In North America, influenza activity remains low; with slightly increase in some Canadian regions (Alberta, British Columbia, Quebec Ontario and Saskatchewan).

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, Honduras), 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. Influenza A(H1N1)pmd09 (Ecuador and Brasil) and influenza A/H3N2 (Ecuador and Chile) circulated in low amount.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological week (EW) 49, influenza activity continued to increase in more regions compared with the previous weeks, but influenza activity remained at inter-seasonal levels in the rest of the country. Localized influenza activity was reported in two regions of two provinces (within British Columbia y Saskatchewan) and sporadic influenza activity was reported in ten regions of four provinces (within Alberta, British Columbia, Ontario, and Quebec). In EW 49, Influenza-like Illness (ILI) consultation rates were 16.2 per 1,000 consultations; slightly lower than the previous EW (23.0) and within the expected levels for this time of year. Compared to other age groups, in EW 49, a higher ILI consultation rate was observed in children under 5 years old (48.2/1,000 consultations) and among children 5 to 19 years of age, the ILI consultation rate was (27.6/1,000). In EW 49, among the total samples analyzed (n=2,609), the percent positivity for respiratory viruses remained lower than 2%, which was slightly higher than the previous week. In EW 49, the proportion of RSV and metapneumovirus increased, and the remaining respiratory viruses remained stable or decreased compared to the previous weeks; rhinovirus, parainfluenza and adenovirus were the mainly viruses detected. Concerning influenza viruses, in EW 49, influenza A/H3N2 and influenza B were detected. In EW 49, two outbreaks by influenza in two long-term care facilities were reported.

In the United States², in EW 49, 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 49 (6.5%) was lower than the epidemic threshold for this time of year (7.2%). In EW 49, no pediatric deaths associated with influenza were reported. Among all samples tested during EW 49 (n=2,480), the percentage of samples positive for influenza remained low (<2%), with sporadic detections of influenza A/H3, and influenza B.
Caribbean

CAREC*, in EW 49, received epidemiological information from Tobago. In EW 49, no SARI hospitalization neither SARI deaths were detected for this EW in Tobago. So far, no samples tested from patients with symptoms onset in EW 48 or 49 have been reported. Since EW 42, RSV and influenza A(H1N1)pmd09 circulated in low an variable amount.

In Jamaica, in EW 49 the proportion of consultations for Acute Respiratory Illness (ARI) was 4.5%, which was similar to the previous week (4.7%). The proportion of SARI admissions remained <2%, increasing slightly compared to previous EW. In EW 49, no SARI deaths were reported. According to laboratory data, in EW 49, no samples positive for influenza viruses were detected.

In Cuba, according to laboratory data, in EW 49, among all samples tested (n=21), ~20% were positive for respiratory viruses. In 49, no samples positive for influenza viruses 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=152), 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, in variable co-circulation with adenovirus. Since EW 44, the percentage of samples positive for influenza showed an increasing trend, due to an increased detection of influenza influenza A/H3 and a variable co-circulation with A(H1N1)pmd09.

In Honduras3, in EW 48, the proportion of ILI was (~4%) slightly lower than the previous week (5%) and than what was observed in 2010. The SARI hospitalization (~5%) was lower than the previous EW (~11%), and what was observed in 2010. In EW 48, one SARI death was reported. According to laboratory data, in EW 48, among all samples tested (n=34), the percent of samples positive for respiratory viruses was ~15%. RSV was the predominant virus since EW 35. Concerning to influenza viruses, one sample positive for influenza A(H1N1)pmd09 another one for influenza B were detected.

In Guatemala, in EW 49, among all samples tested, the percent positivity was ~15%, one sample positive for influenza A no sub-typified was 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 EW 49, among all samples tested, the percent positivity for respiratory viruses was ~55%, samples positives for respiratory viruses were detected, but not for influenza viruses.

South America – Andean

In Colombia, according to the national laboratory4, in EW 49, among all samples tested, no samples positive for respiratory viruses were detected.

In Ecuador, the percentage of SARI hospitalizations, SARI ICU admissions, and SARI deaths remained under 5%. According to laboratory data, in EW 48, among all samples tested (n=42) the percent positivity for respiratory viruses was ~20%; influenza A(H1N1)pmd09 and influenza A/H3 were detected.

In Peru5, in EW 48, ARI and pneumonia indicators activity (number of cases by ARI and pneumonia in children under 5 years old, respectively) were slightly lower and higher, respectively, than the previous week and remained below observed for this time of the year. Through EW 48 2011, 341 deaths by pneumonia in

---

* Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago
children under 5 years old were reported, which was an amount lower than the observed average of the three previous years, 2008-2010.

In Venezuela\(^6\), in EW 48, ARI endemic channel continued to show an increasing trend in the number of cases since ~EW 38 showed an increasing trend in the number of cases since ~EW 38, matching the maximum expected for this time of the year. A higher incidence rate was reported in children less than 7 years old. In EW 48, the pneumonia endemic channel decreased compared to the previous week and remained within expected for this time of the year. In 2011 through December 9\(^{th}\), EW 49, among all samples tested (n=9,398), the percentage of positive samples for respiratory viruses was ~40%. Concerning influenza viruses, of the total number of samples tested, ~24% 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 Argentina\(^7\), in EW 45, ILI and SARI endemic channels 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. According to laboratory data, in EW 49, among all samples tested (n=86), the percent of positivity for respiratory viruses was 9%, RSV and parainfluenza were the main viruses detected. In EW 49, no samples positive for influenza were detected.

In Brazil, according to Adolfo Lutz Institute (San Pablo), in EW 49, among the tested samples (n=20), the percentage of samples positive for respiratory viruses was ~5%; one sample positive for influenza A(H1N1)pmd09 virus was detected.

In Chile\(^8\), in EW 48, the ILI activity (4.9 consultation for 100,000 inhabitants), at national level, was slightly higher than the rate of the previous weeks an slightly above what was observed for this time of the year. In EW 48, the percentage of attention to children under 15 years old in urgency services for respiratory reasons was 33% lower than what was observed in the two previous years. Though EW 48, 17 death were registered associated with influenza A(H1N1)pmd09, of them 14 had at least one co-morbidity. According to laboratory data, in EW 49, among all the samples tested (n=496), at national level, the percent of positivity for respiratory viruses was ~12%, parainfluenza and adenovirus were the predominant viruses detected. Among influenza viruses, in EW 49, influenza A/H3 and influenza A no sub-typified were detected.

In Paraguay\(^9\), in EW 49, the proportion of ILI consultation (5%) was similar to the previous week (5.1%). In EW 49, the proportions of SARI hospitalization, SARI ICU admissions and deaths remained under 15%. According to laboratory data, in EW 49, among all samples tested, low circulation of respiratory viruses was detected, adenovirus and parainfluenza were the predominant viruses in circulation.

In Uruguay\(^10\), in EW 50 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, with the exception of SARI ICU admission, that were slightly above to the SARI hospitalization and SARI deaths but below5%, and with an increasing trend since EW 43.
Graphs

**North America**

**Canada**

ILI consultation rate (x 1,000)

Positive samples for influenza reported to CDC, 2010-11

**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, 2006 – December 19, 2011

Influenza Positive Tests Reported to CDC by U.S. WHO/INRS/SSS Collaborating Laboratories, National Summary, 2011-12 Season

**Caribbean**

**CAREC**

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011
Jamaica

Cuba y Dominican Republic

Central America

Costa Rica, Guatemala, Nicaragua and Panama
Honduras

% ILI consultations

Distribución de las atenciones por ETS. Vigilancia centinela de influenza, semana epidemiológica No 48, Honduras, 2011

% SARI admissions

Distribución por IRAg, vigilancia centinela de influenza, Semana epidemiológica No 48 Honduras, 2011

Distribution of respiratory viruses, 2011

Distribución de virus respiratorios, vigilancia centinela de influenza, semana epidemiológica No 48, Honduras, 2011

South America - Andean

Colombia

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

Peru

ARI cases in children under 5 years old. Peru – 2011

Pneumonia cases in children under 5 years old. Peru - 2011

Ecuador

% hospitalization, ICU admissions, deaths for SARI, 2011

IRAg(%) hospitalizaciones, admisiones a UCI y Fallecidos de la SE 11 a la SE 49. Ecuador . 2011

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011

Year 1 EW 2011

% positive samples
Venezuela

**ARI endemic channel, Venezuela, 2011**

**Pneumonia endemic channel, Venezuela, 2011**

South America – Southern Cone

Argentina

**ILI endemic channel by EW, 2011**

**Pneumonia endemic channel by EW, 2011**

Brazil

**Adolfo Lutz Institute (São Pablo)**

Distribution of influenza and other respiratory viruses under surveillance by Epidemiological Week (EW), region / country, 2010-2011
Chile

ILI endemic channel. Chile, 2011

Emergency attentions by respiratory infection in children under 15 years old. Chile, 2009-11.

Paraguay

Proportion of ILI consultation, Paraguay, 2011.

% SARI hospitalization, SARI ICU admissions and SARI deaths. Paraguay, 2011.
% hospitalization, ICU admissions and deaths for SARI

1 FluWatch Report. EWs 49. Available at http://www.phac-aspc.gc.ca/fluwatch/
2 US Surveillance Summary. Week 49. Centers for Disease Control and Prevention
3 Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 48
4 Colombia. Instituto Nacional de Salud.
8 Chile. Informe de situación. SE 48. Available at: www.pandemia.cl
10 Uruguay. Dirección General de la Salud. División Epidemiología. SE 50. Available at: https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu