



Regional Update EW 17

Influenza
(May 11, 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, most of the influenza activity indicators continued to decrease, except by some localized outbreaks in the East of Canada (Ontario and the Provinces of the Atlantic). The percentage of positive samples to influenza continued to decrease, being influenza type B increasingly predominant with regards to influenza A.
- In Central America, the Caribbean, the Andean region, and the Southern Cone the influenza activity remained low. Several countries in South America reported an increase of respiratory infection activity, being the respiratory syncytial virus (RSV) the predominant circulating respiratory virus.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 17, influenza activity continued to decrease, except by some localized outbreaks in Ontario and the provinces of the Atlantic. The national influenza-like illness (ILI) consultation rate was 10.5 per 1000 consultations less than previously observed weeks and remained within the expected for this time a year. Children less than 5 years old had the highest consultation rate (23.6 per 1000 consultations). In EW 17, the percentage of positive samples for influenza was 7.0%, similar to that observed in the previous week (7.1%). Influenza B (67.4%) was more frequent than Influenza A (32.6%); however, the percentage of positive samples for influenza continues to decrease. Among other respiratory viruses, the syncytial respiratory virus (RSV) appears to have peaked in EW 07. Since EW 11, the proportion of positive samples for parainfluenza viruses has increased, reaching 6.2% in EW 17.

In Mexico, in EW 17, among all samples tested, the positivity percentage for the influenza virus was ~3%, which represents a decrease compared to EW 16 (9%). The predominant respiratory virus in circulation during EWs 11-16 was influenza A/H1N1 2009, followed by influenza B.

In the United States², in EW 17, at the national level, the proportion of outpatient consultations for ILI (1.3%) was below the national baseline. At the regional level, all sub-national regions reported ILI activity to be below their specific baselines. The proportion of deaths attributed to pneumonia and influenza was below its epidemic threshold after being above it for 13 consecutive weeks. This week three pediatric deaths related to influenza were notified. During EW 17, 3.6% of samples tested were positive for influenza, with an increasing proportion of influenza B [influenza type B (47.8%), influenza A/H3 (27.5%), unsubtype influenza A (15.9%) and influenza A/H1N1 2009 (8.7%)]. Of characterized influenza type B viruses, 94.3% belonged to the B/Victoria lineage and 5.7% belonged to the B/Yamagata lineage.

Caribbean

CAREC^{*}, in EW 17, reported that the proportion of admissions for severe acute respiratory illness (SARI) (~1.5%) decreased compared to the prior week (~3.5%). In the last month (EWs 14-17), children between 6-48 months old had the highest SARI admissions rate (the last 4 EWs average: 5.7 per 100 admissions). Two deaths related to SARI were reported in the last month (EW 14-17) In EW 15, among all samples tested, the positivity percentage for the respiratory virus increased to ~40%, without detecting influenza for two

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

consecutive weeks (EW 14-15). The predominant influenza respiratory virus in circulation was rhinovirus in EWs 14-15.

In Cuba, in EW 17, among all samples tested, the percentage of positive samples for respiratory viruses remained in ~50% and the percentage of positive samples for influenza viruses remained at 3%. According to laboratory data, in 2011 to EW 15, influenza A/H3 has been the predominant influenza virus in circulation. Other respiratory viruses (RSV, adenovirus and parainfluenza) co-circulated in EW 15.

In the Dominican Republic, in EW 18, among all samples tested, the percentage of positive samples for respiratory viruses increased slightly to 38% and the percentage of positive samples for influenza viruses remained in 23%. Influenza A/H1N1 2009 has been the predominant influenza virus circulating from EWs 14-18. Other respiratory viruses (adenovirus and parainfluenza) were also detected.

In Jamaica for EW 17, sentinel site data showed that the proportion of consultations for Acute Respiratory Illness (ARI) decreased by 1.1% compared to the previous week. The proportion of admissions due to SARI was less than 1% and remained stable compared to the previous week. There were no SARI deaths reported for EW 17. The percentage of samples positive for influenza was 33.3% which represented a decrease compared to the previous week (66.7%). From EW 5-17, influenza B has been the predominant circulating virus, with sporadic detections of influenza A/H1N1 2009.

Central America

In Costa Rica, in EW 17, among all samples tested, the percent positivity for respiratory viruses increased to 41% from 35% (EW 16); however, the percent positivity for influenza remained low (~0.5%). Adenovirus has been the predominant respiratory virus in the last 6 EWs, followed by parainfluenza.

In El Salvador, in EW 17, among all samples tested, the percent of positive samples for the respiratory virus was ~25%, without influenza detection in the last 2 weeks. RSV and parainfluenza were the viruses that circulated in the last month.

In Honduras, in EWs 16-17 no respiratory viruses were detected among samples tested.

In Panama, in EW 18, among all samples tested, the percent of positive samples for respiratory viruses remained low (~5%), no influenza viruses were detected in the last 3 weeks.

South America – Andean

In Ecuador, in EW 17, at the national and regional level (Quito y Guayaquil), the percentage of SARI hospitalizations, ICU admissions for SARI and SARI deaths remained low and similar to the previous week. The percentage of positive samples for respiratory viruses decreased to 33% (EW 17) from 48% (EW 16). No influenza viruses were detected since EW 11. RSV has been the predominant respiratory virus in circulation during the last 9 EWs, especially in children less than 5 years of age.

In Peru³, in EW 16, the number of ARI cases in children under 5 years of age decreased compared to the previous week, remaining within the endemic channel for this time of year. The severe cases (children under 5 years of age with pneumonia) represent <1% of all ARI cases and also increased as compared to previous EWs, and remained within the expected level for this time of the year. Regionally, in EW 17, coastal and mountainous departments had an increase in their pneumonia rates notified for children less than 5 years of age, which represents a lesser recount than that of 2010 for this time of year; with greater recounts in Loreto, Puno, Lima and Amazonas.

In Venezuela⁴, according to the influenza report, in 2011 up to EW 17, 1904 positive cases of influenza A/H1N1 2009 were detected, with a decreasing trend from EW 12 (when appears to have peaked) (n=593) to EW 17 (n=23). The highest number of positive cases for influenza A/H1N1 2009, were detected in Miranda (n=448), Capital District (n=373) and Merida (n=304).

South America – Southern Cone

In Chile⁵, in EW 17, the ILI activity increased slightly (4.1 consultations per 100,000 inhabitants) compared to the previous week (3.4 consultations per 100,000 inhabitants) even though it remained within the expected

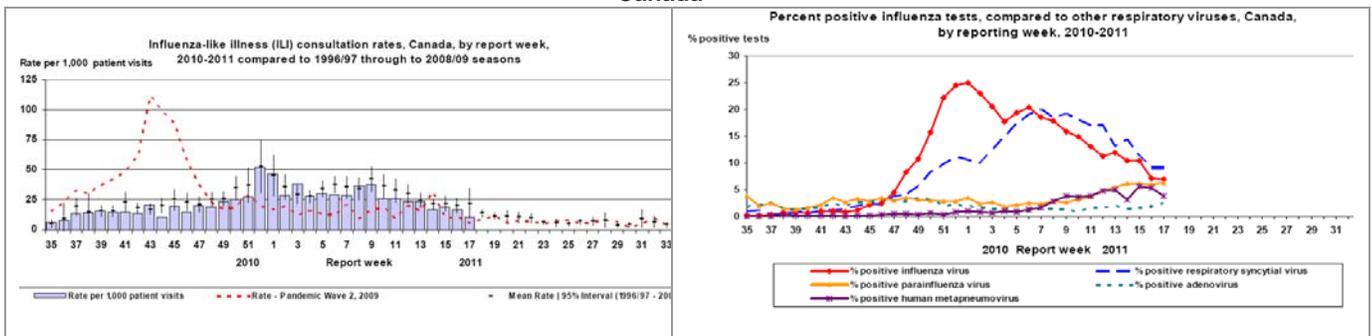
levels for this time of year. The proportion of emergency services consultations for respiratory illness, out of the total number of consultations, increased to 23% (38% in less than 15 years old and 12% in adults), remaining similar to 2010 and 2009. RSV virus and adenovirus have been the predominant respiratory viruses in circulation during 2011. To date in 2011, there has been no influenza deaths reported. During the last month (EWs 14-17) the numbers of positive samples have had an increasing trend, being RSV the predominant virus.

In Paraguay⁶, in EW 16, the number of ILI cases increased compared to the previous week and remained above the endemic threshold. Sentinel surveillance, which measures the percentage of ILI consultations, showed a slight decrease to 6.5% of total consultations. The proportion of SARI admissions among admissions for all causes reached 3.2%, showing a 1.2% decrease in the last week. The proportion of ICU admission for SARI among all ICU admissions showed an increase of 3% (24.4%) compared to the previous week (21.4%). The proportion of SARI deaths among all deaths remained below 2%. According to virological data, RSV has been the predominant respiratory virus in EWs 6-16. No influenza virus has been detected in SARI patients in the last 7 weeks.

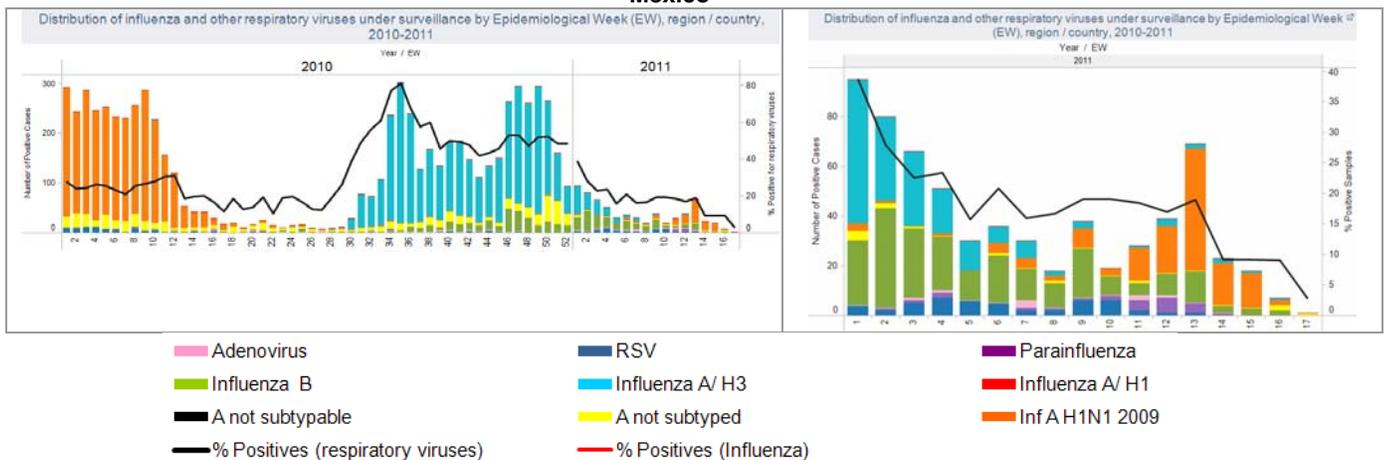
Graphs

North America

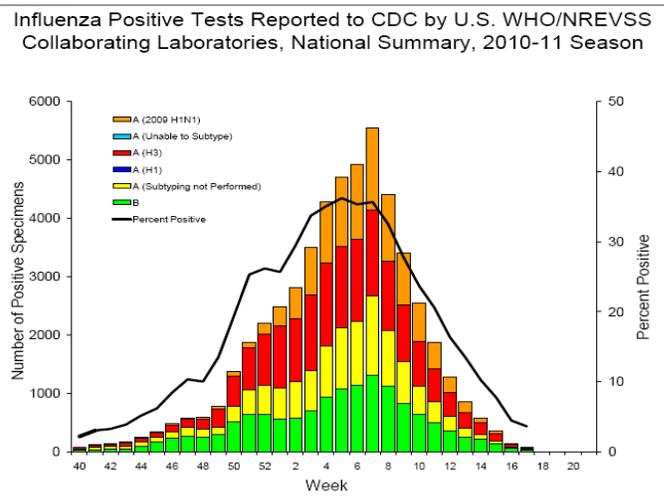
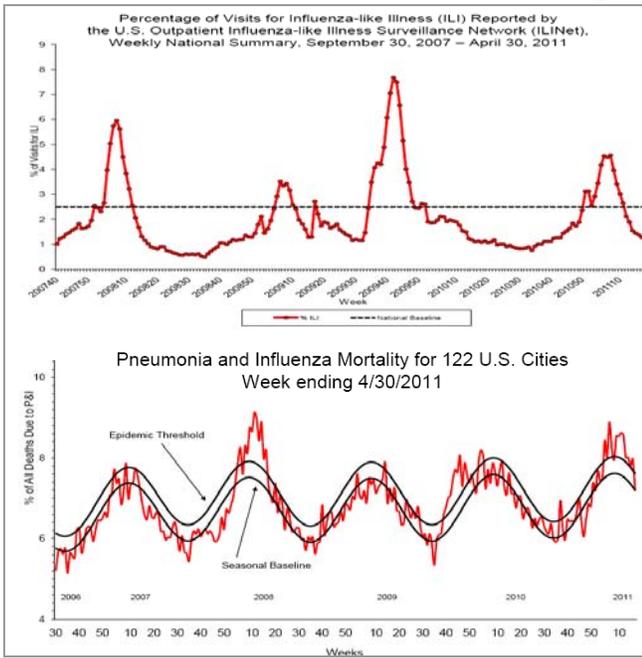
Canada



Mexico

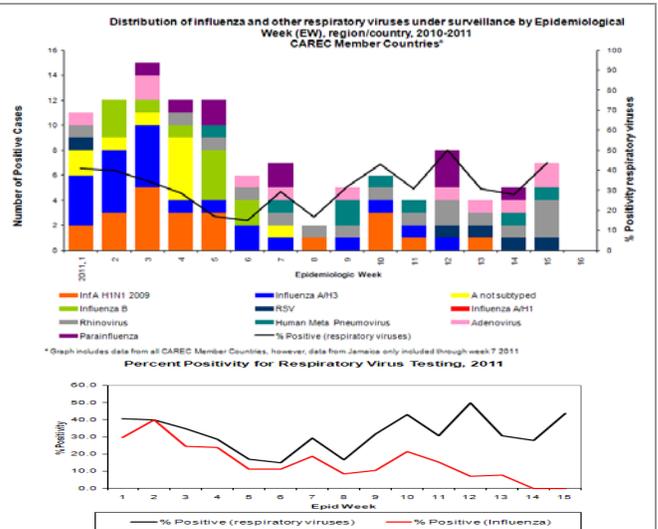
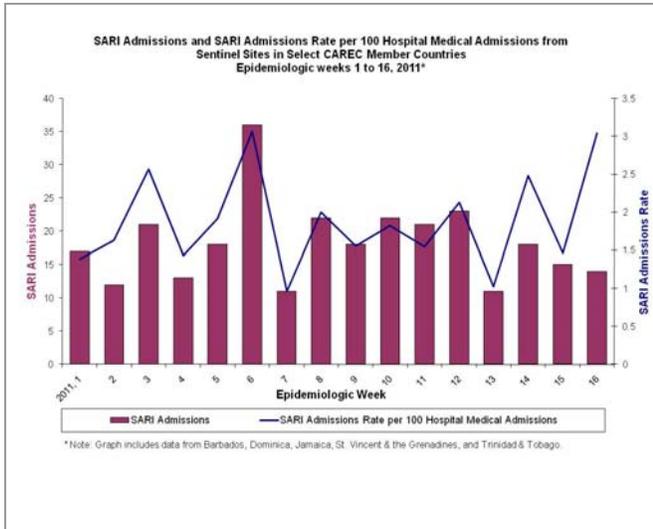


United States

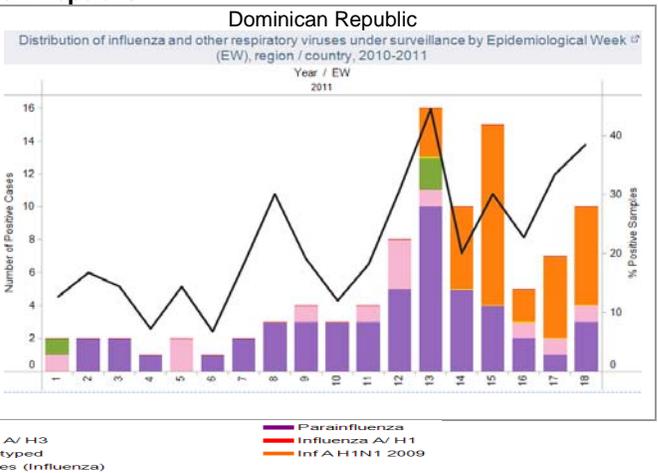
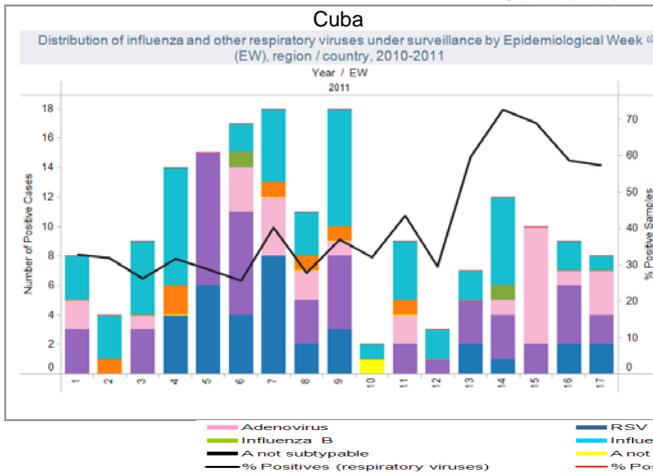


Caribbean

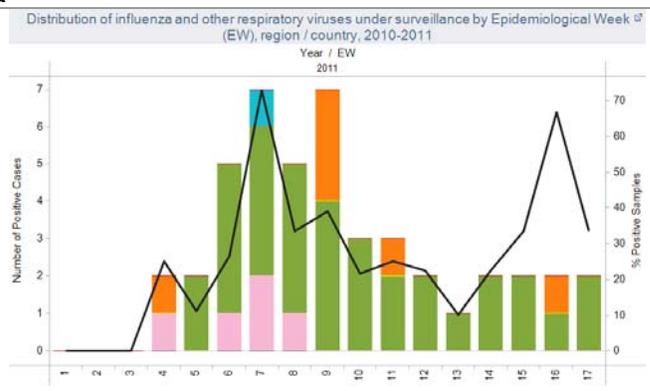
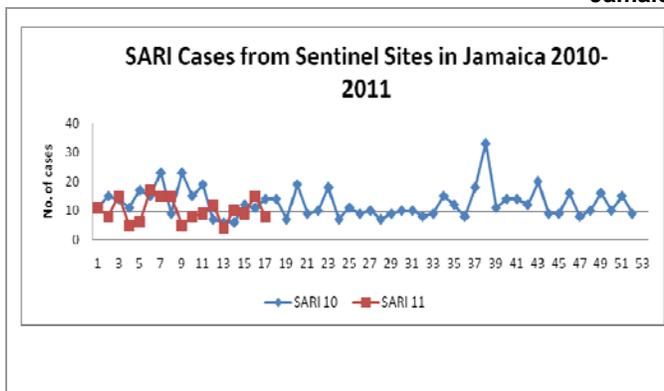
CAREC



Cuba & Dominican Republic



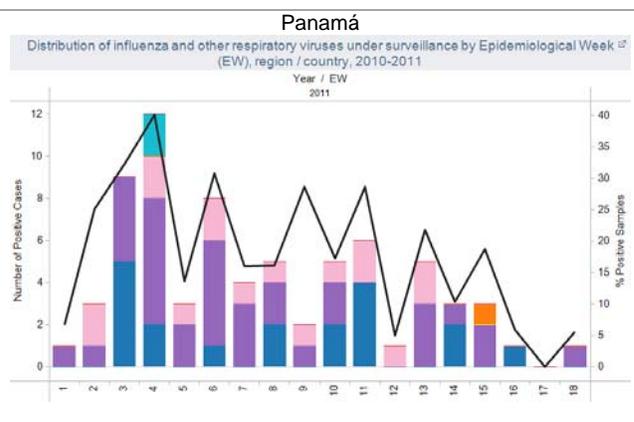
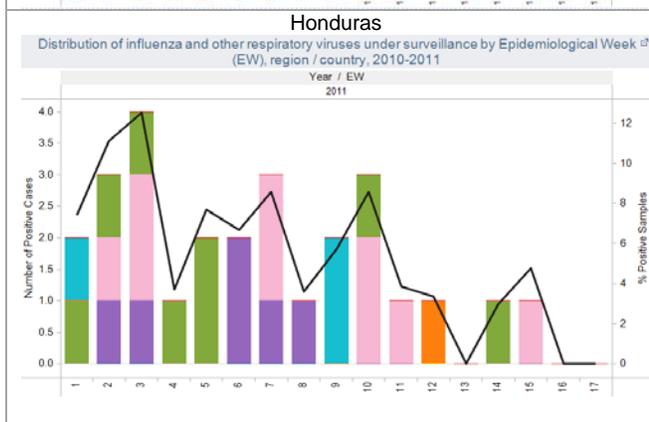
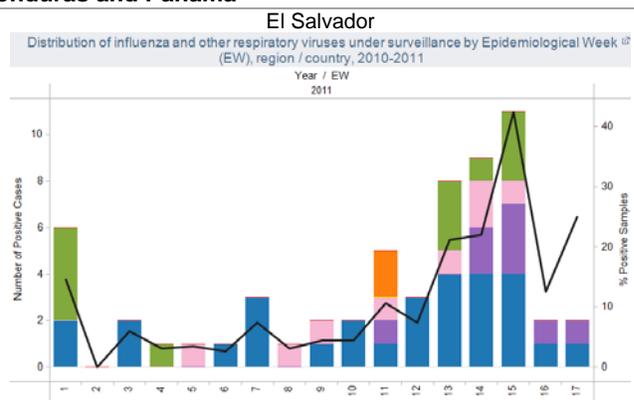
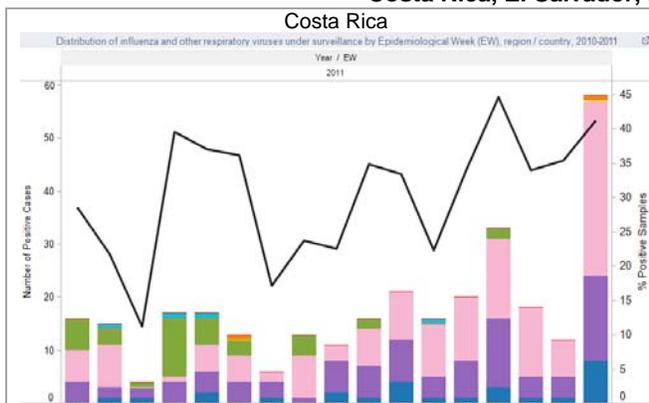
Jamaica



- Adenovirus
- Influenza B
- A not subtypable
- % Positives (respiratory viruses)
- RSV
- Influenza A/ H3
- A not subtyped
- Influenza A/ H1
- Inf A/H1N1 2009

Central America

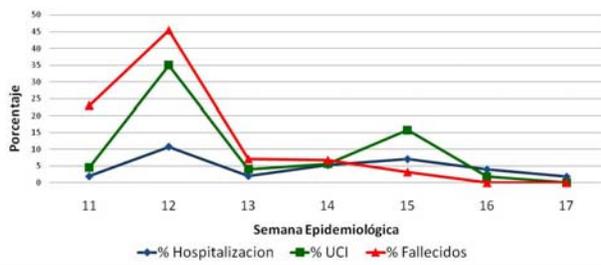
Costa Rica, El Salvador, Honduras and Panama



Ecuador

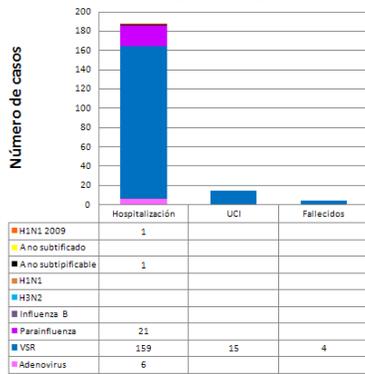
SARI hospitalizations, ICU admissions and deaths

IRAG(%): hospitalizaciones, admisiones a UCI y Fallecidos de la SE 11 a la SE 17 Ecuador . 2011



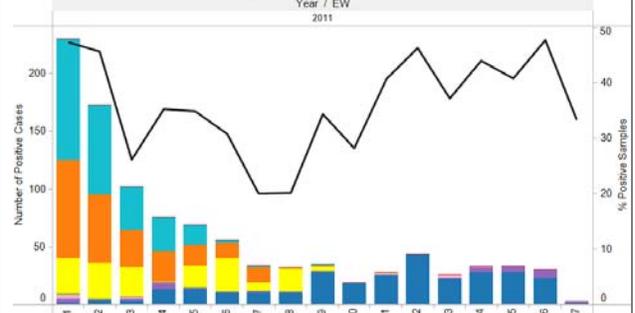
SARI cases by severity

Distribución de virus respiratorios en vigilancia de IRAG según gravedad. Ecuador, SE 08/2011 a 17/2011.



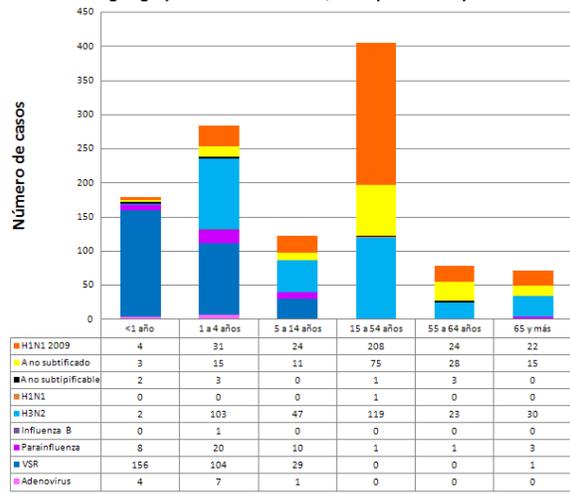
FUENTE: Instituto Nacional de Higiene (INH)
ELABORADO: Programa Ampliado de Inmunizaciones

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



SARI cases by age group

Distribución de virus respiratorios en vigilancia de IRAG según grupos de edad. Ecuador, SE 47/2010 a 17/2011.



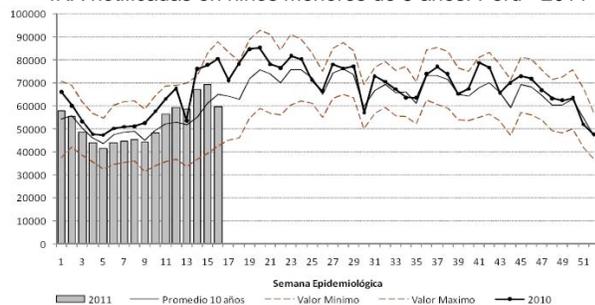
FUENTE: Instituto Nacional de Higiene (INH)
ELABORADO: Programa Ampliado de Inmunizaciones

- Adenovirus
- RSV
- Parainfluenza
- Influenza B
- Influenza A/ H3
- Influenza A/ H1
- A not subtypable
- A not subtyped
- Inf A H1N1 2009
- % Positives (respiratory viruses)
- % Positives (Influenza)

Peru

Acute Respiratory Illness, in children <5 years old. Peru, 2011

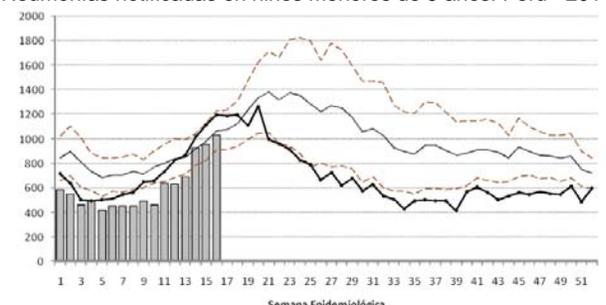
IRA notificadas en niños menores de 5 años. Perú - 2011



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

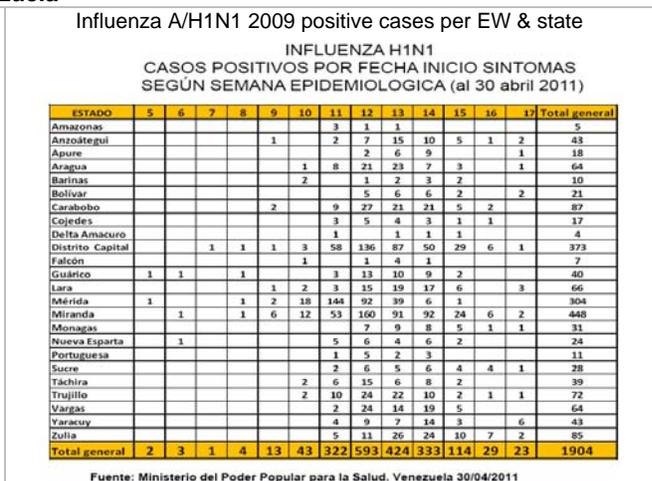
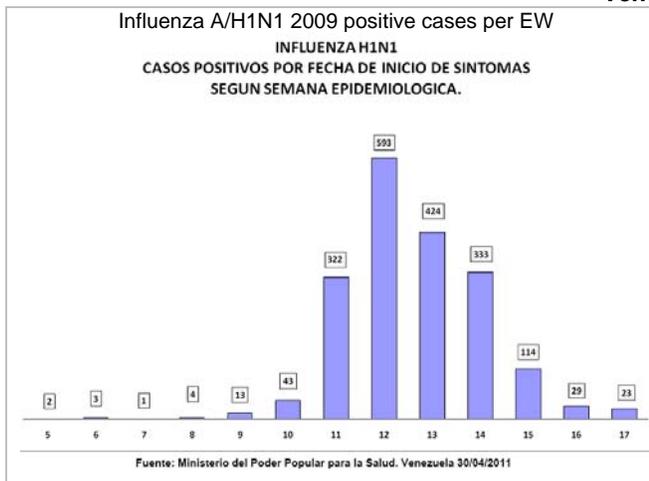
Pneumonías, in children <5 years old. Peru, 2011

Neumonías notificadas en niños menores de 5 años. Peru - 2011



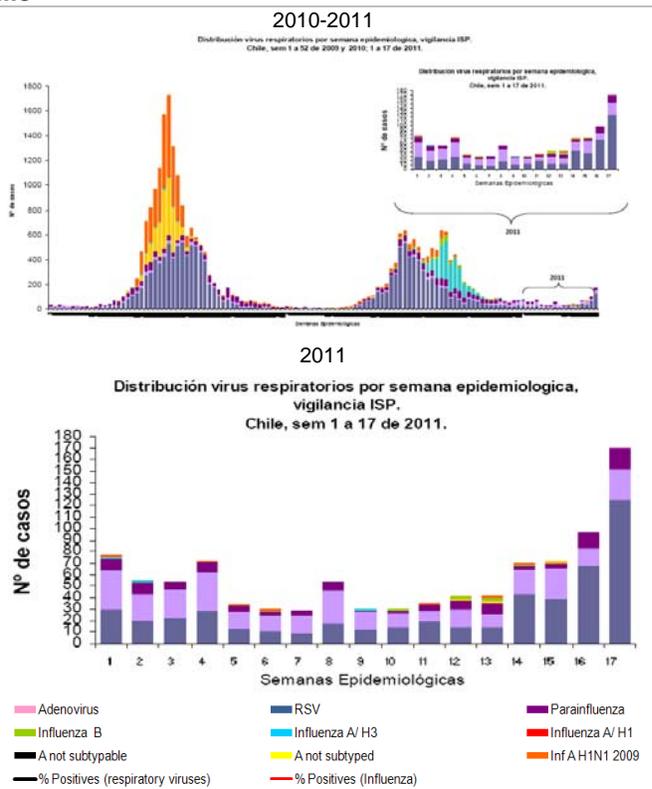
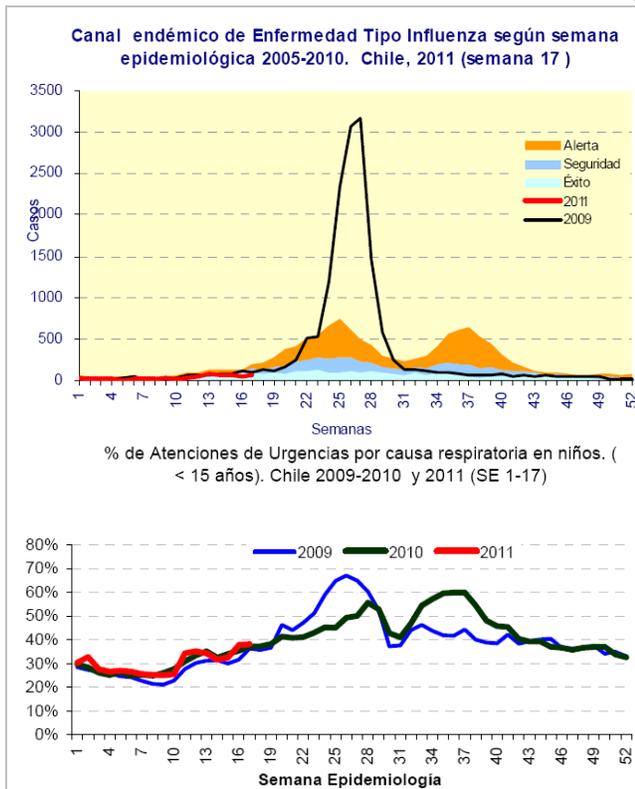
FUENTE: Registros de Notificación Colectiva. IRA 2011 - MINSa - Dirección General de Epidemiología (DGE) - Red Nacional de Epidemiología (RENACE).

Venezuela

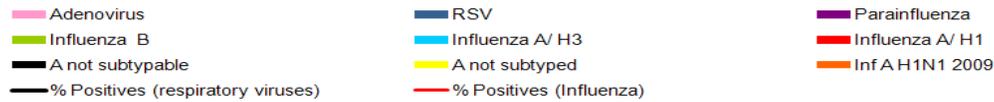
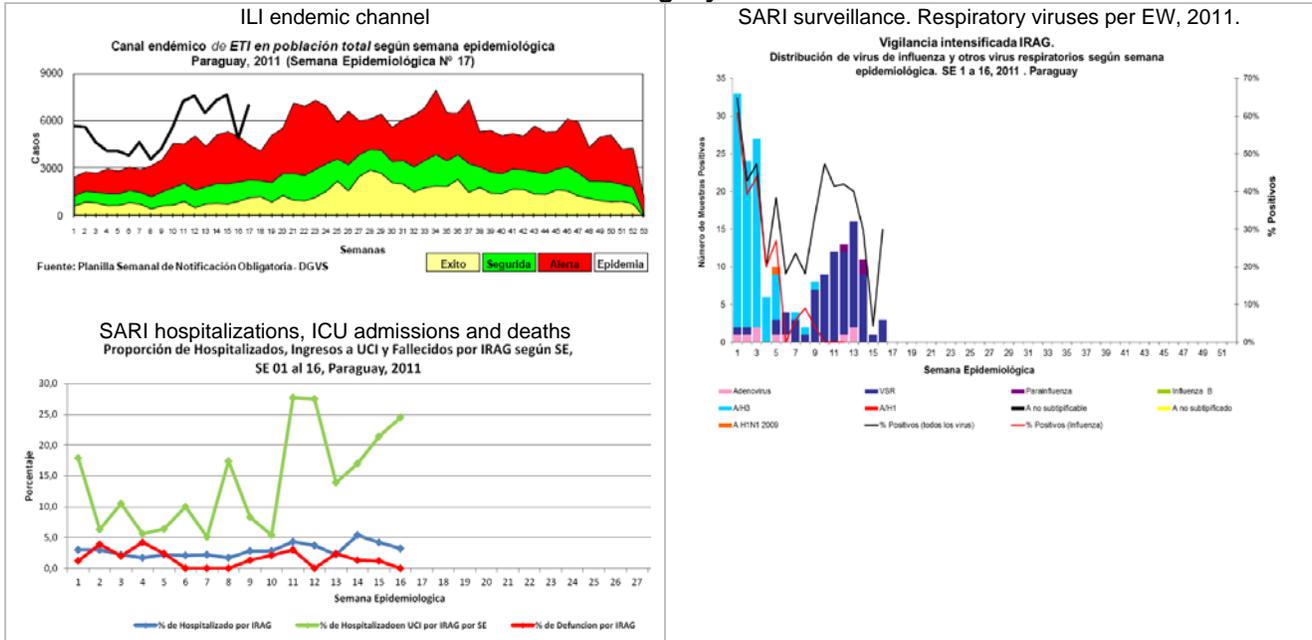


South America – Southern Cone

Chile



Paraguay



¹ Canada. FluWatch Report. EW 17. <http://www.phac-aspc.gc.ca/fluwatch/>

² USA. Surveillance Summary. Week 17. Centers for Disease Control and Prevention

³ Perú. Boletín epidemiológico. SE 16. Ministerio de Salud. Dirección General de Epidemiología

⁴ Venezuela. Reporte influenza A H1N1. Actualizado al 30 de abril del 2011. Ministerio del Poder Popular para la Salud.

⁵ Chile. Informe de situación. SE 17. www.pandemia.cl

⁶ Paraguay. Boletín epidemiológico semanal. SE 18. Ministerio de Salud Pública y Bienestar Social