



Regional Update EW 16, 2012

Influenza
(May 1, 2012 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/phip/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 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) 16, 2012, although nationally influenza activity has peaked, there are several regions still reporting elevated influenza activity (i.e. the Atlantic Region, Quebec, Ontario, and the Prairies). In EW 16 the influenza-like illness (ILI) consultation rate decreased as compared to the previous week, and remained within expected levels for this time of year. In EW 16, among the total samples analyzed (n=4,211), the proportion of samples positive for influenza (17.4%) decreased as compared to the previous week. In EW 16, of the total cases positive for influenza, the percent positive for influenza B (63.2%) continued to be greater than the percent positive for influenza A (36.8%). Concerning other respiratory viruses, the proportion of tests positive for RSV (7.4%) continued to decline, and influenza was the most prevalent among all respiratory viruses detected.

In the United States², in EW 16, influenza activity declined nationally, but was elevated in some parts of the country. At the national level, the proportion of ILI consultations (1.3%) was below the national baseline (2.4%). Region 10 (northwest part of the country) continued to report ILI activity above its' region-specific baseline, and this week all states reported low to minimal ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 16 (7.0%) was below the epidemic threshold for this time of year (7.7%). In EW 16, three pediatric deaths associated with influenza were reported (1 with influenza A(H1N1)pdm09, 1 with influenza A(H3), and one with an influenza A virus that was not subtyped). Among all samples tested during EW 16 (n=2,987), the percentage of samples positive for influenza (22.2%) continued to decrease. Nationally, among the positive samples, 74.2% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 25.8% 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, 2.2% (n=15) of the influenza A(pdm)09 viruses tested this season have been resistant to oseltamivir.

In Mexico, according to laboratory data, in EW 16, of the total samples analyzed, the proportion of samples positive for influenza continued to decrease to 3.4%--which is the lowest that it has been in 2012. An unsubtyped influenza A virus was the only respiratory virus detected.

Caribbean

CAREC*, in EW 16, received epidemiological information from 6 countries: Barbados, Dominica, Jamaica, Suriname, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 16, the proportion of severe acute respiratory infection (SARI) hospitalizations was 1.3%, slightly lower compared to the prior week (1.4%). Children aged 5 – 14 years had the highest rate of SARI hospitalization (3.5% of hospitalized children in this age group were SARI cases). No SARI related deaths were reported in week 16, 2012. According to laboratory data, in the past four weeks, influenza A(H1N1)pdm09, respiratory syncytial virus, parainfluenza type 3 and rhinovirus have been confirmed. To date in 2012, the percentage positivity for samples tested is 29%.

In Jamaica for EW 16, the proportion of consultations for acute respiratory illness (ARI) was 4.1% which was 0.5% less than the previous week. The proportion of admissions due to SARI was 0.5% which was the same as the previous week. There was no SARI death reported for EW 16. No influenza viruses were detected in EW 16.

In Cuba, according to laboratory data, in EW 16, among all samples tested (n=58), 22% were positive for respiratory viruses and 3.5% for influenza viruses (influenza B).

In Dominican Republic, in EW 17, among all samples tested (n=16), ~30% were positive for influenza viruses (influenza A(H3N2)).

Central America

In Costa Rica, in EW 16, according to laboratory data, among all samples tested (n=88), the percentage of positive samples for respiratory viruses was 23.9%, Adenovirus, influenza A(H3N2) and parainfluenza viruses were detected.

In Guatemala, in EW 16, according to laboratory data, among all samples tested (n=25), the percentage of positive samples for respiratory viruses was 32%, being detected parainfluenza and RSV. Influenza viruses were not detected.

In Nicaragua, in EW 16, according to laboratory data, among all samples tested (n=36), influenza viruses were not detected.

South America – Andean

In Colombia, in EW 16, according to laboratory data, among all samples tested (n=6), nor influenza viruses neither other respiratory viruses were not detected.

In Ecuador, SARI cases have been decreasing since EW 11. In EW 14, the proportion of SARI hospitalizations, ICU admissions, and deaths remained below 5%. According to laboratory data, among all samples tested (n=70), 19.5% were positive for respiratory viruses, being RSV (13/17) the predominant virus.

In Peru³, up to EW 15, at the national level, 670 893 episodes of ARI and 7 291 episodes of pneumonia in children under 5 have been notified, being observed an increase in pneumonias, probably related to the rains occurred in several areas of the country. Eleven departments in the country reported rates above of the national level, being Loreto and Ucayali the departments that reported the highest rates, however these departments reported low case-fatality rates. In the present year, through EW 15, 87 deaths from pneumonia were reported, with a case-fatality rate of 1.2%. 65% of deaths in children under 5 were notified in the departments of Loreto, Puno Huánuco, Cusco, Junín and Lima.

In Venezuela⁴, in the EW 15, 165 527 cases of ARI been reported, 25.3% higher than the previous EW (n=132 066), being observed greater incidence in children < 7 years old, mainly in the federal entities of Zulia, Carabobo and Miranda. Furthermore, there were reported 3 357 cases of pneumonia, 23.7% higher than the previous EW (n= 2 712). According to laboratory data, from 1 January up to 18 April, among all samples tested (n=633), the percentage of positivity for respiratory viruses was 3.9%. Among the positive samples, 64% were influenza A(H3N2), RSV (24%) and influenza A(H1N1)pdm09 (12.0%).

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

South America – Southern Cone

In Argentina⁵, in EW 12, 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 15, among all samples tested (n=6,582), 4.6% were positives to influenza. Low circulation of respiratory viruses was detected, mainly parainfluenza and followed by adenovirus and RSV.

In Chile, 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, which has been increasing in the last weeks, in EW 15 (4.2%) decreased as compared to the prior week. The proportion of SARI hospitalizations remained similar to the prior week and the SARI ICU admission proportion decreased. No SARI deaths were reported in EW 15. According to laboratory data, in EW 15, among samples analyzed (n=32), the proportion of positives to respiratory viruses was 6,3%, being detected RSV and adenovirus.

Graphs

North America

Canada

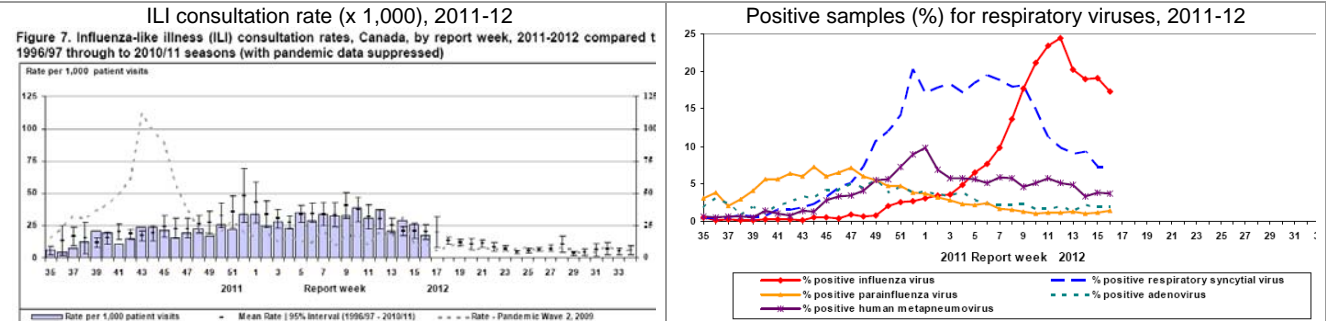
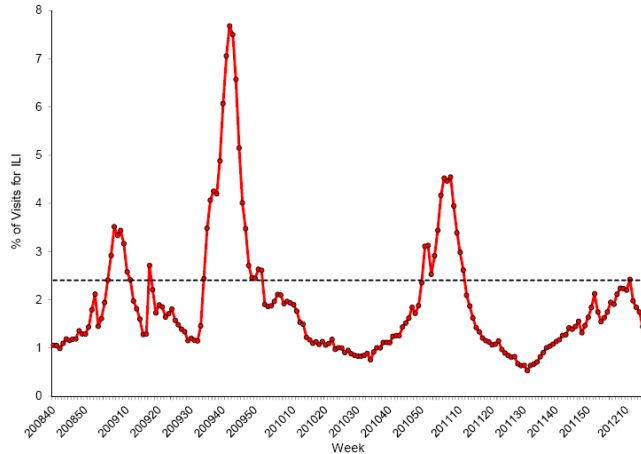


Figure 1. Map of overall Influenza activity level by province and territory, Canada, Week 16

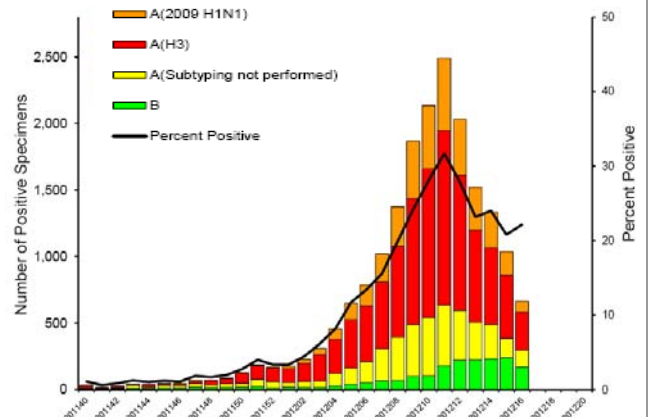


United States

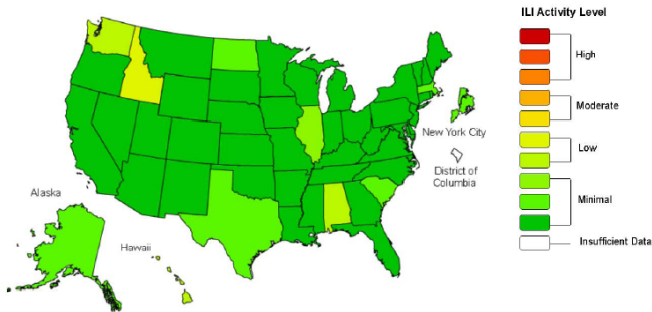
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – April 21, 2012



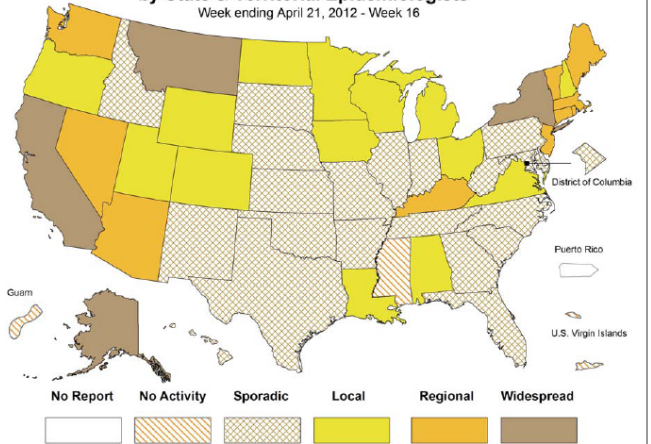
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2011-12 Influenza Season Week 16 ending Apr 21, 2012



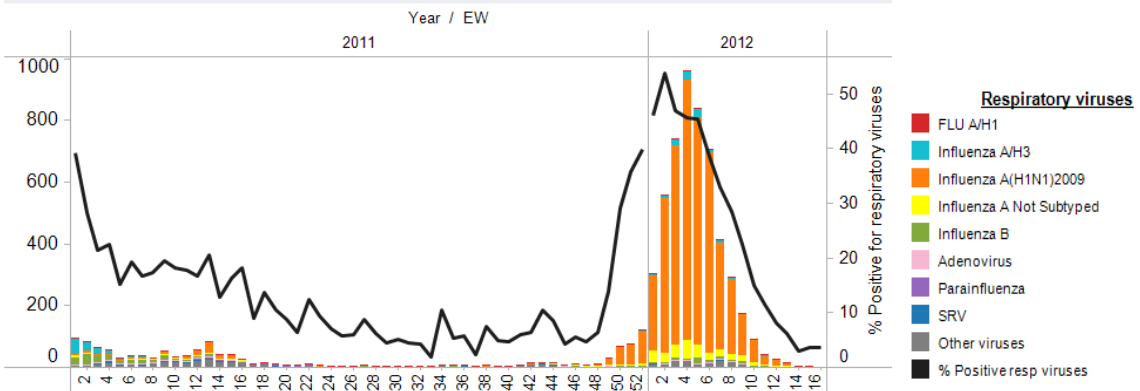
Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending April 21, 2012 - Week 16



Mexico

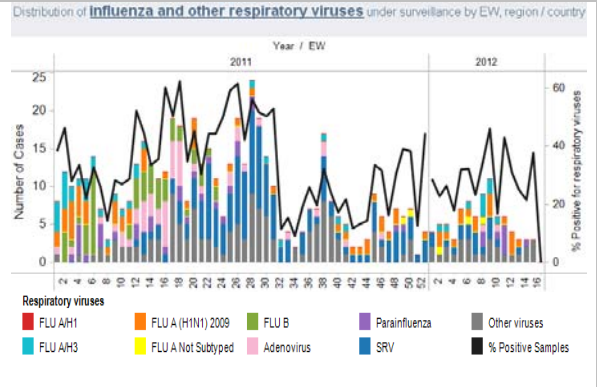
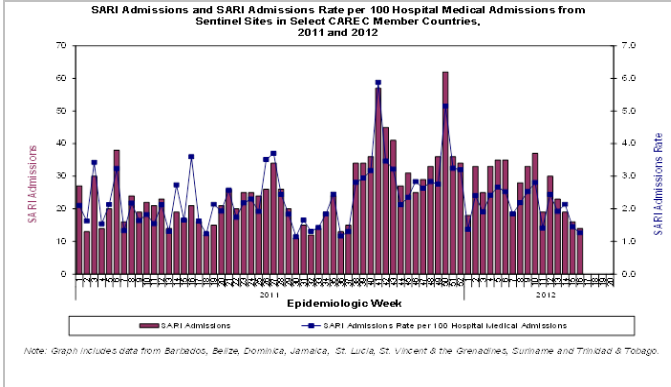
Distribution of respiratory viruses by EW, 2011-2012

Distribution of influenza and other respiratory viruses under surveillance by EW, region / country

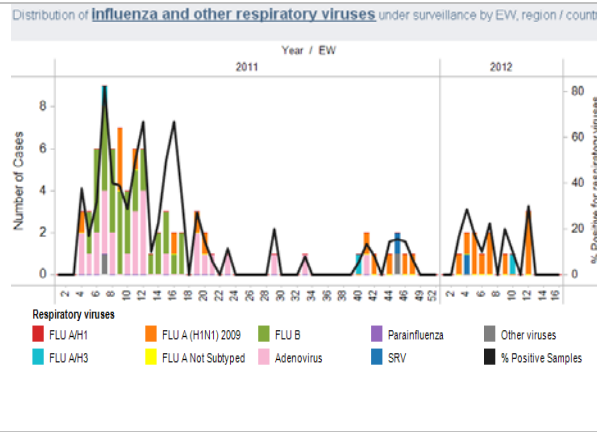
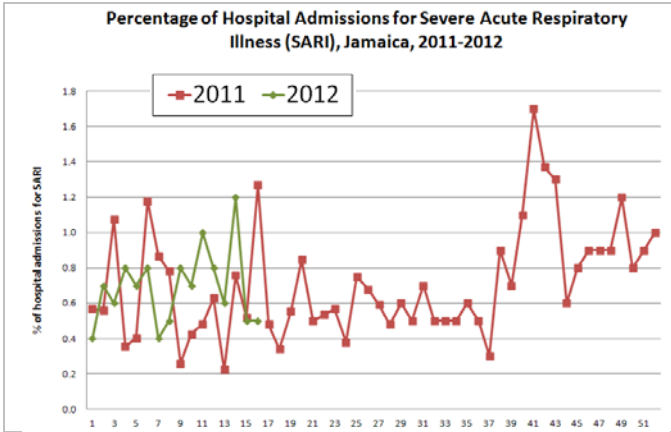


Caribbean

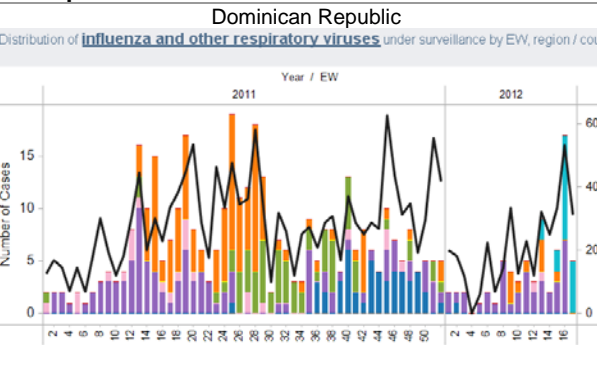
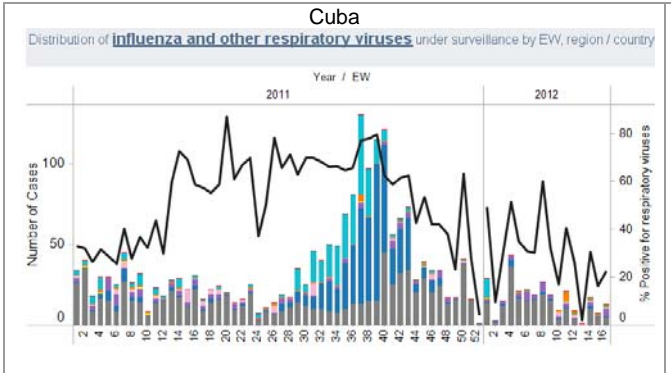
CAREC



Jamaica



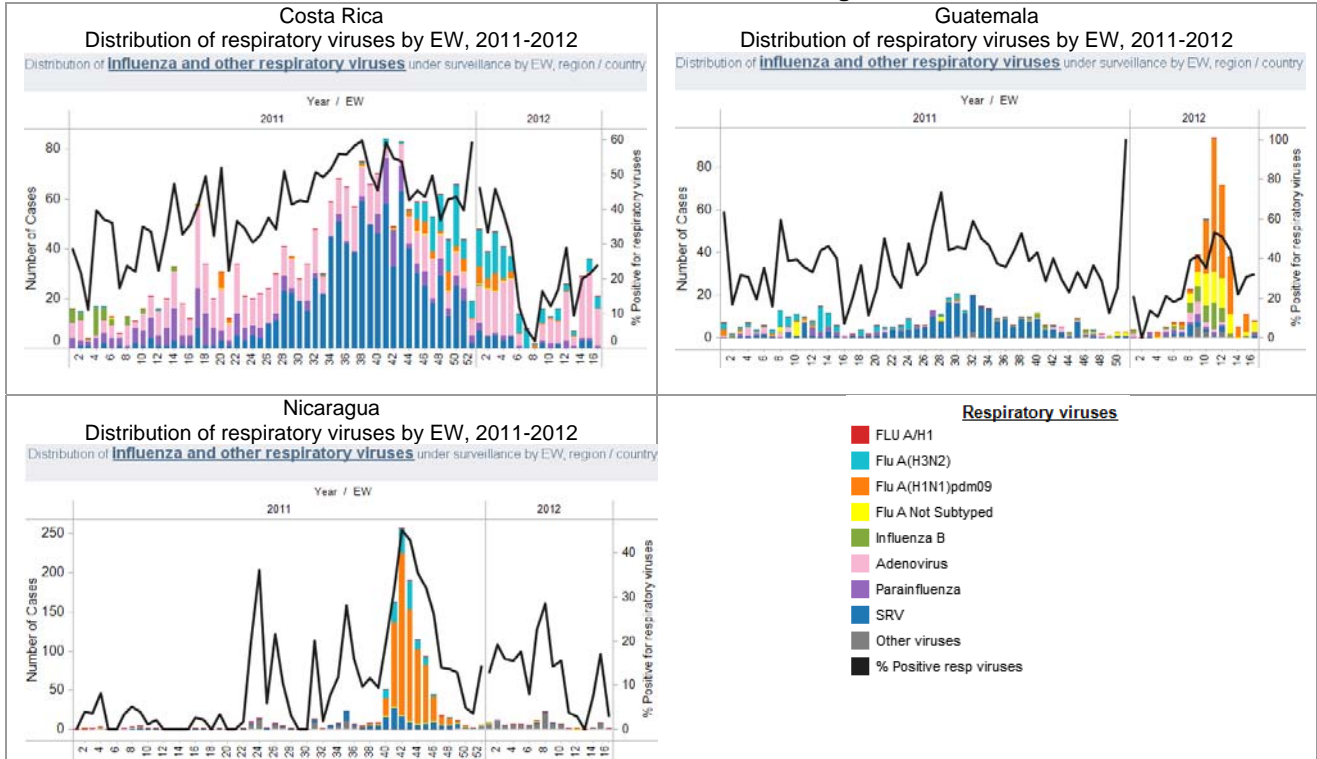
Cuba & Dominican Republic



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

Central America

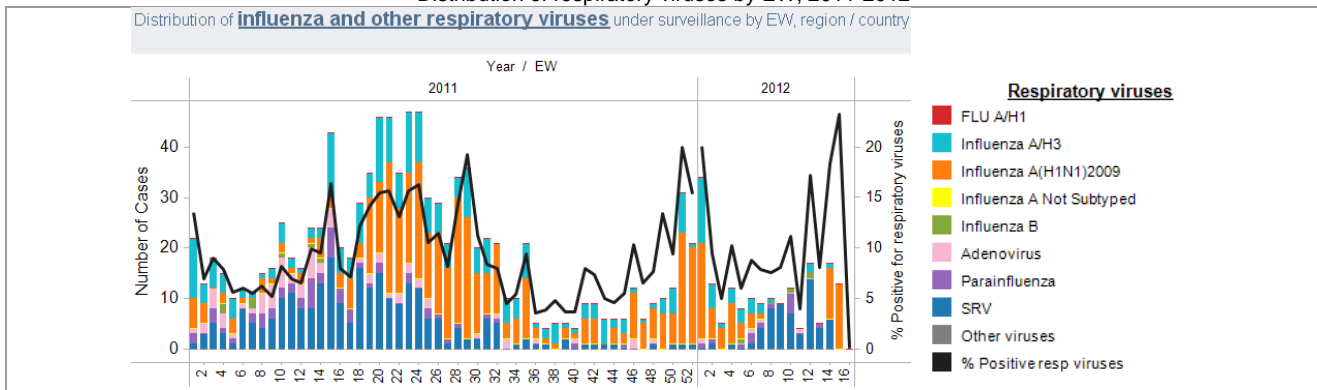
Costa Rica, Guatemala and Nicaragua



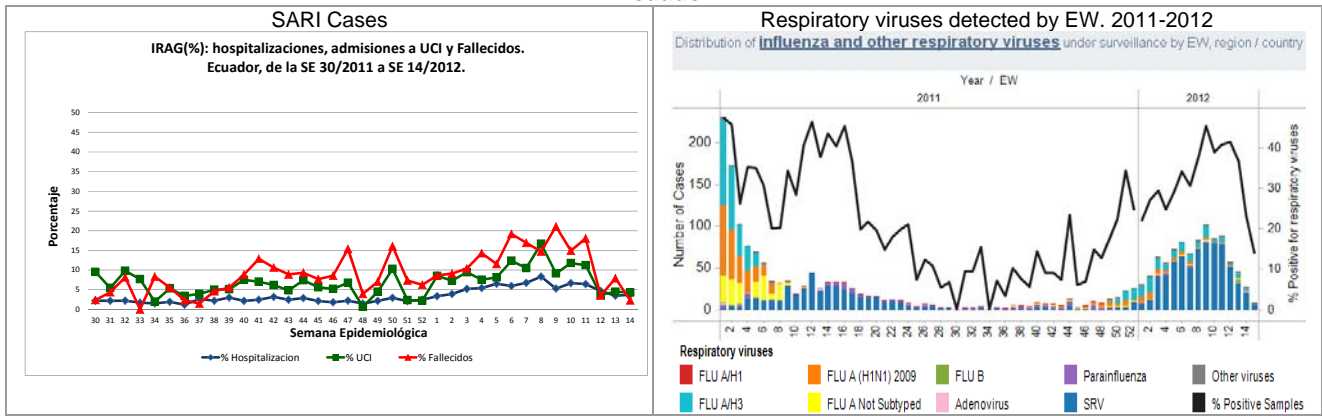
South America - Andean

Colombia

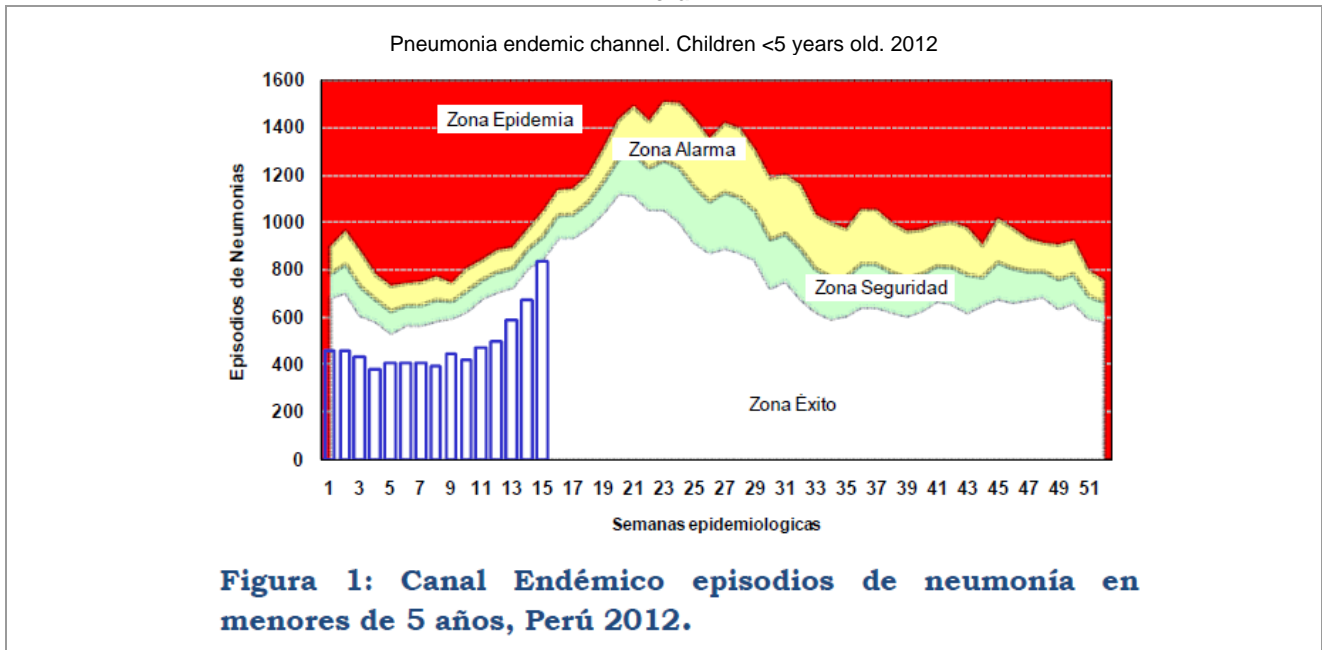
Distribution of respiratory viruses by EW, 2011-2012



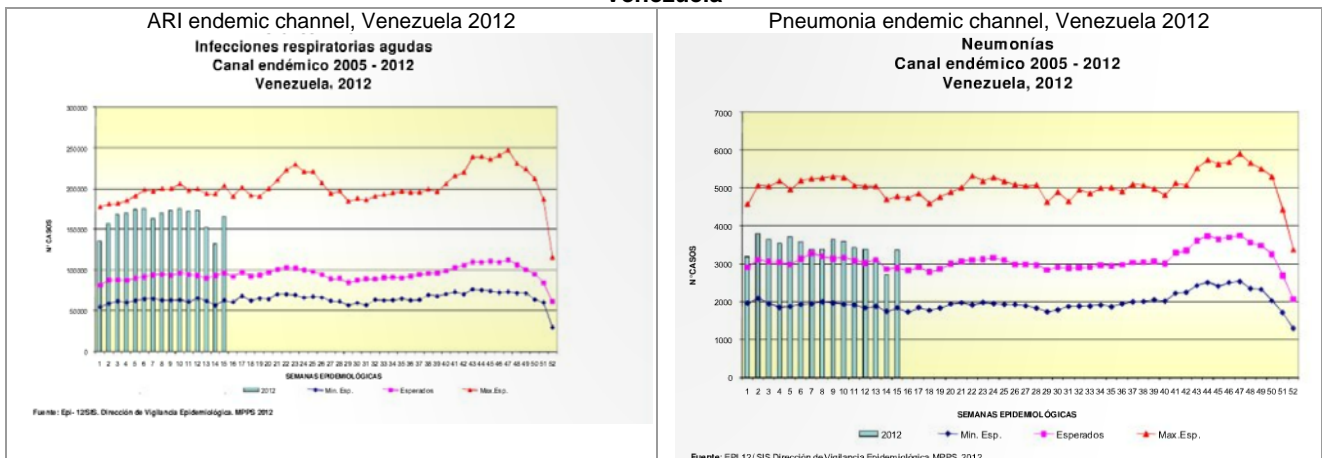
Ecuador



Peru

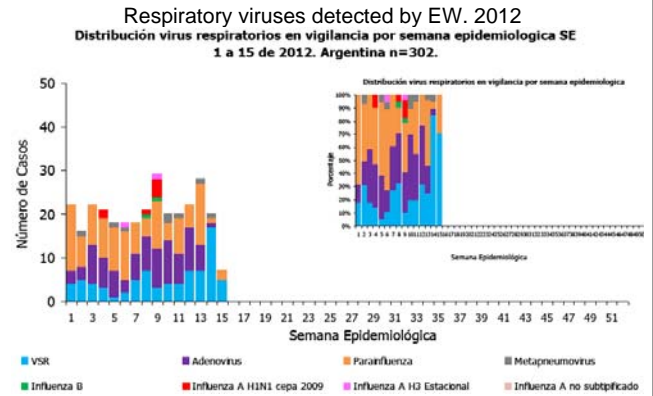
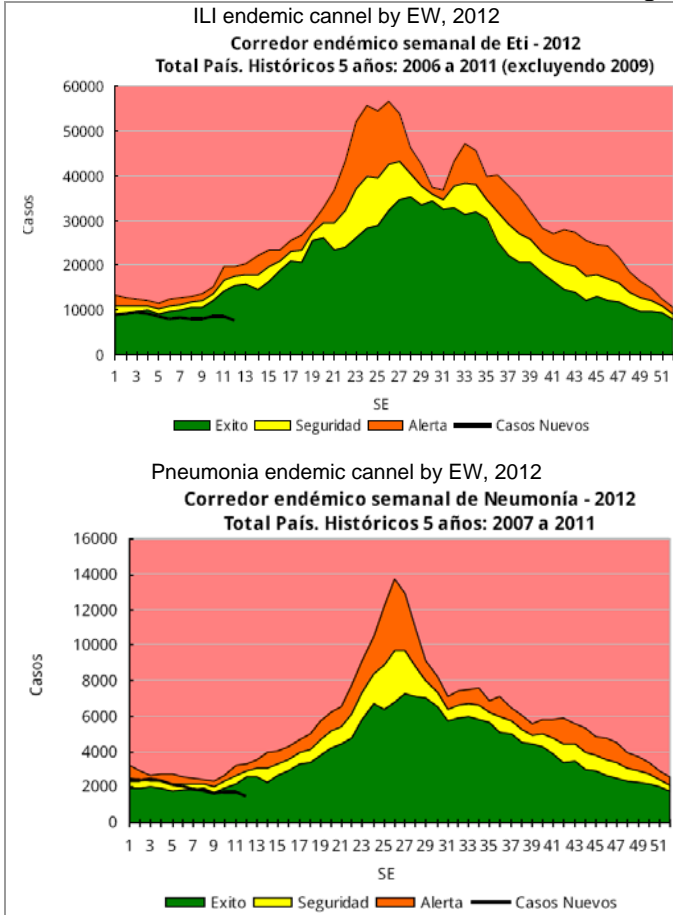


Venezuela

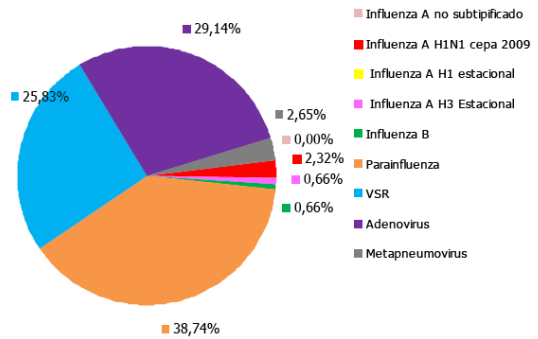


South America – Southern Cone

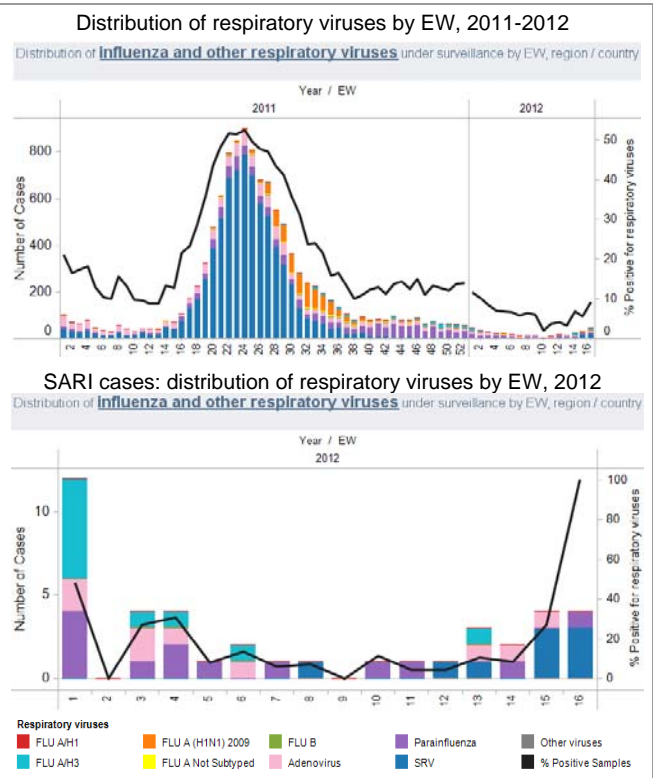
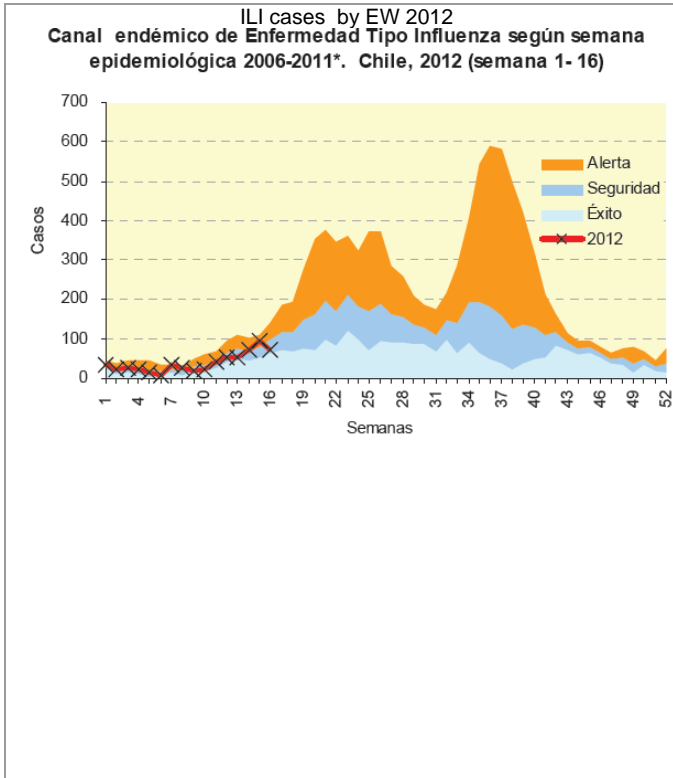
Argentina



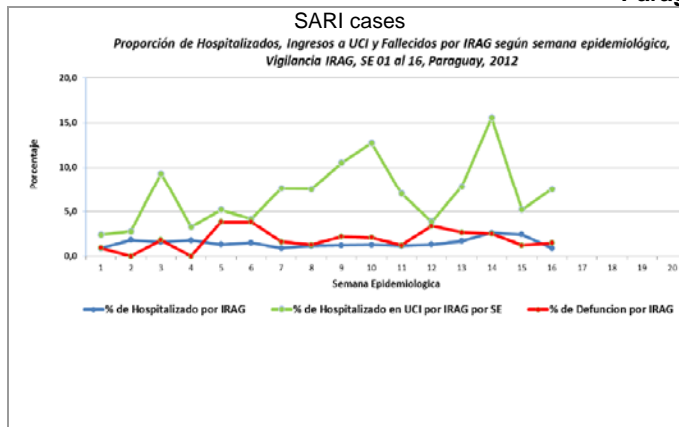
Cumulative respiratory viruses detected in 2012
Distribución porcentual de virus respiratorios identificados. Argentina. SE 1 a 15 de 2012. n=302.



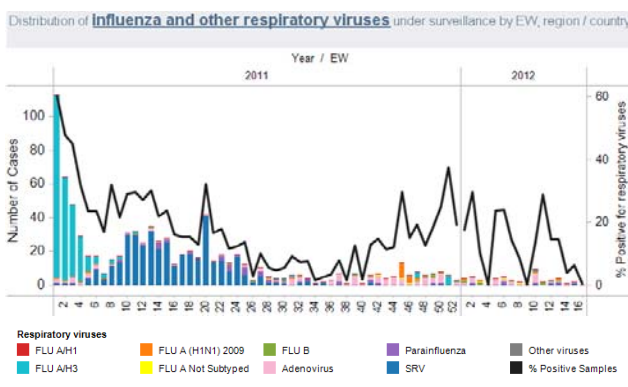
Chile



Paraguay



SARI cases: distribution of respiratory viruses by EW, 2011-2012



¹ FluWatch Report. EW 16. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 16. Centers for Disease Control and Prevention

³ Perú. Sala de Situación de Salud. SE 15. Ministerio de Salud. Dirección General de Epidemiología

⁴ Venezuela. Boletín epidemiológico - SE 16. 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

⁵ Argentina. Actualización situación de enfermedades respiratorias 2012. SE 16.

⁶ Paraguay. Boletín epidemiológico semanal SE 16. Available at:

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