



Regional Update EW 12

Influenza
(April 5, 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 western Canada but persists in parts of Alberta, Ontario, Quebec and the Atlantic provinces; influenza A/H3 has predominated since the beginning of the influenza season, however recently, influenza B cases have increased. In the United States, at the national level, ILI activity was at the national baseline and the proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold; there has been a co-circulation of influenza A and B during the second half of the influenza season.
- Influenza activity in Central America, the Caribbean and the Andean Region remained low. There has been a co-circulation of influenza A and B.
- In the southern cone, Paraguay reported an increased trend in ILI and SARI.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 12, influenza activity has declined in of the western part of the country, but persists in parts of Alberta, Ontario, Quebec and the Atlantic provinces. In EW 12, 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 (98 per 1,000 consultations). There was a decrease in the number of influenza and ILI outbreaks reported this week, as compared to the previous week. In EW 12, the percentage of samples positive for influenza was 11.3%, which represents a slight decrease from the prior week (12.6%); 55.6% of influenza-positive samples were influenza A and 44.4% were influenza B. In week 11, the number of influenza B cases increased 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 slightly compared to the prior week 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 4, there have been 142 cumulative cases of ILI and severe acute respiratory infection (SARI) identified (24% of which were confirmed to be influenza A/H1N1 2009) and seven deaths (all adults, previously healthy, with the exception of one with COPD and one who was pregnant), of which six were confirmed to have influenza A/H1N1 2009. The Institute of Diagnosis and Epidemiological Reference (InDRE) of Mexico carried out genetic sequencing of the first three pandemic (H1N1) 2009 influenza cases (two fatal cases and one mild), and 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. In the rest of Mexico, isolated influenza A/H1N1 2009 cases have been reported, but there are no other outbreaks reported at this time.

In the United States², in EW 12, at the national level, the proportion of outpatient consultations for ILI (2.0%) dropped below the national baseline and decreased as compared to EW 11 (2.5%). At the regional level, two of ten regions reported ILI activity to be at or above their region-specific baseline. The proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold. Twelve influenza-associated pediatric deaths were reported this week. During EW 12, 13.9% of samples tested were positive for influenza [unsubtyped influenza A (30.4%), influenza type B (28.8%), influenza A/H3 (25.4%) and influenza A/H1N1 2009 (15.5%)]. Of characterized influenza B viruses, 94.3% belong to the B/Victoria lineage, which is included in the 2010-2011 Northern Hemisphere vaccine, and 5.7% belong to the B/Yamagata lineage.

Caribbean

CAREC^{*}, in EW 12, reported that the proportion of admissions for SARI (~1%) was similar to the prior week. No SARI deaths have been reported in the last two EW. No influenza viruses were detected during EWs 10 & 11.

In Cuba, in EW 12, among all samples tested, the percent positivity for respiratory viruses was ~30% and the percent positivity for influenza viruses was ~3%. 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, the percent positivity for respiratory viruses (~45%) has increased in the last 3 EWs. To date in 2011, parainfluenza has been the primary respiratory virus circulating. In EW 13, influenza A/H1N1 2009 and influenza B were detected.

In Jamaica for EW 12, sentinel site data reported that the proportion of consultations for Acute Respiratory Illness (ARI) decreased by 1.3% compared to the previous week. The percentage of samples positive for influenza was 22.2% which represents a decrease compared to the previous week (25.0%). Influenza type B has remained the predominant influenza virus circulating (EW 05 to EW 12).

Central America

Influenza activity in this region has remained low in 2011.

In Costa Rica, to date in 2011, influenza B has been the primary influenza virus circulating, while adenovirus has been the primary respiratory virus circulating.

In Honduras³, in EW 12, the proportion of ILI consultations among all consultations remained similar to the prior week (6%). To date in 2011, small numbers of respiratory viruses have been detected. No respiratory viruses were detected during EWs 11-12.

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, to date in 2011, there has been a co-circulation of multiple respiratory viruses, with influenza A/H3 being the predominant influenza virus.

In Ecuador, the percentage of samples positive for respiratory viruses (~50%) increased in the EWs 11 & 12; however, the percentage of samples positive for influenza has been decreasing in the last 4 EWs. No influenza viruses were detected in EW 12. In 2011, influenza A/H3 and influenza A/H1N1 2009 co-circulated. The predominant respiratory virus in circulation was RSV during the last month.

In Peru⁴, in EW 11, 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 expected levels for this time of year.

South America – Southern Cone

In Paraguay⁵, in EW 12, the number of ILI consultations was above the endemic channel and slightly higher than what was observed in the prior week. The proportion of SARI hospitalizations among all the hospitalized cases (~4.5%) increased over the last 3 EWs (~2.2% in EW 08). Based on virological data, RSV has been the predominant circulating respiratory virus in the last month. Even though influenza A/H3N2 has been the predominant influenza virus during 2011, no influenza viruses have been detected since EW 09.

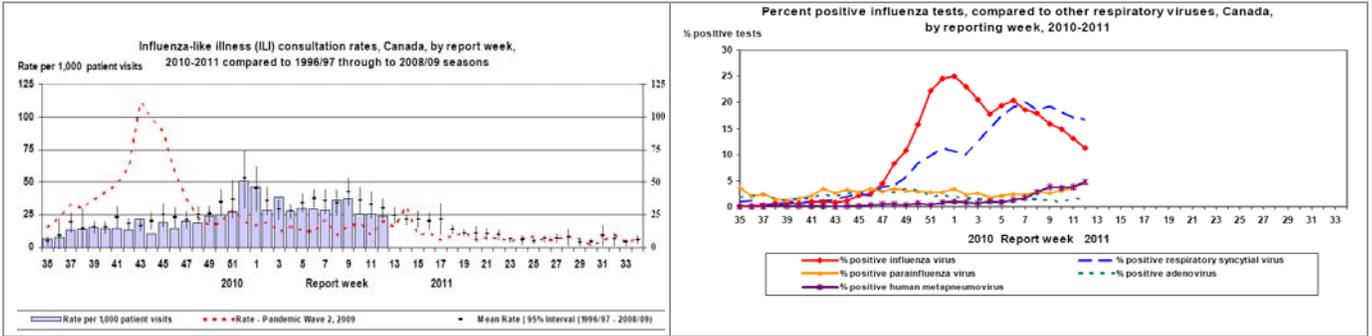
In Uruguay⁶, from EW 01 – 14, the proportion of SARI cases among the total number of hospitalizations, ICU admissions, and deaths associated with SARI, remained low (<2%).

^{*} Participating CAREC member countries, which include, Barbados, Dominica, Jamaica and Trinidad and Tobago, were assessed together

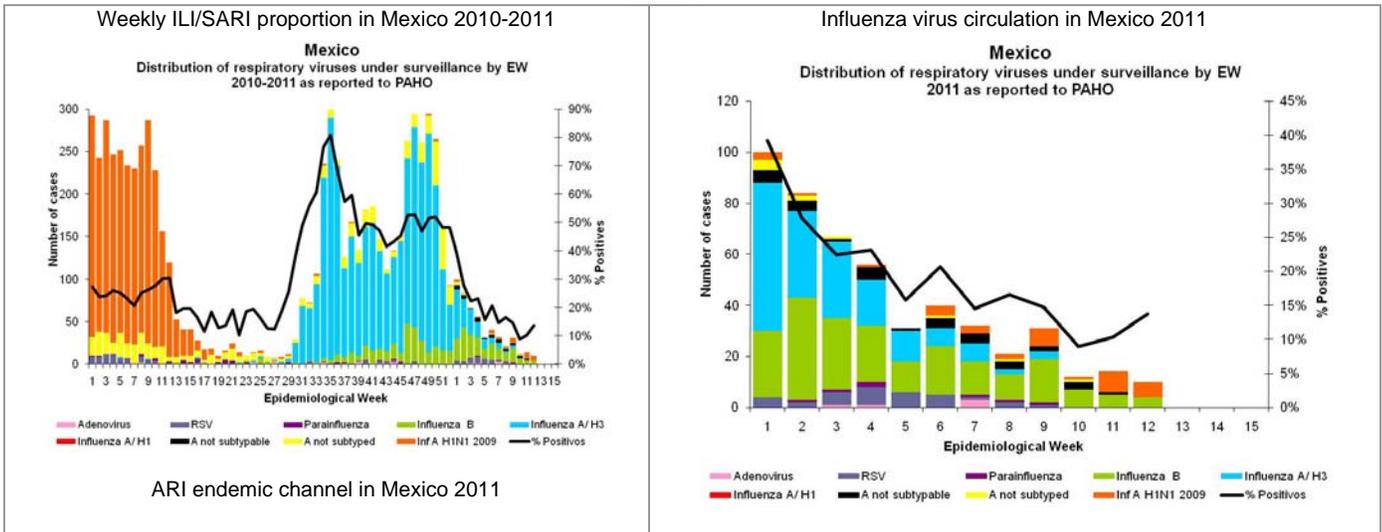
Graphs

North America

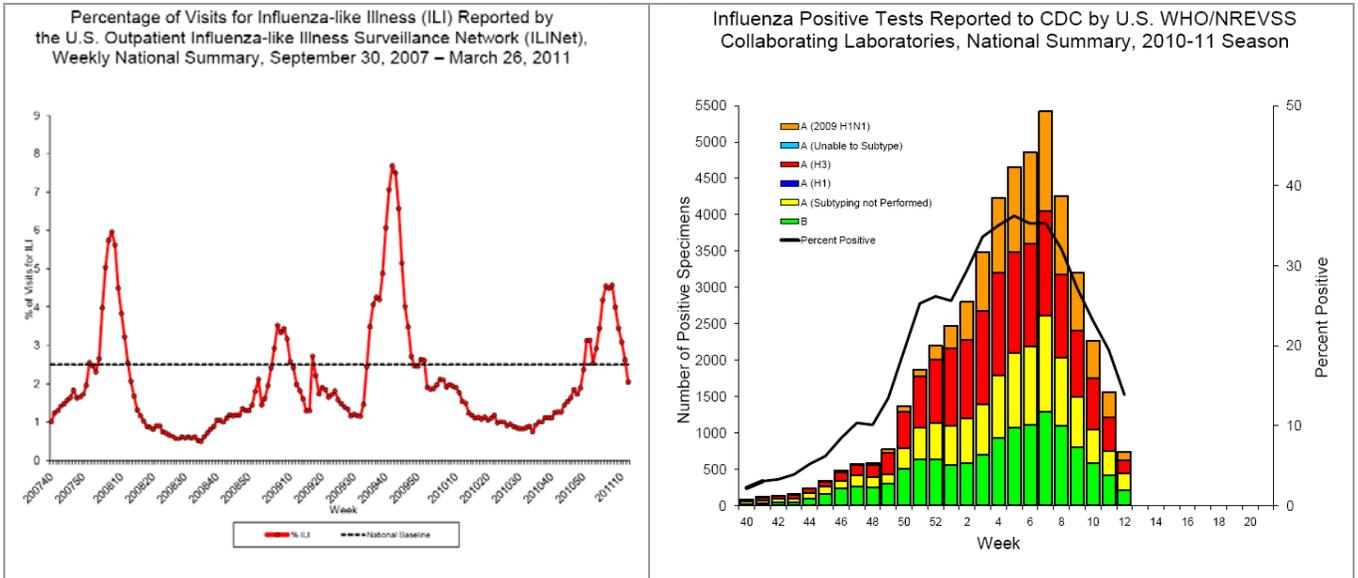
Canada



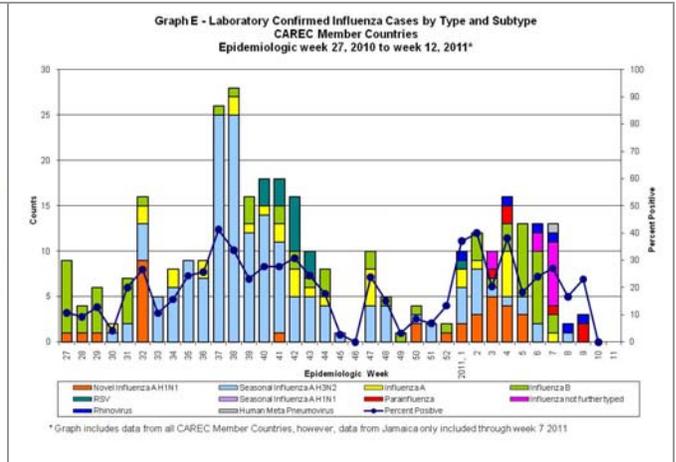
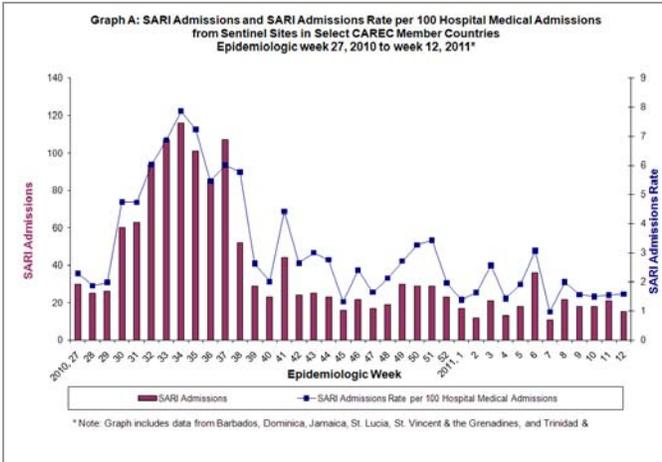
Mexico



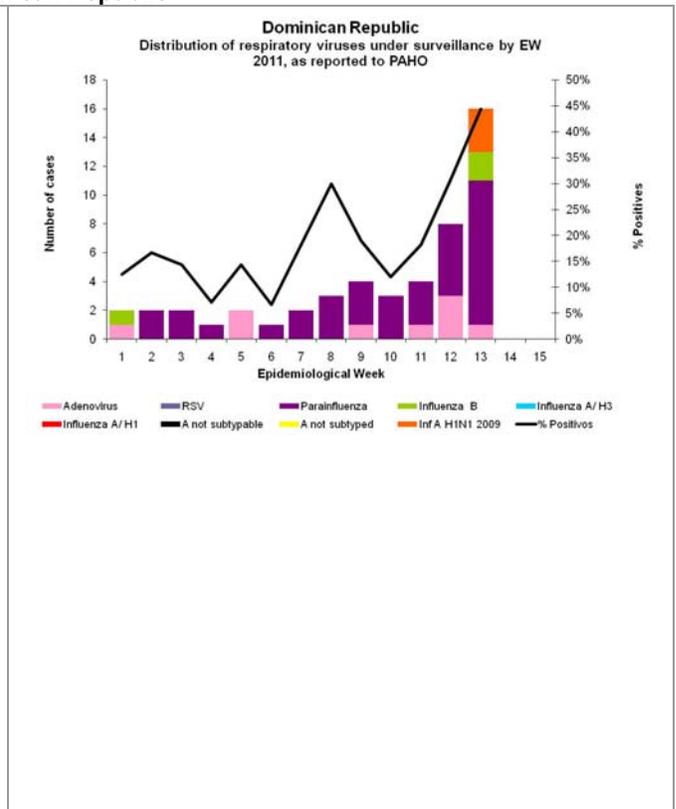
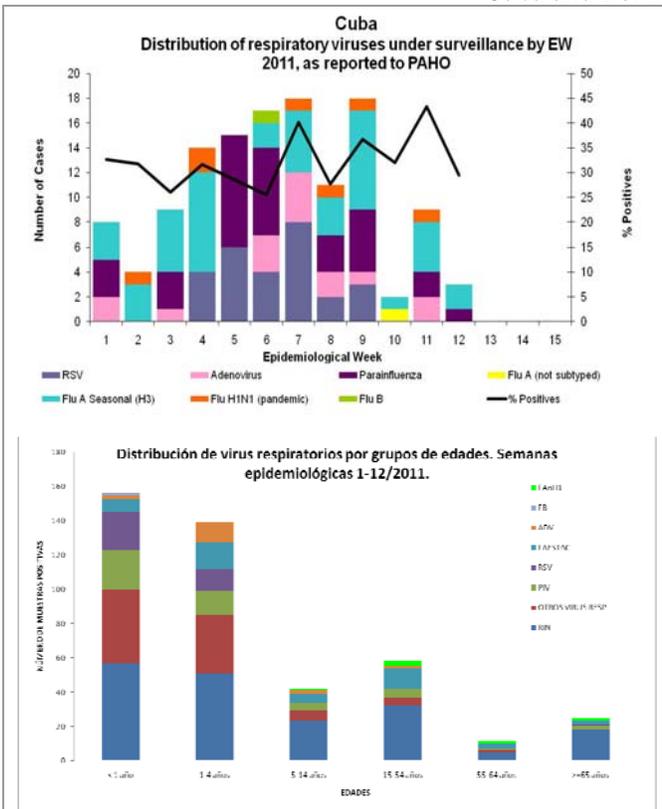
United States



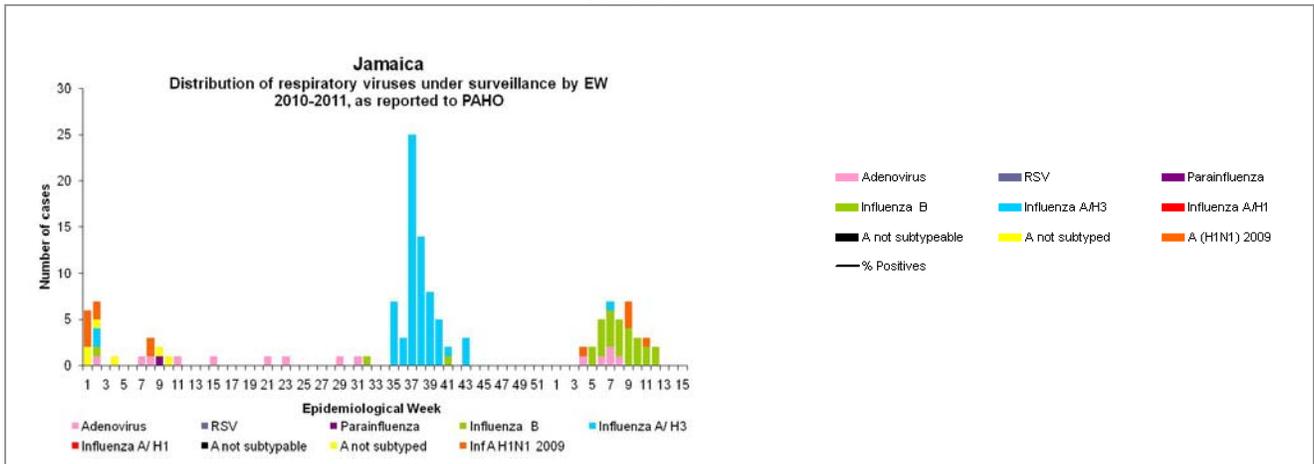
CAREC



Cuba and Dominican Republic

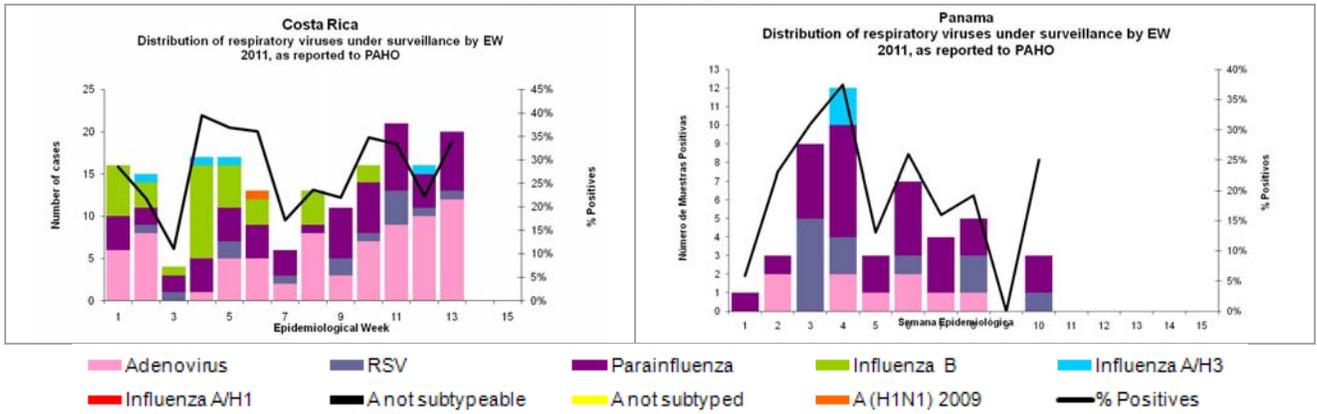


Jamaica

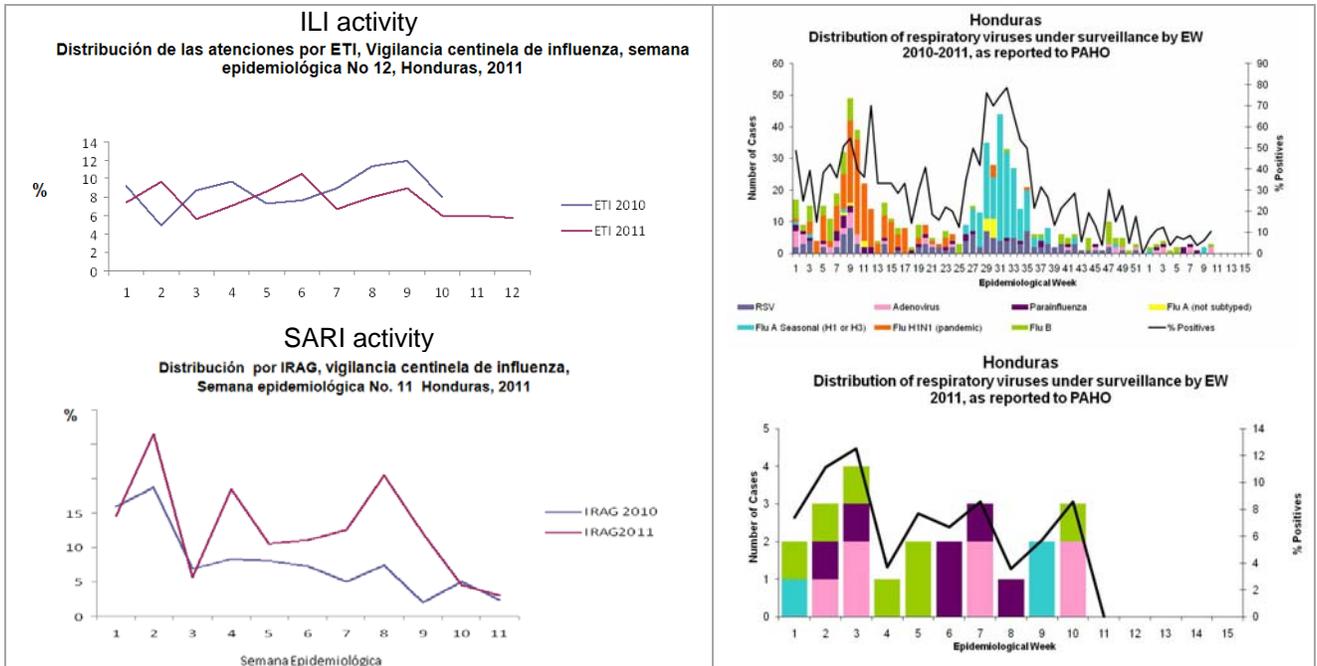


Central America

Costa Rica and Panama

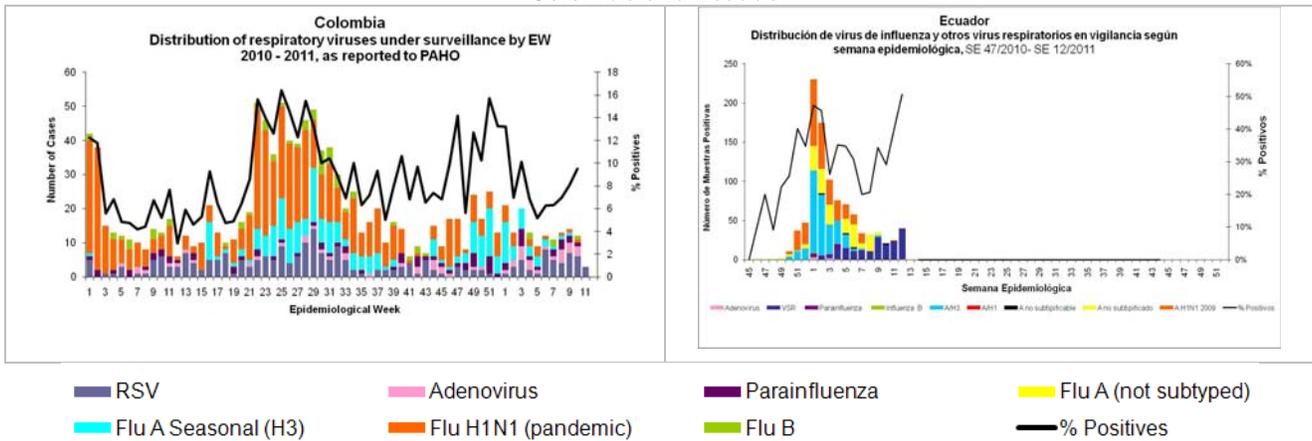


Honduras



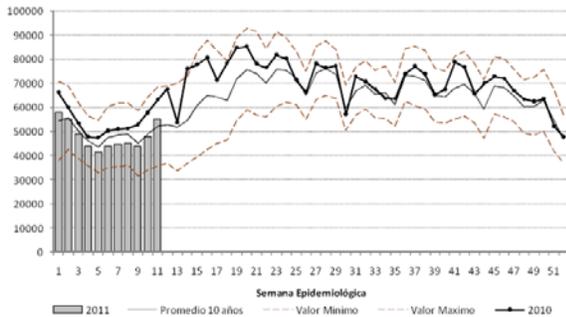
South America - Andean

Colombia and Ecuador



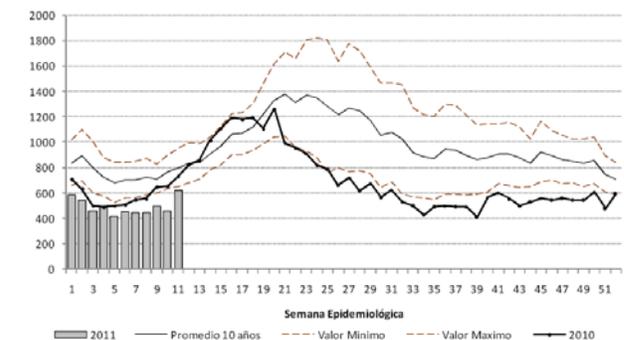
Peru

Acute Respiratory Illness, in children <5 years old. Peru, 2011
Infección respiratoria aguda notificadas en niños menores de 5 años. Perú - 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
Neumonías notificadas en niños menores de 5 años. Peru - 2011

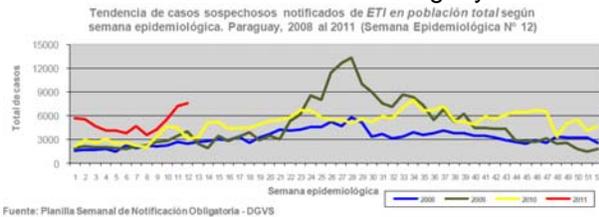


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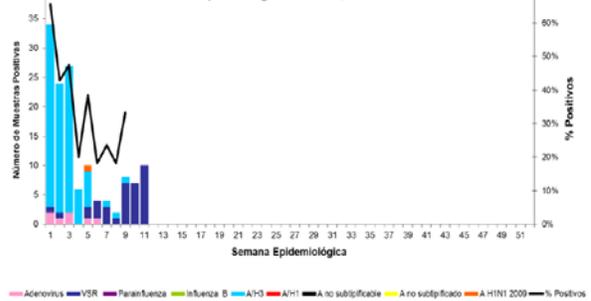
South America - Southern Cone

Paraguay

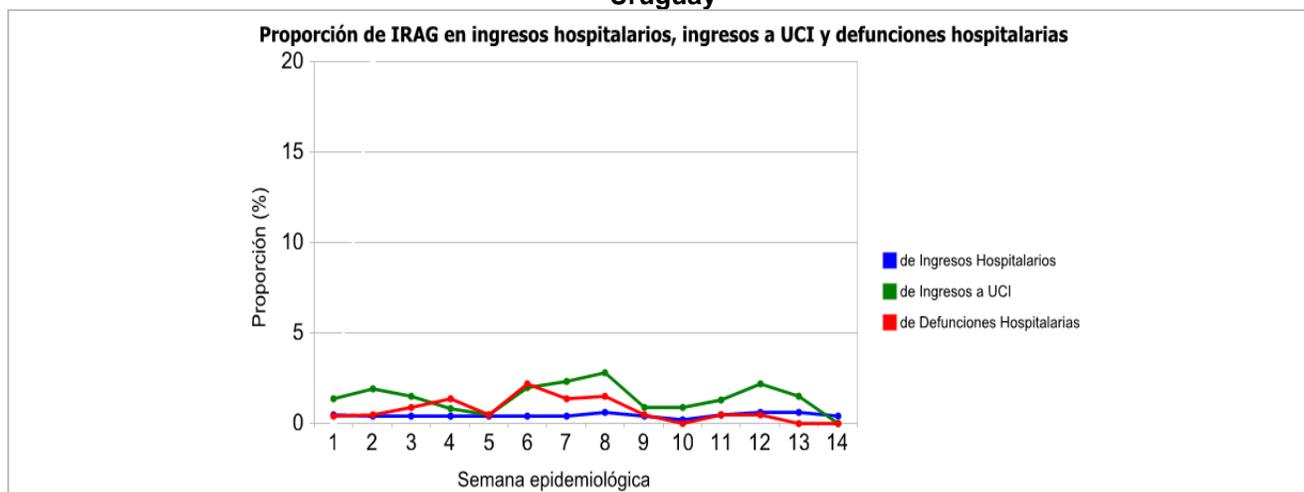
ILI endemic channel - Paraguay



Paraguay
Distribución de virus de influenza y otros virus respiratorios según semana epidemiológica. SE 1 a 11, 2011



Uruguay



¹ Canada. FluWatch Report. EW 12. <http://www.phac-aspc.gc.ca/fluwatch/>

² USA. Surveillance Summary. Week 12. Centers for Disease Control and Prevention

³ Honduras. Boletín de la vigilancia de influenza y otro virus respiratorios. SE 12.

⁴ Perú. Boletín epidemiológico. SE 11. Ministerio de Salud. Dirección General de Epidemiología

⁵ Paraguay. Boletín epidemiológico semanal. SE 13. Ministerio de Salud Pública y Bienestar Social

⁶ Uruguay. Vigilancia de IRAG. <https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu>