



## Regional Update EW 13

Influenza  
(April 12, 2011 - 17 h GMT; 12 h EST)

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.

- Influenza activity has declined in most of Canada, localized influenza activity was reported in parts of Saskatchewan, Ontario, Quebec and the Atlantic; influenza B continued to increase steadily in most regions of the country except the Atlantic provinces and now accounts for almost half of the positive tests for influenza. In the United States, all ten regions reported ILI activity to be under the baseline, however the proportion of deaths attributed to pneumonia and influenza continued to be above the epidemic threshold; there has been a co-circulation of influenza A and B during the second half of the influenza season. In Mexico, an influenza A/H1N1 2009 outbreak was reported in Chihuahua (border with US), the genetic sequencing reported that the virus is homologous to the one that is currently circulating worldwide; nationally, there has been a co-circulation of influenza A and B.
- Influenza activity in Central America and the Caribbean remained low. There has been a co-circulation of influenza A and B.
- Most of countries in the Andean Region and the Southern Cone reported respiratory illness activity within the expected levels. Venezuela reported an increase of confirmed influenza A/H1N1 2009 cases in Merida, Miranda and Capital District between EWs 11-13. Paraguay reported an increased ILI activity between EWs 10-12; the respiratory syncytial virus (RSV) has been the predominant circulating respiratory virus in the last 8 EWs.

### Epidemiologic and virologic influenza update

#### *North America*

In Canada<sup>1</sup>, in epidemiological week (EW) 13, localized influenza activity was reported in parts of Saskatchewan, Ontario, Quebec and the Atlantic provinces. In EW 13, the national influenza-like illness (ILI) consultation rate remained similar to the prior week and was within expected rates for this time of year. Children under 5 years of age had the highest ILI consultation rates (77 per 1,000 consultations). There was a decrease in the number of influenza and ILI outbreaks reported this week, as compared to the previous weeks. In EW 13, the percentage of samples positive for influenza was 11.4%, similar to the prior week (11.3%); 53% of influenza-positive samples were influenza A and 47% were influenza B. In week 13, the number of influenza B cases continued to increase in most regions of the country except in the Atlantic provinces. Among the other respiratory viruses, the proportion of specimens positive for respiratory syncytial virus (RSV) decreased from 17.1% (EW 12) to 12.8% and appears to have peaked in EW 07.

On March 24, Mexico reported an influenza A outbreak in the state of Chihuahua (northern part of Mexico). Two cities are primarily affected: Juarez and Chihuahua. Between March 22 and April 6, there have been 163 cumulative cases of ILI and severe acute respiratory infection (SARI) identified (29% of which were confirmed to be influenza A/H1N1 2009) and seven deaths (all adults, previously healthy, including one pregnant woman), of which six were confirmed to have influenza A/H1N1 2009. The genetic sequencing of the first three pandemic (H1N1) 2009 influenza cases (two fatal cases and one mild) reported that the virus is homologous to the one that is currently circulating worldwide. Thus far, there is no evidence that the influenza strains identified have mutations that confer greater virulence or antiviral resistance. This outbreak occurred along the US-Mexico border region and has not been associated with excessive demand of the health services. Based on virological data, in EW 13, among all samples tested, the percent positivity for influenza viruses was 17%, which represents an increase as compared to EW 12 (9%). The predominant circulating respiratory virus has been influenza A/H1N1 2009 in the last 3 EWs, followed by influenza B.

In the United States<sup>2</sup>, in EW 13, at the national level, the proportion of outpatient consultations for ILI (1.6%) was below the national baseline and decreased as compared to EW 12 (2.0%). At the regional level, all ten regions reported ILI activity to be below their region-specific baseline. However, the proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold. Two influenza-associated pediatric deaths were reported this week. During EW 13, 11% of samples tested were positive for influenza [influenza type B (31.8%), unsubtype influenza A (25.3%), influenza A/H3 (26.5%) and influenza A/H1N1 2009 (16.3%)]. Of characterized influenza B viruses, 94.3% belong to the B/Victoria lineage and 5.7% belong to the B/Yamagata lineage.

### *Caribbean*

In Cuba, in EW 13, among all samples tested, the percent positivity for respiratory viruses was ~60% and the percent positivity for influenza viruses was ~4%. Based on the laboratory data, to date in 2011, influenza A/H3 has been the predominant influenza virus circulating and rhinovirus was the predominant respiratory virus detected.

In the Dominican Republic, in EW 14, the percent positivity for influenza (~10%) remained similar to EW 13. To date in 2011, parainfluenza has been the primary respiratory virus circulating. Influenza A/H1N1 2009 has been the predominant influenza virus in the last 2 EWs.

In Jamaica for EW 13, sentinel site data showed that the proportion of consultations for Acute Respiratory Illness (ARI) decreased by 0.1% compared to the previous week. The proportion of SARI admissions was less than 1% and remained stable compared to the previous week. There were no SARI deaths reported for EW 13. The percentage of samples positive for influenza was 10% which represents a decrease compared to the previous week (22%). Influenza type B has remained the predominant influenza virus circulating (EW 05 to EW 13).

### *Central America*

Influenza activity in this region has remained low in 2011.

In Costa Rica, in EW 14, among all samples tested, the percent positivity for respiratory viruses was ~45% and the percent positivity for influenza viruses was ~3%. To date in 2011, influenza B has been the primary influenza virus circulating, while adenovirus has been the primary respiratory virus circulating.

In Honduras<sup>3</sup>, in EW 13, the proportion of ILI consultations was 6.2% (645/10,353), slightly higher to the prior week (5.8%). The proportion of SARI hospitalizations was 5.86% (57/972), similar to the previous week (5.7%). No SARI deaths were reported this week, according to the data reported by the sentinel units in San Pedro Sula and Tegucigalpa. To date in 2011, small numbers of respiratory viruses have been detected. In the EW 12, one influenza A/H1N1 2009 case was detected. In EW 13, no respiratory viruses were detected.

In Panama, to date in 2011, adenovirus, parainfluenza and RSV have been co-circulating. No influenza viruses have been detected since EW 04.

### *South America – Andean*

In Colombia<sup>4</sup>, in EW 11, the number of ILI consultations (~100) decreased as compared to previous weeks (~200). The number of SARI hospitalizations showed a decreasing trend in the last 5 EWs, and remained lower than the number of SARI cases observed in the same period in 2010. To date in 2011, there has been a co-circulation of multiple respiratory viruses, with influenza A/H3 being the predominant influenza virus, followed by influenza A/H1N1 2009 (principally reported in the departments of Nariño, Valle and the district of Bogota).

In Ecuador, in EW 13, the percentage of samples positive for respiratory viruses was ~40% and the percentage of samples positive for influenza showed a decreasing trend in the last 5 EWs. No influenza viruses were detected in EW 13. In the beginning of 2011, influenza A/H3 and influenza A/H1N1 2009 were co-circulating; however, RSV has been the predominant respiratory virus in circulation during the last 5 EWs.

In Peru<sup>5</sup>, in EW 12, the ARI activity and the pneumonia activity in children under 5 years of age were higher than the levels observed during the prior week; however, both indicators remained within the endemic

channel for this time of year. Regionally, to date in 2011, the highest pneumonia rates were observed in some departments in the jungle (Madre de Dios, Loreto and Amazonas) and in Callao (coast).

In Venezuela<sup>6</sup>, up to April 10<sup>th</sup> in 2011, there have been detected 1260 cases confirmed with influenza A/H1N1 2009, including 12 deaths. All deaths occurred in people with comorbidities as diabetes, asthma, hypertension, smoking and obesity. The states that presented the highest numbers of cases were Merida, Miranda and Capital District. Most of the confirmed cases had the symptoms onset in EWs 11, 12 and 13. In EW 14 fewer number of confirmed influenza cases were reported. According to the weekly epidemiological report, in EW 11, the number of ARI cases slightly increased as compared to the two previous weeks and the number of pneumonia cases remained similar to the prior week. ARI and pneumonia cases remained within the expected counts for this time of year. The highest rates for both ARI and pneumonia were observed in those less than one year of age. Up to April 10<sup>th</sup> in 2011, among the hospitalized SARI cases (n=771), 33.1% of samples tested were positive for influenza [influenza A/H1N1 2009 (60.8%), unsubtype influenza A (21.2%), influenza A/H3 (17.3%) and influenza type B (1%)].

**South America – Southern Cone**

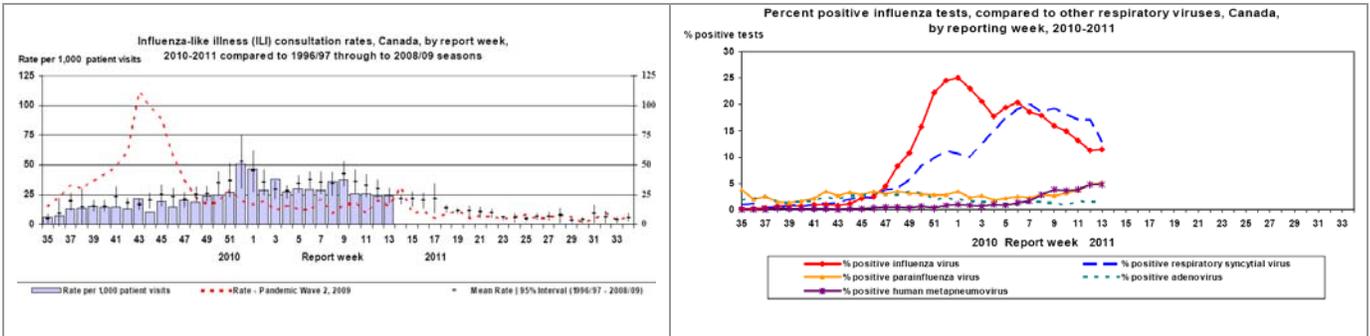
In Paraguay<sup>7</sup>, in EW 13, the number of ILI consultations was above the endemic channel but lower than what was observed in the prior week. The number of SARI hospitalizations and ICU admissions increased in EWs 10 & 11, as compared to previous weeks. Based on virological data, influenza A/H3N2 was the predominant influenza virus during the beginning of 2011; however, RSV has been the predominant circulating respiratory virus in the last 8 EWs. No influenza viruses have been detected since EW 11.

In Uruguay<sup>8</sup>, from EW 01 – 14, the proportion of SARI cases among the total number of hospitalizations, ICU admissions, and deaths associated with SARI, remained low (<2%).

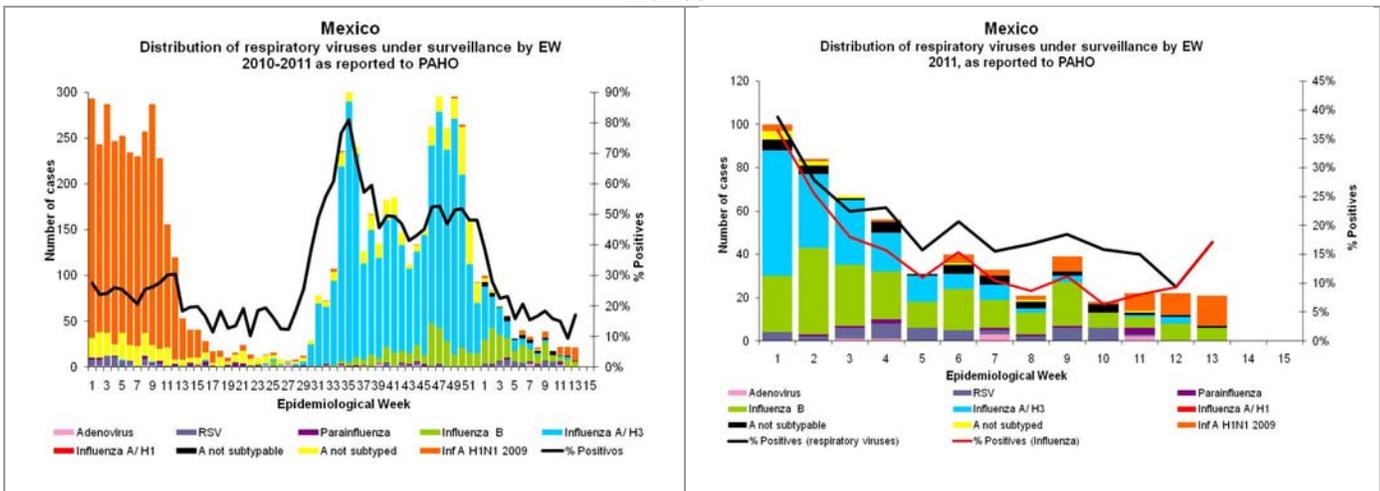
**Graphs**

**North America**

**Canada**

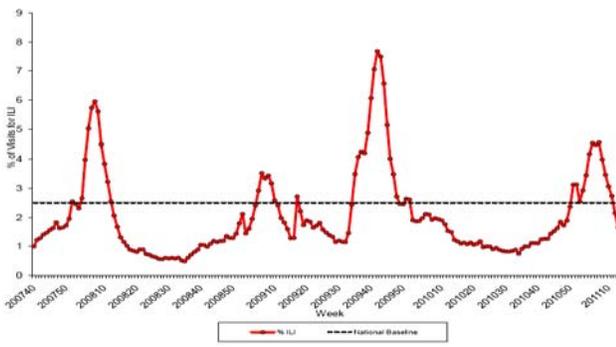


**Mexico**

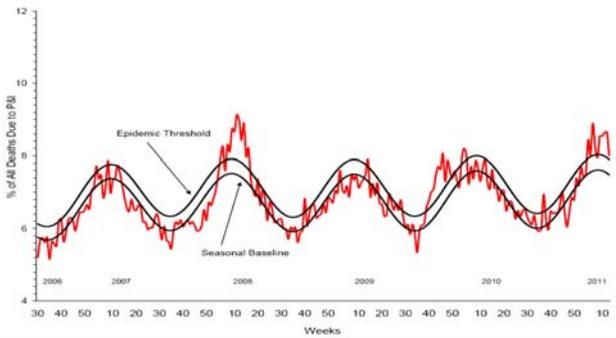


## United States

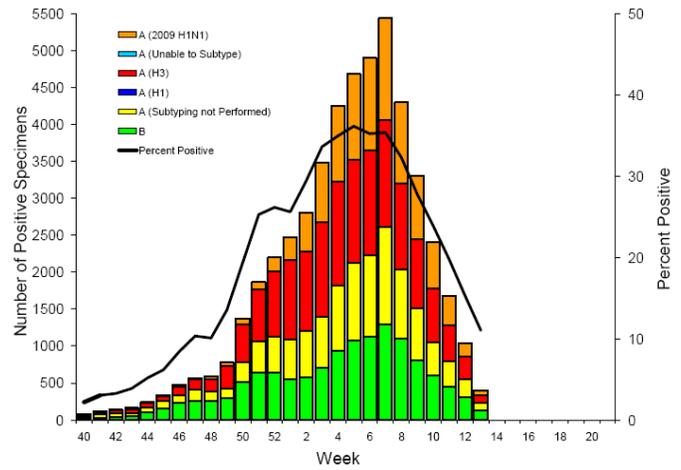
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2007 – April 2, 2011



Pneumonia and Influenza Mortality for 122 U.S. Cities Week ending 4/2/2011



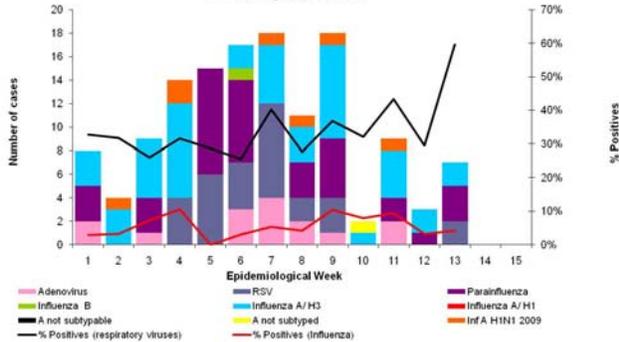
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2010-11 Season



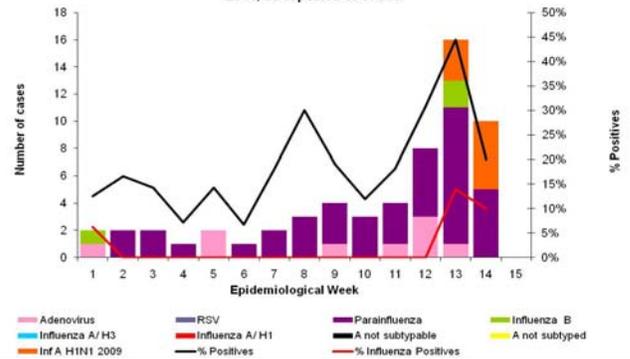
## Caribbean

### Cuba and Dominican Republic

**Cuba**  
Distribution of respiratory viruses under surveillance by EW 2011, as reported to PAHO

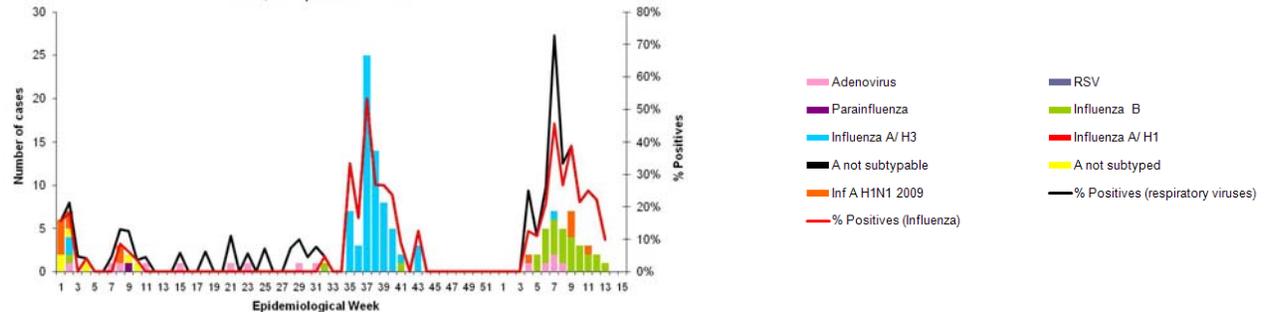


**Dominican Republic**  
Distribution of respiratory viruses under surveillance by EW 2011, as reported to PAHO



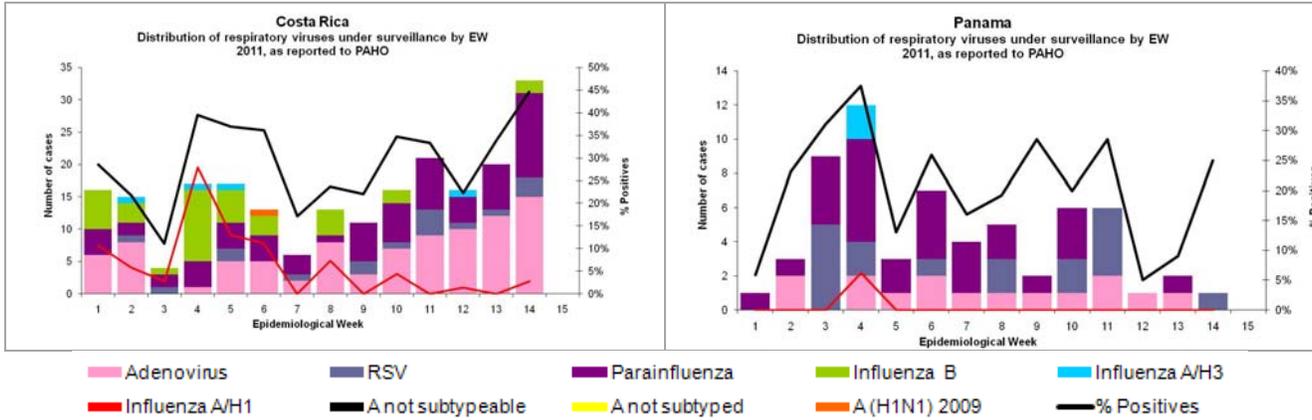
### Jamaica

**Jamaica**  
Distribution of respiratory viruses under surveillance by EW 2011, as reported to PAHO

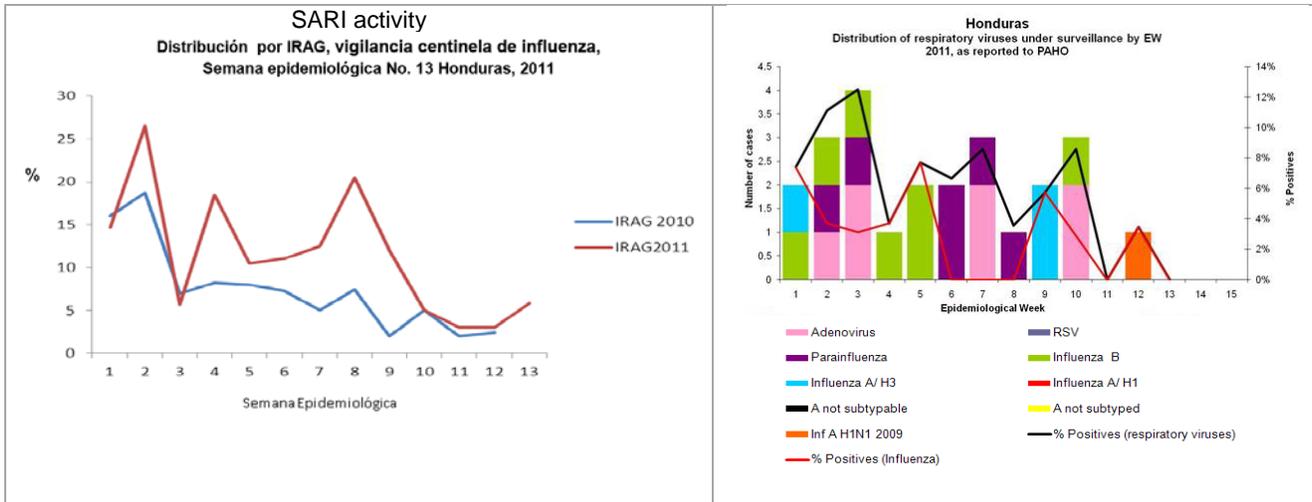


# Central America

## Costa Rica and Panama

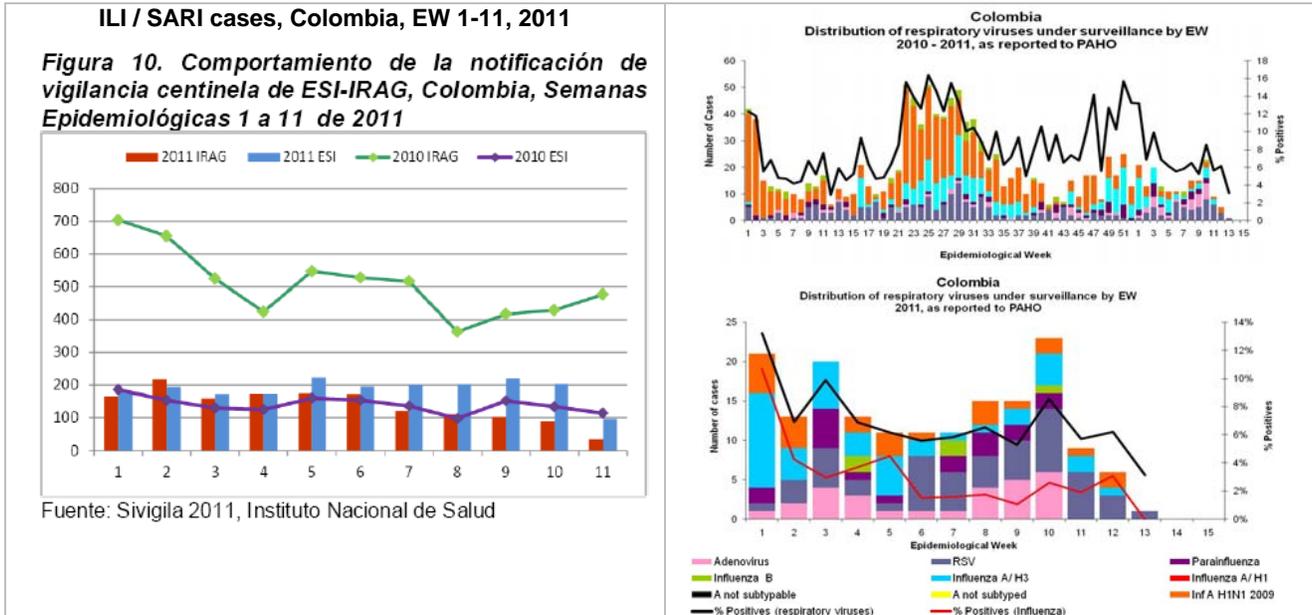


## Honduras



# South America - Andean

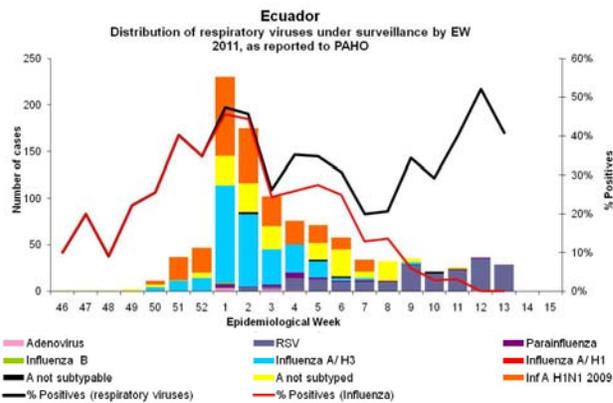
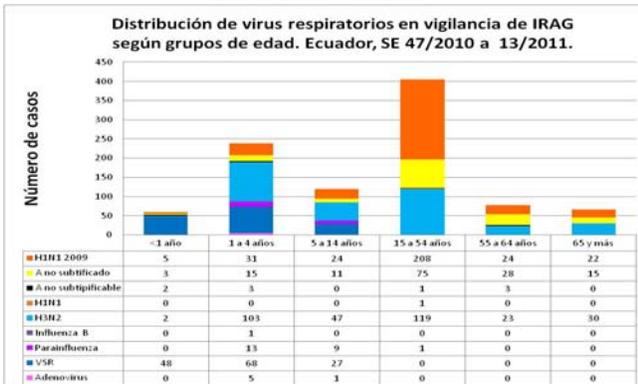
## Colombia



Fuente: Sivigila 2011, Instituto Nacional de Salud

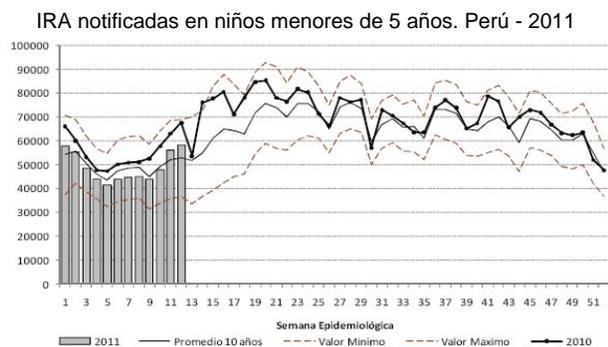
## Ecuador

### Distribution of respiratory viruses by age groups, Ecuador, EW 47/2010 – 13/2011



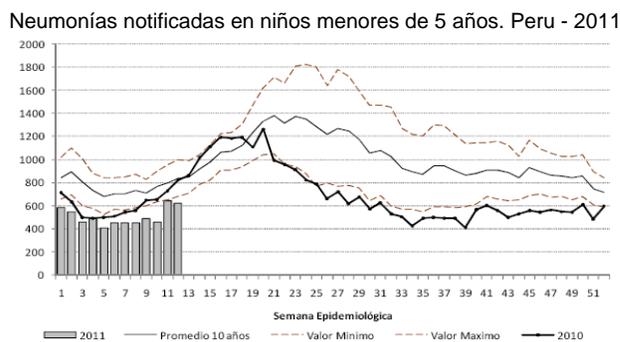
## Peru

### Acute Respiratory Illness, in children <5 years old. Peru, 2011



FUENTE: Registros de Notificación Colectiva. IRA 2011 - MINSA - Dirección General de Epidemiología (DGE) - Red Nacional de Epidemiología (RENACE).

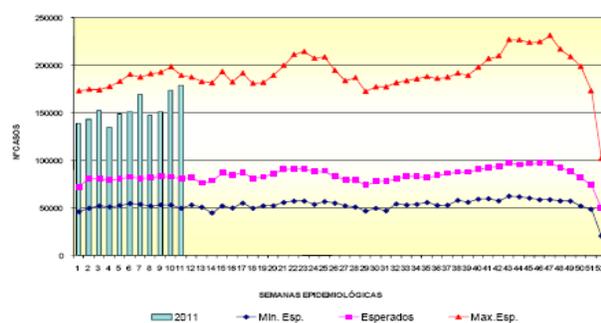
### Pneumonías, in children <5 years old. Peru, 2011



FUENTE: Registros de Notificación Colectiva. IRA 2011 - MINSA - Dirección General de Epidemiología (DGE) - Red Nacional de Epidemiología (RENACE).

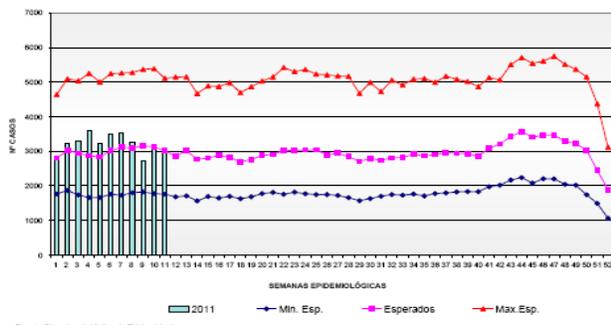
## Venezuela

### Infecciones Respiratorias Agudas Canal Endémico 2005 - 2011 Venezuela, 2011



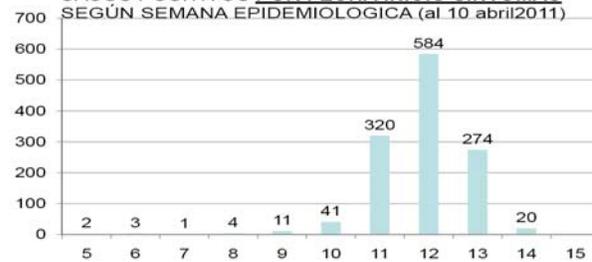
Fuente: Dirección de Vigilancia Epidemiológica

### Neumonías Canal Endémico 2005 - 2011 Venezuela 2011



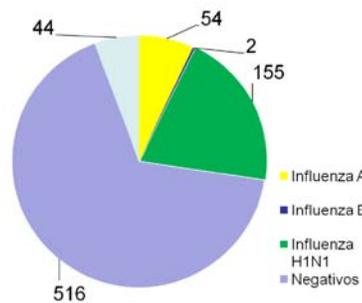
Fuente: Dirección de Vigilancia Epidemiológica

### INFLUENZA H1N1 CASOS POSITIVOS POR FECHA INICIO SINTOMAS SEGÚN SEMANA EPIDEMIOLÓGICA (al 10 abril 2011)



Fuente: Ministerio del Poder Popular para la Salud. Venezuela 10/04/2011

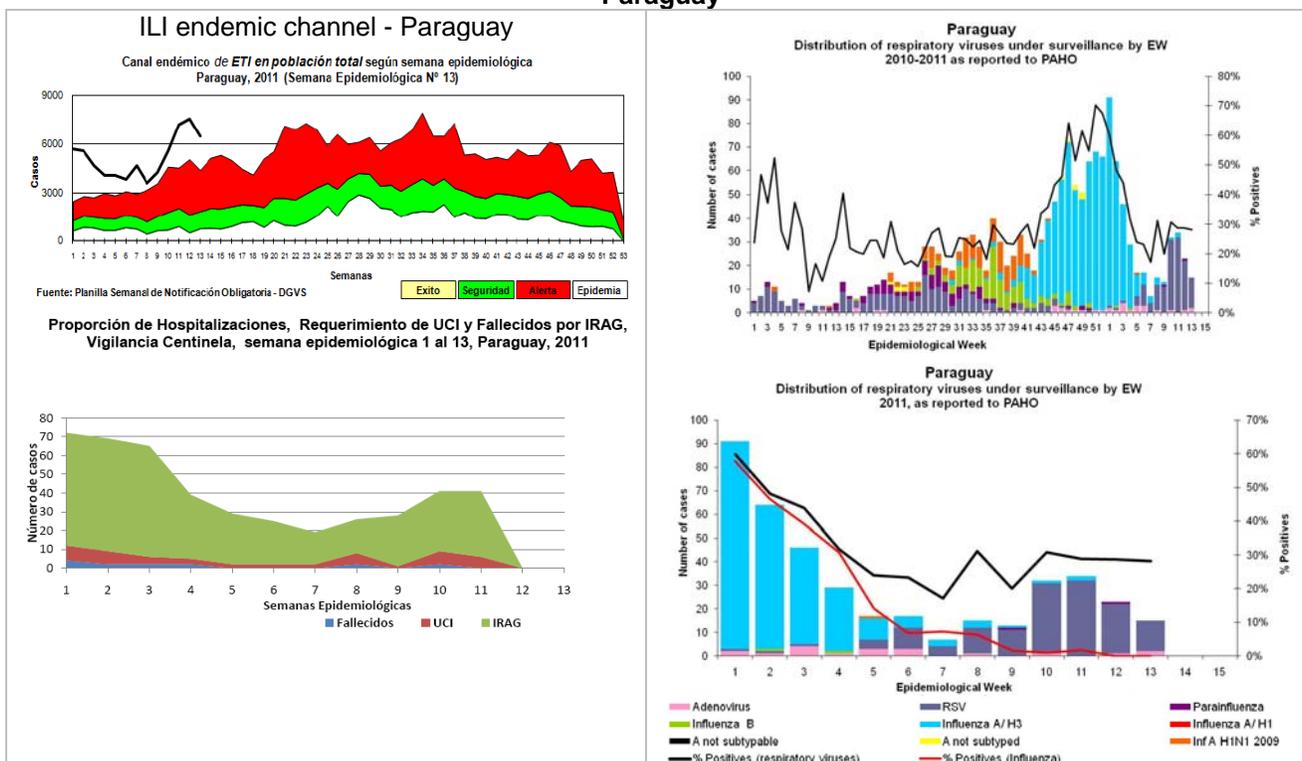
### PACIENTES HOSPITALIZADOS POR INFECCION RESPIRATORIA AGRAVE SEGÚN RESULTADOS DE INVESTIGACION DE VIRUS RESPIRATORIO VENEZUELA, 01-01-2011 al 10-04-2011.



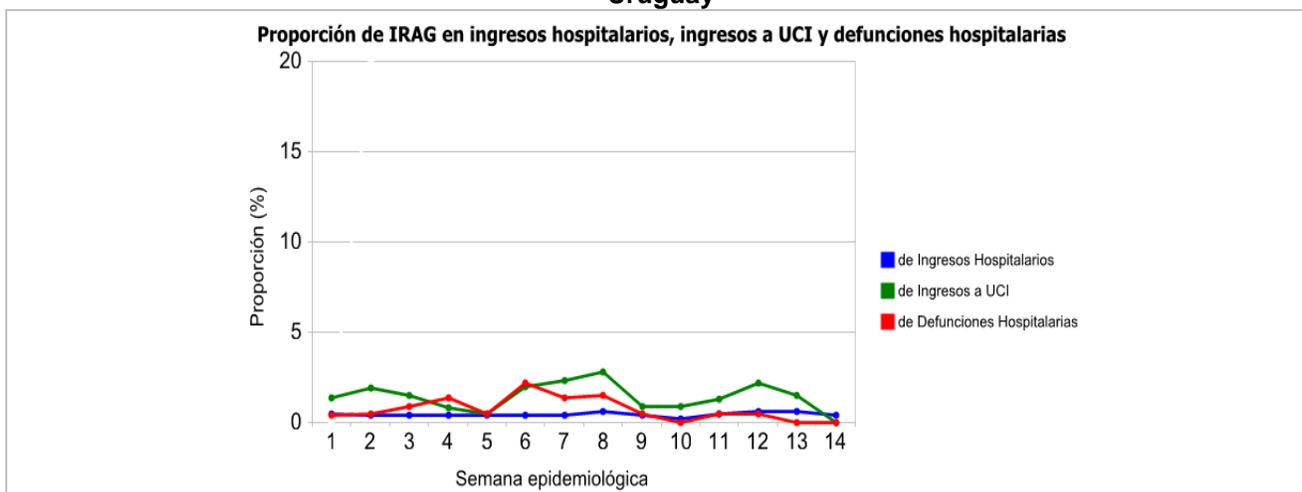
Fuente: Ministerio del Poder Popular para la Salud. Venezuela 10/04/2011

## South America – Southern Cone

### Paraguay



### Uruguay



<sup>1</sup> Canada. FluWatch Report. EW 13. <http://www.phac-aspc.gc.ca/fluwatch/>

<sup>2</sup> USA. Surveillance Summary. Week 13. Centers for Disease Control and Prevention

<sup>3</sup> Honduras. Boletín de la vigilancia de influenza y otro virus respiratorios. SE 13.

<sup>4</sup> Colombia. Boletín epidemiológico. SE 12. Ministerio de Salud. Dirección General de Epidemiología

<sup>5</sup> Perú. Boletín epidemiológico. SE 12. Ministerio de Salud. Dirección General de Epidemiología

<sup>6</sup> Venezuela. Reporte influenza A H1N1 actualizado al 10 de abril 2011. Y Boletín epidemiológico - SE 11. Ministerio del Poder Popular para la Salud.

<sup>7</sup> Paraguay. Boletín epidemiológico semanal. SE 14. Ministerio de Salud Pública y Bienestar Social

<sup>8</sup> Uruguay. Vigilancia de IRAG. <https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu>