Regional Update EW 19, 2012

Influenza

(May 22, 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 of an increased detection of influenza A(H3N2) that was reported in Dominican Republic and influenza A(H1N1)pdm09 in El Salvador and Honduras
- In South America, respiratory viruses detection has been increasing in the last weeks. Respiratory sincicial virus (RSV) was the predominant respiratory virus in this sub-region

Epidemiologic and virologic influenza update

North America

In Canada[1], in epidemiological week (EW) 19, 2012, influenza activity decreased. In EW 19 the influenza-like illness (ILI) consultation rate decreased considerably as compared to the previous week and was lower than expected levels for this time of year. In EW 19, among the total samples analyzed (n=3,124), the proportion of samples positive for influenza (9.7%) decreased as compared to the previous week. In EW 19, of the total cases positive for influenza, the percent positive for influenza B (63.2%) decreased but continued to be greater than the percent positive for influenza A (36.8%). Concerning other respiratory viruses, the percent positive for rhinovirus (11.3%) was similar to the previous week and was the most prevalent among all respiratory viruses detected.

In the United States[2], in EW 19, influenza activity declined nationally and the proportion of ILI consultations (1.2%) 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 19 (6.1%) was below the epidemic threshold for this time of year (7.5%). In EW 19, two pediatric deaths associated with influenza were reported (one with influenza type B and one with an unsubtyped influenza A virus). Among all samples tested during EW 19 (n=2,171), the percentage of samples positive for influenza (13.3%) continued to decrease. Nationally, among the positive samples, 52.5% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 47.2% were influenza B, and the proportion of B virus detections continued to increase. Of the antigenically characterized influenza B viruses (n=252), 46.4% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 53.6% were of the B/Yamagata lineage. In total, 1.4% (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 18, there were no respiratory viruses detected among all samples analyzed (n=16).

Caribbean

CAREC*, in EW 19, received epidemiological information from 7 countries: Barbados, Belize, Dominica, Jamaica, Suriname, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 19, the proportion of severe acute respiratory infection (SARI) hospitalizations was 1.8%, which is less than the prior week (2.8%).

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

Children aged 6 months – 4 years had the highest rates of SARI hospitalization (4.7% of all children admitted to hospital were for SARI). No SARI related deaths were reported in week 19, 2012. According to laboratory data, in the past four weeks, influenza A(H3), influenza A(H1N1)pdm09, influenza B and respiratory syncytial virus (RSV) have been confirmed. Influenza B was confirmed among persons in northern Caribbean countries (Jamaica and Montserrat) while influenza A viruses have been confirmed among persons in southern Caribbean countries (Dominica and Suriname). To date in 2012, the overall percentage positivity for samples tested is 31%, with % positive for influenza = 16% and % positive for other respiratory viruses = 15%.

In Jamaica for EW 19, the proportion of consultations for Acute Respiratory Illness (ARI) was 5.7% which was 1.3% more than the previous week. The proportion of admissions due to SARI was 0.8% which was the same as the previous week. There was no SARI death reported for EW 19. Influenza B was detected in EW 19.

In Cuba, according to laboratory data, in EW 19, among all samples tested (n=75), the percentage of positives for respiratory viruses (26,7%) increased as compared to the prior weeks; being rhinovirus the predominant respiratory virus detected, followed by parainfluenza. In EW 19, influenza B and influenza A(H1N1)pdm09 were also detected.

In Dominican Republic, in EW 20, among all samples tested (n=29), ~30% were positive for influenza viruses. Higher detection of influenza A(H3N2) has been detected in the last 5 weeks as compared with previous weeks. This week influenza A(H1N1)pdm09 was also detected.

Central America

In El Salvador, in EW 19, ARI and pneumonia endemic channels showed that the number of ARI and pneumonia cases remained within what was expected for this time of year. Regionally, the pneumonia endemic channels were over their region-specific baselines in the departments of Morazan and La Union. According to laboratory data, in EW 20, among all samples tested (n=49), the percentage of positive samples for respiratory viruses was 20.4%. Influenza A(H1N1)pdm09 has been the predominant circulating virus since EW 12.

In Guatemala, in EW 19, according to laboratory data, among all samples tested (n=25), the percentage of positive samples for respiratory viruses remained similar to previous weeks (32%). In EW 19, influenza A unsubtyped was the most predominant circulating virus detected.

In Honduras, in EW 19, according to laboratory data, among all samples tested (n=19), the percentage of positive samples for respiratory viruses was 31%, with influenza A(H1N1)pdm09, parainfluenza and adenovirus detected. Influenza A(H1N1)pdm09 has been the predominant circulating virus detected since EW 13.

South America – Andean

En Bolivia, according to laboratory data from La Paz (INLASA laboratory), circulation in EWs 19-20, in the Departments of La Paz, Oruro, Potosi, Tarija, Pando, Beni, and Chuquisaca showed a positivity of 28,8% (EW 19) and 15% (EW 20). Among all samples analyzed (n=79), RSV was the predominant virus, followed by influenza A(H1N1)pdm09. According to SARI surveillance, in the department of La Paz, since EW 11, there has been an increase in the proportion of SARI hospitalizations. In EW 19, SARI activity was similar to the previous week. Of the samples from SARI cases (n=53), in the EW 19, percentage of positive samples was 32,1%; being RSV the predominant virus detected.

In Ecuador, SARI cases have been decreasing since EW 11. In EW 19, the proportion of SARI hospitalizations, ICU admissions remained below 5%. No SARI deaths were reported. According to laboratory data, among all SARI samples tested (n=39), 7.7% were positive for respiratory viruses, lower than the previous week (15.8%). No respiratory virus was predominant.

In Colombia, in EW 18, according to laboratory data, among all samples tested (n=35), the percentage of positive samples for respiratory viruses was 11.4%. RSV was the main virus detected. Influenza viruses were not detected.

In Peru[3], in the EW 18, at the national level, the endemic channel of ARI cases and pneumonia cases in children under 5 years old, showed an increasing trend since EW 09; however, this week, these channels are within the expected levels for this period of time. Regionally, the departments of Callao, Lima, Piura, Puno and Tacna showed a number of pneumonia cases in children under 5 years old, over their specific regional epidemic threshold.

South America – Southern Cone

In Argentina[4], in EW 16, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained within what was expected for this time of year. The hospitalized ARI surveillance showed a lower accumulated proportion of cases in 2012 through EW 16 (n=5826) than reported last year in the same period of time. According to laboratory data, in 2012, through EW 19, among all samples tested (n=11,886), the proportion of positive samples has been increasing since EW 15, to SE 19 (29%). RSV has been the predominant circulating virus.

In Chile[5], in EW 19, at the national level, ILI activity remained within what was expected for this time of year, In EW 19, a decreased in number of cases was reported (3.5 per 100.000 inhabitants) as compared to EW 18 (5.4 per 100.000 inhabitants). The percent of urgent visits for respiratory causes (20.5%) decreased slightly as compared to the previous week (21.5%). According to laboratory data at the national level, in EW 18, among all samples analyzed (n=679), the percent positivity for respiratory viruses was 20%, higher than prior weeks, with a predominance of RSV (58%) among the positives. According to SARI surveillance data, in EW 18, the proportion of positive samples among the tested (n=23) was 52.2%; detecting mainly RSV.

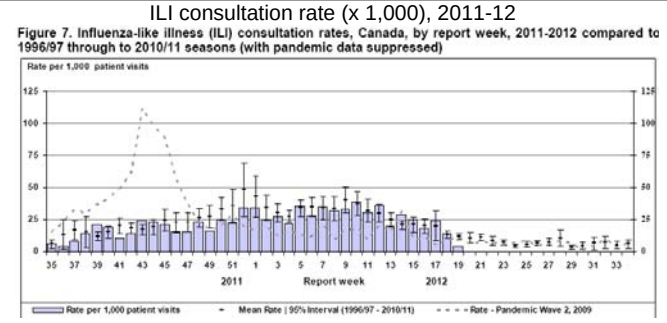
In Paraguay[6], the proportion of ILI visits in EW 17 increased (to 17.1%) as compared to the prior week (8.1%). According to laboratory data, nationally, in EW 18, among samples analyzed (n=47), the proportion of positives to respiratory viruses was 27.7%, being detected influenza A(H1N1)pdm09 and parainfluenza. The proportions of SARI hospitalizations and SARI deaths remained similar to the prior week and below 5%; and the SARI ICU admission proportion (12.5%) decreased as compared to the previous week. According to laboratory data, in EW 18, among samples analyzed (n=15), the proportion of positives to respiratory viruses increased to 26.7%, being influenza A(H1N1)pdm09 the predominant respiratory virus.

Graphs

North America

Canada

ILI consultation rate (x 1,000), 2011-12



Positive samples (%) for respiratory viruses, 2011-12

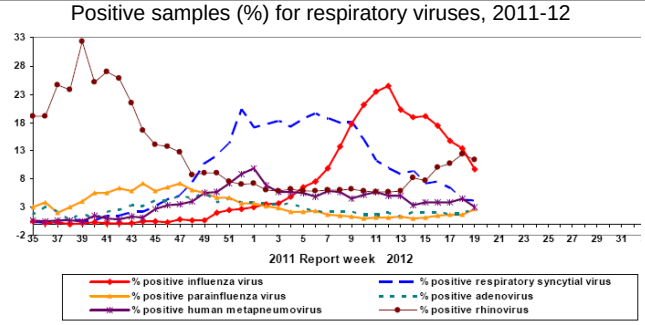
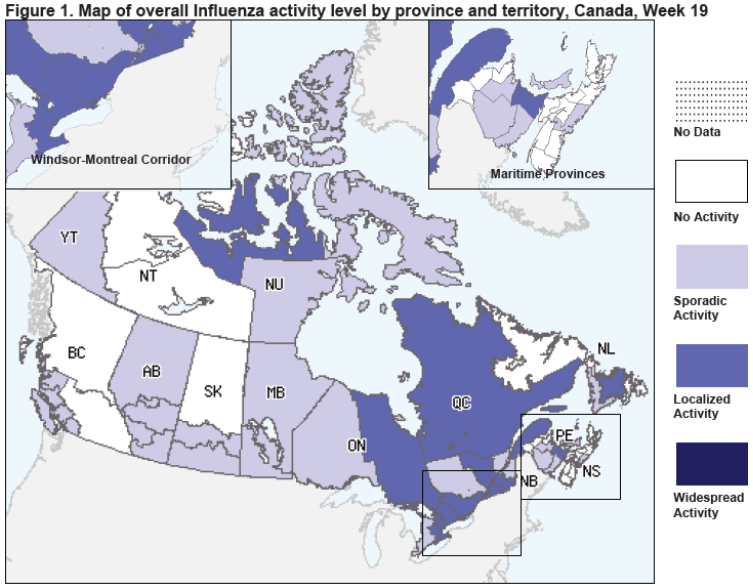
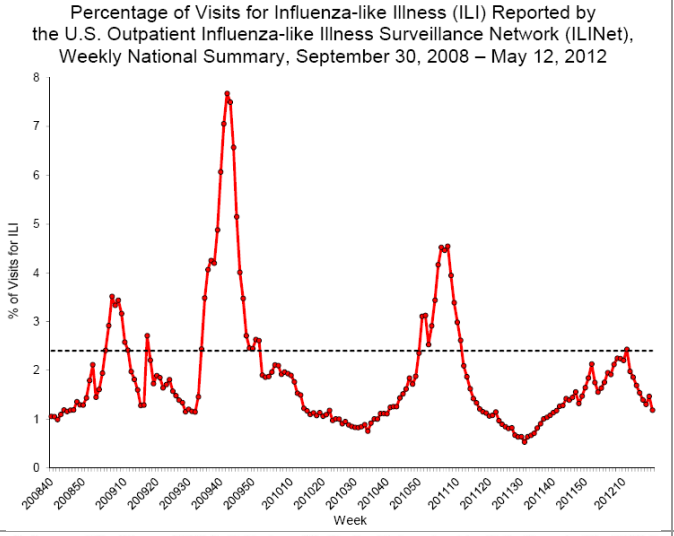
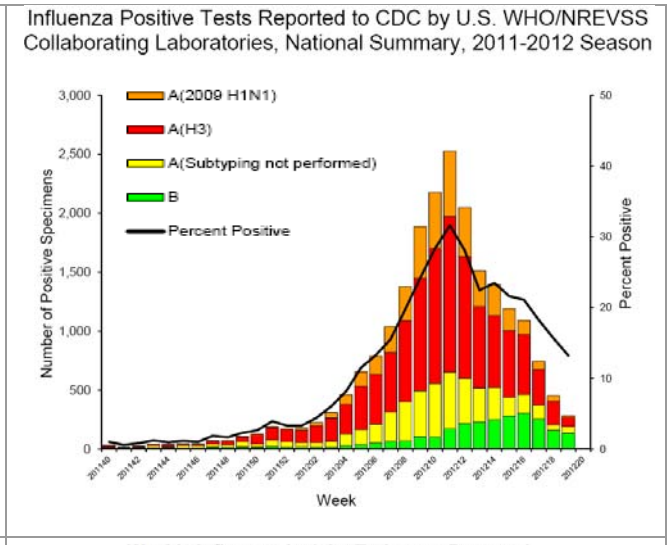


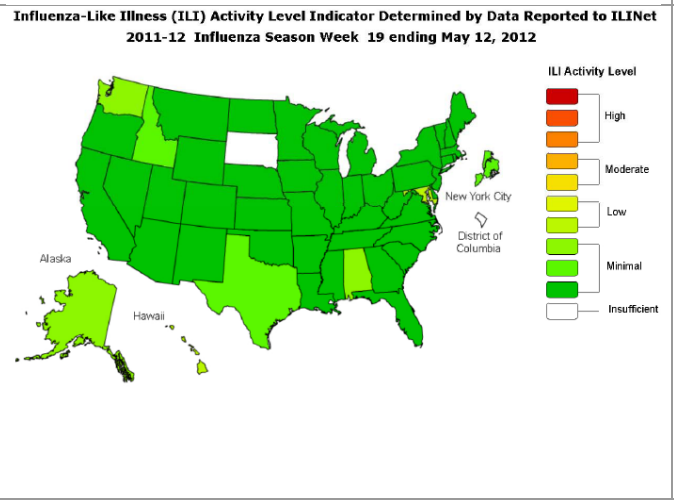
Figure 1. Map of overall Influenza activity level by province and territory, Canada, Week 19

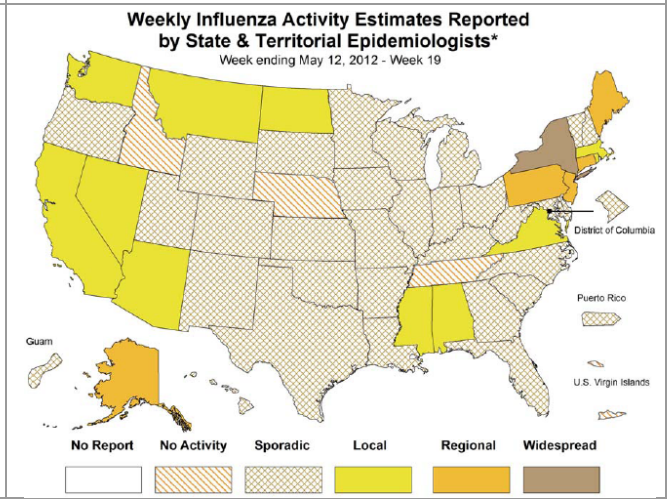


United States

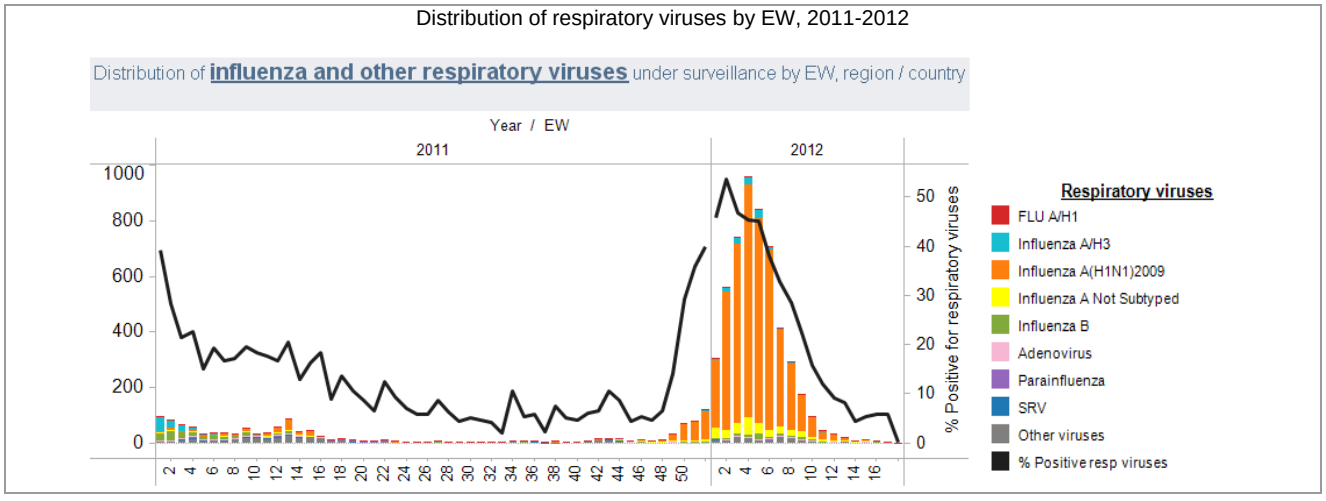






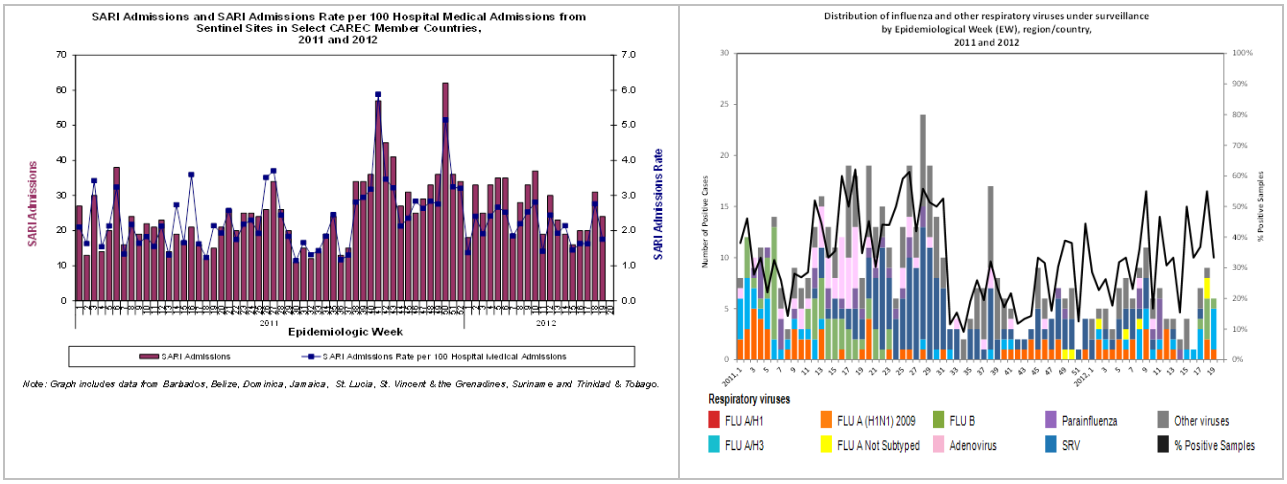


Mexico

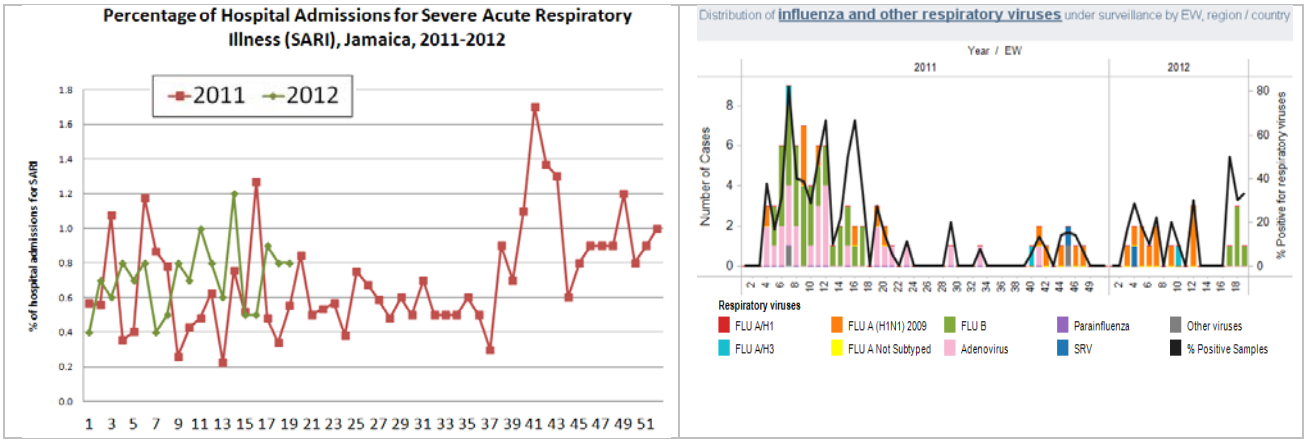


Caribbean

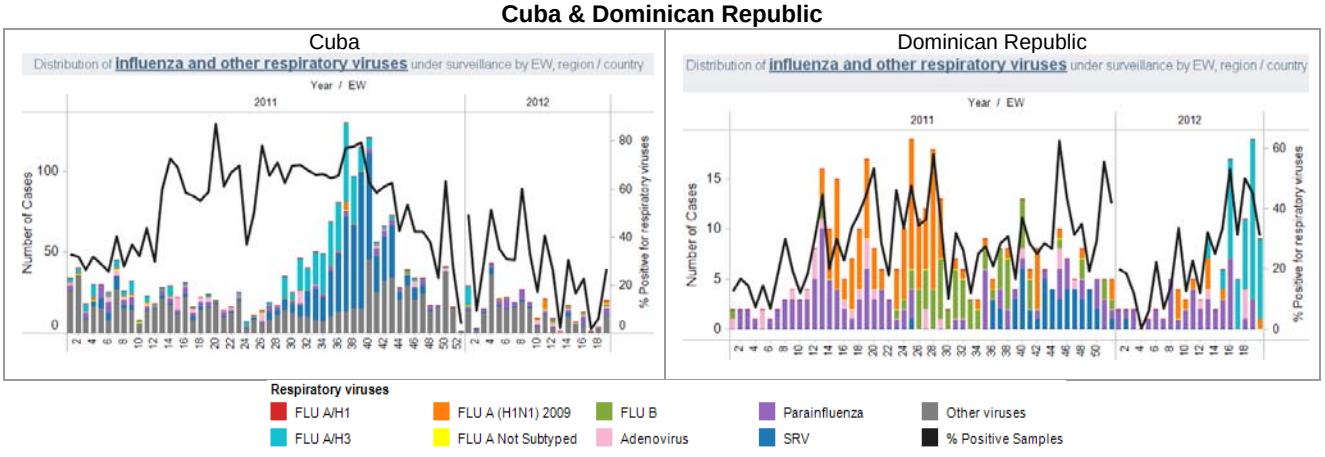
CAREC



Jamaica



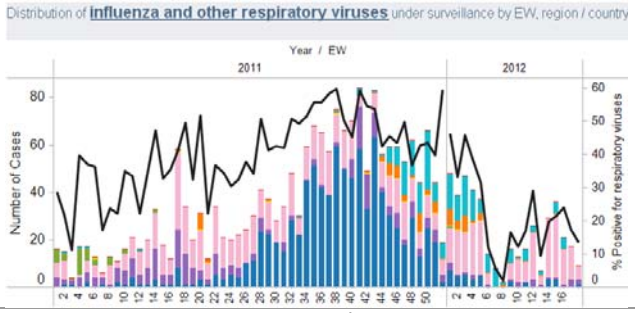
Cuba & Dominican Republic



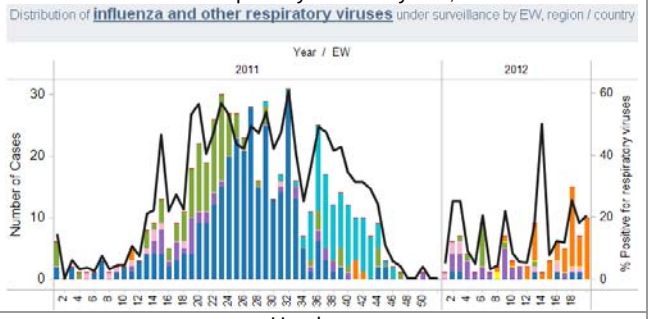
Central America

Costa Rica, El Salvador, Guatemala and Honduras

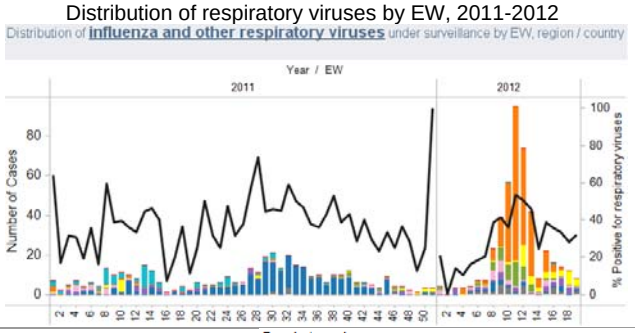
Costa Rica
Distribution of respiratory viruses by EW, 2011-2012



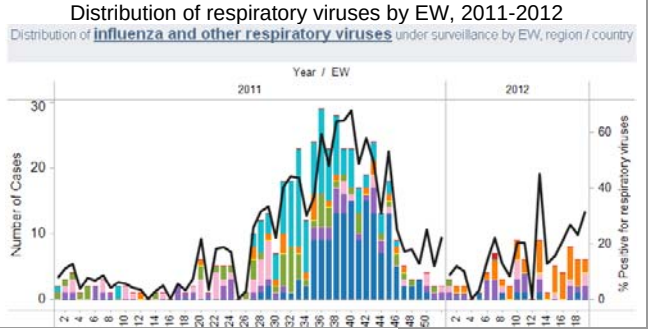
El Salvador
Distribution of respiratory viruses by EW, 2011-2012

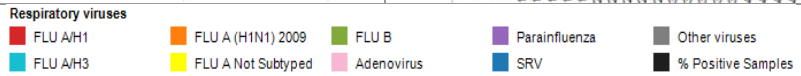


Guatemala
Distribution of respiratory viruses by EW, 2011-2012



Honduras
Distribution of respiratory viruses by EW, 2011-2012

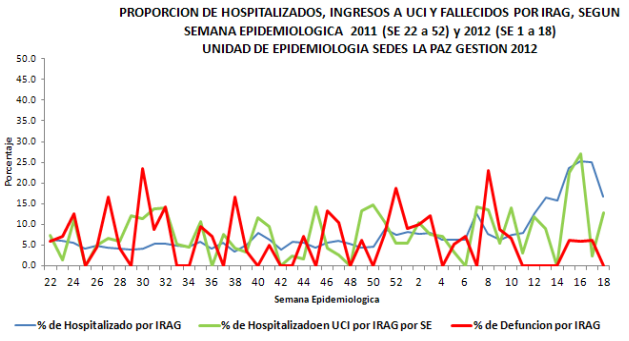




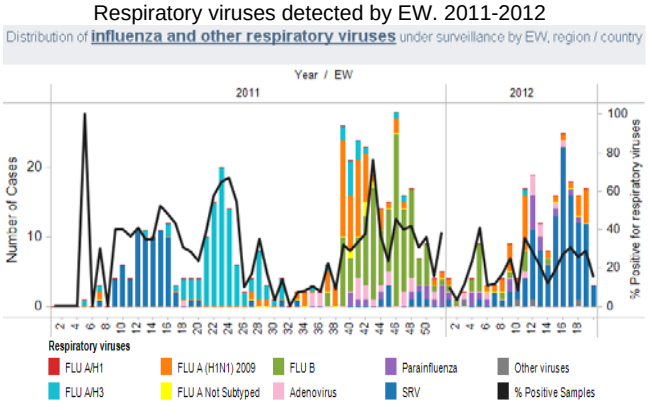
South America - Andean

Bolivia

INLASA, La Paz
SARI Cases

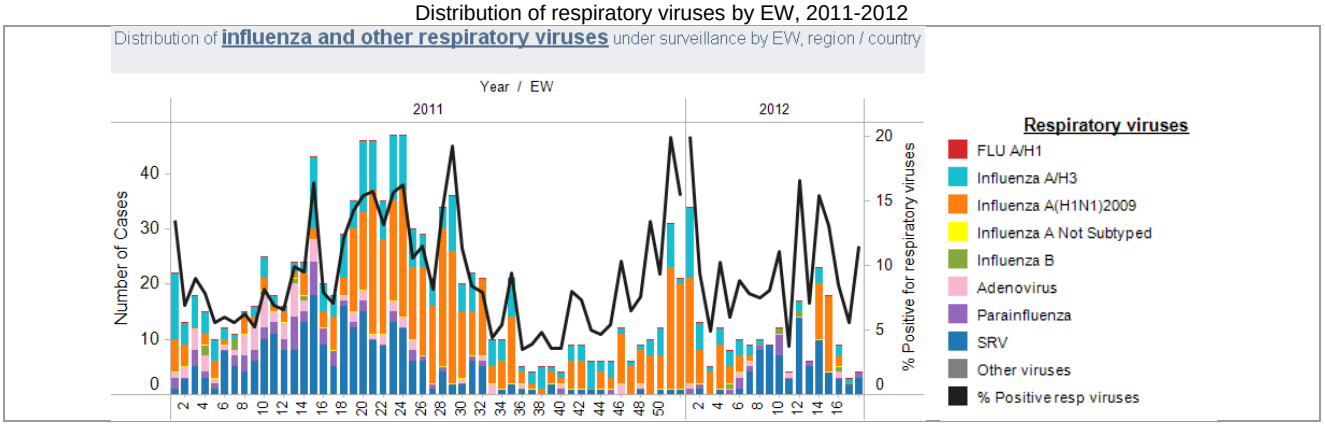


INLASA, La Paz
Respiratory viruses detected by EW. 2011-2012



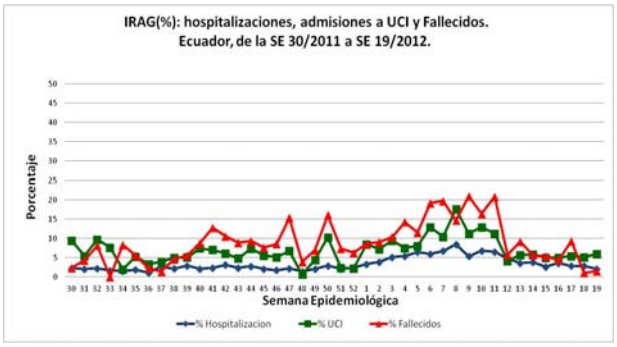
Colombia

Distribution of respiratory viruses by EW, 2011-2012

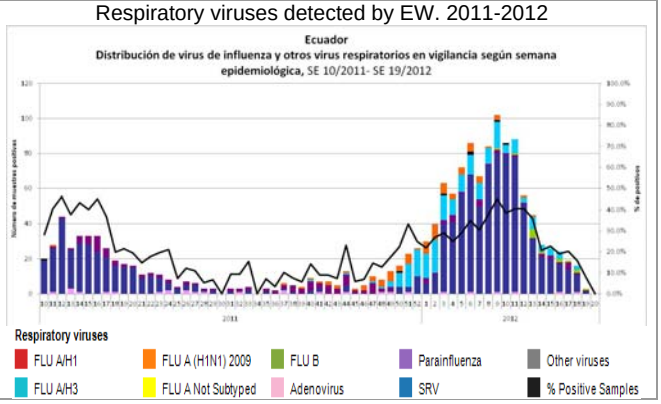


Ecuador

SARI Cases

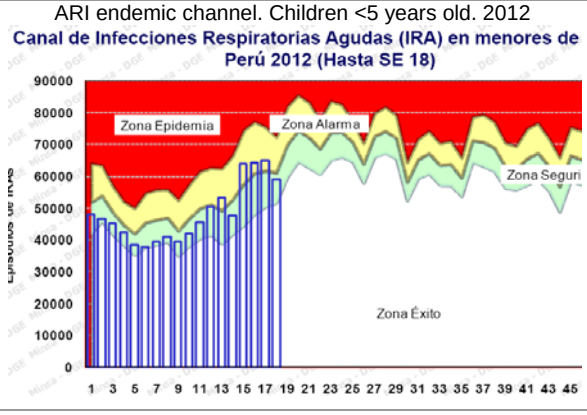


Respiratory viruses detected by EW. 2011-2012

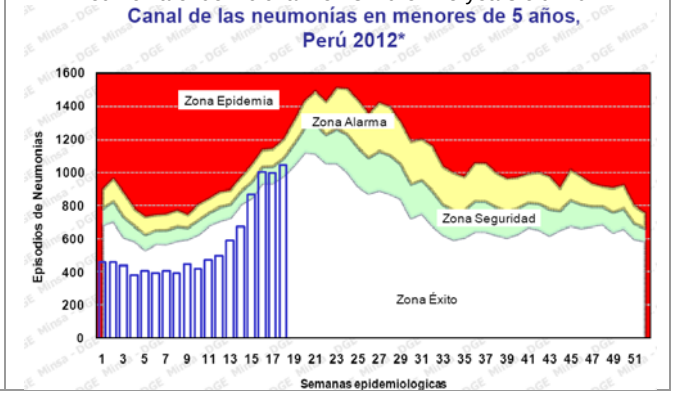


Peru

ARI endemic channel. Children <5 years old. 2012



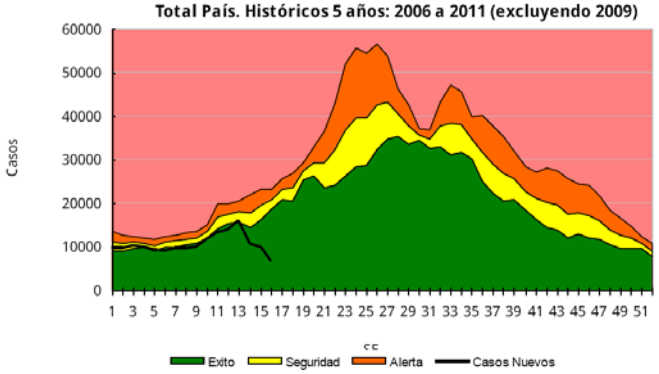
Pneumonia endemic channel. Children <5 years old. 2012



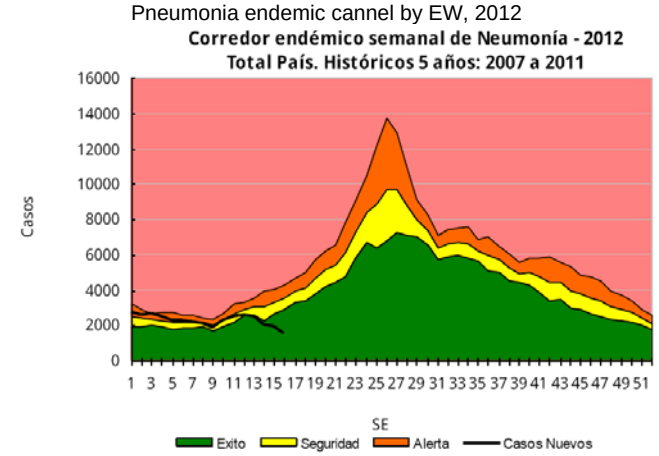
South America – Southern Cone

Argentina

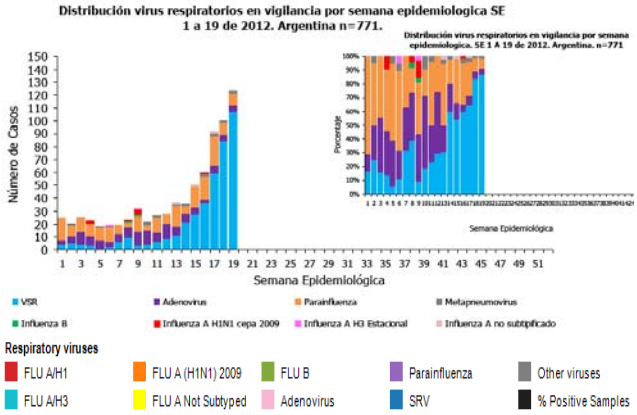
ILI endemic cannel by EW, 2012

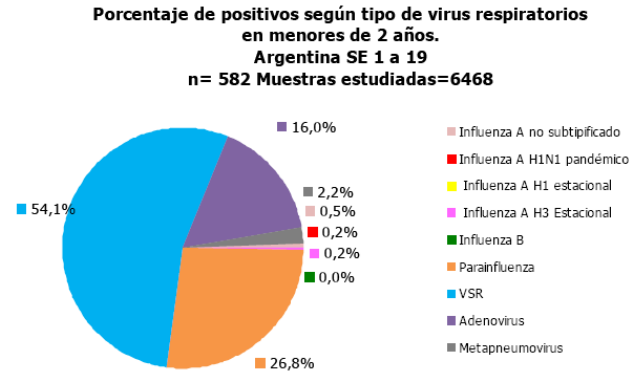


Pneumonia endemic cannel by EW, 2012



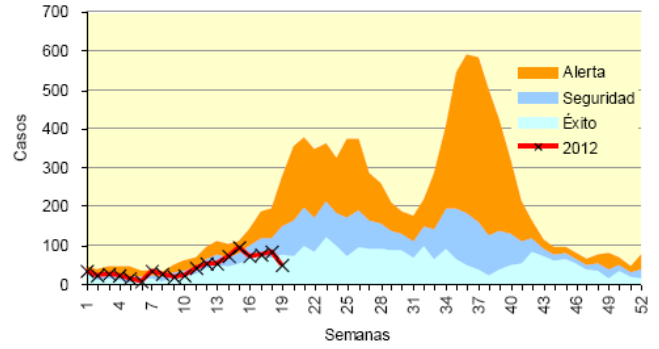
Respiratory viruses detected by EW. 2011-2012



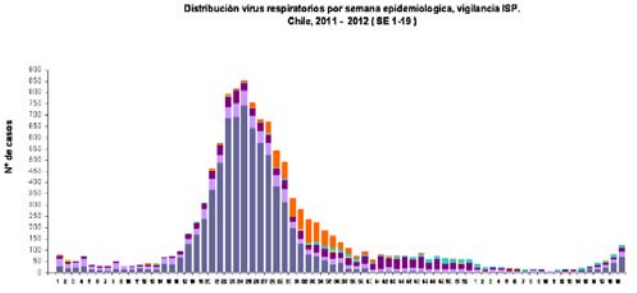


Chile

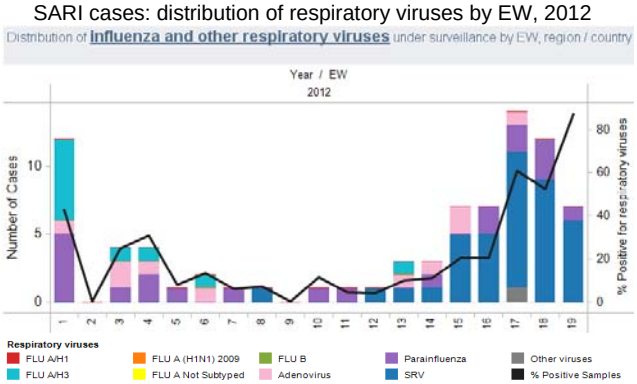
ILI cases by EW 2012



Distribution of respiratory viruses by EW, 2011-2012

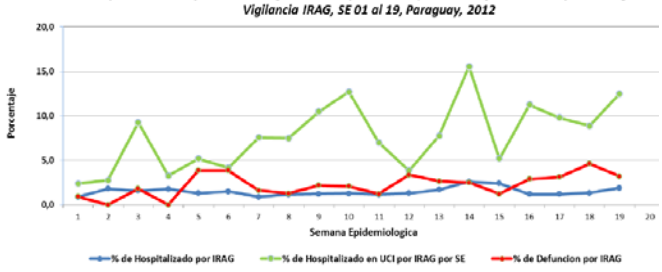


SARI cases: distribution of respiratory viruses by EW, 2012

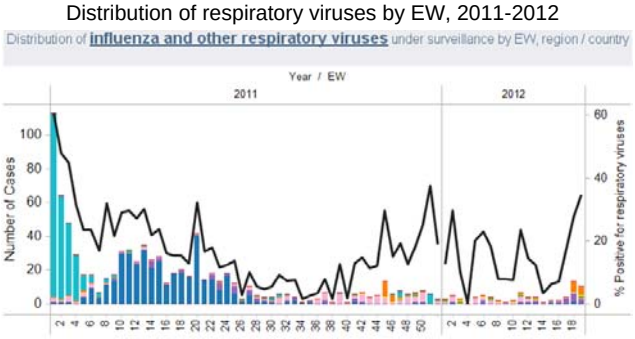


Paraguay

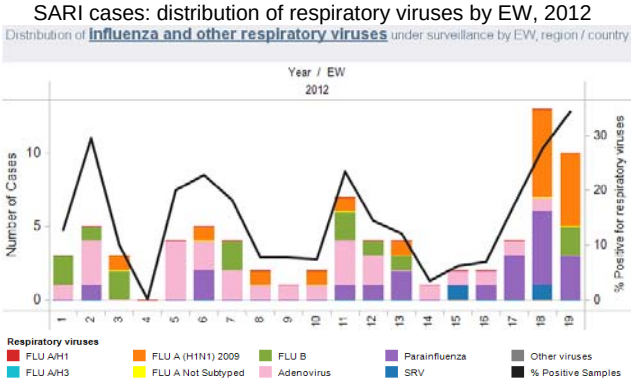
SARI cases (%) by EW 2012



Distribution of respiratory viruses by EW, 2011-2012



SARI cases: distribution of respiratory viruses by EW, 2012



[1] FluWatch Report. EW 19. Available at http://www.phac-aspc.gc.ca/fluwatch/
[2] US Surveillance Summary. EW 19. Centers for Disease Control and Prevention
[3] Perú. Sala de Situación de Salud. SE 18. Ministerio de Salud. Dirección General de Epidemiología
[4] Argentina. Actualización situación de enfermedades respiratorias 2012. SE 19.
[5] Chile. Informe de situación. SE 19. Disponible en: www.pandemia.cl
[6] Paraguay. Boletín epidemiológico semanal SE 19. Available at: http://www.vigisalud.gov.py/index.php?option=com_phocadownload&view=category&id=18:vigilancia-eti-e-irag-ano-2011&Itemid=86