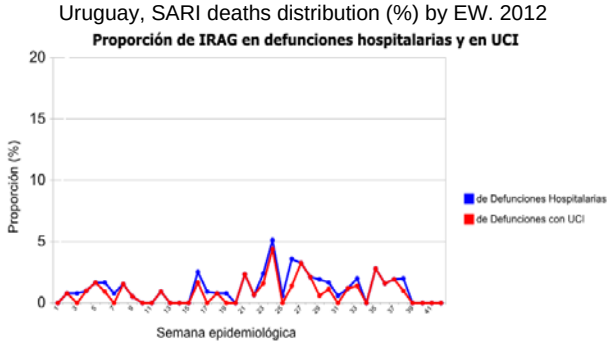


Uruguay

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



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



1 FluWatch Report. EW 41. Available at http://www.phac-aspc.gc.ca/fluwatch/
2 US Surveillance Summary. EW 41. Centers for Disease Control and Prevention
3 Bulletin Hebdomadaire Grippe, Institut de Veille San (10/16/2012)
4 El Salvador. Boletin epidemiológico SE 41 de 2012. MINSAL.
5 Brazil. Influenza Laboratory Surveillance Information from GISRS. Available in: http://gamapserver.who.int/gareports/Default.aspx?ReportNo=1
6 Paraguay. Boletín epidemiológico semanal SE 41. Available at: http://www.vigisalud.gov.py/index.php?option=com_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86
7 Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública