



Pandemic (H1N1) 2009

(March 15, 2010 - 17 h GMT; 12 h EST)

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, in EW 09 the national influenza-like illness (ILI) consultation rate was similar to the previous week and was still below the historical average. No new hospitalized cases and deaths were reported this week. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In the United States, the proportion of outpatient consultations for ILI has remained below the national baseline for nine consecutive weeks. Three of ten sub-national surveillance regions reported the proportion of outpatient visits for ILI to be above their region specific baseline. Laboratory-confirmed influenza hospitalization rates remained stable, but high, especially in children 0–4 years of age. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. A total of 61 oseltamivir-resistant isolates have been detected since April 2009.

#### Caribbean

In countries providing these data SARI hospitalization incidence decreased from EW 7 to EW 8, and remained much lower than the peak levels seen in EW 40 and 41. From EW 1 to 8, two hospitalizations associated with the pandemic virus and no deaths were reported.

Dominica reported no flu activity while Jamaica and Bahamas reported widespread and regional influenza activity respectively. Bahamas and Jamaica reported increasing trends in acute respiratory disease while

Dominica reported an unchanged trend. Jamaica reported an increasing trend for five consecutive weeks. Low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services were reported by these countries.

## **Weekly Summary**

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- In the Caribbean, Jamaica and Bahamas reported an increasing trend in acute respiratory disease.
- In Central American, Panama and Nicaragua reported increasing trends in acute respiratory disease.
- In South America, Brazil reported an increasing trend in acute respiratory disease.
- In North America and Colombia, a median of 100% of subtyped influenza A viruses were pandemic (H1N1) 2009.
- 46 new confirmed deaths in 4 countries were reported; in total there have been 7,622 cumulative confirmed deaths.

<sup>&</sup>lt;sup>1</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

Guatemala and Panama reported no influenza activity, Nicaragua reported regional and Costa Rica reported widespread activity. Costa Rica and Guatemala reported decreasing trends in acute respiratory diseases while Panama and Nicaragua reported an increasing trend. These countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on the health care services.

Honduras continues to report several outbreaks of respiratory disease in schools in Tegucigalpa and San Pedro Sula. In both cities several schools have been closed in the last weeks.

## South America<sup>2</sup>

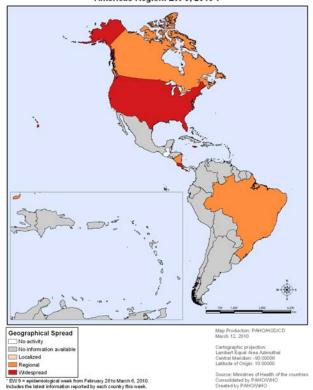
### **Southern Cone**

Influenza activity was reported as regional in Brazil. This country reported an increasing trend for two consecutive weeks. Low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on the health care services was reported by this country.

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<sup>&</sup>lt;sup>2</sup> No information on qualitative indicators was available for Andean Region countries this week.

Map 1. Pandemic (H1N1) 2009, Geographical Spread by Country. Americas Region. EW 9, 2010\*.



Map 3. Pandemic (H1N1) 2009, Intensity of Acute Respiratory Disease in the Population. Americas Region. EW 9, 2010\*.



Map 2. Pandemic (H1N1) 2009, Trend of respiratory disease activity compared to the previous week. Americas Region. EW 9, 2010\*.



Map 4. Pandemic (H1N1) 2009, Impact of Acute Respiratory Disease on Health-Care Services. Americas Region. EW 9, 2010\*.



# 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 (Table 1). Hospitalizations were highest in children and young adults. Underlying comorbidities were present in 55% - 65% of hospitalized cases.

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

	Canada	Costa Rica	
Reporting period	April 12, 2009–March 6, 2010	Until EW 7	
Type of cases reported	Hospitalized, confirmed	Hospitalized, confirmed	
Number of cases	8,221	460	
Percentage of women	50	55.9%	
Age	Median 29 years	Mean 42 years	
Percent with underlying co- morbidities	55.3	64.6%	
Co-morbidities most frequently reported (%)	Chronic respiratory disease (36.7%), diabetes (15.2%), immunosuppression (15.2%)	Asthma (31.2%), diabetes (12.7%), obesity (8.1%), chronic respiratory disease (7.4%)	
Percent pregnant among women of child-bearing age	20.2* 8.1%**		

<sup>\*</sup> Percent of pregnant women among women 15 to 44 years of age

<sup>\*\*</sup> The denominator used was all hospitalized cases 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 60 to 82%.

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

Countries		
	Canada	Mexico
Reporting period	April 12, 2009–March 6, 2010	Until March 8, 2010
Number of confirmed deaths	424	1,103
Percentage of women	49.8	48.3
Age	Median 53 years	Highest percentage (69.4%) in 20–54 year age group
Percent with underlying co-morbidities	81.9	60.4
Co-morbidities most frequently reported (%)	Chronic respiratory disease (51.3%), chronic heart disease (35.5%), immunoppression (34.7%)	-
Percent pregnant among women of child- bearing age	8*	-

<sup>\*</sup> Percent of pregnant women among women 15 to 44 years of age

### **III- Viral circulation**

For the purpose of this analysis, 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 North America and Colombia pandemic (H1N1) 2009 continues to predominate among circulating subtyped influenza A viruses in the Region (Table 3).

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

Country	Epidemiologic Week	Percentage of pandemic (H1N1) 2009*
Canada	09	100*
Colombia	06	100
USA	09	100
MEDIAN percentage pandemic (H1N1) 2009		100

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

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

Country	Time Period	Percentage of pandemic (H1N1) 2009#	
Canada	August 30, 2009- March 6, 2010	99.8	
Colombia	EW 21, 2009-EW 6, 2010	80.6	
CAREC <sup>3</sup>	EW 1, 2010-EW 8, 2010	100	
MEDIAN percentage pandemic (H1N1) 2009		93.5	

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

<sup>\*</sup> Only one sample was positive.

<sup>&</sup>lt;sup>3</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 09, 2010

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas	Regional	Increasing	Low or moderate	Low	8
Barbados					
Belize					
Bolivia					
Brazil	Regional	Increasing	Low or moderate	Low	9
Canada	Regional	Unchanged	Low or moderate	NIA	9
Chile					
Colombia					
Costa Rica	Widespread	Decreasing	Low or moderate	Low	8
Cuba					
Dominica	No activity	Unchanged	Low or moderate	Low	9
Dominican Republic					
Ecuador					
El Salvador					
Grenada					
Guatemala	No activity	Decreasing	Low or moderate	Low	9
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Increasing	Low or moderate	Low	8
Mexico					
Nicaragua	Regional	Increasing	Low or moderate	Low	8
Panama	No activity	Increasing	Low or moderate	Low	9
Paraguay					
Peru					
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Unchanged	Low or moderate	Low	9
Uruguay					
Venezuela					

NIA: No information Available

Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas. Updated as of March 12, 2010 (17 h GMT; 12 h EST).

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

Country	Cumulative number of deaths	New deaths (since March 5, 2010, 12 h EST)	
Southern Cone			
Argentina	626		
Brazil	1,632		
Chile	155		
Paraguay	47		
Uruguay	20		
Andean Area			
Bolivia	59	0	
Colombia	205		
Ecuador	120		
Peru	217		
Venezuela	133		
Caribbean Countries			
Antigua & Barbuda	0	0	
Bahamas	11	0	
Barbados	3	0	
Cuba	54		
Dominica	0	0	
Dominican Republic	23		
Grenada	0	0	
Guyana	0	0	
Haiti	0	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	
Central America			
Belize	0	0	
Costa Rica	52	2	
El Salvador	33		
Guatemala	18	0	
Honduras	17	1	
Nicaragua	11		
Panama	12	0	
North America			
Canada	429	0	
Mexico	1,103	10	
United States	2,635	33	
TOTAL	7,622	46	

<sup>\*</sup> This death occurred in January 2010.

As of 12 March, 2010, a total of 7,622 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).