



Regional Update EW 20, 2012

Influenza
(May 29, 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 remained as the predominant virus in Canada and influenza A in the United States.
- In Central America and the Caribbean, influenza activity increased. Influenza A(H1N1)pdm09 was circulating in some countries of Central America (El Salvador, Honduras and Panama); influenza A(H3N2) was circulating in Dominican Republic and Suriname; and influenza B was reported in Jamaica.
- In South America, acute respiratory illness activity has been increasing in some countries in the last weeks; but remained within the expected level for this time of year. Respiratory syncytial virus (RSV) was the predominant respiratory virus in this sub-region (Chile, Argentina and Ecuador). Influenza A(H3N2) was reported in Chile; and co-circulation of influenza A(H1N1)pdm09 and influenza B was reported in Bolivia and Paraguay.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 20, 2012, influenza activity decreased. In EW 20 the influenza-like illness (ILI) consultation rate increased as compared to the previous week and was within expected levels for this time of year. In EW 20, among the total samples analyzed (n=2,100), the proportion of samples positive for influenza (8.6%) decreased as compared to the previous week. In EW 20, of the total cases positive for influenza, the percent positive for influenza B (54.1%) decreased and now is only slightly greater than the percent positive for influenza A (45.9%). Concerning other respiratory viruses, the percent positive for rhinovirus (14.6%) increased as compared to the previous week and was the most prevalent among all respiratory viruses detected.

In the United States², in EW 20, nationally, influenza activity declined. Nationally, the proportion of ILI consultations (1.0%) was below the 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 20 (6.4%) was below the epidemic threshold for this time of year (7.4%). In EW 20, two pediatric deaths associated with influenza were reported (one with influenza type B and one with influenza A/H3). Among all samples tested during EW 20 (n=2,054), the percentage of samples positive for influenza (13.9%) was similar to the previous week. Nationally, among the positive samples, 52.4% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 47.6% were influenza B. Of the antigenically characterized influenza B viruses (n=302), 48.7% were of the B/Victoria lineage, which is included in the 2011-12 Northern Hemisphere vaccine, and 51.3% were of the B/Yamagata lineage. In total, 1.4% (n=16) of the influenza A(H1N1)pdm09 viruses tested this season have been resistant to oseltamivir.

In Mexico, according to laboratory data, in EW 19, among all samples tested (n=116), 7.7% were positive for influenza viruses, mainly influenza B.

Caribbean

CAREC*, in EW 20, received epidemiological information from 7 countries: Barbados, Belize, Dominica, Jamaica, Suriname, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 20, the proportion of

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

severe acute respiratory infection (SARI) hospitalizations was 2.3%, which is greater than the prior week (1.8%). The SARI rate increased in 4 of 7 sentinel countries. Children aged 6 months – 4 years had the highest rates of SARI hospitalization (5.9% of all children admitted to hospital were for SARI). No SARI related deaths were reported in week 20, 2012. In the past four weeks, influenza A/H3, influenza A(H1N1)pdm09, influenza B and adenovirus have been confirmed. The increased of influenza A/H3 was reported from Suriname. To date in 2012, the overall percentage positivity for samples tested was 32%, with 15% positive for influenza and 17% positive for other respiratory viruses.

In Jamaica for EW 20, the proportion of consultations for Acute Respiratory Illness (ARI) was 5.6% which was similar to the previous week. The proportion of admissions due to SARI was 0.7% which was also similar to the previous week. There was no SARI death reported for EW 20. Influenza B was detected in EW 20.

In Cuba, according to laboratory data, in EW 20, among all samples tested (n=61), the percentage of positives for respiratory viruses (34.4%) increased as compared to the prior week (26%); being rhinovirus the predominant respiratory virus detected, followed by influenza B, influenza A(H1N1)pdm09 and adenovirus which also increased as compared to the previous weeks.

In Dominican Republic, in EW 21, among all samples tested (n=23), 21% were positive for influenza viruses. Parainfluenza, influenza A(H3N2), influenza A(H1N1)pdm09 and adenovirus were detected.

Central America

In Costa Rica, in EW 20, according to laboratory data, among all samples tested (n=52), the percentage of positive samples for respiratory viruses was 13.4%, being adenovirus the predominant circulating virus. Influenza B was detected this week.

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 EWs 19-20, according to laboratory data, RSV, parainfluenza and influenza A untyped were detected circulating.

In Honduras, in EW 20, according to laboratory data, among all samples tested (n=7), the percentage of positive samples for respiratory viruses was 42%, with influenza A(H1N1)pdm09, parainfluenza and RSV detected. Influenza A(H1N1)pdm09 has been the predominant circulating virus detected since EW 13.

In Panama, in EW 20, among all the tested samples (n=11), 63% were positive for other respiratory viruses. Influenza A(H1N1)pdm09 was detected for the first time this year.

South America – Andean

En Bolivia, According to SARI surveillance data from La Paz, there was an increase in the proportion of SARI hospitalizations between EW 14 and 18, which coincided with an increase in the circulation of RSV; in EW 20 this percentage (15.4%) decreased slightly. Of the samples from SARI cases (n=46), there was a decrease in the percent positivity for respiratory viruses (30.4%); and RSV continued to predominate (10/14), although recently there have been increases in the number of influenza A (H1N1)pdm09 cases. According to data from Santa Cruz, respiratory virus circulation has been decreasing since EW 13 and the EW 19 respiratory virus positivity index was 14.9% among all samples analyzed (n=67), with influenza A(H1N1)pdm09 (4/1) and influenza B (3/10) detected.

In Ecuador, SARI cases and viral circulation have been decreasing since EW 09. In EW 20, the proportion of SARI hospitalizations and ICU admissions remained low and unchanged as compared to the previous week; however, five SARI-associated deaths were reported. According to laboratory data, among all SARI samples tested (n=50), 12% were positive for a respiratory virus and no virus predominated.

In Colombia, in EW 19, according to laboratory data, among all samples tested (n=28), the percentage of positive samples for respiratory viruses was 3.5% (parainfluenza). Influenza viruses were not detected.

In Peru³, through EW 19, at the national level, 933,467 cases of ARI were reported, which was less than that observed in previous years during the same time period. The ARI endemic channel in those less than five years of age has shown an increasing trend since EW 09 and in EW 19 was in the safe zone. At the

subnational level, since the beginning of the year all departments reported ARI rates in those less than five years of age to be below expected levels.

South America – Southern Cone

In Argentina⁴, in EW 17, ILI and pneumonia endemic channels showed that the number of ILI and pneumonia cases remained in the success zone. The hospitalized ARI surveillance showed that the number of cumulative cases in 2012 through EW 17 (n=6239) was less (9%) than what was reported during the same period last year. The decreasing trend observed in the hospitalized ARI cases since EW 11 is different from what was seen in 2010 and 2011. According to laboratory data, there has been an important increase in the respiratory virus percent positivity since EW 18, reaching 41% in EW 20. The predominant virus was RSV.

In Chile⁵, in EW 20, at the national level, ILI activity⁵ was reported as low/moderate; and remained within what was expected for this time of year. In EW 20, an increased in number of cases was reported (6.5 per 100.000 inhabitants) as compared to the prior EW. The percent of urgent visits for respiratory causes (23%) increased as compared to the previous week (21%). According to laboratory data at the national level, in EW 20, among all samples analyzed (n=757), the percent positivity for respiratory viruses was 24%, higher than prior weeks, with a predominance of RSV (70.6% among the positives), followed by influenza A(H3N2) (14% among the positives). According to SARI surveillance data, in EW 19, the proportion of SARI hospitalizations, SARI ICU admissions and SARI deaths, remained under 5%.

In Paraguay⁶, the ILI rate in EW 20 (116.61/100,000 population) increased as compared to the previous week (91.7%) and is now in the epidemic zone of the endemic channel. According to laboratory data, at the national level, in EW 19, among the samples analyzed (n=50), the percent positivity was 26% and relatively unchanged as compared to the previous week with both influenza A(H1N1)pdm09 (6/13) and parainfluenza (4/13) predominating. The proportion of SARI hospitalization and deaths remained unchanged and below 5%; while the proportion of SARI ICU admissions increased as compared to the previous week (84%). In EW 19, among the samples analyzed from SARI cases (n=17), the percent positivity was 23.5%, with detection of influenza A(H1N1)pdm 09 and parainfluenza.

Graphs

North America

Canada

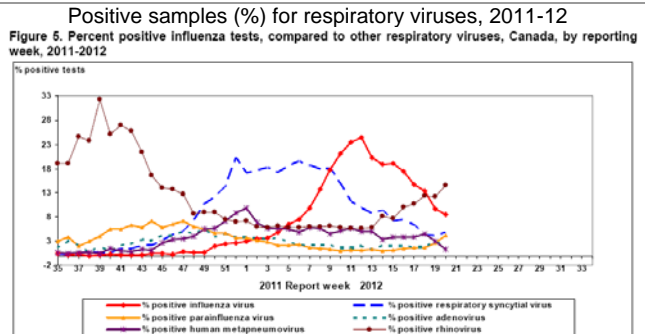
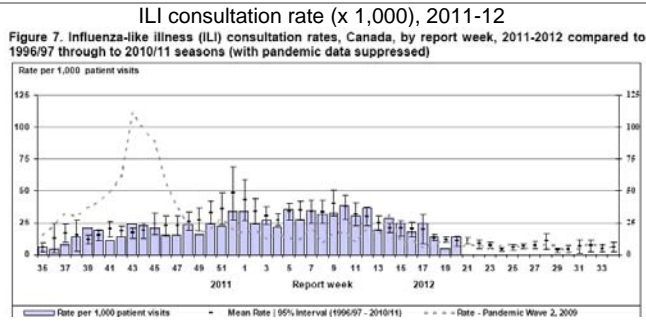
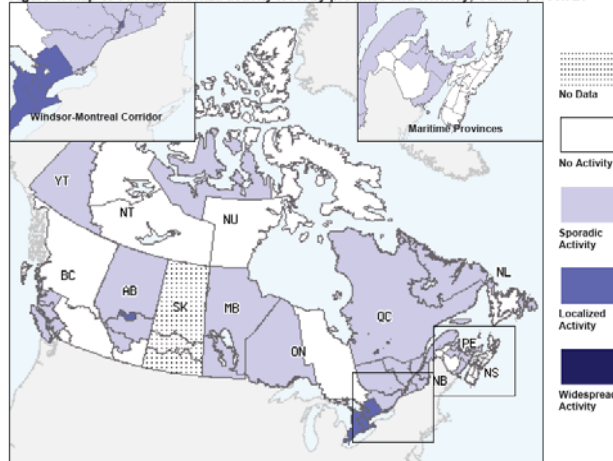
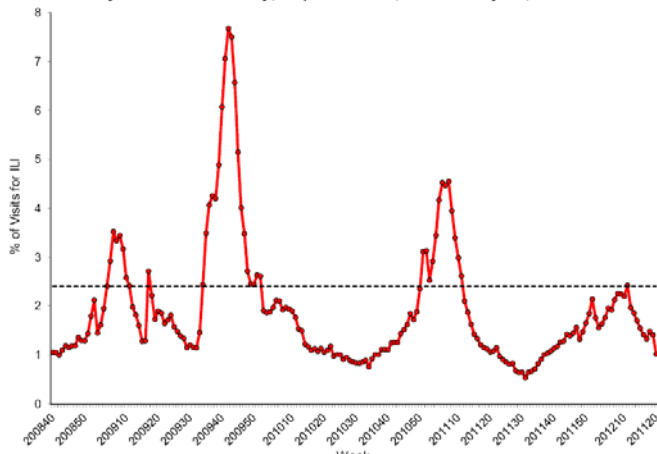


Figure 1. Map of overall influenza activity level by province and territory, Canada, Week 20

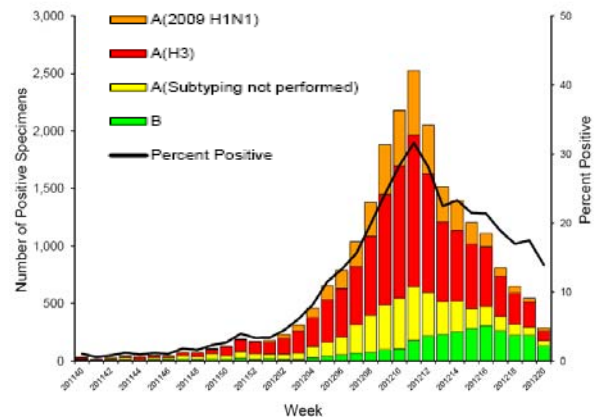


United States

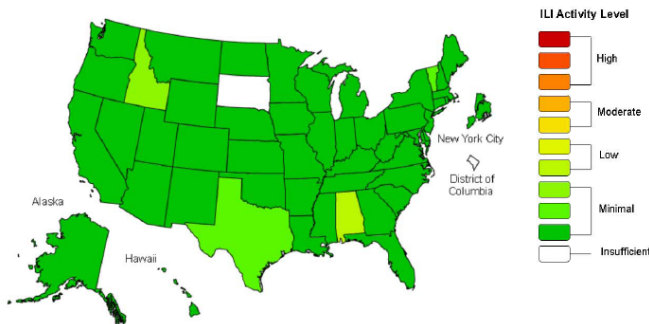
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, September 30, 2008 – May 19, 2012



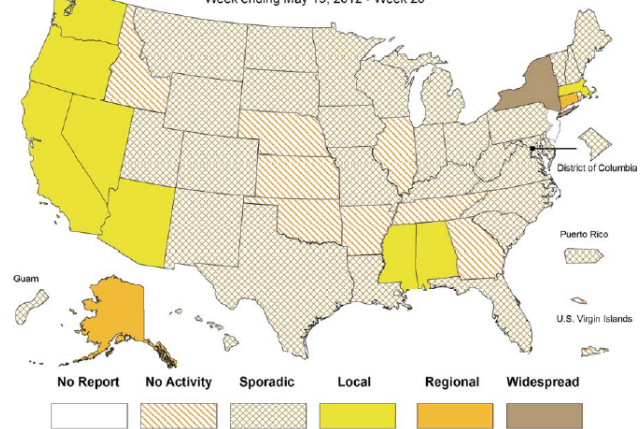
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-2012 Season



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2011-12 Influenza Season Week 20 ending May 19, 2012



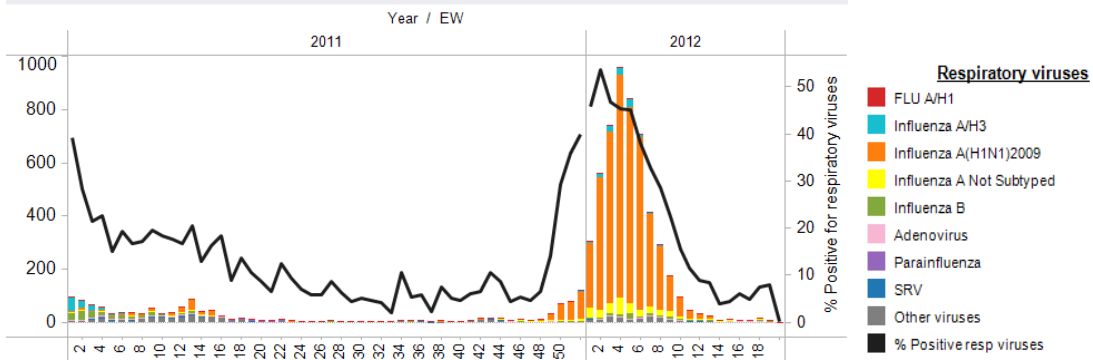
Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists* Week ending May 19, 2012 - Week 20



Mexico

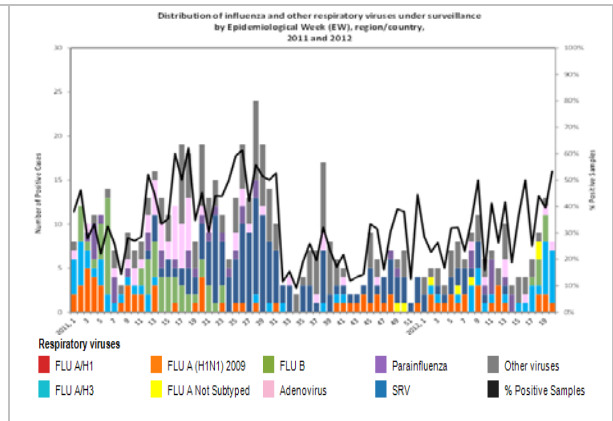
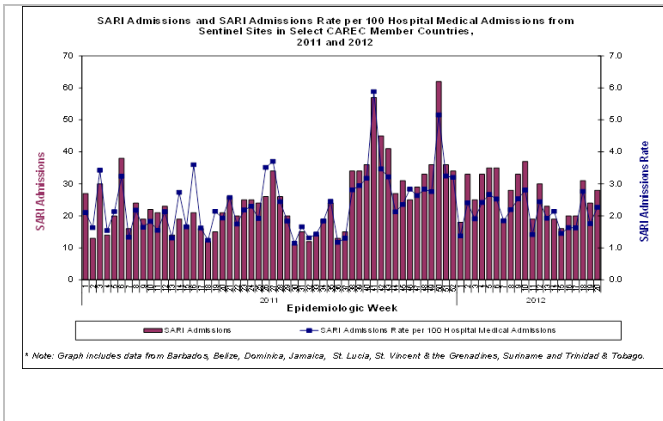
Distribution of respiratory viruses by EW, 2011-2012

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

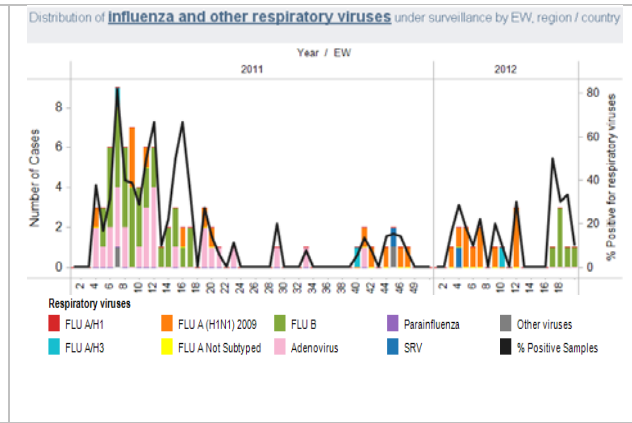
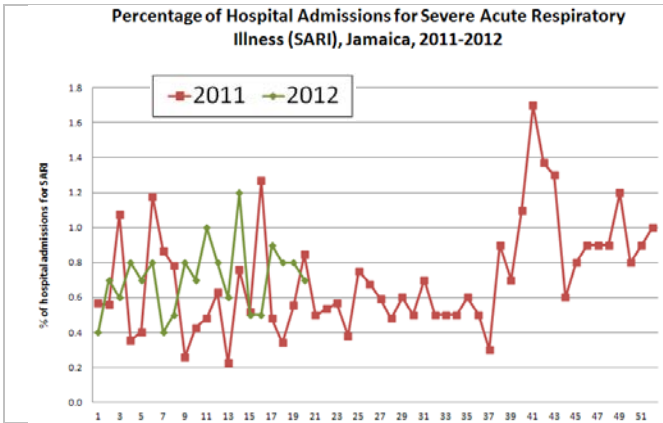


Caribbean

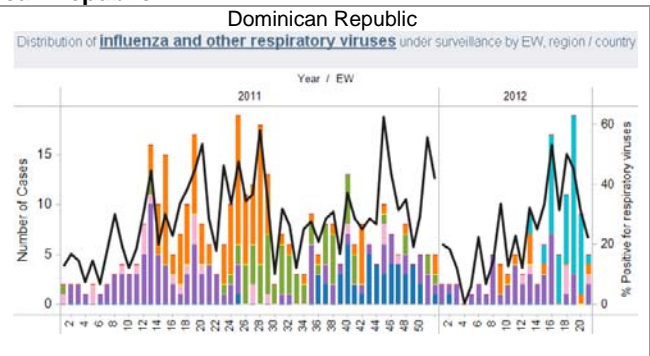
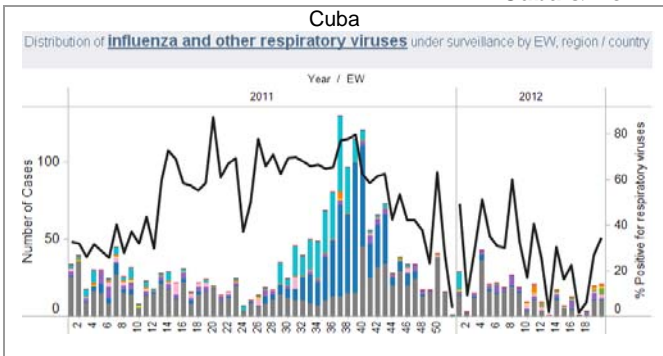
CAREC



Jamaica



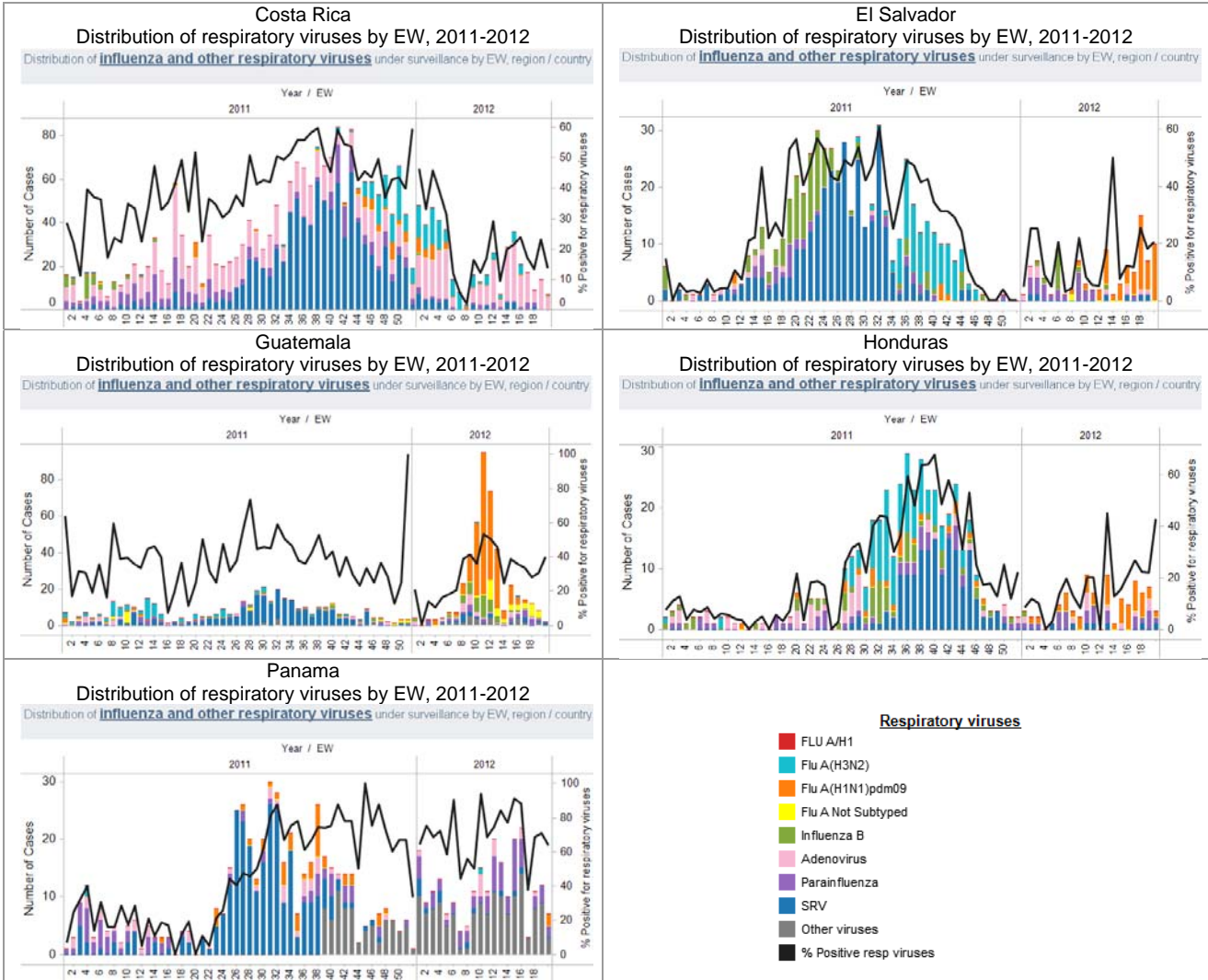
Cuba & Dominican Republic



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

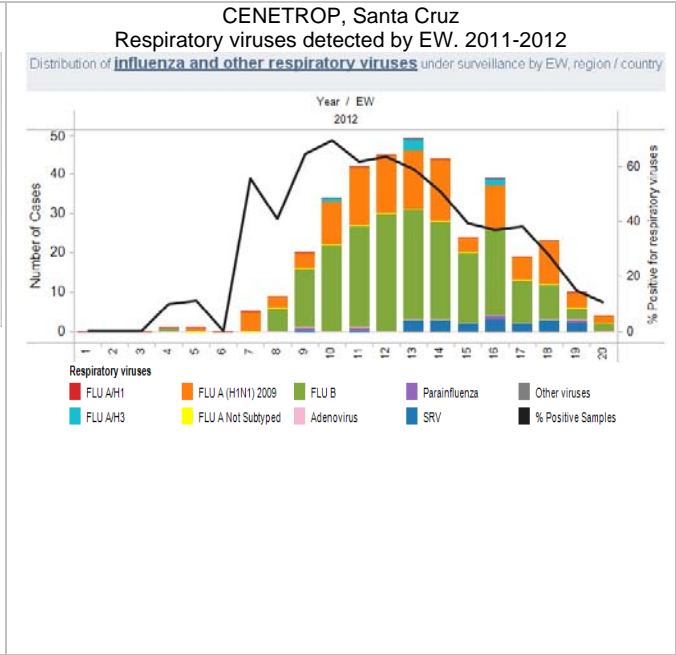
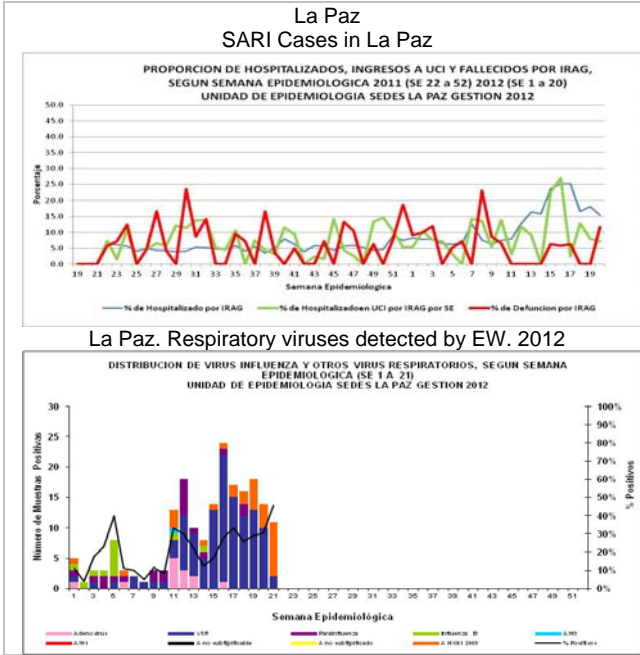
Central America

Costa Rica, El Salvador, Guatemala, Honduras and Panama



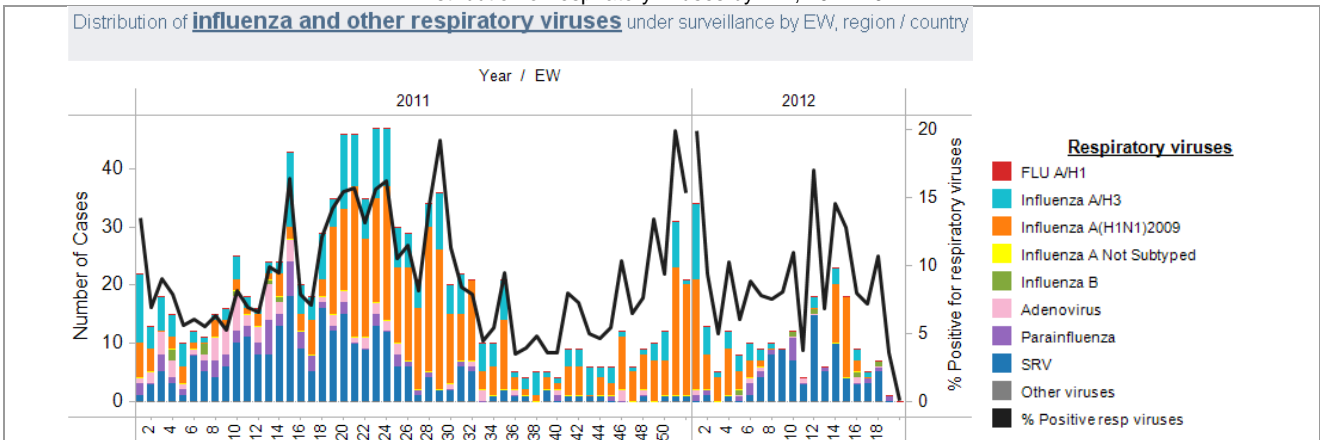
South America - Andean

Bolivia

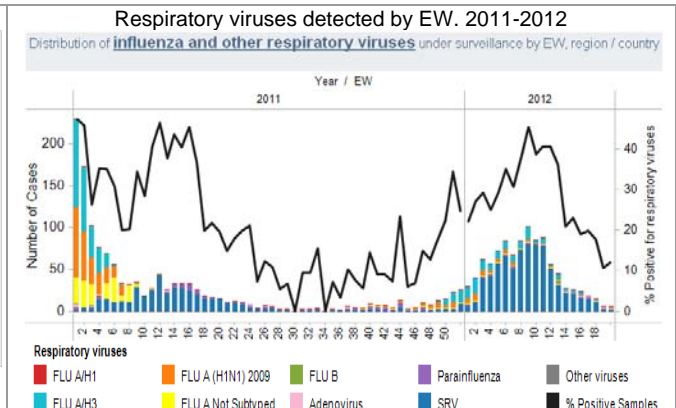
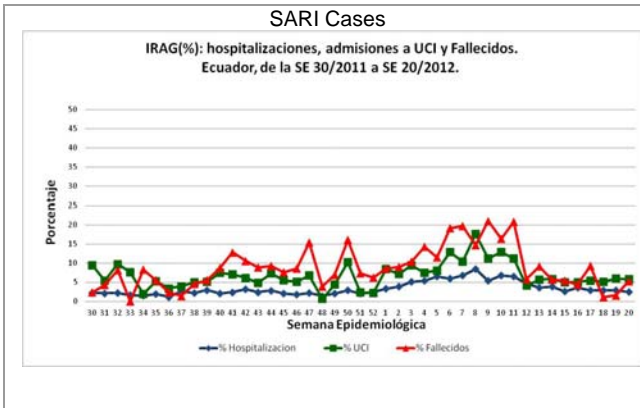


Colombia

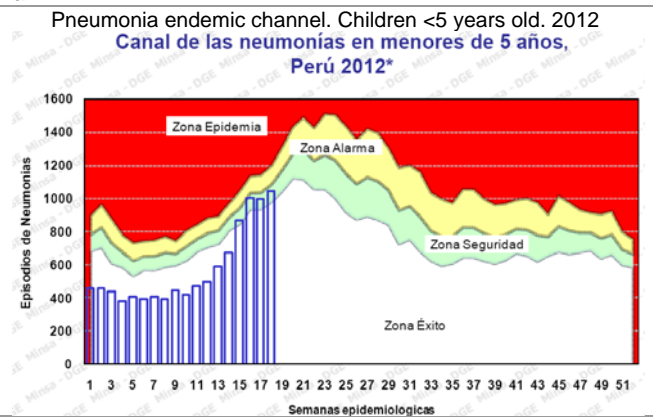
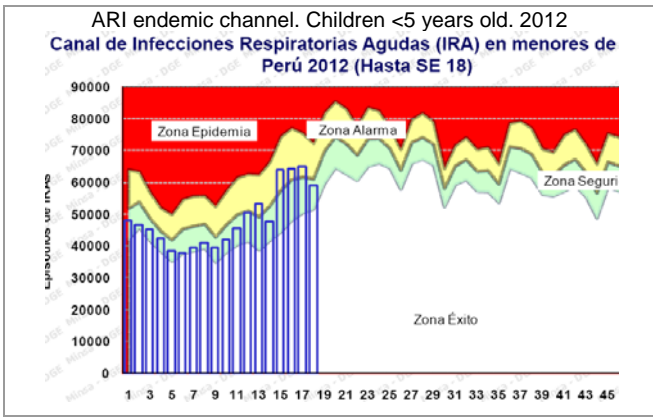
Distribution of respiratory viruses by EW, 2011-2012



Ecuador

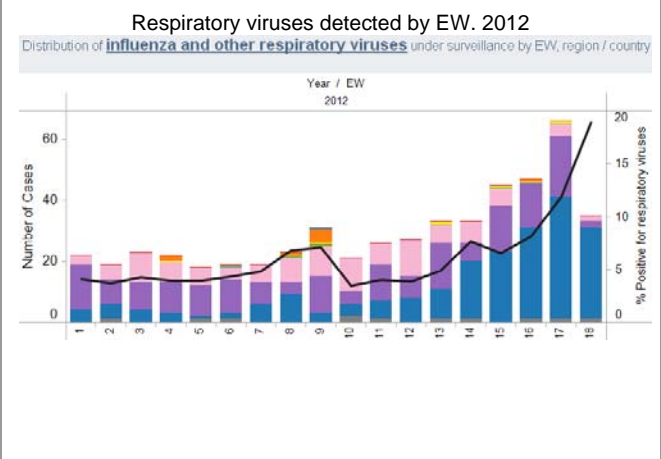
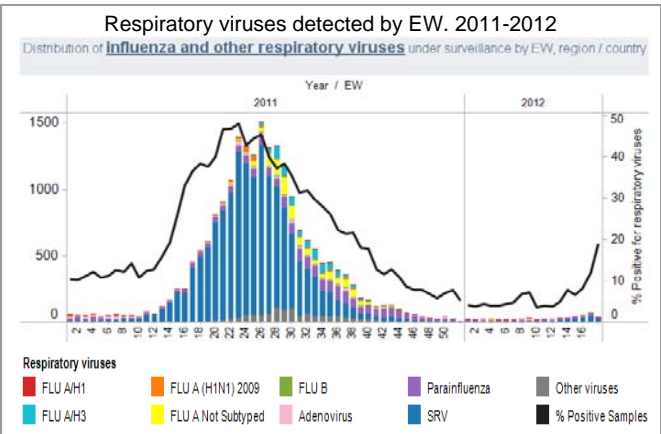
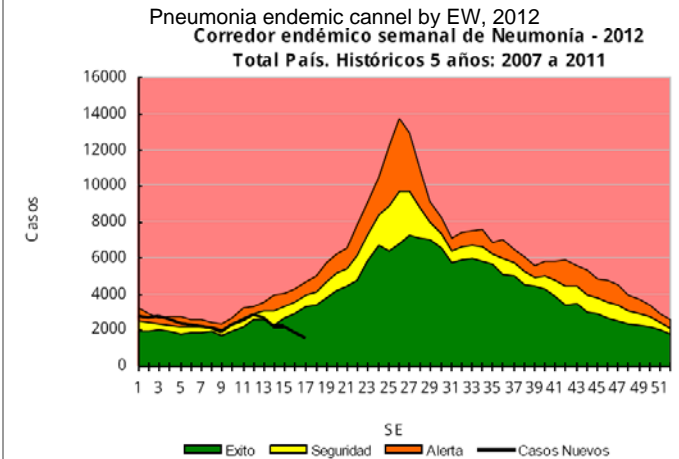
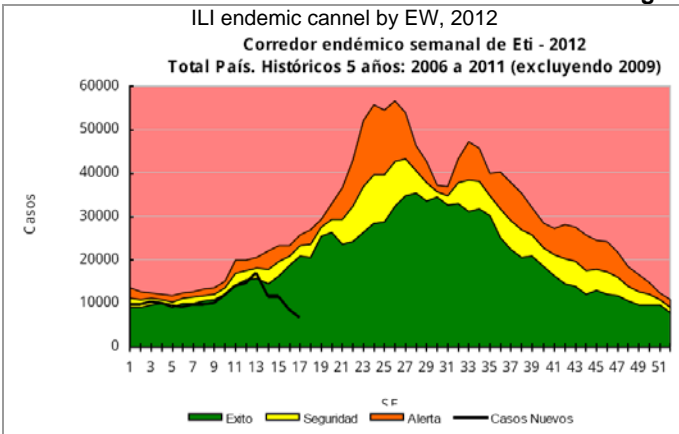


Peru

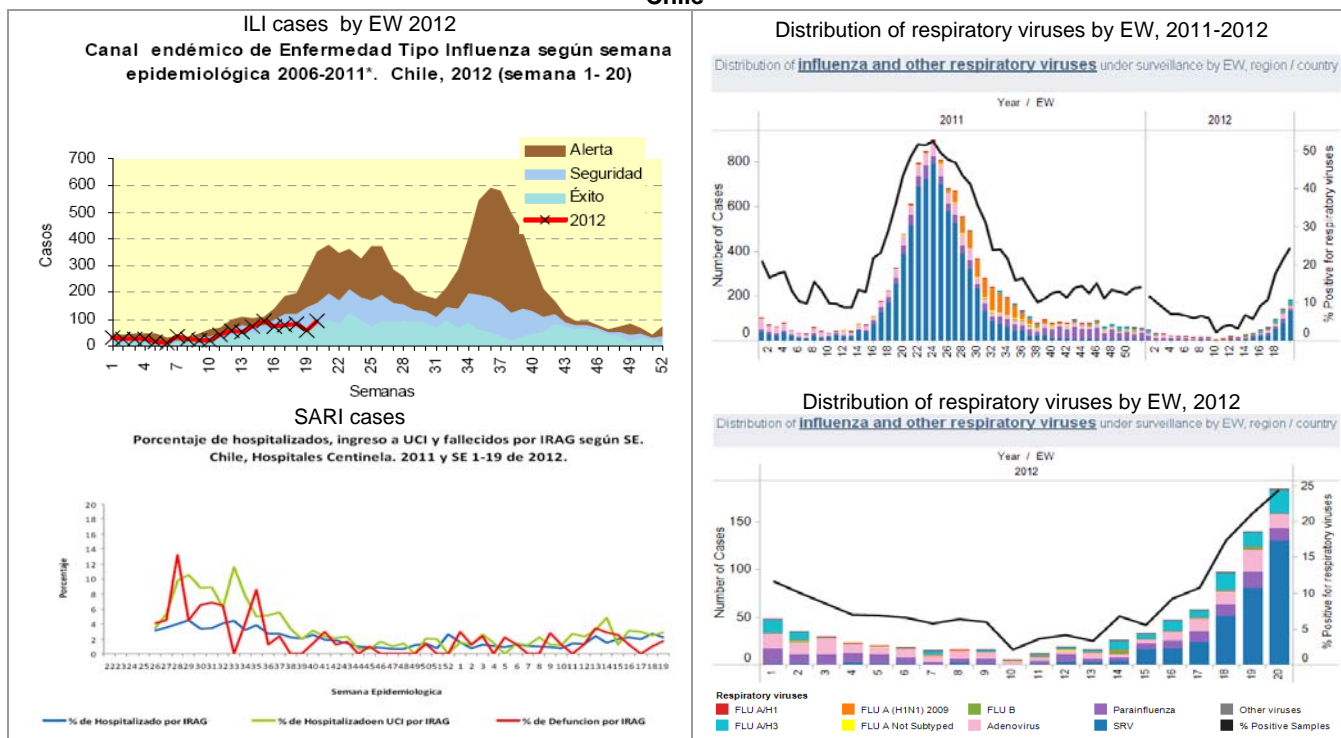


South America – Southern Cone

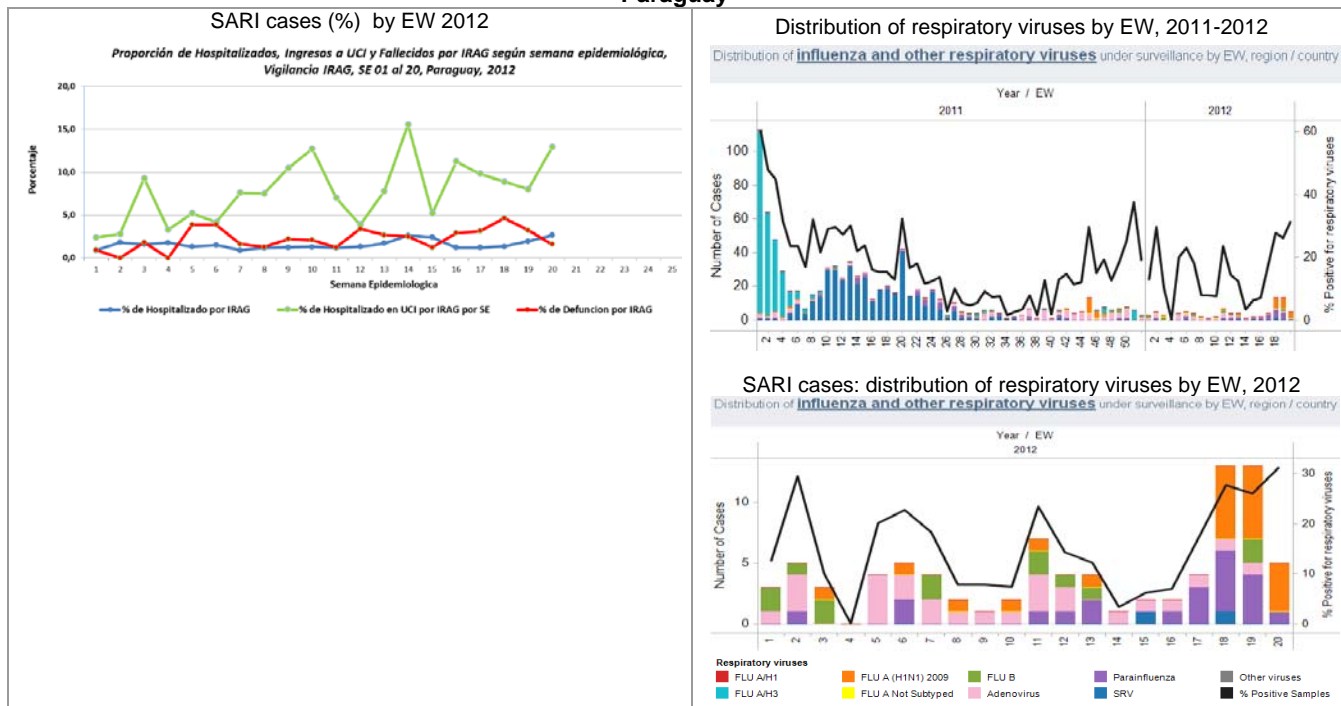
Argentina



Chile



Paraguay



¹ FluWatch Report. EW 20. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. EW 20. Centers for Disease Control and Prevention

³ Perú. Sala de Situación de Salud. SE 19. Ministerio de Salud. Dirección General de Epidemiología

⁴ Argentina. Actualización situación de enfermedades respiratorias 2012. SE 20.

⁵ Chile. Informe de situación. SE 20. Disponible en: www.pandemia.cl

⁶ Paraguay. Boletín epidemiológico semanal SE 20. Available at:

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