



Regional Update EW 32

Influenza
(August 23, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phip/viz/ed_flu.asp

Influenza Regional Reports: http://new.paho.org/hq/index.php?option=com_content&task=view&id=3352&Itemid=2469&to=2246

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 American, influenza activity remains low.
- In Central America and the Caribbean respiratory syncytial virus (RSV) remained as the primary circulating virus (CAREC, Costa Rica, El Salvador, and Panama); with variable predominance of influenza A/H3N2 (CAREC, Cuba and Honduras) and influenza B (Dominican Republic).
- In South America, RSV continues to show a circulation with a decreasing trend (Argentina and Chile). Among influenza viruses a lower circulation for this time of year is observed, with predominance of influenza A/H1N1 2009 (Bolivia, Colombia, and Chile); and co-circulation of influenza A/H3 (Bolivia, Colombia, Peru, and Argentina) and influenza B (Brazil).

Epidemiologic and virologic influenza update

North America

Canada¹, in epidemiological weeks (EWs) 31 and 32, showed influenza activity at inter-seasonal levels. Influenza-like illness (ILI) consultation rates were 3.9 (EW 31) and 7.7 (EW 32) per 1000 consultations; these rates were within the expected for this time of year. Few influenza detections were reported in EWs 31 and 32, during both of these weeks the percentage of samples positive for influenza remained less than 1%, similar to previous EWs. The influenza viruses detected were influenza A/H3N2 and unsubtype influenza A.

In the United States², in EW 32, at the national level, the proportion of ILI consultations (0.6%) remained below the national baseline (2.5%). The proportion of deaths attributed to pneumonia and influenza (5.9%) remained below the epidemic threshold for EW 32 (6.4%). This week no pediatric deaths associated with influenza were reported. During EW 32, among all samples tested (n=388), the percentage of samples positive for influenza remained at low levels (<2%), with sporadic detections of unsubtype influenza A/H3 and unsubtype influenza A.

In Mexico, in EW 32, of all samples received (n=16), only one sample positive for influenza A/H3 was detected.

Caribbean

CAREC^{*}, in EW 32, received information from Jamaica, Trinidad and Tobago. The rate of severe acute respiratory infection (SARI) (1.6%) was similar to the previous week (1.7%). No SARI related deaths were reported since EW 27. According to laboratory data, in EW 32, among samples tested (n=13), no samples positive for respiratory viruses were detected. Respiratory syncytial virus (RSV) was the primary virus in circulation between EWs 26-31, with sporadic detections of A/H1N1 2009 throughout the year.

In Cuba, in EW 32, among all samples tested (n=59), the percentage of samples positive for respiratory viruses remained similar to the previous week (~70%); and the percentage of positives for influenza was <25%. The primary virus in circulation was RSV followed by influenza A/H3 and other respiratory viruses.

* Includes Barbados, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, and Trinidad and Tobago

In the Dominican Republic, in EW 33, among all samples tested (n=25), the percentage of samples positive for respiratory viruses was 12%; lower than the previous week (26%). The primary virus in circulation was influenza B, with decreasing detection of influenza A/H1N1 2009.

In Jamaica, in EW 32, the proportion of acute respiratory illness (ARI) consultations was 2.8%, similar to that observed during the previous week. The proportion of SARI admissions was less than 1% and remained stable compared to the previous week. In EW 32 no SARI related deaths were reported. According to laboratory data, there has been no detection of positive cases for influenza since EW 21.

Central America

In Costa Rica, in EW 32, among all samples tested (n=61), the percentage of samples positive for respiratory viruses was ~50%, similar to the previous week. RSV has been the predominant virus since EW 28, followed by adenovirus and influenza A/H3.

In El Salvador, in EW 32, of all samples tested (n=42) the proportion of samples positive for respiratory viruses remained at ~60% without influenza detections since EW 29. RSV continues to be the predominant virus with a decreasing trend since EW 30.

In Honduras³, in EW 32, at the national level, the proportion of ILI consultations was slightly higher than the previous week, remaining <10% and less than observed in 2010 during this time of the year. The proportion of SARI hospitalizations, even though higher than the previous week and higher than observed in 2010, remained <10%. This week, one SARI related death was reported. According to laboratory data, in EW 32, of all samples tested (n=22), ~50% were positive for respiratory viruses, influenza A/H3 being the predominant virus followed by influenza B.

In Panama, in EW 32, among samples tested (n=24), ~80% were positive for respiratory viruses; RSV has been the predominant virus since EW 21. In EW 32, no samples positive for influenza were detected.

South America – Andean

In Bolivia, in La Paz (INLASA), between EWs 18-31 influenza A/H3 was the primary virus in circulation, with sporadic detection of influenza A/H1N1 2009. In Santa Cruz, (Laboratorio CENETROP), in EW 32 of all samples tested (n=74) the percentage of positivity for respiratory viruses was slightly higher than the previous week (~30%) with predominance of influenza A/H1N1 2009 (~80% of detected viruses) followed by influenza A/H3.

In Colombia⁴, according to the national laboratory, in EW 32, of all samples received (n=54) the positivity percentage for respiratory viruses was ~2%, with RSV as the only detected virus. Up to EW 31 co-circulation of influenza A/H3 and influenza A/H1N1 2009 was reported.

In Ecuador, in EW 32, at the national level, the percentage of SARI hospitalizations and SARI ICU admissions remained <10%, no SARI related deaths were reported. In EW 32, of all samples tested (n=23), the percentage of samples positive for respiratory viruses was <10%. No influenza viruses have been detected since EW 11. RSV has been the primary virus in circulation between EW 9 and EW 29, especially in children less than 1 year old.

In Peru⁵, in EW 31, ARI and pneumonia activity indicators (number of ARI cases in less than 5 years old and number of pneumonia cases in children less than 5 years old, respectively) show a decreasing trend compared to the previous weeks, remaining below or within the expected for this time of year. Up to EW 31 of 2011, 230 pneumonia related deaths were notified in children less than 5 years of age, this represents ~20% less than the average notified in the last three years (2008-2010). According to laboratory data, in EW 31, of total samples tested (n=35), ~30% were positive for respiratory viruses, influenza A/H3 has been the primary virus in circulation, followed by untyped influenza A and RSV.

South America – Southern Cone

In Argentina⁶, ILI and SARI endemic channels showed that the number of ILI and SARI cases for EW 29 remained with a decreasing trend and at lower levels than observed during 2010. According to national

laboratory data, in EW 32 the predominance of RSV as respiratory virus continued but with a decreasing trend since its peak in EW 23. Concerning influenza viruses, in EW 32, among samples tested (n=222) the main virus detected was untyped influenza A with co-circulation of influenza A/H1N1 2009 and influenza A/H3.

In Brazil, according to Adolfo Lutz institute (Sao Paulo), in EW 33, among all samples tested (n=45), the percentage of samples positive for respiratory viruses remained similar to the previous week (20%) and the percentage of samples positive for influenza was ~10%. In EWs 32 and 33, among samples tested (n=74 and n=45 respectively), co-circulation of influenza A/H1N1, influenza A/H3 and influenza B was reported. In Rio de Janeiro (Laboratorio FIOCRUZ) in EW 33, of all samples tested (n=8) 50% were positive for influenza B. Since EW 20, co-circulation of influenza A/H3, influenza A/H1N1 2009 and influenza B has been reported.

In Chile⁷, in EW 32, ILI activity (7 consultations per 100,000 inhabitants) at the national level was higher than the previous week (6.7 per 100,000 inhabitants), but remained with low intensity and within the expected levels for this period. This week, the percentage of emergency department admission for respiratory cases in children less than 15 years remained similar to the previous week and lower than observed during 2009-2010. In EW 32, 2 deaths associated to influenza A/H1N1 2009 were registered. According to laboratory data, in EW 32, among samples tested at the national level 23% were positive for some respiratory virus. Of these positive samples RSV was the predominant one (41%) with a decreasing trend compared to the previous weeks. Concerning influenza virus, of all samples positive for some respiratory virus, 39% were positive for influenza A, being influenza A/H1N1 2009 the predominant circulating virus. Regionally, influenza A/H1N1 2009 was detected in Copiapo, San Felipe, Valparaiso, Viña del Mar, Rancagua, Linares, Concepcion, Temuco, Valdivia and Santiago.

In Paraguay⁸, in EW 32, the proportion of ILI consultations among all consultations remained similar to the previous week (~8%). In EW 32 the proportion of SARI hospitalizations and the proportion of SARI ICU admissions showed a slight decrease compared to the previous week and these remain below 5% and 15% respectively. The percentage of SARI deaths continued below 10%. According to laboratory data, in EW 32, of all samples tested (n=78) the percentage of samples positive for respiratory virus remained at ~5%, with few detections of respiratory viruses, among them RSV and parainfluenza.

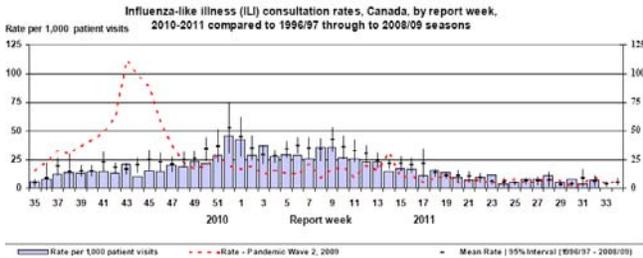
In Uruguay⁹, in EW 32, the proportion of SARI hospitalizations and the proportion of SARI ICU admissions were below 5% and 15% respectively. The proportion of SARI deaths remained with a decreasing trend and below 2%. According to laboratory data, in EW 32, of all samples tested (n=19) the percentage of samples positive for respiratory virus remained at ~40%, co-circulating RSV, influenza A/H3 and influenza A/H1N1 2009.

Graphs

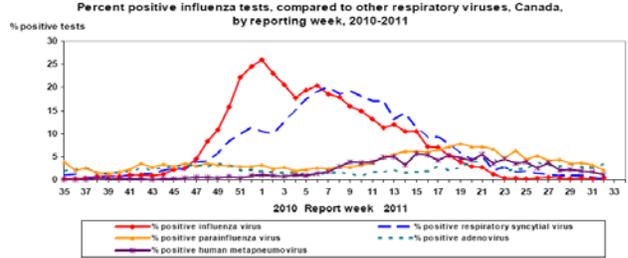
North America

Canada

Tasa de consultas por enfermedad tipo influenza (ETI), por SE, 2010-2011, comparado con las estaciones de 1996/97 a 2008/09



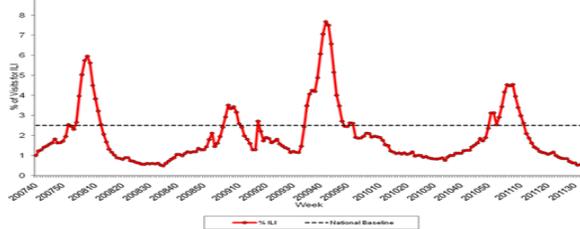
Porcentaje de muestras positivas a Influenza, comparado con otros virus respiratorios por semana epidemiológica, 2010 – 2011.



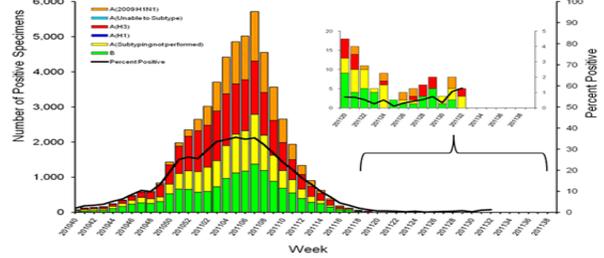
Estados Unidos

% of Visits for ILI

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 – August 13, 2011



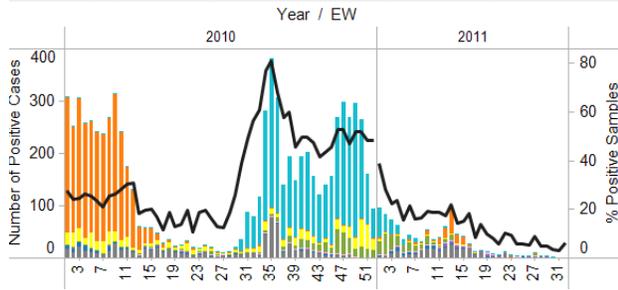
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2010-11



Mexico

Respiratory virus characterization by EW, 2011

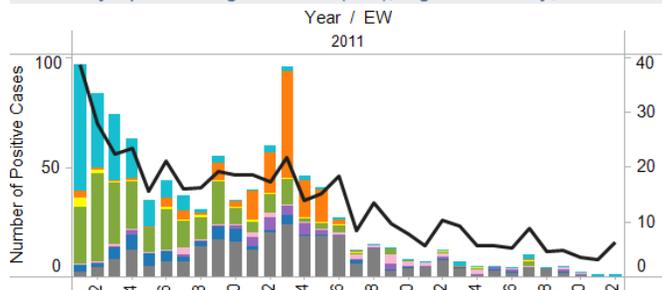
Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011



Respiratory viruses
 FLU A/H1 (red), FLU A/H3 (teal), FLU A (H1N1) 2009 (orange), FLU A Not Subtyped (yellow), FLU B (green), Adenovirus (pink)

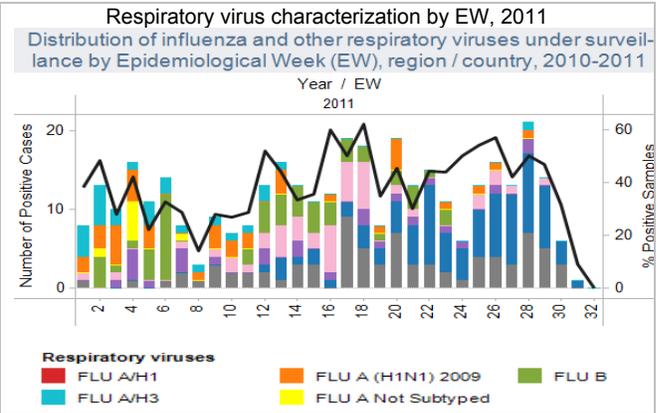
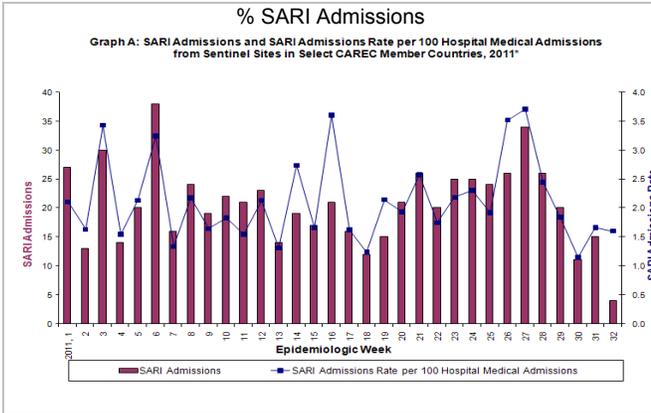
Respiratory virus characterization by EW, 2011

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

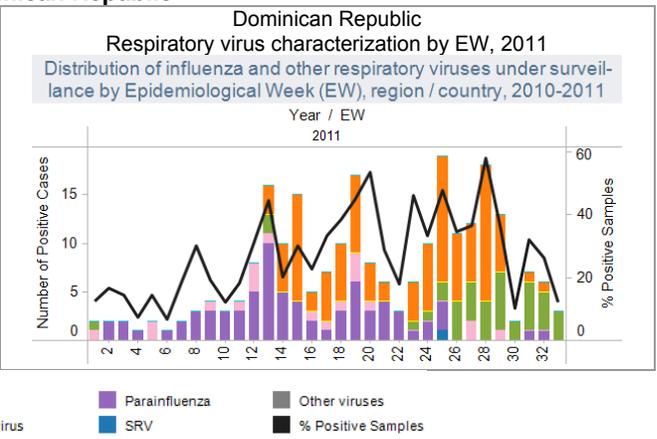
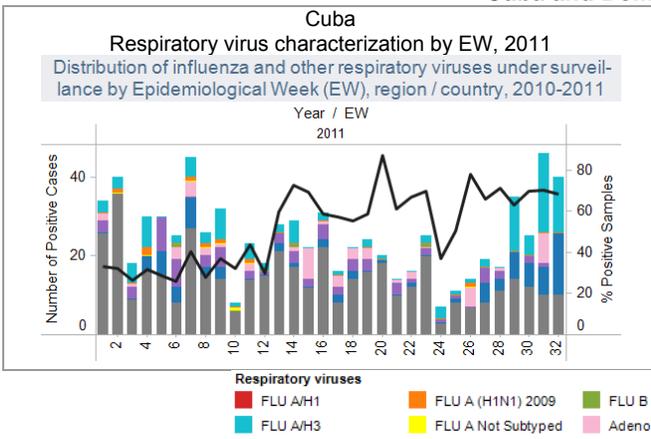


