Regional Update EW 49

Influenza

(December 20, 2010 - 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 North America (Canada and United States), at the national level, influenza activity remained low. In Canada and Mexico, influenza A/H3 predominated this week, while in the United States, there has been a co-circulation of influenza A and B.
- The United States reported a case of triple reassortant swine-origin influenza A (H3N2) infection in a young adult male.
- Influenza activity in Central America and South America continued to remain low
- Influenza virus A/H3 and influenza B are co-circulating in the Americas Region

Epidemiologic and virologic influenza update

North America

In Canada[1], in epidemiological week (EW) 49, overall influenza activity increased as compared to the previous week, particularly in regions across the Prairies, Ontario and Quebec. This week, one region reported widespread influenza activity, 7 regions reported localized activity, 11 regions reported sporadic activity and 37 regions reported no activity. The influenza-like illness (ILI) consultation rate (23.6 consultations per 1,000 patients) increased from last week, but remained within the expected levels for this time of year. Children between 5 and 19 years had the highest ILI consultation rates (45.6 per 1,000 consultations). The percentage of samples positive for influenza (EW 49: 10.8%) increased as compared to the previous week. Since the beginning of the influenza season, A/H3N2 has been the predominant influenza strain circulating in Canada.

In Mexico, in EW 48, of all samples tested, the percentage of samples positive for influenza was 36%. Influenza A/H3 has predominated since EW 36.

In the United States[2], in EW 49, at the national level, the proportion of outpatient consultations for ILI remained below the baseline and similar to what was observed in the previous week. At the regional level, even though, all 10 regions reported ILI activity below the region-specific baseline, two states (Alabama and Georgia) experienced high ILI activity, New York City and three states experienced low ILI activity and 45 states experienced minimal ILI activity. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. One influenza A/H3-associated pediatric death was reported this week. During EW 49, 11% of samples tested were positive for influenza (influenza type B, followed by influenza A unsubtyped and influenza A/H3). On 8 December, 2010, the United States reported a case of triple reassortant swine-origin influenza A (H3N2) infection in a young adult male. This is the 6th human case of triple reassortant swine-origin influenza A (H3N2) virus (S-OtrH3n2) reported to CDC since 2005. The S-OtrH3n2 viruses identified in these 6 cases are genetically different from each other, and there were no epidemiologic links identified between these cases. Thus far, no person-to-person transmission of these viruses has been documented.

Caribbean

CAREC* reported a decreasing trend in the severe acute respiratory infection (SARI) admission proportion (SARI admissions among 100 hospital medical admissions) from 7.9% (EW 34) to 1.8% (EW 48). Children

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

between 6-48 months had the highest SARI admission rate (3.6 per 100 medical admissions). Influenza A/H3 was the predominant influenza virus circulating during EWs 35-45 (especially in Jamaica); however, during EW 47, only 1 sample was positive (influenza B).

In Cuba, respiratory syncytial virus (RSV) continued to predominate between EWs 47-49. Among the influenza viruses, influenza A/H3 was the predominant virus circulating.

In the Dominican Republic, in EW 49, of all samples tested, the percentage of samples positive for influenza viruses was 8%. RSV predominated during EWs 35-48. Adenovirus and parainfluenza were the only viruses detected during EW 50.

Central America

In Costa Rica, from EW 42–50, influenza type B was the predominant influenza virus circulating. Small numbers of adenovirus and RSV continued to be detected.

In Honduras, in EW 49, of all samples tested, the percentage of samples positive for influenza was 19%. The predominant influenza virus circulating between EWs 47-49 was influenza type B. Low levels of adenovirus and RSV were also reported.

South America – Andean

In Bolivia, the predominant influenza virus circulating was influenza A/H3, especially in the eastern part of the country, where the percentage of samples positive for influenza, among all samples tested, was 67% (EWs 47-48).

In Colombia, over the last two months, low levels of respiratory viruses have been detected, and pandemic influenza A (H1N1) 2009 continued to be the predominant respiratory virus detected through EW 47. In EW 49, a few cases of adenovirus and RSV were detected.

South America – Southern Cone

In Argentina and Brazil (region of Para), over the last month, very low levels of influenza A have been detected, of which the majority were unsubtyped.

In Chile[3], in EW 47, ILI activity remained low (3.2 outpatient consultations per 100,000 habitants), similar to the last 4 EW. The proportion of emergency services consultations for respiratory illness, out of the total number of consultations, showed a decreasing trend from ~EW 38 to EW 47. In the last month, among the SARI cases, few influenza cases have been detected, with influenza A/ H3 being the predominant strain.

In Paraguay[4], in EW 48, nationally, the number of ILI consultations decreased (~27%) as compared to the previous week. The percentage of SARI admissions among all hospitalizations remained ~3%. Among the SARI cases, influenza A/H3 predominated over other circulating respiratory viruses from EW 41–48.

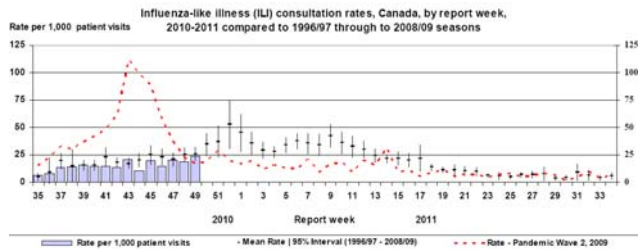
In Uruguay[5], since EW 43, the proportion of SARI cases among the total number of hospitalizations, intensive care units (ICU) admissions, and deaths remained less than 4%. From EW 41–47, the predominant virus circulating among sampled SARI cases was influenza A/H3.

Graphs

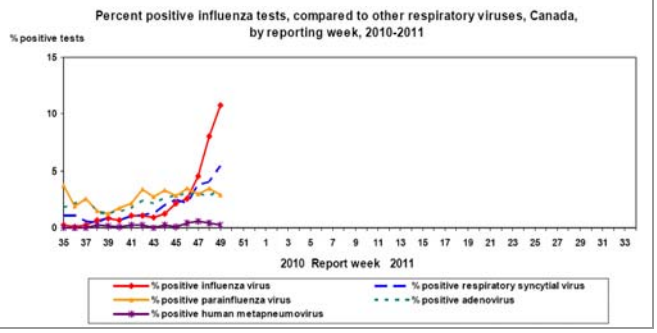
North America

Canada

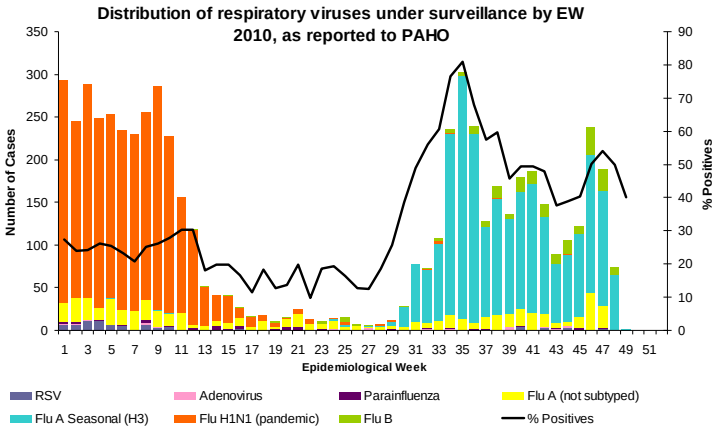
Influenza-like illness (ILI) consultation rates, Canada, by report week, 2010-2011 compared to 1996/97 through to 2008/09 seasons



Percent positive influenza tests, compared to other respiratory viruses, Canada, by reporting week, 2010-2011

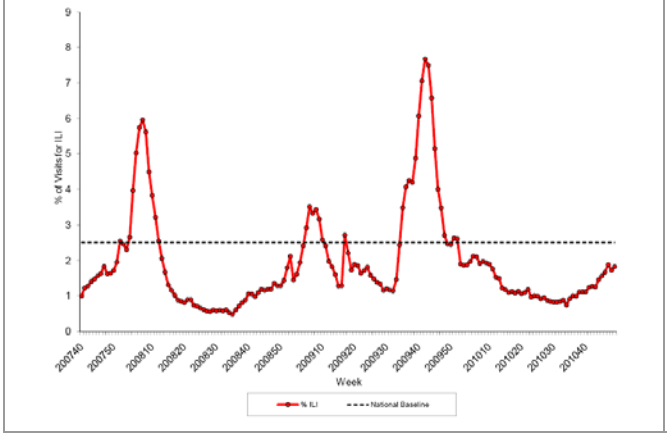


Mexico

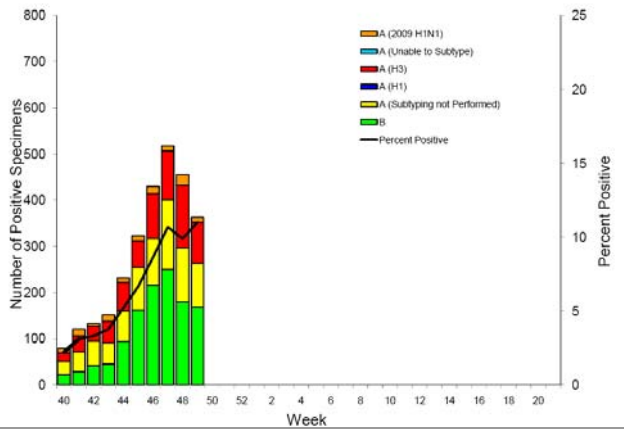


United States

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 – December 11, 2010

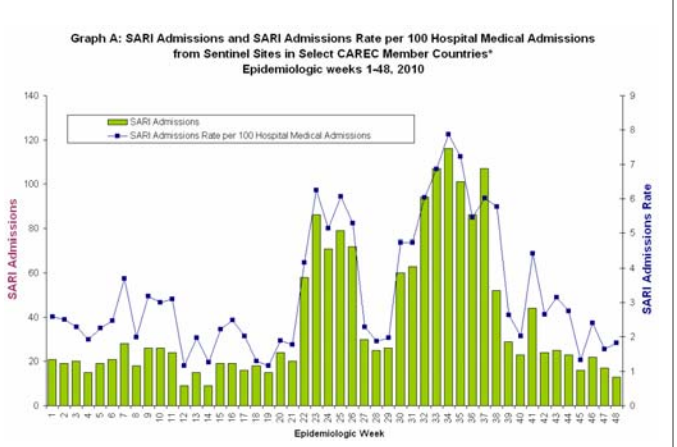


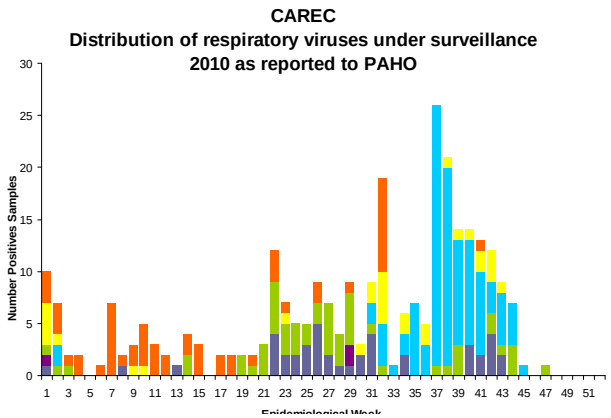
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2010-11 Season



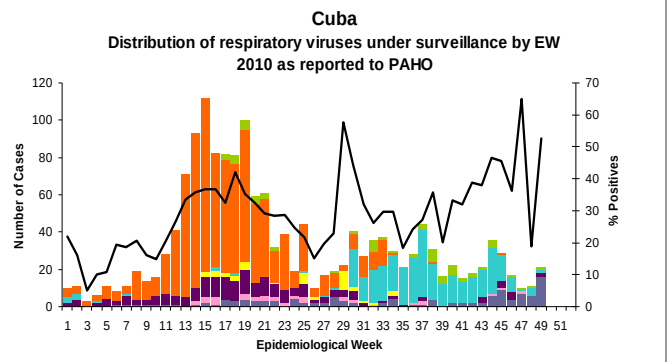
Caribbean

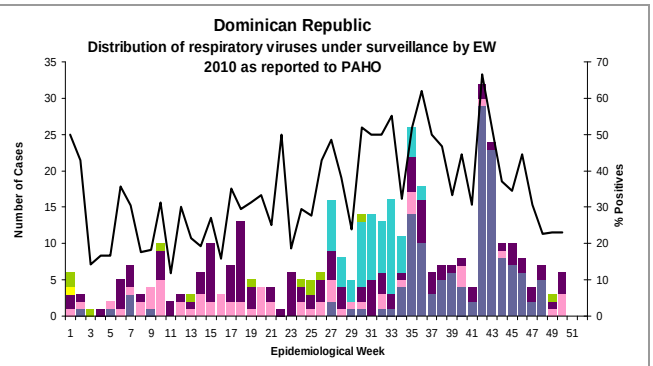
CAREC (Barbados, Dominica, Jamaica, St. Vincent & the Grenadines, St. Lucia, Trinidad and Tobago)

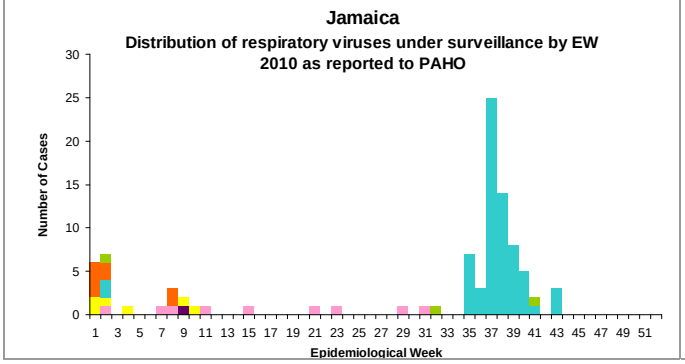


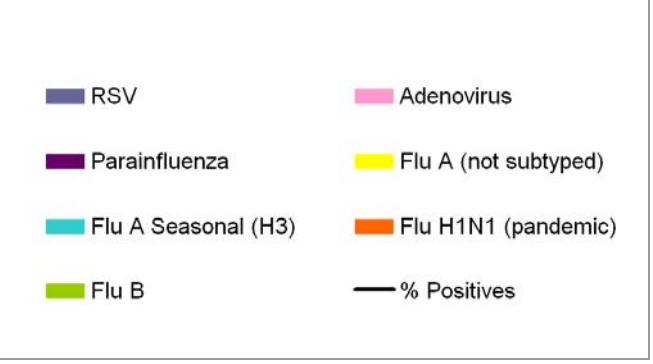


Cuba, Dominican Republica and Jamaica

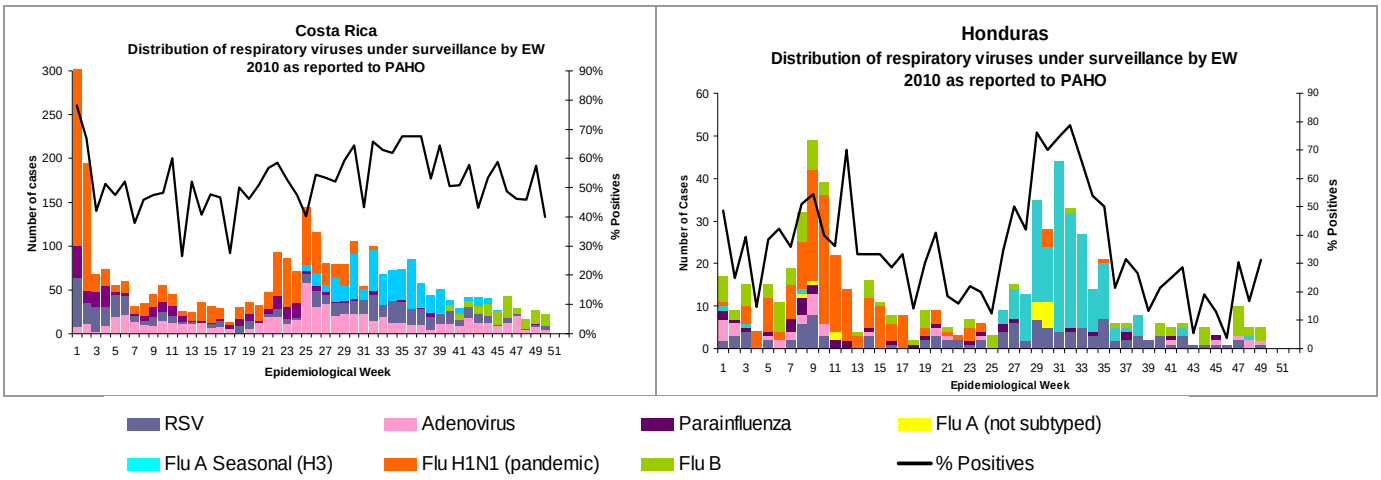




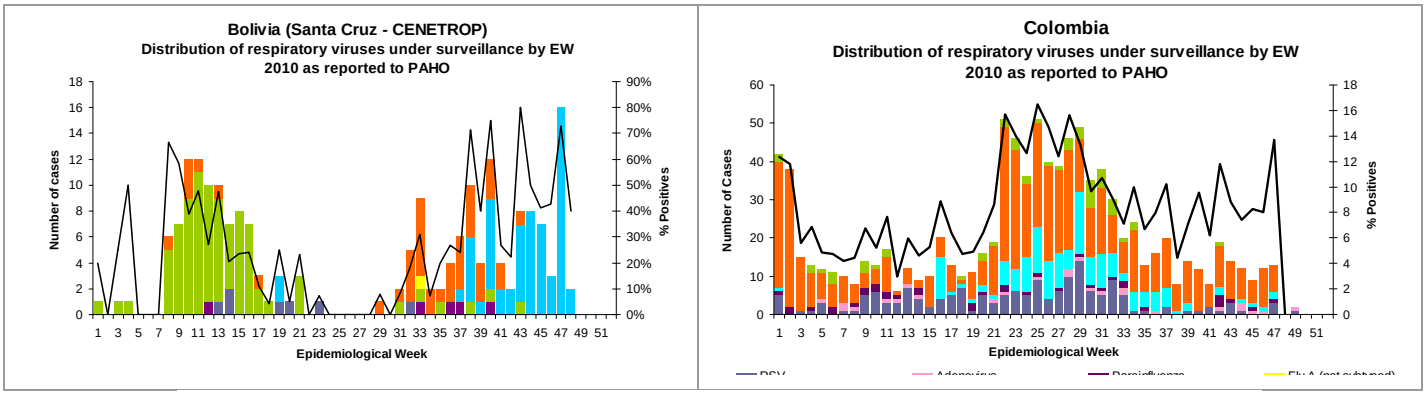




Central America

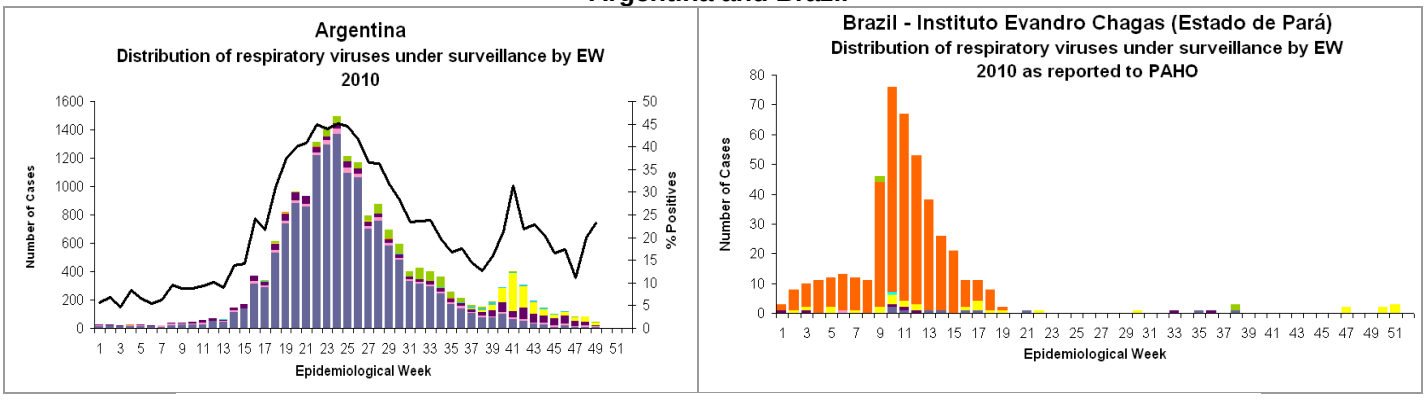


South America - Andean

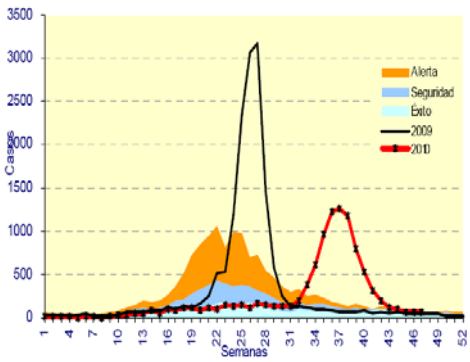


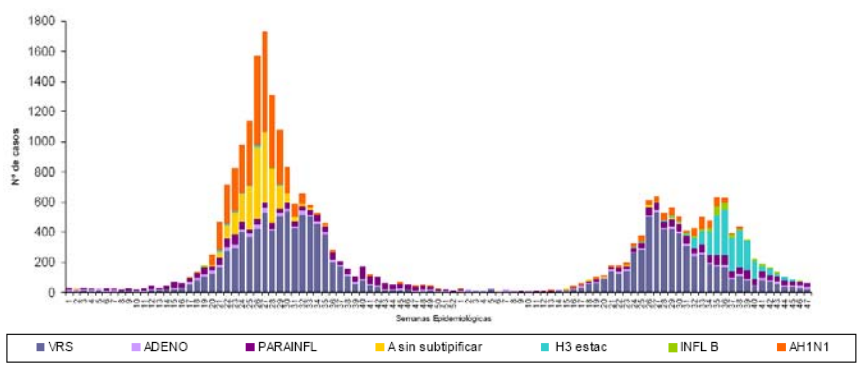
South America – Southern Cone

Argentina and Brazil

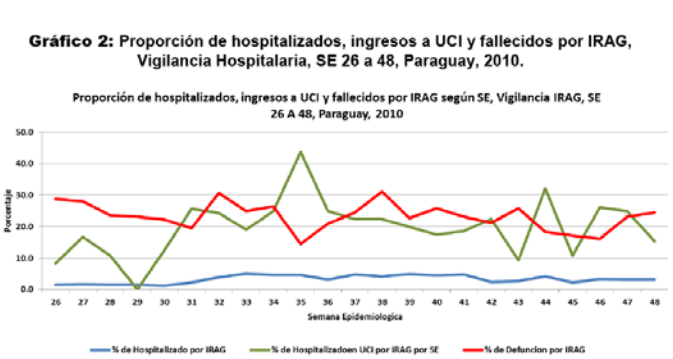


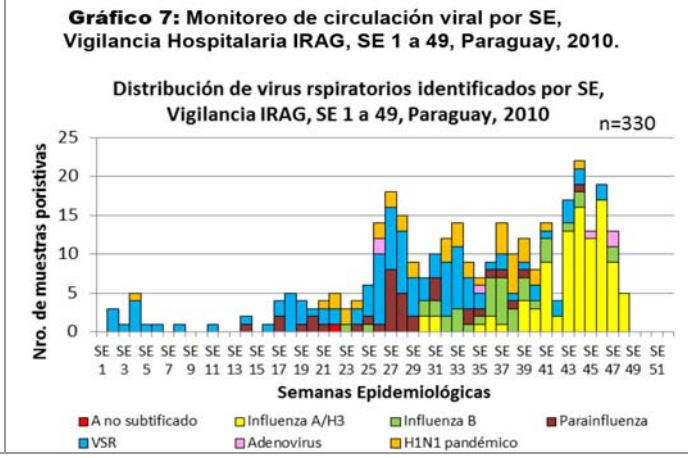
Chile



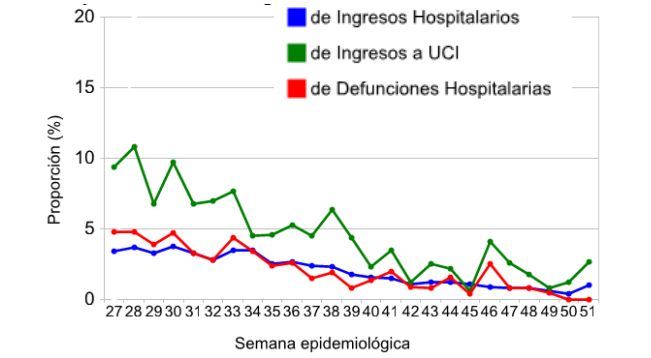


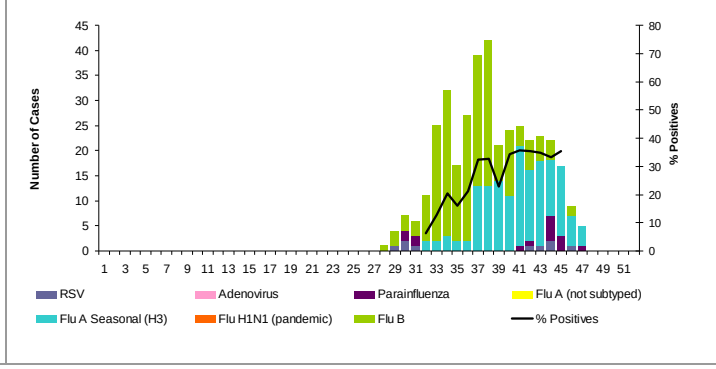
Paraguay





Uruguay





[1] Canada. FluWatch Report. EW 49. http://www.phac-aspc.gc.ca/fluwatch/
[2] USA. Surveillance Summary. Week 49. Centers for Disease Control and Prevention
[3] Chile. Informe de situación. SE 47. www.pandemia.cl
[4] Paraguay. Boletín epidemiológico semanal. SE 50. Ministério de Salud Pública y Bienestar Social
[5] Uruguay. Vigilancia de IRAG. **https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu**