



The information contained within this update is obtained from data provided by Ministries of Health of Member States and National Influenza Centers through reports sent to Pan American Health Organization (PAHO) or updates on their web pages.

## I- Evolution of the pandemic

### **North America**

In Canada<sup>1</sup>, in EW 15 the national influenza-like illness (ILI) consultation rate was similar to the previous weeks and was still below the historical average. No new pandemic-related hospitalizations and deaths have been reported for two weeks. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In the United States<sup>2</sup>, the proportion of outpatient consultations for ILI has remained below the national baseline for fifteen consecutive weeks. All sub-national surveillance regions reported the proportion of outpatient visits for ILI to be below their region specific baseline. Laboratory-confirmed influenza hospitalization rates remained stable, and children 0–4 years of age continue to have the highest rate. The proportion of deaths attributed to pneumonia and influenza was at the epidemic threshold. No influenza-associated pediatric deaths were reported this week. A total of 64 oseltamivir-resistant isolates have been detected since April 2009.

In Mexico<sup>3</sup>, in EW 14 there was a 38% increase in the number ILI and severe acute respiratory illness (SARI) cases with respect to the previous week. Mexico has reported only one oseltamivir-resistant case, since the beginning of pandemic.

### **Caribbean**

In countries providing these data<sup>\*</sup> SARI hospitalization incidence decreased slightly compared to the previous week, and remained much lower than the peak levels seen in EW 40 and 41 of 2009. From EW 1 to EW 14 of 2010, two hospitalizations associated with the pandemic virus but no deaths were reported<sup>4</sup>.

Influenza activity was reported as widespread in Barbados and Jamaica, regional in Cuba, and no influenza activity in Dominica, Dominican Republic and Saint Lucia. These countries reported unchanged or decreasing trends in acute respiratory disease except Jamaica which reported an increasing trend. Low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services were reported by these countries.

In Cuba, all provinces reported an increased number of acute respiratory disease cases in the last two weeks, especially in the city of Havana.

### **Weekly Summary**

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- Caribbean countries reported unchanged or decreasing trends in acute respiratory disease except Jamaica which reported an increasing trend.
- In Central America, Guatemala and Panama reported increasing trends in acute respiratory disease.
- In South American countries, Brazil and Venezuela reported increasing trends in acute respiratory disease.
- In Canada and the United States, the 100% of all subtyped influenza A viruses were pandemic (H1N1) 2009.
- 7 new confirmed deaths in 4 countries were reported; in total there have been 8,316 cumulative confirmed deaths.

<sup>\*</sup> Participating CAREC member countries, which include, Barbados, Bahamas, Dominica, Jamaica, St Vincent and the Grenadines, and Trinidad and Tobago, were assessed together

### **Central America**

Costa Rica reported widespread influenza activity, Guatemala and Nicaragua reported regional activity, and Panama reported no activity. Costa Rica reported a decreasing trend in acute respiratory disease and Nicaragua an unchanged trend, while Guatemala and Panama reported an increasing trend. Low/moderate intensity and low impact of acute respiratory disease on health care services were reported by all countries.

In Guatemala, laboratory results from EW 15 indicated that among samples testing positive for respiratory viruses, the pandemic virus was predominant.

### **South America**

#### **Andean**

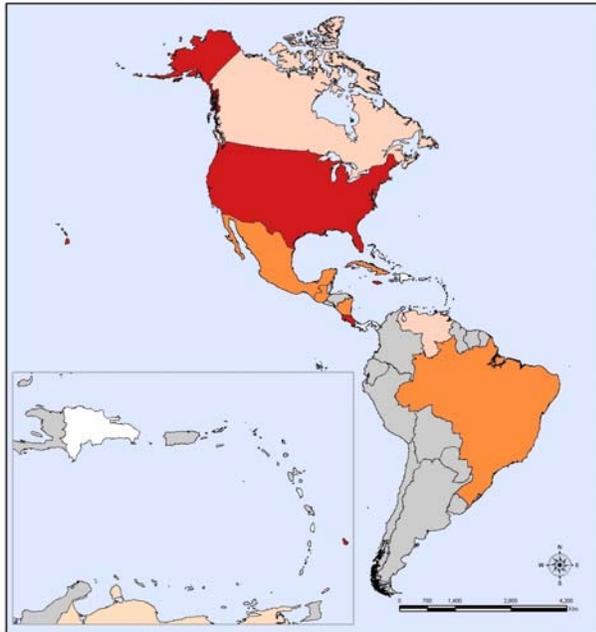
Venezuela reported localized influenza activity, an increasing trend in acute respiratory disease, a low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services. No information on qualitative indicators for other countries was received this week.

In Peru<sup>5</sup>, the number of pneumonia cases in children under 5 years of age has been increasing since EW 10. This increase is localized to Lima where these pneumonias continue to be above the epidemic threshold for six consecutive weeks.

#### **Southern Cone**

Brazil reported regional influenza activity, increasing trend in acute respiratory disease, low/moderate intensity of acute respiratory disease, and low impact of acute respiratory disease on health care services. No information on qualitative indicators for other countries was received this week.

**Map 1. Pandemic (H1N1) 2009, Geographical Spread by Country. Americas Region. EW 15, 2010\*.**



**Geographical Spread**

- No activity
- No information available
- Localized
- Regional
- Widespread

Map Production: PAHO/MSD/CDC  
April 23, 2010  
Cartographic projection:  
Lambert Equal Area Azimuthal  
Central Meridian: -90.00000  
Latitude of Origin: 10.00000  
Source: Ministries of Health of the countries  
Consolidated by PAHO/WHO  
Created by PAHO/WHO

\* EW 15 = epidemiological week from April 11 to April 17, 2010. Includes the latest information reported by each country this week.

**Map 2. Pandemic (H1N1) 2009, Trend of respiratory disease activity compared to the previous week. Americas Region. EW 15, 2010\*.**



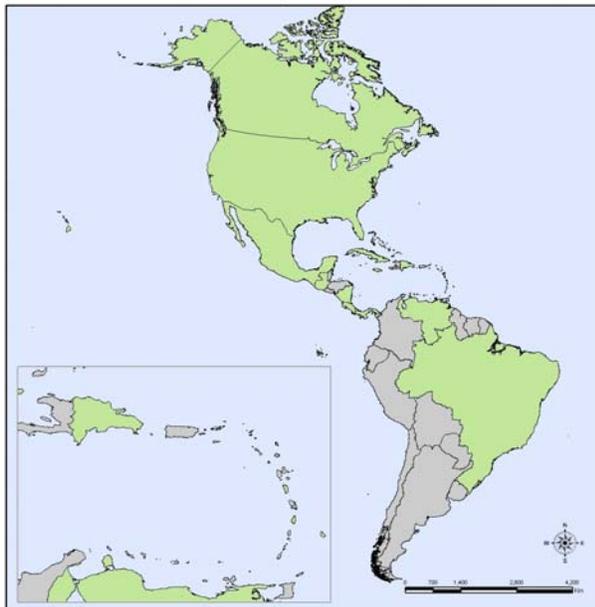
**Trend**

- No information available
- Decreasing
- Unchanged
- Increasing

Map Production: PAHO/MSD/CDC  
April 23, 2010  
Cartographic projection:  
Lambert Equal Area Azimuthal  
Central Meridian: -90.00000  
Latitude of Origin: 10.00000  
Source: Ministries of Health of the countries  
Consolidated by PAHO/WHO  
Created by PAHO/WHO

\* EW 15 = epidemiological week from April 11 to April 17, 2010. Includes the latest information reported by each country this week.

**Map 3. Pandemic (H1N1) 2009, Intensity of Acute Respiratory Disease in the Population. Americas Region. EW 15, 2010\*.**



**Intensity of acute respiratory disease**

- No information available
- Low or moderate
- High
- Very high

Map Production: PAHO/MSD/CDC  
April 23, 2010  
Cartographic projection:  
Lambert Equal Area Azimuthal  
Central Meridian: -90.00000  
Latitude of Origin: 10.00000  
Source: Ministries of Health of the countries  
Consolidated by PAHO/WHO  
Created by PAHO/WHO

\* EW 15 = epidemiological week from April 11 to April 17, 2010. Includes the latest information reported by each country this week.

**Map 4. Pandemic (H1N1) 2009, Impact of Acute Respiratory Disease on Health-Care Services. Americas Region. EW 15, 2010\*.**



**Impact on health-care services**

- No information available
- Low
- Moderate
- Severe

Map Production: PAHO/MSD/CDC  
April 23, 2010  
Cartographic projection:  
Lambert Equal Area Azimuthal  
Central Meridian: -90.00000  
Latitude of Origin: 10.00000  
Source: Ministries of Health of the countries  
Consolidated by PAHO/WHO  
Created by PAHO/WHO

\* EW 15 = epidemiological week from April 11 to April 17, 2010. Includes the latest information reported by each country this week.

## II- Description of hospitalizations and deaths among confirmed cases of pandemic (H1N1) 2009

A table containing the number of deaths reported to PAHO is included in Annex 2.

The ratio of males to females among hospitalized cases was approximately one, except in Brazil, where 64% of hospitalized cases were women (Table 1). Hospitalizations were mainly in young adults. Underlying comorbidities were present in 56 - 82% of hospitalized cases.

**Table 1: Description of hospitalizations and severe cases—selected countries**

	Brazil	Canada	Costa Rica
<b>Reporting period</b>	January 3, 2010-April 03, 2010	April 11, 2009– April 17, 2010	April 24, 2009 – April 10, 2010
<b>Type of cases reported</b>	Hospitalized, confirmed	Hospitalized, confirmed	Hospitalized, confirmed
<b>Number of cases</b>	361	8,227	487
<b>Percentage of women</b>	64	50	56.5
<b>Age</b>	Median 21 years	Median 29 years	Median 42.8 years
<b>Percent with underlying co-morbidities</b>	58	56.1	81.6
<b>Co-morbidities most frequently reported (%)</b>		-	
<b>Percent pregnant among women of child-bearing age</b>	21*	20.4**	6.5***

\* Percent of pregnant women among women 15 to 49 years of age

\*\* Percent of pregnant women among women 15 to 44 years of age

\*\*\* The denominator used was all deaths as information was not provided about women of child-bearing age

Overall, approximately half of deceased cases were among women (Table 2). The percentage of cases with underlying co-morbidities varied from 61 to 83%.

**Table 2: Description of deaths among confirmed cases of pandemic (H1N1) 2009 in selected countries**

	Canada	Mexico
<b>Reporting period</b>	April 11, 2009–April 17, 2010	2009 – April 19, 2010
<b>Number of confirmed deaths</b>	423	1,198
<b>Percentage of women</b>	49.6	47.9
<b>Age</b>	Median 53 years	Highest percentage (70.2%) in 20–54 year age group
<b>Percent with underlying co-morbidities</b>	83	60.9
<b>Co-morbidities most frequently reported (%)</b>	-	-
<b>Percent pregnant among women of child-bearing age</b>	8*	-

\* Percent of pregnant women among women 15 to 44 years of age

### III- Viral circulation

For the purpose of the analysis presented in Table 3 and Table 4, only countries which reported data on influenza A subtypes were considered. We excluded from the calculations of the percentages, results from samples of influenza A that were not subtyped or were unsubtypeable.

Currently, in Canada and the United States, pandemic (H1N1) 2009 continues to predominate among circulating subtyped influenza A viruses in the Region (Table 3). Cumulatively, in Canada, CAREC<sup>†</sup> and Colombia, pandemic (H1N1) 2009 continues to predominate as well (Table 4).

In Canada, during EW 15, 2010 the proportion of tests that were positive for influenza was 0.07%, respiratory syncytial virus 12.2%, parainfluenza virus 3.8%, and adenovirus 1.9%.

In Colombia from EW 01 to EW 12, 2010, 7% of samples tested positive for respiratory viruses. Of these positive samples, 80% were positive for influenza, 10.7% for respiratory syncytial virus, 5.6% for parainfluenza virus, and 2.8% for adenovirus.

In Guatemala, during EW 15, 2010, 13.5% of all samples tested were positive for pandemic virus, 3% for parainfluenza , and 3% for respiratory syncytial virus.

In Panama from EW 01 to EW 14, 2010, 14.3% of samples tested positive for respiratory viruses. Of these positive samples, 35.9% were positive for influenza (only one sample was positive for pandemic virus), 30.8% for parainfluenza virus, 28.2% for respiratory syncytial virus, and 5.1% for adenovirus..

**Table 3: Relative circulation of pandemic (H1N1) 2009 for selected countries—last EW available**

Country	Epidemiologic Week	Percentage of pandemic (H1N1) 2009 <sup>#</sup>
Canada	15	100
USA	15	100
<b>MEDIAN percentage pandemic (H1N1) 2009</b>		<b>100*</b>

<sup>#</sup>Percentage of pandemic (H1N1) 2009 virus = Pandemic (H1N1) 2009 virus / All subtyped influenza A viruses

\* Three samples were positive for pandemic virus, one sample in Canada and two in USA.

**Table 4: Cumulative relative circulation of pandemic (H1N1) 2009 for selected countries**

Country	Time Period	Percentage of pandemic (H1N1) 2009 <sup>#</sup>
Canada	August 30, 2009– April 17, 2010	99.8
CAREC <sup>†</sup>	EW 1, 2010-EW 14, 2010	100
Colombia	EW 1,2010 – EW 12, 2010	99.2
<b>MEDIAN percentage pandemic (H1N1) 2009</b>		<b>99.7</b>

<sup>#</sup>Percentage of pandemic (H1N1) 2009 virus = Pandemic (H1N1) 2009 virus / All subtyped influenza A viruses

<sup>†</sup> CAREC countries and territories include Anguilla, Antigua, Barbados, Belize, Bermuda, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos Islands

**Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 15, 2010**

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados	Widespread	Unchanged	Low or moderate	Low	15
Belize					
Bolivia					
Brazil	Regional	Increasing	Low or moderate	Low	15
Canada	Localized	Unchanged	Low or moderate	NIA	15
Chile					
Colombia					
Costa Rica	Widespread	Decreasing	Low or moderate	Low	14
Cuba	Regional	Unchanged	Low or moderate	Low	15
Dominica	No activity	Unchanged	Low or moderate	Low	15
Dominican Republic	No activity	Unchanged	Low or moderate	Low	15
Ecuador					
El Salvador					
Grenada					
Guatemala	Regional	Increasing	Low or moderate	Low	15
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Increasing	Low or moderate	Low	14
Mexico	Regional	Decreasing	Low or moderate	Low	15
Nicaragua	Regional	Unchanged	Low or moderate	Low	15
Panama	No activity	Increasing	Low or moderate	Low	14
Paraguay					
Peru					
Saint Kitts and Nevis					
Saint Lucia	No activity	Decreasing	Low or moderate	Low	15
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Decreasing	Low or moderate	Low	15
Uruguay					
Venezuela	Localized	Increasing	Low or moderate	Low	15

NIA: No information Available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.  
As of 23 April, 2010, (17 h GMT; 12 h EST).**

*Source:* Ministries of Health of the countries in the Region.

Country	Cumulative number of deaths	New deaths reported. (since April 16, 2010, 12 h EST)
<b>Southern Cone</b>		
Argentina	626	
Brazil	2,101	
Chile	153	
Paraguay	47	
Uruguay	20	
<b>Andean Area</b>		
Bolivia	59	0
Colombia	233	
Ecuador	129	
Peru	223	
Venezuela	135	1
<b>Caribbean Countries</b>		
Antigua & Barbuda	0	0
Bahamas	1	0
Barbados	3	0
Cuba	63	0
Dominica	0	0
Dominican Republic	23	0
Grenada	0	0
Guyana	0	0
Haiti	0	
Jamaica	7	0
Saint Kitts & Nevis	2	0
Saint Lucia	1	0
Saint Vincent & Grenadines	0	0
Suriname	2	0
Trinidad & Tobago	5	0
<b>Central America</b>		
Belize	0	0
Costa Rica	57	1
El Salvador	33	
Guatemala	21	2
Honduras	18	
Nicaragua	11	0
Panama	12	
<b>North America</b>		
Canada	428	0
Mexico	1,185	3
United States*	2,718	0
<b>TOTAL</b>	<b>8,316</b>	<b>7</b>

\*These deaths include both laboratory-confirmed pandemic (H1N1) 2009 and other influenza associated deaths.

As of **23 April, 2010**, a total of **8,316 deaths** have been reported among the confirmed cases in **28 countries** of the Region.

In addition to the figures displayed in **Annex 2**, the following overseas territories have confirmed deaths of pandemic (H1N1) 2009: United Kingdom Overseas Territories; Cayman Islands (1 death); French Overseas Communities: Guadeloupe (5 deaths), French Guiana (1 death) and Martinique (1 death).

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**References:**

- 1 .- Fluwatch. Public Health Agency of Canada. <http://www.phac-aspc.gc.ca/fluwatch/index-eng.php>
- 2.- Fluview. Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>.
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- 4 .- CAREC Surveillance Report-Influenza. Volume 2, Number 7. April 16, 2010. [www.carec.org](http://www.carec.org)
- 5 .- Informe de Vigilancia de Infecciones Respiratorias Agudas y neumonías en menores de 5 años en el Perú 2010 SE 14. Revisado el 22 de abril, 2010.  
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