Regional Update EW 44, 2012

Influenza and other respiratory viruses
(November 13, 2012 - 17 h GMT; 12 h EST)

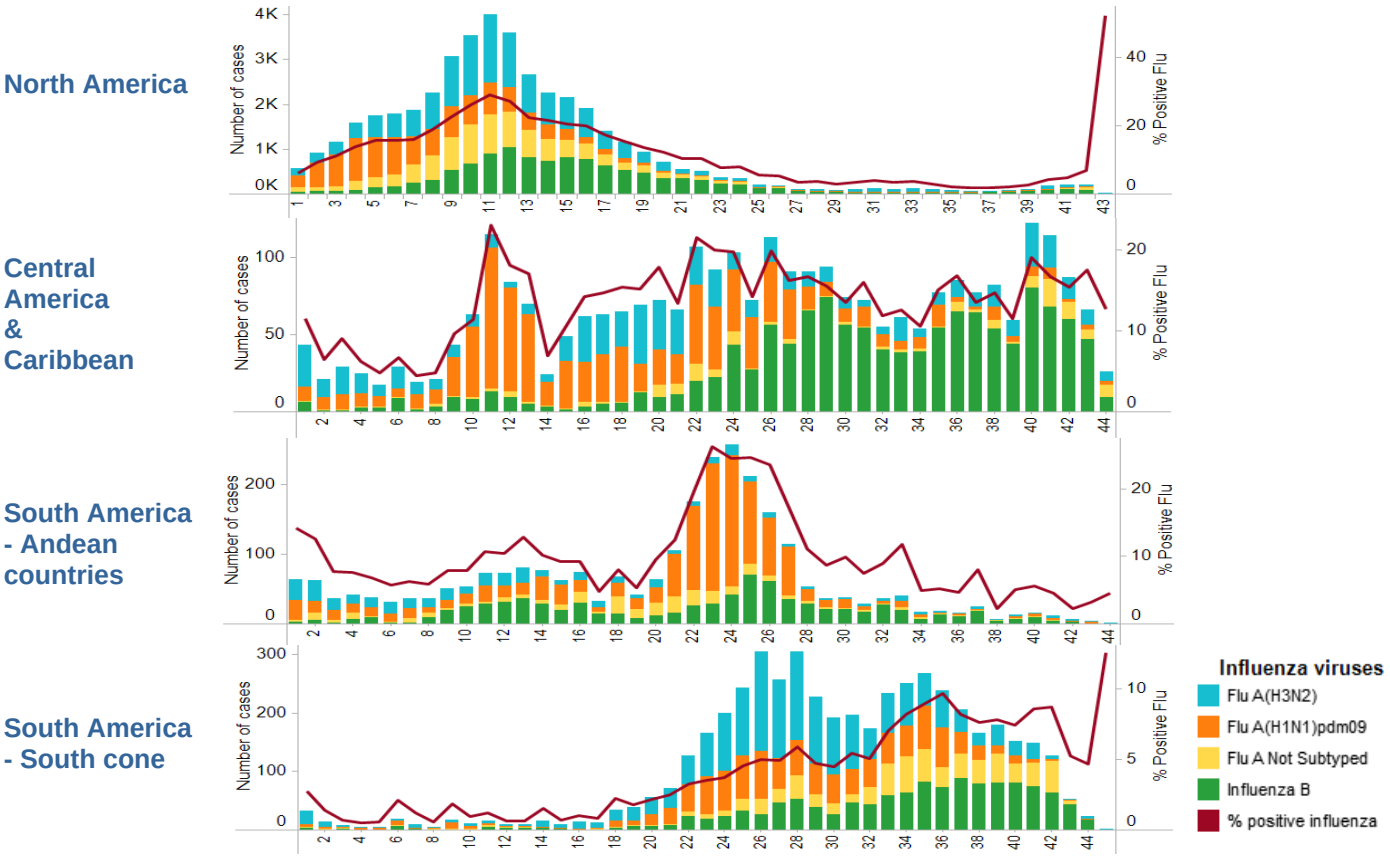
PAHO interactive influenza data: http://ais.paho.org/phip/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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.

1. WEEKLY SUMMARY

- North America: influenza activity increased but remained within the expected level for this time of the year. Influenza A(H3) was predominant in Canada and United States, and influenza B in Mexico.
- Central America and the Caribbean: high respiratory infection activity or increased respiratory viruses detection (percentage of positive samples – n samples tested) were observed in Costa Rica, Cuba, Jamaica and Panama. Among the influenza viruses, influenza B (which predominates in Jamaica and Nicaragua), co-circulated with influenza A(H1N1)pdm09 (Cuba) and influenza A(H3N2) (Barbados, Honduras, Jamaica and Nicaragua). Among other respiratory viruses, RSV remained as predominant circulating virus in several countries of the region (Costa Rica, Cuba, Guatemala, Honduras and Panama). In Guadalupe and Martinique, the epidemic of bronchiolitis associated to RSV decreased.
- South America: Severe acute respiratory disease activity remains low and unchanged in the region. In Chile, ILI activity remained the alert zone in endemic channel and in Peru (Madre de Dios) pneumonia reports remained increased. In the current EW, co-circulation of influenza B (Bolivia, Brazil, Chile and Paraguay), influenza A(H3) (Brazil and Paraguay) and influenza A(H1N1)pdm09 (Bolivia, Brazil and Peru) was observed among reported influenza detection. Among the other respiratory viruses, parainfluenza (Argentina, Bolivia, Chile and Perú) predominated.

2. THE AMERICAS: DISTRIBUTION OF INFLUENZA VIRUSES BY EW, 2012



3. EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America

In Canada[1], in epidemiological week (EW) 44, 2012, influenza activity increased but remained low and similar to the previous week. In EW 44, the influenza-like illness (ILI) consultation rate increased (21.9/1,000 consultations) but was within expected levels for this time of year. In EW 44, among the total samples analyzed, the proportion of samples positive for influenza was low (2.8%); of the influenza cases, 90.6% were influenza A (70.7% influenza A(H3) and 29.3% influenza A unsubtyped). Concerning other respiratory viruses, the percent positive for rhinovirus decreased but remained the highest (15.5%) as compared to other respiratory viruses.

In the United States[2], in EW 44, nationally, the proportion of ILI consultations (1.3%) was below the baseline (2.2%); and all 10 regions reported a proportion of outpatient visits for ILI below their region-specific baseline levels. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 44 (6.6%) was above the epidemic threshold for this time of year (6.5%). In EW 44, no influenza-associated pediatric deaths were reported. Among all samples tested during EW 44 (n=3,277), the percentage of samples positive for influenza (6.9%) increased very slightly as compared to the previous week. Nationally, among the positive samples, 59.9% were influenza A [among the subtyped influenza A viruses, 97.2% were influenza A(H3)]. No novel influenza A virus infections were reported during EW 44, and since July 12, 2012, a total of 310 infections with influenza A variant viruses (306 H3N2v viruses, 3 H1N2v viruses, and one H1N1v) have been reported from 10 states.

In México, according to laboratory data, in EW 43, 25 samples were tested showing a positivity to respiratory viruses of 52%. 10 positive samples associated to influenza B and 3 associated to influenza A(H3) were reported.

Caribbean

CAREC, in EW 44, received epidemiological information from 5 countries: Barbados, Dominica, Jamaica, St. Vincent & the Grenadines, and Trinidad and Tobago. In EW 44, the proportion of severe acute respiratory infection (SARI) hospitalizations was 3.4% which is lower than what was reported during the prior week (3.7%). The SARI admission rate increased in Barbados and St. Vincent & the Grenadines. The highest rate of SARI was among children between 6 months and 4 years of age (9.2%). No SARI related deaths have been reported since EW 39, 2012. In the last 4 weeks (EW 40 to 44) the following viruses have been laboratory confirmed in CAREC member countries: influenza A(H3N2), parainfluenza 1 and RSV in Barbados and influenza B in Jamaica. To date in 2012, the overall percentage positivity for samples tested is 36.4%, with a 18.2% positivity for influenza.

In Cuba, in EW 44, according to laboratory data, the percentage of positive samples for influenza viruses was 54.5% among the tested samples (n=33) Influenza A(H1N1)pdm09 and RSV were detected.

In Jamaica for EW 43, the proportion of consultations for ARI was 8.9% (1.3% lower than the previous EW). The proportion of admissions due to SARI was 1.9 % (0.7% increase when compared to the EW before). There was no SARI death reported for EW 43. According to laboratory data from EW 43, the percentage of positive samples for influenza virus was 93.8% among the tested samples (n=16). Influenza A(H3) and B viruses were detected with a predominance of influenza B.

In the Dominican Republic, according to laboratory data from EW 45, among the samples analyzed (n=33), the percent positivity for respiratory viruses was 21.2%. Influenza B and parainfluenza were detected.

In French Guyana[3], in EW 43, there was an increase in influenza activity but no reports for other respiratory viruses noted at this time. In Guadalupe[4], in EW 43, the bronchiolitis epidemic, associated with RSV, in the mainland has rapidly decreased in the last 3 EWs, though still slightly above maximum expected values. In Saint-Martin and Saint-Barthélemy, in EW 43, no influenza or other respiratory virus activity was reported. In Martinique, in EW 43, the epidemic of bronchiolitis continued.

Central America

In Costa Rica, in EW 43, the proportion of SARI hospitalizations (7%) remained similar to the previous week. 34% of the ICU admissions and 6.9% of deaths were associated with SARI. In EW 43, 2 deaths associated to respiratory viruses (RSV and influenza B) were reported. According to laboratory data, in EW 44, among all samples tested (n=142), the percentage of positive samples for respiratory viruses continued (46.5%)

remained similar to the previous week. RSV increased in the last two months, and remained in its highest level of activity since the beginning of the year. Among influenza viruses, from the total samples tested, influenza A (10.6%) was more prevalent that influenza B (5.6%). Among the influenza A subtyped, mainly influenza A(H3N2) was detected.

In El Salvador[5], according to data provided by the Ministry of Health, nationally, in EW 44, 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 percentages of ARI cases (21%) and pneumonia cases (38.5%) were reported in the children 1-4 years old group. Regionally, the highest pneumonia incidence rates in EWs 41-44, were observed in Chalatenango, San Vicente, San Miguel y La Unión. According to laboratory data, in EWs 43-44, of the total samples analyzed, RSV, adenovirus and influenza B were detected.

In Guatemala, according to laboratory data, in EW 43, of the total samples analyzed (n=21), the percentage of positive samples for respiratory viruses was 57.1%, associated mainly with the detection of RSV and Human metapneumovirus. No circulation of influenza was observed.

In Honduras[6], in EW 44, at the national level, the proportion of ILI consultations was similar (<5%) to the previous EW, and less than observed in 2011 during the same time of the year. The proportion of SARI hospitalizations, which even though was higher than the previous EW, remained <10% and lower than observed in 2011. According to laboratory data, in EW 44, of all samples tested (n=10), circulation of influenza A(H3N2) was reported for the third consecutive EW, and RSV, remaied the predominant virus since the end of July.

In Nicaragua, in EW 43, according to laboratory data, the percentage of positive samples for respiratory viruses was 44.7% among all samples tested (n=47), which was similar to the previous EW. Influenza A(H3N2) has been the predominant circulating virus in the last 9 EWs, followed by influenza A(H3N2) and RSV.

In Panama[7], according to the Ministry of Health, in EW 39, nationally, the endemic channel of pneumonia and bronchopneumonia showed an activity within the expected level for this period of year. According to laboratory data, in EW 44, of the total samples analyzed (n=23), the percentage of positive samples for respiratory viruses was 87%, mainly associated with RSV. During the last weeks, low influenza activity was reported.

South America – Andean

In Bolivia, according to SARI surveillance data, in EW 43, the percentage of SARI admissions remained similar to the previous EW (~10%) with a low proportion of ICU admissions and SARI deaths. According to laboratory data, in La Paz (INLASA) for EW 44, few respiratory viruses (influenza B, influenza A(H3), influenza A(H1N1)pdm09 and parainfluenza) were detected among the 12 tested samples. In Santa Cruz (CENETROP), in EW 44, only one sample was positive (influenza B) among the 15 tested samples for respiratory viruses.

In Colombia, at the national level, according to laboratory data from the national laboratory (INS) which includes data from the Departments of Antioquia, Bogota and Nariño, in EW 44 no positive results for respiratory viruses was reported among tested samples (n=5)..

In Ecuador, in the SARI surveillance system from sentinel units, at the national level in EW 43, the proportion of SARI hospitalizations (2%) showed no significant changes with respect to the previous EW and no SARI-deaths were reported in this EW. According to laboratory data at the national level, in EW 43, a low percentage of positivity (2%) among the 49 tested samples was reported, which was lower than the previous EW.

In Peru, at the national level and in EW 43, the cumulative number of pneumonias in children under 5 years reached a rate of 91.3/10,000 population remaining in the success zone of endemic channel. At subnational level, in Department Madre de Dios, pneumonia reports in children under 5 years old remained in epidemic zone of endemic channel and with a rate significantly higher than what was reported in previous EWs. According to laboratory data, in EW 44, at the national level, the percentage of positive samples for respiratory viruses among samples tested (n=59) was 10.2%, which was lower with respect to the previous EW, with a predominance of RSV (66.7%), influenza A(H1N1)pdm09 (16.7%) and parainfluenza virus (16.7%) among the positive samples.

South America –Southern Cone & Brazil

In Argentina[8], at the national level, the number of ILI cases remained in the safety zone for EW 42 while SARI cases for the same EW remained below the reported values for 2010 and 2011. At the sub-national level, some provinces such as Formosa, San Juan and Tucumán showed cumulative rates higher than the expected values for the period. According to laboratory data in EW 43, the percentage of positive samples for respiratory viruses was 20.9% with no significant changes with respect to the previous EWs, among the analyzed samples (n=220) with a predominance of parainfluenza (37%) among the positive samples.

In Brazil[9], in EW 44, the number of SARI cases continued to decrease since peaking in EW 27. 20.4% of all SARI cases for the present year (n=19,521) were confirmed to be due to influenza virus, of which 65.5% were subtyped as influenza A(H1N1)pdm09. In 2012, (EW 01- EW 40) 1754 SARI-deaths have been reported (24.6% associated with influenza, of which 80.3% were influenza A(H1N1)pdm09). For EW 44, the percentage of positive samples for influenza viruses was of 22.2% among the tested samples (n=45), which was lower with respect to previous EW and with a predominance of influenza A(H3) virus (5/10) and A(H1N1)pdm09 (4/10) and a positive sample for influenza B..

In Chile, in EW 43, at the national level, ILI activity was 8.3/100,000 population with no significant change with respect to previous EW and remaining in the alert zone of the endemic channel. According to laboratory data, at the national level and in EW 43, the percentage positivity for respiratory viruses was 14.6% among the tested samples (n=690), which was lower with respect to previous EW, and with a predominance of parainfluenza (34%) and influenza B (23%). In SARI surveillance, one case of influenza B among the 4 tested samples was reported.

In Paraguay, in EW 43, the national ILI rate (98/100,000 population) showed a decrease with respect to previous EW while the proportion of ILI consultations (5%) in sentinel units showed no significant changes as compared to the previous EW. According to laboratory data in EW 44 at the national level, 37 samples were tested for respiratory viruses with a percentage positivity of 32.4%, which was higher with respect to previous EW and with a predominance of influenza B and influenza A(H3). In the SARI surveillance system in sentinel units, the proportion of hospitalizations for EW 43 was 3.5%, showing a decrease with respect to the previous EW. According to laboratory data of SARI surveillance, 15 samples were tested with a percentage positivity of of 6.7% and no positive sample for influenza.

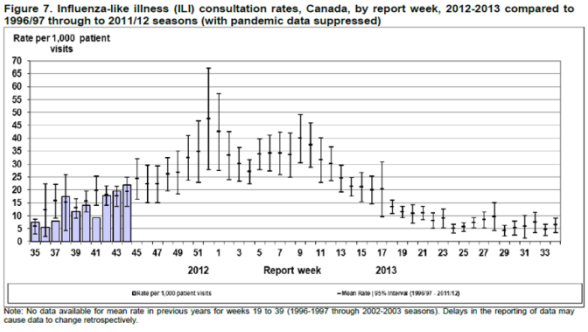
In Uruguay[10], at the national level, in EW 45, in the SARI surveillance system, the proportion of hospitalizations and ICU admissions did not show significant changes with respect to prior EW. No SARI-deaths were reported in the same EW. In EW 44, no positive samples were reported for respiratory viruses among the 2 tested samples.

4. GRAPHS

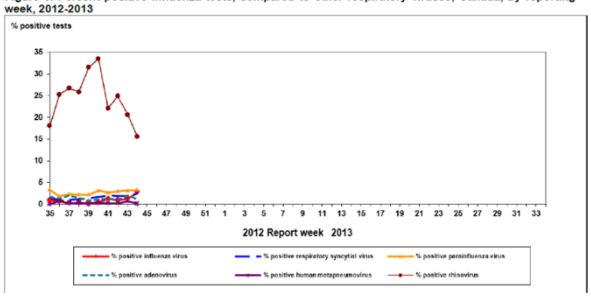
North America

Canada

Canadá. ILI rate distribution by SE, 2012-2013

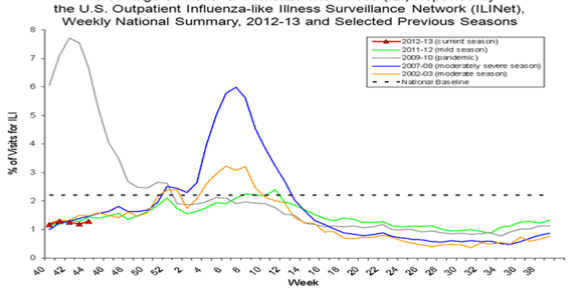


Canadá. Positive samples for respiratory viruses by SE, 2011-12 2012-2013

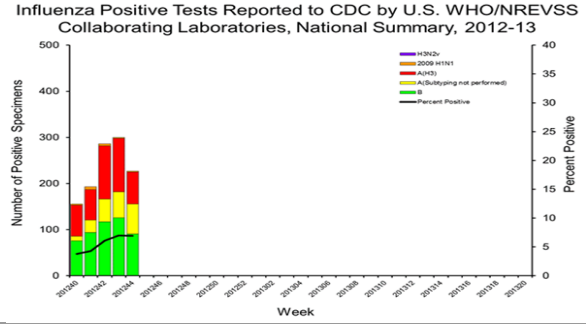


United States

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

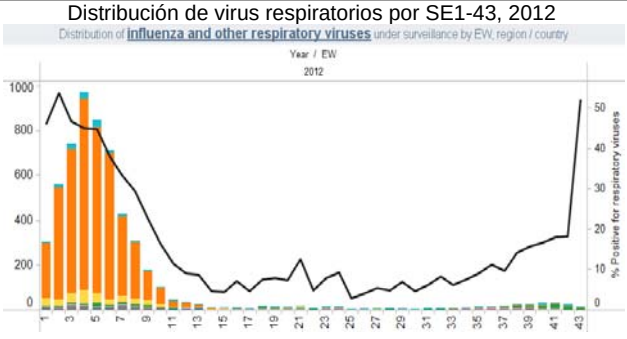


E.E.U.U. Influenza viruses distribution by EW, 2012

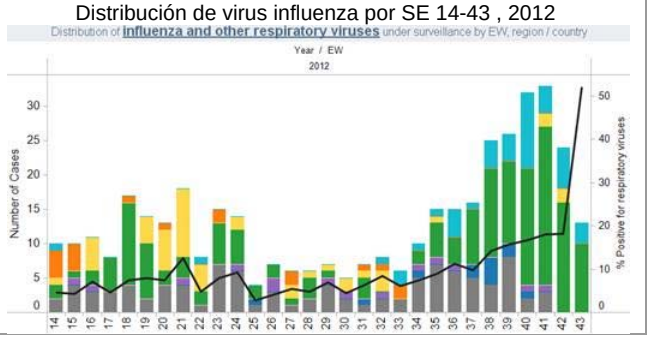


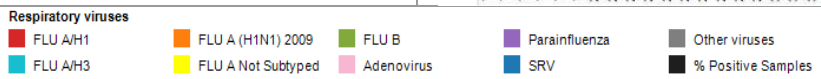
Mexico

Distribución de virus respiratorios por SE1-43, 2012



Distribución de virus influenza por SE 14-43 , 2012

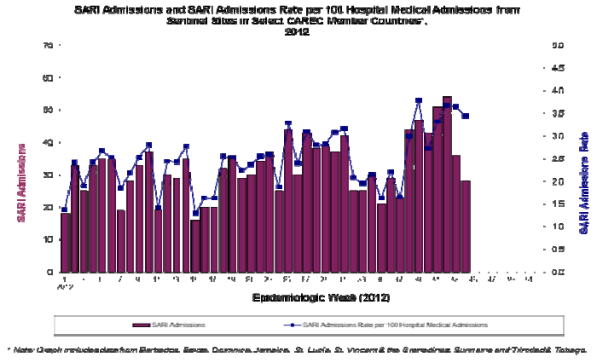




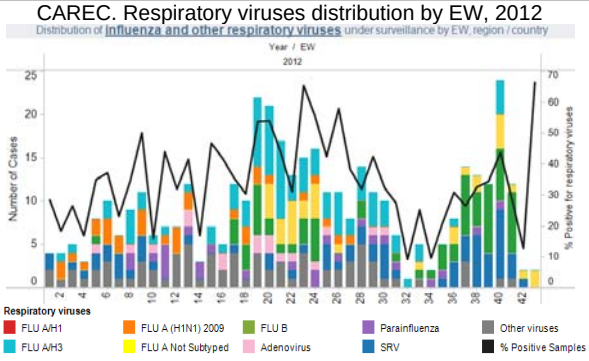
Caribbean

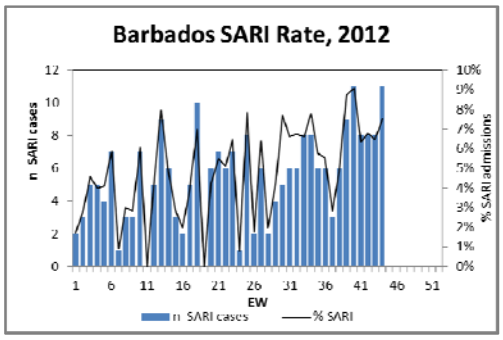
CAREC

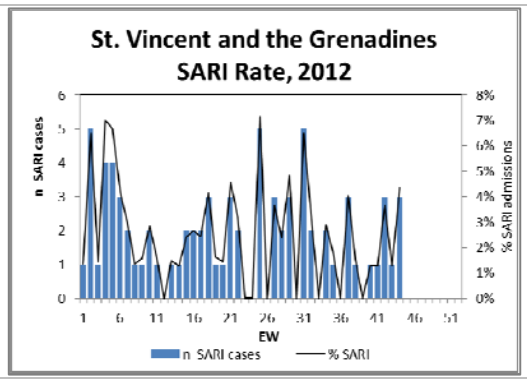
CAREC. % SARI Hospitalizations by EW, 2012



CAREC. Respiratory viruses distribution by EW, 2012

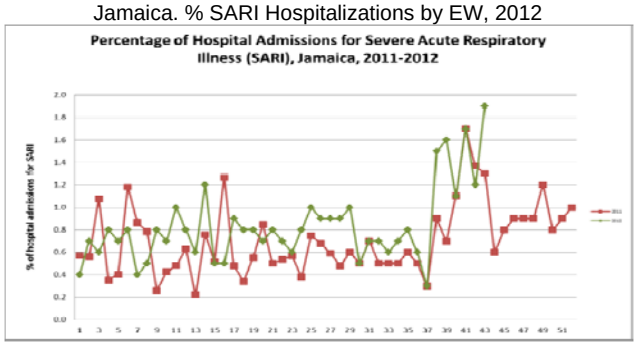




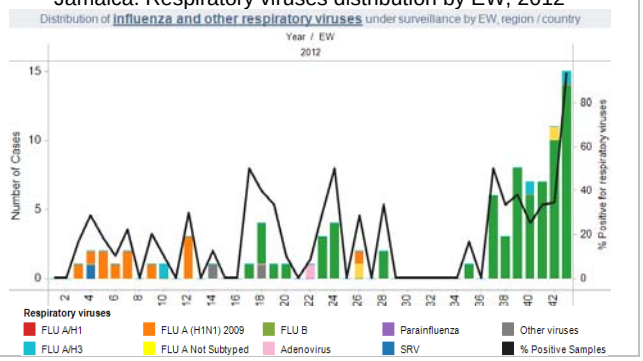


Jamaica

Jamaica. % SARI Hospitalizations by EW, 2012

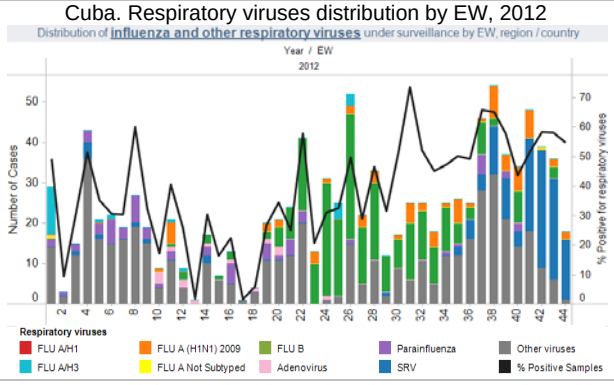


Jamaica. Respiratory viruses distribution by EW, 2012

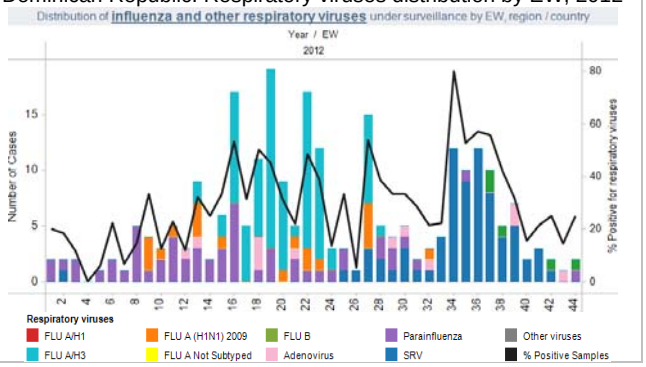


Cuba and Dominican Republic

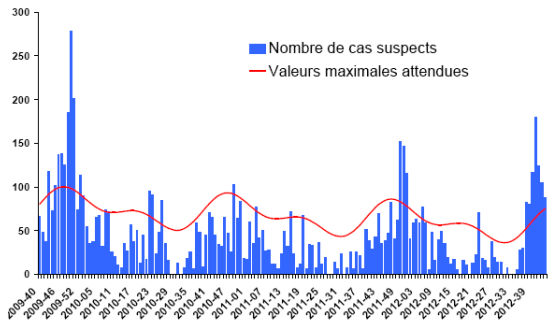
Cuba. Respiratory viruses distribution by EW, 2012



Dominican Republic. Respiratory viruses distribution by EW, 2012



Martinique

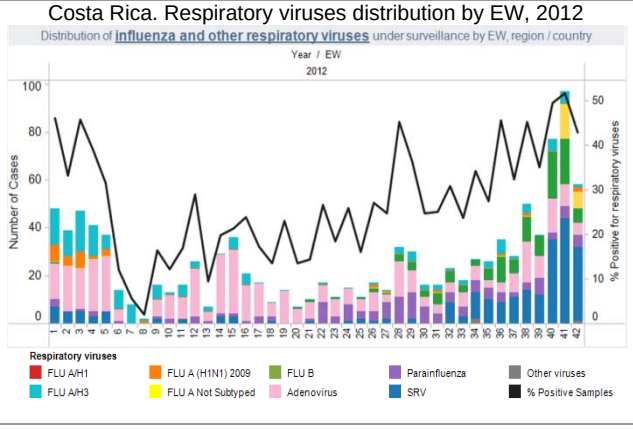


*Le nombre de cas est une estimation pour l'ensemble de la population guadeloupéenne du nombre d'enfants ayant consulté un médecin généraliste pour une bronchiolite. Cette estimation est réalisée à partir des données recueillies

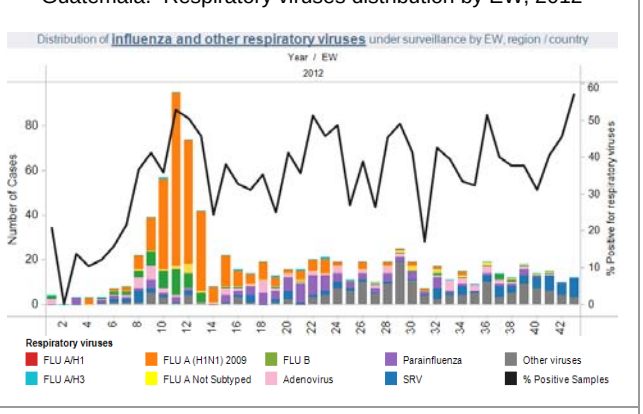
Central America

Costa Rica, Guatemala and Nicaragua

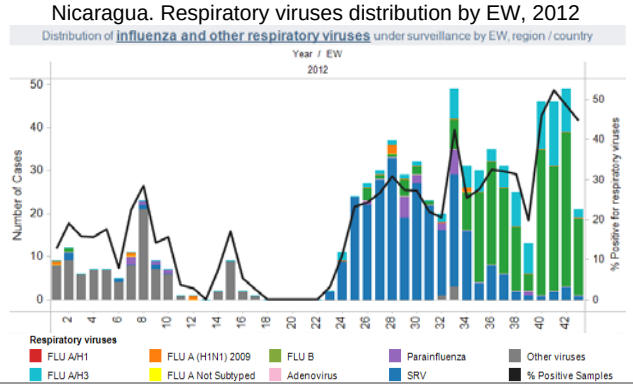
Costa Rica. Respiratory viruses distribution by EW, 2012

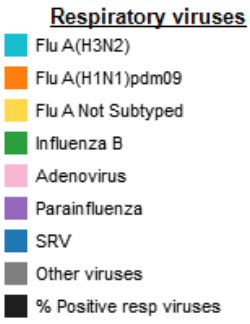


Guatemala. Respiratory viruses distribution by EW, 2012



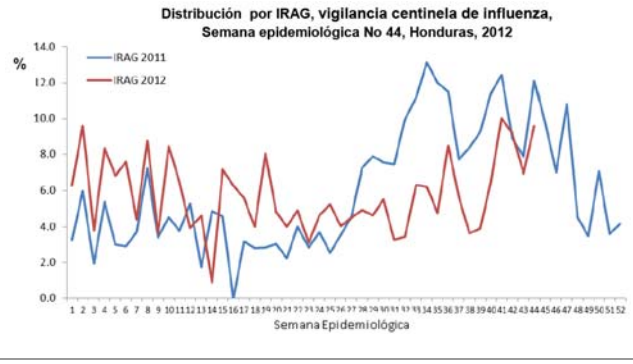
Nicaragua. Respiratory viruses distribution by EW, 2012



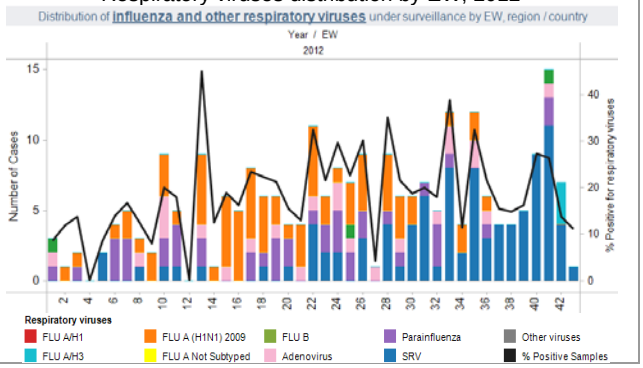


Honduras

SARI cases

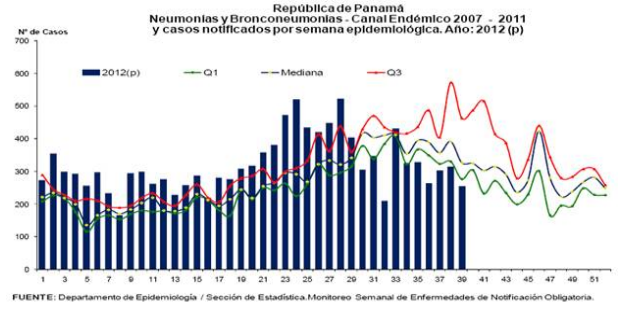


Respiratory viruses distribution by EW, 2012

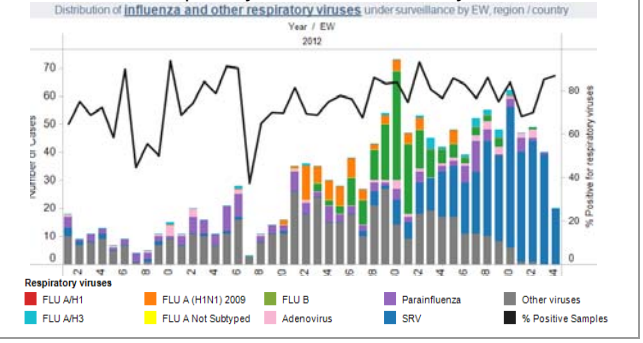


Panama

Panama. Endemic channel of pneumonias, 2012



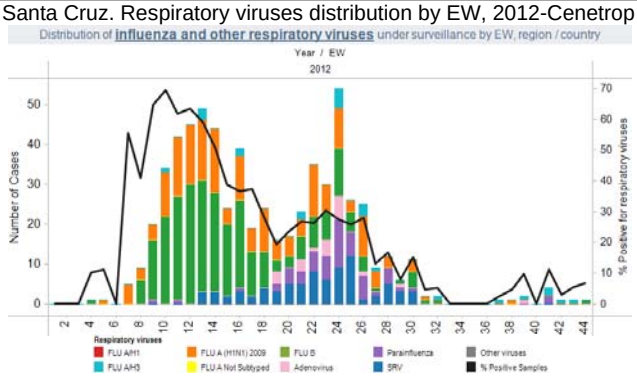
Panama. Respiratory viruses distribution by EW, 2012



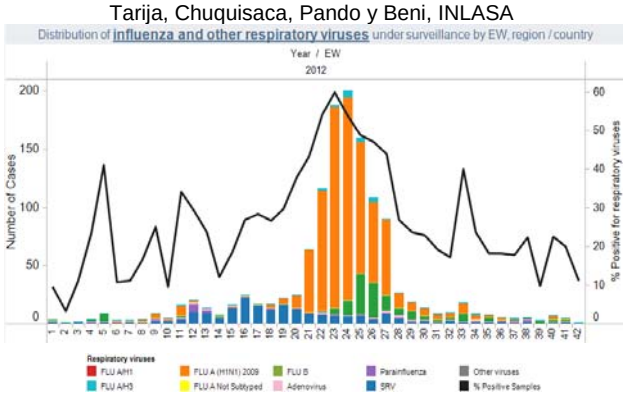
South America - Andean

Bolivia

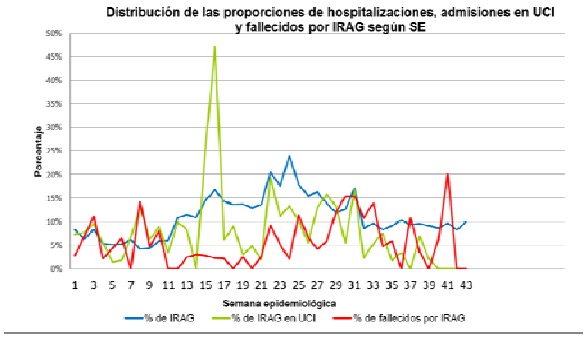
Santa Cruz. Respiratory viruses distribution by EW, 2012-Cenetrop



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

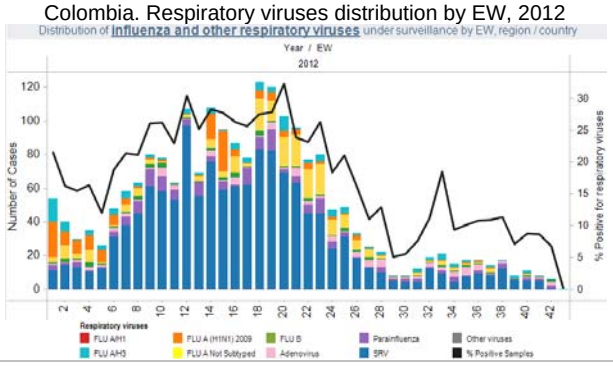


Bolivia. SARI cases distribution by EW, 2012



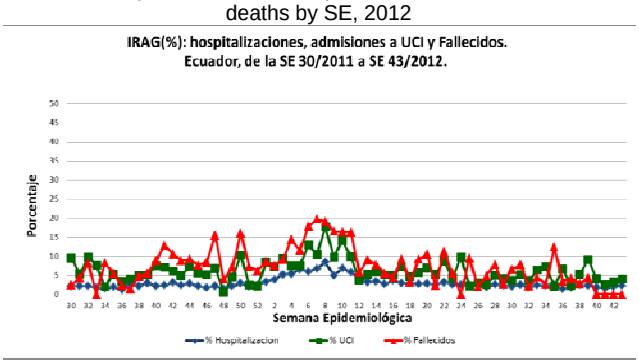
Colombia

Colombia. Respiratory viruses distribution by EW, 2012

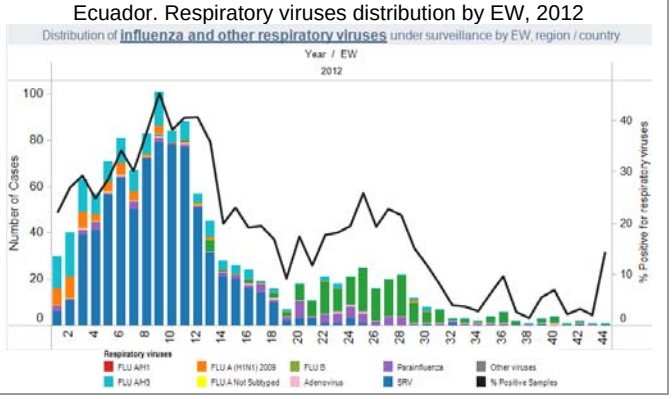


Ecuador

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

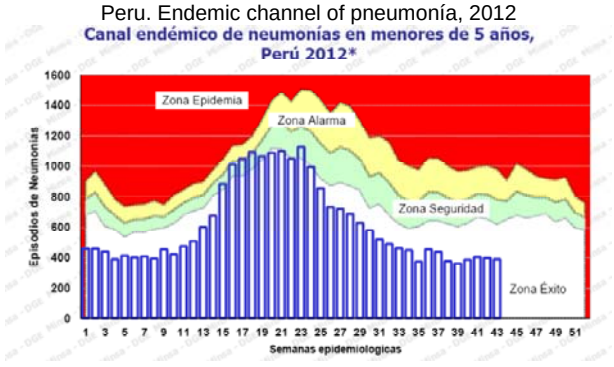


Ecuador. Respiratory viruses distribution by EW, 2012

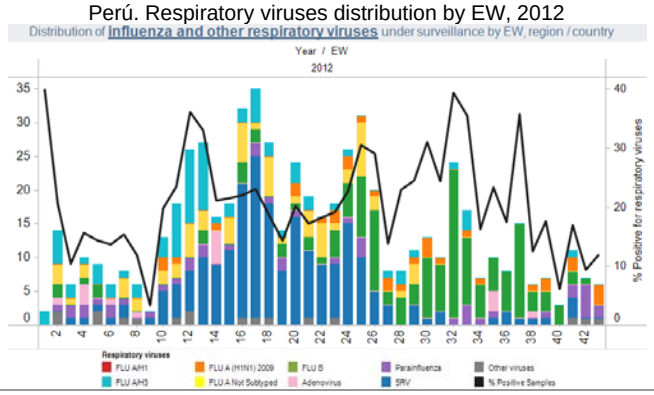


Peru

Peru. Endemic channel of pneumonía, 2012



Perú. Respiratory viruses distribution by EW, 2012

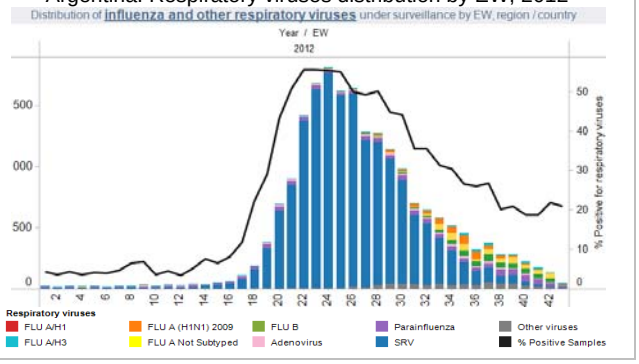


South America, Southern cone

Argentina

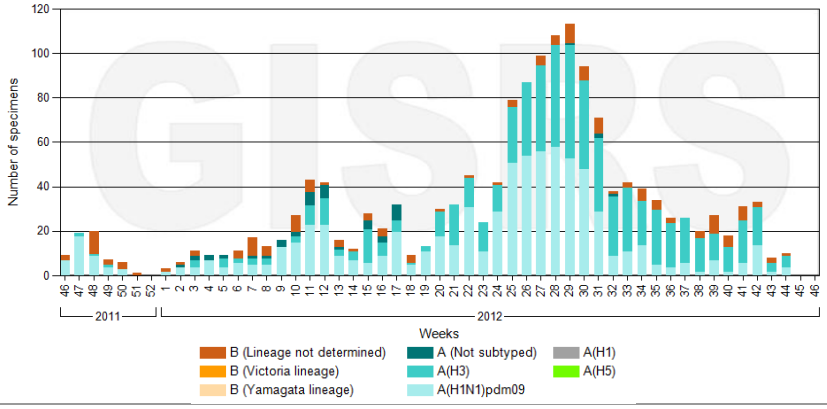
Argentina. SARI Hospitalizations distribution by EW, 2010 - 2012

Argentina. Respiratory viruses distribution by EW, 2012



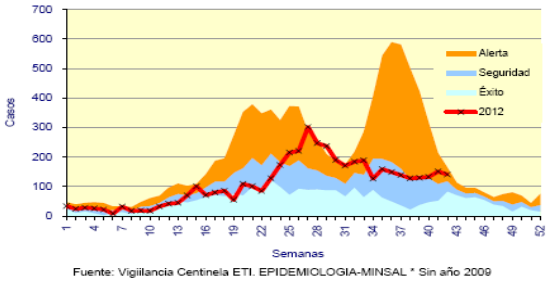
Brazil

Brazil. Influenza viruses distribution by EW, 2011 - 2012

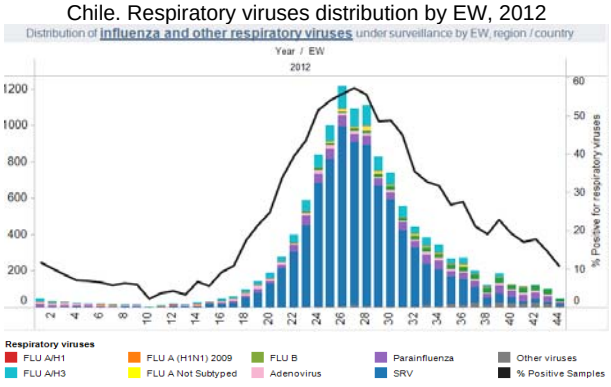


Chile

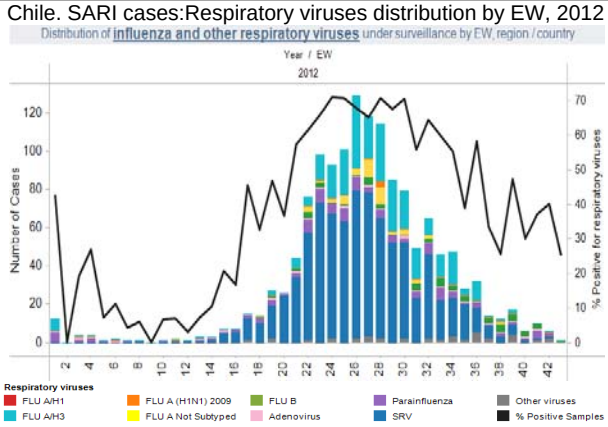
Chile. ETI endemic channel, 2012



Chile. Respiratory viruses distribution by EW, 2012

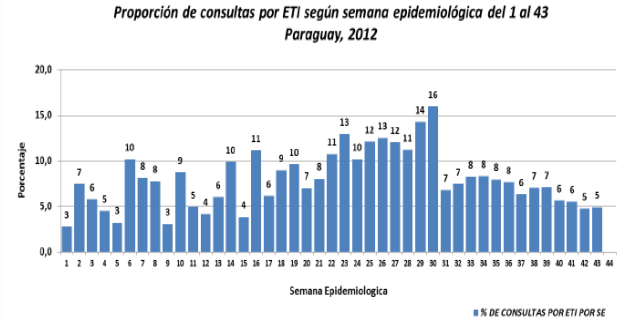


Chile. SARI cases:Respiratory viruses distribution by EW, 2012

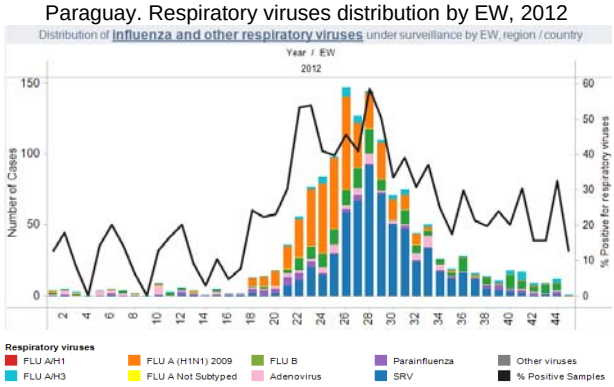


Paraguay

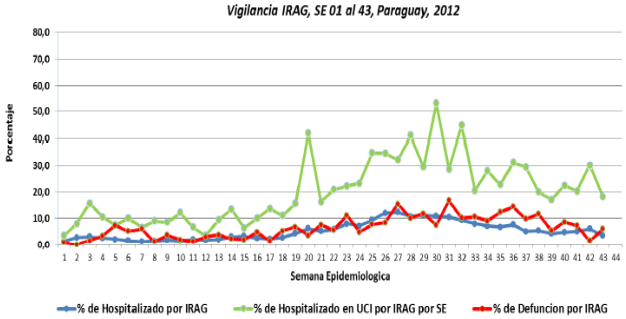
Paraguay. ILI consults (%) by EW, 2012



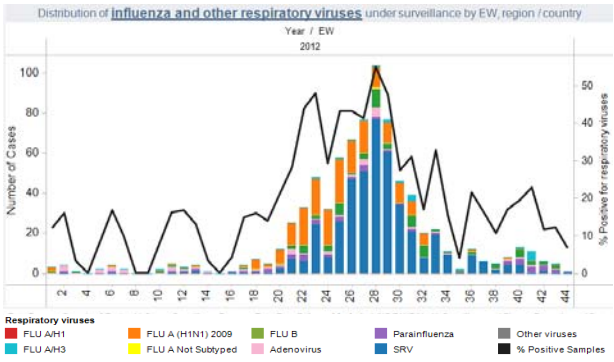
Paraguay. Respiratory viruses distribution by EW, 2012



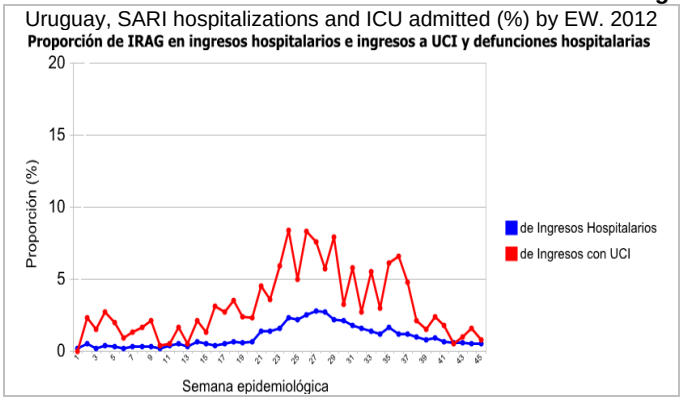
Paraguay. SARI cases (%) by EW, 2012

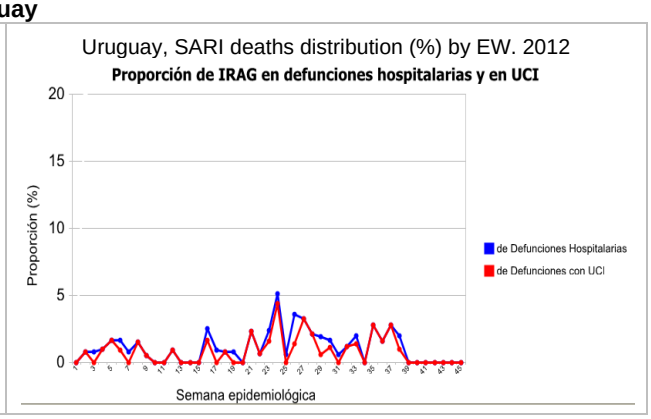


Paraguay. SARI Cases: Respiratory viruses distribution by EW, 2012



Uruguay





1 FluWatch Report. EW 44. Available at http://www.phac-aspc.gc.ca/fluwatch/
2 US Surveillance Summary. EW 44. Centers for Disease Control and Prevention
3 Point 06/11//2012, Bulletin Hebdomadaire Grippe — Institut de Veille Sanitaire (11/06/2012)
4 Surveillance de la bronchiolite, Le point épidémiologique — N° 03 / 2012. Institut de Veille Sanitaire (11/07/2012)
5 El Salvador. Boletin epidemiológico SE 44 de 2012. MINSAL.
6 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula.
7 Ministerio de Salud. Dirección General de Salud Pública. Resumen Semanal de Eventros de Interes Epidemiológico. Semana epidemiológica Nº 39
8 Argentina. Actualización situación de enfermedades respiratorias 2012. SE 44.
9 Brasil. Boletim Informativo SE 44. http://portalsaude.saude.gov.br/portalsaude/noticia/6184/785/boletim-informativo-_-influenza.html
10 Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública