



## Regional Update EW 10, 2012

Influenza

(March 20, 2012 - 14 h GMT; 14 h EST)

PAHO interactive influenza data: [http://ais.paho.org/hip/viz/ed\\_flu.asp](http://ais.paho.org/hip/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 increased in Canada and in some Regions of the United States; however, remained within the expected level for this time of year, while it declined in Mexico. Among influenza viruses, influenza B and influenza A(H3N2) were predominant in Canada and United States respectively; influenza A(H1N1)pmd09 in Mexico.
- In Central America and the Caribbean, influenza activity remained low or within the expected level for this period of time.
- In South America, influenza activity and acute respiratory illness activity remained low or within the expected level for this period of time.

### Epidemiologic and virologic influenza update

#### **North America**

In Canada<sup>1</sup>, in epidemiological week (EW) 10, 2012, influenza activity continued to increase. In EW 10, the influenza-like illness (ILI) consultation rate was similar to the previous week and remained within expected levels for this time of year. In EW 10, among the total samples analyzed (n=5,107), the proportion of samples positive for influenza (21.1%) increased as compared to the previous week. Of the total cases positive for influenza, the percent positive for influenza B (51.7%) surpassed the percent positivity for influenza A (48.3%). Concerning other respiratory viruses, the proportion of tests positive for RSV (14.5%) declined as compared to the previous week, and influenza was the most prevalent among all respiratory viruses detected. Among antigenically characterized influenza B viruses (n=312), 53.5% were similar to the 2011-12 Northern Hemisphere vaccine strain.

In the United States<sup>2</sup>, in EW 10, influenza activity remained relatively low, but was elevated in some parts of the country. At the national level, the proportion of ILI consultations (2.2%) remained below the national baseline (2.4%). Regions 5 (midwest part of the country), 7 (midwest part of the country), and 10 (northwest part of the country) reported ILI activity above their region-specific baselines and five states (Alabama, Arkansas, Kansas, Missouri, and Oklahoma) reported high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 10 (7.3%) was below the epidemic threshold for this time of year (7.9%). In EW 10, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 10 (n=4,742), the percentage of samples positive for influenza (23.2%) increased. Nationally, among the positive samples, 95.5% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 4.5% were influenza B. Of the antigenically characterized influenza B viruses (n=89), 44.9% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 55.1% were of the B/Yamagata lineage.

In Mexico, according to laboratory data, in EW 10, of the total samples analyzed, the proportion of samples positive for influenza decreased to 21.8%--which is the lowest that has been in 2012. Influenza A(H1N1)pdm09 was the predominant circulating virus.

## **Caribbean**

CAREC<sup>[1]</sup>, in EW 10, received epidemiological information from Barbados, Dominica, Jamaica, Suriname and Trinidad & Tobago. In EW 10, the SARI hospitalization rate was 1.6%, which was lower than the previous week (2%). The highest SARI hospitalization rate was reported among Children aged <6 months had the highest rate of SARI hospitalization (4.8% of hospitalized children in these age groups were SARI cases).. No SARI related deaths have been reported since EW 02, 2012. According to laboratory data, in the past four weeks, influenza A H1N1pdm09, influenza A H3N2, respiratory syncytial virus (RSV), parainfluenza and adenovirus have been confirmed.

In Cuba, according to laboratory data, in EW 10, among all samples tested (n=53), 17 % were positive for respiratory viruses; adenovirus, parainfluenza and influenza A(H1N1)pdm09 were the predominant respiratory virus detected.

In Dominican Republic, in 2012, through EW 11, among all samples tested (n=22), 22.7 % were positive for respiratory viruses; parainfluenza and influenza A(H1N1)pdm09 has been the predominant respiratory viruses detected.

## **Central America**

In Costa Rica, in EW 10, according to laboratory data, among all samples tested (n=108), the percentage of positive samples for respiratory viruses (12%) was higher than the previous week. Adenovirus, parainfluenza and influenza A(H3N2) viruses were detected.

In Guatemala, in EW 10, according to laboratory data, among all samples tested (n=109), the percentage of positive samples for respiratory viruses was 27.5%, slightly lower than the previous week ( 34.3%), being detected influenza A(H1N1) pdm09 (53.3%), influenza B (16.7%) and other virus (~1%).

In Honduras, in EW 10, the proportion of ILI consultations (4.9%) presented an increased trend in comparison with the previous EW(5.6%). The proportion of SARI hospitalizations (8.4%) was higher than the previous EW (3.6%). In the EW 10, the case-fatality from SARI in the sentinel unit of San Pedro Sula (Honduran Social Security Institute) in this week is 20.0% (1/5), while in the unit of Tegucigalpa (Cardiopulmonary National Institute) is 80.0% (4/5). According to laboratory data, in EW 10, among all samples tested (n=12), the percentage of positive samples to respiratory viruses was of 33.3%, being detected influenza A(H1N1) pdm 09 (50%) and other viruses (16.7%).

In Panama, through EW 10, all the tested samples (n=3), were positive for respiratory viruses. Influenza viruses were not detected.

## **South America – Andean**

In Bolivia, in Santa Cruz, according to CENETROP laboratory data in EW 10, among all samples tested (n=30), influenza B (67%) and influenza A(H1N1)pdm09(30%) viruses were detected.

In Peru<sup>3</sup>, at the national level in 2012 up to the EW 09, 375,001 ARI cases in children under 5 were reported, 26% less than the average reported in the last 5 years. According to the ARI and pneumonia epidemic channels in children under 5 years old in EW 09, were within what is expected for this time of the year and does not become evident increasing trend in comparison with what was reported in previous years.

In Venezuela<sup>4</sup>, in EW 09, the ARI and pneumonia endemic channels show a slight increasing trend in comparison with the previous EW; the children <7 year of age was the most affected group for acute respiratory illness, mainly in Zulia and Miranda federal states. According to laboratory data, from 1 January up to 9 March, among all samples tested (n=363), the percentage of positive samples for respiratory viruses

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<sup>[1]</sup> Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago

was 6.3%. Among the positive samples, 65.2% were influenza A(H3N2), 26.1% was SRV and influenza A(H1N1) pdm09 (8.7%).

**South America – Southern Cone**

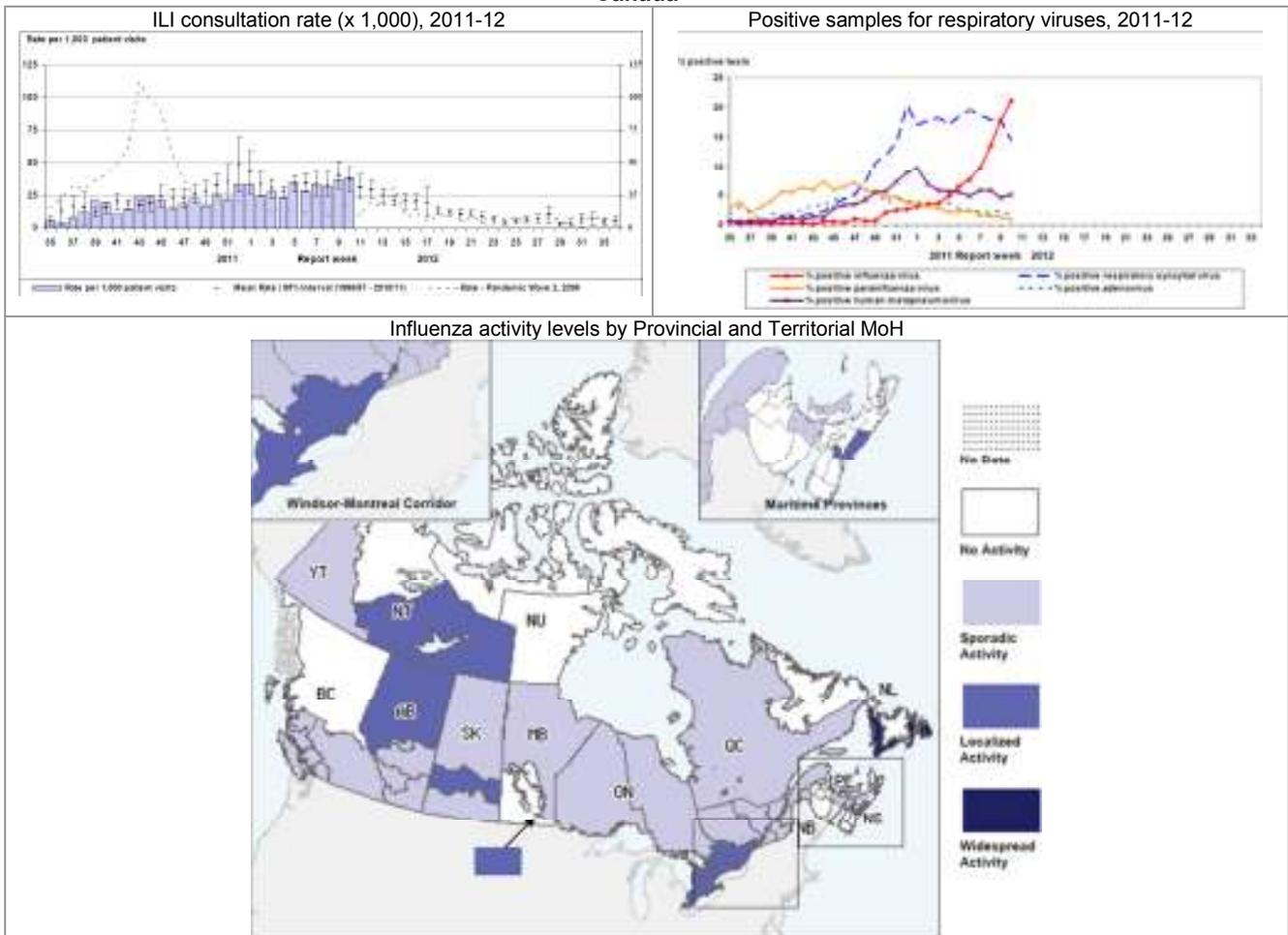
In Chile<sup>5</sup>, in EW 10, the proportions of SARI hospitalization and SARI ICU admissions remained under 5%. No deaths related to SARI were reported. According to laboratory data, up to the EW 10, at national level, among all the samples tested (n=242), the percent of positivity for respiratory viruses was 2.1%; remaining adenovirus as predominant virus detected. For SARI surveillance, in the EW 10, of the processed samples (n= 9), respiratory viruses were no detected.

In Paraguay<sup>6</sup>, up to the EW 10, ILI activity (7.8%) increased with respect to the EW 09 (2.9%). In EW 10, the proportion of SARI hospitalizations, and deaths remained under 10%, nevertheless SARI ICU admissions(17.9%) increased with respect to the EW 09(4.8%). According to laboratory data, in 2012, up to the SE 10, among all samples tested(n=20), respiratory viruses were not detected..

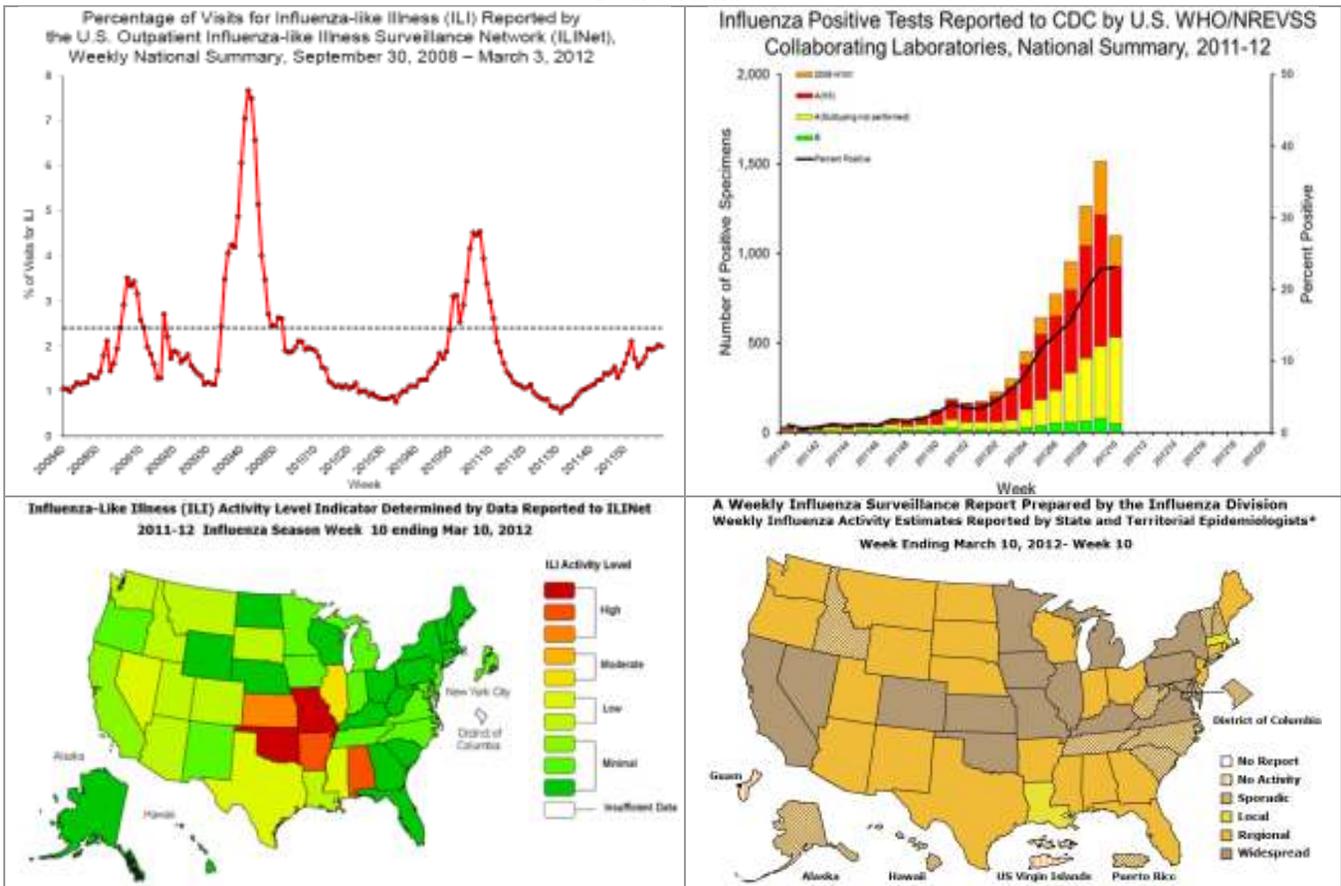
**Graphs**

**North America**

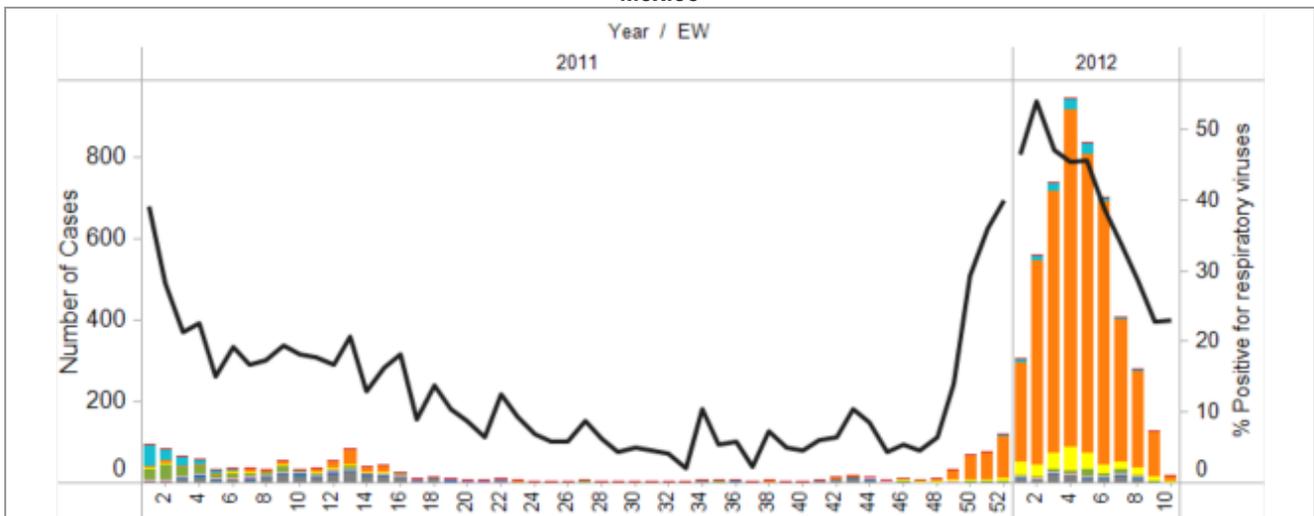
**Canada**



### United States

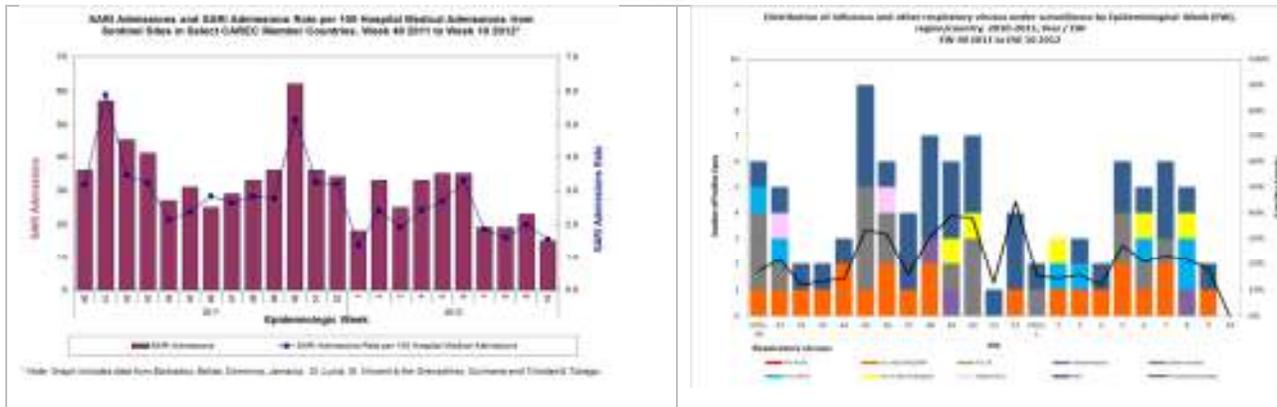


### Mexico

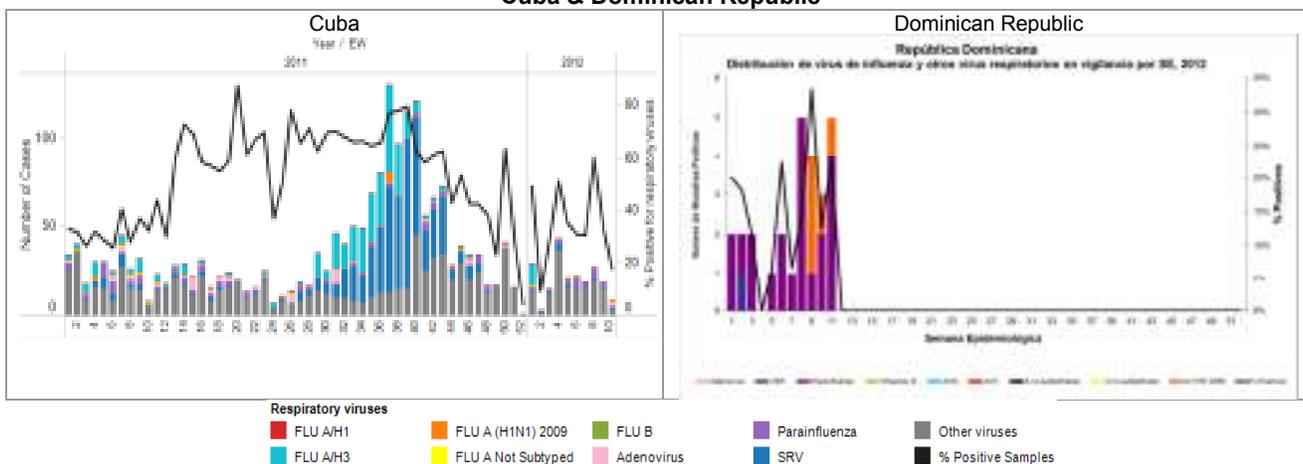


# Caribbean

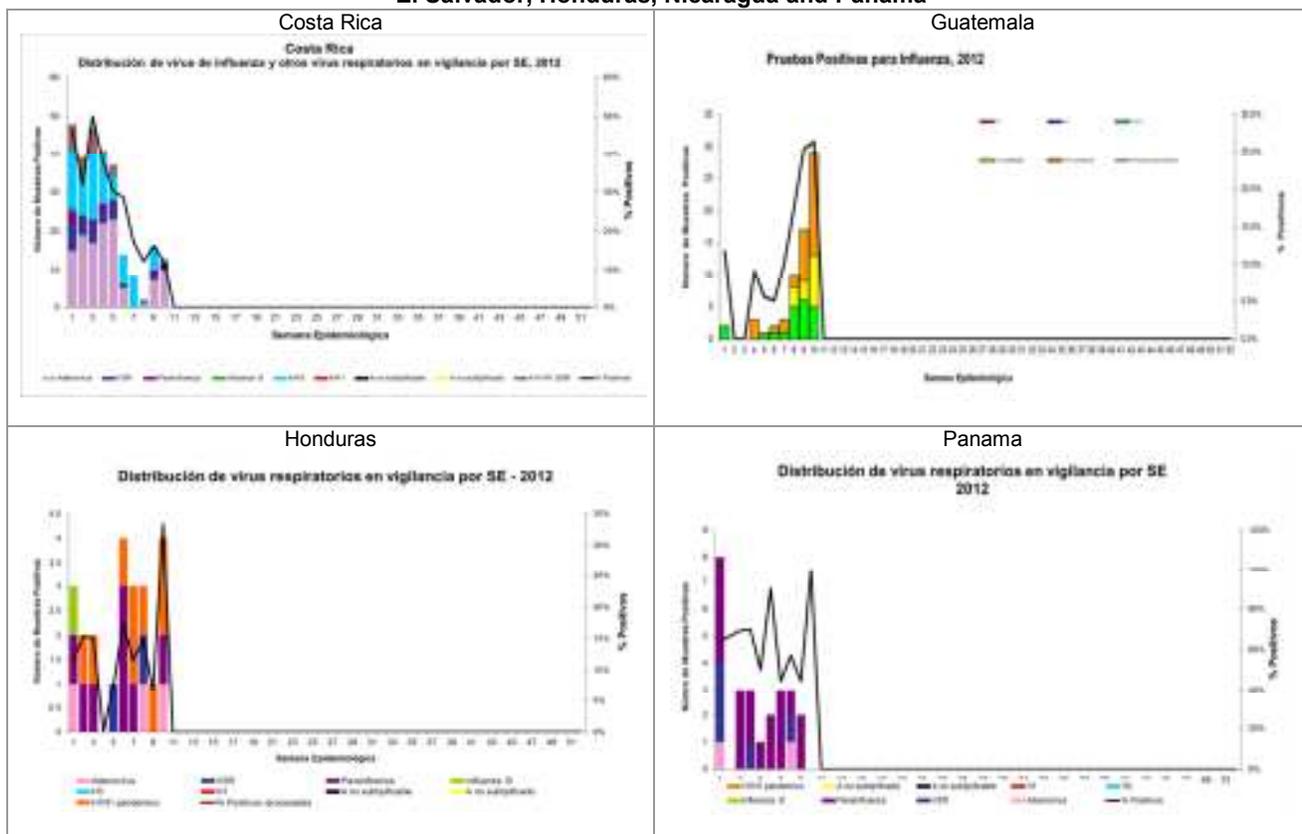
## CAREC



## Cuba & Dominican Republic



El Salvador, Honduras, Nicaragua and Panama

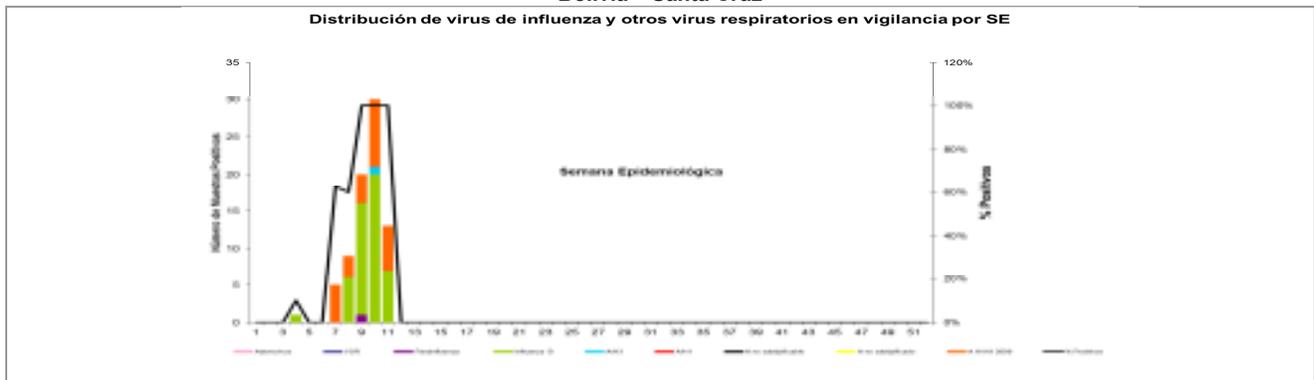


Respiratory viruses

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

# South America - Andean

## Bolivia – Santa Cruz



## Peru

ARI endemic channel in children <5 years by EW. 2012

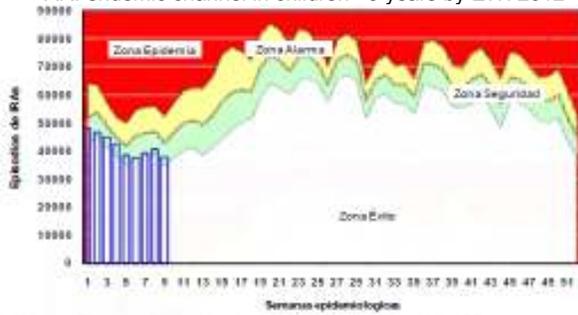


Figura 1: Canal endémico de Episodios de IRA en menores de 5 años. Perú 2012

Pneumonia endemic channel in children <5years by EW. 2012

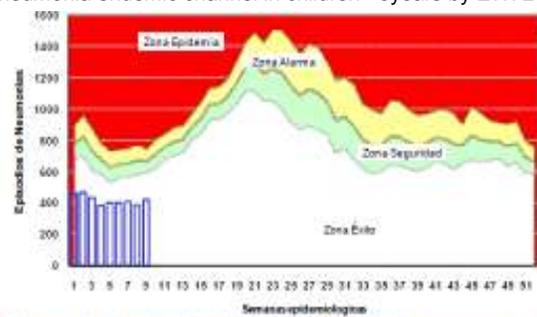
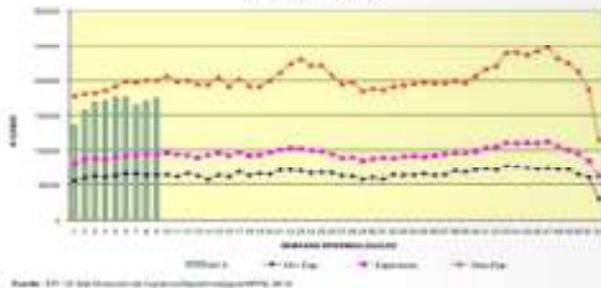


Figura 2: Canal endémico de Episodios de neumonías en menores de 5 años. Perú 2012

## Venezuela

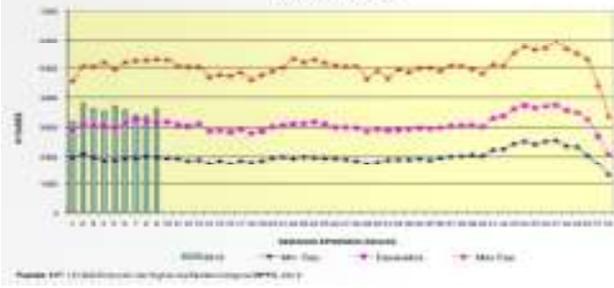
ARI endemic channel

Gráfico N° 01  
Infecciones respiratorias agudas  
Canal endémico 2005 - 2012  
Venezuela, 2012



Pneumonia endemic channel

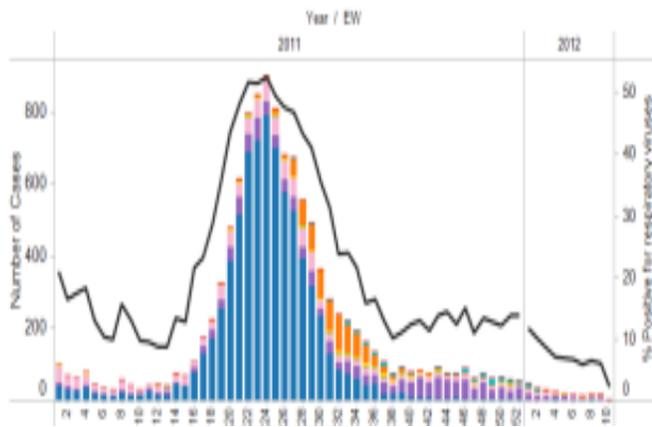
Gráfico N° 04  
Neumonías  
Canal endémico 2005 - 2012  
Venezuela, 2012



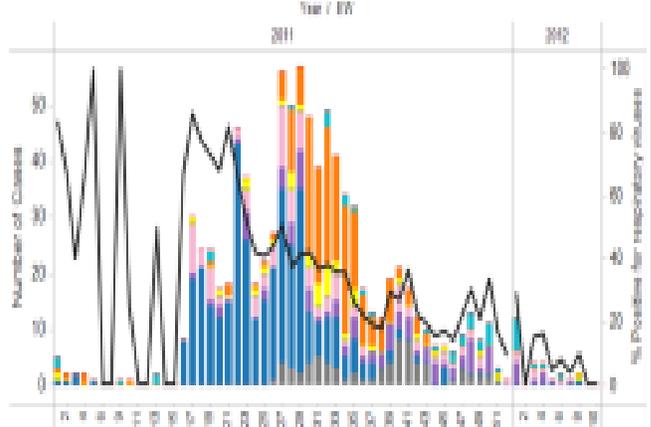
# South America – Southern Cone

## Chile

Influenza and other respiratory viruses, 2011-2012



SARI cases: distribution of respiratory viruses by EW, 2011-2012

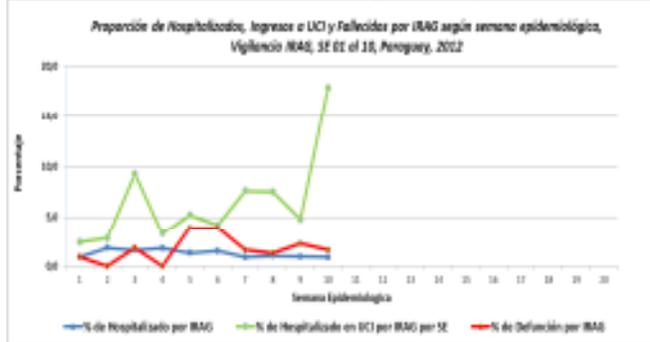


Percentage of SARI hospitalizations, ICU admissions and deaths, according to EW. Chile, Sentinel Hospitals.



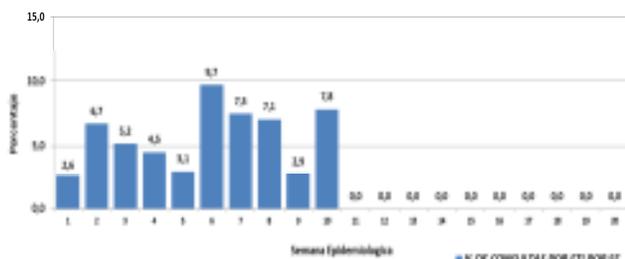
## Paraguay

SARI cases: distribution of respiratory viruses by EW, 2011-2012



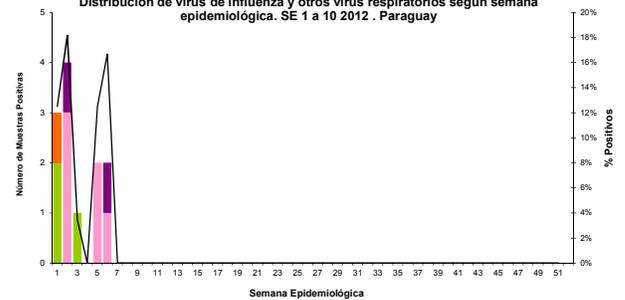
ILI cases

Proporción de consultas por ETI según semana epidemiológica del 1 al 10 Paraguay, 2012



Flu viruses

Vigilancia intensificada IRAG. Distribución de virus de influenza y otros virus respiratorios según semana epidemiológica. SE 1 a 10 2012. Paraguay



- Respiratory viruses:
  - FLU A/H1 (red)
  - FLU A (H1N1) 2009 (orange)
  - FLU B (green)
  - FLU A/H3 (cyan)
  - FLU A Not Subtyped (yellow)
  - Adenovirus (pink)
  - SRV (blue)
  - Parainfluenza (purple)
  - Other viruses (grey)
  - % Positive Samples (black)

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<sup>1</sup>FluWatch Report. EW 10. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

<sup>2</sup>US Surveillance Summary. EW 10. Centers for Disease Control and Prevention

<sup>3</sup>Perú. Sala de Situación de Salud. SE 09. Ministerio de Salud. Dirección General de Epidemiología

<sup>4</sup>Venezuela. Boletín epidemiológico - SE 09. Ministerio del Poder Popular para la Salud. Disponible en:

[http://www.mpps.gob.ve/index.php?option=com\\_content&view=article&id=549&Itemid=915](http://www.mpps.gob.ve/index.php?option=com_content&view=article&id=549&Itemid=915)

<sup>5</sup>Chile. Informe de situación. SE 10. Available at: [www.pandemia.cl](http://www.pandemia.cl)

<sup>6</sup>Paraguay. Boletín epidemiológico semanal SE 10. Available at:

[http://www.vigisalud.gov.py/index.php?option=com\\_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86](http://www.vigisalud.gov.py/index.php?option=com_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86)