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 increased in Canada and United States; but remained within the expected level for this time of year. 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.

Epidemiologic and virologic influenza update

**North America**

In Canada\(^1\), in epidemiological week (EW) 11, 2012, influenza activity continued to increase. In EW 11 the influenza-like illness (ILI) consultation rate decreased slightly compared to the previous week, but remained within expected levels for this time of year. In EW 11, among the total samples analyzed (n=5,207), the proportion of samples positive for influenza (23.4%) increased as compared to the previous week. Of the total cases positive for influenza, the percent positive for influenza B (57.3%) continued to be greater than the percent positive for influenza A (42.7%). Concerning other respiratory viruses, the proportion of tests positive for RSV (10.9%) declined as compared to the previous week, and influenza was the most prevalent among all respiratory viruses detected.

In the United States\(^2\), in EW 11, influenza activity remained relatively low nationally, but was elevated in some parts of the country. At the national level, the proportion of ILI consultations (2.4%) was at the national baseline. Regions 5 (midwest part of the country), 6 (south central part of the country), 7 (midwest part of the country), 8 (northwest part of the country) and 10 (northwest part of the country) reported ILI activity at or above their region-specific baselines and four states (Alabama, Arkansas, Illinois, and Oklahoma) reported high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 11 (7.6%) was below the epidemic threshold for this time of year (7.9%). In EW 11, three pediatric deaths associated with influenza were reported (2 with influenza A(H1N1)pdm09 and 1 with influenza B). Among all samples tested during EW 11 (n=5,088), the percentage of samples positive for influenza (26.6%) decreased slightly. Nationally, among the positive samples, 93.3% were influenza A [among the subtyped influenza A viruses, mainly influenza A(H3N2)] and 6.7% 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 11, of the total samples analyzed, the proportion of samples positive for influenza decreased to 11.9%, which is the lowest that it has been in 2012. Influenza A(H1N1)pdm09 was the predominant circulating virus.
Caribbean

CAREC*, in EW 11, received epidemiological information from Belize, Jamaica, Suriname and Trinidad and Tobago. In EW 11, the severe acute respiratory infection (SARI) hospitalization rate was 1.7%, which was lower than the previous week (2%). The highest SARI hospitalization rate was reported among children aged 6 months – 4 years (3.9% of hospitalized children in this age group were SARI cases). One SARI related death was reported in EW 11. In the past four weeks, influenza A(H1N1)pdm09, influenza A(H3N2), RSV, parainfluenza and rhinovirus have been confirmed.

In Jamaica, in EW 11, the proportion of consultations for Acute Respiratory Illness (ARI) was 4.9%, slightly higher than the previous week. The proportion of SARI admissions was 1.0%, which was slightly higher than the previous week. In EW 11, one SARI death was reported. According to laboratory data, no influenza viruses were identified in EW 11.

In Cuba, according to laboratory data, in EW 10, among all samples tested (n=53), 17% were positive for respiratory viruses and 2% for influenza viruses (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 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 09-10, ARI endemic channel showed that the number of ARI cases remained within what was expected for this time of year. In EW 11, according to laboratory data, among all samples tested (n=125), the percentage of positive samples for respiratory viruses was 48%, slightly higher than the previous week (32%), being detected influenza A(H1N1) pdm09 (60%), and other virus (16.7%).

In Honduras, in EW 11, the proportion of ILI consultations (3.8%) less in comparison with the previous EW(4.9%). The proportion of SARI hospitalizations (6.5%) was lower than the previous EW (8.4%). In the EW 11, the case-fatality from SARI was 50% (5/10), with 4 SARI-related deaths in Tegucigalpa and one in San Pedro Sula. According to laboratory data, in EW 11, among all samples tested (n=48), the percentage of positive samples to respiratory viruses was of 18.8%, being detected parainfluenza, influenza A(H1N1) pdm09, adenovirus and SRV.

In Nicaragua, through EW 11, all the tested samples (n=28), 3.6% were positive for respiratory viruses. Influenza viruses were not detected.

In Panama, through EW 12, all the tested samples (n=4), 50% were positive for parainfluenza and other respiratory viruses. Influenza viruses were not detected.

South America – Andean

In Bolivia, in La Paz, according to INLASA laboratory data in EW 12, among all samples tested (n=69), 31.9% of the samples were positive for respiratory viruses; influenza A(H1N1)pdm09 (36.4%), SRV, parainfluenza, adenovirus and influenza B viruses were detected. In Bolivia, in Santa Cruz, according to CENETROP laboratory data in EW 11, among all samples tested (n=13), all of them were positive for respiratory viruses; influenza B (53.8%) and influenza A(H1N1)pdm09(46.2%) viruses were detected.

In Colombia, in EW 09, among all samples tested (n=27), 14.8% were positive for respiratory viruses (RSV). No influenza viruses were detected.

In Peru*, in 2012, through EW 10, at the national level, 417,877 ARI cases in children under 5 were reported, 27% less than the average reported in the last 5 years. According to the ARI and pneumonia epidemic channels in children under 5 years old in EW 10, were within what is expected for this time of the year and does not become evident increasing trend in comparison with what was reported in previous years.

In Venezuela4, in EW 10, the ARI and pneumonia endemic channels show a slight increasing trend in comparison with the previous EW; the children <7 year of age was the most affected group for acute respiratory illness, mainly in Zulia, Miranda and Carabobo federal states. According to laboratory data, from 1 January up to 14 March, among all samples tested (n=416), the percentage of positive samples for

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* Includes Barbados, Belize, Dominica, Jamaica, St Vincents and the Grenadines, St Lucia, Suriname and Trinidad and Tobago
respiratory viruses was 6.0%. Among the positive samples, 68% were influenza A(H3N2), 24% was SRV and influenza A(H1N1) pdm09 (8.0%).

South America – Southern Cone

In Brazil, in Sao Paulo (Adolfo Lutz institute) in 2012, through EW 11, among all the tested samples (n=501), 15.4% were positive for respiratory viruses, predominating RSV and followed by influenza A(H1N1)pdm09, influenza A(H3) and influenza B. In Para (Evandro Chagas institute) in 2012, through EW 10, among all the tested samples (n=42), 28.6% were positive for respiratory viruses, predominating influenza A(H1N1)pdm09.

In Argentina5, in EW 07, 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 10, among all samples tested (n=3,759), low circulation of respiratory viruses was detected, mainly parainfluenza and followed by adenovirus and RSV.

In Chile6, in EW 11, at national level, ILI activity remained in a low level and slightly higher than the previous week and within what is expected for this time of the year (2.1 per 100,000 inhabitants). The percentage of consults in urgency services for respiratory reasons (16.4%) increased as compared to the two previous years. In EW 11, the proportions of SARI hospitalization, SARI ICU admissions and SARI deaths remained under 5%. According to laboratory data, at national level, in EW 11, among all the samples tested (n=326), the percent of positivity for respiratory viruses was 3.7%; remaining adenovirus and parainfluenza as predominant viruses detected, followed by influenza A(H3N2).

In Paraguay7, in EW 11, the proportion of ILI consultations (4.5%) was lower than the previous weeks. The proportions of SARI hospitalization, SARI ICU admissions and deaths were under 10%. According to laboratory data, in 2012, through EW 11, among all samples tested (n=166), low circulation of respiratory viruses was detected, mainly adenovirus and followed by influenza B, parainfluenza and influenza A(H1N1)pdm09.

Graphs

North America

Canada

![Graph showing ILI consultation rate and positive samples for respiratory viruses in Canada](image)

![Graph showing influenza activity levels by Provincial and Territorial MoH in Canada](image)
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 17, 2012


Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*

Mexico

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

Year / EW

Respiratory viruses

2011

2012
Central America

Guatemala

ARI endemic channel
Corredor Endémico Semanal de 2012
IRAS TOTAL, República de Guatemala
Historico de 3 años: 2007 a 2011

Influenza cases in Guatemala 2012
Mapa de casos de Influenza, Semanas Epidemiológicas 1 a 12, Guatemala 2012

Honduras

ILI cases
Distribución de las atenciones por ERI, Vigilancia continua de influenza, semana epidemiológica No 11, Honduras, 2012

SARI cases
Distribución por IRAI, vigilancia continua de influenza, Semana epidemiológica No 11 Honduras, 2012
El Salvador, Nicaragua and Panama

**El Salvador**

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

**Nicaragua**

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

**Panama**

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

South America - Andean

**Colombia**

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

**Bolivia**

La Paz (INLASA Int.)

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

Santa Cruz (CENETROP Int.)

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

Respiratory viruses

- FLU A H1
- FLU A H3
- FLU A (H1N1)pdm09
- FLU A Not Subtyped
- Influenza B
- Adenovirus
- Paramfluenza
- SRV
- Other viruses
- % Positive resp viruses
Peru

ARI endemic channel. Children <5 years old
Canal endémico de IRA en <5 años por SE. 2012

Pneumonia endemic channel. Children <5 years old
Canal endémico de neumonías en <5 años por SE. 2012

Venezuela

ARI endemic channel.
Canal endémico de IRA

Pneumonia endemic channel.
Canal endémico de neumonías

Distribution of influenza viruses under surveillance by Epidemiological Week (EW), region / country, 2011-2012

Respiratory viruses
- FLU A(H1)
- FLU A(H3N2)
- FLU A(H1N1)pdm09
- FLU A Not Subtyped
- Influenza B
- Adenovirus
- Parainfluenza
- SRV
- Other viruses
- % Positive resp viruses
**South America – Southern Cone**

**Brazil**

- Adolfo Lutz institute (Sao Paulo)
  - Distribution of influenza and other respiratory viruses under surveillance by EY, region / country
  - Year / EW 2012

- Evandro Chagas institute (Para)
  - Distribution of influenza and other respiratory viruses under surveillance by EY, region / country
  - Year / EW 2012

**Argentina**

- ILI endemic cannel by EW, 2012
- Corredor endémico semanal de EI - 2012
- Total País. Históricos 5 años: 2006 a 2011 (excluyendo 2009)

- Pneumonia endemic cannel by EW, 2012
- Corredor endémico semanal de Neumonia - 2012
- Total País. Históricos 5 años: 2007 a 2011

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- Brazil
  - Adolfo Lutz institute (Sao Paulo)
  - Evandro Chagas institute (Para)

- Argentina
  - ILI endemic cannel by EW, 2012
  - Pneumonia endemic cannel by EW, 2012
Chile

Distribution of respiratory viruses by EW, 2011-2012

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

Paraguay

ILI cases

SARI cases

2 US Surveillance Summary. EW 11. Centers for Disease Control and Prevention
6 Chile. Informe de situación. SE 11. Available at: www.pandemia.cl