Regional Update EW 31

Influenza

(August 16, 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 America, influenza activity remains low.
- In Central America and the Caribbean, respiratory syncytial virus (RSV) remained the primary virus in circulation (Costa Rica and El Salvador) and there has been variable detection of influenza A (subtypes H1N1 2009 and H3N2) and influenza B (Cuba, Dominican Republic and Honduras).
- In the Southern Cone, RSV circulation continues to decrease (Argentina and Chile) and among influenza viruses, circulation of influenza A/H1N1 2009 was reported (Chile and Uruguay), but at lower levels than expected for this time of year; co-circulating with influenza A/H3 (Bolivia, Peru and Argentina) and with little detection of influenza B (Brazil).

North America

In the United States[1], in EW 31, at the national level, the proportion of influenza-like illness (ILI) consultations (0.6%) remained below the national baseline (2.5%). The proportion of deaths attributed to pneumonia and influenza (5.9%) was below the epidemic threshold. This week no pediatric deaths associated with influenza were reported. During EW 31, among all samples tested, the percentage of samples positive for influenza remained at low levels, less than 2%, with sporadic detections of unsubtyped influenza A, A/H1N1 2009 and influenza B.

In Mexico, in EW 31, of all samples received (n=27), only one sample positive for unsubtyped influenza A was detected.

Caribbean

CAREC[*], in EW 31, received information from Jamaica, Saint Vincent, the Grenadines, and Tobago. The rate of severe acute respiratory infection (SARI) (1.7%) was higher compared to the previous week (1.2%). No SARI-related deaths were reported since EW 27. According to laboratory data, in EW 31, among samples tested, no samples positive for respiratory viruses were detected. Respiratory syncytial virus (RSV) was the primary virus in circulation between EWs 26-29, with sporadic detections of A/H1N1 2009 throughout the year.

In Cuba, in EW 31, among all samples tested (n=66), the percentage of samples positive for respiratory viruses remained similar to the previous week (~70%); and the percentage of positives for influenza was 30%. The primary viruses in circulation were influenza A/H3, followed by RSV, adenovirus and other respiratory viruses.

In the Dominican Republic, in EW 32, among all samples tested (n=23), the percentage of samples positive for respiratory viruses was 26%, similar to the previous week. The predominant virus in circulation was influenza B, followed by influenza A/H1N1 2009.

In Jamaica, in EW 31, the proportion of acute respiratory illness (ARI) was 3%, 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 31 no SARI related deaths were reported. According to laboratory data there has been no detection of positive cases for influenza since EW 21.

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

Central America

In Costa Rica, in EW 32, among all samples tested (n=95), the percentage of samples positive for respiratory viruses was ~50%, increasing slightly compared to the previous week (~40%), RSV has been the predominant virus since EW 28 and there has been no influenza virus detection.

In El Salvador, in EW 31, the proportion of samples positive for respiratory viruses remained ~30% without influenza detection since EW 29. Even though RSV continued to be the predominant virus it showed a decreasing trend since its peak in EW 27.

In Honduras[2], in EW 31, at the national level, the proportion of ARI consultations was slightly less than the previous week, remaining <5% and less than observed in 2010 during this time of the year. The proportion of SARI hospitalizations was similar to the previous weeks, remaining <10% and higher than the observed during 2010 for this time of year. This week, 3 SARI deaths were reported. According to laboratory data, in EW 31, 16% of all tested samples (n=44) were positive for respiratory viruses, being influenza A/H3 the predominant influenza virus, followed by influenza B, influenza A/H1N1 and RSV.

South America – Andean

In Bolivia, in EW 31, according to CENETROP laboratory data (Santa Cruz), among tested samples (n=25), the percentage of respiratory viruses was ~15%, less than that observed during the previous week (~30%). The primary virus in circulation was influenza A/H1N1 2009. According to INLASA (La Paz) laboratory data, among analyzed samples (n=16), no respiratory viruses were detected.

In Colombia[3], according to the SARI surveillance system of Bogota, in EW 31, the percentage of SARI hospitalizations remained <5% and the percentage of ICU admissions was 6%. The predominant virus in Bogota SARI patients during the last 8 EWs was RSV followed by unsubtyped influenza A. According to the national laboratory[4], in EW 31, the positivity percentage for influenza was 7%, with co-circulation of influenza A/H1N1 2009 and influenza A/H3N2.

In Ecuador, in EW 31, at the national level, the percentage of SARI hospitalizations, SARI ICU admissions and SARI deaths remained <=5%. In EW 31, of all samples tested (n=20), the percentage of samples positive for respiratory viruses was 5%. There has been no detection of influenza viruses since EW 11. RSV has been the primary virus in circulation since EW 9, especially in children less that 1 year old.

In Peru[5], 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) were lower than the previous week; remaining below the expected level for this time of year. To date this year, 215 deaths associated to pneumonia were notified in less than 5 years old, this represents a lower count than observed in years 2008-2010 for this same period. Regionally, during 2011, the departments of Loreto, Amazonas, Junin, Lima and Arequipa reported a higher number of deceased children less than 5 years old due to pneumonia, in comparison to previous years. According to laboratory data, between EW 31, of all samples tested (n=35) ~30% were positive for respiratory viruses, being influenza A/H3 the primary virus in circulation, followed by unsubtyped influenza A and RSV.

South America – Southern Cone

In Argentina[6], ILI and SARI endemic channels showed that the number of ILI and SARI cases for EW 28 remained with a decreasing trend and less than observed during 2010. According to national laboratory data, for EW 31, continued the predominance of RSV, but with a decreasing trend since its peak in EW 23. Concerning influenza viruses, in EW 31, the main virus detected was unsubtyped influenza A.

In Brazil, according to Adolfo Lutz institute (Sao Paulo), in EW 31, among all samples tested (n=44), the percentage of samples positive for respiratory viruses remained similar to the previous week (20%), with co-circulation of influenza B as the predominant virus, and influenza A/H3N2. According to data of FIOCRUZ Institute (Rio de Janeiro), in EW 31, among all samples tested (n=8), co-circulation of influenza A/H1N1 2009 and influenza A/H3N2 was detected.

In Chile[7], in EW 31, ILI activity (6.3 consultations per 100,000 inhabitants) at the national level was slightly lower than the previous week (10 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 continued to decrease for the third consecutive week, and was less than observed during 2009-2010 for this time of period. Up to EW 31, no deaths associated to influenza have been reported. According to laboratory data, in EW 31 among all samples tested, at the

national level, 29% were positive to respiratory viruses; RSV being the predominant virus (51% among the positives) with a decreasing trend compared to the previous weeks. Concerning influenza viruses, among the samples positive for respiratory viruses, 26% were positive for influenza A, with predominance of influenza A/H1N1 as circulatory virus. Regionally, influenza A/H1N1 2009 was detected in Copiapo, San Felipe, Valparaiso, Viña del Mar, Rancagua, Coyhaique, and Santiago.

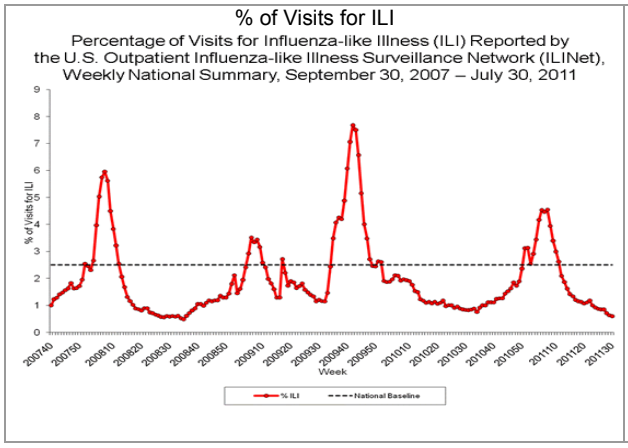
In Paraguay[8], in EW 31, the proportion of ILI consultations among all consultations remained similar to the previous week (~7%). The proportion of SARI hospitalizations and the proportion of SARI ICU admissions showed a slight increase compared to the previous week, even though it remained <5% and <15%, respectively. This week the percentage of SARI deaths increased for the third consecutive week; reaching 11% of all deaths. According to laboratory data, in EW 31, the percentage of samples positive for respiratory virus remained <10%, with few detections of respiratory viruses.

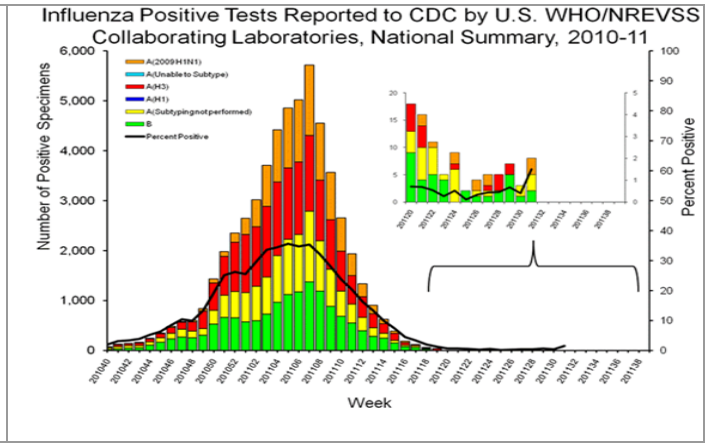
In Uruguay[9], in EW 32, the proportion of SARI hospitalizations and the proportion of SARI ICU admissions were below 5% and 15% respectively. The proportion of SARI deaths remained fluctuating and below 5%. According to laboratory data, for SARI patients between EWs 25-30 the positivity percentage for respiratory viruses increased progressively from 14% to 50% and the percentage of positivity for influenza increased from 1% to 36%. In EWs 29 and 30, influenza A/H1N1 2009 was the primary virus in circulation, with greater predominance in adults older than 25 years. RSV predominated in children less than 5 years of age and adults older than 64 years.

Graphs

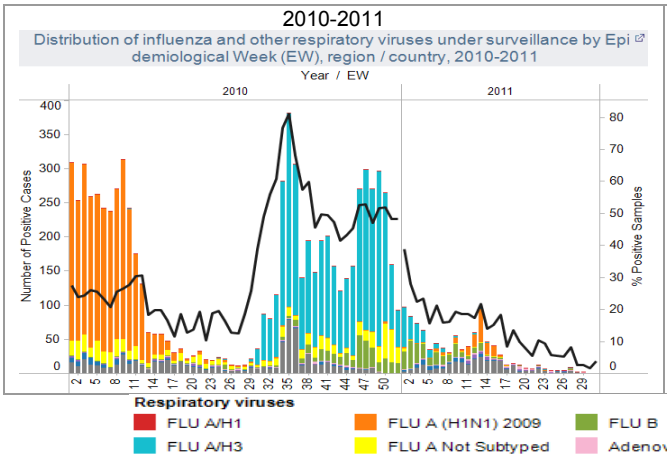
North America

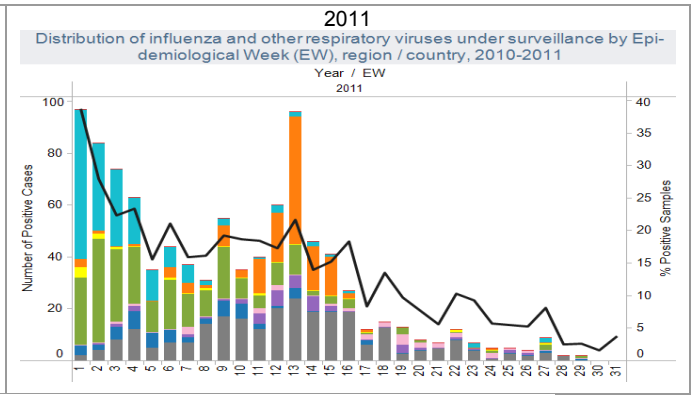
United States





Mexico





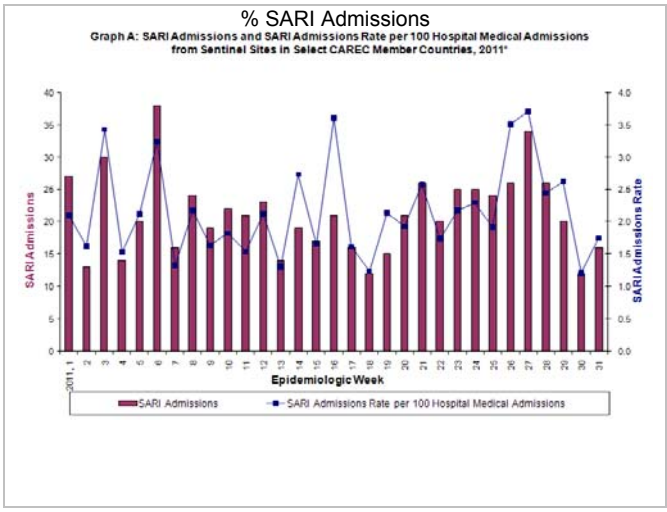
Respiratory viruses

FLU A/H1 | FLU A (H1N1) 2009 | FLU B | Parainfluenza | Other viruses
FLU A/H3 | FLU A Not Subtyped | Adenovirus | SRV | % Positive Samples

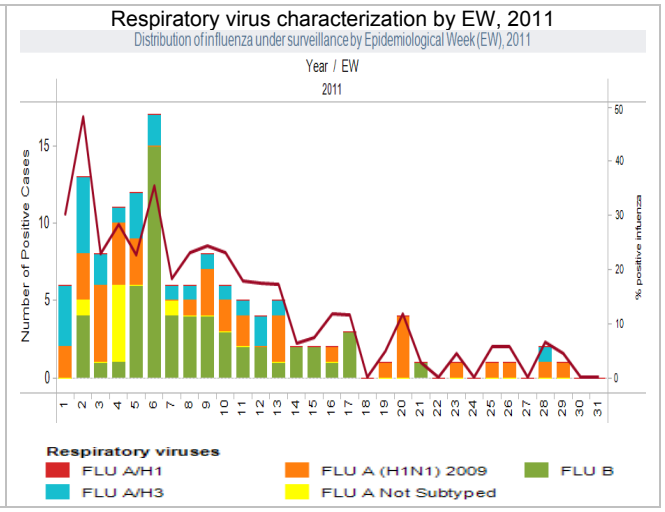
Caribbean

CAREC

% SARI Admissions

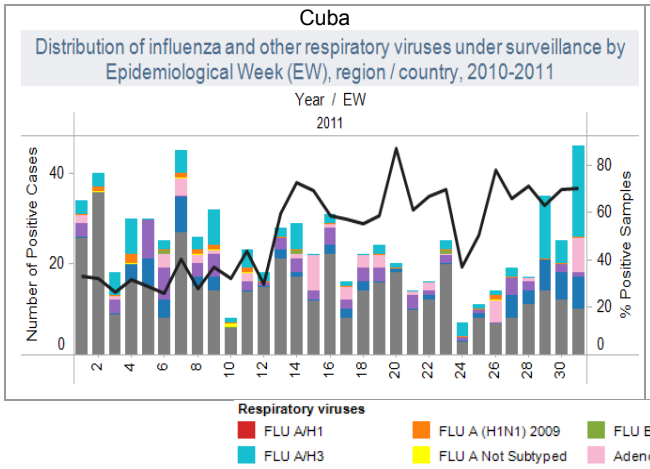


Respiratory virus characterization by EW, 2011

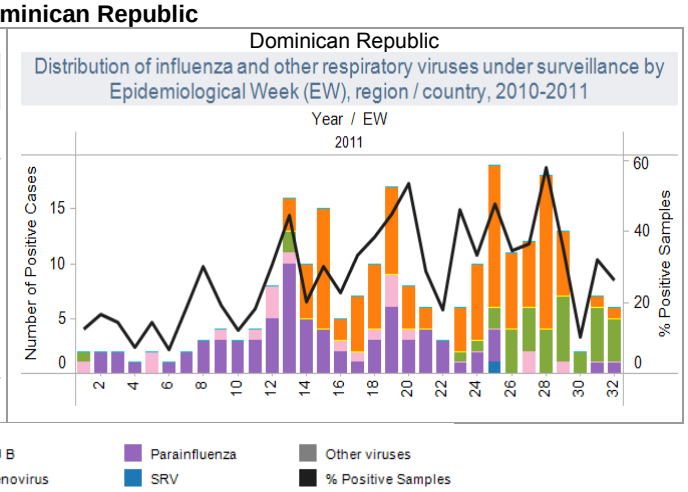


Cuba and Dominican Republic

Cuba

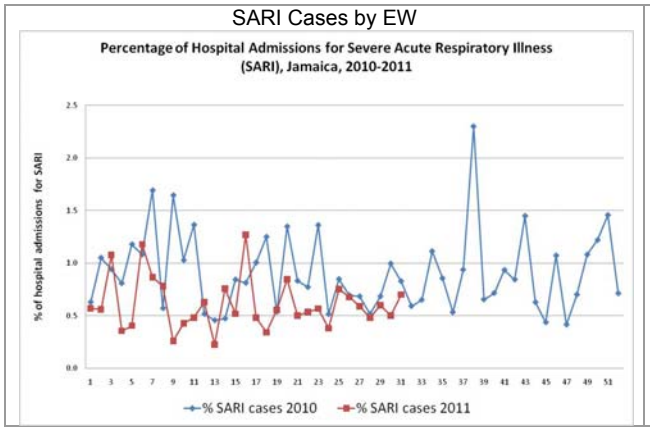


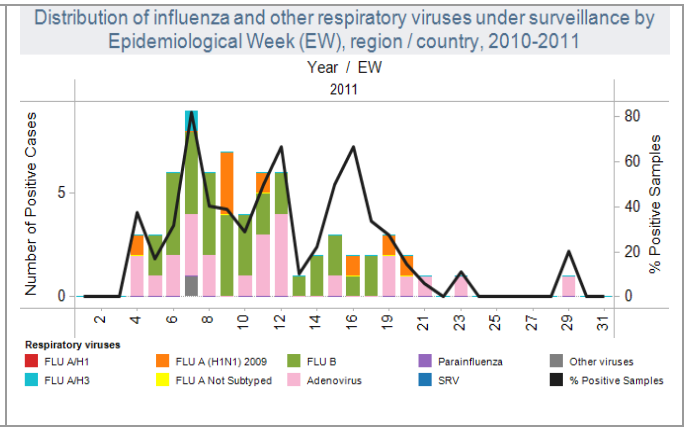
Dominican Republic



Jamaica

SARI Cases by EW

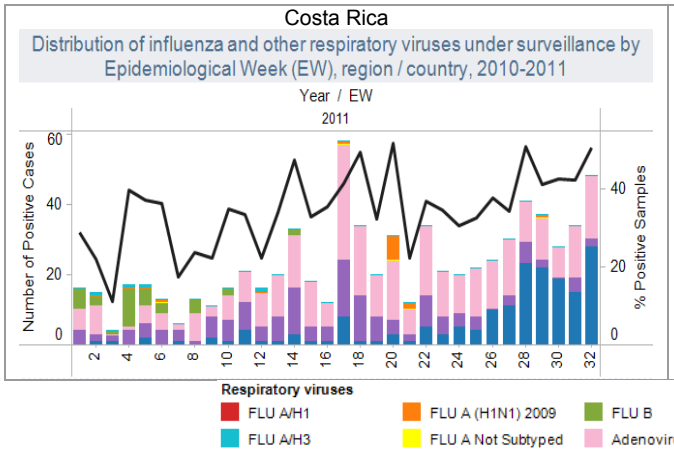




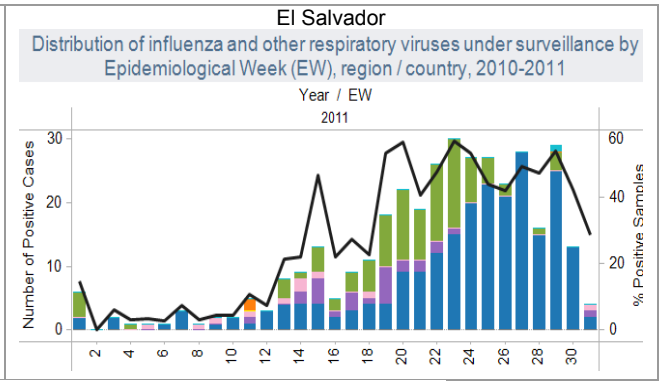
Central America

Costa Rica and El Salvador

Costa Rica

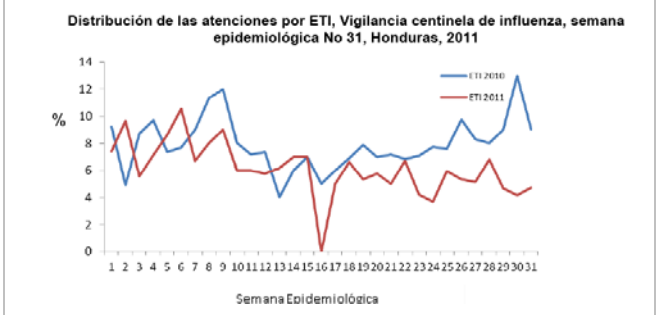


El Salvador

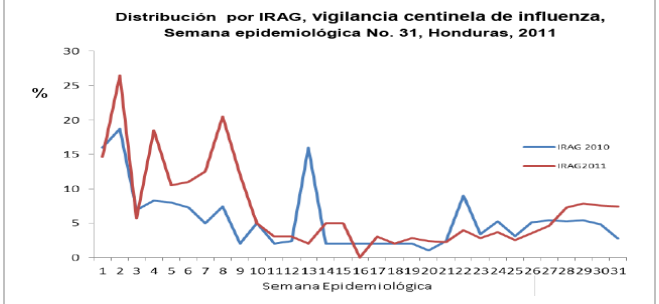


Honduras

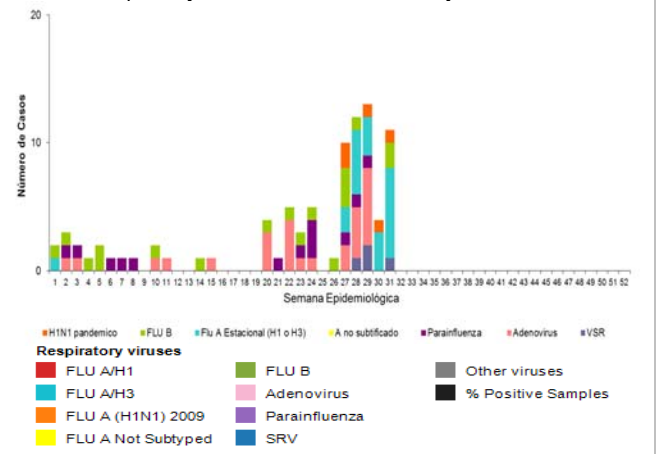
% ILI consultations



% SARI hospitalizations



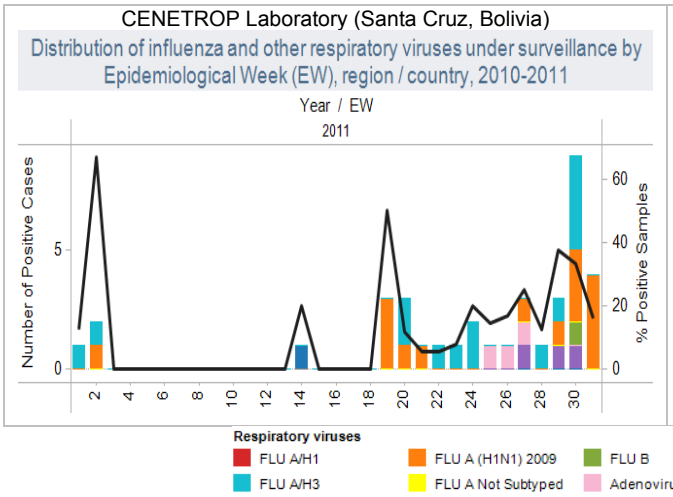
Respiratory viruses characterization by EW, 2011



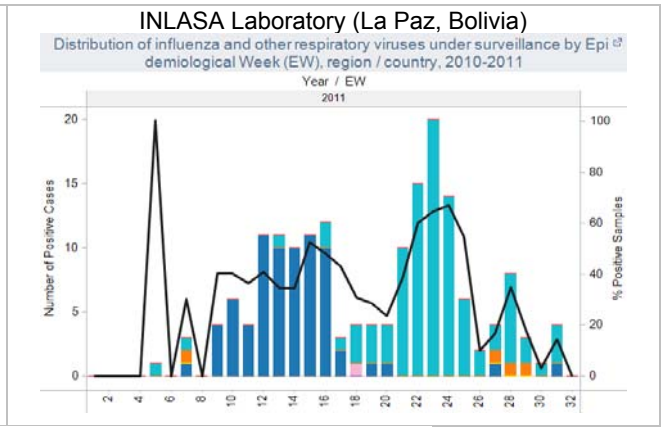
South America - Andean

Bolivia

CENETROP Laboratory (Santa Cruz, Bolivia)

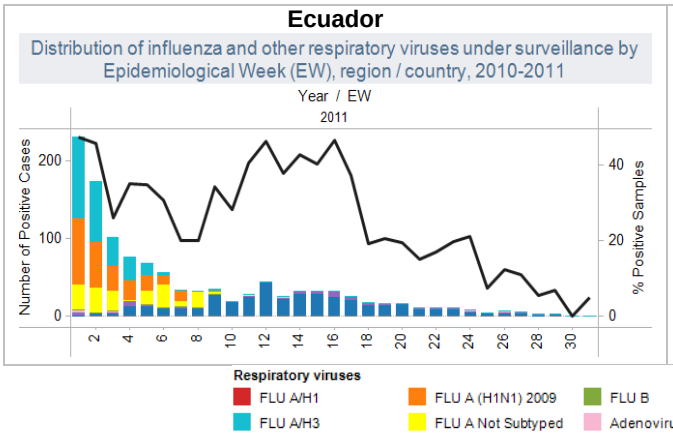


INLASA Laboratory (La Paz, Bolivia)

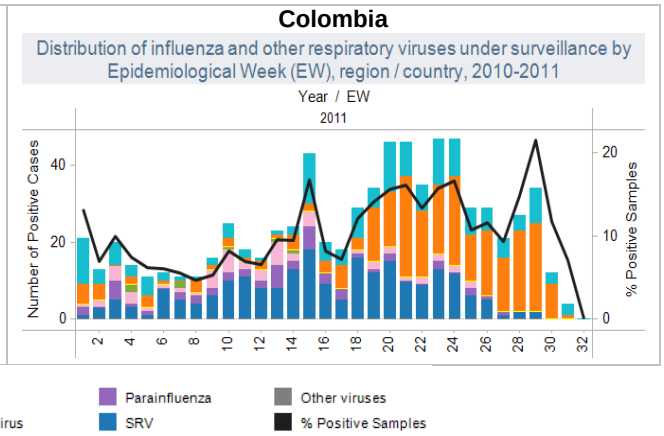


Ecuador and Colombia

Ecuador

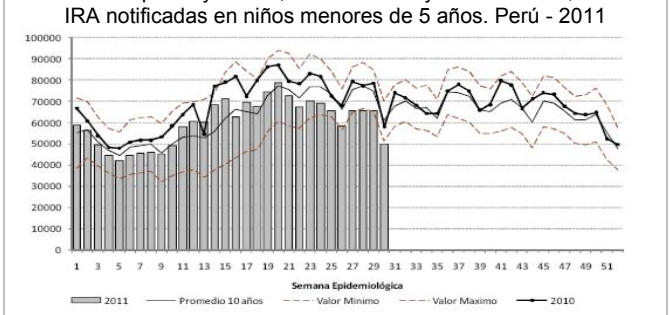


Colombia



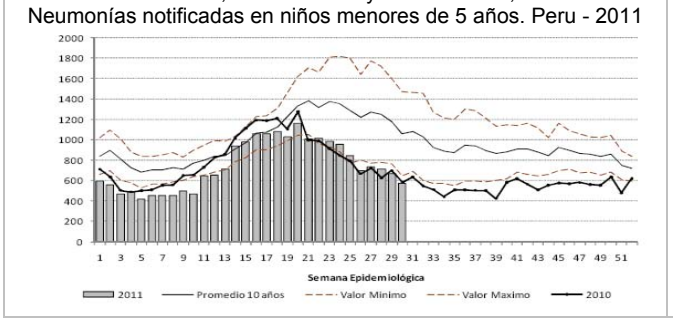
Peru

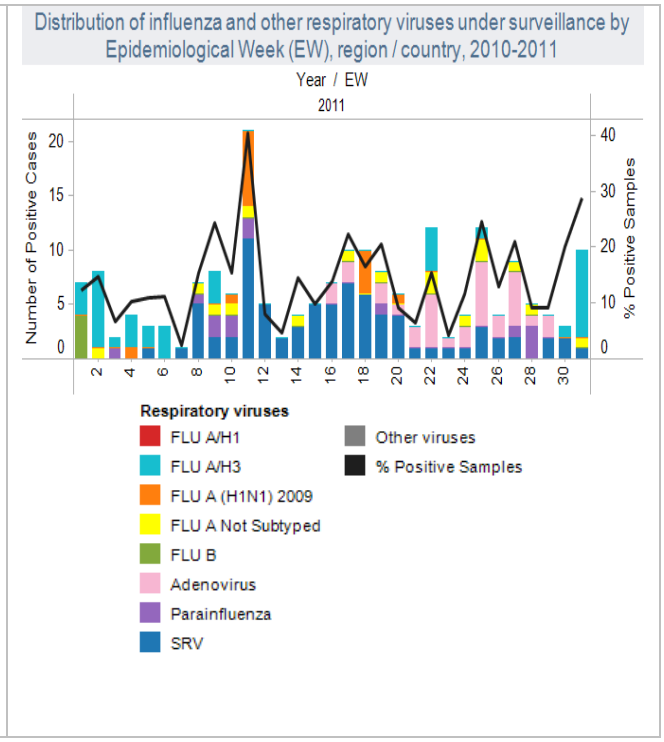
Acute Respiratory Illness, in children <5 years old. Peru, 2011
IRA notificadas en niños menores de 5 años. Perú - 2011



FUENTE: Registros de Notificación Colectiva. IRA 2011 - MINSA – Dirección General de Epidemiología (DGE) – Red Nacional de Epidemiología (RENACE).

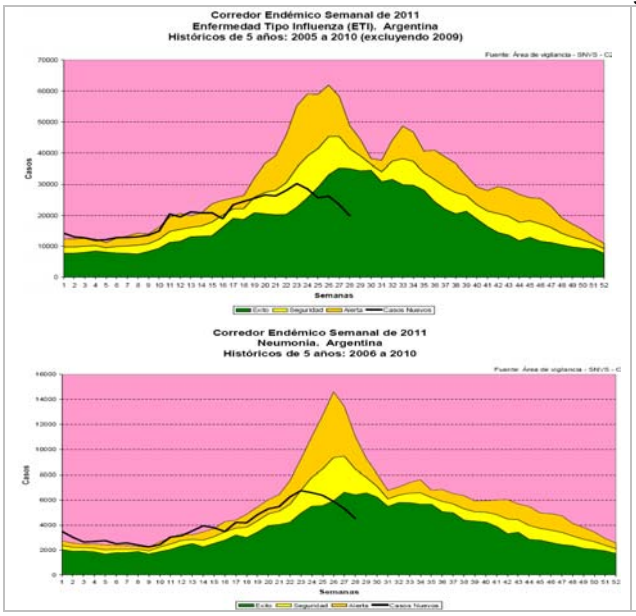
Pneumonias, in children <5 years old. Peru, 2011
Neumonías notificadas en niños menores de 5 años. Peru - 2011

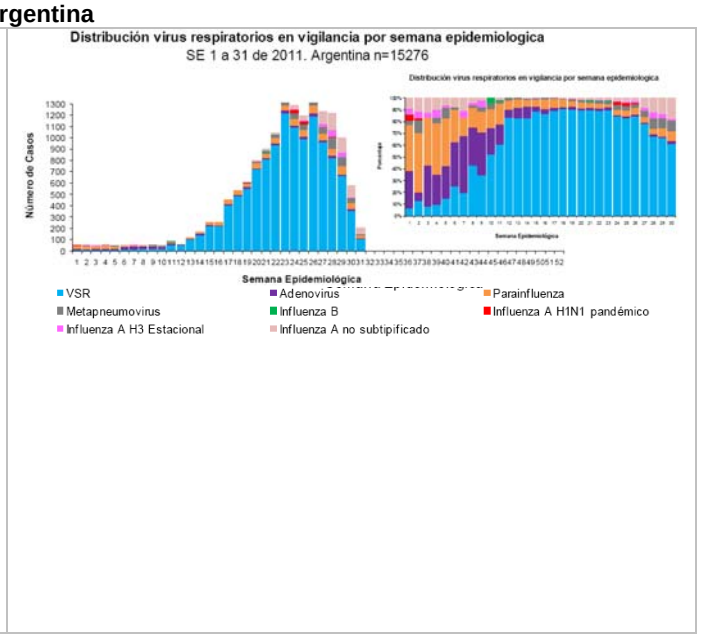




South America – Southern Cone

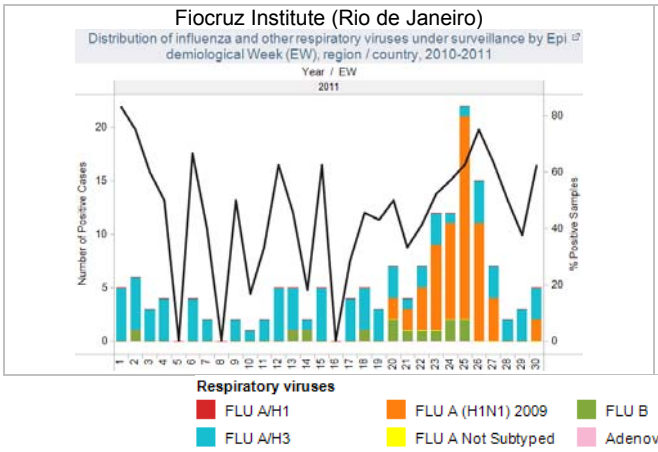
Argentina



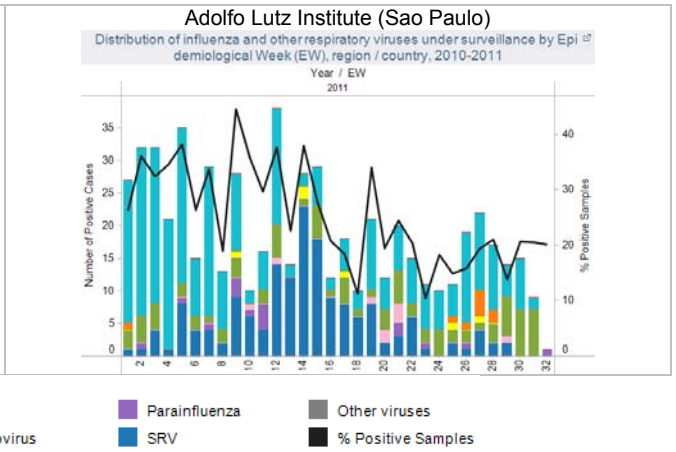


Brasil

Fiocruz Institute (Rio de Janeiro)



Adolfo Lutz Institute (Sao Paulo)

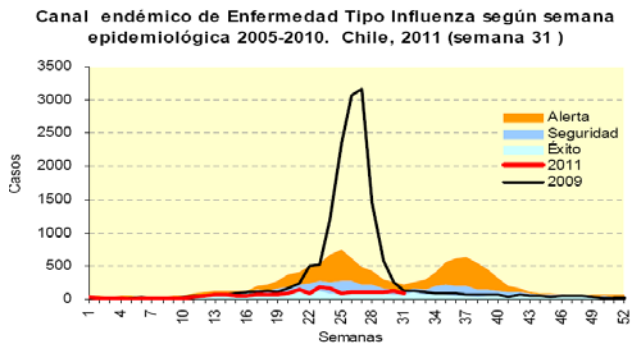


Respiratory viruses

FLU A/H1 | FLU A (H1N1) 2009 | FLU B | Parainfluenza | Other viruses
FLU A/H3 | FLU A Not Subtyped | Adenovirus | SRV | % Positive Samples

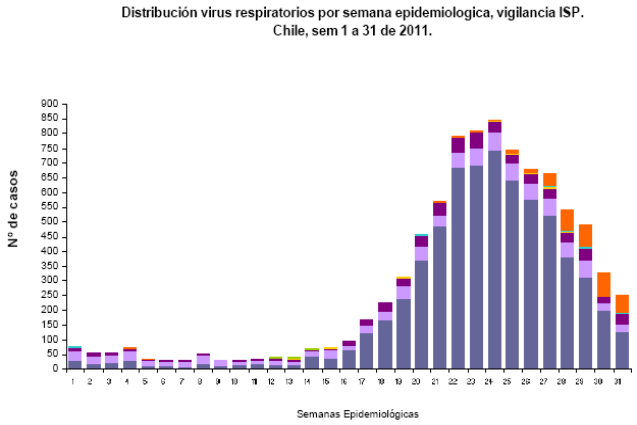
Chile

ILI endemic cannel by EW, 2005-10. Chile, EW 31

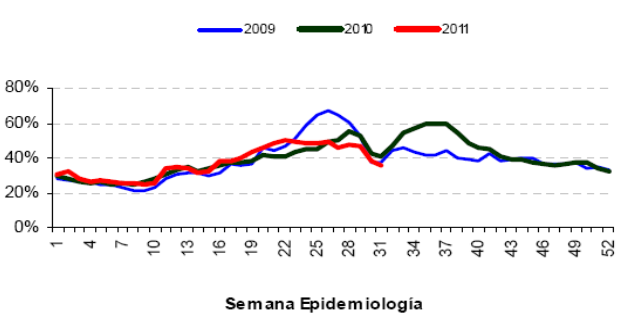


Fuente: Vigilancia Centinela ETI. EPIDEMIOLOGIA-MINSAL

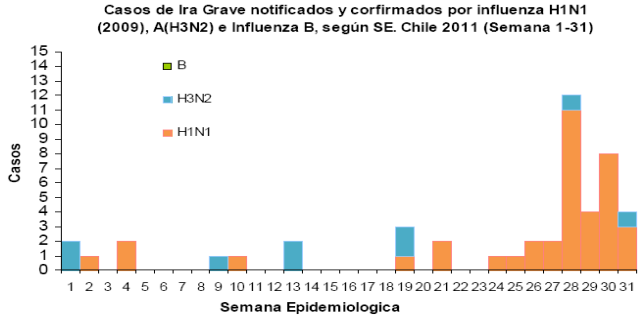
Distribution of respiratory viruses by EW, 2011



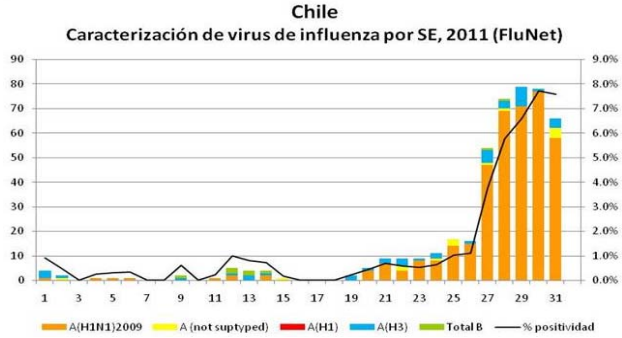
%Respiratory admissions in children ≤ 5 years. Peru, 2011



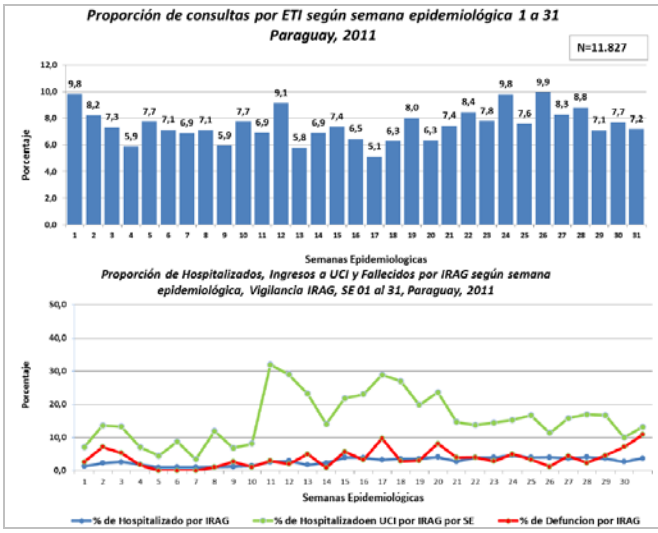
SARI cases, 2011



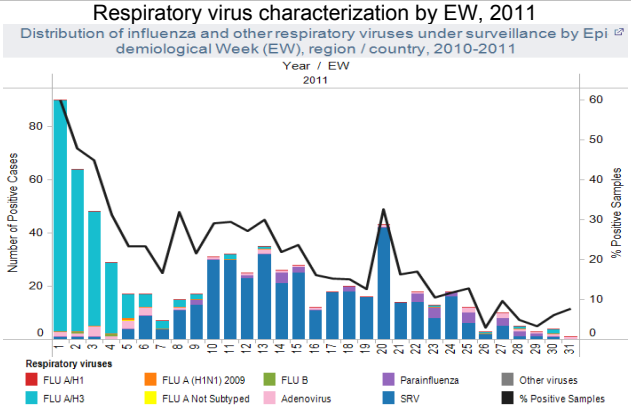
Influenza viruses characterization by EW, 2011



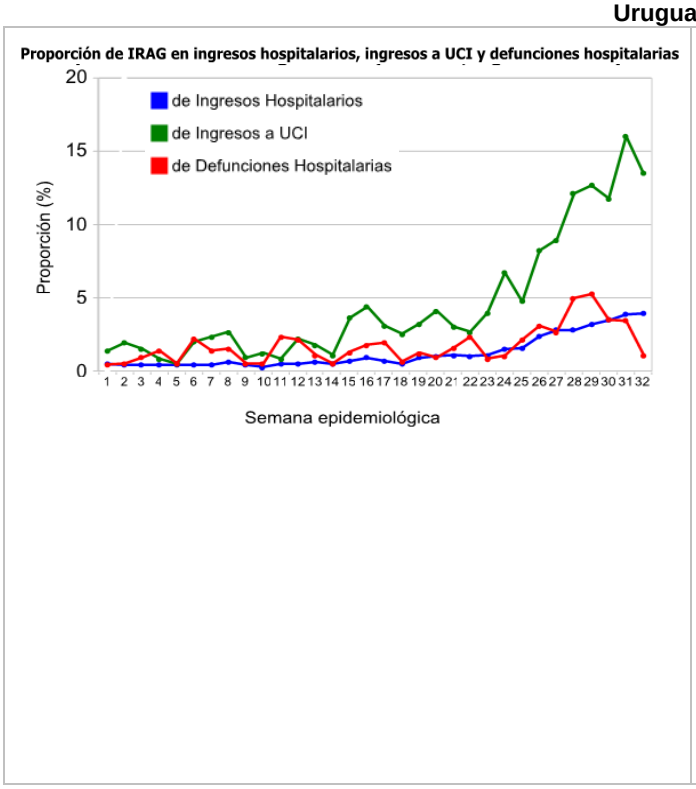
Paraguay



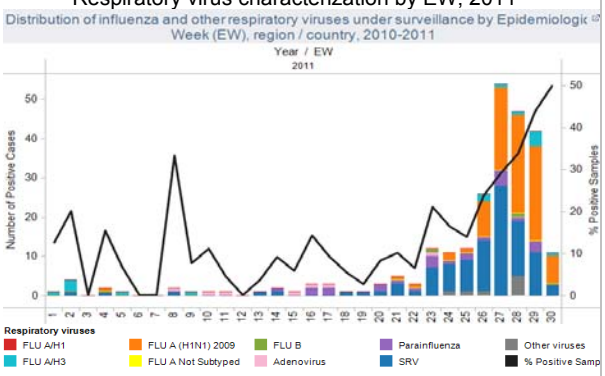
Respiratory virus characterization by EW, 2011



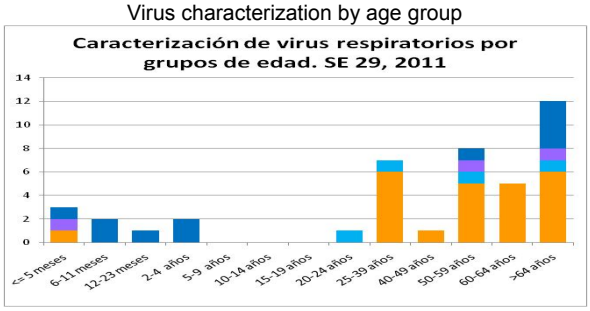
Uruguay



Respiratory virus characterization by EW, 2011



Virus characterization by age group



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[1] US Surveillance Summary. Week 31. Centers for Disease Control and Prevention
[2] Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 31
[3] Informe de Fase inicial del Proyecto de Vigilancia Nacional Intensificada de Colombia. Participantes: Secretaria Distrital de Salud de Bogotá, Instituto Nacional de Salud y 5 hospitales de Bogotá.
[4] Colombia. Instituto Nacional de Salud.
[5] Perú. Sala de Situación de Salud. SE 30. Ministerio de Salud. Dirección General de Epidemiología.
[6] Argentina. Actualización situación de enfermedades respiratorias 2011. SE 32.
[7] Chile. Informe de situación. SE 31. 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**