Parainfluenza (purple), SRV (blue), Other viruses (grey), % Positive Samples (black)

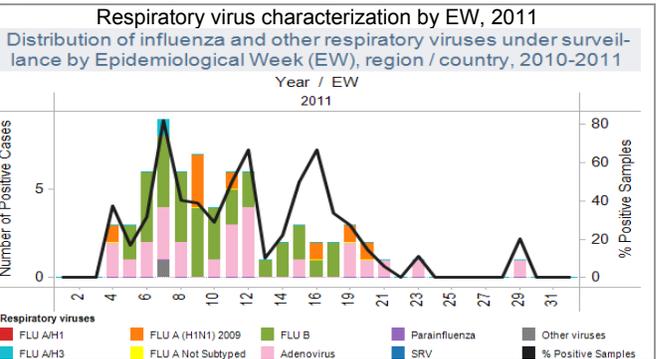
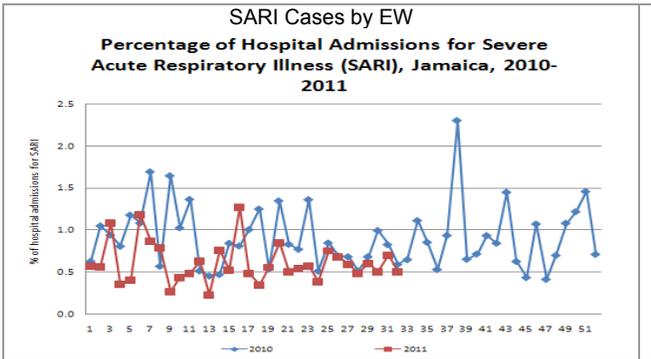
CAREC



Cuba and Dominican Republic

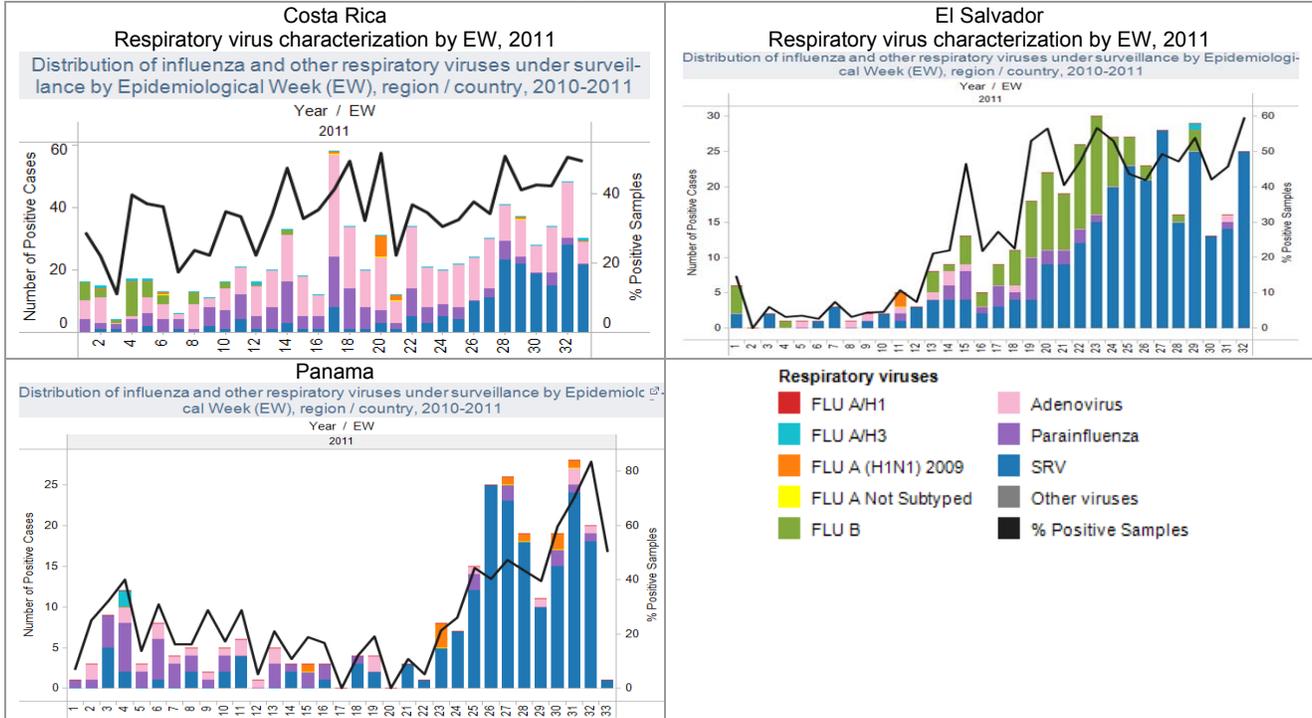


Jamaica

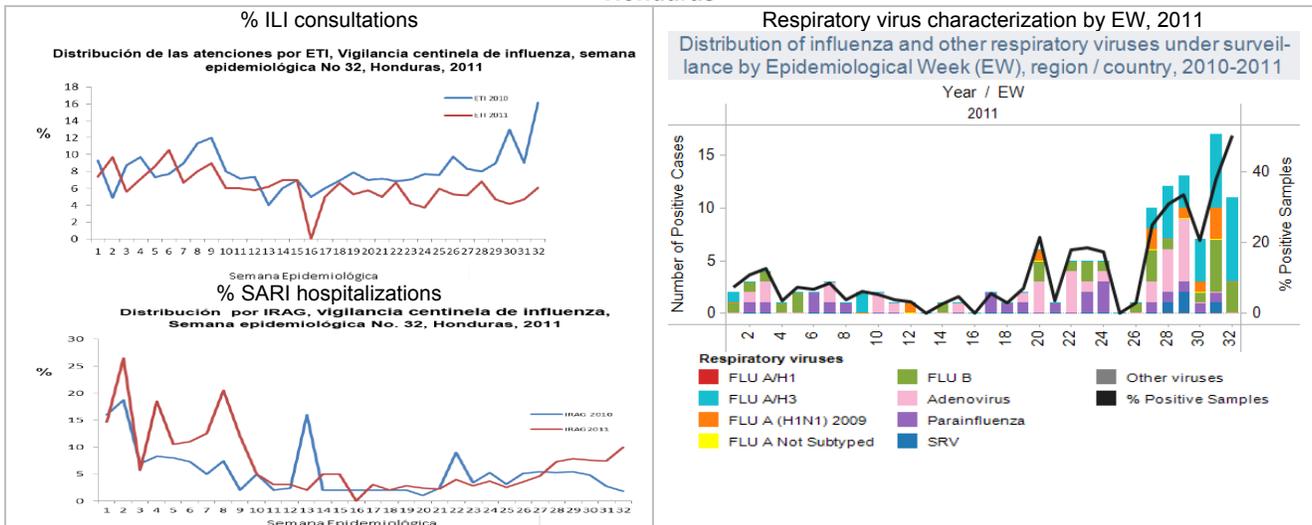


Central America

Costa Rica, El Salvador and Panama

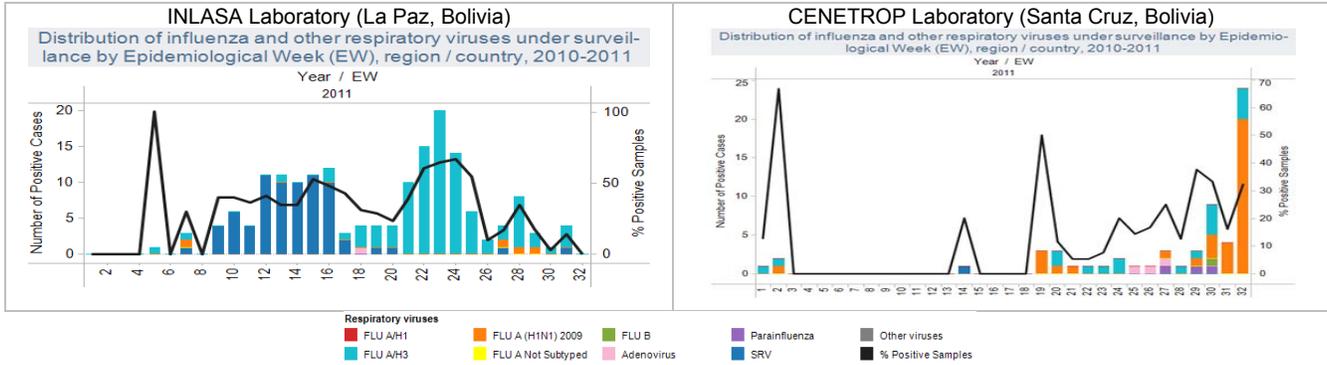


Honduras

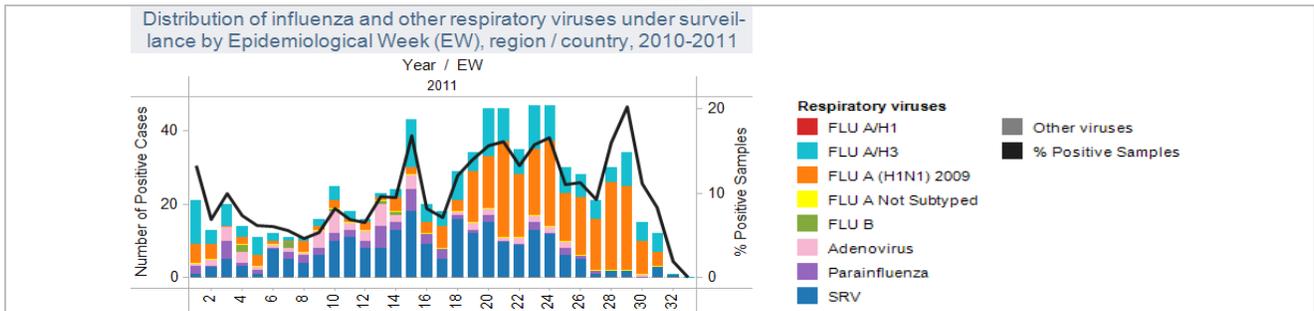


South America - Andean

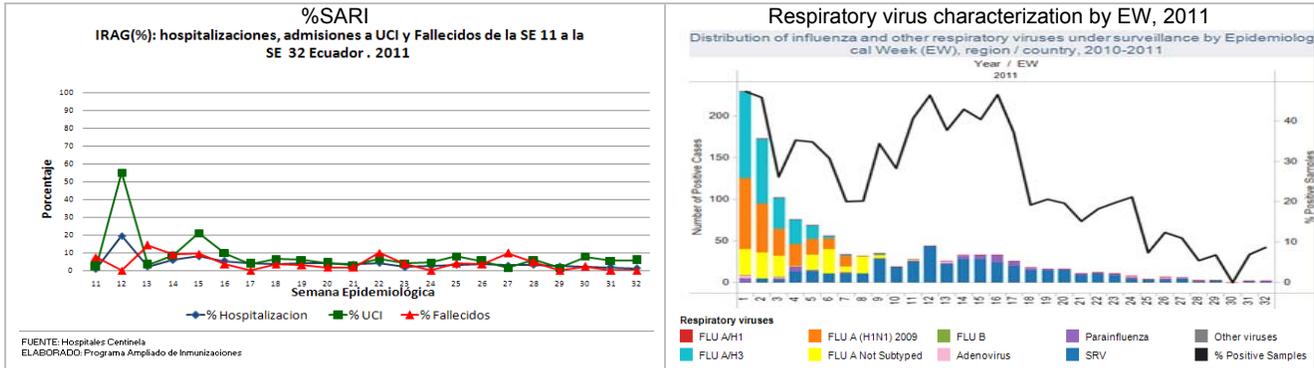
Bolivia



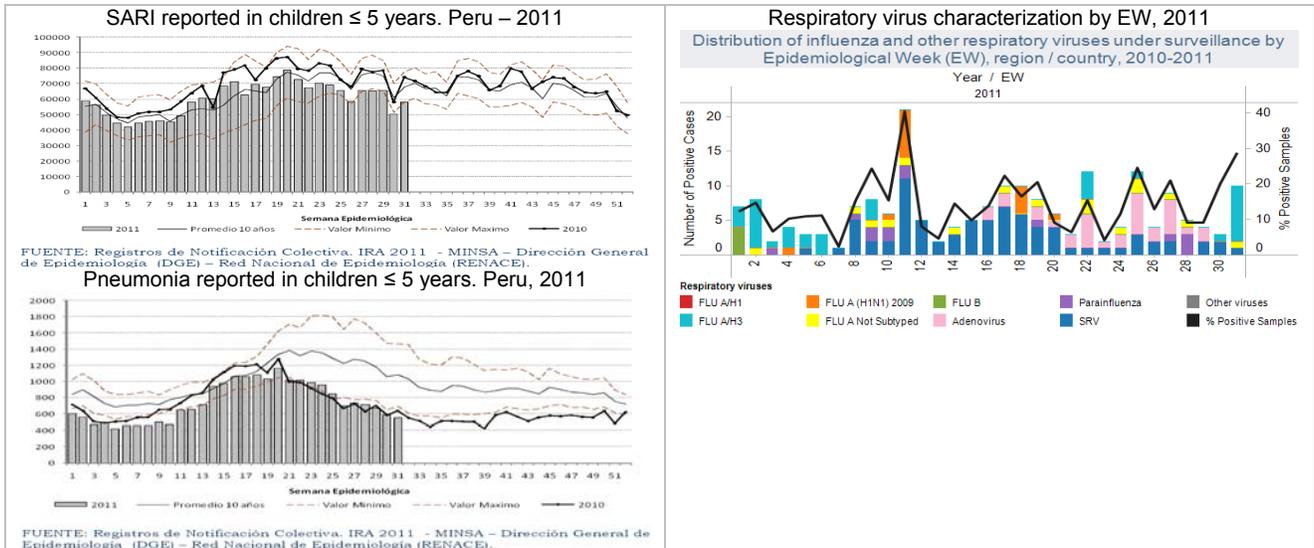
Colombia



Ecuador

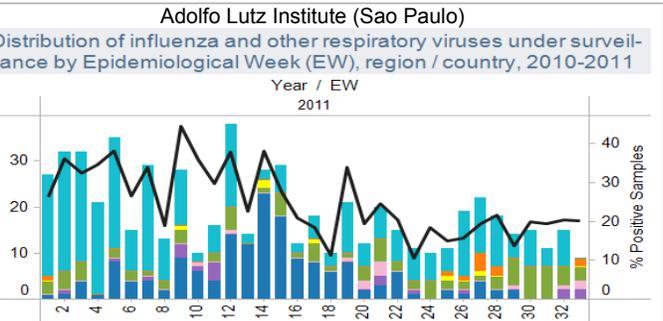
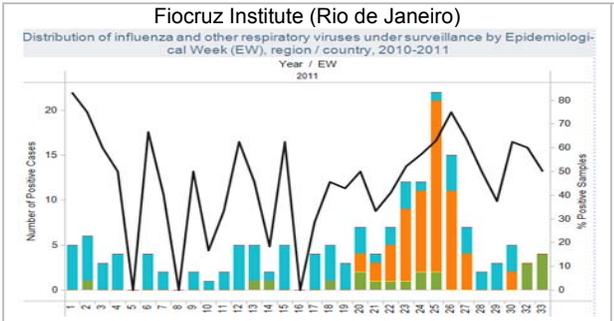
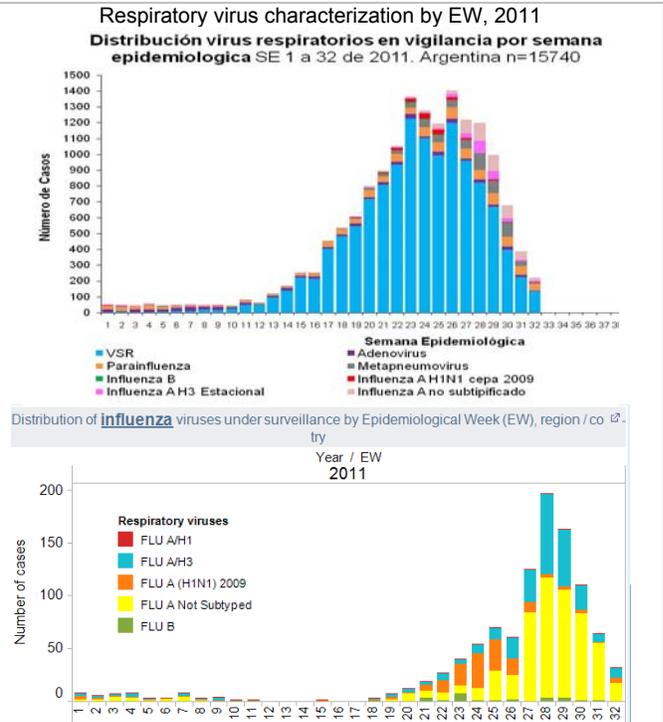
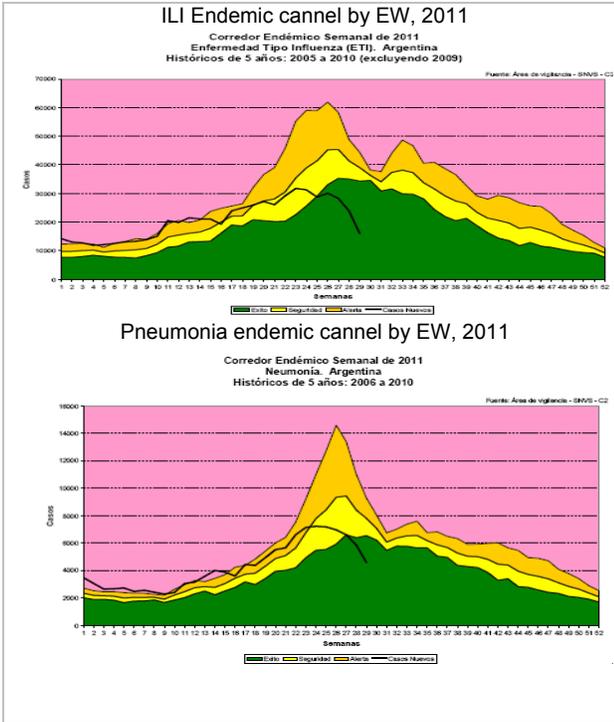


Peru

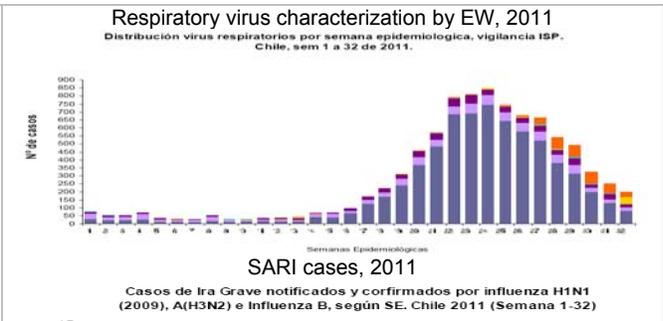
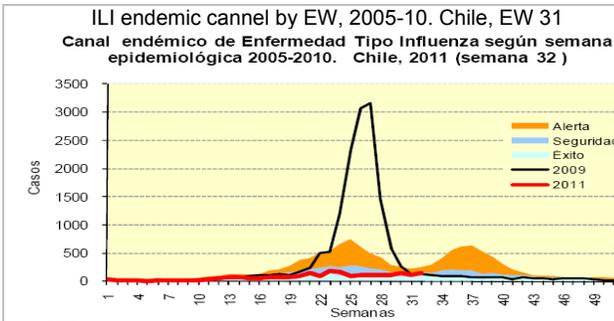


South America – Southern Cone

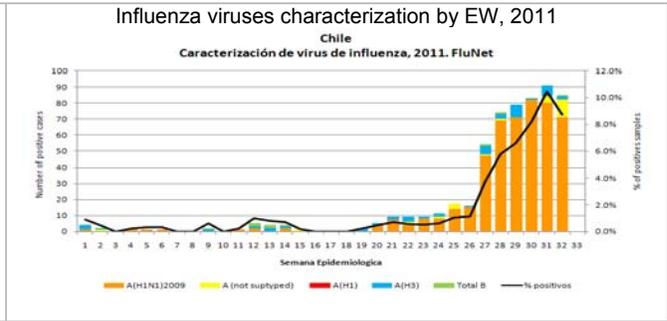
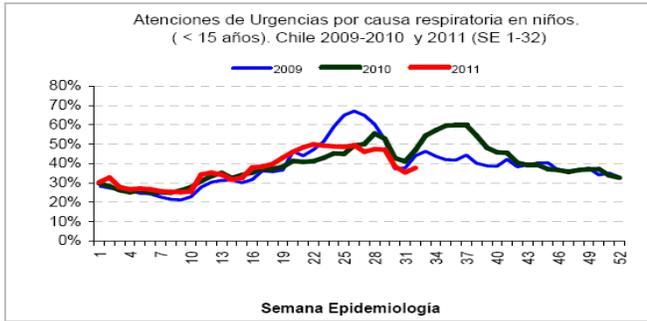
Argentina



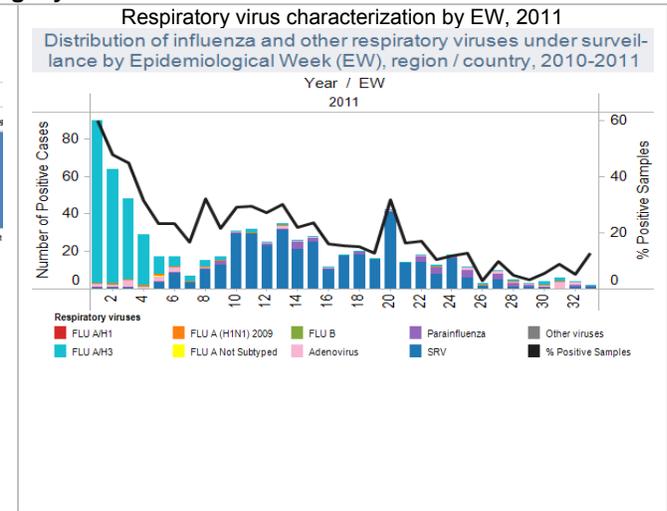
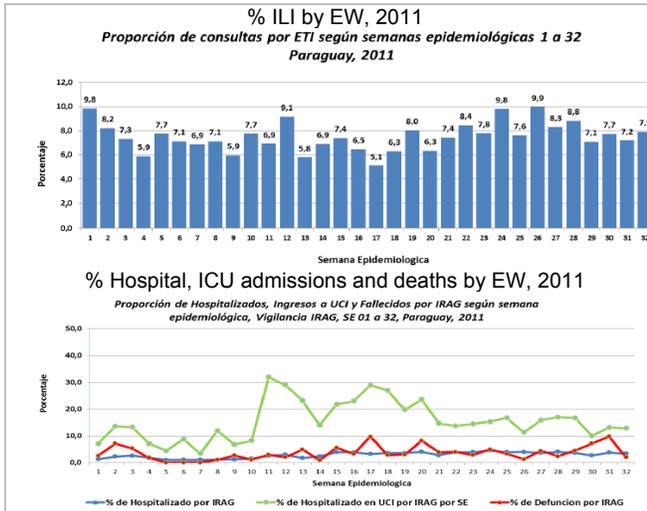
Chile



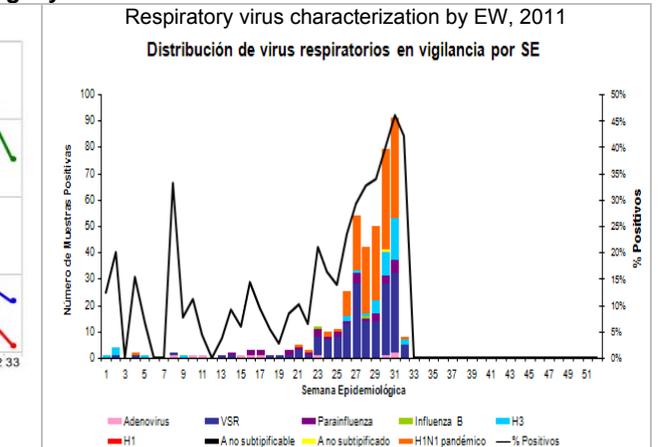
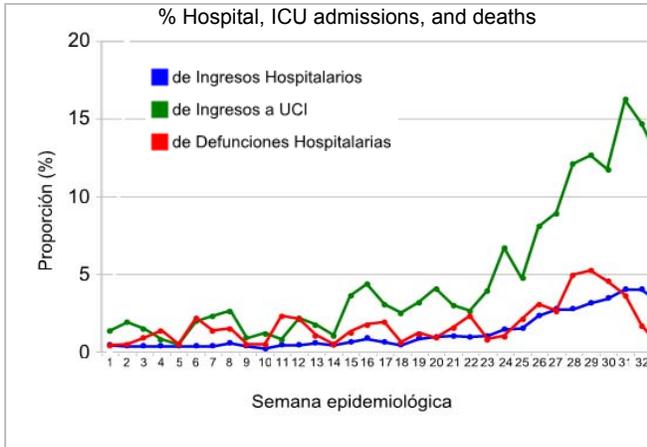
%Respiratory admissions in children ≤ 15 years. Peru, 2011



Paraguay



Uruguay



¹ FluWatch Report. EWs 31-32. <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. Week 32. Centers for Disease Control and Prevention

³ Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 32

⁴ Colombia. Instituto Nacional de Salud.

⁵ Perú. Sala de Situación de Salud. SE 31. Ministerio de Salud. Dirección General de Epidemiología.

⁶ Argentina. Actualización situación de enfermedades respiratorias 2011. SE 32.

⁷ Chile. Informe de situación. SE 32. www.pandemia.cl

⁸ Paraguay. Boletín epidemiológico semanal. SE 32. Ministerio de Salud Pública y Bienestar Social

⁹ Uruguay. Dirección General de la Salud. División Epidemiología.

HU <https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu>