Regional Update EW 48



(December 13, 2011 - 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 remains low; with slightly increase in some Canadian regions (Alberta, British Columbia, Quebec Ontario and Saskatchewan). CDC confirmed two infections due to swine origin influenza A virus.
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued to circulate (Costa Rica, Nicaragua and Dominican Republic). Among influenza viruses, the circulation of influenza A(H1N1)pmd09 continued (Costa Rica, Jamaica, Panama), in co-circulation with influenza A/H3N2 (Costa Rica).
- In South America, influenza activity remains low or within the expected level for this period of time.
 Except in Brazil, where an increase of the activity of influenza A(H1N1)pmd09 and influenza B was observed.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 48, influenza activity increased in more regions compared with the previous week, but influenza activity remained at inter-seasonal levels in the rest of the country. Localized influenza activity was reported in three regions of two provinces (within Alberta and British Columbia) and sporadic influenza activity was reported in eight regions of six provinces (within Alberta, British Columbia, New Brunswick, Ontario, Quebec and Saskatchewan). In EW 48, Influenza-like Illness (ILI) consultation rates were 23.0 per 1,000 consultations; slightly higher than the previous EW (18.4) and within the expected levels for this time of year. Compared to other age groups, in EW 48, a higher ILI consultation rate was observed in children under 5 years old (~66.9/1,000 consultations) and among children 5 to 19 years of age, the ILI consultation rate was (44.8/1,000). In EW 48, among the total samples analyzed (n=2,428), the percent positivity for respiratory viruses remained lower than 1%, which was similar to previous week. In EW 48, the percent positivity for respiratory viruses remained stable or decreased compared to previous weeks; rhinovirus, parainfluenza and adenovirus were the main viruses detected. Concerning influenza viruses, in EW 48, influenza A/H3, influenza A(H1N1)pmd09 and influenza B were detected.

In the United States², in EW 48, at the national level, the proportion of ILI consultations (1.2%) remained below the national baseline (2.4%). The proportion of deaths attributed to pneumonia and influenza for EW 48 (6.7%) was lower than the epidemic threshold for this time of year (7.2%). In EW 48, two pediatric deaths associated with influenza were reported. Among all samples tested during EW 48 (n=2,233), the percentage of samples positive for influenza remained low (<2%), with sporadic detections of influenza A/H3, and influenza B. In EW 49, CDC³ reported two infections due to swine-origin influenza A virus in two children from two different states (Minnesota and West Virginia). One patient was infected by a novel influenza A/H1N2 and the other one by a novel influenza A/H3N2. Both patients recovered. Both viruses are known to circulate in the swine population in the United States and health authorities of both states have been tracing the contacts of the cases and looking for possible sources of the exposure. Thus far, no additional cases have been detected and no swine contact has been reported.

In Mexico, in EW 48, according to laboratory data, of total samples analyzed, no sample tested positive for respiratory viruses.

Caribbean

CAREC^{*}, in EW 48, received epidemiological information from Barbados, Dominica, Jamaica and Trinidad & Tobago. The proportion of admissions for Severe Acute Respiratory Infection (SARI) among all hospitalizations (2.7%) increased as compared to the previous week (1.9%). Concerning age groups, among children between 6 months and 4 years of age, the highest SARI hospitalization rate was reported (7.2% SARI hospitalization from total hospitalized children). Since EW 47, no SARI deaths were reported. According to laboratory data, between EW 43-46, samples positive for influenza A(H1N1)pmd09 and RSV were detected.

In Jamaica, in EW 48, the proportion of consultations for Acute Respiratory Illness (ARI) was 4,7%, which was similar to the previous week (4,6%). The proportion of SARI admissions remained <1%. In EW 48, no SARI deaths were reported. According to laboratory data, in EW 48, no samples positive for respiratory viruses were detected.

In Cuba, according to laboratory data, in EW 48, among all samples tested (n=45), ~40% were positive for respiratory viruses, mainly parainfluenza and RSV. In the last two weeks (EW 47 and 48) no samples positive for influenza were detected.

In the Dominican Republic, according to laboratory data, in EW 49, among all samples tested (n=21), the percentage of samples positive for respiratory viruses was ~20%, which was lower than the previous week. RSV was the only virus detected in this EW. In EW 49, no positive samples for influenza viruses were detected.

Central America

In Costa Rica according to laboratory data, in EW 49, among all samples tested (n=103), the percentage of samples positive for respiratory viruses (~45%) was slightly higher than the previous week. RSV has been the predominant virus since EW 28, followed by adenovirus. From EW 44, the percentage of samples positive for influenza showed an increasing trend, due to an increased detection of influenza A(H1N1)pmd09 and influenza A/H3.

In Guatemala, in EW 48, among all samples tested, the percent positivity was ~30%, and adenovirus was the primary virus detected. In EW 48, no samples positive for influenza were detected.

In Nicaragua, in EW 48, among all samples tested (n=79), the percent positivity for respiratory viruses was ~15%; RSV was the main virus detected, followed by influenza A(H1N1)pmd09. In EW 49, for the first time since EW 37, no positive samples for influenza were detected.

In Panama, in the last two weeks (EW 47 and 48) among all samples tested, samples positive for influenza A(H1N1)pmd09 and other respiratory viruses were detected.

South America – Andean

In Colombia, according to the national laboratory⁴, in the last two weeks, EW 47 and 48, samples positive only for influenza A(H1N)pmd09 were detected.

In Ecuador, the percentage of SARI hospitalizations, SARI ICU admissions, and SARI deaths remained under 15%. According to laboratory data, in EW 48, among all samples tested, the percent positivity for respiratory viruses was ~15% and no positive samples for influenza viruses were detected.

In Venezuela⁵, in EW 47, ARI and pneumonia endemic channels showed an increasing trend in the number of cases since ~EW 38, but remained within expected levels for this time of year. A higher incidence rate was reported in children less than 7 years old. In 2011 through November 19th, of all samples tested (n=9,173), the percentage of positive samples for respiratory viruses was ~40%. Concerning influenza viruses, of the

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

total number of samples tested, ~25% of samples tested were positive for influenza A(H1N1)pmd09, ~6% were influenza A/H3 and <1% were influenza B.

South America - Southern Cone

In Argentina⁶, in EW 43, ILI and SARI endemic cannels showed that the number of ILI and pneumonia cases has continued to decrease since peaking in EW 27 and has remained lower than what was observed in the same period in 2010.

In Brazil, according to Evandro Chagas Institute (Pará), in EW 48, among the tested samples (n=25), the percentage of samples positive for respiratory viruses was ~70% and for influenza viruses was ~60%; the positives detected were primarily influenza A(H1N1)pmd09 virus and influenza B.

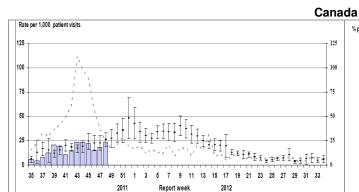
In Paraguay, in EW 49, according to laboratory data, adenovirus was the predominant virus in circulation since EW 42, and in EW 49 influenza A/H3 circulated.

In Uruguay⁷, in EW 49, the proportion of SARI hospitalizations, SARI ICU admissions and SARI deaths remained <5%. In general, these proportions have continued to decrease since peaking in EW 31.

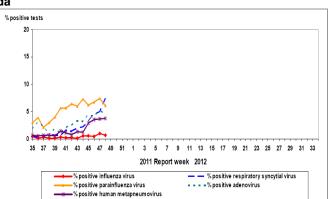
Graphs

North America

Rate per 1,000 patient visits



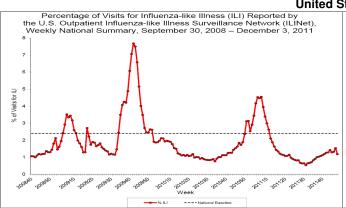
- Mean Rate | 95% Interval (1996/97 - 2010/11) - - - - Rate - Pandemic Wave 2, 2009

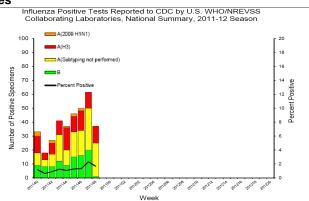


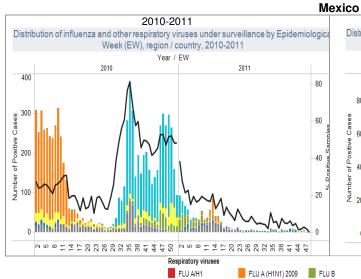
United States

FLU A Not Subtyped Adenovirus

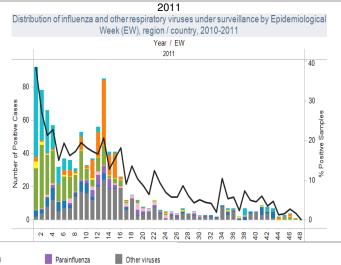
SRV







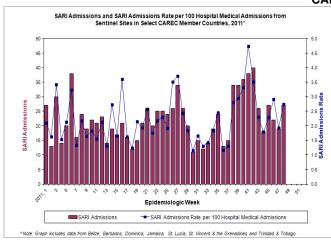
FLU A/H3

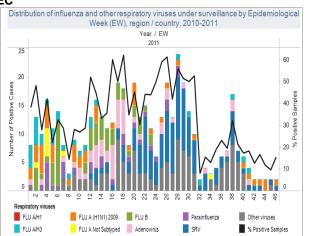


% Positive Samples

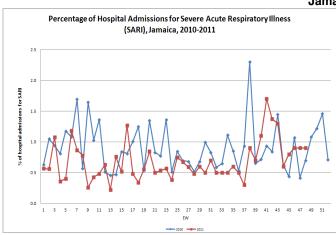
Caribbean

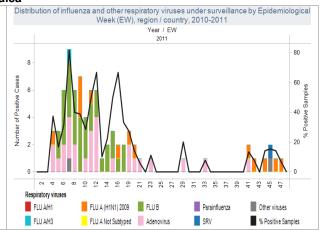
CAREC



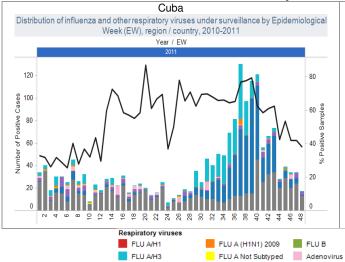


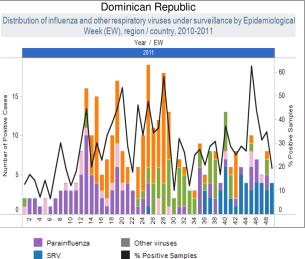
Jamaica





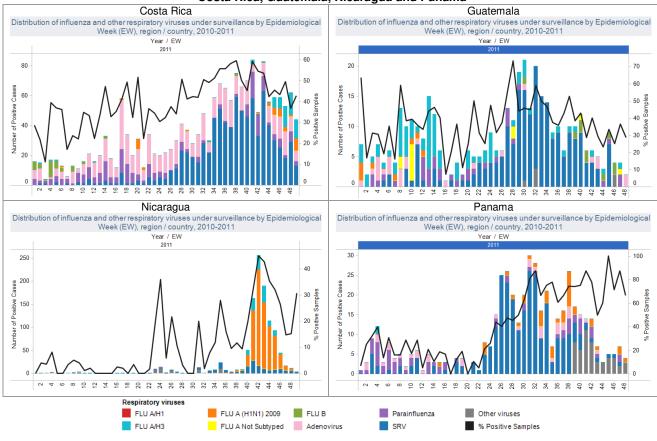
Cuba y Dominican Republic





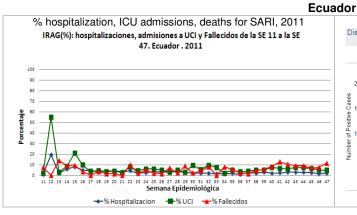
Central America

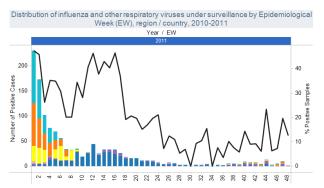
Costa Rica, Guatemala, Nicaragua and Panama

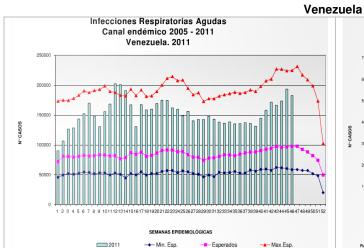


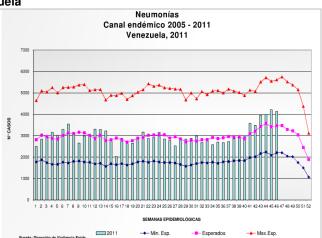
South America - Andean

Colombia Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011 Year / EW 20 15 8 Respiratory viruses FLU A/H1 Adenovirus Influenza A/H3 Parainfluenza Influenza A/HN1)20... SRV Influenza A Not Subt... Other viruses Influenza B % Positive Samples

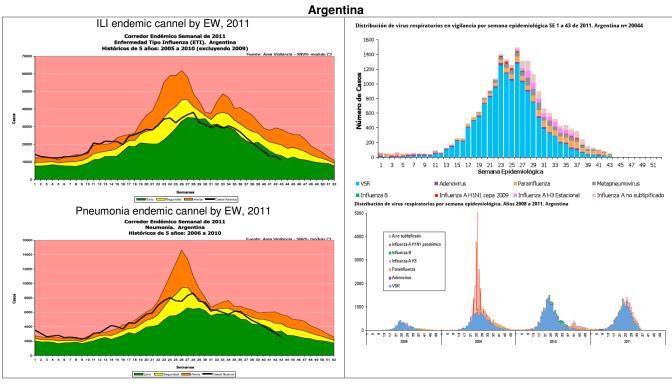


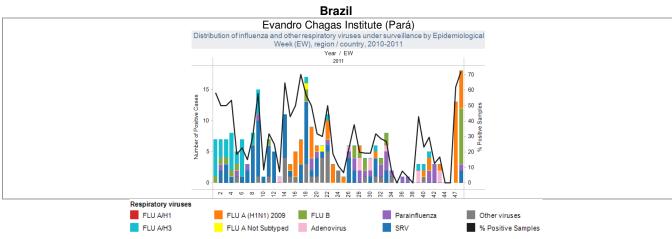


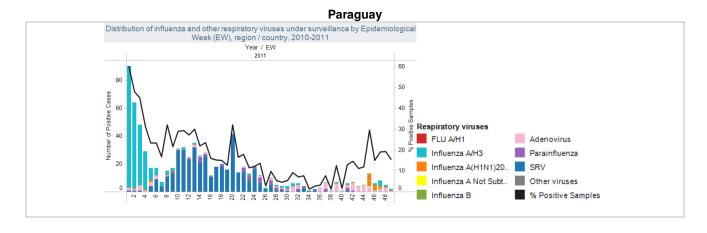


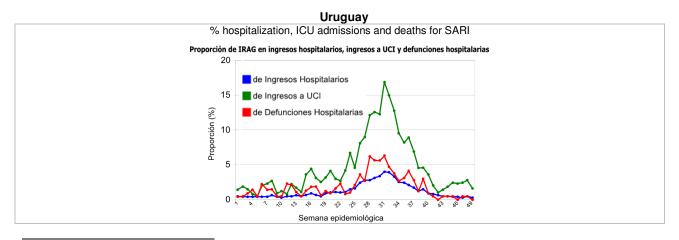


South America - Southern Cone









¹ FluWatch Report. EWs 48. http://www.phac-aspc.gc.ca/fluwatch/

Disponible en: http://www.cdc.gov/media/haveyouheard/stories/novel_influenza.html

² US Surveillance Summary. Week 48. Centers for Disease Control and Prevention

³ CDC. CDC confirms two human infections with novel influenza viruses .

⁴ Colombia. Instituto Nacional de Salud.

⁵ Venezuela. Boletín epidemiológico - SE 47. 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

⁶ Argentina. Actualización situación de enfermedades respiratorias 2011. SE 48.

⁷ Uruguay. Dirección General de la Salud. División Epidemiología. SE 49. Available at: https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu