
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 Canada, influenza activity has decreased; influenza B accounted for a greater proportion than influenza A. In the United States, the ILI activity was below the baseline, however the proportion of deaths attributed to pneumonia and influenza continued to be above the epidemic threshold; there has been a co-circulation of influenza A and B during the second half of the influenza season. In Mexico, the predominant circulating respiratory virus has been influenza A/H1N1 2009 in the last 4 weeks.
- In the Caribbean, the Dominican Republic reported an increase number of influenza A/H1N1 2009 cases between EW 13-15.
- In South America, Paraguay reported an increased ILI and SARI activity in EW 14 as compared to the prior week; the respiratory syncytial virus (RSV) has been the predominant circulating respiratory virus in the last 8 EWs.

### Epidemiologic and virologic influenza update

**North America**

In Canada, in epidemiological week (EW) 14, all indicators of influenza activity have decreased. The national influenza-like illness (ILI) consultation rate declined compared to previous weeks and was slightly below the expected rate for this time of year. Children 5-19 years of age had the highest ILI consultation rates (32.8 per 1,000 consultations). In EW 14, the percentage of samples positive for influenza was 10.4%, which was decreased compared to the prior week (11.7%); of which influenza B (59%) accounted for a greater proportion than influenza A (41%). Among the other respiratory viruses, the proportion of specimens positive for respiratory syncytial virus (RSV) increased slightly to 14.3% of specimens tested.

In Mexico, in EW 14, among all samples tested, the percent positivity for influenza viruses was ~8%, which represents a slight decrease as compared to EW 13 (14%). The predominant circulating respiratory virus has been influenza A/H1N1 2009 in the last 4 EWs, followed by influenza B.

In the United States, in EW 14, at the national level, the proportion of outpatient consultations for ILI (1.4%) was below the national baseline. At the regional level, all ten regions reported ILI activity to be below their region-specific baseline. However, the proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold for 11 consecutive weeks. One influenza-associated pediatric death was reported this week. During EW 14, 9.1% of samples tested were positive for influenza [influenza type B (37.5%), influenza A/H3 (25.8%), unsubtyped influenza A (19.1%) and influenza A/H1N1 2009 (17.5%)]. Of characterized influenza B viruses, 94.7% belong to the B/Victoria lineage and 5.3% belong to the B/Yamagata lineage.

**Caribbean**

CAREC, in EW 14, reported that the proportion of admissions for severe acute respiratory illness (SARI) (~2.5%) was higher than the prior week (~1%). No SARI deaths were reported in the EW 14. To date in

---

1. Participating CAREC member countries, which include, Barbados, Dominica, Jamaica, St Vincent and the Grenadines, St. Lucia and Trinidad and Tobago, were assessed together
2011, there has been a co-circulation of influenza A/H1N1 2009 and influenza A/H3N2. No influenza viruses have been detected in the last two EW.

In Cuba, in EW 14, among all samples tested, the percent positivity for respiratory viruses was ~70% and the percent positivity for influenza viruses increased to ~18%. Based on the laboratory data, to date in 2011, influenza A/H3 has been the predominant influenza virus circulating and rhinovirus was the predominant respiratory virus detected.

In the Dominican Republic, between EW 13-15, an number (n=19) of influenza A/H1N1 2009 cases was detected. In EW 15, the percent positivity for influenza (22%) increased as compared to EW 14 (10%). More information has been requested.

In Jamaica for EW 14, sentinel site data showed that the proportion of consultations for Acute Respiratory Illness (ARI) decreased by 1% compared to the previous week. The proportion of admissions due to SARI was less than 1% and remained stable compared to the previous week. The percentage of samples positive for influenza was 22.2% which represents an increase compared to the previous week (10%). To date in 2011, influenza type B has been the predominant virus circulating.

Central America

In Costa Rica, in EW 14, among all samples tested, the percent positivity for respiratory viruses was ~45% and the percent positivity for influenza viruses was ~3%. To date in 2011, influenza B has been the primary influenza virus circulating, while adenovirus has been the primary respiratory virus circulating.

In Panama, in EW 14, among all samples tested, the percent positivity for respiratory viruses was ~9. To date in 2011, adenovirus, parainfluenza and RSV have been co-circulating. No influenza viruses have been detected since EW 04.

South America – Andean

In Colombia, to date in 2011, there has been a co-circulation of multiple respiratory viruses, with influenza A/H3 being the predominant influenza virus, followed by influenza A/H1N1 2009. Among the other respiratory viruses, RSV has been the predominant circulating respiratory virus.

In Ecuador, the percentage of samples positive for influenza has been decreasing during 2011 and the percentage of samples positive for other respiratory viruses has increased since EW 08. RSV has been the predominant respiratory virus in circulation during the last 6 EWs.

In Peru\(^3\), between EW 11-13, the number of ARI cases increased as compared to previous EWs; however, it remained within the endemic channel for this time of year. The severe cases (children under 5 years of age with pneumonia) represent 1% of all ARI cases and have remained under the lower limit of the endemic channel in the last 2 weeks. Regionally, the highest pneumonia rates were observed in some departments in the jungle (Madre de Dios, Ucayali and Loreto).

In Venezuela\(^4\), some influenza A/H1N1 2009 outbreaks were reported in the states of Merida, Miranda and Capital District. In EW 14, the number of confirmed influenza cases decreased as compared to the prior weeks. According to the weekly epidemiological report, in EWs 12 & 13, the numbers of ARI cases were above the endemic channel, however, the number of pneumonia cases remained similar to the prior weeks and within the endemic channel. Up to April 4\(^{st}\) in 2011, among the samples positives for influenza (n=990), 93% were influenza A/H1N1 2009, 6% were influenza A/H3 and <1% were influenza type B.

South America – Southern Cone

In Argentina, in EW 14, among all samples tested, the percentage of positivity for respiratory viruses remained stable in ~17%. No influenza viruses were detected since EW 10. RSV has been the predominant respiratory virus in circulation during the last 5 EWs.

In Paraguay\(^5\), in EW 14, the proportion of ILI consultations (7%) increased 1% as compared to the prior week. The proportion of SARI cases among the total hospitalized (5,4%) increased 3% as compared to EW 13. The proportion of SARI intensive care units (ICU) admissions (17%) increased slightly as compared to EW 13 (14%). The proportion of SARI deaths among the total deaths remained below 3%. Based on
virological data, influenza A/H3N2 was the predominant respiratory virus during the beginning of 2011; however, RSV has been the predominant circulating respiratory virus between EWs 6-13. No influenza viruses have been detected since EW 11.

In Uruguay\textsuperscript{6}, in EW 15, the proportion of SARI cases among the total number of hospitalizations remained low and similar to the prior week; however, the proportion of SARI ICU admissions increased to \textasciitilde3\% from 1\% (EW14). No deaths associated with SARI were reported in EWs 14 & 15.

Other topics

Landmark agreement improves global preparedness for influenza pandemics

GENEVA, 17 April 2011

An open-ended working-group meeting of Member States, which was convened under the authority of the World Health Assembly and coordinated by the World Health Organization (WHO), successfully agreed upon a Framework that ensures that in a pandemic, influenza virus samples will be shared with partners who need the information to take steps to protect public health.

The new Framework includes certain binding legal regimes and will address clear roles for WHO, national flu labs around the world and industry partners (vaccine and pharmaceutical manufacturers) in both developed and developing countries that will strengthen how the world responds more effectively with the next flu pandemic. By making sure that the roles and obligations among key players are better established than in the past, the Framework will help to increase and expedite more equitable access to affordable vaccines, antivirals and diagnostic kits, especially for lower-income countries.

In addition, the Framework will also put the world in a better position for seasonal influenza and potential pandemic threats such as the H5N1 virus, because some key activities will begin before the next pandemic, such as greater support for strengthening laboratories and surveillance, and partnership contributions from the industry.

Graphs

\textit{North America}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{North_America_graph.png}
\caption{Percent positive influenza tests, compared to other respiratory viruses, Canada, by reporting week, 2010-2011}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Canada_graph.png}
\caption{Influenza-like illness (ILI) consultation rates, Canada, by report week, 2010-2011 compared to 1998/99 through 2009/10 seasons}
\end{figure}
Mexico

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

- Adenovirus
- RSV
- Influenza B
- Influenza A/H3
- A not subtyped
- % Positives (respiratory viruses)
- % Positives (influenza)

United States

Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILI/Net), Weekly-National Summary, September 30, 2007 – April 8, 2011

Influenza Positive Tests Reported to CDC by U.S. WHOINREVSS Collaborating Laboratories, National Summary, 2010-11 Season

- A (2009 H1N1)
- A (Subtype in Subtype)
- H1
- H3
- (Subtype in Subtype)
- Percent Positive

Caribbean

CAREC

Graph A: SARI Admissions and SARI Admission Rate per 100 Hospital Medical Admissions from Selected Sites in Selected CAREC Member Countries Epidemiological Week 27, 2010 to Week 14, 2011

Graph E: Laboratory Confirmed Influenza Cases by Type and Subtype CAREC Member Countries Epidemiological week 27, 2009 to week 14, 2009

Note: Graphs include data from all CAREC Member Countries. However, data from four countries is included through week 7 2011.
South America - Andean

Colombia

Distribution of respiratory viruses under surveillance by EW 2010 - 2011, as reported to PAHO

Ecuador

Cumulative proportion of respiratory viruses, Ecuador, EW 47/2010 – 14/2011

Peru

Acute Respiratory Illness, in children <5 years old. Peru, 2011

Pneumonias, in children <5 years old. Peru, 2011
Venezuela

ARI and pneumonia cases. Endemic channel 2005-2011.

Influenza A/H1N1 2009 outbreak in Venezuela

South America – Southern Cone

Argentina

Distribution of respiratory viruses under surveillance by EW 2010 - 2011, as reported to PAHO

Distribution of respiratory viruses under surveillance by EW 2011, as reported to PAHO
Paraguay

ILI endemic channel - Paraguay

Proportion of SARI hospitalizations, SARI admissions to ICU and SARI deaths

2 USA. Surveillance Summary. Week 14. Centers for Disease Control and Prevention
5 Paraguay. Boletín epidemiológico semanal. SE 15. Ministerio de Salud Pública y Bienestar Social
6 Uruguay. Vigilancia de IRAG. https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu