



Regional Update EW 04

Influenza
(February 8, 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.

- In Canada, overall influenza activity decreased as compared to the previous week and remained within the expected levels for this time of year. In the United States, at the national level, ILI activity increased as compared to the previous week and the proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold. In Canada and Mexico, influenza A/H3 has predominated since the beginning of the influenza season, while in the United States, there has been a co-circulation of influenza A and B.
- Influenza activity in Central America, the Caribbean and the Andean Region remained low
- In Paraguay, the ILI activity was above the endemic channel; however, it has been decreasing over the last four epidemiologic weeks. The predominant circulating virus was influenza A/H3

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 04, overall influenza indicators continued to decrease across the country, as compared to the previous weeks, except in the Atlantic provinces. In EW 04, only 1 region (in the province of Quebec) reported widespread influenza activity, 14 regions reported localized activity, 30 regions reported sporadic activity, and 11 regions reported no activity. During EW 04, the national ILI consultation rate remained within expected levels and was 33.3 per 1,000 consultations—a small decrease as compared to the previous week (36.1 per 1,000 consultations). Children under 5 years of age had the highest ILI consultation rates (97.1 per 1,000 consultations). The percentage of samples positive for influenza was 17.7%, which represents a decrease from the prior week (20.8%) and appears to have peaked in the EW 52. Since the beginning of the influenza season, influenza A/H3N2 has been the predominant strain circulating in Canada (88.9% of the subtyped positive influenza A cases). Among other respiratory viruses, the proportion of specimens testing positive for respiratory syncytial virus (RSV) increased slightly from EW 03 (12.5%) to EW 04 (15%).

In Mexico, in EW 04, of all samples tested, the percentage of samples positive for respiratory viruses decreased to less than 20% and the percentage of samples positive for influenza decreased over the last 7 weeks to less than 10%, while the numbers of influenza B positive cases have remained stable (~12% of all samples tested).

In the United States², in EW 04, at the national level, the proportion of outpatient consultations for ILI (4.0%) was above the national baseline. At the regional level, seven 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. Six influenza-associated pediatric deaths were reported this week. Four of these deaths were associated with influenza B viruses, one of these deaths was associated with an influenza A/H3 virus, and one was associated with a 2009 influenza A (H1N1) virus. Influenza-associated hospitalization rates remained lower than what was observed during the same period in 2010 based on data from FluSurv-NET. During EW 04, 32.9% of samples tested were positive for influenza [influenza A/H3 (35.1%), followed by unsubtyped influenza A (25.9%), and influenza type B (18.2%)], which represents an increase as compared to EW 03 (30.1%). Of characterized influenza B viruses, 93% belong to the B/Victoria lineage, which is included in the 2010-2011 Northern Hemisphere vaccine and 7% belong to the B/Yamagata lineage.

Caribbean

CAREC* reported that the proportion of admissions for severe acute respiratory infection (SARI) decreased to ~1% as compared to EW 03 (3.7%). No SARI deaths have been reported in the last five EWs. In EW 04, two positive samples for influenza A/H1N1 2009 were detected. To date in 2011, 22 confirmed influenza cases have been identified among residents in Suriname, St. Kitt's, Barbados, Turks & Caicos Islands, and Jamaica. Among the 22 confirmed cases, 45% (10) were influenza A/H3N2, 41% (9) were influenza A/H1N1 2009 and 14% (3) were influenza B.

In Cuba, in EW 04, of all samples tested, the percentage of samples positive for respiratory viruses remained stable (~31%) and the percentage of samples positive for influenza increased to ~10%. During the last two months, influenza A/H3 has been the predominant influenza virus circulating. According to the laboratory data, in EW 04, RSV and influenza A/H3 were the predominant viruses in children under 5 years of age and rhinovirus was the predominant virus in other age groups (5-15 years, 15-54 years and ≥65 years old).

In Dominican Republic, in EWs 04 & 05, of all samples tested, the percentage of positive samples for respiratory viruses remained ~10%. No influenza virus has been detected since EW 01, 2011.

In Jamaica, in the EW 04, one case of influenza A/H1N1 2009 was detected.

Central America

In Honduras, from EW 01-04, small numbers of respiratory viruses were detected. Influenza B has been detected in the last 3 weeks.

South America – Andean

In Colombia, no respiratory viruses were detected in EW 04. From EW 01 – 03, influenza A/H3 and influenza B were detected among the influenza viruses.

South America – Southern Cone

In Argentina, in January 2011, of all samples tested, the percentage positive for respiratory viruses was ~8% and the percentage positive for influenza was ~1%. Three positive cases of influenza A/H1N1 2009 were detected in EW 01, all of them travelers from Europe.

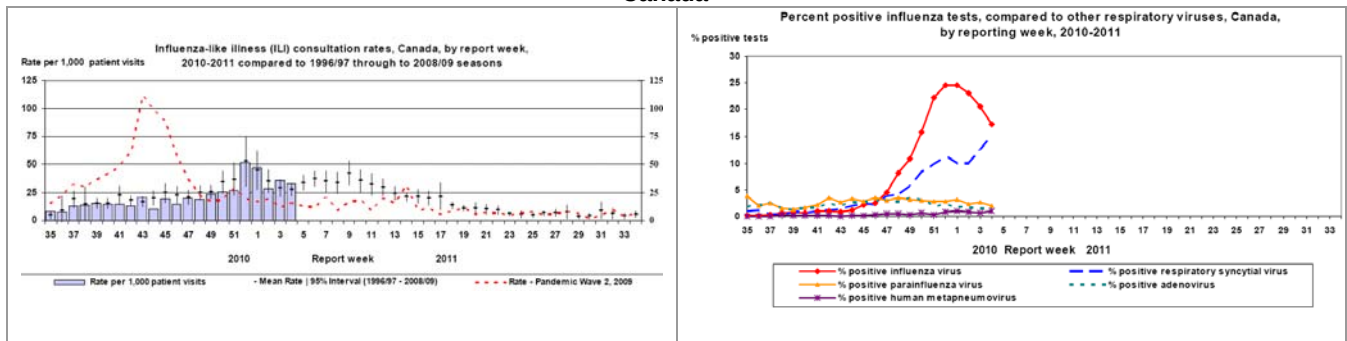
In Paraguay³, from EW 01-04, the numbers of national ILI consultations were above the endemic channel; however, the overall trend is decreasing. In EW 04, the proportion of sentinel ILI consultations decreased (5.7%) as compared to the previous week (9%). In EW 04, the proportion of SARI cases among the total hospitalized, the proportion of SARI ICU cases among all ICU admissions and the proportion of SARI deaths among the total deaths were below 2%, which represents a decrease as compared to EW 03. Of all samples tested, the percentage positive for respiratory viruses was ~40% and the percentage positive for influenza was ~37%. Influenza A/H3 has been the predominant circulating virus since EW 41.

* Participating CAREC member countries, which include, Barbados, Dominica, Jamaica, St Vincent and the Grenadines, St. Lucia and Trinidad and Tobago, were assessed together

Graphs

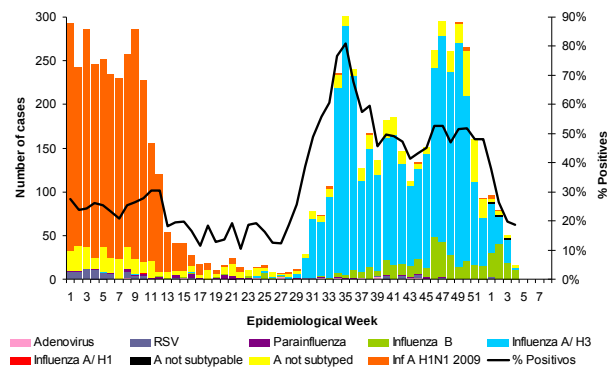
North America

Canada

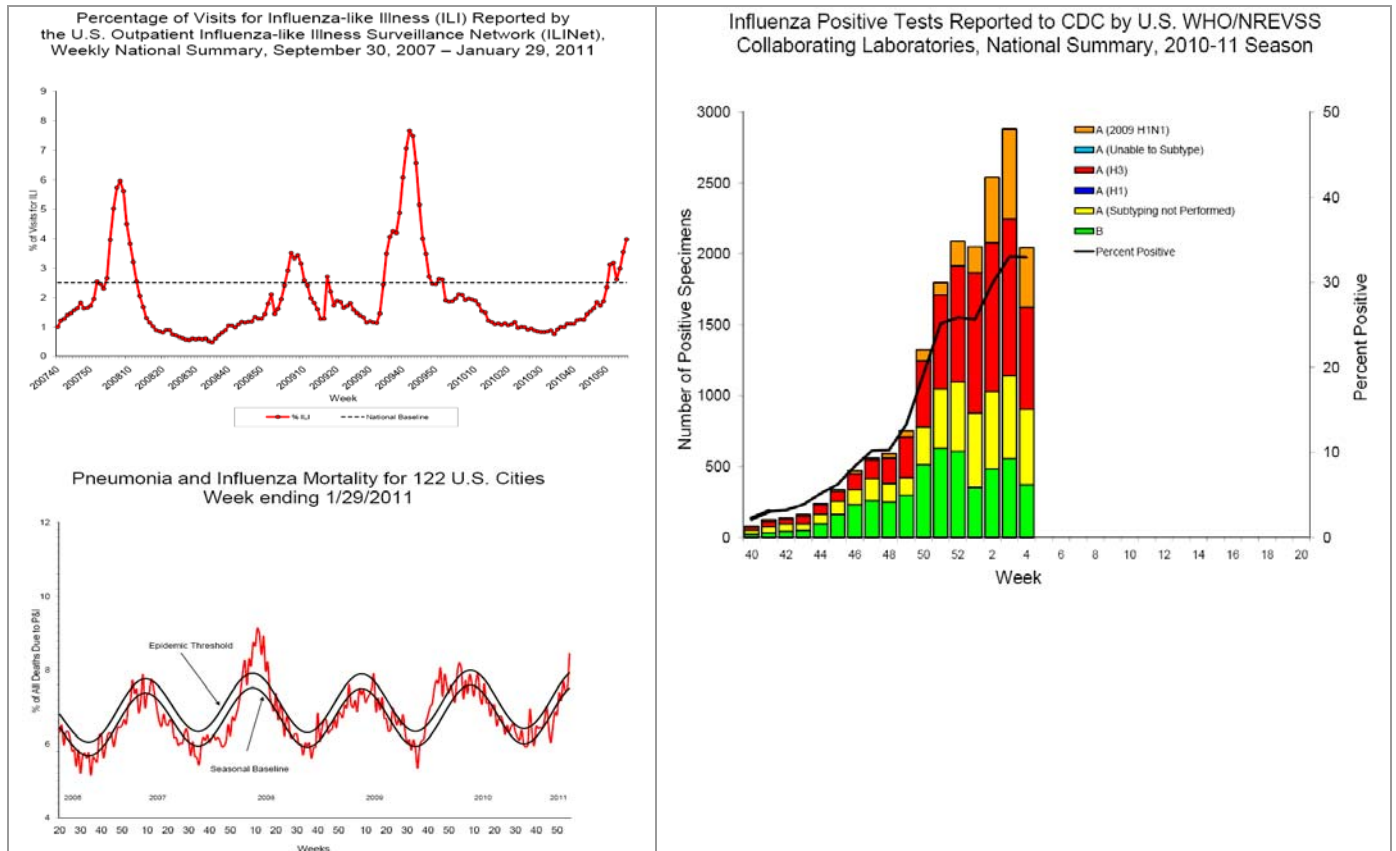


Mexico

Distribution of respiratory viruses under surveillance by EW 2010-2011 as reported to PAHO

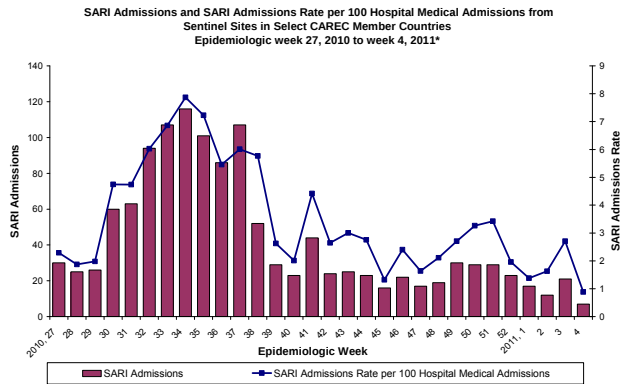


United States



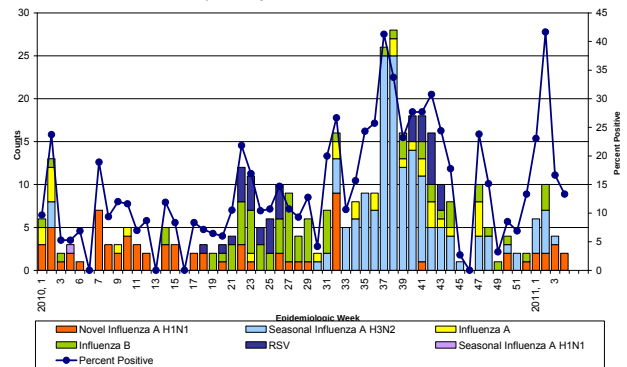
Caribbean

CAREC

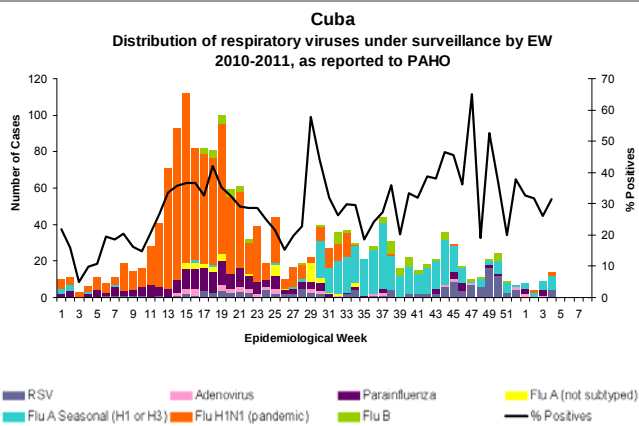


This graph includes data from the following CAREC Member Countries (n=4): Dominica, Jamaica, St. Vincent & the Grenadines and Tobago

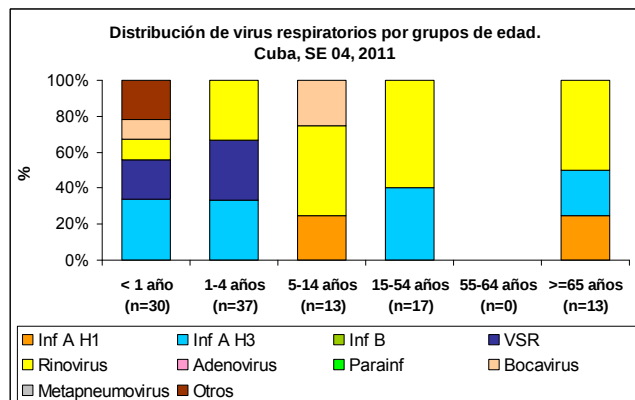
Graph E - Laboratory Confirmed Influenza Cases by Type and Subtype
CAREC Member Countries
Epidemiologic week 1, 2010 to week 4, 2011*



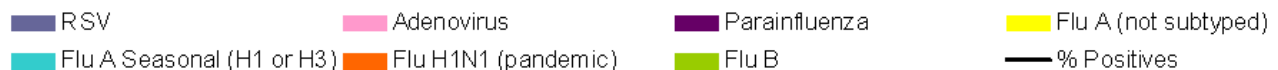
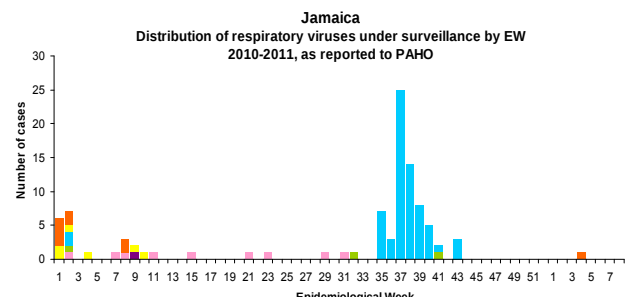
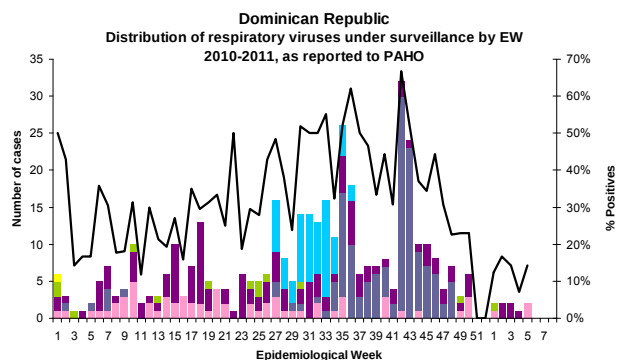
Cuba



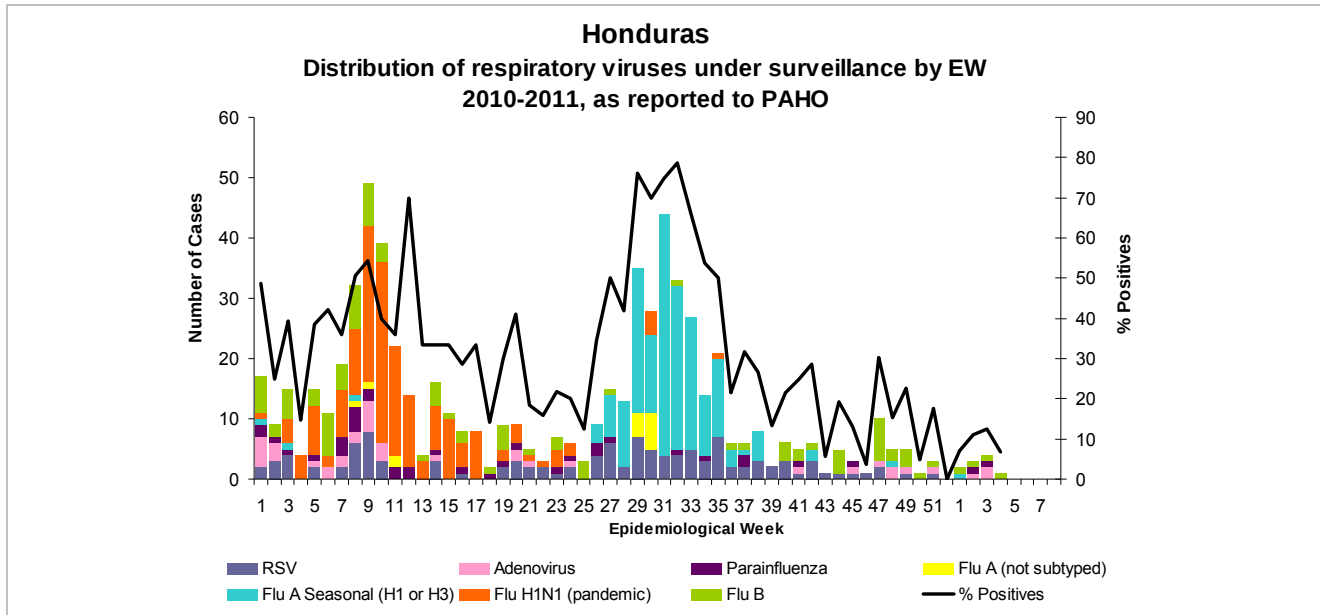
Distribution of respiratory viruses by age Group in the EW 04, 2011.
Cuba



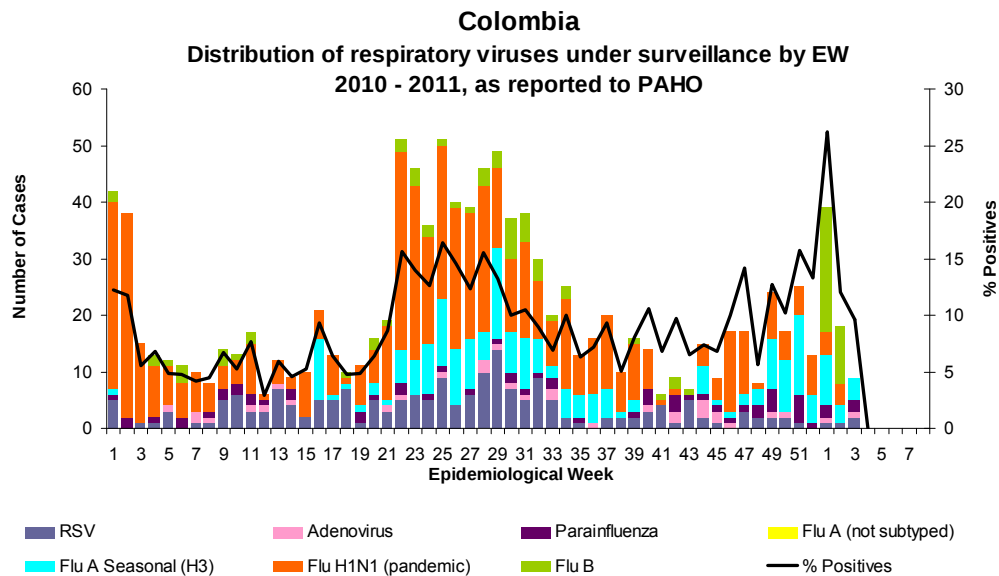
Dominican Republic and Jamaica



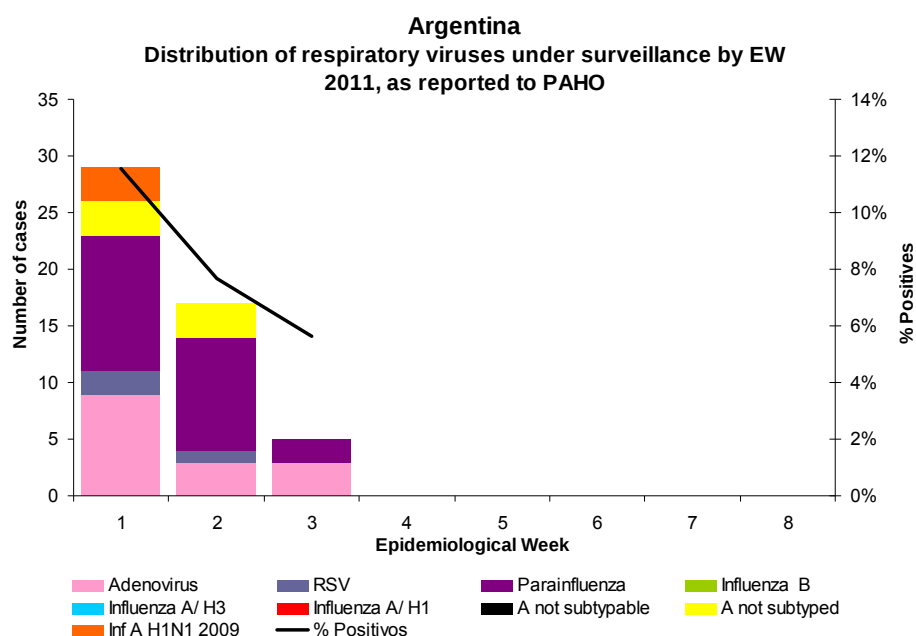
Central America



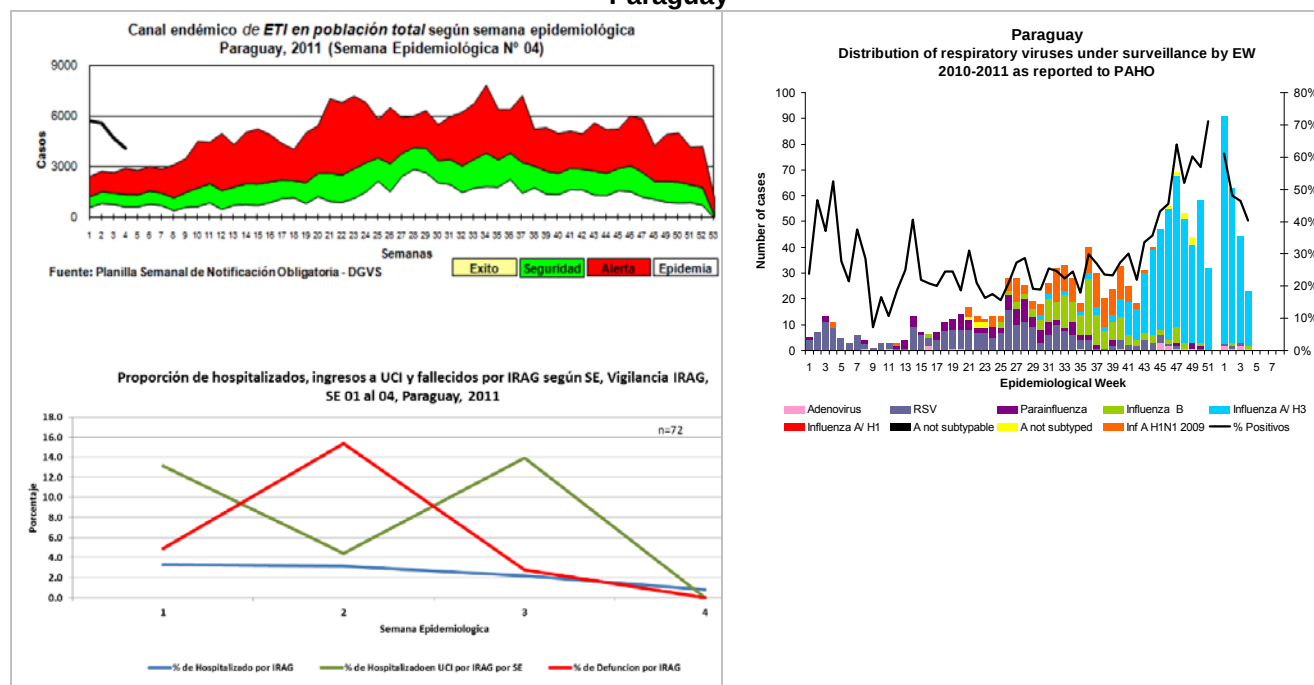
South America - Andean



South America – Southern Cone



Paraguay



¹ Canada. FluWatch Report. EW 04. <http://www.phac-aspc.gc.ca/fluwatch/>

² USA. Surveillance Summary. Week 04. Centers for Disease Control and Prevention

³ Paraguay. Boletín epidemiológico semanal. SE 05. Ministerio de Salud Pública y Bienestar Social