PAHO interactive influenza data: http://ais.paho.org/phip/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/reportesinfluenza

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.

WEEKLY SUMMARY

- **North America**: Influenza activity remained low, although some indicators in Canada and Mexico showed slight increasing trends. Among circulating influenza viruses, influenza A predominated.

- **The Caribbean and Central America**: RSV continued circulating in many countries in the region (Cuba, Cost Rica, Guatemala, Honduras, Nicaragua and Panama). Among influenza viruses, influenza B predominated in Cuba and Dominican Republic while influenza A predominated in Costa Rica, El Salvador, Jamaica, Guatemala, Honduras and Nicaragua.

- **South America – Andean Countries**: Acute respiratory virus activity remained low in most countries in the region except Bolivia (Santa Cruz) where influenza A(H1N1)pmd09 activity remained high. Among other circulating viruses, parainfluenza predominated (Bolivia (Santa Cruz), Colombia, Ecuador, Peru).

- **South America - South Cone and Brazil**: Acute respiratory virus activity was low and within the expected level for this time of year in all countries except Paraguay where ILL activity remained high. A slight increase in influenza B circulation was seen in some countries of the region (especially Paraguay).

Influenza circulation by region. 2013

![Distribution of influenza viruses by region, 2013](image)
North America:

In Canada\(^1\), during EW 45 influenza activity increased slightly compared to the previous week. The national influenza-like-illness (ILI) consultation rate was 18.6 per 1,000 patient visits, a slight increase from the previous week and within the expected level for this time of year. To date this season, 15 influenza-associated hospitalizations have been reported (7 pediatric and 8 adult), of which two required ICU admission (1 pediatric and 1 adult). No influenza-associated deaths were reported. Based on laboratory data for EW 45, the overall percentage of positive influenza tests was 1.6% (N=36), a slight increase compared to the previous week. Among the positive tests, 87.8% were influenza A, of which 44.4% were influenza A(H1N1)pdm09. Among other respiratory viruses, rhinovirus and parainfluenza predominated.

In the United States\(^2\) during EW 45, influenza activity remained low with 1.6% of outpatient visits associated with ILI and 6.1% of deaths associated with pneumonia and influenza. Two influenza-associated pediatric deaths were reported during EW 45. One death occurred during EW 42 and was associated with influenza A (not subtyped) and the other occurred during EW 43 was associated with an influenza A and B co-infection. Based on laboratory data for EW 45, 4,257 samples were analyzed, of which 5.4% were positive for influenza. Among the positive samples, 87.3% were influenza A (59.6% were not subtyped and 31.5% were A(H1N1)pdm09) and 12.1% were influenza B.

\(^2\) USA: CDC FluView report. EW 45. Available at: [http://www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)
In Mexico\(^3\), during EW 44 the number of ARI and pneumonia cases decreased by 8.6% and 3.9%, respectively, from the previous week. The highest levels of ARI activity were reported in Aguascalientes, Durango and Colima, and the highest levels of pneumonia activity were reported in Jalisco, Colima and Aguascalientes. According to laboratory data from EW 41-44, 892 samples were tested, of which 14.7% were positive for a respiratory virus and 9.1% for influenza. Among the positive influenza samples, 77.8% were influenza A (54.0% were A(H3N2) and 22.2% were A(H1N1)pdm09) and 22.2% were influenza B. Among other respiratory viruses, RSV predominated (25.2% of positive samples).

**Mexico**

**Caribbean**

In Cuba during EW 45, the number of SARI-associated hospitalizations increased compared to the previous EW but has shown a decreasing trend since peaking in EW 39. Children less than one year of age comprised the largest proportion of these cases. One SARI-associated death was reported during this period, and was negative for respiratory viruses. According to national laboratory data for EW 42-45, 381 samples were analyzed, of which 60.6% were positive for a respiratory virus and 11.8% were positive for influenza. RSV remained the predominant circulating virus (64.1% of the positives), and among influenza viruses, influenza B predominated, although with a decreasing trend.

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\(^3\) México. Dirección General de Epidemiología. Información epidemiológica. SE 44.
In the Dominican Republic\textsuperscript{4}, the cumulative ILI rate for EW 1-44 was 1,696 per 10,000 inhabitants, and is 14% less than what was reported this period last year. During EW 1-44, 1,469 SARI cases were reported through sentinel surveillance, of which 10 were reported during EW 44. No SARI-associated deaths were reported during EW 44. According to laboratory data for EW 42-45, 66 samples were analyzed, of which 19.7% were positive for a respiratory virus and 12.1% were positive for influenza. Among positive influenza samples, 75.0% were influenza B and 25.0% were influenza A (all influenza A(H3N2)). Among other respiratory viruses, parainfluenza (30.8% of positive samples) predominated.

### Dominican Republic

#### Dominican Rep. Provinces with respiratory virus circulation, EW 40-43


In Jamaica, based on sentinel surveillance data for EW 45, the proportion of ARI-associated consultations was 7.0\%, a slight decrease from the previous EW. The proportion of SARI-associated hospitalizations (1.0\%) also decreased. No SARI-associated deaths were reported during this period. Based on laboratory data from EW 45, 11 samples were tested, of which 27.3\% were positive for a respiratory virus and indicated co-circulation of influenza A(H3N2) and A(H1N1)pdm09.

### Jamaica

#### Jamaica: SARI-related hospitalizations, by EW, 2013

#### Jamaica: Respiratory virus distribution, by EW, 2013

In Puerto Rico\textsuperscript{5} during EW 45, the number of influenza cases (n=100) continued a decreasing trend since peaking in EW 37. Of these, 86\% were associated with influenza A. Since the beginning of June, 10,708 influenza cases have been reported and children aged 0-14 years accounted for 43\% of those cases. Since June, 686 influenza-associated hospitalizations and 16 influenza-associated deaths have been reported.

### Puerto Rico

#### Puerto Rico: Influenza cases by EW, 2012-13

#### Puerto Rico: Influenza cases by age group, June-Sept 2013

\textsuperscript{4} República Dominicana. Dirección Nacional de Vigilancia Epidemiológica. Boletín Semanal SE 44.  
\textsuperscript{5} Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 45.  
Central America

In Costa Rica, based on national laboratory data from EW 42-45, 233 samples were analyzed, of which 37.3% were positive for a respiratory virus and 9.9% were positive for influenza. Among influenza positive samples, 95.7% were influenza A (86.4% were A(H1N1)pdm09 and 13.6% were A(H3N2)). Among other respiratory viruses, RSV predominated (56.3% of positive samples).

Costa Rica

Costa Rica: Respiratory viruses distribution by EW, 2013

In El Salvador, during EW 45 respiratory activity remained low and similar to what was observed in previous years. Based on national laboratory data from EW 41-44, 141 samples were analyzed, of which 18.4% were positive for a respiratory virus and 14.2% were positive for influenza. Among influenza positive samples, A(H1N1)pdm09 predominated (84.2%). Among other respiratory viruses, adenovirus, RSV and parainfluenza were detected.

El Salvador

El Salvador: Respiratory virus distribution by EW, 2013

In Guatemala, based on laboratory data from EW 42-45, 99 samples were analyzed, of which 36.4% were positive for a respiratory virus and 11.1% were positive for influenza. Among influenza positive samples, 54.5% were influenza B and 45.5% were influenza A (80% were not subtyped and 20% were A(H1N1)pdm09). Among the other respiratory viruses, RSV predominated (52.8% of positive samples).

Guatemala

Guatemala: Respiratory viruses distribution by EW, 2013
In Honduras\(^6\), during EW 44, the proportion of ILI-associated visits (6.8%) decreased slightly compared to the previous week while the proportions of SARI-associated hospitalizations (11.5%) and deaths (28.8%) increased. Based on national laboratory data for EW 41-44, 209 samples were analyzed, of which 64.1% were positive for a respiratory virus and 32.1% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (44.8%) and RSV (38.8%) predominated.

In Nicaragua, based on national laboratory data from EW 42-45, 702 samples were analyzed of which 17.8% were positive for a respiratory virus and 7.1% were positive for influenza. Among influenza positive samples, 96.0% were influenza A (54.2% were A(H3N2) and 45.8% were A(H1N1)pdm09). Among other respiratory viruses, RSV predominated (53.6% of positive samples) and has been increasing for the last several weeks.

In Panama, based on national laboratory data from EW 42-45, 75 samples were analyzed, of which 78.7% were positive for a respiratory virus. Among positive samples, RSV (79.7%) predominated, followed by rhinovirus (11.9%).

South America – Andean countries

In Bolivia, in Santa Cruz, the proportion of SARI hospitalizations remained elevated compared to this period last year. Based on laboratory data from CENETROP (Santa Cruz) during EW 42-45, 361 SARI samples were analyzed, of which 27.4% were positive for a respiratory virus and 19.4% were positive for influenza.

\(^6\) Honduras. Influenza Bulletin, EW 44
Among the positive samples, influenza A(H1N1)pdm09 (66.7%) predominated, followed by parainfluenza (28.3%). According to data from La Paz, the proportion of SARI-associated hospitalizations in EW 44 (4.0%) continued a decreasing trend. Based on laboratory data from INLASA (La Paz) from EW 41-44, 96 samples were analyzed of which 11.5% were positive for influenza. Among positive samples, influenza A(H1N1)pdm09 (81.8%) and influenza B (18.2%) were detected.

Bolivia

In Bolivia, during EW 41-44, the proportion of hospitalizations associated with SARI continued a decreasing trend. Among the positive samples, influenza A(H1N1)pdm09 (66.7%) predominated, followed by parainfluenza (28.3%).

Colombia

In Colombia, during EW 45, the proportion of hospitalizations (9.5%), ICU admissions (10.5%) and deaths (8.7%) with ARI-associated ICD-10 codes (J00 to J22) remained at low levels. Based on INS national laboratory data from EW 42-45, 441 samples were analyzed, of which 13.2% were positive for a respiratory virus and 1.6% were positive for influenza. Among the positive samples, RSV (29.3%) and parainfluenza (17.2%) predominated.

Ecuador

In Ecuador, during EW 43 SARI activity continued a decreasing trend: 4% of hospitalizations, 12% of ICU admissions and 0% of deaths were SARI-associated. Based on national reference laboratory data from EW 42-45, 248 SARI samples were analyzed, of which 15.3% were positive for a respiratory virus and 9.7% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (63.2%) and parainfluenza (23.7%) predominated.

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In Peru during EW 44, the number of ARI and pneumonia reports in children less than 5 years of age decreased compared to the previous EW and remained within the success zone of the endemic channel. Among patients older than 5 years, the number of pneumonia reports continued a decreasing trend since peaking during EW 31 and was within the security zone of the endemic channel. Based on national laboratory data from EW 42-45, 190 samples were analyzed, of which 12.6% were positive for a respiratory virus and 8.9% were positive for influenza. Among the positive samples, influenza B predominated (41.7%), followed by influenza A(H1N1)pdm09 (29.2%) and parainfluenza (12.5%).

In Venezuela during EW 45, ARI activity was similar to the previous EW, while pneumonia activity decreased by 5%. Both were near the expected values for this time of year. During EW 45, 182 SARI-associated hospitalizations were reported, with children less than 1 year of age comprising the largest proportion of cases. Based on virologic data from EW 1-45, 5,211 samples were analyzed from suspected influenza cases, of which 53.0% were positive for influenza. Among the positive samples, 92.1% were influenza A(H1N1)pdm09.
**South America – Southern Cone and Brazil**

In Argentina\(^{10}\), according to reports and calculated estimations, national ILI activity during EW 44 was within the security zone of the endemic channel and showed a decreasing trend since its peak in EW 26. The proportion of SARI-associated hospitalizations was within the epidemic zone of the endemic channel, but also showed a decreasing trend since EW 27. Based on laboratory data from EW 41-44, 1,346 samples were analyzed, of which 20.4% were positive for a respiratory virus and 4.4% for influenza. Among positive samples, RSV predominated (50.2%), but has been decreasing since peaking in EW 27.

**Argentina**

![Argentina. ILI cases](image1)

![Argentina. SARI cases](image2)

In Brazil\(^{11}\), according to ILI sentinel surveillance data through EW 44, 14,583 samples have been analyzed, of which 22.1% were positive for influenza or other respiratory virus. Positivity has decreased since EW 27. Based on universal SARI surveillance data during this same period, 33,941 SARI cases were reported and 17.1% were positive for influenza. Of these positive samples, influenza A(H1N1)pdm09 predominated (63.7%), followed by influenza B (22.1%) and A(H3N2) (10.8%). Additionally, in 2013, 3,981 SARI-associated deaths have been reported of which 23.7% were positive for influenza, and of these, 80.4% were associated with influenza A(H1N1)pmd09.

**Brazil**

![Brazil: Resp virus distribution in ILI cases](image3)

![Brazil: Resp virus distribution, SARI cases](image4)

In Chile\(^{12}\) ILI activity during EW 44 (rate: 2.9 per 100,000 inhabitants) remained low and was within the success zone of the endemic channel. The proportion of ILL-associated hospital emergency consultations was 0.5%, maintaining a low and stable level. Based on laboratory data from EW 44-45, 1,150 samples

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\(^{10}\) Argentina. Boletín integrado de vigilancia. SE 44.


\(^{12}\) Chile. Informe de situación. EW 44. Available at: [http://epi.minsal.cl/](http://epi.minsal.cl/)
were tested, of which 16.5% were positive for a respiratory virus and 3.3% were positive for influenza. Among the positive samples, parainfluenza (32.6%), adenovirus (17.4%) and RSV (16.3%) were detected.

Chile

In Paraguay, during EW 45, the ILI consultation rate (144.3 per 100,000 inhabitants) increased slightly compared to the previous EW and was higher than observed this time last year. The proportion of SARI-associated hospitalizations (4.9%) decreased compared to the previous week and children less than 5 years of age comprised the largest portion (47.0%) of these cases. Based on reference laboratory data from EW 41-44, 278 SARI samples were analyzed, of which 21.2% were positive for a respiratory virus and 7.2% were positive for influenza. Among influenza samples, 85.0% were influenza B and 15.0% were influenza A (all A(H3N2)). Among other respiratory viruses, parainfluenza (32.2% of positive samples) predominated, followed by metapneumovirus (16.9%) and adenovirus (16.9%).

Paraguay

13 Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 45, 2013
In Uruguay during EW 45, the proportions of SARI-associated hospitalizations, ICU admissions and deaths were similar to the previous EW, and remained at low levels. Based on laboratory data from EW 42-45, 28 SARI samples were analyzed, of which none were positive for a respiratory virus.