



## Regional Update EW 28, 2012

Influenza  
(July 24, 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.

- In North America, influenza activity remained low.
- In Central America and the Caribbean there was a mixed circulation of respiratory viruses. In Cuba, influenza B predominated.
- In South America, respiratory disease activity has been increasing. In Ecuador and Peru, influenza B has been detected in the last few weeks. In Chile and Paraguay, SARI activity has been increasing and RSV has predominated. In Brazil this year, the greatest proportion of SARI cases have been identified in the south and southeast parts of the country with ~20% of all SARI cases being attributed to influenza A(H1N1)pdm09.

### Epidemiologic and virologic influenza update

#### North America

In Canada<sup>1</sup>, in epidemiological weeks (EW) 27 and 28, 2012, influenza activity remained low and continued to decline. In EW 28, the influenza-like illness (ILI) consultation rate was lower than the expected levels for this time of year. In EWs 27 and 28, among the total samples analyzed, the proportion of samples positive for influenza (0.7 and 0.8% respectively) decreased. In EWs 27 and 28, of the total cases positive for influenza, the percent positive for influenza A was 53.3%. Concerning other respiratory viruses, the percent positive for rhinovirus declined but remained the highest (19.1%) as compared to other respiratory viruses.

In the United States<sup>2</sup>, in EW 28, nationally, the proportion of ILI consultations (0.9%) was below the baseline (2.4%). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 28 (6.0%) was below the epidemic threshold for this time of year (6.7%). In EW 28, one pediatric death associated with influenza A/H3 was reported. Among all samples tested during EW 28 (n=974), the percentage of samples positive for influenza (5.3%) decreased as compared to the previous week. Nationally, among the positive samples, 40.4% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 59.6% were influenza B.

In Mexico, according to laboratory data, in EW 28, of the samples analyzed (n=23), only one case of influenza B was detected.

#### Caribbean

CAREC\*, in EW 28, received epidemiological information from 8 countries: Barbados, Belize, Jamaica, St. Lucia, St. Vincent & the Grenadines, Suriname and Trinidad & Tobago. In EW 28, the proportion of severe acute respiratory infection (SARI) hospitalizations was 2.4% which is the same as what was seen in the prior week. The rate of SARI admissions decreased or stayed the same in 4 of the 8 countries. Children aged 5-14 years had the highest rates of SARI hospitalization. Five SARI-related deaths were reported in EW 28, and case investigations are underway for these persons. RSV (Barbados), influenza A (H1N1)pdm09 (Bermuda, Jamaica), influenza A/H3 (St. Lucia, Suriname), parainfluenza (Trinidad and Tobago), and

\* Includes Barbados, Belize, Dominica, Jamaica, St. Vincent and the Grenadines, St. Lucia, Suriname and Trinidad and Tobago

adenovirus (St Vincents and the Grenadines) were detected. To date in 2012, the overall percentage positivity for samples tested was 39%, with a 21% positivity for influenza.

In Jamaica for EW 28, sentinel site data showed that the proportion of consultations for Acute Respiratory Illness (ARI) was 4.5% which was similar to the previous week. The proportion of admissions due to SARI was 0.9% which was the same as the week before. There were no SARI deaths reported for EW 28. There was laboratory detection of Influenza B in EW 28.

In Cuba, according to laboratory data in EW 28, among the samples analyzed (n=71), the percent positivity for respiratory viruses was 46.5% and the percent positive for influenza, among all samples analyzed, was 31%. Influenza B predominated.

In the Dominican Republic, according to laboratory data from EW 28, among the samples analyzed (n=12), the percent positivity for respiratory viruses was 33%. Adenovirus, parainfluenza, and RSV were detected

### *Central America*

In Costa Rica, in EW 28, according to laboratory data, among all samples tested (n=71), the percentage of positive samples for respiratory viruses was 45.1%, higher than the previous week (24.6%). Adenovirus and parainfluenza were the predominant circulating viruses, followed by influenza A(H3) and influenza B .

In Guatemala, in EW 27, according to laboratory data, among all samples tested (n=20), the percentage of positive samples for respiratory viruses was 20%, lower than the previous week (41%). Adenovirus, parainfluenza and other respiratory viruses were detected.

In Nicaragua, in EW 28, according to laboratory data, among all samples tested (n=102), the percentage of positive samples for respiratory viruses was 33.3%, higher than the previous week (25.7%). RSV was mainly detected, followed by influenza A(H1N1)pdm09, influenza A(H3) and influenza B .

In Panama, in EW 29, according to laboratory data, among all samples tested (n=10), the percentage of positive samples for respiratory viruses was 70%, lower than the previous week (90%). Influenza B, influenza A(H3), adenovirus and other viruses were detected.

### *South America – Andean*

In Santa Cruz, Bolivia, according to data from Cenetrop, viral circulation showed a small increase as compared to the previous week with a positivity of 18% in EW 28 among all samples analyzed (n=61), influenza A(H1N1)pdm09, parainfluenza, and RSV were detected.

In Ecuador, viral circulation has shown an increasing trend since EW 19. Of the samples analyzed (n=45), in the same week, the percent positivity was 36%, representing an increase with respect to the previous week with a predominance of influenza B (13/16). In EW 28, the proportions of hospitalizations for SARI and ICU admissions remained low and unchanged as compared to the previous week; no SARI associated deaths were reported this week. With respect to severity, since the beginning of the year, the highest proportion of hospitalizations, ICU admissions, and deaths associated with SARI were attributed to RSV.

In Peru at the national level, through EW 27, reports of ARI in children less than five years of age reached a rate of 510/100,000 population, continuing to remain lower than expected for this time of year. The ASI endemic channel in those less than five years of age remained in the upper limit of the success zone. The same behavior was observed for this age group for pneumonia cases. At the sub-national level, since the beginning of the year, all departments reported ARI rates in children less than five years of age to be below expected for this time of year. According to laboratory data, at the national level, in EW 27, among samples analyzed (n=58), the percent positivity was 14%, which was less than the prior week.

### *América del Sur – Cono Sur*

In Brazil<sup>3</sup>, as of EW 28, a total of 8,936 cases of SARI were reported of which 7.2% (n=648) died. Influenza accounted for 20.3% of the total SARI cases. A higher percentage of SARI cases were identified from the southern (59%, n=5247) and the southeast (33%, n=2914) regions.

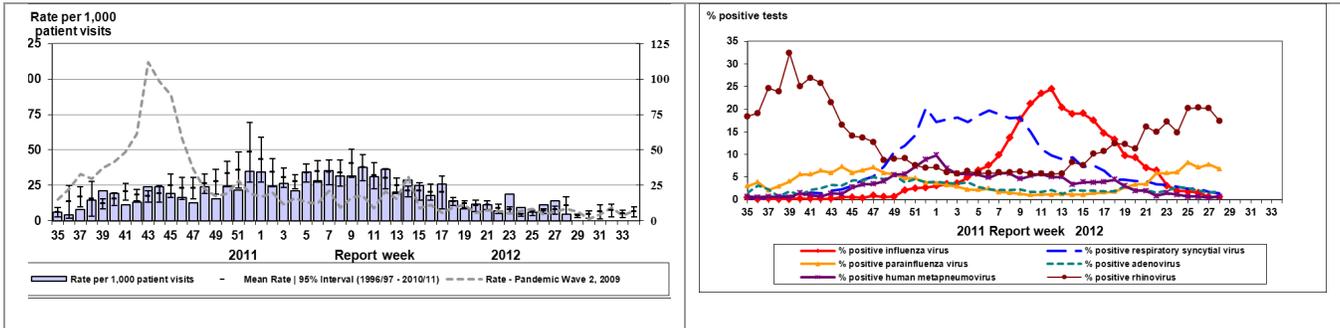
In Chile, in EW 28 at the national level, ILI activity decreased with respect to the previous week, remaining in the upper limit of the alert zone of the endemic channel (16.8/100,000 population). The percent of emergency visits for respiratory causes, showed a decrease and reached 32.9% in EW 28, but superseding values expected for this time of year. According to laboratory data at the national level, in the same week, among the samples analyzed (n=1,964), the percent positivity for respiratory viruses was 54.6%, which was lower than the previous week, with a predominance of RSV (81.7%). According to the SARI surveillance system, the proportion of hospitalizations also showed an increase since EW 19, reaching 5.9% in EW 27. In this week, there was an increase in the proportion of SARI-deaths. Among the samples from SARI cases (n=70), there was an increase in the percent positivity, reaching 85.7% in EW 27 with a predominance of RSV (67%).

In Paraguay, at the national level, in EW 28, the ILI rate (214/100,000 population) remained in the epidemic zone of the endemic channel, with an increasing trend, surpassing values for prior years. According to laboratory data, at the national level, in EW 28, among the samples analyzed (n=159), the positivity was 47.2%, with a predominance of RSV (52%); influenza A(H1N1)pdm09 (20%) and influenza B(17%) were also detected. In the SARI surveillance system, the proportion of hospitalizations continued to be 10% (n=1925) in the last three weeks; however, the SARI ICU admissions (42.4%) showed a significant increase with respect to the previous week. Since the beginning of the year, the total SARI deaths (n=101) of which 12 were confirmed for some respiratory virus, 9 of which were positive for influenza A(H1N1)pdm09. For the same week, among samples analyzed from SARI cases (n=43), the percent positivity for any respiratory virus (60.5%) was higher than the previous week with a predominance of RSV (23/26) among the positive samples.

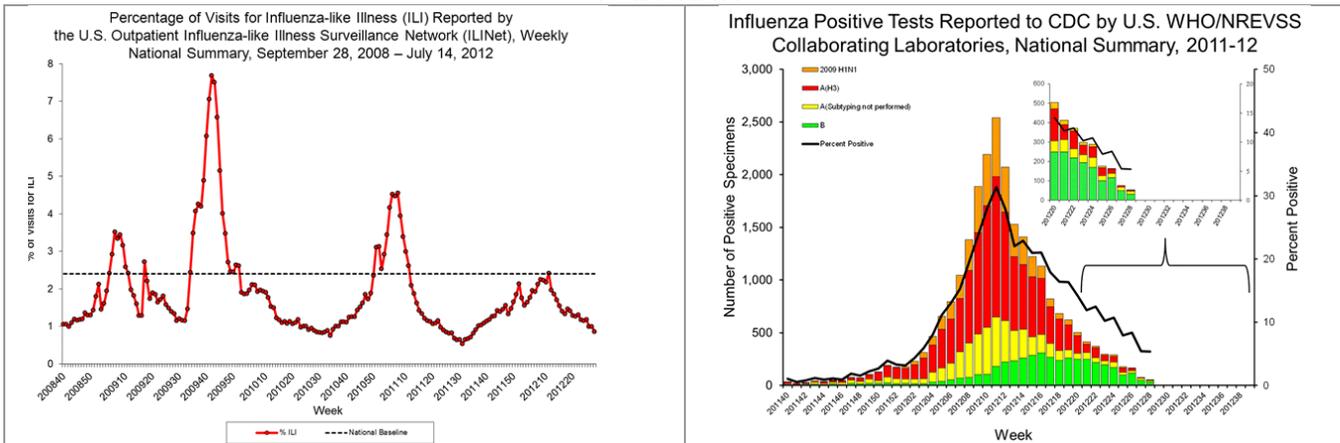
**Graphs**

**North America**

**Canada**

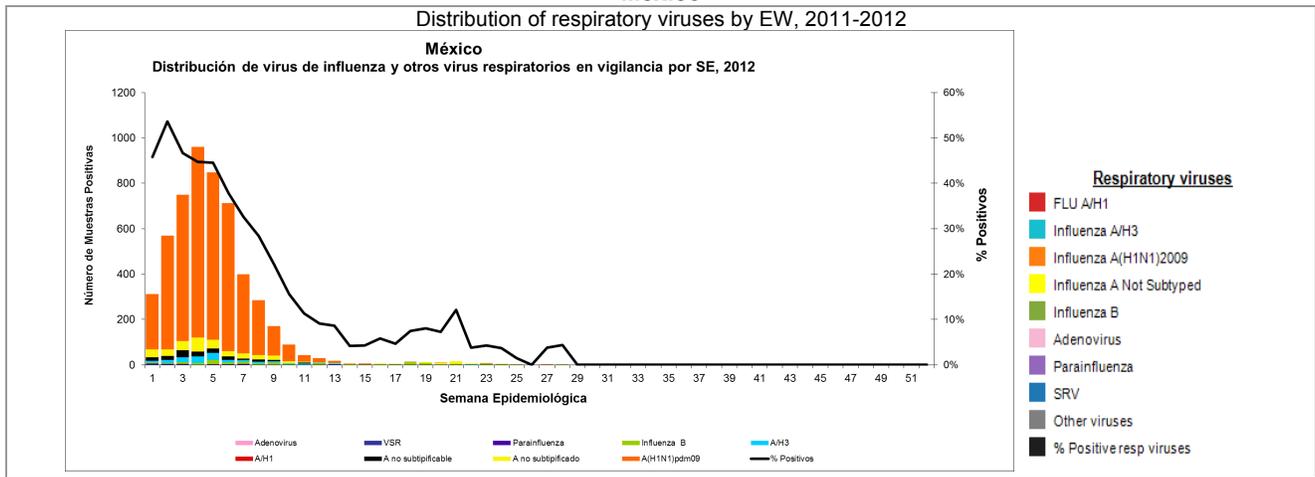


**United States**



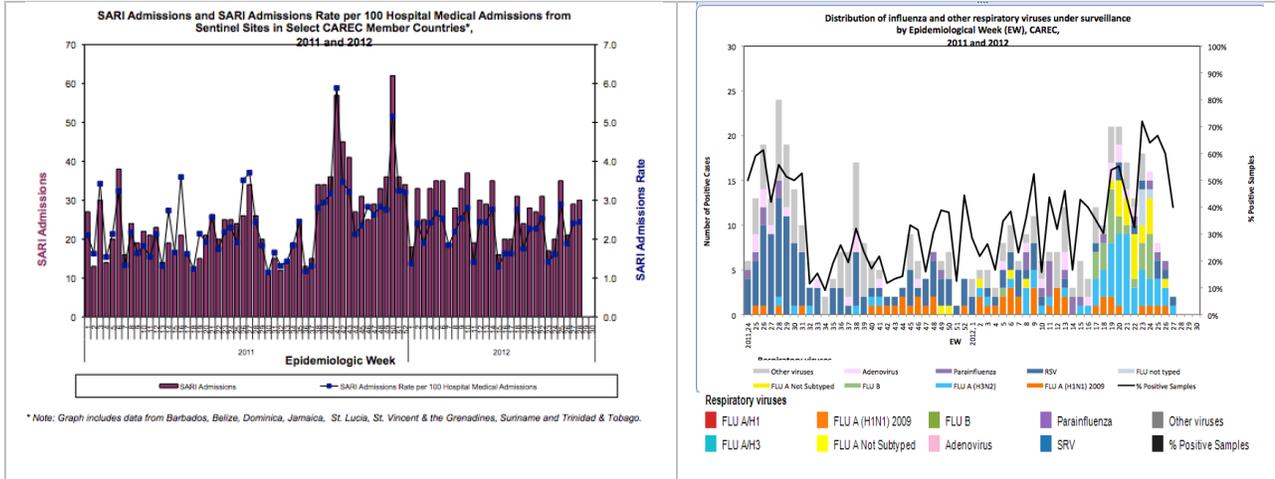
## Mexico

### Distribution of respiratory viruses by EW, 2011-2012

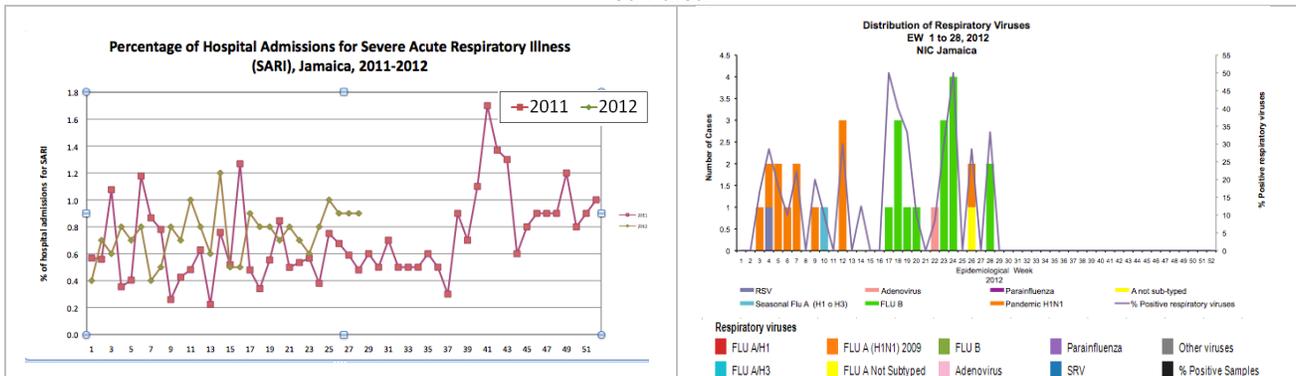


# Caribbean

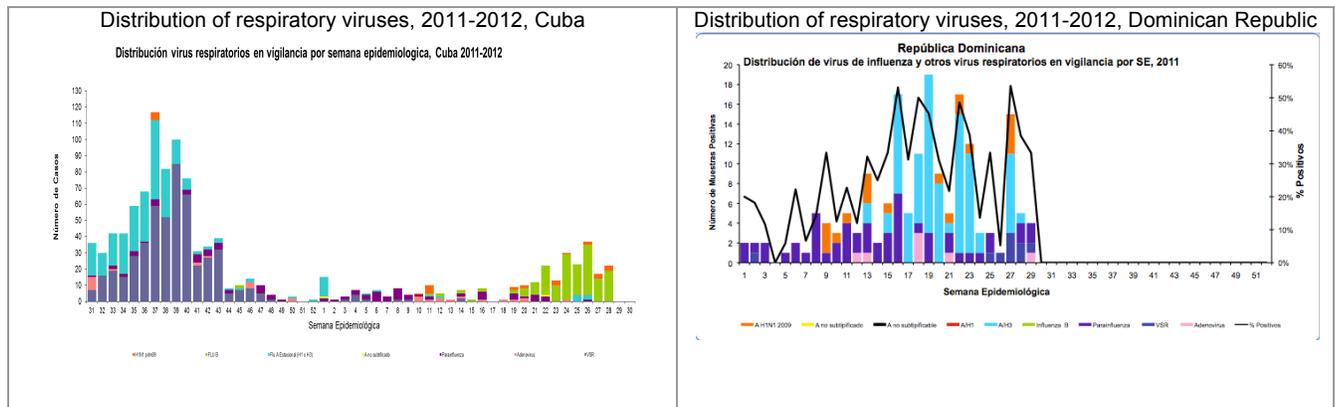
## CAREC



## Jamaica



## Cuba and Dominican Republic

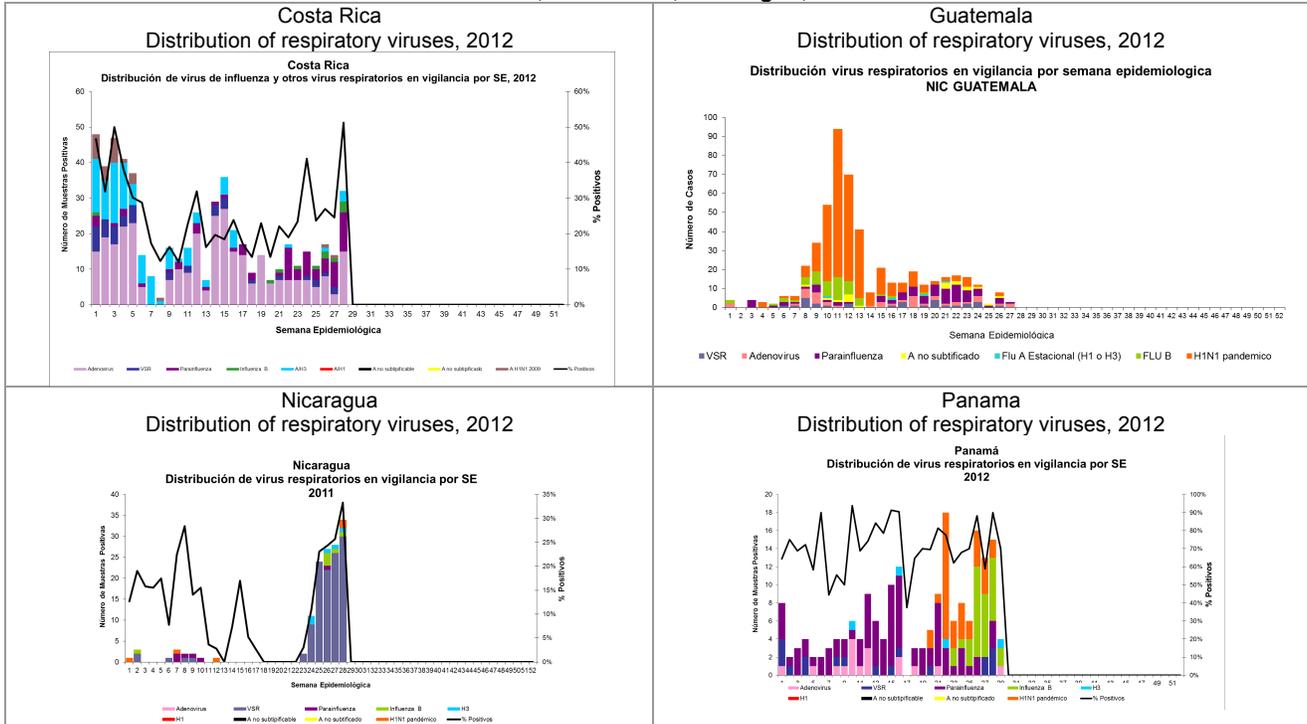


**Respiratory viruses**

- FLU A/H1
- FLU A/H3
- FLU A (H1N1) 2009
- FLU A Not Subtyped
- FLU B
- Adenovirus
- Parainfluenza
- SRV
- Other viruses
- % Positive Samples

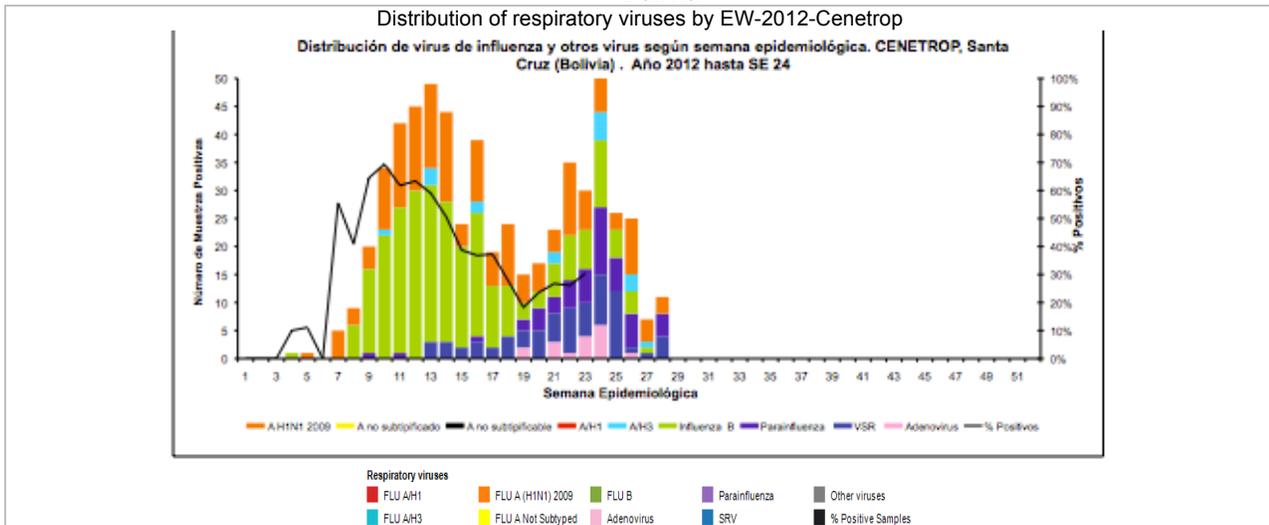
# Central America

## Costa Rica, Guatemala, Nicaragua, Panama



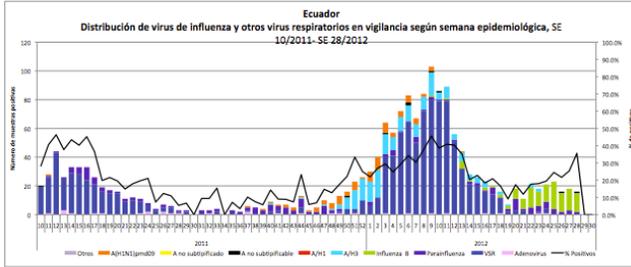
# South America - Andean

## Bolivia



## Ecuador

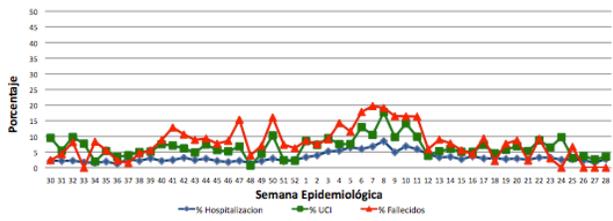
Distribution of respiratory viruses by EW 2011-2012



FUENTE: Sistema de Vigilancia Intensificada de IRAG  
ELABORADO: Dirección Nacional de Vigilancia Epidemiológica

### SARI Cases

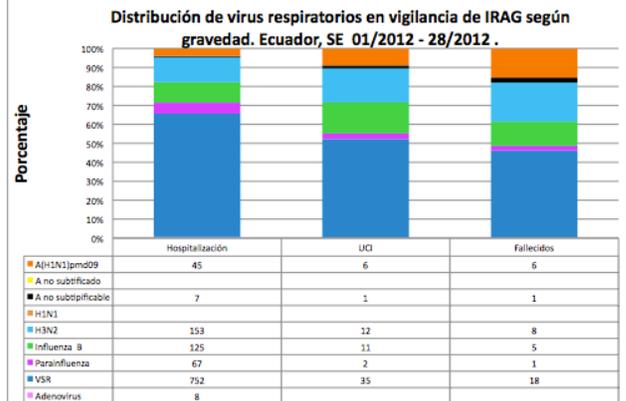
IRAG(%): hospitalizaciones, admisiones a UCI y Fallecidos. Ecuador, de la SE 30/2011 a SE 28/2012.



FUENTE: Sistema de Vigilancia Intensificada de IRAG  
ELABORADO: Dirección Nacional de Vigilancia Epidemiológica

SARI cases: Distribution of respiratory viruses by severity

Respiratory viruses  
 FLU AH1, FLU A (H1N1) 2009, FLU B, Parainfluenza, Other viruses, FLU AH3, FLU A Not Subtyped, Adenovirus, SRV, % Positive Samples

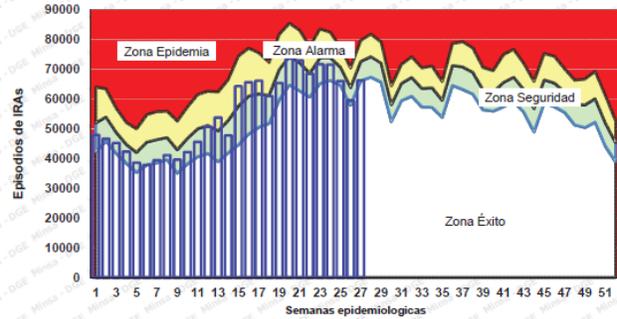


FUENTE: Sistema de Vigilancia Intensificada de IRAG  
ELABORADO: Dirección Nacional de Vigilancia Epidemiológica

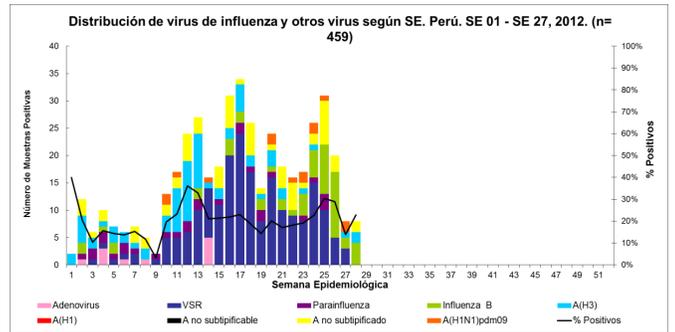
## Peru

### ARI Cases

Canal de Infecciones Respiratorias Agudas (IRA) en menores de 5 años, Perú 2012\*



Distribution of respiratory viruses by EW 2012

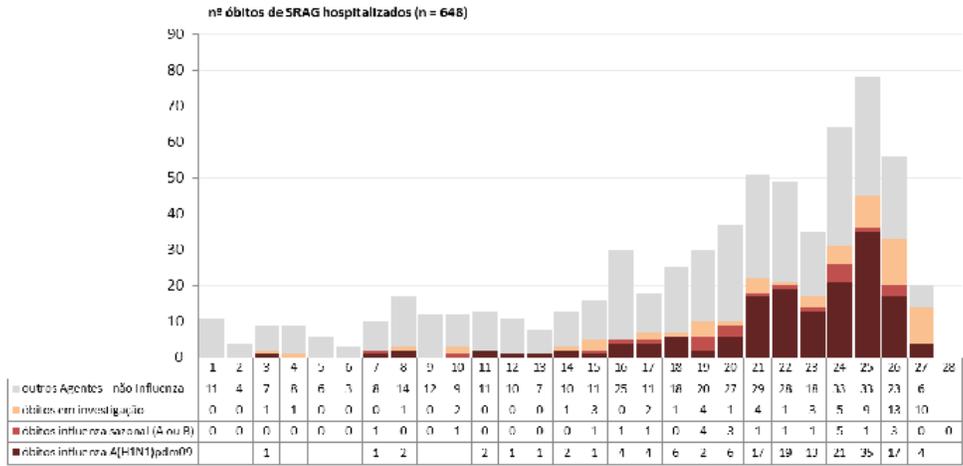


Respiratory viruses  
 FLU AH1, FLU A (H1N1) 2009, FLU B, Parainfluenza, Other viruses, FLU AH3, FLU A Not Subtyped, Adenovirus, SRV, % Positive Samples

# South America – Southern Cone

## Brazil

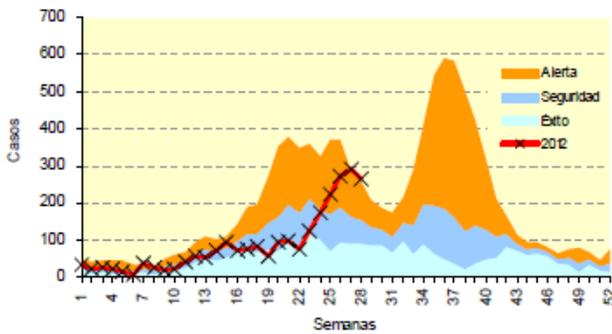
Distribution of deaths among SARI cases Brazil, through 12/07/2012.



## Chile

### ILI cases by EW 2012

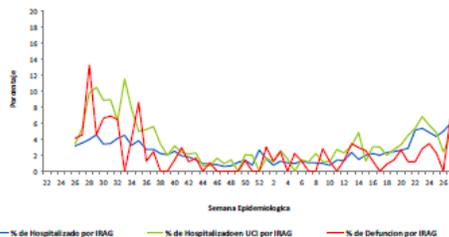
Canal endémico de Enfermedad Tipo Influenza según semana epidemiológica 2006-2011\*. Chile, 2012 (semana 1- 28)



Fuente: Vigilancia Centinela ETI. EPIDEMIOLOGIA-MINSAL \* Sin año 2009

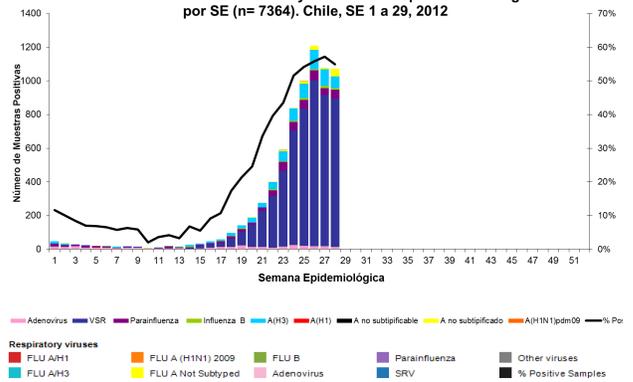
### SARI cases by EW 2012

Porcentaje de hospitalizados, ingreso a UCI y fallecidos por IRAG según SE. Chile, Hospitales Centinela. 2011 y SE 1-27 de 2012.



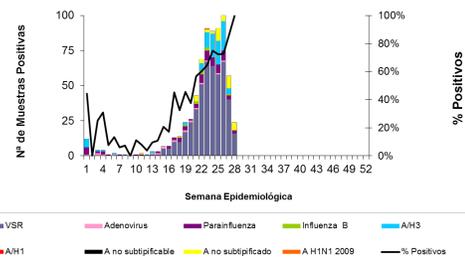
### Distribution of respiratory viruses by EW, 2011-2012

Distribución de virus de influenza y otros virus respiratorios en vigilancia por SE (n= 7364). Chile, SE 1 a 29, 2012



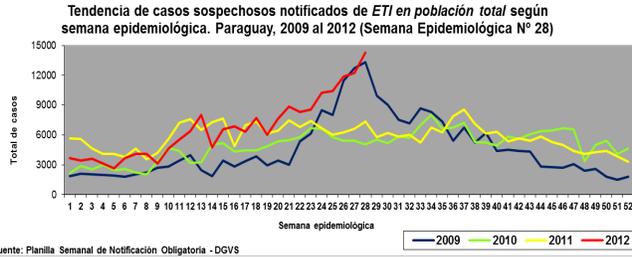
### SARI cases: Distribution of respiratory viruses by EW, 2012

Distribución de virus en casos de IRAG, según semana epidemiológica (n= 703). CHILE, SE 1 a 28\* de 2012.

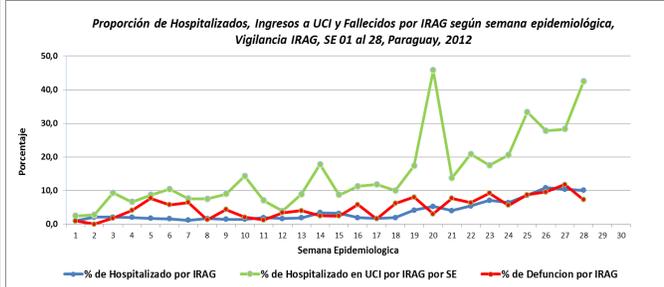


## Paraguay

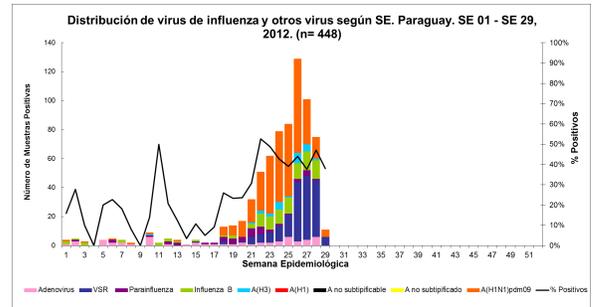
### ILI endemic channel



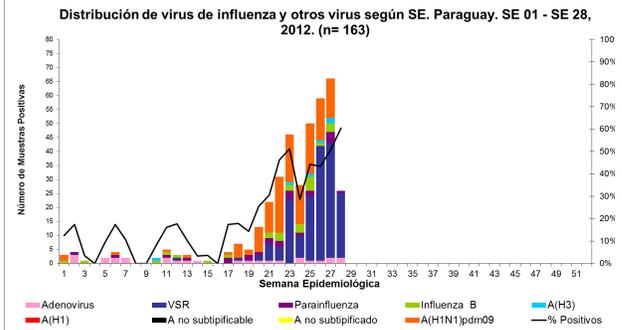
### SARI cases (%) by EW 2012



### Distribution of respiratory viruses by EW, 2012



### SARI cases: distribution of respiratory viruses by EW, 2012



- 1 FluWatch Report. EW 28. Available at <http://www.phac-aspc.gc.ca/fluwatch/>
- 2 US Surveillance Summary. EW 28. Centers for Disease Control and Prevention
- 3 [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)