Regional Update EW 40, 2012

Influenza

(October 16, 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 Canada, regions of Alberta and Ontario showed increased flu activity. In the U.S., from July 12 through October 11, 2012, a total of 306 infections with influenza A (H3N2) variant (H3N2v) viruses have been reported in 10 states.
- Central America and the Caribbean: No significant changes in respiratory infection activity were observed except in Guadalupe and Martinique, where epidemic of bronchiolitis was observed. Increase of viral circulation was observed in some countries (Costa Rica, Jamaica y Nicaragua) mainly due to influenza B detection. Also, 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(H3) (Argentina and Brazil) and influenza A(H1N1)pdm09 (Argentina and Bolivia) was observed among reported influenza virus. Among the other respiratory viruses, parainfluenza (Chile) and RSV (Chile and Paraguay) predominated.

Epidemiologic and virologic influenza update

North America

In Canada[1], in epidemiological weeks (EW) 39 and 40, 2012, influenza activity remained low but has increased in two regions (Alberta and Ontario). In EWs 39 and 40, the influenza-like illness (ILI) consultation rate was within the expected levels for this time of year. In EWs 39 and 40, among the total samples analyzed, the proportion of samples positive for influenza was low (0.3% and 0.4%, respectively); of the influenza cases, 92% were influenza A (45% influenza A(H3) and 39% influenza A(H1N1)pdm09). Concerning other respiratory viruses, the percent positive for rhinovirus remained the highest (EW 40: 32.8%) as compared to other respiratory viruses.

In the United States[2] in EW 40, nationally, the proportion of ILI consultations (1.2%) was below the baseline (2.4%). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 36 (5.9%) was below the epidemic threshold for this time of year (6.2%). In EW 40, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 40 (n=2,870), the percentage of samples positive for influenza (2.6%) increased slightly as compared to the previous week. Nationally, among the positive samples, 52% were influenza A [among the subtyped influenza A viruses, 69.2% were influenza A(H3)]. No novel influenza A virus infections were reported during EW 40, however, from July 12 through October 11, 2012, a total of 306 infections with influenza A (H3N2) variant (H3N2v) viruses were reported from 10 states.

In Mexico, according to laboratory data, in EW 40, 25 samples were analyzed, and among the positives 75% (n=3) were positive for influenza type B.

Caribbean

CAREC, in EW 40, received epidemiological information from 7 countries: Barbados, Dominica, Jamaica, St. Vincent & the Grenadines, Trinidad & Tobago, Belize and Suriname. The SARI admission rate increased in St. Vincent & the Grenadines and Trinidad & Tobago. In EW 40, the proportion of severe acute respiratory infection (SARI) hospitalizations was 2.3% which is lower than what was seen in the prior week (3.6%). The highest rate of SARI was among children 6 months to 4 years (6.5%). There was no SARI death reported for

epidemiological week 40. In the last 4 weeks (EW 37 to 40) the following viruses have been laboratory confirmed in CAREC member countries: not subtyped influenza A (Barbados),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 19.5% positivity for influenza.

In Jamaica for EW 40, the proportion of consultations for ARI was 8.6% (0.4% lower than the previous EW). The proportion of admissions due to SARI was 1.1 % (0.5% decrease when compared to the EW before). There was no SARI death reported for EW 40. According to laboratory data from EW 40, the percentage of positive samples for influenza virus was 14.3% among the tested samples (n=14). 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.

In French Guyana[3], the number of ILI cases did not exceed the maximum number of cases expected compared to the last flu season. In Guadalupe, the weekly estimate for ILI did not exceed the maximum number of expected cases compared to the last flu season. The beginning of an epidemic of bronchiolitis was reported, with an increase of 30% in the first week of October. RSV cases have been more frequently reported since July. In Martinique, the number of ILI cases has increased in the last 2 EWs, reaching the maximum number of expected cases for the season. An epidemic of bronchiolitis was reported. Among the positive test for respiratory viruses, 70% were identified as RSV. In Saint-Martin and Saint-Barthelemy, low levels of influenza activity were reported as compared to the same period of time from the last year.

Central America

In Costa Rica, in EW 40, according to laboratory data, among all samples tested (n=156), the percentage of positive samples for respiratory viruses increased to 49.4% as compared to the previous week (35%). Among influenza viruses, influenza B remained increasing level during the last weeks; followed by influenza A(H3N2). Among other respiratory viruses, RSV and adenovirus also increased in the last week.

In Guatemala, according to laboratory data, in EW 39, respiratory virus detection remained low. Among all samples tested (n=13), RSV was the predominant virus.

In Nicaragua, in EW 40, according to laboratory data, the percentage of positive samples for respiratory viruses was 43% among all samples tested (n=80), which was higher 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 40, according to laboratory data, RSV remained as the predominant virus in circulation among all samples tested (n=8). Influenza detection remained in low levels.

South America – Andean

In Santa Cruz, Bolivia, according to data from CENETROP in EW 40, all the samples were negative for respiratory viruses among the 11 tested. In the Department of Santa Cruz, the proportion of SARI hospitalizations (5%) continued to decrease with respect to previous EWs. One SARI-death was reported in this EW. In the Department of La Paz, according to INLASA laboratory data, viral circulation in EW 40, showed a percent positivity of 18% among the 29 tested samples, with predominance of influenza B virus (3/6) and with reappearance, after 3 EWs of absence of influenza A(H1N1)pdm2009 virus (2/6). The proportion of SARI–hospitalizations reached 6.1%, 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 40, 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 40 two positive samples for RSV were detected among the tested samples (n=12)

In Ecuador, according to laboratory data at the national level and in EW 40, the percentage of positive samples for respiratory viruses was 6.5% among the 31 tested samples with positive samples for influenza B virus and adenovirus. According to the SARI surveillance system from sentinel units, the proportion of hospitalizations (2%) in EW 40 showed no significant changes with respect to previous EW and no SARI-

deaths were reported in this EW. One positive sample for adenovirus was reported among 6 SARI tested samples.

In Peru, at the national level and in EW 40, the cumulative number of pneumonias in children under 5 years reached a rate of 86.9/10,000 population remaining in the safety zone of endemic channel. According to laboratory data, in EW 40, the percentage of positive samples for respiratory viruses among samples tested (n=49) was 6.1%, which was lower with respect to previous EW, with a predominance of influenza B virus (3/3).

South America –Southern Cone

In Argentina[4], at the national level, the endemic channel of pneumonias showed that the estimated number of cases of pneumonias for EW 40 continued to decrease and remained in the safety zone. The SARI surveillance estimation of cases for the same EW remained between the reported values for 2010 and 2011. At the sub-national level, some Norwestern, Cuyo and Southern provinces continued to report higher SARI rates than what is expected for this time of the year. According to laboratory data in EW 40, the percentage of positive samples for respiratory viruses was higher with respect to the previous EW, reaching 53.2% among the analyzed samples (n=124) with a predominance of influenza A (18.5%) and influenza B (17%) among the positive samples. With respect to influenza A positive samples for the same EW, identified subtypes were H3N2 (30.4%), H1N1pdm2009 (18.5%) while 43.5% were not subtyped influenza A cases.

In Brazil[5], in EW 40, the number of SARI cases continued to decrease since peaking in EW 27. 21% of all SARI cases for the present year (n=18,700) were confirmed to be due to influenza virus, of which 66% were subtyped as influenza A(H1N1)pdm09. In 2012, (EW 01- EW 40) 1647 SARI-deaths have been reported (26% associated with influenza, of which 81% were influenza A(H1N1)pdm09). For EW 40, the percentage of positive samples for influenza viruses was of 5.1% among the tested samples (n=59), which was lower with respect to previous EW and with a predominance of influenza A(H3) virus (3/3).

In Chile, in EW 40, at the national level, ILI activity reached a rate of 8,4/100,000 population, which was slightly higher as compared to the previous EW reaching the limit between the alert and safety zones of the endemic cannel. According to laboratory data, at the national level and in EW 40, the percentage positivity for respiratory viruses was 19% among the tested samples (n=654), which was lower with respect to previous EW, and with a predominance of parainfluenza (30%) and RSV (27%).

In Paraguay[6], at the national level, in EW 40, the national ILI rate (105/100,000 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 40 at the national level, 81 samples were tested for respiratory viruses with a percent of positive samples of 18.5%, which was lower as compared to previous EWs and with a predominance of influenza B (7/15) among the positive samples. In the SARI surveillance system in sentinel units, the proportion of hospitalizations (4.7%) showed no significant changes as compared to the previous EW. Since the beginning of the year, a total of 241 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.

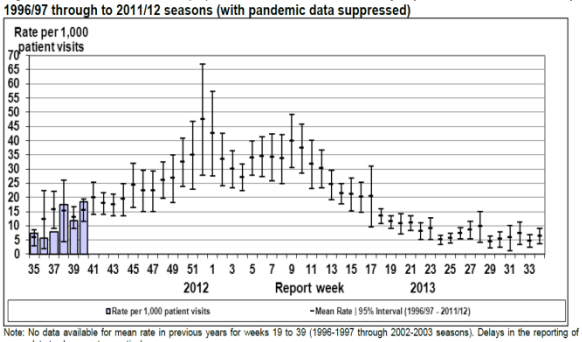
In Uruguay[7], at the national level, in EW 41, in the SARI surveillance system, the proportion of hospitalizations and ICU admissions did not show significant changes with respect to prior EWs. No SARI-deaths were reported in the same EW.

Graphs

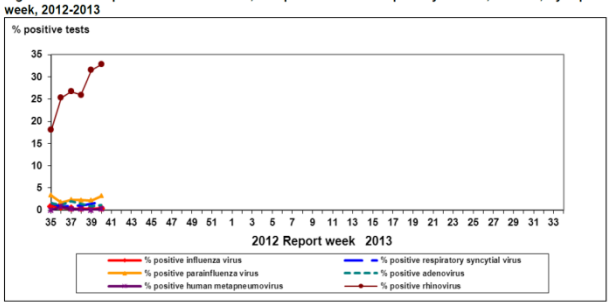
North America

Canadá

Canadá. ILI rate distribution by SE, 2012-2013

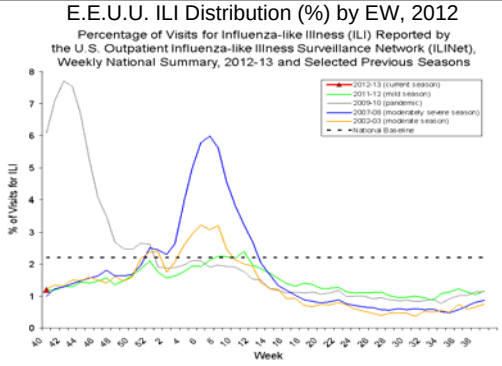


Canadá. Positive samples for respiratory viruses by SE, 2011-12 2012-2013

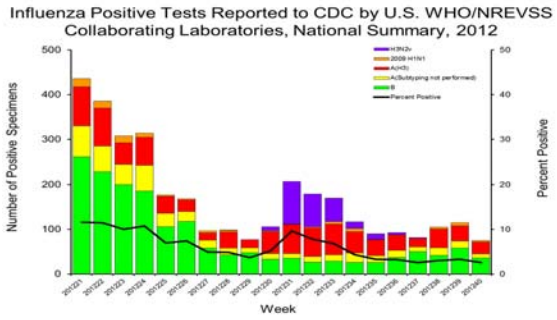


United States

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

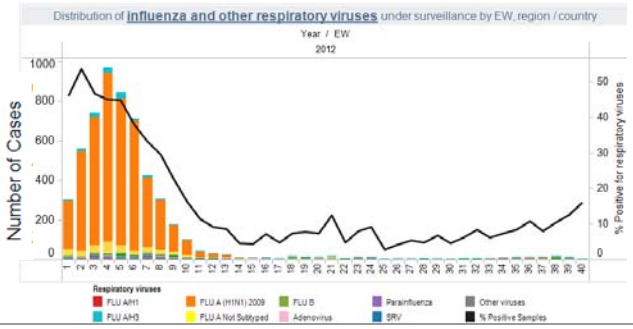


E.E.U.U. Influenza viruses distribution by EW, 2012



Mexico

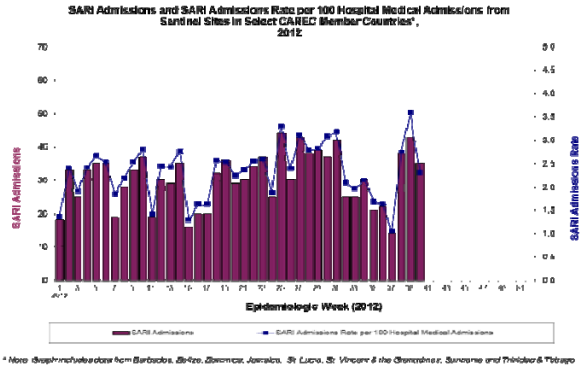
Mexico. Respiratory viruses distribution by SE, 2012



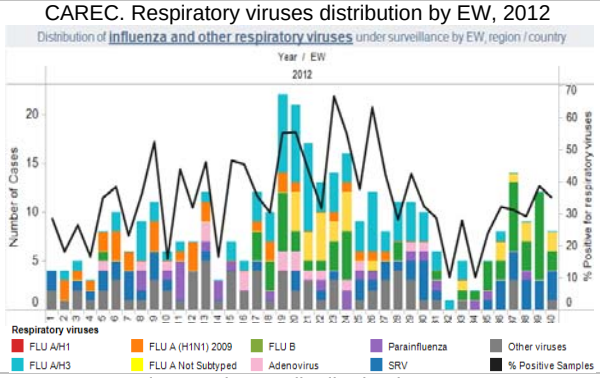
Caribbean

CAREC

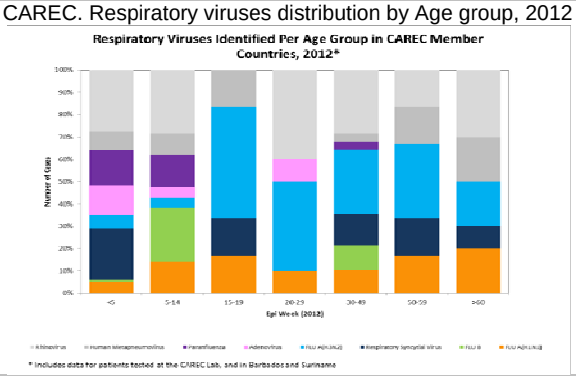
CAREC. % SARI Hospitalizations by EW, 2012



CAREC. Respiratory viruses distribution by EW, 2012

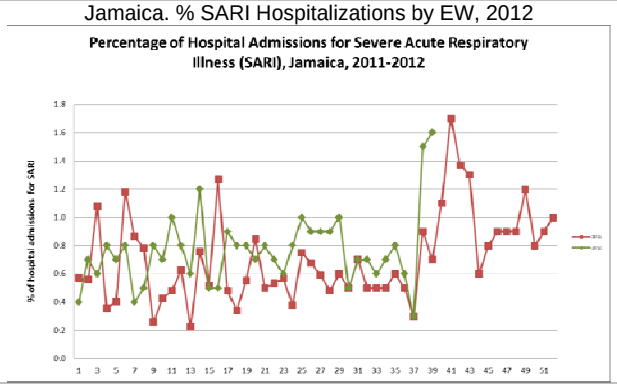


CAREC. Respiratory viruses distribution by Age group, 2012

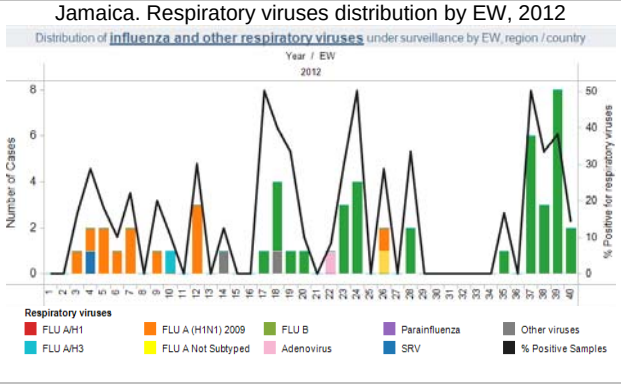


Jamaica

Jamaica. % SARI Hospitalizations by EW, 2012

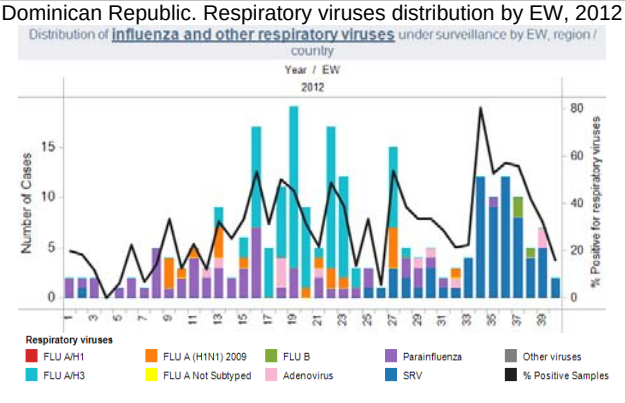


Jamaica. Respiratory viruses distribution by EW, 2012

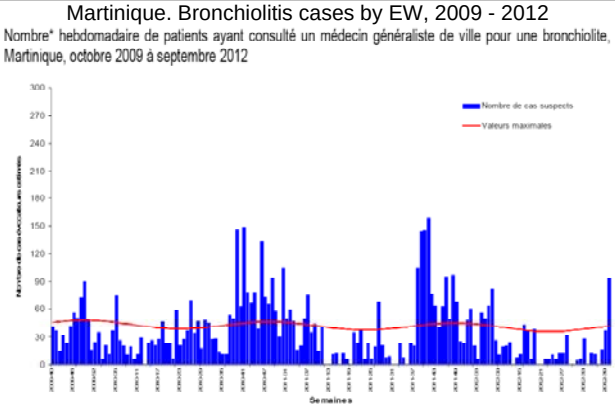


Dominican Republic and Martinique

Dominican Republic. Respiratory viruses distribution by EW, 2012



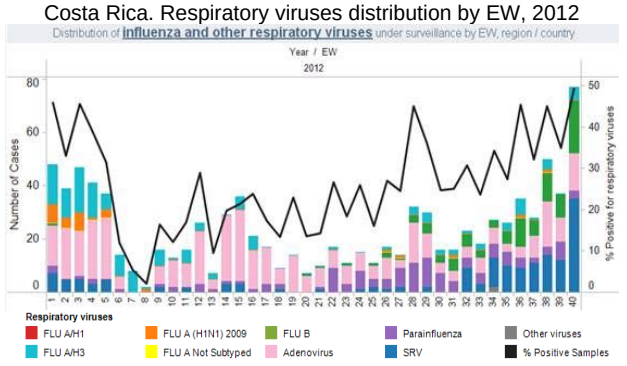
Martinique. Bronchiolitis cases by EW, 2009 - 2012



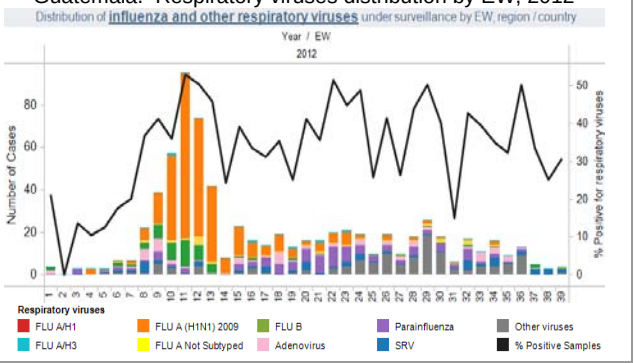
Central America

Costa Rica, Guatemala, Nicaragua and Panama

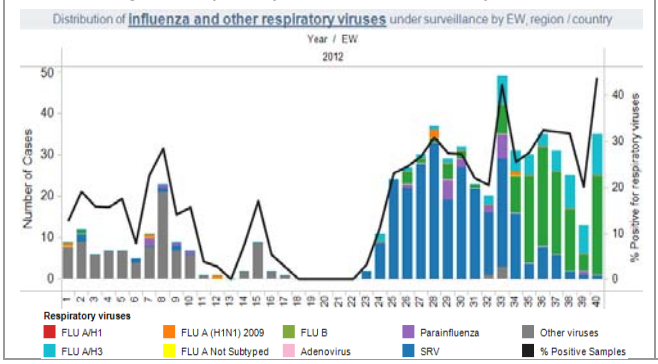
Costa Rica. Respiratory viruses distribution by EW, 2012



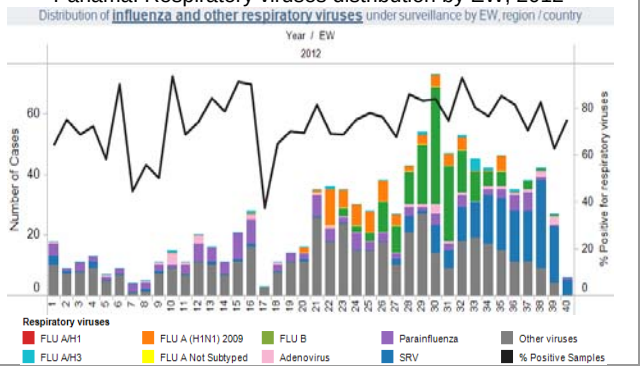
Guatemala. Respiratory viruses distribution by EW, 2012



Nicaragua. Respiratory viruses distribution by EW, 2012



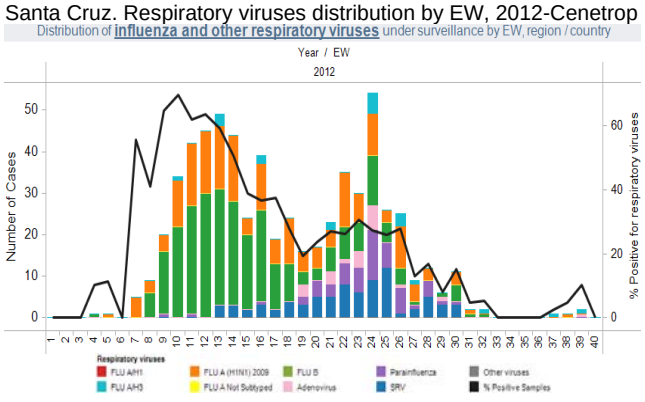
Panama. Respiratory viruses distribution by EW, 2012



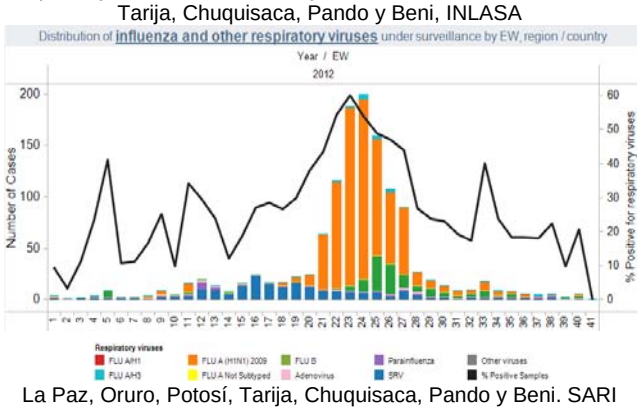
South America - Andean

Bolivia

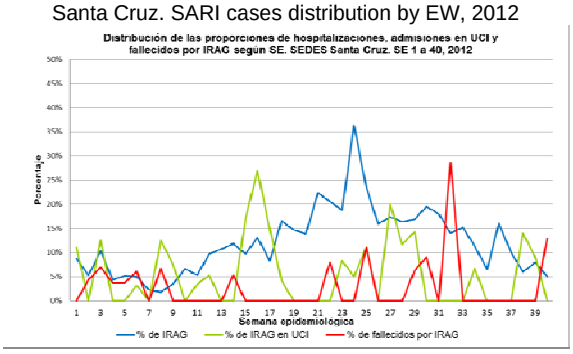
Santa Cruz. Respiratory viruses distribution by EW, 2012-Cenetrop



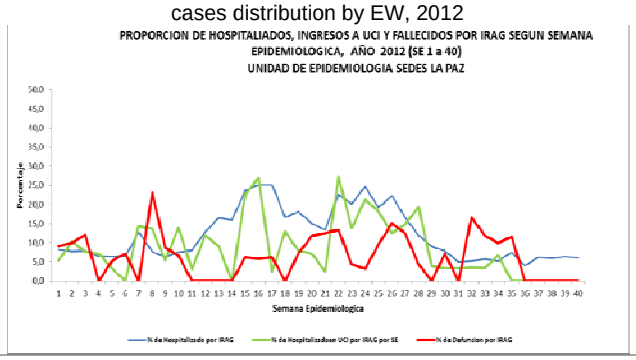
Respiratory viruses distribution by EW, 2012-La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni, INLASA



Santa Cruz. SARI cases distribution by EW, 2012

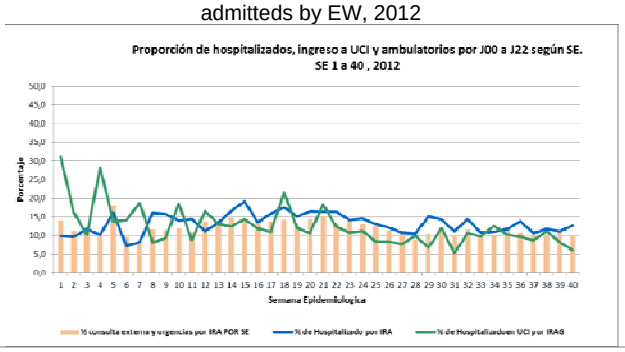


La Paz, Oruro, Potosí, Tarija, Chuquisaca, Pando y Beni. SARI cases distribution by EW, 2012

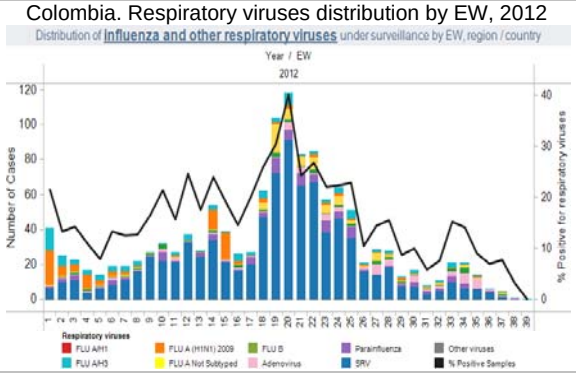


Colombia

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

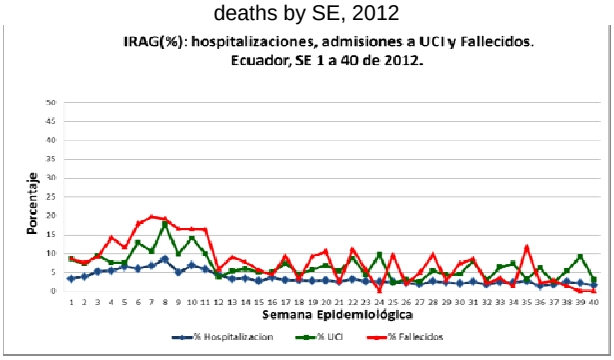


Colombia. Respiratory viruses distribution by EW, 2012

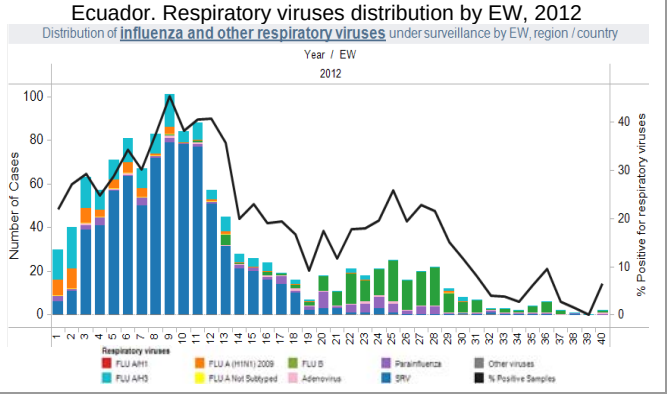


Ecuador

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

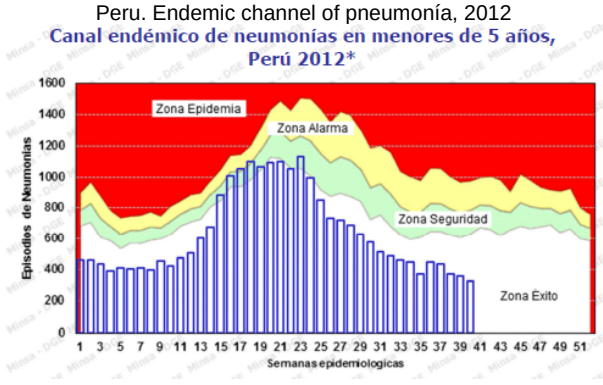


Ecuador. Respiratory viruses distribution by EW, 2012

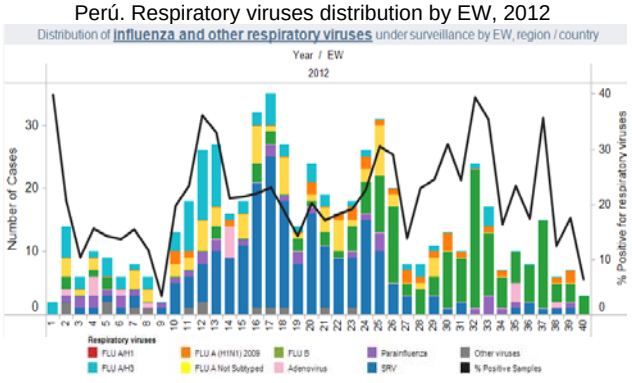


Peru

Peru. Endemic channel of pneumonía, 2012



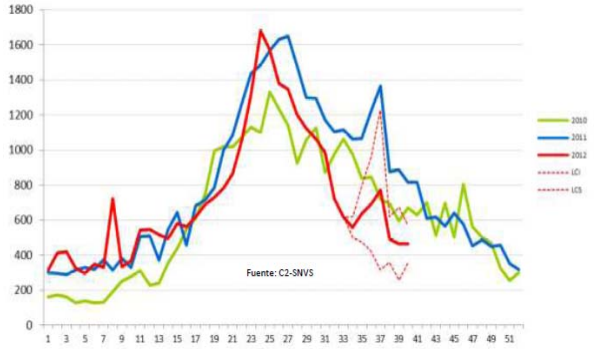
Perú. Respiratory viruses distribution by EW, 2012



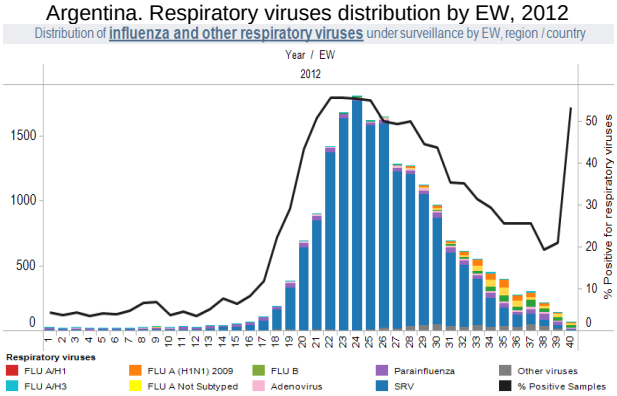
South America, Southern cone

Argentina

Argentina. SARI Hospitalizations distribution by EW, 2010 - 2012

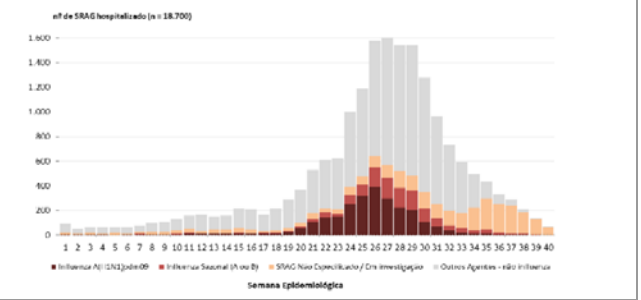


Argentina. Respiratory viruses distribution by EW, 2012

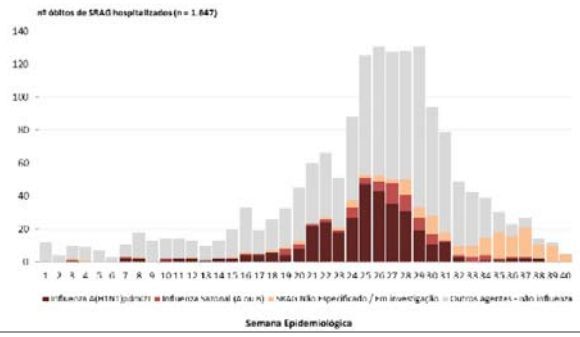


Brazil

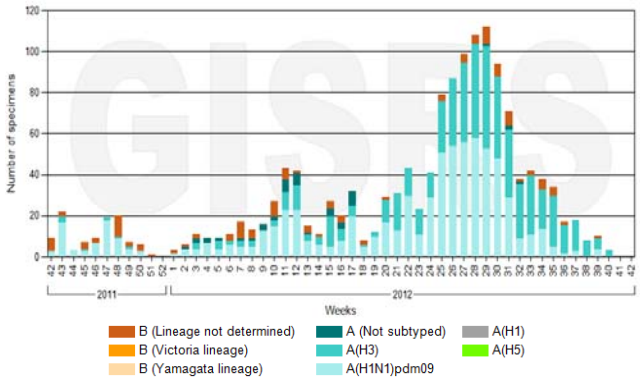
Brazil. SARI hospitalization distribution by EW, 2012



Brazil. SARI deaths distribution by EW, 2012

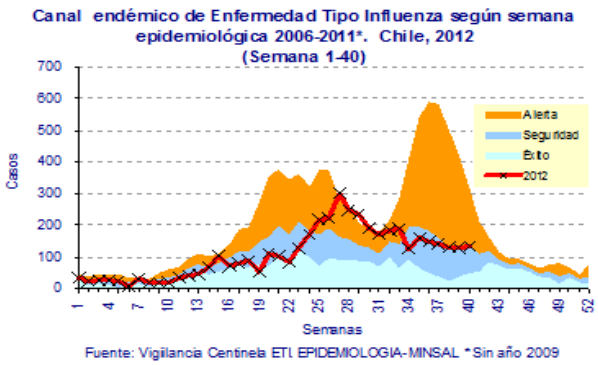


Brazil. Influenza viruses distribution by EW, 2011 - 2012

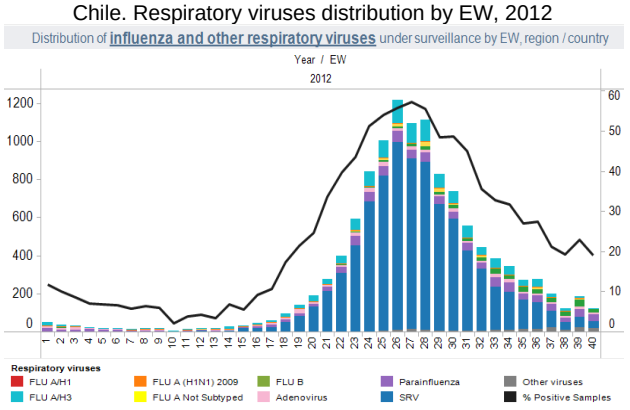


Chile

Chile. ETI endemic channel, 2012

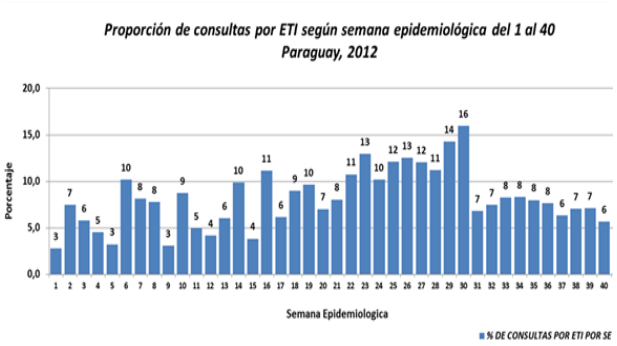


Chile. Respiratory viruses distribution by EW, 2012

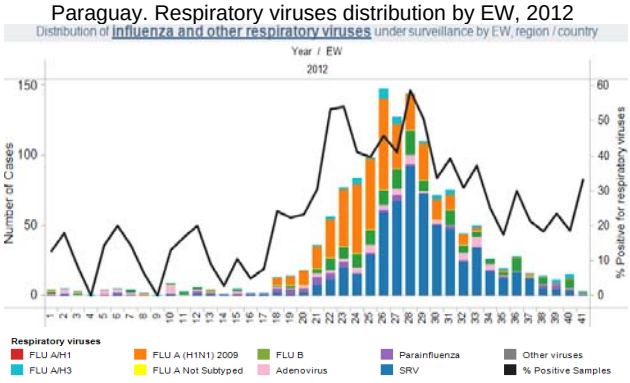


Paraguay

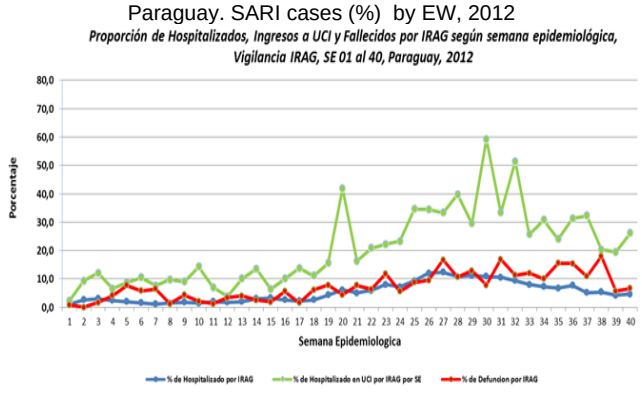
Paraguay. ILI consults (%) by EW, 2012



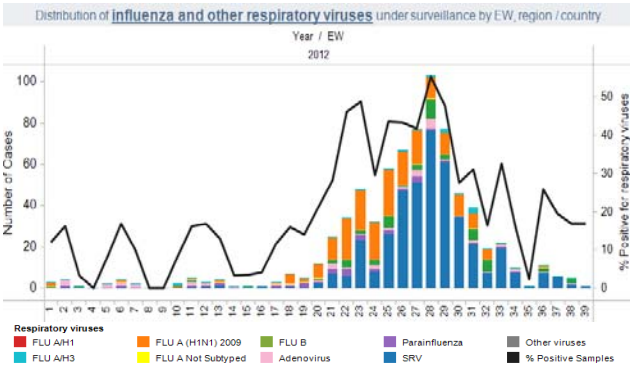
Paraguay. Respiratory viruses distribution by EW, 2012



Paraguay. SARI cases (%) by EW, 2012

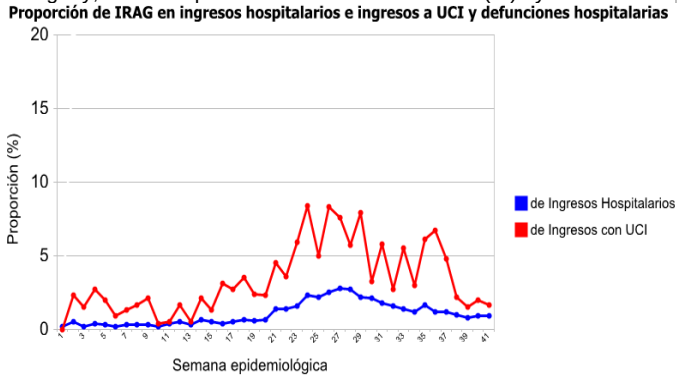


Paraguay. SARI Cases: Respiratory viruses distribution by EW, 2012



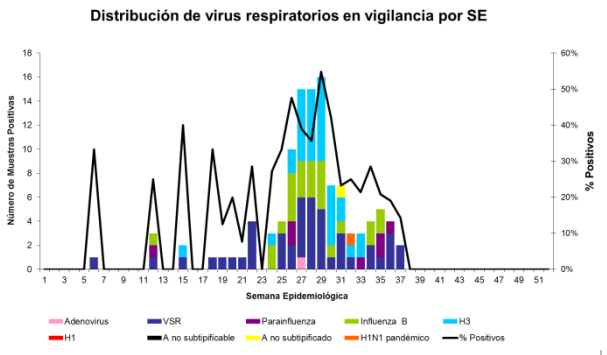
Uruguay

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



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

Uruguay. Respiratory viruses distribution by EW, 2012



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