



## Regional Update EW 45, 2012

### Influenza and other respiratory viruses (November 20, 2012 - 17 h GMT; 12 h EST)

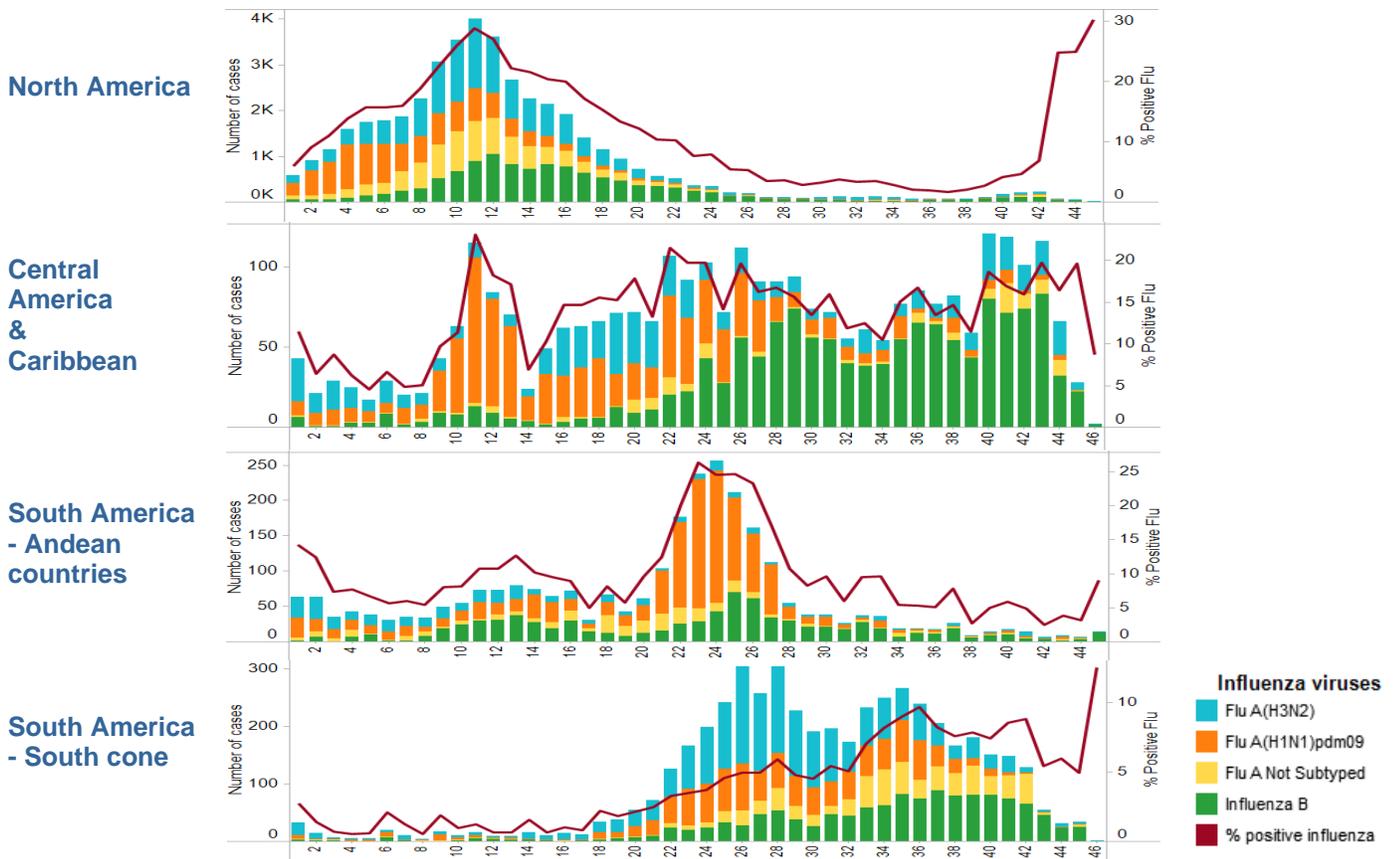
PAHO interactive influenza data: [http://ais.paho.org/phis/viz/ed\\_flu.asp](http://ais.paho.org/phis/viz/ed_flu.asp)  
 Influenza Regional Reports: [www.paho.org/influenzareports](http://www.paho.org/influenzareports)

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.

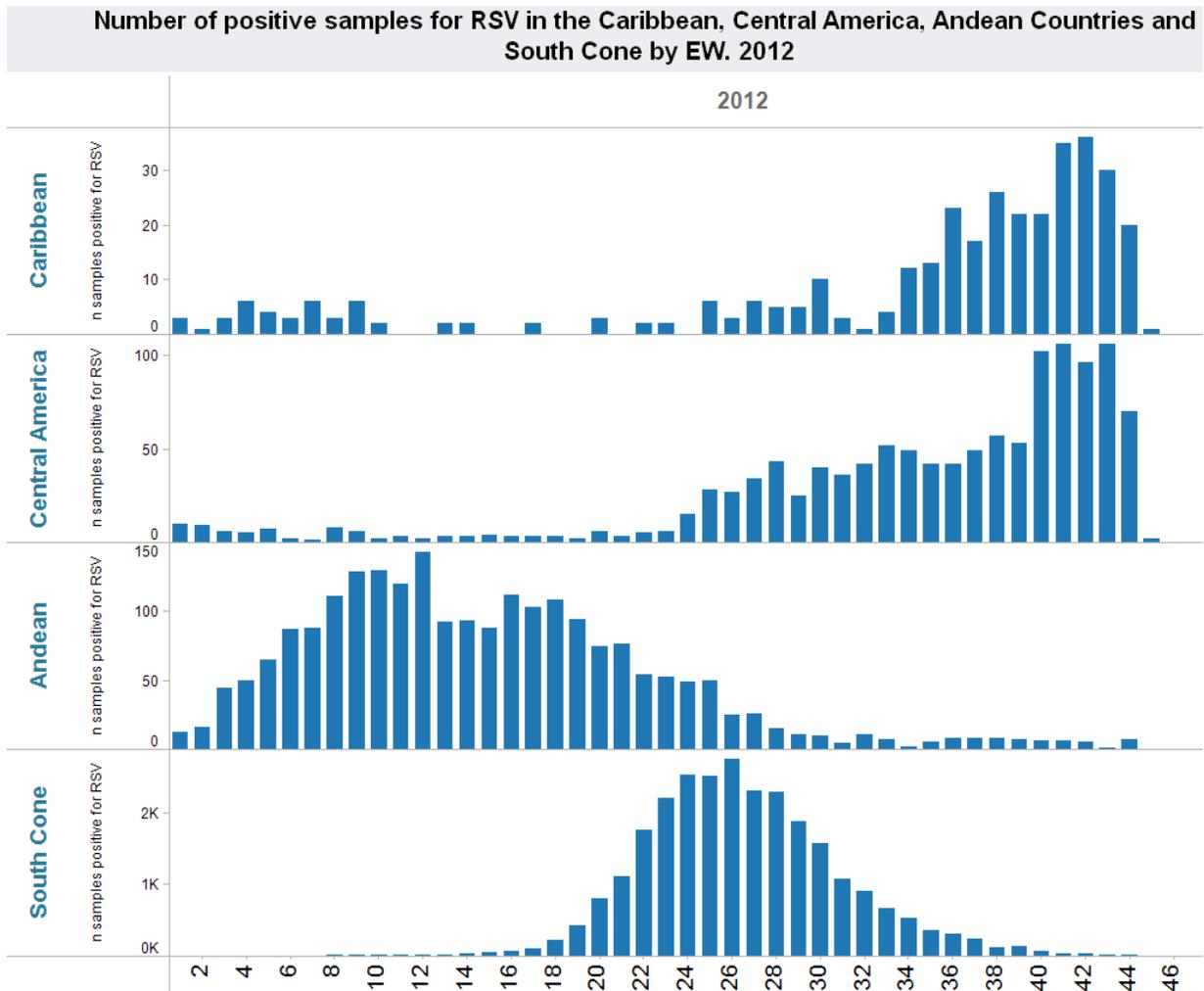
### 1. WEEKLY SUMMARY

- **North America:** influenza activity 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 (positivity) were observed in some countries of this sub-region. Among the influenza viruses, influenza B (Dominica, Dominican R., El Salvador, Jamaica and Nicaragua) co-circulated with influenza A(H1N1)pdm09 (Jamaica) and influenza A(H3N2) (Barbados, El Salvador and Nicaragua). Among other respiratory viruses, RSV remained as predominant circulating virus in several countries of the region (El Salvador, Guatemala and Panama). In Guadalupe and Martinique, the epidemic of bronchiolitis associated to RSV continued to decrease.
- **South America:** Severe acute respiratory disease activity remains low and unchanged in the region. In the current EW, co-circulation of influenza B (Bolivia, Chile, Colombia, Paraguay and Peru), influenza A(H3) (Bolivia, Brazil and Paraguay) and influenza A(H1N1)pdm09 (Brazil) was observed among reported influenza detection. Among the other respiratory viruses, parainfluenza (Bolivia, Chile, Ecuador, Peru and Paraguay) predominated.

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



## THE AMERICAS: DISTRIBUTION OF RSV 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) 45, 2012, influenza activity increased but remained low and similar to the previous week. In EW 45, the influenza-like illness (ILI) consultation rate decreased (19.1/1,000 consultations) but was within expected levels for this time of year. In EW 45, among the total samples analyzed, the proportion of samples positive for influenza increased (5.0%); of the influenza cases, 92.5% were influenza A (61.2% influenza A(H3) and 31.7% influenza A unsubtype). Concerning other respiratory viruses, the percent positive for rhinovirus increased and remained the highest (19.1%) as compared to other respiratory viruses.

In the United States<sup>2</sup>, in EW 45, nationally, the proportion of ILI consultations (1.4%) 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 45 (6.4%) was above the epidemic threshold for this time of year (6.5%). In EW 45, no influenza-associated pediatric deaths were reported. Among all samples tested during EW 45 (n=4,147), the percentage of samples positive for influenza (7.5%) increased very slightly as compared to the previous week. Nationally, among the positive samples, 56.3% were influenza A [among the subtyped influenza A viruses, 97.6% were influenza A(H3)]. No novel influenza A virus infections were reported during EW 45, 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 45, 43 samples were tested showing a positivity to respiratory viruses of 30.2%, which was slightly higher than what was reported on previous EWs. 11 positive samples associated to influenza B and 1 associated to influenza A(H3) were reported.

### **Caribbean**

CAREC, in EW 45, received epidemiological information from 6 countries: Barbados, Belize, Jamaica, St. Vincent & the Grenadines, Trinidad and Tobago and Suriname. In EW 45, the proportion of severe acute respiratory infection (SARI) hospitalizations was 3.0% which is higher than what was reported during the prior week (2.4%). The SARI admission rate increased in Dominica, Jamaica and St. Vincent & the Grenadines, and remained at nil for one country (Trinidad and Tobago). The highest rate of SARI was among children 6 months to 4 years age (7.1%). One SARI-death was reported in Belize in one person >65 years. In the last 4 weeks (EW 42 to 45) the following viruses have been laboratory confirmed in CAREC member countries: influenza A(H1N1)pdm09 (Jamaica), influenza A(H3N2) (Barbados), influenza A not further typed (Barbados), influenza B (Cayman Islands, Dominica and Jamaica), parainfluenza type 2 (Cayman Islands) and respiratory syncytial virus (Barbados, Cayman Islands and Dominica). To date in 2012, the overall percentage positivity for samples tested is 37% with 20% positivity for influenza.

In Jamaica for EW 45, the proportion of consultations for ARI was 6.9% (1.2% lower than the previous EW). The proportion of admissions due to SARI was 1.2 % (0.2% decrease when compared to the EW before). There was no SARI death reported for epidemiological week 44.

In the Dominican Republic, according to laboratory data from EW 46, among the samples analyzed (n=23), the percent positivity for respiratory viruses was 17.4%. Influenza B and parainfluenza were detected.

In French Guyana<sup>3</sup>, in EW 44, the weekly number of ILI consultations has decreased and was below expected maximum values for this time of year. In Guadalupe<sup>4</sup>, in EW 44, the bronchiolitis epidemic, associated to RSV circulation, was still present, but at lower levels and has been declining. In Saint-Martin and Saint-Barthélemy, in EW 44, no influenza or other respiratory virus activity was reported. In Martinique, in EW 44, bronchiolitis has decreased, but the number of cases remained significantly higher than the expected values for the season. Bronchiolitis associated RSV, has been steadily increasing in the region.

### **Central America**

In El Salvador, according to laboratory data, in EWs 44-45, of the total samples analyzed, RSV, adenovirus, influenza B and influenza (H3N2) were detected.

In Guatemala, according to laboratory data, in EW 44, of the total samples analyzed (n=15), the percentage of positive samples for respiratory viruses was 40%, associated mainly to the detection of RSV, human metapneumovirus and adenovirus.

In Nicaragua, in EW 45, according to laboratory data, among all tested samples (n=72), the percentage of positive samples for respiratory viruses (32%) has been decreasing since its peak in EW 41. Influenza A(H3N2) has been the predominant circulating virus in the last 10 EWs, followed by influenza A(H3N2).

In Panama, according to laboratory data, in EW 45, of the total samples analyzed (n=55), the percentage of positive samples for respiratory viruses was 76.4%, mainly associated to RSV. During the last EWs, low influenza activity were reported.

### **South America – Andean**

In La Paz, Bolivia, according to SARI surveillance data, in EW 45, the percentage of SARI admissions slightly decreased with respect to previous EW (4.8%) with no ICU admissions and a low proportion of SARI-deaths (6.3%, n=1). According to laboratory data, in La Paz (INLASA) for EW 45, a positivity for respiratory viruses of 36.8% was reported among the 19 tested samples with influenza A(H3) (n=6) and influenza B (n=1) viruses being observed among the positives. In Santa Cruz (CENETROP), in EW 45, the positivity was 9.5% among the 21 tested samples with presence of influenza B and parainfluenza among the positives.

In Colombia, at the national level, in EW 45, the proportion of ILI consultations remained with no significant changes, while SARI hospitalizations (10.6%) and ICU admissions (6.9%) slightly decreased with respect 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 45 a positivity of 44.4% was reported among the tested samples (n=18) and respiratory viruses, and with influenza A not further typed and influenza B being observed among positive samples.

In Ecuador, in the SARI surveillance system from sentinel units, at the national level in EW 45, the proportion of SARI hospitalizations and ICU admissions (2% and 4% respectively) 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 45, a percentage of positivity of 14.3% was reported among the 42 tested samples, which was higher than previous EW and with complete predominance of parainfluenza virus.

In Peru, according to laboratory data, in EW 45, at the national level, the percentage of positive samples for respiratory viruses among samples tested (n=75) was 18.7%, which was higher with respect to the previous EW, with presence of influenza B (n=10) and parainfluenza virus (n=2) among the positive samples.

In Venezuela, at the national level, in EW 44, the number of ARIs and pneumonias slightly increased (4.7% and 5.5% respectively) but remained in safety zone of endemic channel. In both cases, children less than one year were the most affected age group. At the national level, SARI rate in EW 44 was 54.45/100,000 pop., with 11 states exceeding this rate. So far, in all the 2012, 1698 samples were tested showing an accumulate positivity of 8.6% with predominance of influenza B (29.5%), influenza A(H3N2) (12.3%) and RSV (21.9%) among the positives.

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

In Argentina<sup>5</sup>, at the national level, in EW 45, the number of ILI cases remained in the safety zone 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<sup>6</sup>, in EW 45, the percentage of positive samples for influenza viruses was of 19.15% among the tested samples (n=94), which was slightly lower with respect to previous EW and with a predominance of influenza A(H3) virus (15/10) and A(H1N1)pdm09 (2/10) and a positive sample for influenza B.

In Chile, according to laboratory data, at the national level and in EW 45, the percentage positivity for respiratory viruses was 13.7% among the tested samples (n=635), which was slightly higher with respect to previous EW, and with a predominance of influenza B (26.4%) and parainfluenza (25.3%). In SARI surveillance, one case of influenza B among the 7 tested samples was reported.

In Paraguay, in EW 44, the national ILI rate (87.4/100,000 population) showed a decrease with respect to previous EWs while the proportion of ILI consultations (4.5%) in sentinel units showed no significant changes as compared to the previous EW. According to laboratory data in EW 45 at the national level, 46 samples were tested for respiratory viruses with a percentage positivity of 13%, which was lower with respect to previous EW and with presence of influenza B, influenza A(H3) and parainfluenza virus. In the SARI surveillance system in sentinel units, the proportion of hospitalizations for EW 44 was 3.1%, 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.

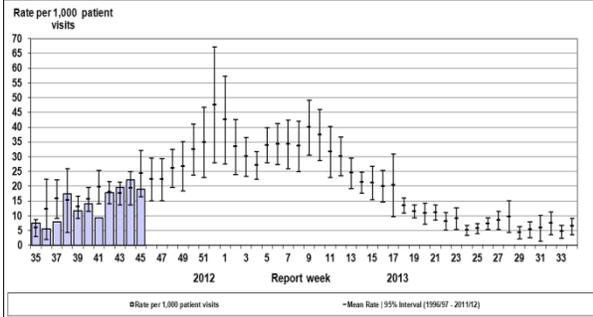
In Uruguay<sup>7</sup>, at the national level, in EW 45, in the SARI surveillance system, the proportion of hospitalizations and ICU admissions did not show significant changes with respect to prior EW. No SARI-deaths were reported in the same EW.

## 4. GRAPHS

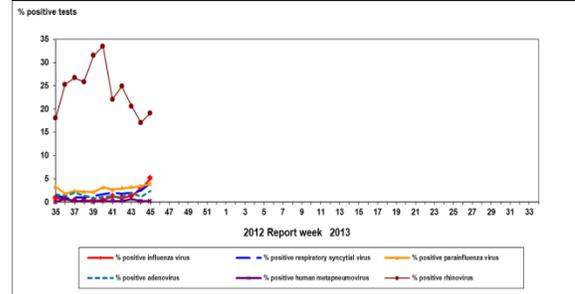
### North America

#### Canada

Canadá. ILI rate distribution by SE, 2012-2013



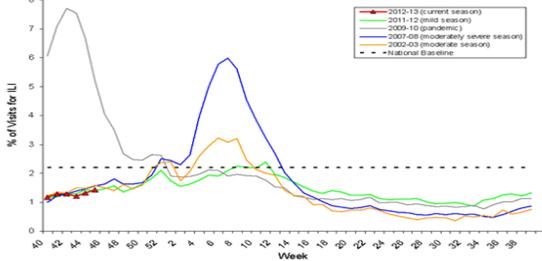
Canadá. Positive samples for respiratory viruses by SE, 2011-12 2012-2013



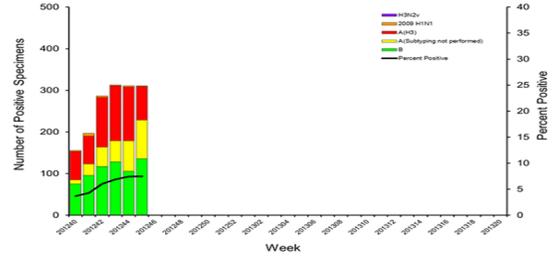
#### United States

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

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



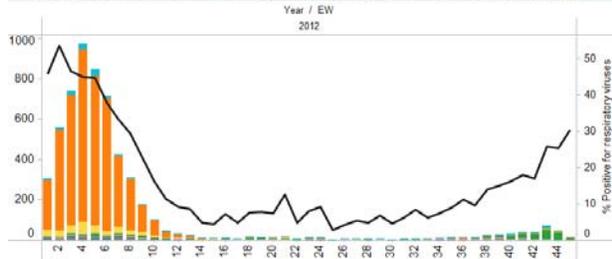
E.E.U.U. Influenza viruses distribution by EW, 2012  
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2012-13



#### Mexico

Distribución de virus respiratorios por SE1-43, 2012

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

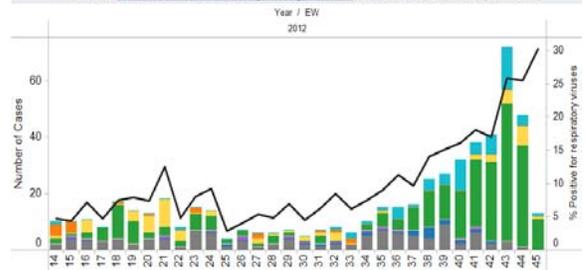


Respiratory viruses

- FLU A/H1
- FLU A (H1N1) 2009
- FLU B
- FLU A/H3
- FLU A Not Subtyped
- Adenovirus

Distribución de virus influenza por SE 14-43, 2012

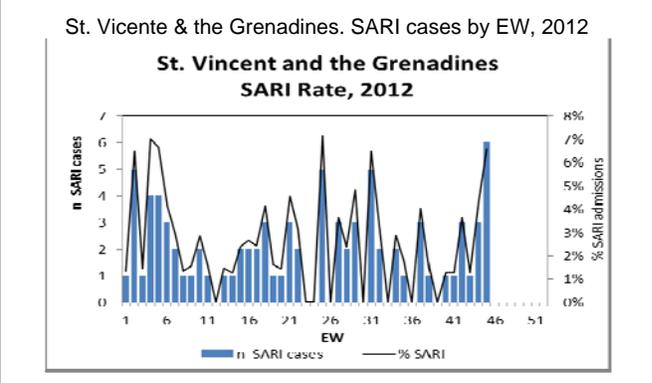
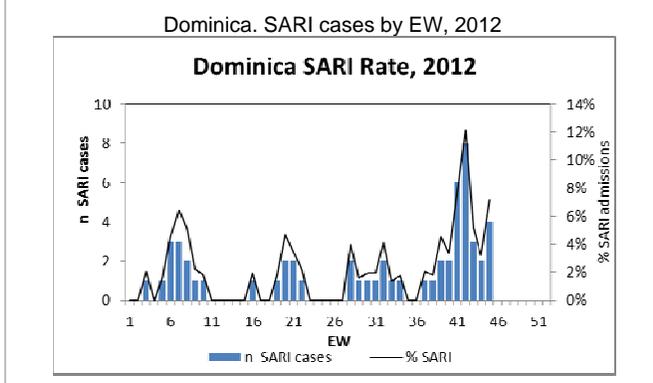
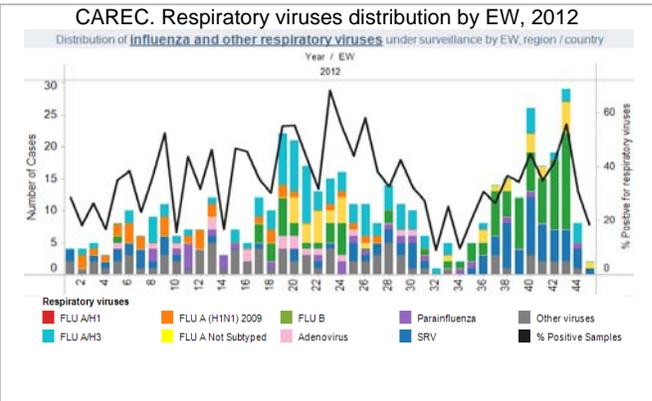
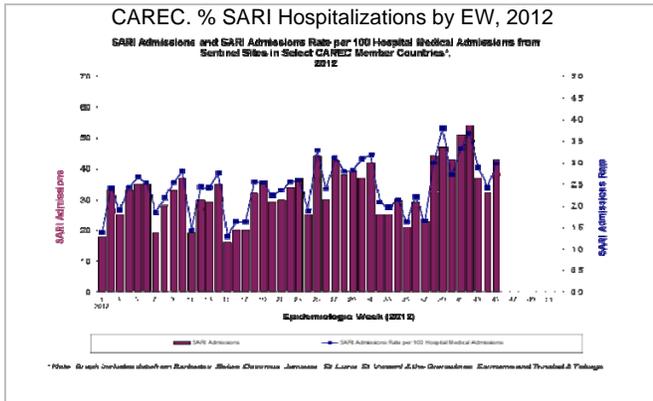
Distribution of influenza and other respiratory viruses under surveillance by EW, region / country



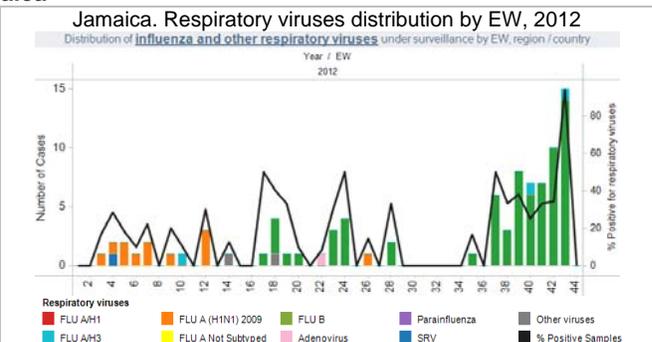
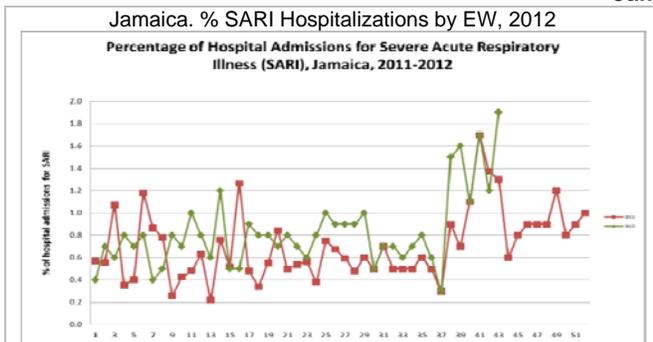
Parainfluenza

- SRV
- Other viruses
- % Positive Samples

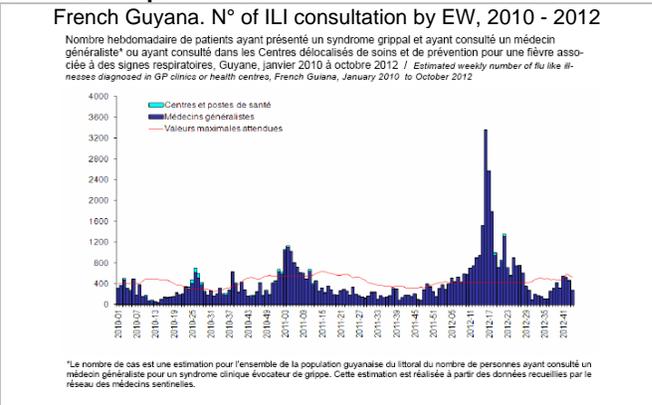
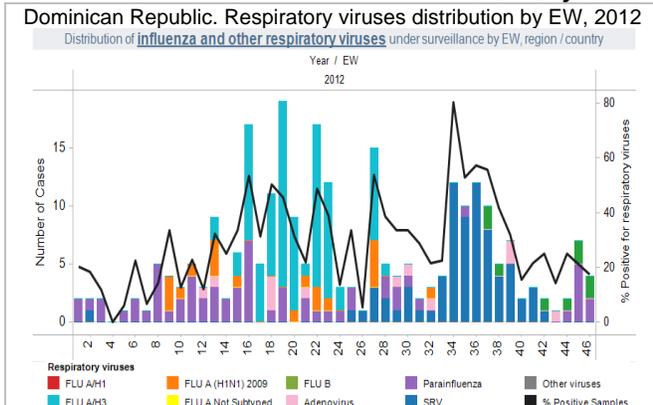
CAREC



Jamaica

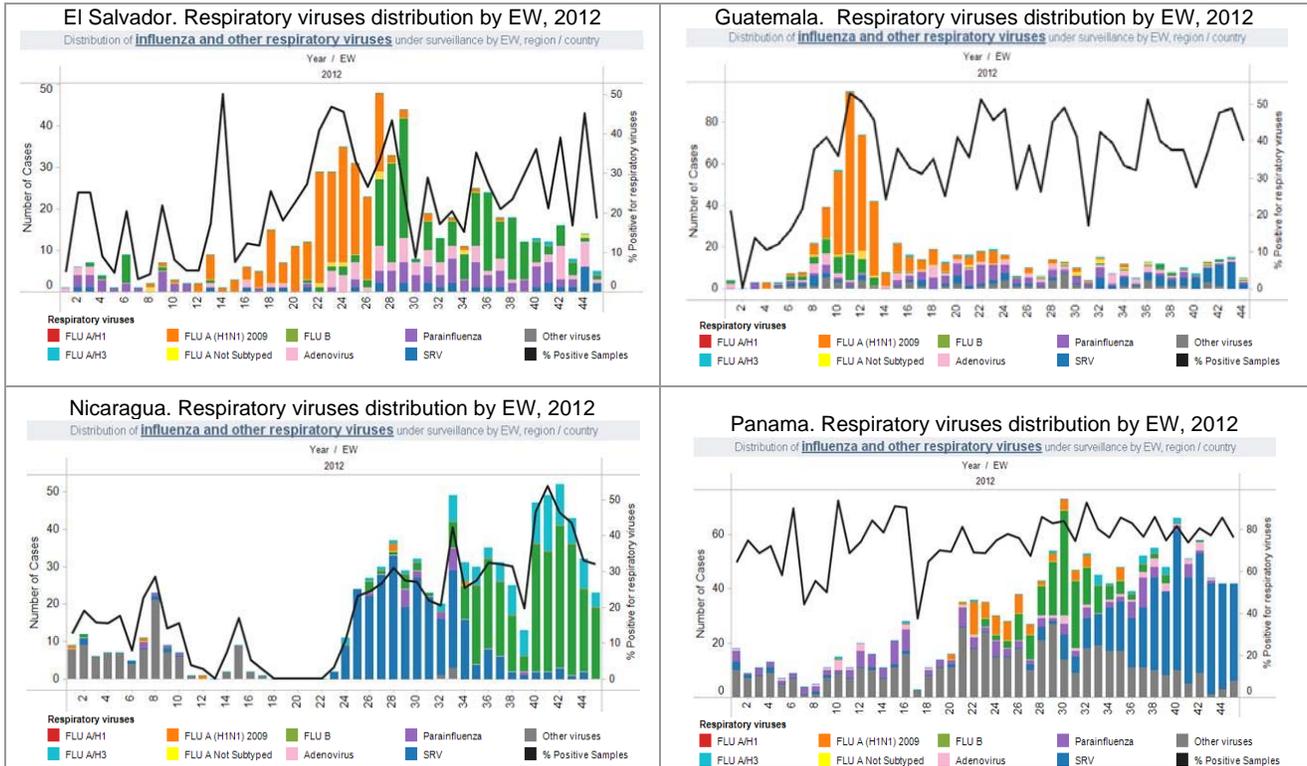


French Guyana & Dominican Republic



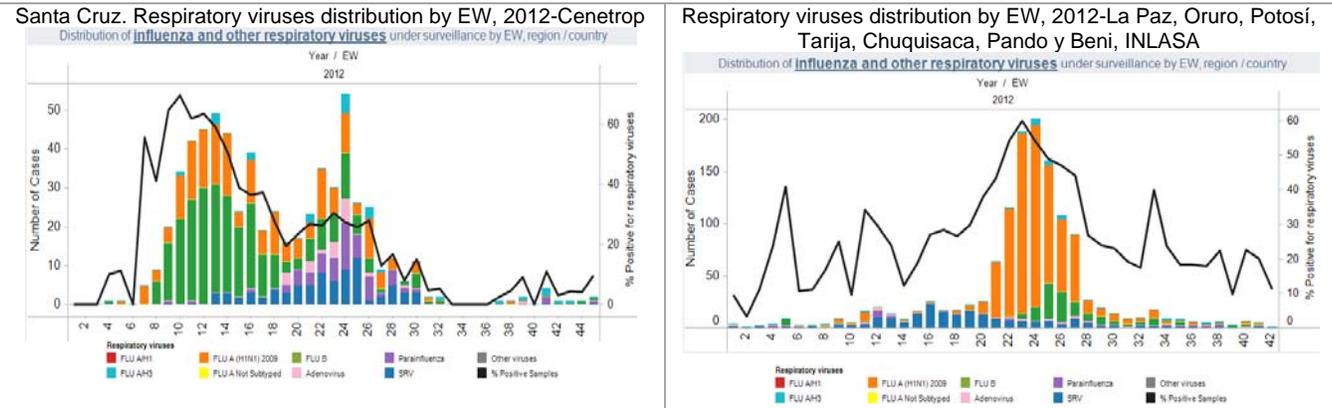
# Central America

## El Salvador, Guatemala, Nicaragua and Panama

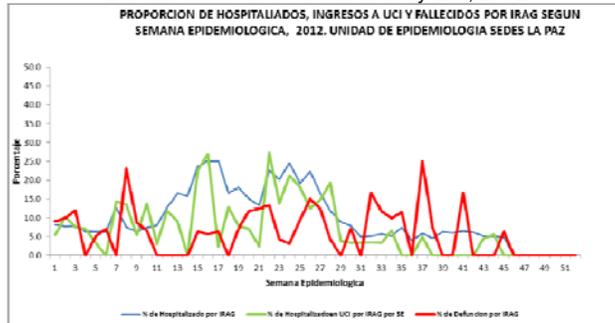


# South America - Andean

## Bolivia

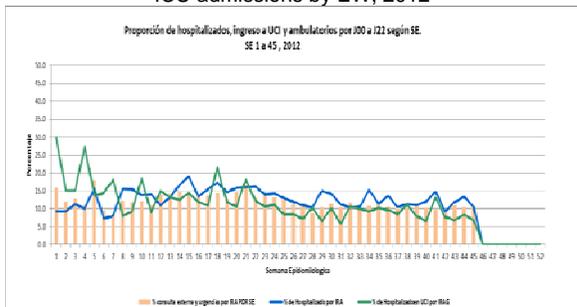


## Bolivia. SARI cases distribution by EW, 2012

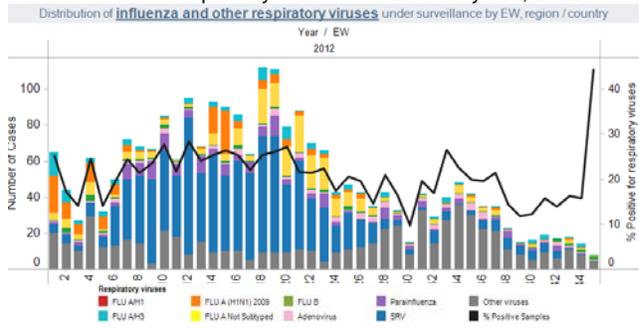


### Colombia

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

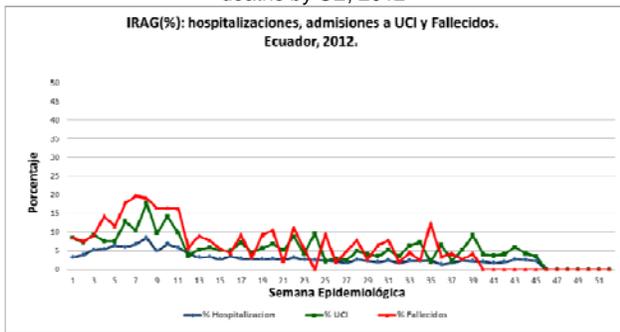


Colombia. Respiratory viruses distribution by EW, 2012

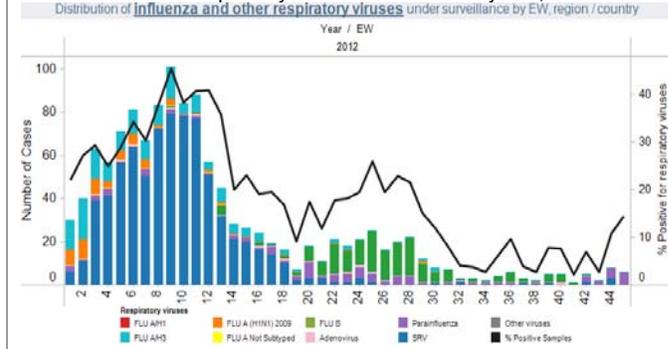


### Ecuador

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

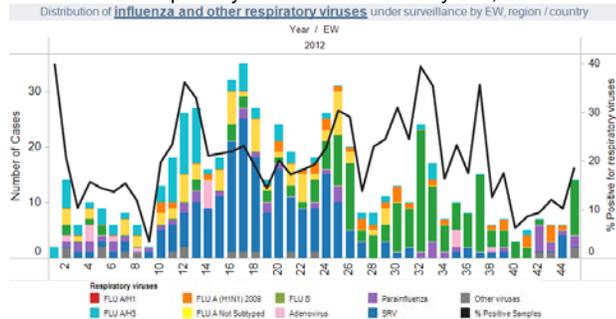


Ecuador. Respiratory viruses distribution by EW, 2012



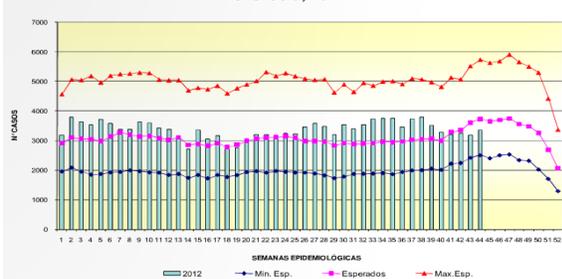
### Peru

Perú. Respiratory viruses distribution by EW, 2012

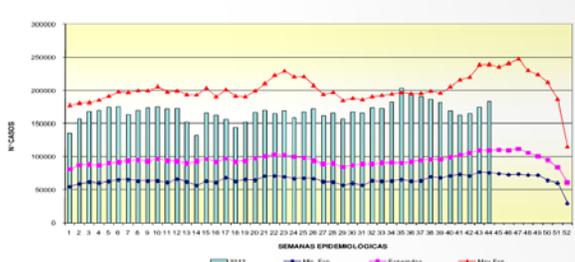


### Venezuela

Venezuela. Pneumonia endemic channel, 2012  
Neumonías  
Canal endémico 2005 - 2012  
Venezuela, 2012

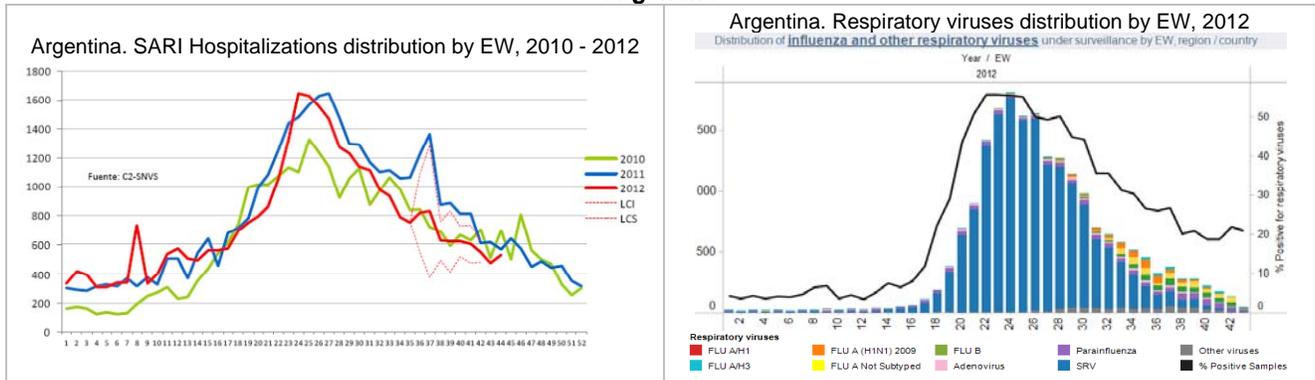


Venezuela. ARIs endemic channel, 2012  
Infecciones respiratorias agudas  
Canal endémico 2005 - 2012  
Venezuela, 2012

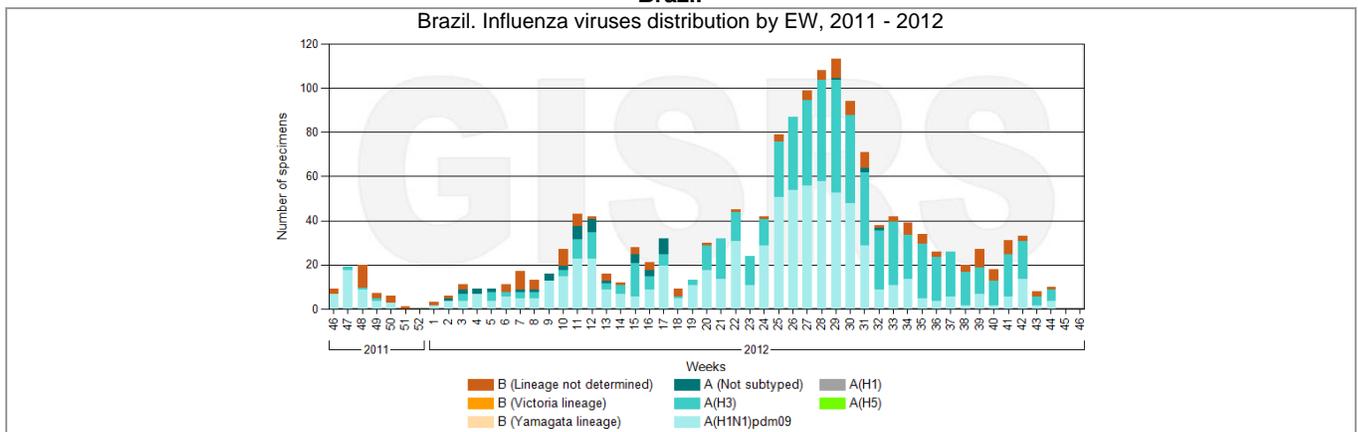


# South America, Southern cone

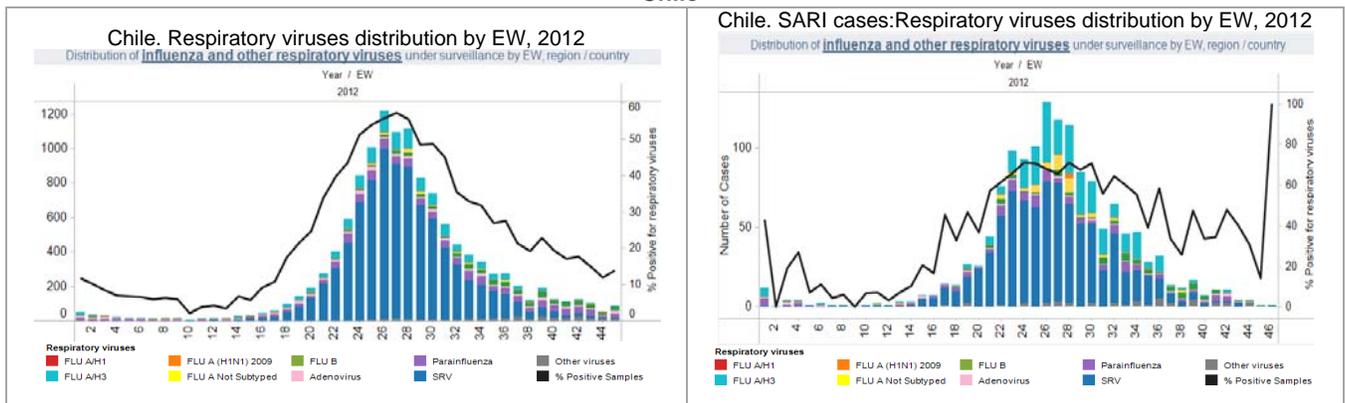
## Argentina



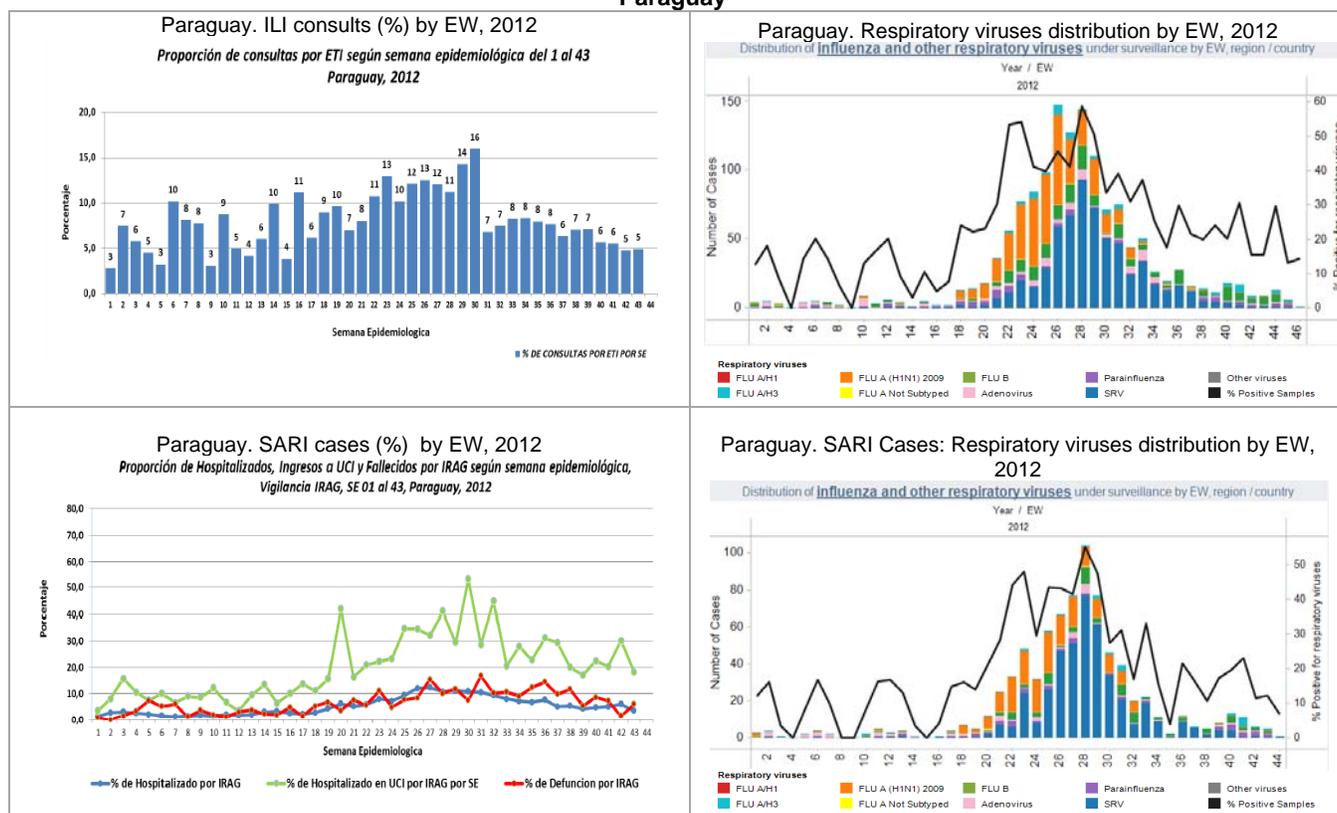
## Brazil



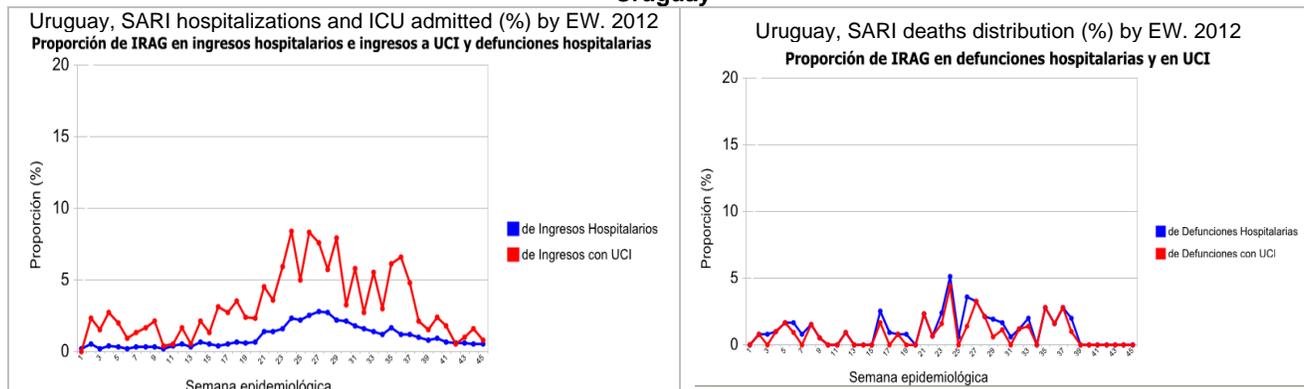
## Chile



## Paraguay



## Uruguay



1 FluWatch Report. EW 45. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

2 US Surveillance Summary. EW 45. Centers for Disease Control and Prevention

3 Surveillance de la grippe, Le point épidémiologique — N° 09 / 2012. Institut de Veille Sanitaire (11/14/2012)

4 Surveillance de la bronchiolite, Le point épidémiologique — N° 04 / 2012. Institut de Veille Sanitaire (11/15/2012)

5 Argentina. Actualización situación de enfermedades respiratorias 2012. SE 45.

6 Brasil. Boletim Informativo SE 45. [http://portalsaude.saude.gov.br/portalsaude/noticia/6184/785/boletim-informativo\\_-\\_influenza.html](http://portalsaude.saude.gov.br/portalsaude/noticia/6184/785/boletim-informativo_-_influenza.html)

7 Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública