



Regional Update EW 12, 2012

Influenza
(April 03, 2012 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/hip/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 increased in Canada; but remained within the expected level for this time of year; decreased in United States and remained low in Mexico. Among influenza viruses, influenza B was the predominant virus in Canada, influenza A(H3N2) remained predominant in United States and influenza A(H1N1)pdm09 was predominant in Mexico.
- In Central America and the Caribbean, influenza activity remained low or within expected levels for this period of time, except in Guatemala, where influenza A(H1N1)pdm09 has increased and has been co-circulating with influenza B in the last EWs.
- In South America, influenza activity and acute respiratory illness activity remained low or within expected level for this period of time, except in Ecuador, where respiratory syncytial virus (RSV) has

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 12, 2012, influenza activity continued to increase. In EW 12 the influenza-like illness (ILI) consultation rate increased slightly compared to the previous week, but remained within expected levels for this time of year. In EW 12, among the total samples analyzed (n=5,363), the proportion of samples positive for influenza (24.4%) increased slightly as compared to the previous week. Of the total cases positive for influenza, the percent positive for influenza B (60.6%) increased and continued to be greater than the percent positive for influenza A (39.4%). Concerning other respiratory viruses, the proportion of tests positive for RSV (9.6%) continued to decline, and influenza was the most prevalent among all respiratory viruses detected.

In the United States², in EW 12, influenza activity remained relatively low nationally, but was elevated in some parts of the country. At the national level, the proportion of ILI consultations (2.0%) was below the national baseline (2.4%). Regions 5 (midwest part of the country) and 10 (northwest part of the country) reported ILI activity above their region-specific baselines but this week no states reported high ILI activity and three reported moderate activity (Idaho, Illinois, and Washington). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 12 (7.8%) was below the epidemic threshold for this time of year (7.9%). In EW 12, four pediatric deaths associated with influenza were reported (1 with influenza A(H1N1)pdm09 and 3 with influenza A not subtyped). Among all samples tested during EW 12 (n=4,624), the percentage of samples positive for influenza (19.6%) continued to decrease. Nationally, among the positive samples, 89.1% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 10.9% were influenza B. Of the antigenically characterized influenza B viruses (n=117), 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 Mexico, according to laboratory data, in EW 12, of the total samples analyzed, the proportion of samples positive for influenza slightly increased to 14.8%. Influenza A(H1N1)pdm09 was the predominant circulating virus.

Caribbean

CAREC*, in EW 12, received epidemiological information from Belize, Dominica, Jamaica, St. Vincent & the Grenadines and Trinidad and Tobago. In EW 12, the severe acute respiratory infection (SARI) hospitalization rate was 2.2%, which was higher than the previous week (1.4%). The highest SARI hospitalization rate was reported among children aged 5 – 14 years (5.2% of hospitalized children in this age group were SARI cases). No SARI related deaths were reported in EW 12. In the past four weeks, influenza A(H1N1)pdm09, influenza A(H3N2), RSV, adenovirus, parainfluenza and rhinovirus have been confirmed. A review of the age of confirmed cases identified in 2012 indicates influenza A, RSV and rhinovirus infection among various age groups while adenovirus and parainfluenza have been confirmed primarily in children <5 years.

In Jamaica, in EW 12, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.9%, which was the same than the previous week. The proportion of SARI admissions was 0.8%, which was slightly lower than the previous week. In EW 12, there was no SARI death reported. According to laboratory data, influenza A(H1N1)pdm09 has been the predominant virus circulating in 2012.

In Cuba, according to laboratory data, in EW 12, among all samples tested (n=35), 26% were positive for respiratory viruses and 9% for influenza viruses, mainly influenza A(H1N1)pdm09.

In Dominican Republic, in EW 12, among all samples tested (n=25), 12% were positive for respiratory viruses. In 2012, through EW 12, parainfluenza has been the predominant respiratory virus detected. Influenza A(H1N1)pdm09 were detected sporadically in the last EWs.

Central America

In Costa Rica, in EW 12, according to laboratory data, among all samples tested (n=90), 29% were positive for respiratory viruses (mainly adenovirus) and just 3% for influenza viruses (mainly influenza A(H3N2)).

In El Salvador, in EW 12, among all samples tested (n=38), 5% were positive for respiratory viruses. In the last 3 EWs, parainfluenza and influenza A(H1N1)pdm09 were detected.

In Guatemala, in EW 12, according to laboratory data, among all samples tested (n=104), the percentage of positive samples for respiratory viruses was 53%, mainly influenza A (among the subtyped influenza A, the predominant virus was influenza A(H1N1)pdm09, followed by influenza B).

In Panama, through EW 12, all the tested samples (n=21), 60% were positive for other respiratory viruses. Influenza viruses were not detected.

South America – Andean

In Ecuador, in 2012, through EW 10, SARI activity showed an increasing trend. In EW 10, the proportions of SARI hospitalization and deaths were under 10% and the proportion of SARI ICU admissions was 15%. Among SARI patients, 21% had at least one risk factor, being the predominant risk factors: chronic cardiac disease, neurological disease, chronic respiratory disease and immune compromise. According to laboratory data, in 2012, through EW 10, the prevalent virus was RSV (36% of positives among the total tested samples), followed by influenza viruses (2.5% of positives among the total tested samples), mainly influenza A(H3N2) and influenza A(H1N1)pdm09.

South America – Southern Cone

In Brazil, in Sao Paulo (Adolfo Lutz institute) in EW 12, among all the tested samples (n=39), 23% were positive for respiratory viruses, predominating RSV and followed by influenza A untyped.

In Argentina³, in EW 09, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained low and within what was expected for this time of year. According to the laboratory data, in 2012, through EW 12, among all samples tested (n=4,952), low circulation of respiratory viruses was detected, mainly parainfluenza and followed by adenovirus and RSV.

In Chile, according to laboratory data, at national level, in EW 12, among all the samples tested (n=459), the percent of positivity for respiratory viruses was 4.1%; being parainfluenza the predominant virus detected,

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

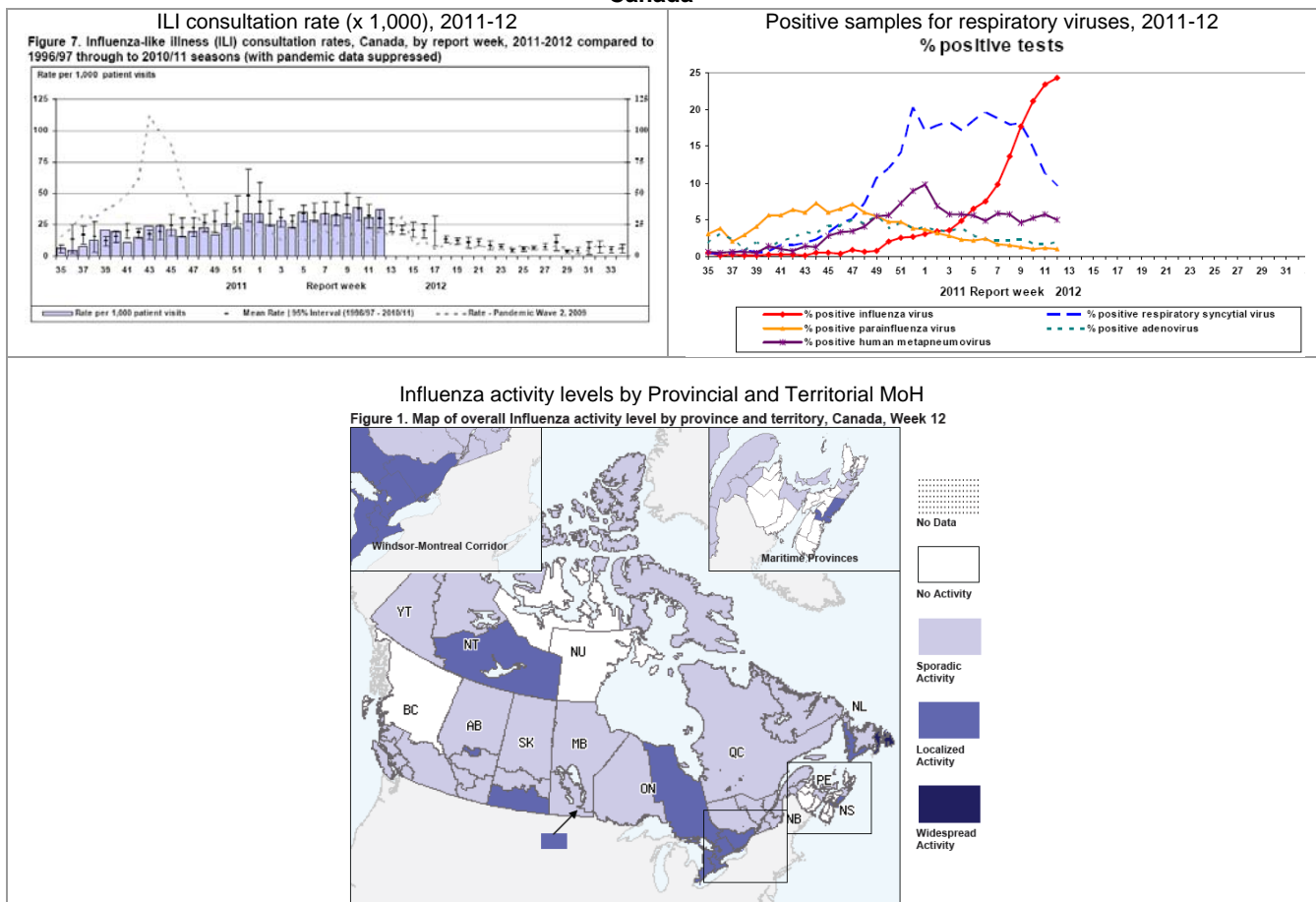
followed by adenovirus and influenza A(H3N2). Among the SARI cases, influenza A not subtyped was detected in 2 SARI cases in EW 11.

In Paraguay⁴, in EW 12, national ILI consultations increased 14% as compared to the previous weeks. The proportion of ILI in sentinel sites, in EW 12, was 6%. The proportions of SARI hospitalization and deaths were under 2%. According to laboratory data, in EW 12, low circulation of respiratory viruses was detected (mainly adenovirus).

Graphs

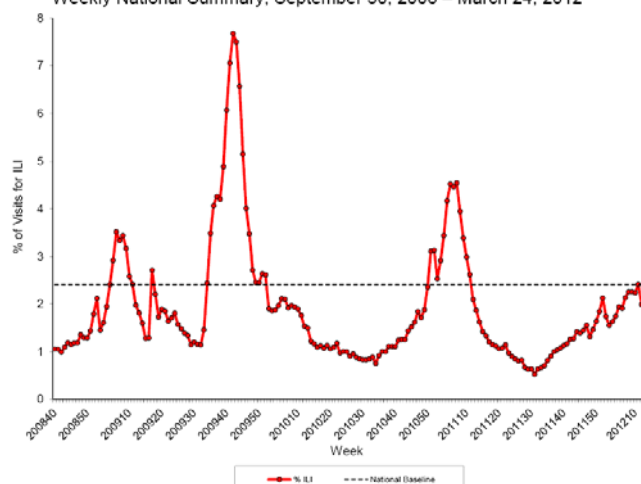
North America

Canada

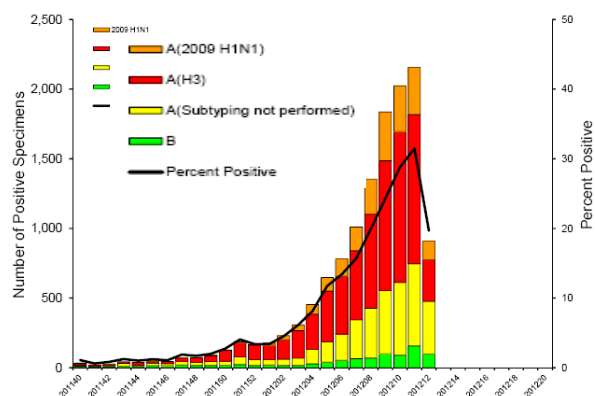


United States

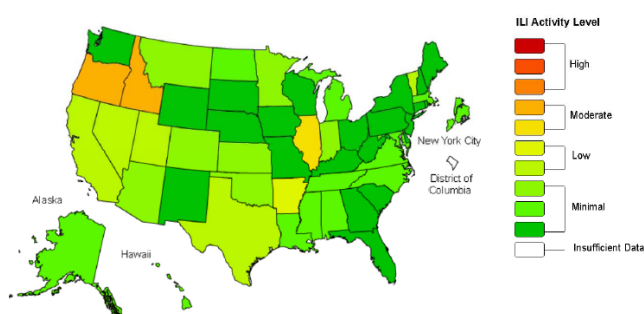
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – March 24, 2012



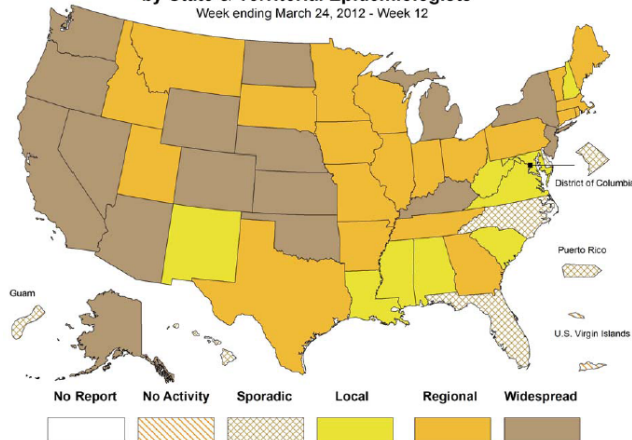
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2011-12 Influenza Season Week 12 ending Mar 24, 2012

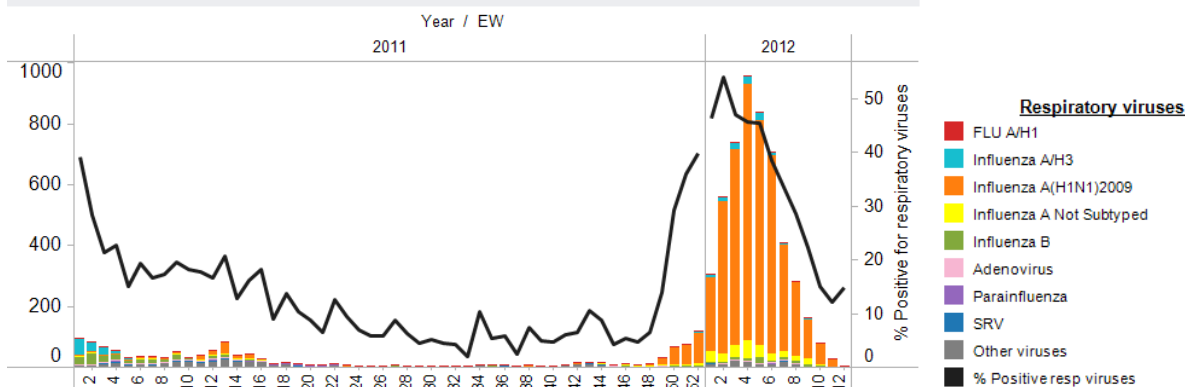


Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists* Week ending March 24, 2012 - Week 12

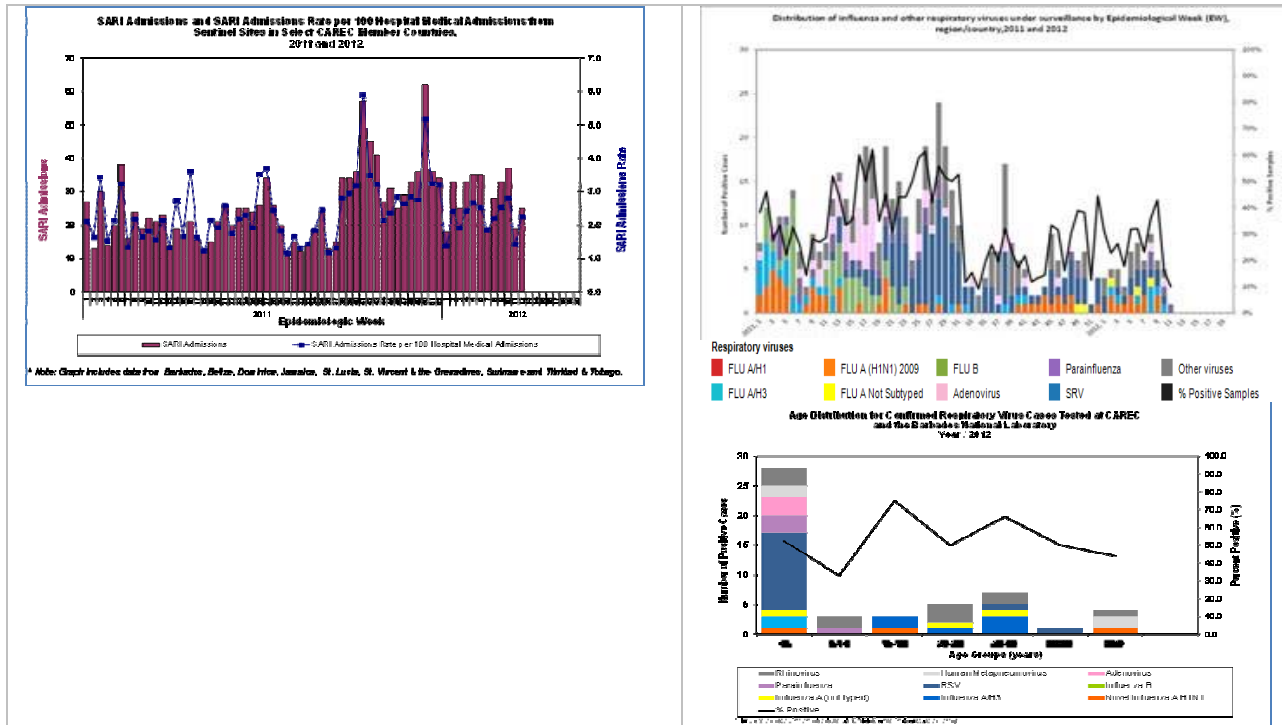


Mexico

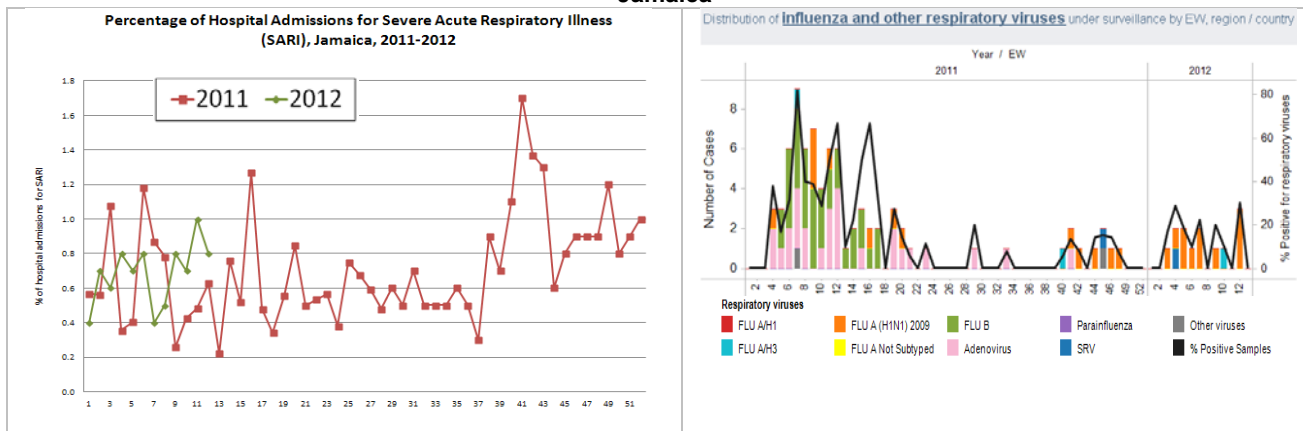
Distribution of influenza and other respiratory viruses under surveillance by EW, region / country



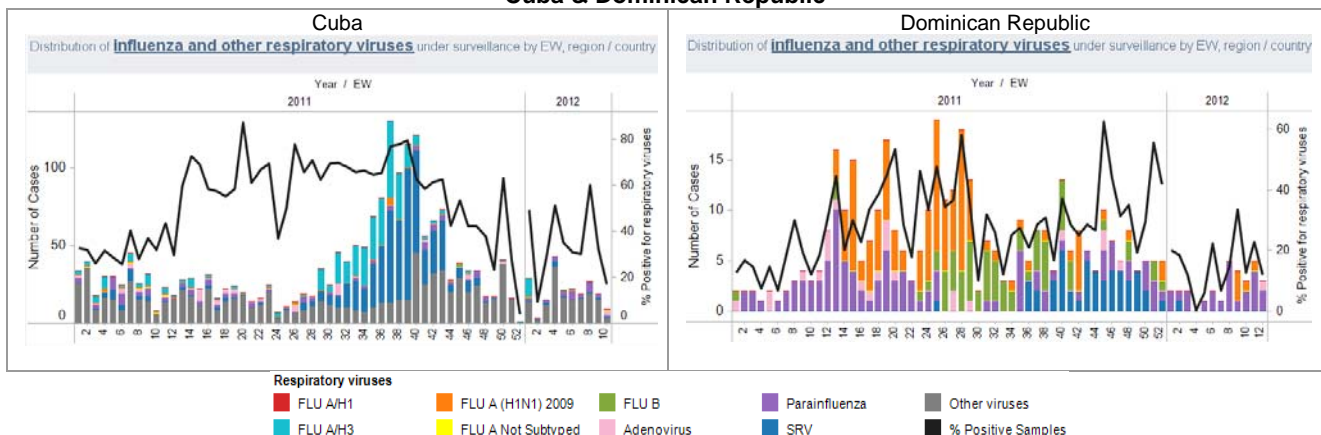
CAREC



Jamaica

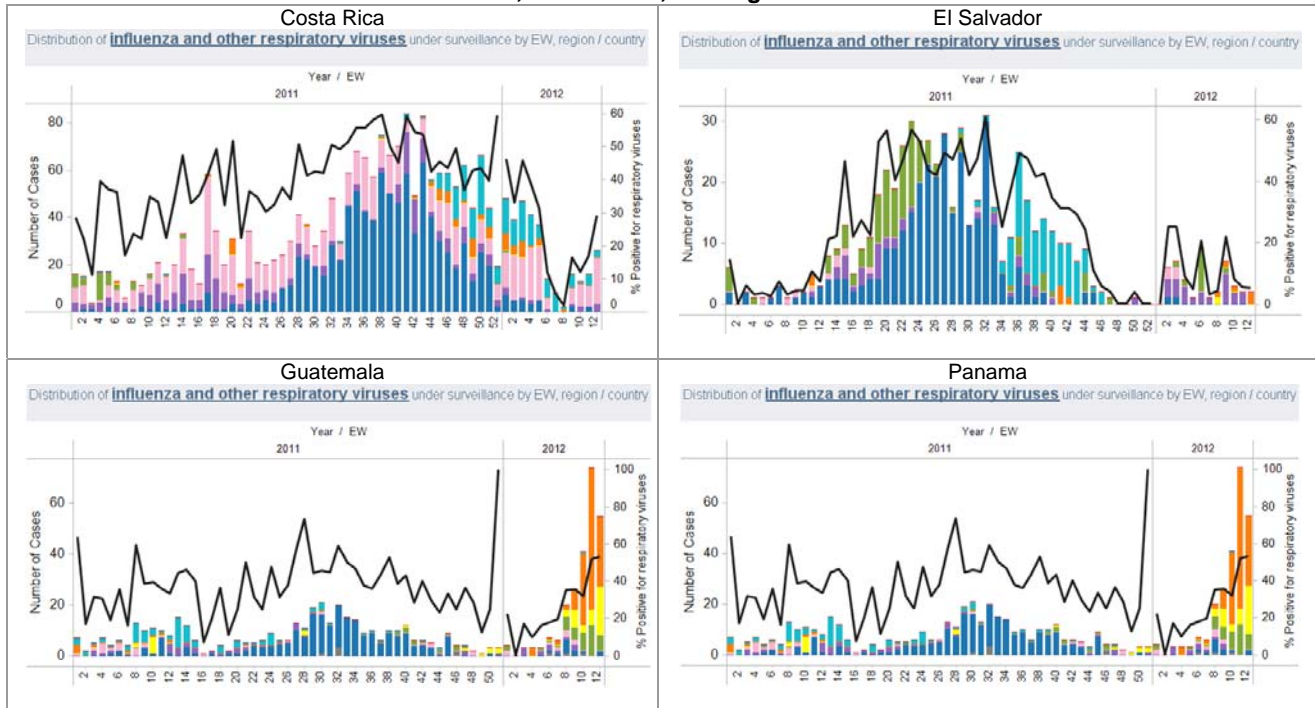


Cuba & Dominican Republic



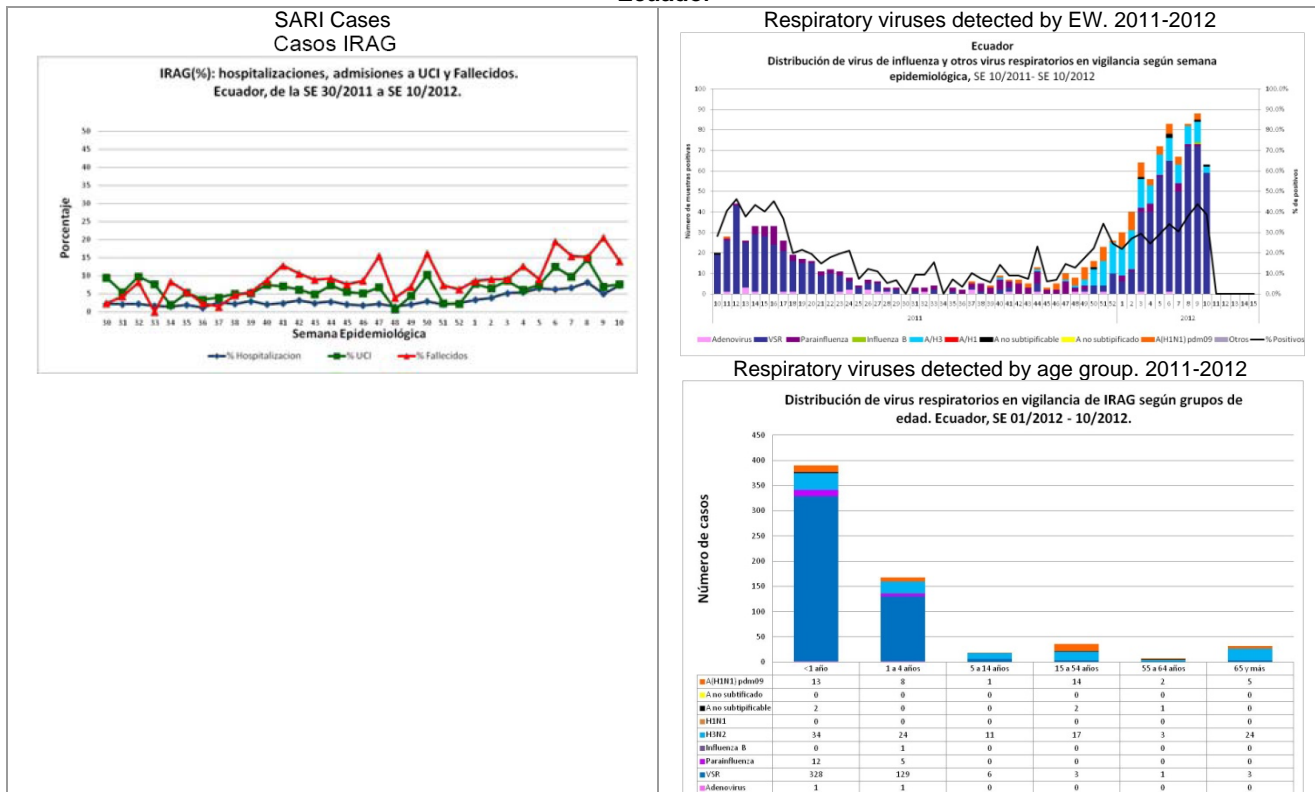
Central America

Costa Rica, El Salvador, Nicaragua and Panama



South America - Andean

Ecuador

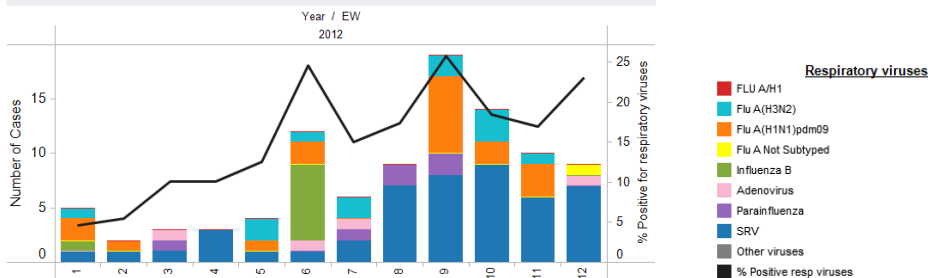


South America – Southern Cone

Brazil

Sao Paulo (Adolfo Lutz Institute)

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

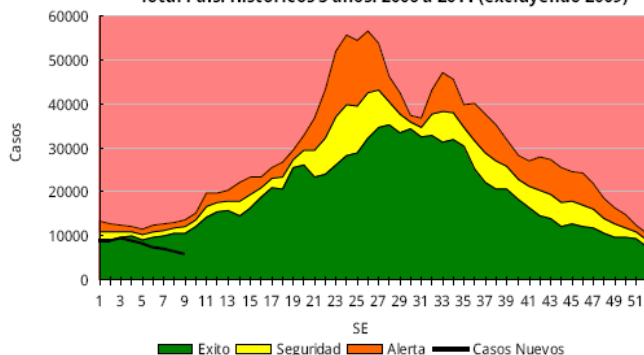


Argentina

ILI endemic canal by EW, 2012

Corredor endémico semanal de Eti - 2012

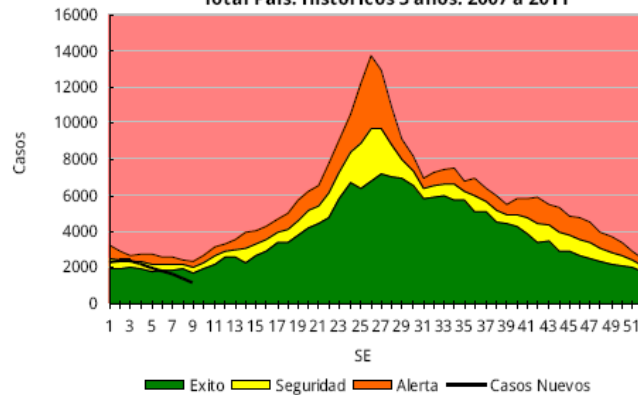
Total País. Históricos 5 años: 2006 a 2011 (excluyendo 2009)



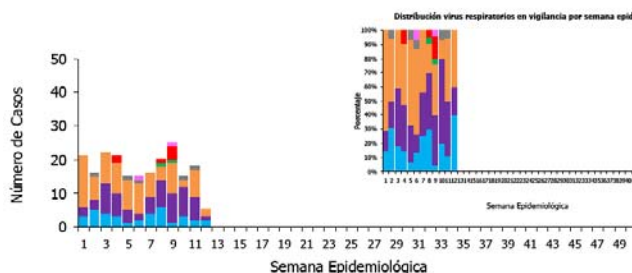
Pneumonia endemic canal by EW, 2012

Corredor endémico semanal de Neumonía - 2012

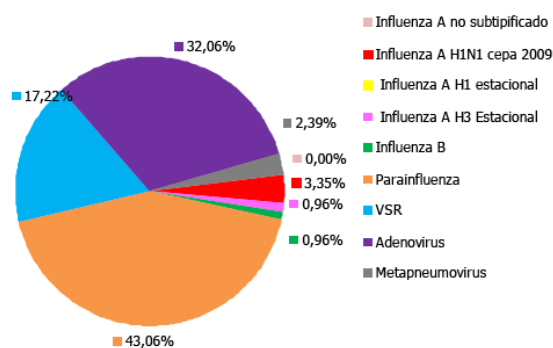
Total País. Históricos 5 años: 2007 a 2011



Distribución virus respiratorios en vigilancia por semana epidemiológica SE 1 a 12 de 2012. Argentina n=209.

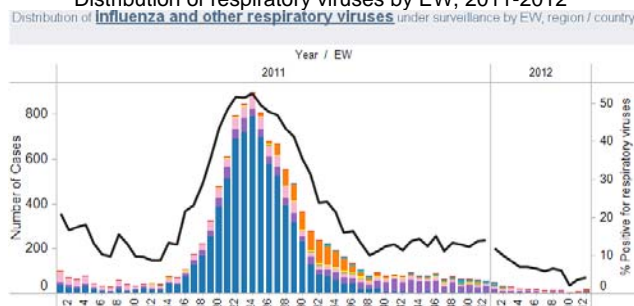


Distribución porcentual de virus respiratorios identificados. Argentina. SE 1 a 12 de 2012. n=209.

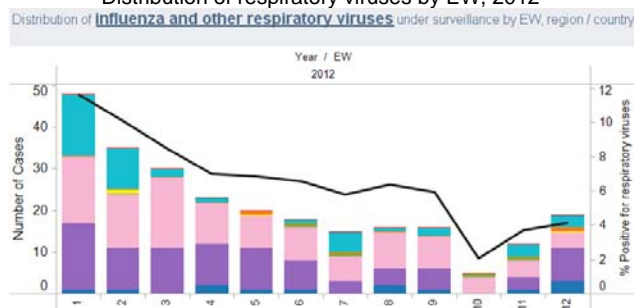


Chile

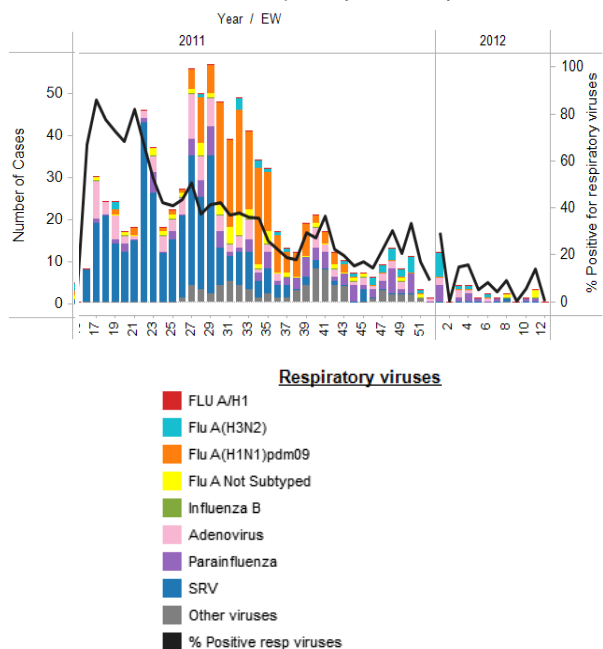
Distribution of respiratory viruses by EW, 2011-2012



Distribution of respiratory viruses by EW, 2012



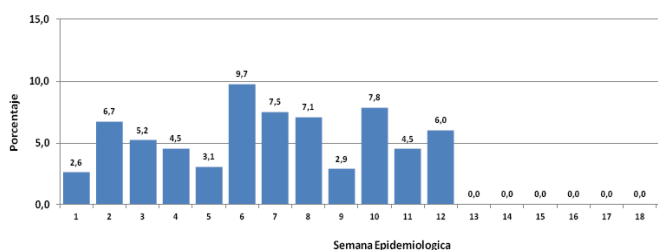
SARI cases: distribution of respiratory viruses by EW, 2011-2012



Paraguay

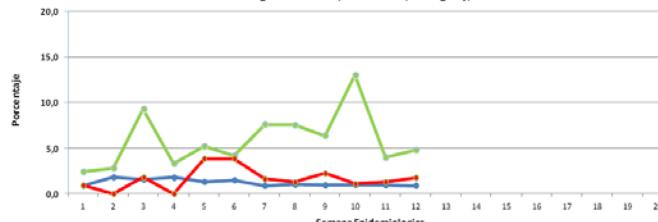
ILI cases

Proporción de consultas por ETI según semana epidemiológica del 1 al 12 Paraguay, 2012

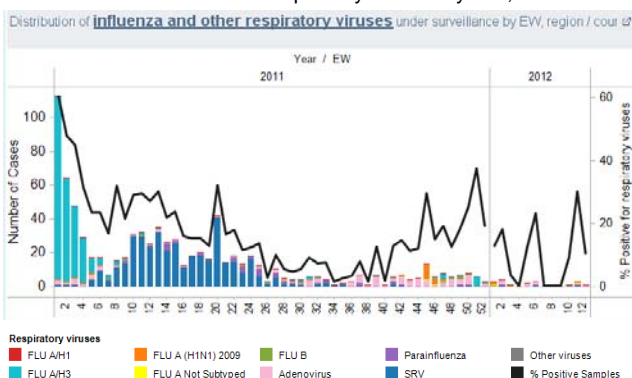


SARI cases

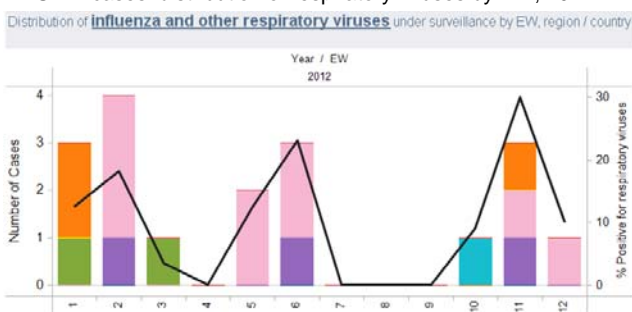
Proporción de Hospitalizados, Ingresos a UCI y Fallecidos por IRAG según semana epidemiológica, Vigilancia IRAG, SE 01 al 12, Paraguay, 2012



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



SARI cases: distribution of respiratory viruses by EW, 2012



¹ FluWatch Report. EW 12. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 12. Centers for Disease Control and Prevention

³ Argentina. Actualización situación de enfermedades respiratorias 2012. SE 12.

⁴ Paraguay. Boletín epidemiológico semanal SE 12. Available at:

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