



Pandemic (H1N1) 2009

(February 16, 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 05 the national influenza-like illness (ILI) consultation rate decreased slightly as compared to the previous week but remained below the historical average. The overall number of hospitalizations, ICU admissions, and deaths associated with the pandemic virus remained low, as compared to the levels seen in October and November 2009. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In Mexico, from EW 03 to EW 04 there was a 4% increase in the number ILI and severe acute respiratory illness (SARI) cases.

In the United States, the proportion of outpatient consultations for ILI has remained below the national baseline for five 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 three influenza-associated pediatric deaths were reported, of which two were associated with the pandemic virus. A total of 60 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

In countries providing these data¹ SARI hospitalization incidence decreased from EW 3 to EW 4, but remained much lower than the peak levels seen in EWs 40/41.

Weekly Summary

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas
- In the Caribbean, Jamaica continued to report an increasing trend while Dominica reported an unchanged trend in acute respiratory disease
- In Central America, Costa Rica and Guatemala reported decreasing trends in acute respiratory disease
- South American countries reported decreasing or unchanged trends of acute respiratory disease except Paraguay which reported increasing trend
- In North America, a median of 100% of subtyped influenza A viruses were pandemic (H1N1) 2009
- 59 new confirmed deaths in 4 countries were reported; in total there have been 7,433 cumulative confirmed deaths

Dominica reported no influenza activity and unchanged trends in acute respiratory disease, while Jamaica reported widespread influenza activity and continued increasing trends in acute respiratory disease. Both countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

¹ 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 and Panama reported widespread influenza activity, while Nicaragua reported regional activity, and Guatemala and El Salvador reported no influenza activity. All reported decreasing or unchanged trends in acute respiratory disease and low or moderate impact of acute respiratory disease on health care services.

South America

Andean

Ecuador reported widespread influenza activity, unchanged trends in acute respiratory disease, low/moderate intensity of acute respiratory disease, and low impact of acute respiratory disease on health care services.

Southern Cone

Influenza activity was reported as widespread in Argentina, regional in Brazil and localized in Paraguay. The trends of acute respiratory disease were reported as unchanged in Argentina, decreasing in Brazil and increasing in Paraguay. Paraguay reported high intensity of acute respiratory disease, while Argentina and Brazil reported low/moderate intensity.

In Paraguay (EW 04) the number of consultations for ILI increased (17.2%), while consultations for SARI decreased (17.8%), as compared to the previous week.

Argentina reported a low incidence of ILI (0.2 per 100,000 population); this incidence has remained under the epidemic threshold for fifteen consecutive weeks.

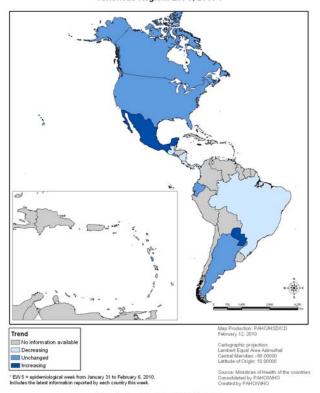
Map 1. Pandemic (H1N1) 2009, Geographical Spread by Country. Americas Region. EW 5, 2010*.



Map 3. Pandemic (H1N1) 2009, Intensity of Acute Respiratory Disease in the Population. Americas Region. EW 5, 2010*.



Map 2. Pandemic (H1N1) 2009, Trend of respiratory disease activity compared to the previous week. Americas Region. EW 5, 2010*.



Map 4. Pandemic (H1N1) 2009, Impact of Acute Respiratory Disease on Health-Care Services. Americas Region. EW 5, 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 approximately 53-79% of hospitalized cases.

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

	Argentina	Canada	CAREC ²	Costa Rica	Paraguay
Reporting period	Until EW 4	April 12, 2009–February 6, 2010	April 16, 2009– February 3, 2010	Until January 30, 2010	Until EW 4, 2010
Type of cases reported	Hospitalized	Hospitalized, confirmed	Hospitalized, confirmed	Hospitalized, confirmed	Severe, confirmed
Number of cases	14,130	8,162	337	429	170
Percentage of women	-	50	47.1	55.8	55
Age	Most affected age group: 0–4 years (incidence 76.4/ 100,000 population)	Median 29 years	Most affected age groups: 0–14 and 20–49	Mean 37.6 years	Median 23 years
Percent with underlying co- morbidities	-	52.6	-	78.5	-
Co-morbidities most frequently reported (%)	-		Obesity (7.7)	Asthma (22.6%), Diabetes (12.9%), Obesity (11.9)	-
Percent pregnant among women of child-bearing age	-	20.3*	10.8**	-	-

^{*} Percent of pregnant women among women 15 to 44 years of age

^{**} Percent of pregnant women among all women

² 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

Overall, approximately half of deceased cases were among women (Table 2). The percentage of cases with underlying co-morbidities varied from 60 to 77%.

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

countries					
	Argentina	Canada	CAREC ³	Mexico	Paraguay
Reporting period	Until EW 4	April 12, 2009– February 6, 2010	April 16, 2009– February 3, 2010	Until February 10, 2010	Until EW 4, 2010
Number of confirmed deaths	626	423	21	1,035	47
Percentage of women	No gender differences	49.6	-	48.8	44
Age	Highest rate in 50–59 year age group	Median 53 years	-	Highest percentage (69.7%) in 20–54 year age group	Median 37 years
Percent with underlying co-morbidities	-	77.4	57.1	60.2	74
Co-morbidities most frequently reported (%)	-	-	Obesity (47.6)	-	Chronic Cardiopathy (20%), metabolic (17%), inmunologic (12%), neurologic (6%)
Percent pregnant among women of child-bearing age	-	8*	14.3**	-	12**

³ 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

^{*} 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

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, 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	05	100
USA	05	100
MEDIAN percentage pand	demic (H1N1) 2009	100

^{*}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	Epidemiologic Week	Percentage of pandemic (H1N1) 2009*
Canada	August 30, 2009– February 6, 2010	99.8
CAREC ⁴	January 4, 2009–February 3, 2010	95.6
MEDIAN percentag	e pandemic (H1N1) 2009	97.7

^{*}Percentage of pandemic (H1N1) 2009 virus = Pandemic (H1N1) 2009 virus / All subtyped influenza A viruses

⁴ 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 05, 2010

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina	Widespread	Unchanged	Low or moderate	Low	4
Bahamas					
Barbados					
Belize					
Bolivia					
Brazil	Regional	Decreasing	Low or moderate	Low	5
Canada	Regional	Unchanged	Low or moderate		5
Chile					
Colombia					
Costa Rica	Widespread	Decreasing	Low or moderate	Low	5
Cuba					
Dominica	No activity	Unchanged	Low or moderate	Low	5
Dominican Republic					
Ecuador	Widespread	Unchanged	Low or moderate	Low	5
El Salvador	No activity	Unchanged	Low or moderate	Low	5
Grenada					
Guatemala	No activity	Decreasing	High	Moderate	5
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Increasing	Low or moderate	Low	5
Mexico	Widespread	Increasing	Low or moderate	Low	5
Nicaragua	Regional	Decreasing	Low or moderate	Low	5
Panama	Widespread	Decreasing	Low or moderate	Low	4
Paraguay	Localized	Increasing	High	NIA	4
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	5
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 February 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 Jan 29, 2010, 12 h EST)	
Southern Cone			
Argentina	626	9	
Brazil	1,632		
Chile	155		
Paraguay	47	0	
Uruguay	20		
Andean Area			
Bolivia	59	0	
Colombia	205	2	
Ecuador	120	0	
Peru	212		
Venezuela	133		
Caribbean Countries			
Antigua & Barbuda	0	0	
Bahamas	1	0	
Barbados	3	0	
Cuba	53	0	
Dominica	0	0	
Dominican Republic	23		
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	
Central America			
Belize	0		
Costa Rica	47	0	
El Salvador	33		
Guatemala	18		
Honduras	16		
Nicaragua	11		
Panama	11	0	
North America			
Canada	426	0	
Mexico	1035	9	
United States	2,530	39	
TOTAL	7,433	59	

As of 12 February, 2010, a total of 7,433 deaths have been reported among the confirmed cases in 28 countries of the Region.

In addition to the figures displayed in Annex 1, 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).