



Regional Update EW 07

Influenza
(March 1, 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 continued to increase while the ILI consultation rate remained within the expected levels for this time of year. In the United States, at the national level, ILI activity and the proportion of deaths attributed to pneumonia and influenza were above the epidemic threshold. In Canada, influenza A/H3N2 has predominated since the beginning of the influenza season. In the United States and Mexico, there has been a co-circulation of influenza A and B.
- Influenza activity in Central America, the Caribbean, the Andean Region and the South Cone remained low. There has been a co-circulation of influenza A and B.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 07, overall influenza activity continued to increase. In EW 07, 35 regions reported localized influenza activity, 15 regions reported sporadic activity, 6 regions reported no activity, and none reported widespread activity. There was a substantial increase in the number of influenza outbreaks reported this week (51 outbreaks) as compared to EW 06 (34 outbreaks). This EW, the national ILI consultation rate remained within expected levels and was 29.4 per 1,000 consultations—which is similar to that observed during the previous 4 weeks. Children between 5 and 19 years of age had the highest ILI consultation rates (70.3 per 1,000 consultations). The percentage of samples positive for influenza was 18.7%, which represents a decrease from the prior week (20.2%). Since the beginning of the influenza season, influenza A/H3N2 has been the predominant strain circulating in Canada. In EW 07, of the positive tests reported (n=1150), 53% were untyped influenza A, 29% were influenza A/H3N2, 10% were influenza B, and 8% were influenza A/H1N1 2009. Among the other respiratory viruses, the proportion of specimens positive for respiratory syncytial virus (RSV) remained similar (19%) to EW 06.

In Mexico, in EW 07, of all samples tested, the percentage of samples positive for influenza remained ~13%. In EW 06, the predominant circulating virus was influenza B (80% of all positive samples).

In the United States², in EW 07, at the national level, the proportion of outpatient consultations for ILI (4.9%) was above the national baseline, which was slightly higher as compared to the prior week (4.5%). At the regional level, all 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. During EW 07, 31.3% of samples tested were positive for influenza [untyped influenza A (30.8%), influenza A/H3N2 (26.3%), influenza A/H1N1 2009 (20.4%) and influenza type B (22.4%)]. Of characterized influenza B viruses, 95% belong to the B/Victoria lineage, which is included in the 2010-2011 Northern Hemisphere vaccine and 5% belong to the B/Yamagata lineage.

Caribbean

CAREC*, in EW 07, of all samples tested, the percentage of positive samples for respiratory viruses increased to 22.7% from the previous week (15%). Between EWs 05 & 07, the predominant circulating virus was influenza B.

In Cuba, in EW 07, of all samples tested, the percentage of samples positive for respiratory viruses increased to 40% as compared to EW 06 (25%), and the percentage of positive samples for influenza virus

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

remained low (~5%). To date in 2011, influenza A/H3 has been the predominant influenza virus circulating. Among the respiratory viruses, respiratory syncytial virus (RSV) has been the predominant virus in the last EW.

In Dominican Republic, in EW 08, of all samples tested, the percentage of positive samples for respiratory viruses was 30%. To date in 2011, the predominant circulating virus was parainfluenza. No influenza viruses have been detected since EW 01, 2011.

Central America

In Guatemala, in EW 07, of all samples tested, the percentage of samples positive for respiratory viruses remained ~25%, and the percentage of positive samples for influenza virus increased to 17%, as compared to EW 06 (0%). To date in 2011, adenovirus was the predominant circulating respiratory virus. In EW 07, small numbers of influenza A/H3 and influenza A/H1N1 2009 were detected.

In Honduras, from EW 01-07, small numbers of respiratory viruses were detected. Influenza B has been the predominant influenza virus circulating in 2011. No influenza viruses have been detected since EW 05.

In Panama, from EW 01-06, small numbers of respiratory viruses were detected. Parainfluenza virus and RSV have been the predominant respiratory viruses circulating in the last 2 weeks.

South America – Andean

In Ecuador, in EW 08, the percentage of samples positive for respiratory viruses remained ~20%, similar to EW 07. To date in 2011, influenza A/H3 and influenza A/H1N1 2009 co-circulated in similar percentage (each ~38% of the positive influenza viruses).

In Colombia³, in EW 06, of all samples tested, the percentage of positive samples for respiratory viruses was 30%. To date in 2011, there has been a co-circulation of influenza A/H1 2009 and influenza A/H3N2.

In Peru⁴, between EW 01 - 05, the acute respiratory infection (ARI) activity (number of ARI consultations and accumulate incidence) was slightly lower as compared to previous years. The number (n=2448) and the cumulative incidence (8.3 per 10,000 habitants) of pneumonia cases in children under 5 years of age, were also slightly inferior as compared to the same period in the previous years.

In Venezuela⁵, in EW 06, the number of the ARI cases increased 1.7% as compared to EW 05 and remained within expected levels for this time of year. The number of pneumonia cases increased 9.8% as compared to EW 05 and remained within expected levels for this time of year. Children under 1 year of age had the highest ARI and pneumonia rates. To date in 2011, the percentage of positive samples for influenza was 31.9%. Among the influenza samples, the predominant circulating virus is seasonal influenza A (79%), followed by influenza B (14%) and influenza A/H1N1 2009 (7%).

South America – Southern Cone

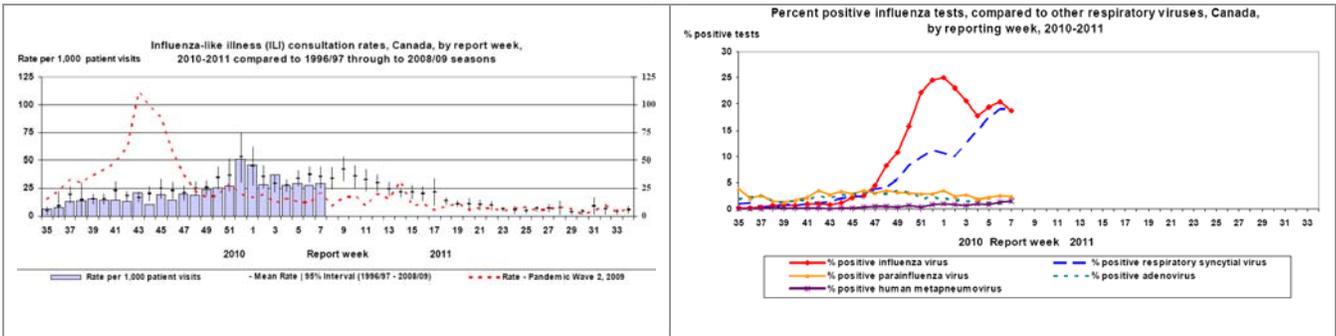
In Paraguay⁶, in EW 07, the proportion of ILI consultations remained less than 10%. The proportion of SARI cases among the total hospitalized was below 2%, the proportion of SARI intensive care units (ICU) cases among all ICU admissions was below 10% and the proportion of SARI deaths among the total deaths was below 5%, which remain similar to previous weeks. Influenza A/H3 has been the predominant circulating virus in 2011 (90% of all respiratory viruses). In EW 06, RSV and adenovirus were detected in the SARI patients.

In Uruguay⁷, from EW 01 – 09, the proportions of SARI cases among the total number of hospitalizations, ICU admissions, and deaths associated with SARI, have remained less than 2%. To date in 2011, small numbers of respiratory viruses were detected and influenza A/H3 has been the predominant circulating virus among SARI cases.

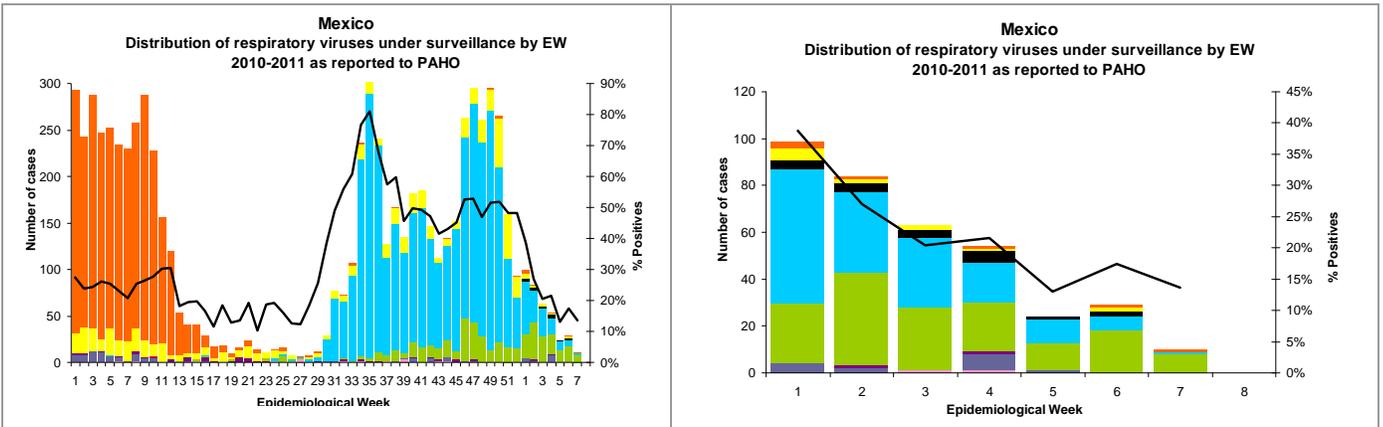
Graphs

North America

Canada

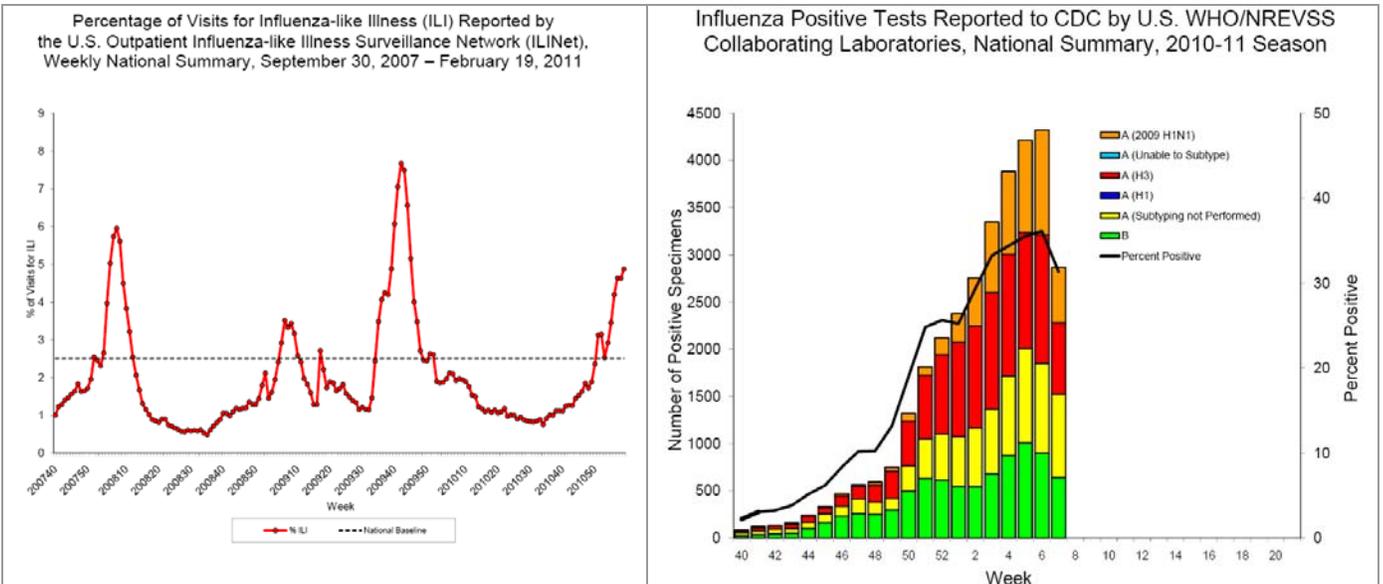


Mexico



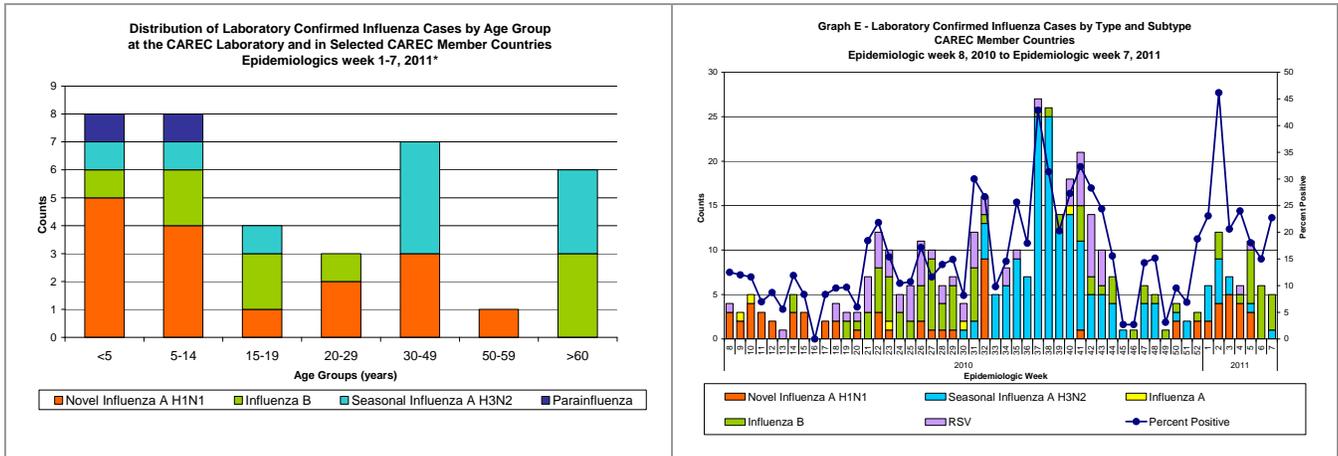
- RSV
- Adenovirus
- Parainfluenza
- Flu A (not subtyped)
- Flu A Seasonal (H1 or H3)
- Flu H1N1 (pandemic)
- Flu B
- % Positives

United States

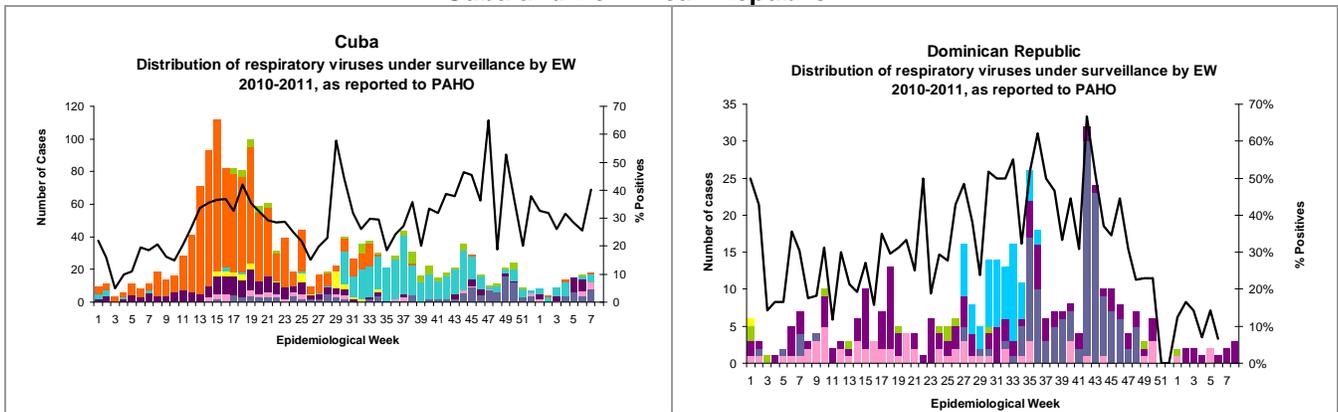


Caribbean

CAREC

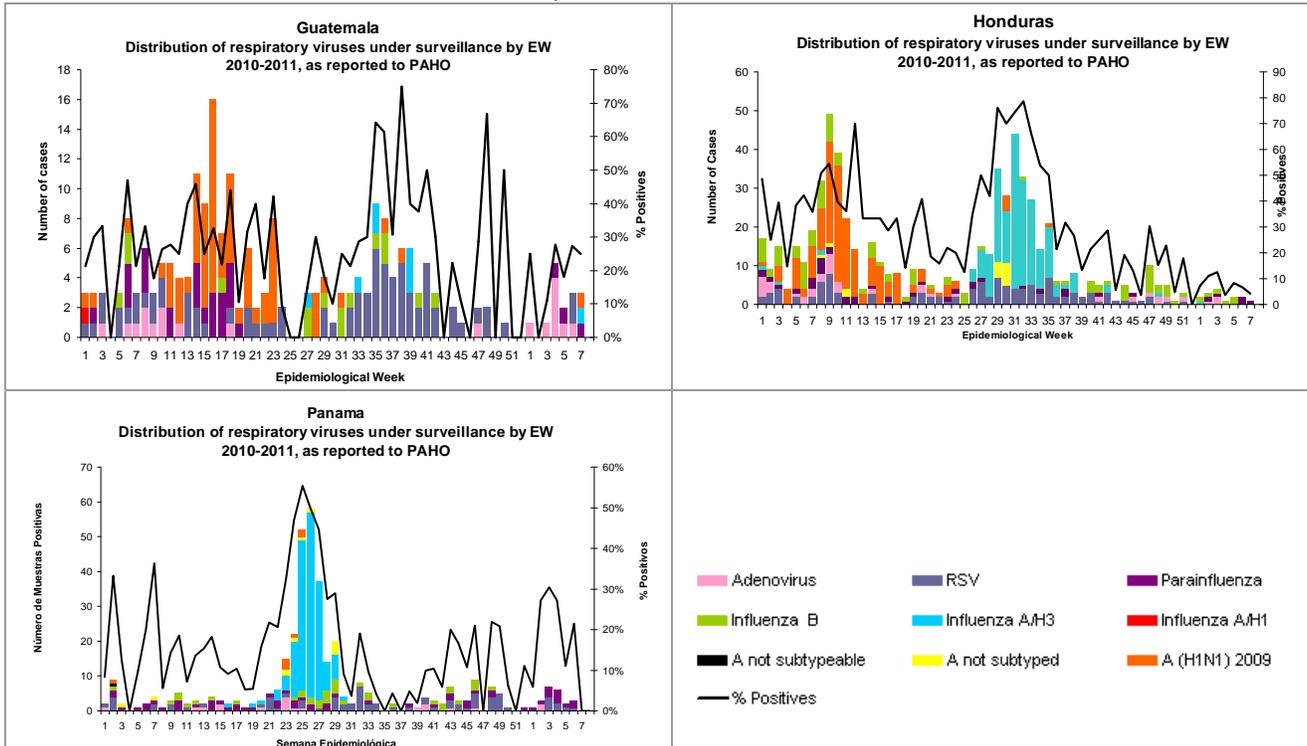


Cuba and Dominican Republic



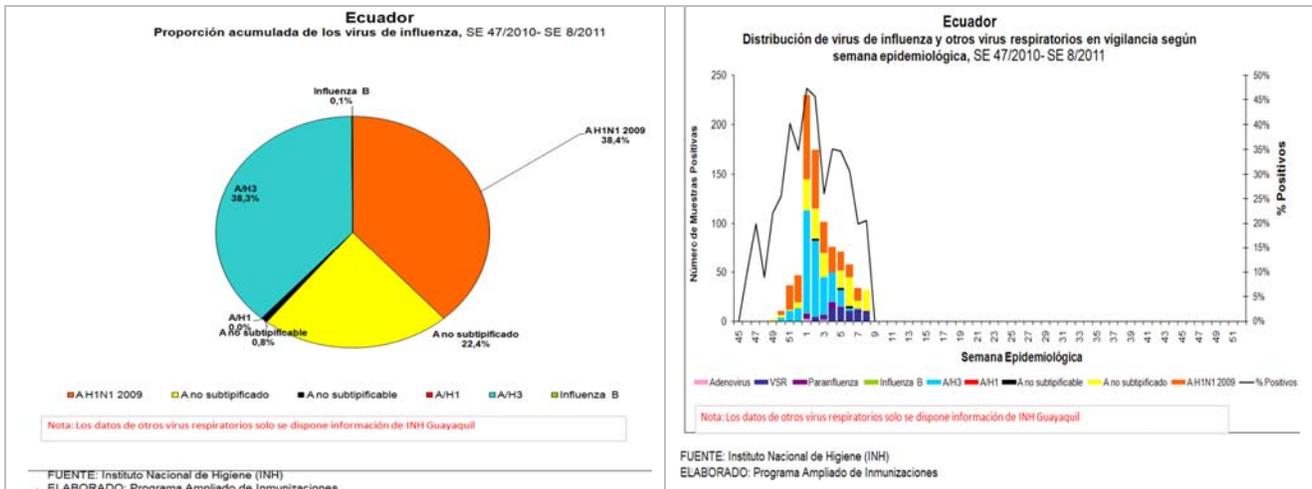
Central America

Guatemala, Honduras and Panama

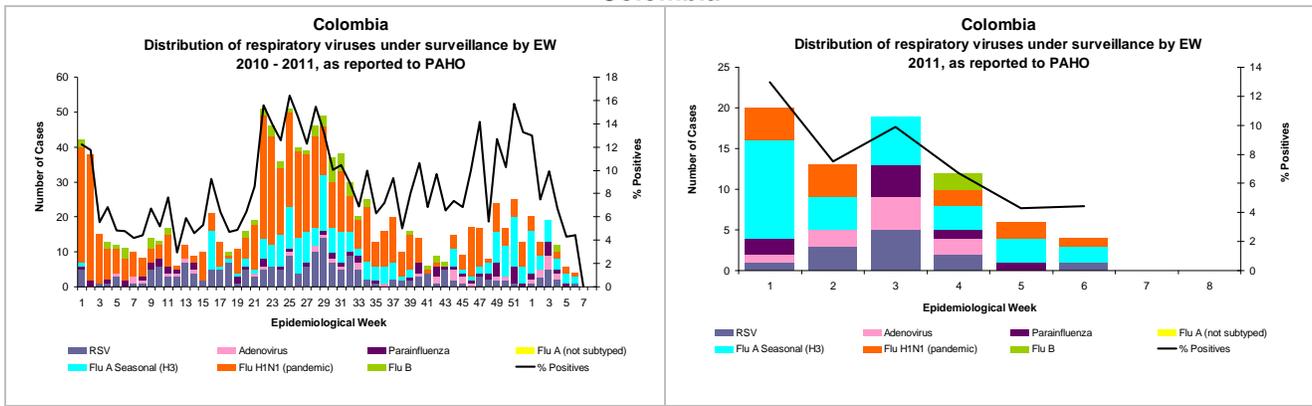


South America - Andean

Ecuador



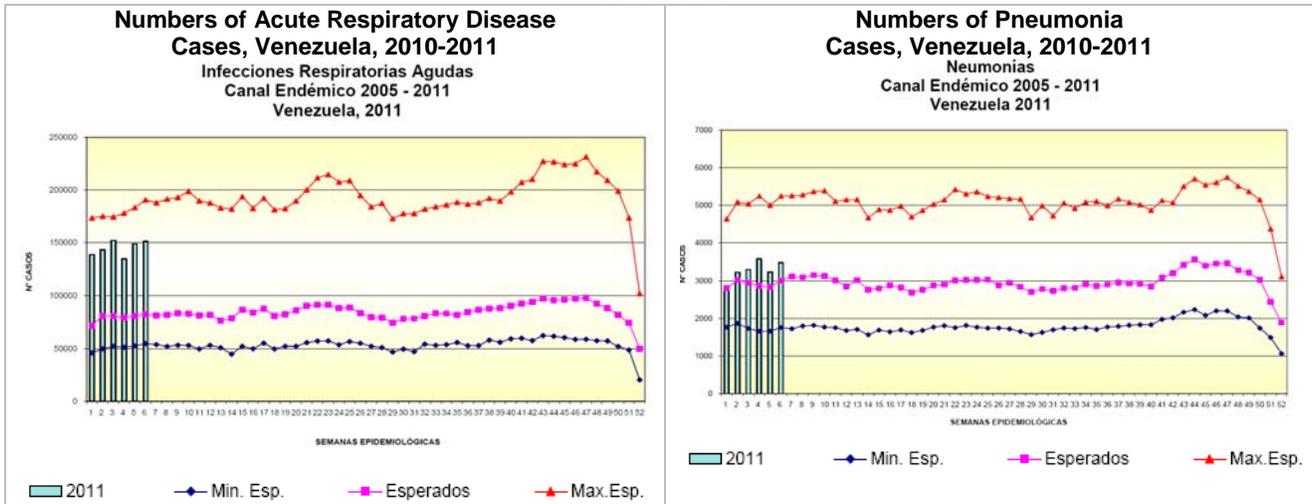
Colombia



Peru

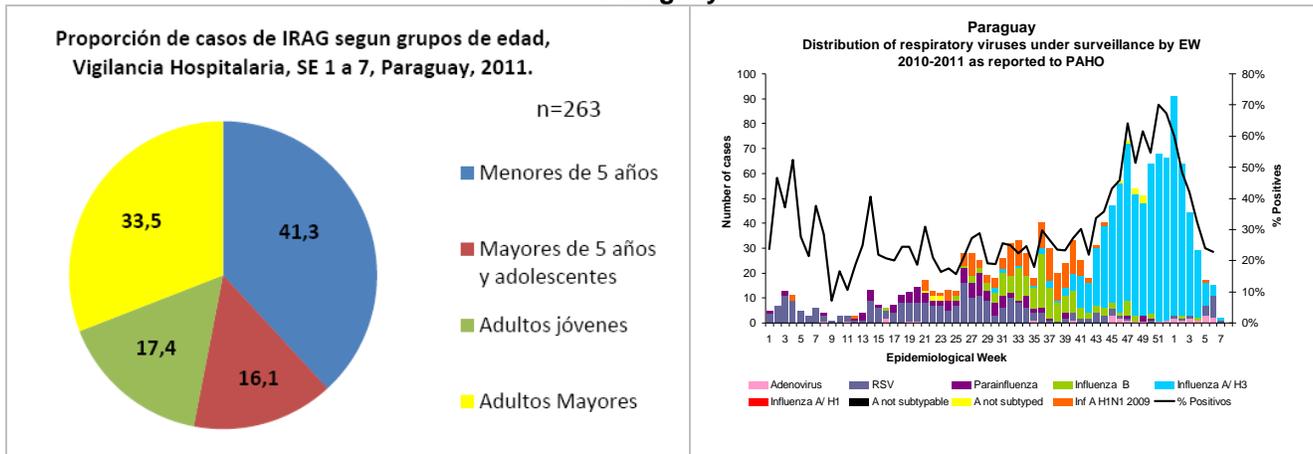


Venezuela

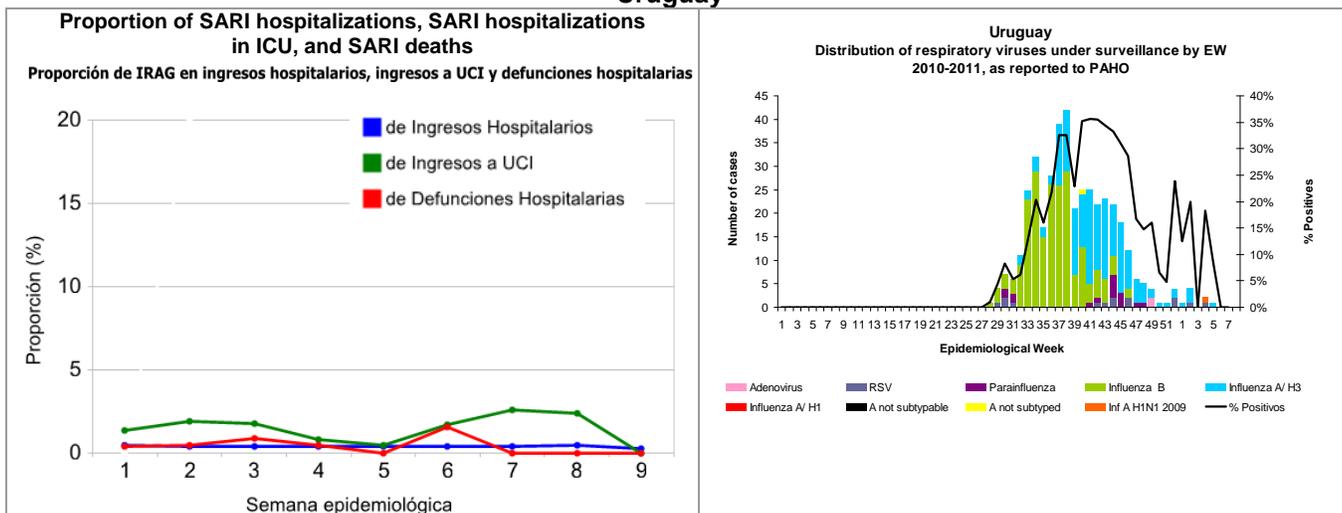


South America – Southern Cone

Paraguay



Uruguay



¹ Canada. FluWatch Report. EW 07. <http://www.phac-aspc.gc.ca/fluwatch/>

² USA. Surveillance Summary. Week 07. Centers for Disease Control and Prevention

³ Colombia. Boletín epidemiológico semanal. SE 06. Instituto Nacional de Salud

⁴ Perú. Sala de Situación de Salud. SE 05. Ministerio de Salud. Dirección General de Epidemiología

⁵ Venezuela. Boletín epidemiológico semanal. SE 06. Ministerio del Poder Popular para la Salud

⁶ Paraguay. Boletín epidemiológico semanal. SE 08. Ministerio de Salud Pública y Bienestar Social

⁷ Uruguay. Vigilancia de IRAG. <https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu>