



## Regional Update EW 48, 2012

### Influenza and other respiratory viruses (December 11, 2012 - 17 h GMT; 12 h EST)

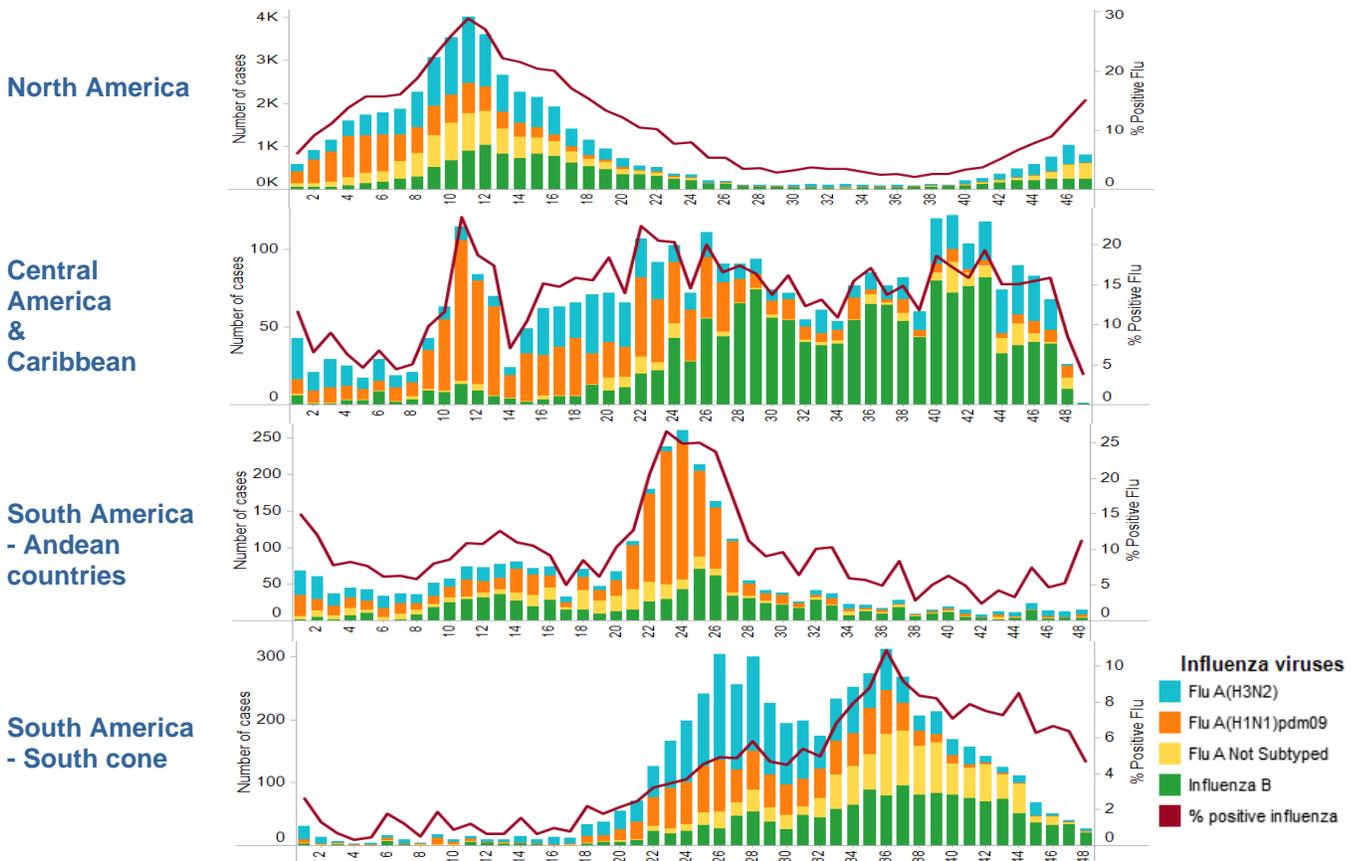
PAHO interactive influenza data: [http://ais.paho.org/phis/viz/ed\\_flu.asp](http://ais.paho.org/phis/viz/ed_flu.asp)  
 Influenza Regional Reports: [www.paho.org/influenzareports](http://www.paho.org/influenzareports)

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 continued to increase in Canada & US, with increases in most of the influenza indicators observed in the last weeks. Influenza A(H3) was predominant in Canada and United States.
- **Central America and the Caribbean:** high respiratory infection activity or increased respiratory viruses detection (% of positivity) were observed in some countries of this sub-region (Dominica, Honduras, Martinique, Guatemala and Panama). Among the influenza viruses, influenza B (Barbados, Dominica, Dominican Republic, Nicaragua and Panama) co-circulated with influenza A(H3N2) (Barbados, Costa Rica, Jamaica, Honduras and Nicaragua) and influenza A(H1N1)pdm09 (Cuba). Among other respiratory viruses, RSV remained as the predominant circulating virus in several countries of the region (Barbados, Cuba, Costa Rica, Dominica, El Salvador, Guatemala, Martinique and Panama)
- **South America:** Severe acute respiratory disease activity remains low and unchanged in the region. Influenza activity in Argentina and Chile remained slightly higher than expected for this time of year. In the current EW, co-circulation of influenza B (Argentina, Chile and Peru), influenza A(H3) (Argentina and Bolivia) and influenza A(H1N1)pdm09 (Peru) was observed among reported influenza detection. Low detection of other respiratory viruses was reported in this sub-region.

### 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<sup>1</sup>, in epidemiological week (EW) 48, 2012, influenza activity increased. In EW 48, the influenza-like illness (ILI) consultation rate increased (39.8/1,000 consultations) and was above expected levels for this time of year. Thirteen regions reported localized influenza activity (in British Columbia, Alberta, Ontario, Saskatchewan, and Quebec) and 16 regions reported sporadic activity (in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Prince Edward Island, and Yukon) with the remaining reporting no activity. In EW 48, among the total samples analyzed, the proportion of samples positive for influenza increased (11.7%); of the influenza cases, 97.3% were influenza A (53.8% influenza A(H3) and 45.2% influenza A unsubtype). Concerning other respiratory viruses, the percent positive for rhinovirus decreased (10.9%) and is now below the percent positivity for influenza; the RSV percent positivity increased (6.7%). Among the characterized influenza viruses this season, the majority have been the vaccine strains (100% of the H1N1pdm09 cases, 100% of the H3N2 cases, and 70% of the influenza B cases).

In the United States<sup>2</sup>, in EW 48, nationally the proportion of ILI consultations (1.9%) decreased as compared to the previous week and was below the baseline (2.2%); and three of ten regions [Regions 2 (northeast), 4(southeast), and 6(southeast)] reported a proportion of outpatient visits for ILI above their region-specific baseline levels. Four states experienced high ILI activity (Alabama, Louisiana, Mississippi, and Texas) and three states experienced moderate activity (Georgia, Missouri, and Tennessee). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 48 (6.5%) was below the epidemic threshold for this time of year (6.8%). In EW 48, three influenza-associated pediatric deaths were reported (one with influenza B and two with unsubtype influenza A). From 1 October to 1 December, the influenza-associated hospitalization rate was 1.5/100,000 population. Among all samples tested during EW 48 (n=5,511), the percentage of samples positive for influenza (20.7%) increased as compared to the previous week. Nationally, among the positive samples, 75% were influenza A [among the subtyped influenza A viruses, 99.1% were influenza A(H3)]. No novel influenza A virus cases were reported during EW 48; since July 12, 2012, a total of 311 infections with influenza A variant viruses (307 H3N2v viruses, three H1N2v viruses, and one H1N1v) have been reported from 11 states. Among the characterized influenza viruses this season, the majority have been the vaccine strains (100% of the H1N1pdm09 cases, 98.7% of the H3N2 cases, and 67.9% of the influenza B cases).

#### *Caribbean*

CAREC, in EW 48, received epidemiological information from 4 countries: Belize, Dominica, St. Vincent and the Grenadines and Trinidad and Tobago. In EW 48, the proportion of severe acute respiratory infection (SARI) hospitalizations was 2.6% which is lower than what was reported during the prior week (3.9%). The SARI admission rate increased in Dominica and remained at the same level for two countries (Trinidad and Tobago). The highest rate of SARI was among children 6 months to 4 years age (8.7% of hospital medical admissions were due to SARI). No SARI deaths were reported from the region. In the last 4 weeks (EW 45 to 48) the following viruses have been laboratory confirmed in CAREC member countries: influenza A(H3N2) (Barbados), influenza B (Barbados, Dominica and Jamaica), parainfluenza type 2 (Cayman Islands) and respiratory syncytial virus (Barbados, Dominica and Trinidad and Tobago). To date in 2012, the overall percentage positivity for samples tested is 33%, with a 25% positivity for influenza.

In Cuba, in EW 48, according to laboratory data, the percentage of positive samples for respiratory viruses was 30.7% and for influenza viruses was 10.7% among the tested samples (n=75). Influenza A(H1N1)pdm09, parainfluenza, RSV, rhinovirus and bocavirus were detected.

In Jamaica for EW 48, the proportion of consultations for ARI was 7.1% (0.1% lower than the previous EW). The proportion of admissions due to SARI was 1.4 % (0.3% increase when compared to the EW before). There was no SARI death reported for epidemiological week 48. According to laboratory data from EW 48, the percentage of positive samples for influenza virus was 33.3% among the tested samples (n=12). Only influenza A virus was detected in EW 48, with influenza B and influenza A (H3N2) detected.

In the Dominican Republic, according to laboratory data from EW 49, among the samples analyzed (n=27), the percent positivity for respiratory viruses was 18.5% and for influenza viruses was 3.7%. Influenza B and parainfluenza were detected.

In Guadalupe, in EW 47, the bronchiolitis epidemic associated to RSV circulation decreased and the number of consultations has been below the epidemic threshold during the last 3 weeks.

In Martinique, the epidemic of bronchiolitis associated to RSV, reported in October, has been decreasing since the beginning of November; however, in EW 47, the number of outpatient consultations for bronchiolitis still remains higher than the expected level for this time of the year.

In Saint-Martin and Saint-Barthélemy<sup>3</sup>, in EW 47, no influenza or other respiratory virus activity was reported.

### **Central America**

In Costa Rica, in EW 48, according to laboratory data, among all samples tested (n=101), the percentage of positive samples for respiratory viruses decreased from 53% (EW 47) to 39%. RSV remained as the predominant circulating virus. Among influenza viruses, influenza B was more prevalent than influenza A (unsubtyped).

In El Salvador<sup>4</sup>, according to data provided by the Ministry of Health, nationally, in EW 48, the number of ARI cases and pneumonia cases were slightly lower than the previous EW (increases of 11% and 4%, respectively). The cumulative number of ARI cases in 2012 was higher as compared to the same period in 2011; and the cumulative number of pneumonia cases in 2012 was lower as compared to the same period in 2011. The highest percentages of ARI cases and pneumonia cases were reported in the children 1-4 years old group. Regionally, the highest pneumonia incidence rates in EWs 45-48, were observed in Chalatenango, San Miguel, Morazán and La Unión. According to laboratory data, in EWs 48, of the total samples analyzed (n=34), 23.5% were positives for respiratory viruses, being RSV the predominant virus. This week, no influenza viruses were detected.

In Guatemala, according to laboratory data, in EW 47, of the total samples analyzed (n=9), the percentage of positive samples for respiratory viruses was 55%. The respiratory viruses detected in the last EWs were RSV and few samples positive for influenza.

In Honduras<sup>5</sup>, in EW 47, at the national level, the proportion of ILI consultations increased to 5.5% as compared to the previous EW, and was higher to what was observed in 2011 during this time of the year. The proportion of SARI hospitalizations (8.7%) was similar as compared to the previous week and similar to what was observed in 2011. According to laboratory data, in EW 47, of all samples tested (n=15), the proportion of positive samples decreased from ~50% to ~35%. In contrast to previous weeks (when a high circulation of influenza A(H3N2) was reported), this week, just a few respiratory viruses were detected. RSV, which was the predominant virus since the end of July, decreased in the last 2 EWs.

In Nicaragua, in EW 48, according to laboratory data, among all samples tested (n=33), the percentage of positive samples for respiratory viruses (6%) has been decreasing since its peak in EW 41. In the last weeks, influenza B has been the predominant circulating virus, followed by influenza A(H3N2).

In Panama, according to laboratory data, in EW 48, of the total samples analyzed (n=51), the percentage of positive samples for respiratory viruses was 88%, mainly associated to RSV. In the last EW, low influenza activity (influenza B) was reported.

### **South America – Andean**

In La Paz, Bolivia, according to SARI surveillance data, in EW 48, the percentage of SARI hospitalizations (4%) and SARI deaths (0%) remained low; however, the proportion of ICU admissions increased to 14%. According to laboratory data, in La Paz (INLASA) for EWs 47- 48, a positivity for respiratory viruses of 10% was reported among the tested samples (n=38) with predominance of influenza A(H3N2), followed by influenza B among the positives. In Santa Cruz (CENETROP), the positivity for respiratory viruses increased from EW 42 to EW 48 (33%) among the tested samples (n=15). Influenza A(H3N2) was the predominant virus detected in the last weeks.

In Colombia, at the national level, in EW 48, the proportion of SARI hospitalizations (17%) increased while the proportions of ICU admissions (8%) and ILI consultations (10.4%) remained similar to previous EW. According to laboratory data from the national laboratory (INS) which includes data from the Departments of

Antioquia, Bogota and Nariño, in EW 48 a positivity of 12% was reported among the tested samples (n=32). A predominance of influenza A(H3N2) was observed in the last weeks.

In Ecuador, in the SARI surveillance system from sentinel units, at the national level in EW 48, the proportion of SARI hospitalizations, SARI ICU admissions and SARI deaths (3%, 5% and 1% respectively) showed no significant changes with respect to the previous EW. According to laboratory data at the national level, in EW 48, among tested samples (n=32), the percentage of positivity (12%) remained similar to the last week. Parainfluenza, influenza B and influenza A(H3) were detected this week.

In Peru, at the national level and in EW 47, the endemic channel of ARIs and pneumonias in children under 5 years remained within the expected levels for this time of period. At the subnational level, Moquegua and Madre de Dios reported a pneumonia activity in children under 5 years old above or close to the epidemic threshold of the endemic channel. According to laboratory data, in EW 48, at the national level, the percentage of positive samples for respiratory viruses among samples tested (n=45) was 20%, which was higher as compared to the previous EW. Influenza A(H1N1)pdm09 and influenza B were the most prevalent viruses detected.

### ***South America –Southern Cone & Brazil***

In Argentina<sup>6</sup>, at the national level, in EW 48, the estimated number of ILI and pneumonia cases remain in the safety zone. The number of SARI cases in EW 48, was similar to the reported values for 2011 and 2010. At the sub-national level, some provinces such as Buenos Aires, Entre Ríos, Santa Fe, La Rioja, San Juan, San Luis, Formosa, Jujuy, Tucumán and Río Negro showed cumulative rates higher than the last year. According to laboratory data in EW 46, the percentage of positive samples for respiratory viruses was 38.6% showing a significant increase with respect to the previous EWs, among the analyzed samples (n=83) with a predominance of not subtyped influenza A (46.9%) among the positive samples.

In Brazil, in EW 48, among the tested samples (n=35), no respiratory viruses were detected.

In Chile, in EW 48, according to laboratory data, at the national level, the percentage positivity for respiratory viruses decreased from 16% (EW 47) to 12%, among the tested samples (n=522). Influenza B was reported as the predominant virus, followed by adenovirus, human metapneumovirus, parainfluenza, influenza A(H3) and RSV.

In Paraguay, in EW 48, the national ILI rate (86.4/100,000 population) and the proportion of ILI consultations (4%) in sentinel units showed a decrease with respect to the previous EWs. In the SARI surveillance system in sentinel units, the proportion of hospitalizations for EW 48 was 2.8%, remaining in a low level and similar to the previous EW. According to laboratory data of SARI surveillance, 13 samples were tested with a percentage positivity of 7%, detecting parainfluenza.

In Uruguay<sup>7</sup>, at the national level, in EW 49, in the SARI surveillance system, the proportion of hospitalizations showed no significant change, while proportion of ICU admissions decreased with respect to the prior EW. No SARI-deaths were reported in EW 48.

#### 4. SPECIAL TOPIC

##### Novel coronavirus infection – update

Over the past two months, nine cases of human infection with a novel coronavirus have been reported to WHO. Thus far, the cases have been reported from Jordan, Qatar, and Saudi Arabia. All patients were very ill and five died. Two clusters in Jordan and Saudi Arabia have raised the possibility of person-to-person transmission, or exposure to a common source. Investigations are ongoing to better characterize the outbreak. Additional information is available at:

[http://www.who.int/csr/disease/coronavirus\\_infections/update\\_20121130/en/index.html](http://www.who.int/csr/disease/coronavirus_infections/update_20121130/en/index.html).

Based on the current situation and available information:

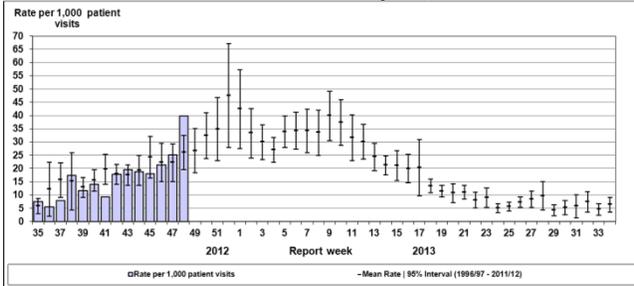
- Member States should continue their surveillance for severe acute respiratory infections (SARI) and carefully review any unusual patterns of illness
- Testing for the new coronavirus in patients with unexplained pneumonias should be considered, especially in persons residing in or returning from the Arabian peninsula and neighboring countries. Any new cases should be promptly reported both to national health authorities and to WHO.
- Any clusters of SARI or SARI in health care workers should be thoroughly investigated, regardless of where in the world they occur. These investigations will help determine whether the virus is distributed more widely in the human population beyond the three countries that have identified cases.
- WHO does not advise special screening at points of entry with regard to this event nor does it recommend that any travel or trade restrictions be applied

#### 5. GRAPHS

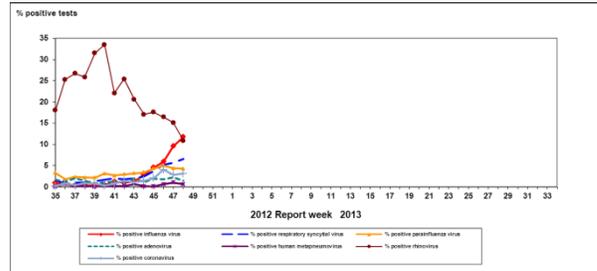
##### North America

##### Canada

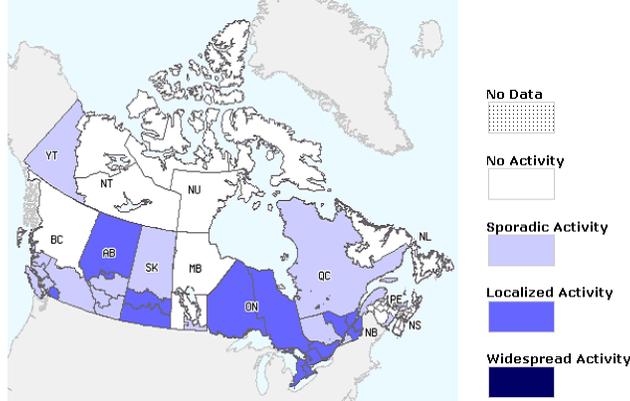
Canada. ILI rate distribution by SE, 2012-2013



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



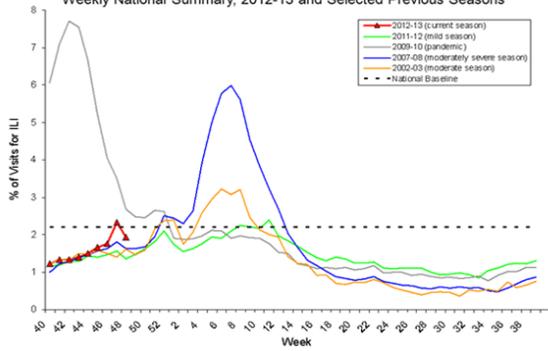
Map of overall Influenza activity level by province and territory, Canada



## United States

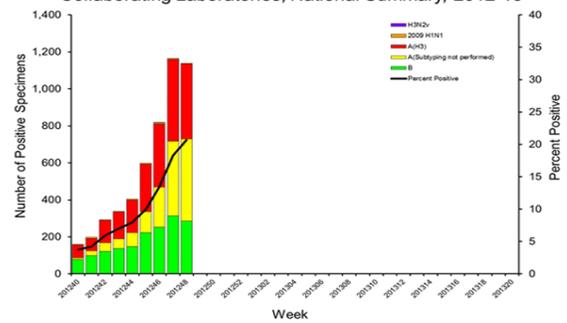
**E.E.U.U. ILI Distribution (%) by EW, 2012**

Percentage of Visits for influenza-like illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2012-13 and Selected Previous Seasons

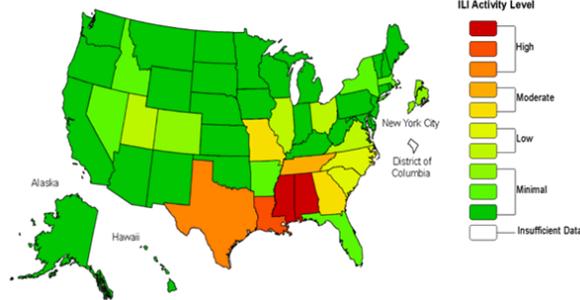


**E.E.U.U. Influenza viruses distribution by EW, 2012**

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2012-13



**Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet**  
2012-13 Influenza Season Week 48 ending Dec 01, 2012

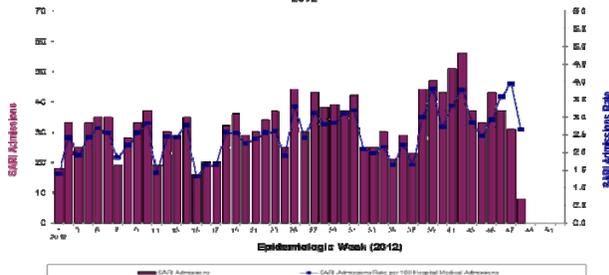


## Caribbean

### CAREC

**CAREC. % SARI Hospitalizations by EW, 2012**

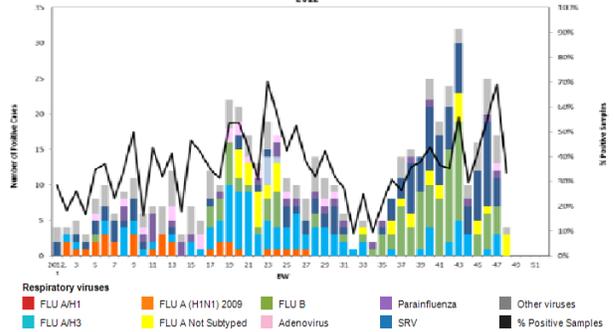
SARI Admissions and SARI Admissions Rate per 100 Hospital Medical Admissions from Serial Sites in Selected CAREC Member Countries, 2012



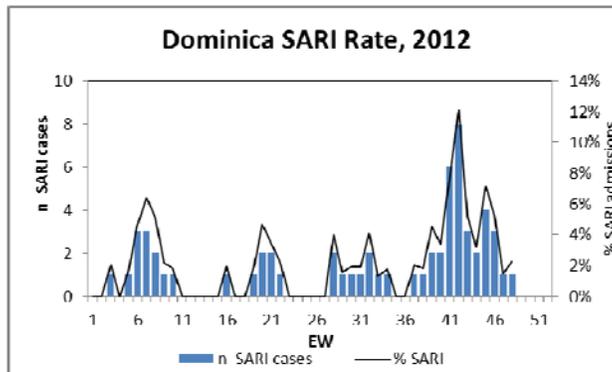
\* Note: Graph includes data from Barbados, Belize, Dominica, Jamaica, St. Lucia, St. Vincent & the Grenadines, Suriname and Trinidad & Tobago

**CAREC. Respiratory viruses distribution by EW, 2012**

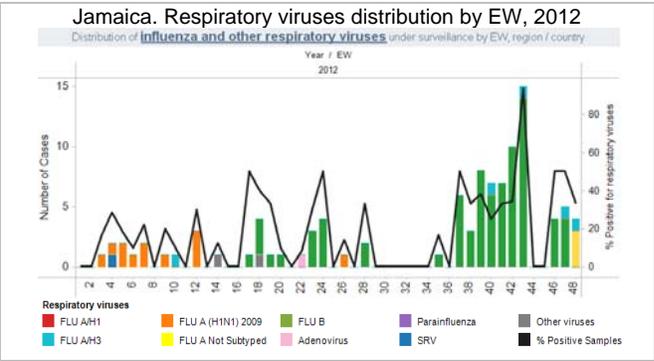
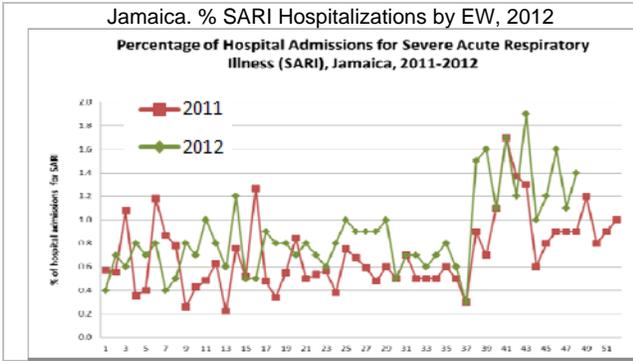
Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), CAREC, 2012



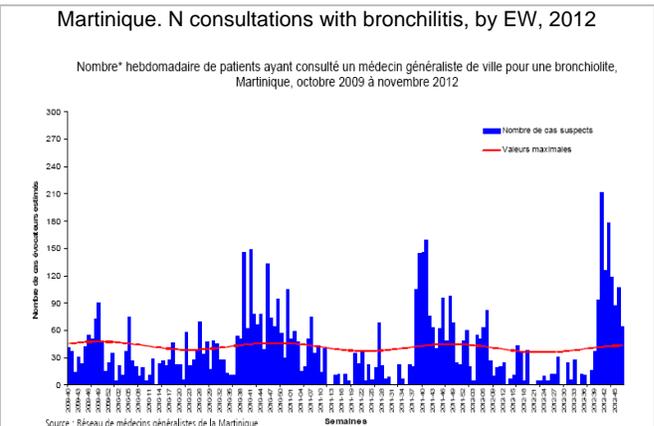
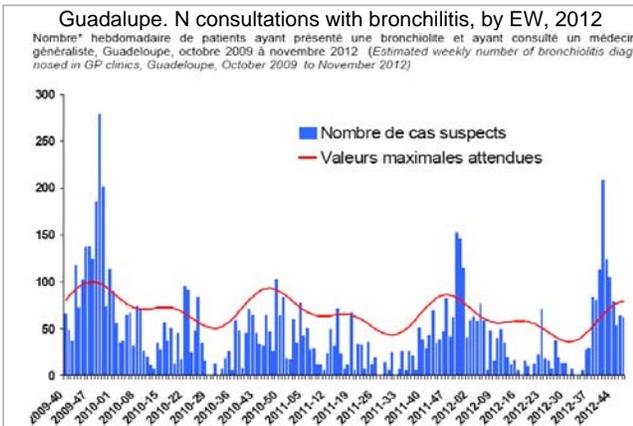
**Dominica. SARI cases by EW, 2012**



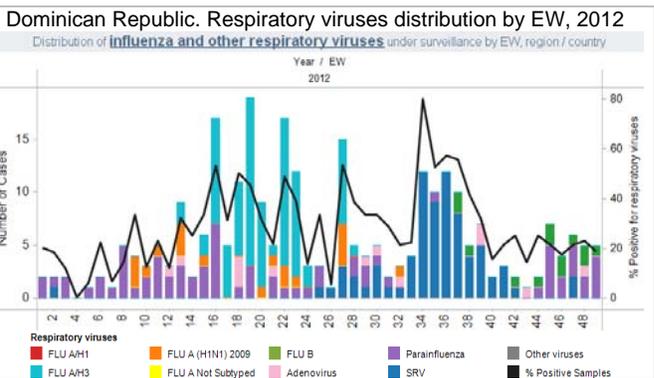
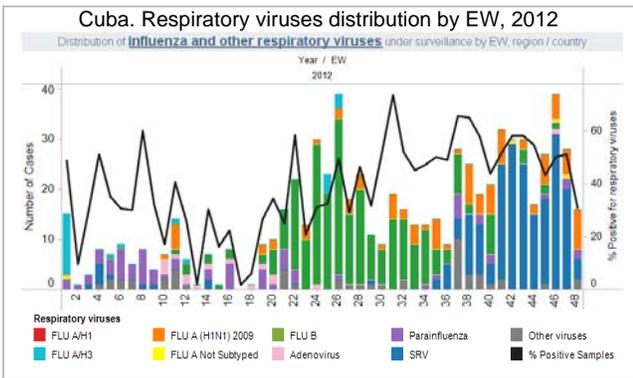
## Jamaica



## Guadelupe and Martinique



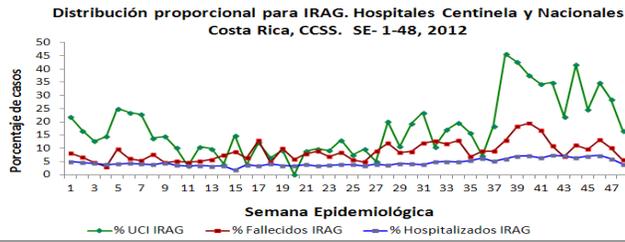
## Cuba and Dominican Republic



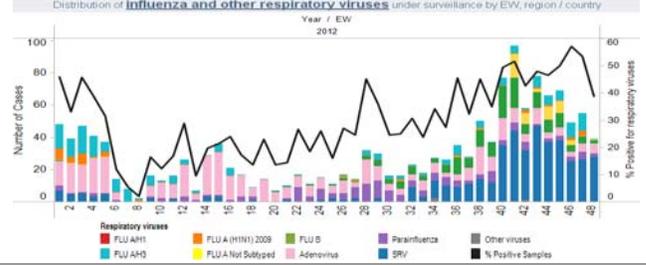
# Central America

## Costa Rica

Costa Rica. Proportion of SARI Hospitalizations, ICU admitteds and deaths by SE, 2012

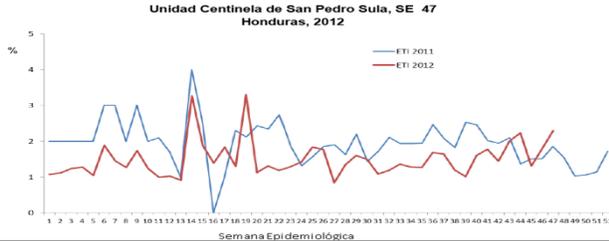


Costa Rica. Respiratory viruses distribution by EW, 2012

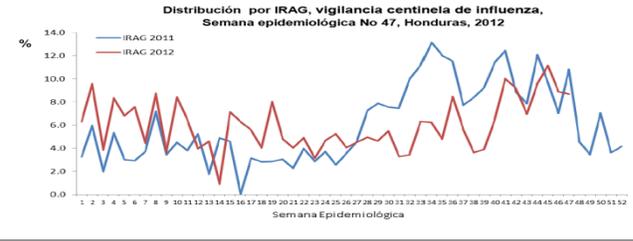


## Honduras

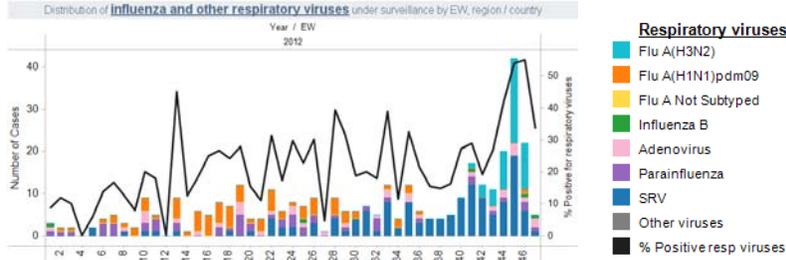
Honduras. Distribution of ILI consultation by EW, 2011- 2012



Honduras. Distribution of SARI cases by EW, 2011-2012

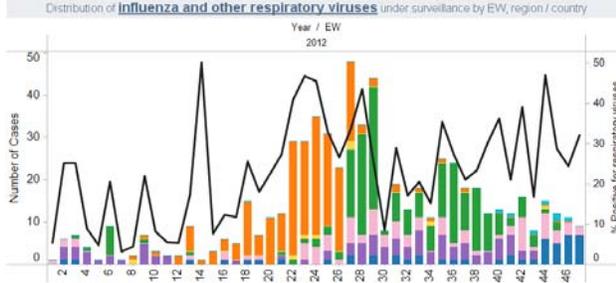


Honduras. Respiratory viruses distribution by EW, 2012

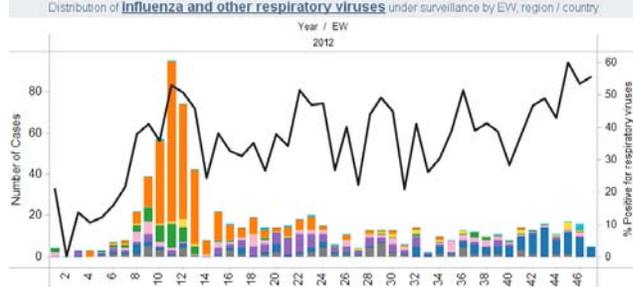


## EI Salvador, Guatemala, Nicaragua and Panama

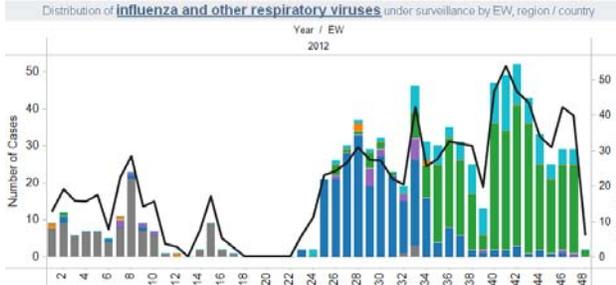
EI Salvador. Respiratory viruses distribution by EW, 2012



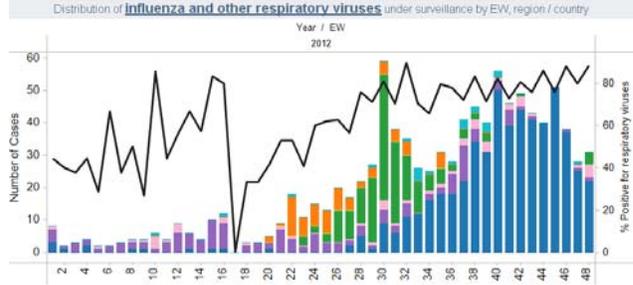
Guatemala. Respiratory viruses distribution by EW, 2012



Nicaragua. Respiratory viruses distribution by EW, 2012



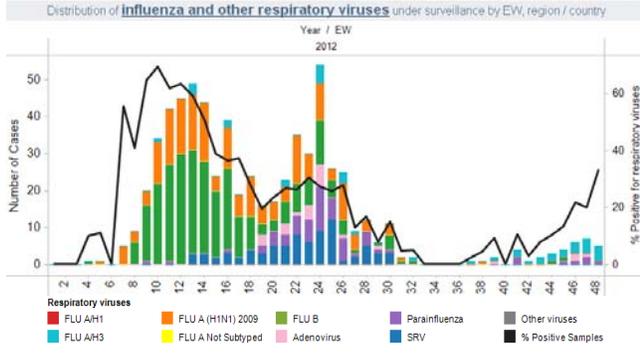
Panama. Respiratory viruses distribution by EW, 2012



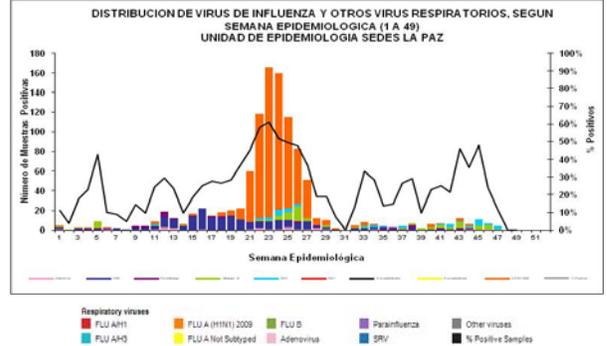
# South America - Andean

## Bolivia

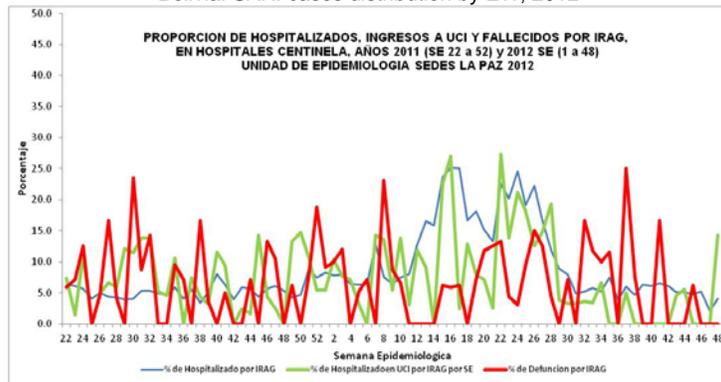
Santa Cruz. Respiratory viruses distribution by EW, 2012-Cenetro



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

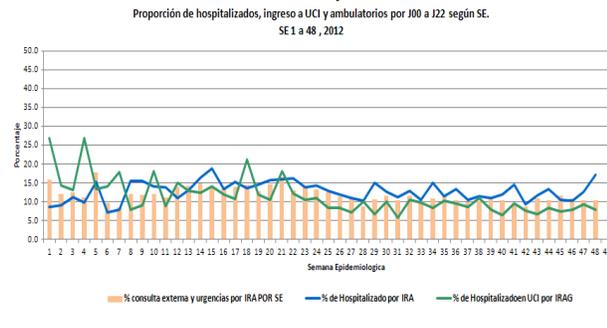


Bolivia. SARI cases distribution by EW, 2012

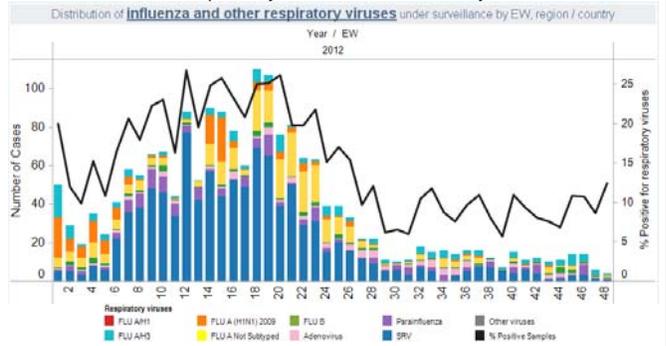


## Colombia

Colombia. Proportion of ILI consultations, SARI admissions and ICU admissions by EW, 2012

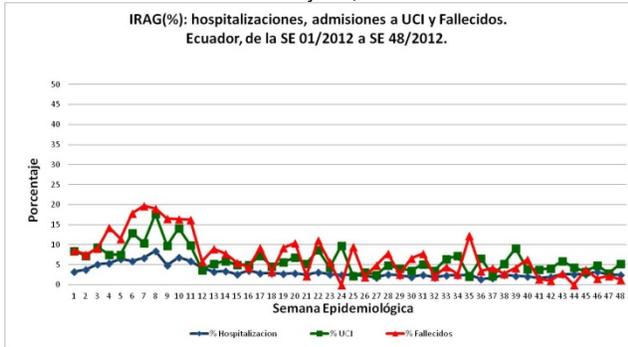


Colombia. Respiratory viruses distribution by EW, 2012

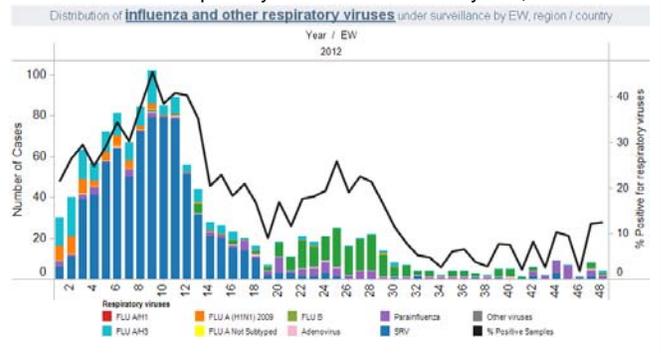


## Ecuador

Ecuador. Proportion of SARI Hospitalizations, ICU admitted and deaths by SE, 2012

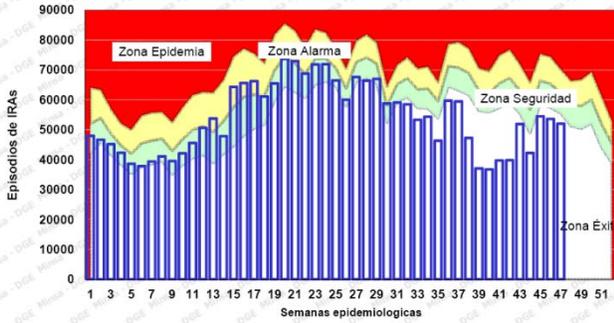


Ecuador. Respiratory viruses distribution by EW, 2012



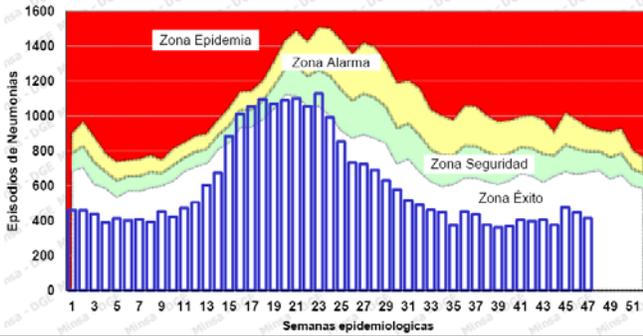
Peru

Peru. Endemic channel of ARI, 2012  
**Canal de Infecciones Respiratorias Agudas (IRA) en menores de 5 años, Perú 2012\***

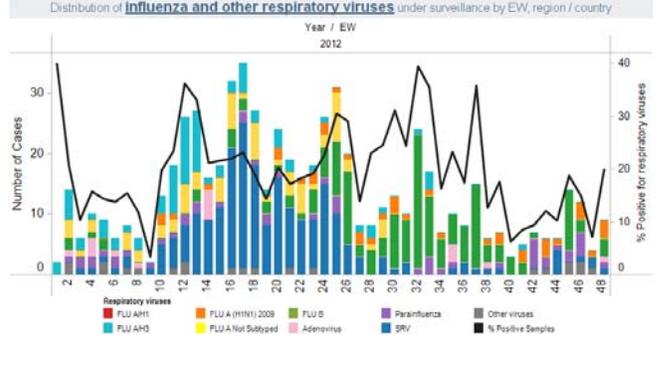


Peru. Endemic channel of pneumonia, 2012

**Canal endémico de neumonías en menores de 5 años, Perú 2012\***



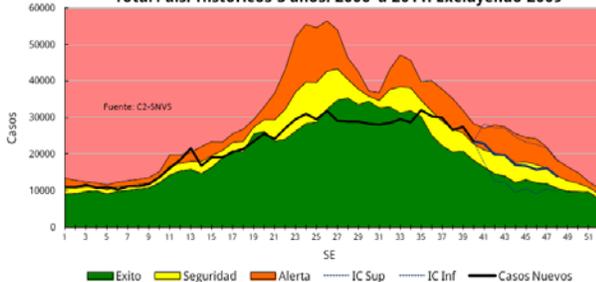
Perú. Respiratory viruses distribution by EW, 2012



South America, Southern cone

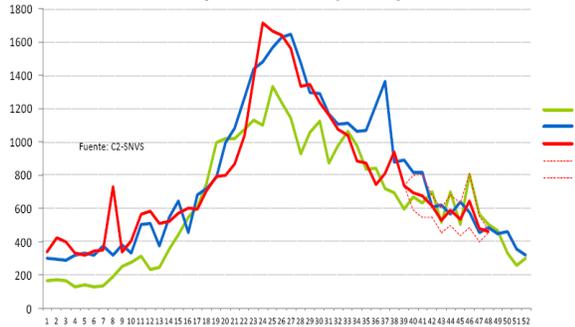
Argentina

Argentina. ILI endemic channel, 2012  
**Corredor endémico semanal de ETI-2012**  
**Total País. Históricos 5 años: 2006 a 2011. Excluyendo 2009**

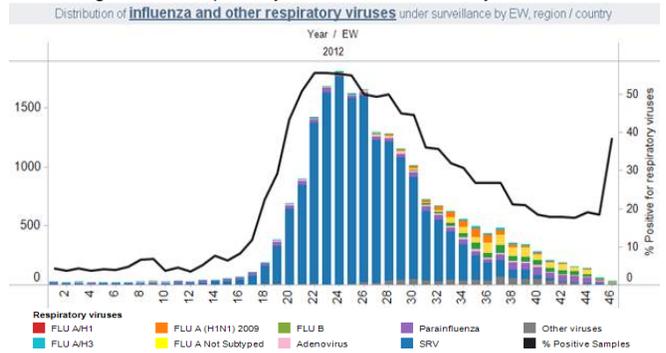


SARI Hospitalizations distribution by EW, 2010 - 2012

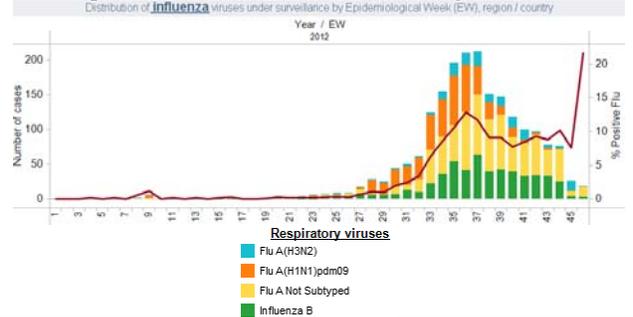
Figura 1: Casos de IRAG por SE. Argentina 2012.



Argentina. Respiratory viruses distribution by EW, 2012



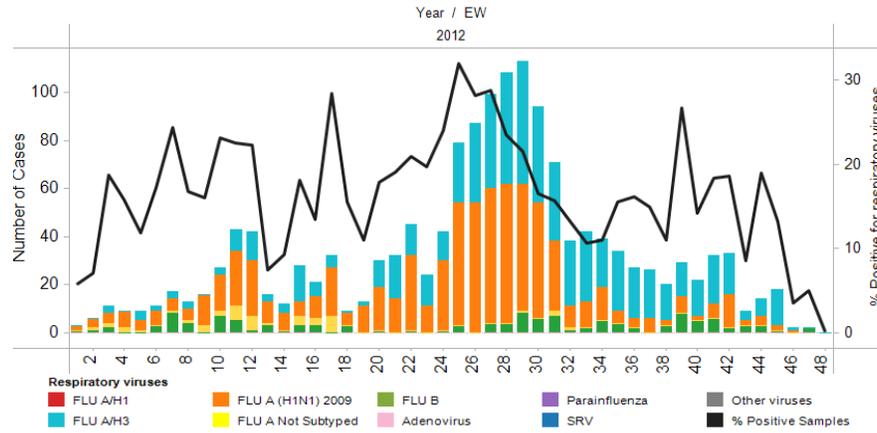
Argentina. Influenza viruses distribution by EW, 2012



## Brazil

### Brazil. Influenza viruses distribution by EW, 2011 - 2012

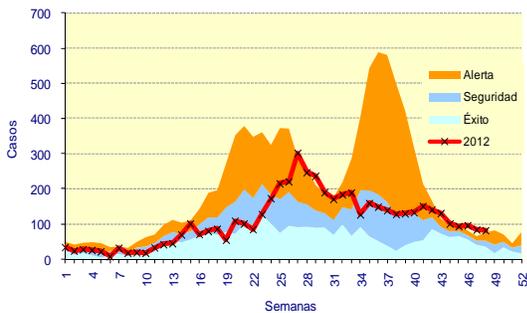
Distribution of **influenza and other respiratory viruses** under surveillance by EW, region / country



## Chile

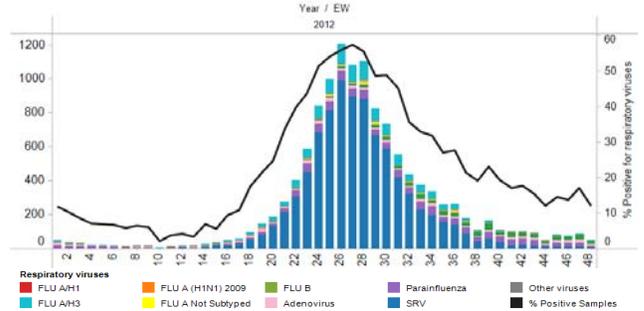
### Chile. ILI Endemic Channel, 2012

Canal endémico de Enfermedad Tipo Influenza según semana epidemiológica 2006-2011\*. Chile, 2012 (Semana 1-48)



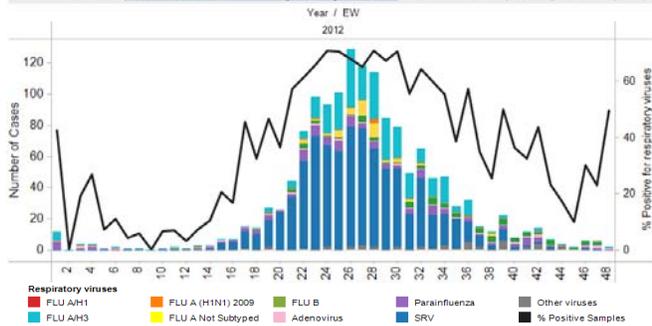
### Chile. Respiratory viruses distribution by EW, 2012

Distribution of **influenza and other respiratory viruses** under surveillance by EW, region / country



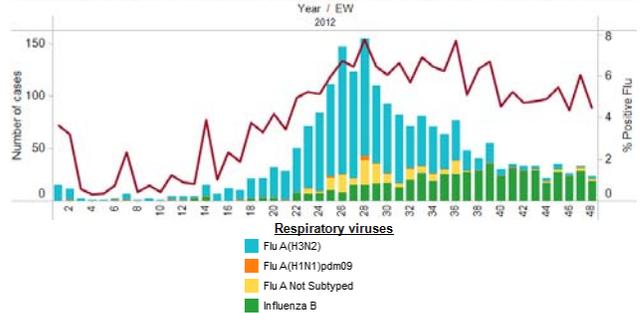
### Chile. SARI cases: Respiratory viruses distribution by EW, 2012

Distribution of **influenza and other respiratory viruses** under surveillance by EW, region / country

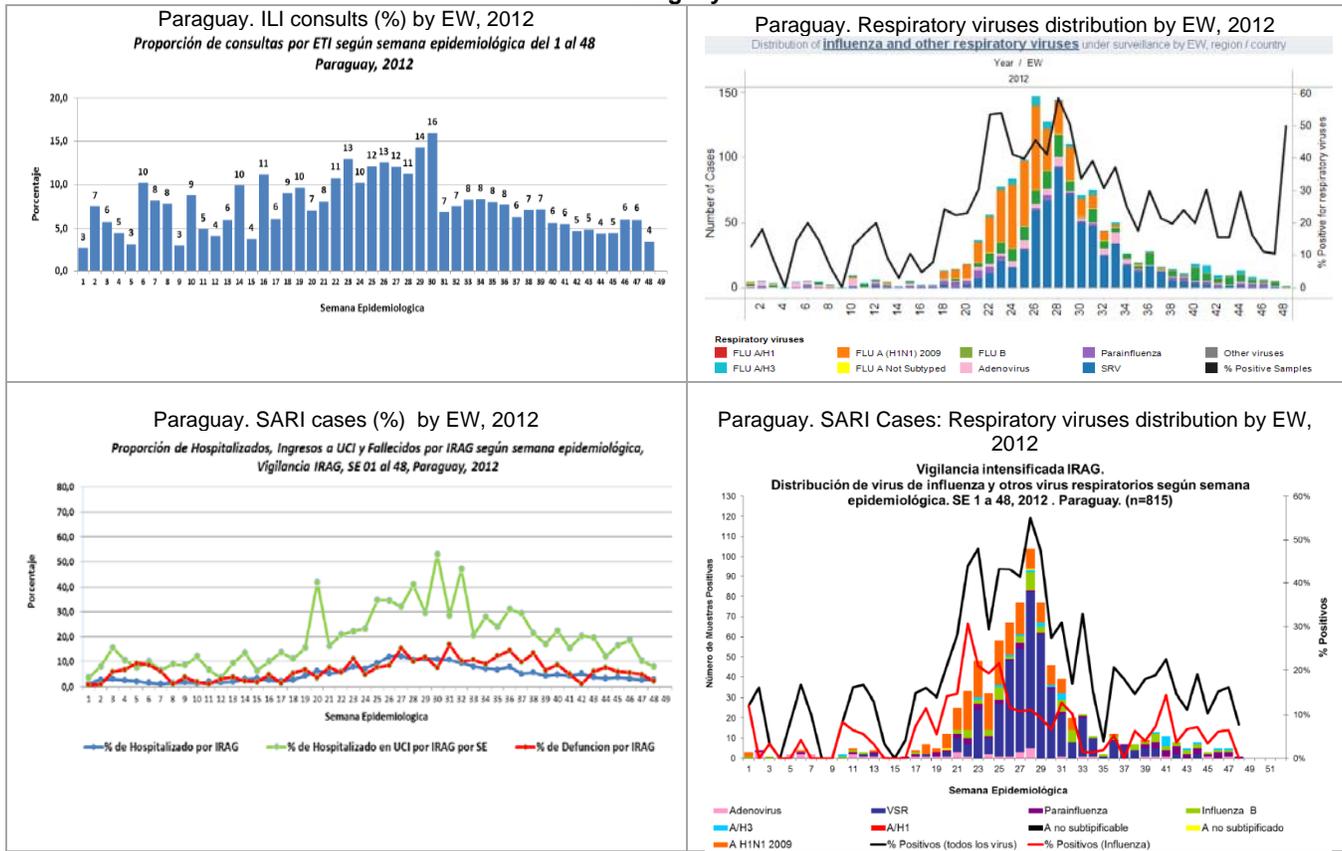


### Chile. Influenza viruses distribution by EW, 2012

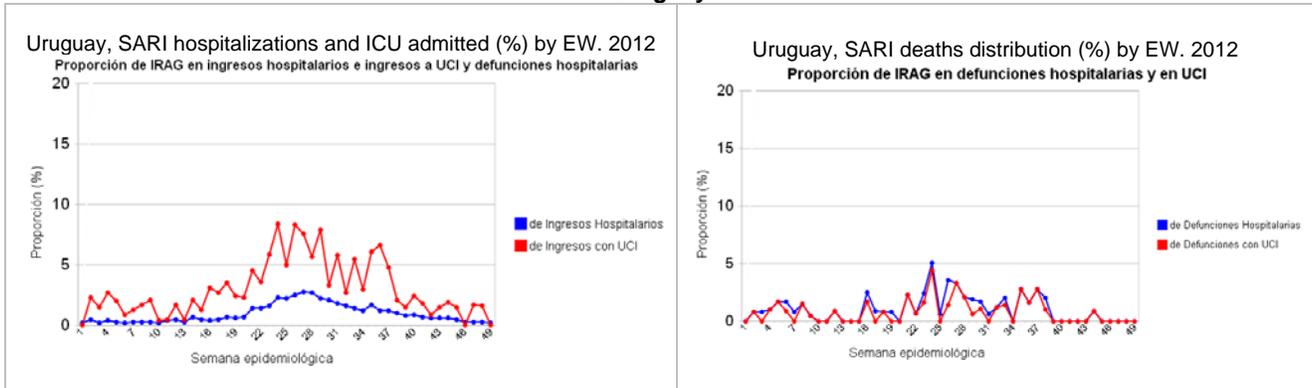
Distribution of **influenza** viruses under surveillance by Epidemiological Week (EW), region / country



## Paraguay



## Uruguay



- 1 FluWatch Report. EW 48. Available at <http://www.phac-aspc.gc.ca/fluwatch/>
- 2 US Surveillance Summary. EW 48. Centers for Disease Control and Prevention
- 3 Bulletin hebdomadaire grippe, Point Au 4/12/2012. Institut de Veille Sanitaire
- 4 El Salvador. Boletín epidemiológico SE 48 de 2012. MINSAL.
- 5 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 47.
- 6 Argentina. Actualización situación de enfermedades respiratorias 2012. SE 48.
- 7 Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública