



Regional Update EW 17, 2012

Influenza
(May 8, 2012 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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 decreased. Among influenza viruses, influenza B was the predominant virus in Canada and influenza A in the United States
- In Central America and the Caribbean, influenza activity remained low or within expected levels for this period of time. Except in Dominican Republic, where an increased detection of influenza A(H3N2) was reported in the last 3 weeks.
- In South America, influenza activity remained low or within expected level for this period of time

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 17, 2012, nationally, influenza activity continued to decrease, although there were several regions still reporting elevated influenza activity (i.e. the Atlantic Region, Quebec, Ontario, and the Prairies). In EW 17 the influenza-like illness (ILI) consultation rate increased as compared to the previous week, but remained within expected levels for this time of year. In EW 17, among the total samples analyzed (n=3,447), the proportion of samples positive for influenza (15.2%) decreased as compared to the previous week. In EW 17, of the total cases positive for influenza, the percent positive for influenza B (67.2%) increased and continued to be greater than the percent positive for influenza A (32.8%). Concerning other respiratory viruses, the proportion of tests positive for RSV (6.3%) continued to decline, and influenza was the most prevalent among all respiratory viruses detected.

In the United States², in EW 17, influenza activity declined nationally and the proportion of ILI consultations (1.1%) was below the national baseline (2.4%), with all regions reporting ILI activity below their region-specific baselines. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 17 (6.9%) was below the epidemic threshold for this time of year (7.6%). In EW 17, two pediatric deaths associated with influenza were reported (one with influenza A(H1N1)pdm09, and one with influenza A(H3)). Among all samples tested during EW 17 (n=2,886), the percentage of samples positive for influenza (15.3%) continued to decrease. Nationally, among the positive samples, 67.9% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 32.1% were influenza B, and the proportion of B virus detections has been increasing. Of the antigenically characterized influenza B viruses (n=203), 41.9% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 58.1% were of the B/Yamagata lineage. In total, 1.5% (n=16) of the influenza A(pdm)09 viruses tested this season have been resistant to oseltamivir.

In Mexico, according to laboratory data, in EW 17, of the total samples analyzed (n=26), there were no respiratory virus detected.

Caribbean

CAREC*, in EW 17, received epidemiological information from 7 countries: Barbados, Belize, Dominica, Jamaica, Suriname, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 17, the proportion of severe acute respiratory infection (SARI) hospitalizations was 2.2%, which is higher than the prior week (1.5%). Children aged 5 – 14 years had the highest rate of SARI hospitalization (6.9 % of hospitalized children in this age group were SARI cases). No SARI related deaths were reported in week 17, 2012. According to laboratory data, in the past four weeks, respiratory syncytial virus, parainfluenza type 3 and rhinovirus have been confirmed. To date in 2012, the percentage positivity for samples tested is 27.7% (9.6% positive for influenza and 18.1% positive for other respiratory viruses).

In Jamaica for EW 17, the proportion of consultations for acute respiratory illness (ARI) was 4.2% which was similar to the previous week. The proportion of admissions due to SARI was 0.9% which was higher than the previous week. There was no SARI death reported for EW 17. Influenza B was detected in EW 17.

In Cuba, according to laboratory data, in EW 17, among all samples tested (n=31), 1.6% were positive for respiratory viruses and influenza viruses were detected.

In Dominican Republic, in EW 18, among all samples tested (n=22), ~50% were positive for influenza viruses (mainly influenza A(H3N2) and followed by adenovirus).

Central America

In Costa Rica, in EW 17, according to laboratory data, among all samples tested (n=99), the percentage of positive samples for respiratory viruses was 17.2%, Adenovirus and parainfluenza viruses were detected. Influenza viruses were not detected.

In Panama, in EW 18 according to laboratory data, among all samples tested (n=3), the percentage of positive samples for respiratory viruses was 66.7%, being detected parainfluenza and other respiratory viruses. Influenza viruses were not detected.

South America – Andean

En Bolivia, according to laboratory data from Santa Cruz (CENETROP laboratory), viral circulation in EW 16 was similar to what was observed in the prior six weeks, with a positivity of 40.9% among all samples analyzed (n=93), with a predominance of influenza B (55% among the positives), followed by influenza A(H1N1)pdm09 (29% among the positives). According to laboratory data from La Paz (INLASA laboratory), circulation in EW 16 in the Departments of La Paz, Oruro, Potosi, Tarija, Pando, Beni, and Chuquisaca showed a positivity of 27.3% among all samples analyzed (n=88), with a predominance of RSV. According to SARI surveillance, in the department of La Paz, since EW 11, there has been an increase in the proportion of SARI hospitalizations, to EW 17 (23.3%). Of the samples from SARI cases (n=31), in the EW 17, percentage of positive samples was 38,7%; being RSV the predominant virus detected in the last three weeks.

In Colombia, in EW 18, according to laboratory data, among all samples tested (n=6), the percentage of positive samples for respiratory viruses was 16.7%. RSV was the main virus detected. Influenza viruses were not detected.

In Venezuela³, in the EW 16, 161 942 cases of ARI been reported, 2.38% less than the previous EW (n=165897), being observed greater incidence in children < 7 years, mainly in the federal entities of Zulia, Miranda and Carabobo. Furthermore, there were reported 3 045 cases of pneumonia, 9.7% less than the previous EW (n= 3368). According to laboratory data, from 1 January up to 25 April, among all samples tested (n=670), the percentage of positivity for respiratory viruses was of 4.5%. Among the positive samples, 56.6% were influenza A(H3N2), RSV (33.3%) and influenza A(H1N1)pmd09 (10.0%).

South America – Southern Cone

In Argentina⁴, in EW 13, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained low and below what was expected for this time of year. According to the laboratory data, in 2012, through EW 16, among all samples tested (n=7,685), 4.8% were positives to influenza. Low circulation of respiratory viruses was detected, mainly parainfluenza and followed by adenovirus and RSV.

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

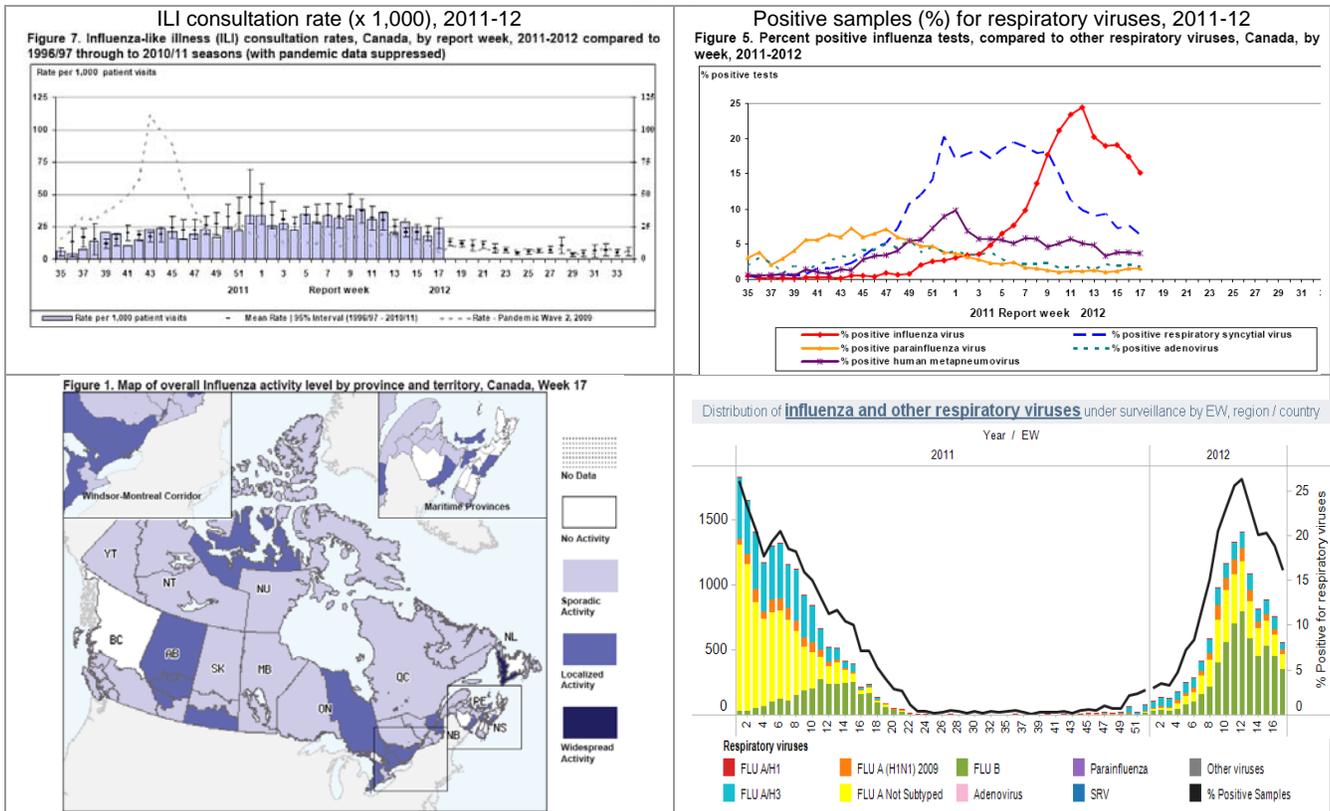
In Chile⁵, in EW 16, at the national level, ILI activity continued to increase since EW 11, reaching the alert zone of the endemic channel in EW 15. However, in EW 16, a decreased in number of cases was reported (4.5 per 100.000 inhabitants). The percent of urgent visits for respiratory causes (20%) remained similar with respect to the previous weeks. According to laboratory data at the national level, in EW 15, among all samples analyzed (n=507), the percent positivity for respiratory viruses was 8.9%, higher than prior weeks, with a predominance of RSV. According to SARI surveillance data, in EW 15, the proportion of positive samples among the tested (n=15) was 26.7%; detecting mainly RSV.

In Paraguay⁶, the proportion of ILI visits in EW 17 decreased (to 5,5%) as compared to the prior week. The proportions of SARI hospitalizations and SARI deaths remained similar to the prior week and below 5%; and the SARI ICU admission proportion (7.8%) decreased as compared to the previous week (11.3%). In EW 16, no respiratory viruses were detected among the 21 SARI samples tested. According to laboratory data, in EW 16, among samples analyzed (n=27), the proportion of positives to respiratory viruses was 6.9%, being detected RSV and adenovirus. In EW 17, no respiratory samples were detected.

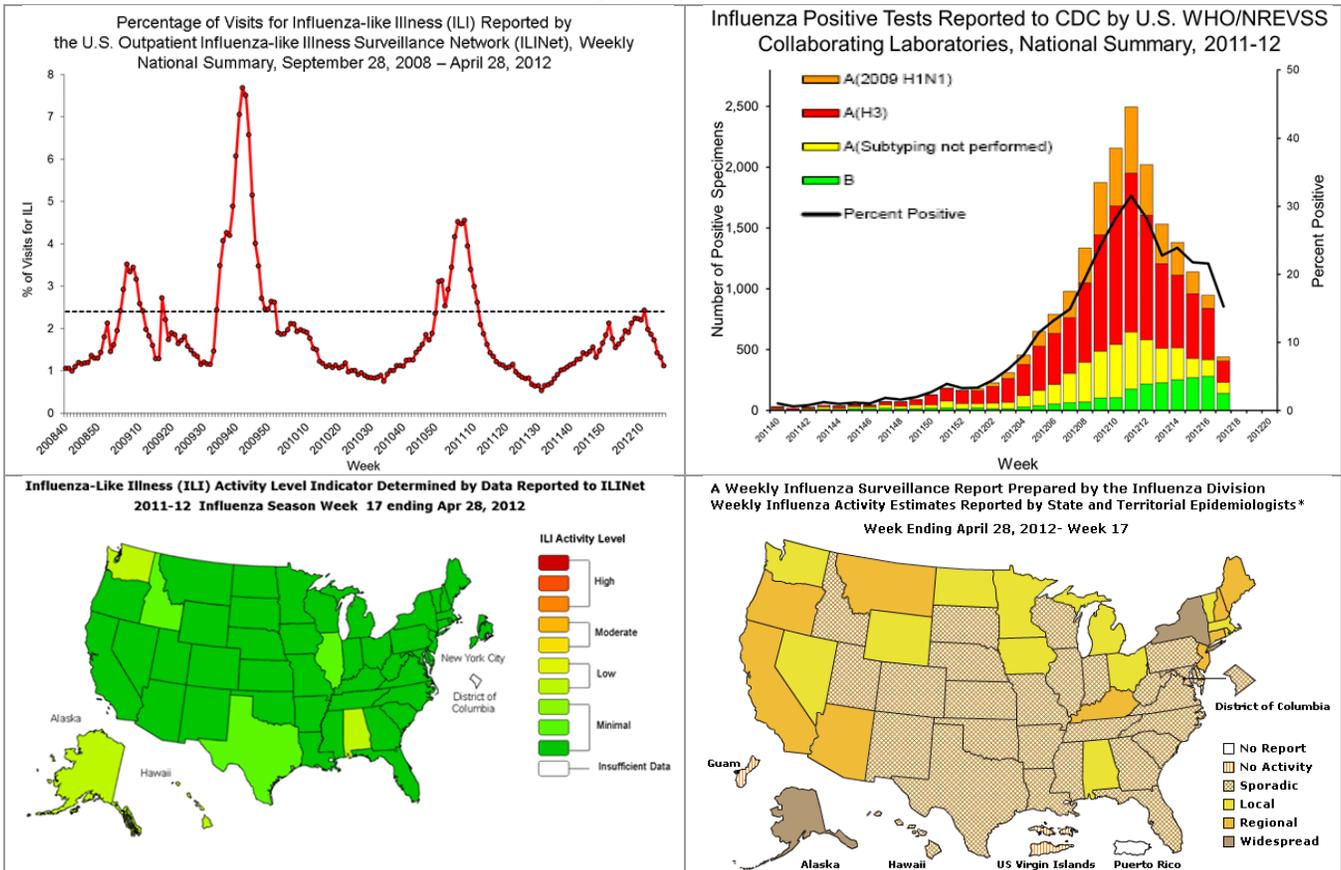
Graphs

North America

Canada

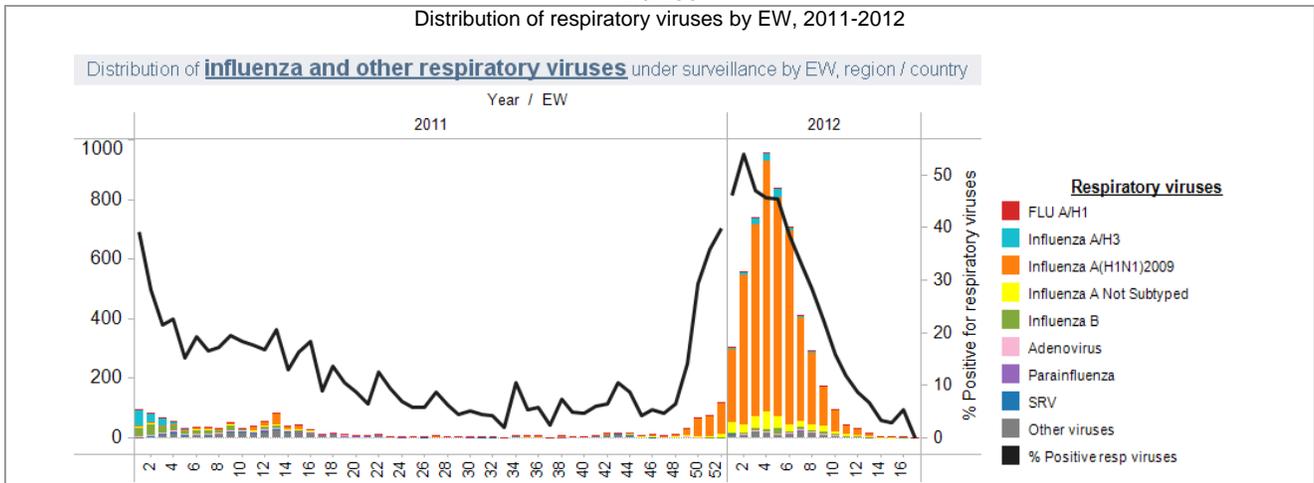


United States

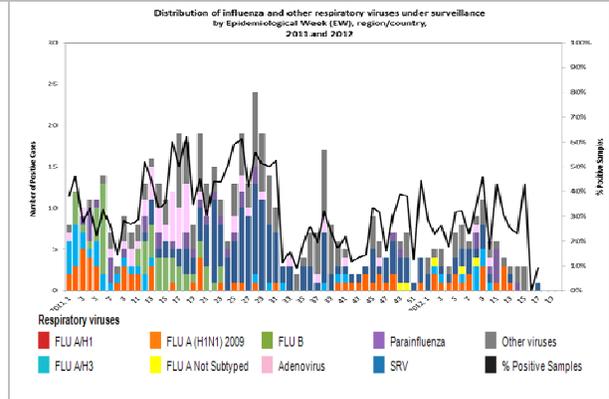
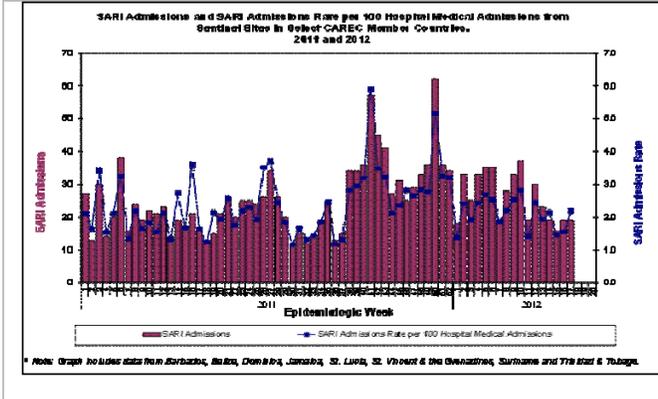


Mexico

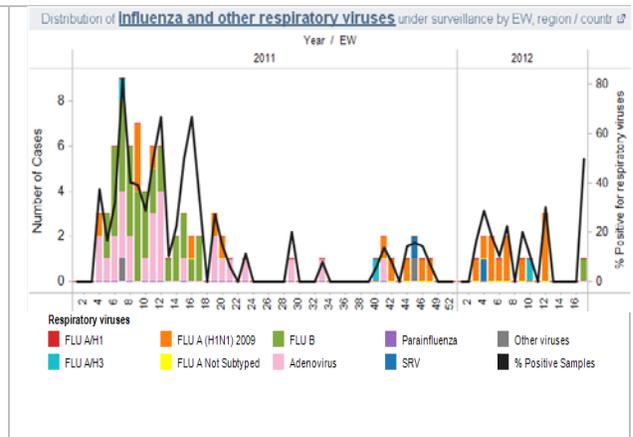
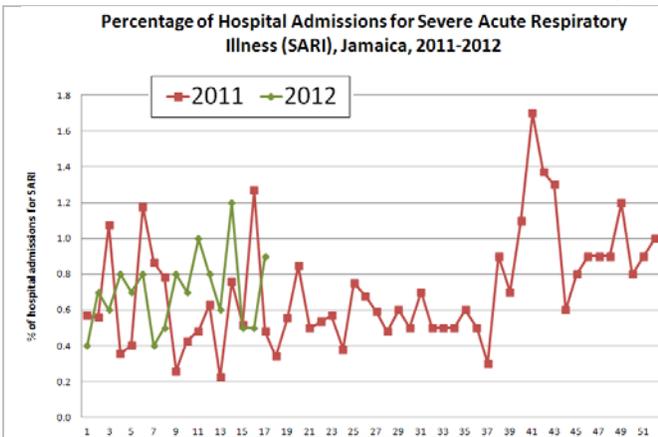
Distribution of respiratory viruses by EW, 2011-2012



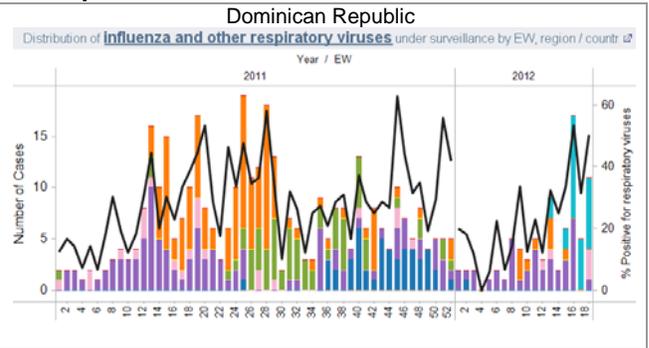
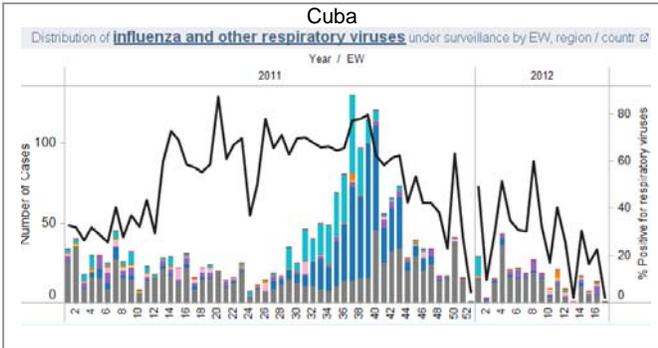
CAREC



Jamaica



Cuba & Dominican Republic

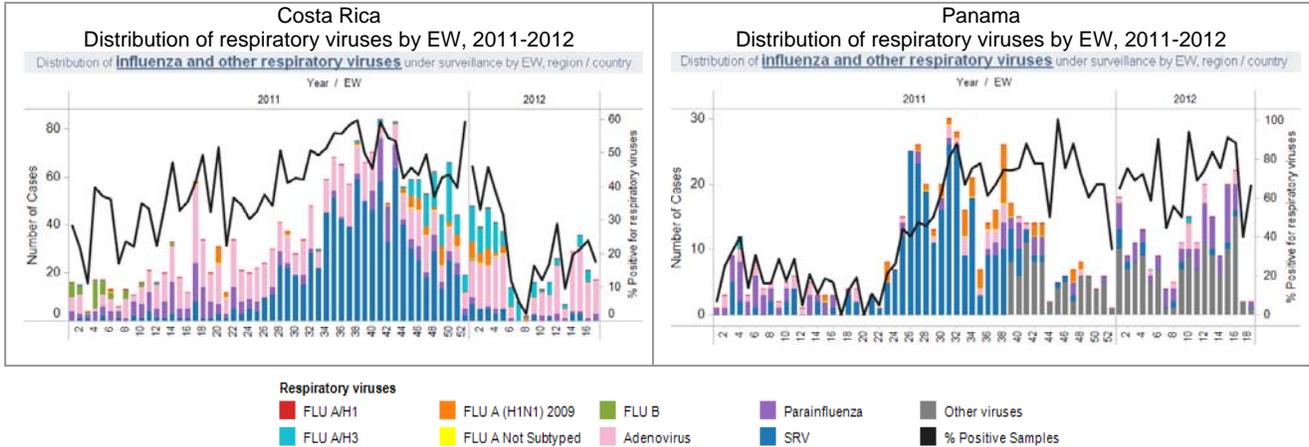


Respiratory viruses

- FLU A/H1 (Red)
- FLU A (H1N1) 2009 (Orange)
- FLU B (Green)
- Parainfluenza (Purple)
- Other viruses (Grey)
- FLU A/H3 (Cyan)
- FLU A Not Subtyped (Yellow)
- Adenovirus (Pink)
- SRV (Blue)
- % Positive Samples (Black line)

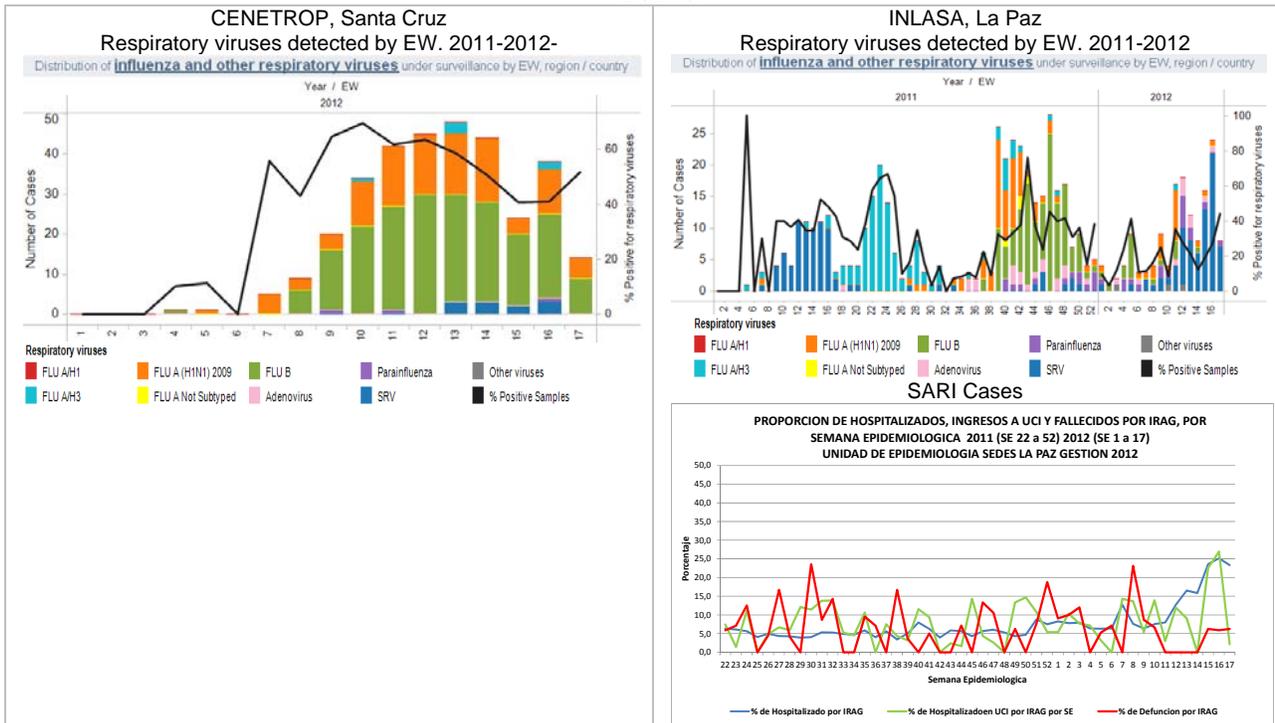
Central America

Costa Rica and Panama



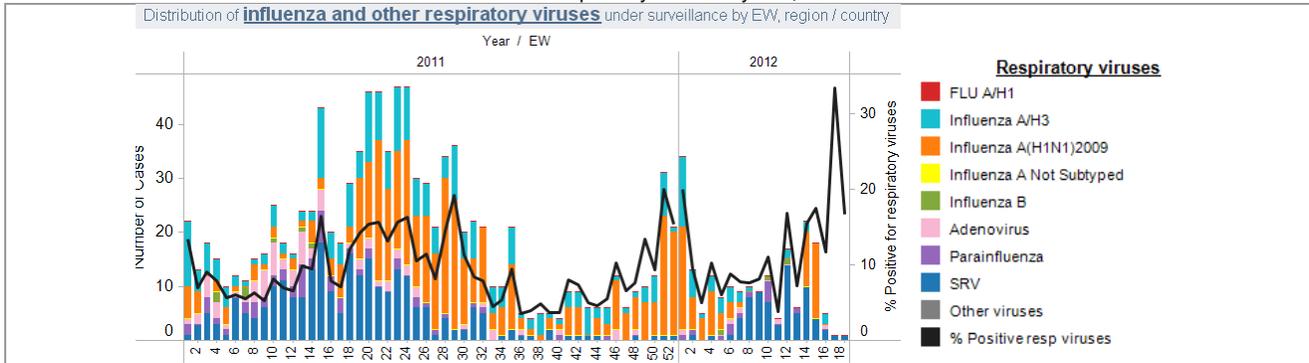
South America - Andean

Bolivia

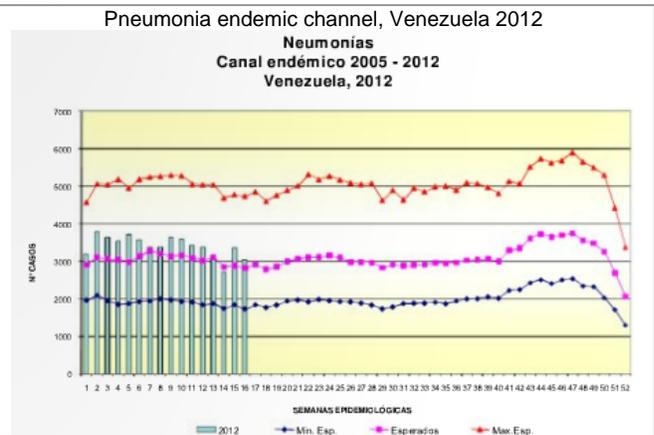
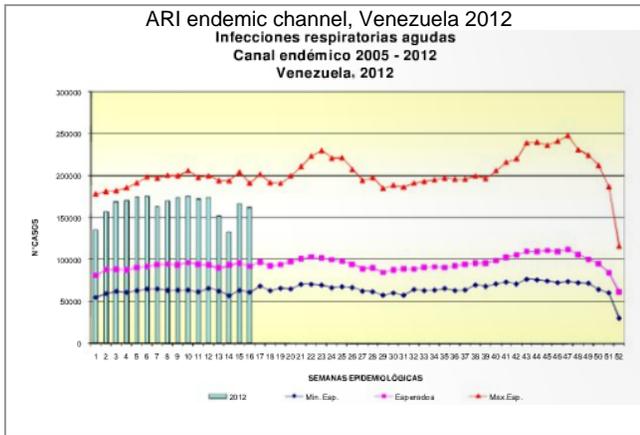


Colombia

Distribution of respiratory viruses by EW, 2011-2012

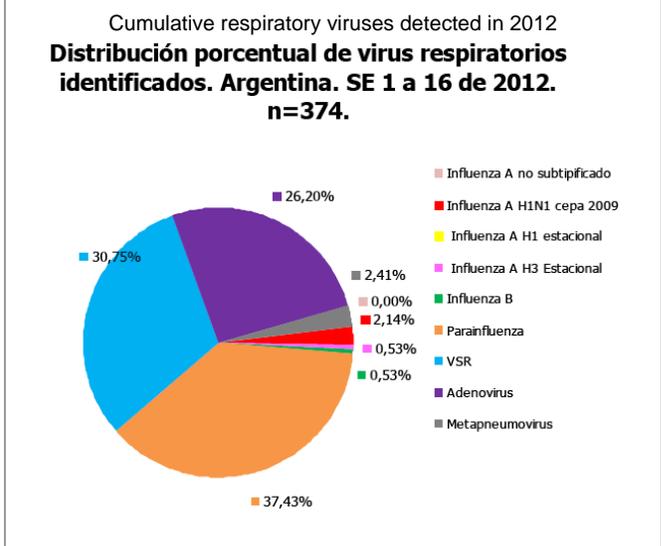
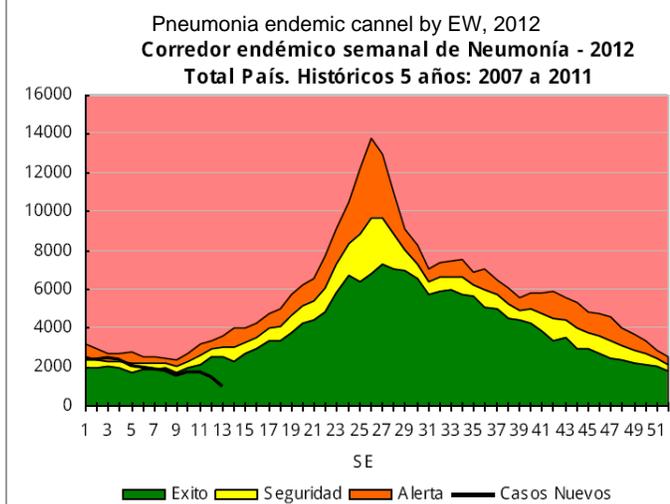
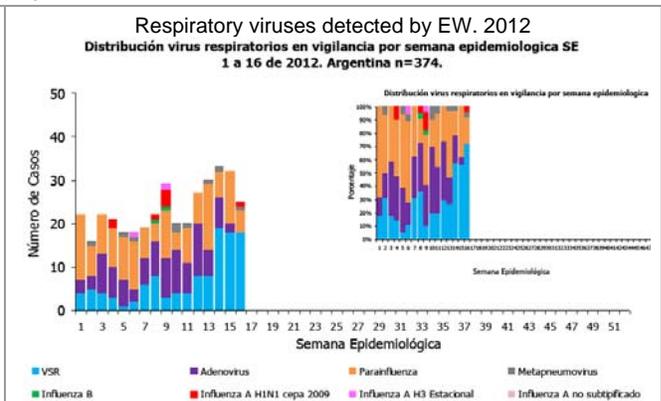
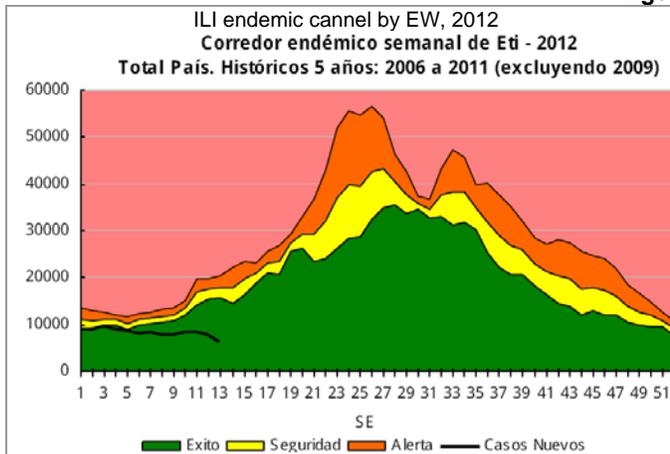


Venezuela

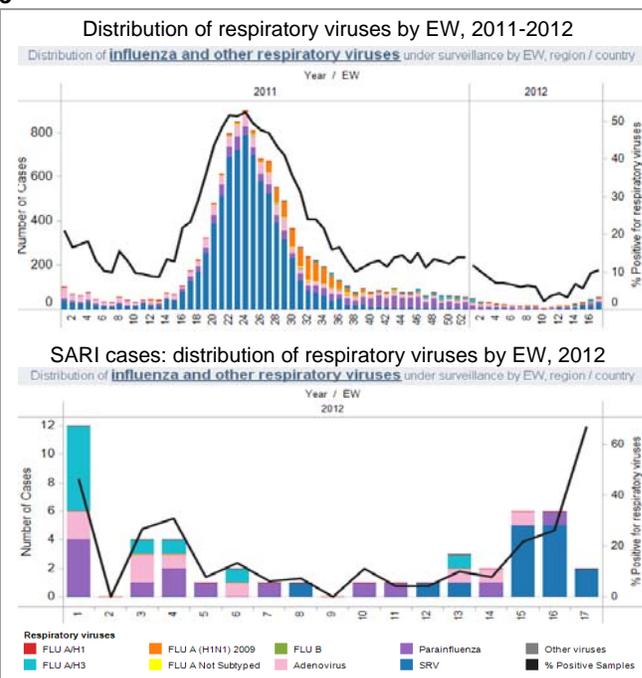
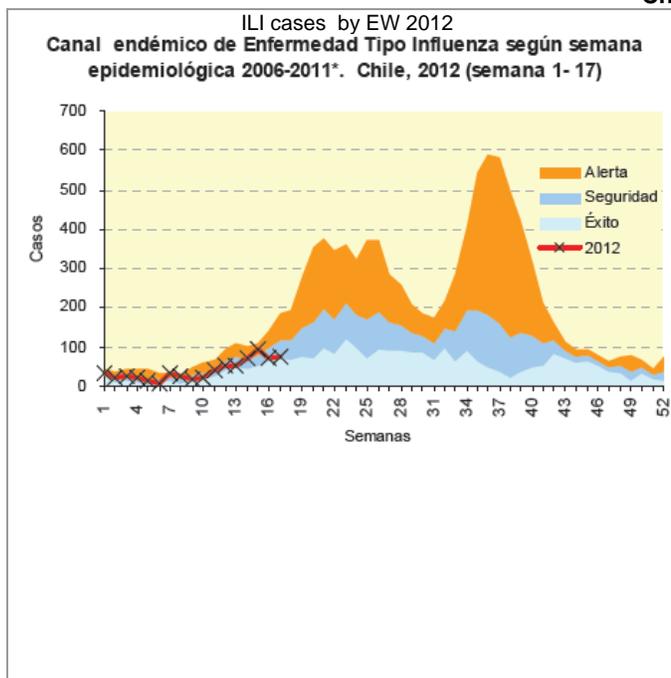


South America – Southern Cone

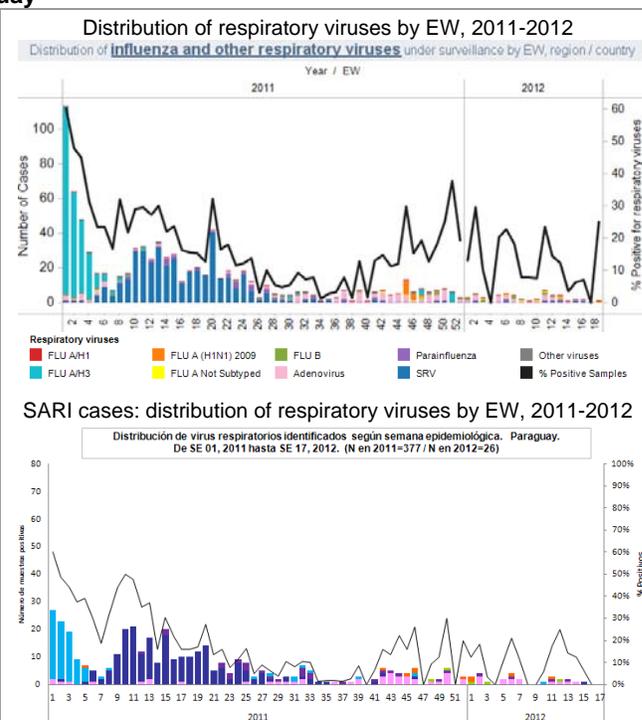
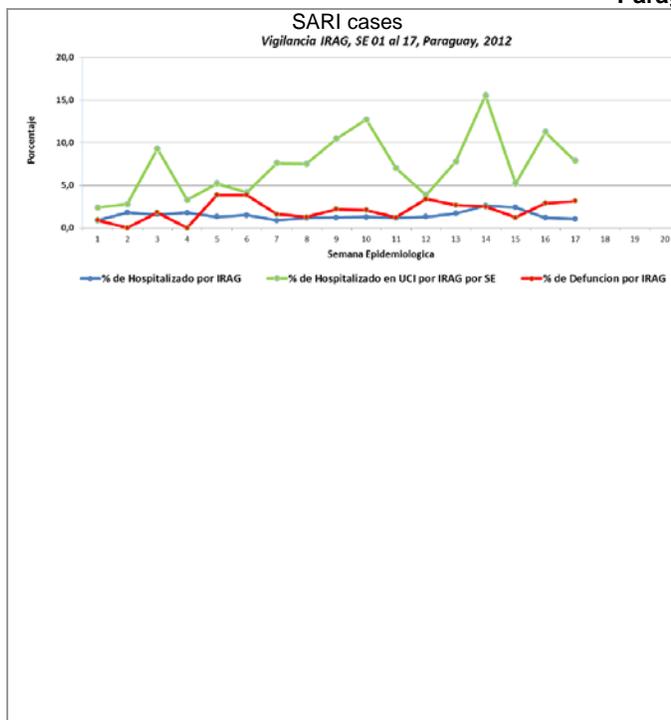
Argentina



Chile



Paraguay



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

² US Surveillance Summary. EW 17. Centers for Disease Control and Prevention

³ Venezuela. Boletín epidemiológico - SE 17. Ministerio del Poder Popular para la Salud. Disponible en: http://www.mpps.gob.ve/index.php?option=com_content&view=article&id=549&Itemid=915

⁴ Argentina. Actualización situación de enfermedades respiratorias 2012. SE 17.

⁵ Chile. Informe de situación. SE 17. Disponible en: www.pandemia.cl

⁶ Paraguay. Boletín epidemiológico semanal SE 17. Available at:

http://www.vigisalud.gov.py/index.php?option=com_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86