Regional Update

Pandemic (H1N1) 2009

(January 5, 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 50, the national influenza-like illness (ILI) consultation rate remained below the historical average for the second consecutive week. The overall number of hospitalizations, ICU admissions, and deaths associated with the pandemic virus decreased approximately 50% as compared to the prior week (EW 49). A total of nine oseltamivir-resistant isolates have been detected since April 2009.

In Mexico, from EW 49 to EW 50, there was a 53% decrease in the number ILI and severe acute respiratory illness (SARI) cases, and the activity has now been decreasing for eight consecutive weeks. The intensity of acute respiratory disease, however, was high.

In the United States, the proportion of outpatient consultations for ILI decreased in EW 50 but increased in EW 51, remaining above the national baseline. In EW 50, three of ten and in EW 51, five 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 dropped below (EW 50) but then increased above (EW 51) the epidemic threshold. A total of nine influenza-associated pediatric deaths were reported in EW 50 and four in EW 51; 10 of these were associated with the pandemic virus. A total of 50 oseltamivir-resistant isolates have been detected since April 2009.

Weekly Summary

- In North America, acute respiratory disease activity continued to decrease and is lower than expected in some areas
- In the Caribbean, all countries reported unchanged and decreasing trends in acute respiratory disease
- Central America reported decreasing or unchanged trends in acute respiratory disease
- South American countries reported mostly decreasing trends of acute respiratory disease
- A median of 99.6% of subtyped influenza A viruses in North America were pandemic (H1N1) 2009
- Since December 18th: 203 new confirmed deaths in 8 countries were reported; in total there have been 6,880 cumulative confirmed deaths

Caribbean

In EW 50 and 51, these countries reported decreasing or unchanged trends in acute respiratory disease, low/moderate intensity of acute respiratory disease and low or moderate impact of acute respiratory disease on health care services.

In countries providing these data[1], for the three consecutive weeks (EW 47–49), SARI hospitalization incidence decreased.

[1] Participating CAREC member countries, which include, Barbados, Bahamas, Jamaica, St Vincent and the Grenadines, and Trinidad and Tobago, were assessed together

Central America

In EW 50 and 51, these countries reported decreasing or unchanged trends in acute respiratory disease, low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

Guatemala (EW 50) reported a decrease of 15% and 17.6% of acute respiratory disease cases and pneumonia cases, respectively, as compared to the prior week.

South America

Andean

Most of these countries reported widespread influenza activity in EW 50 and 51. Acute respiratory disease trends were reported as decreasing, except in Peru, which reported an increasing trend in EW 50, but a decreasing trend in EW 51. The intensity of acute respiratory disease and the impact of acute respiratory disease on health-care services were reported as low or moderate for these countries.

In Peru, nationally, the peak of SARI was in EW 28, and since EW 34 there has been a consistently decreasing trend.

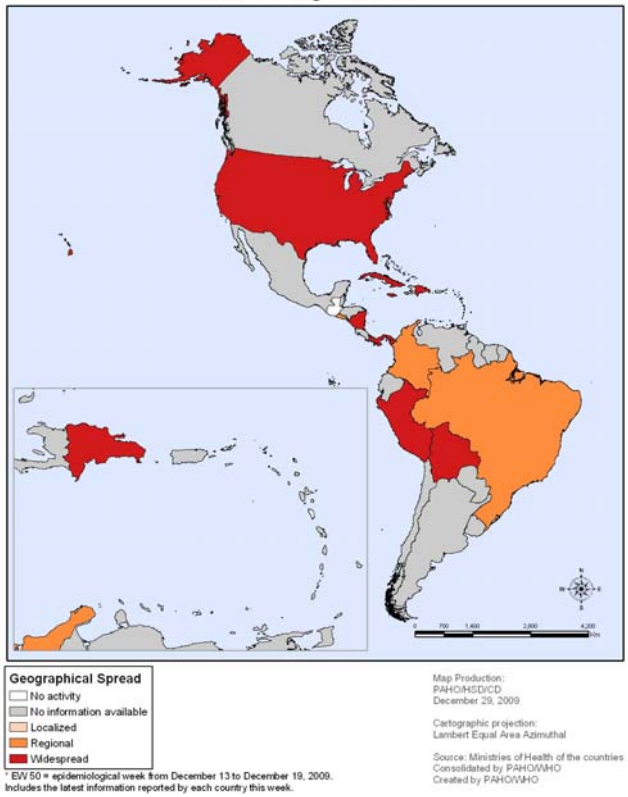
Southern Cone

Influenza activity was reported as widespread in Argentina (EW 48) and regional in Brazil (EW 50, 51). These countries reported continued decreasing trends of acute respiratory disease, low/moderate intensity of acute respiratory disease, and low or moderate impact of acute respiratory disease on health-care services.

In EW 48, Argentina reported decreasing ILI activity in 15 of 20 regions (information was not available for three regions). The incidence of ILI continued to be low (7 per 100,000 habitants) and has been below the epidemic threshold since EW 40.

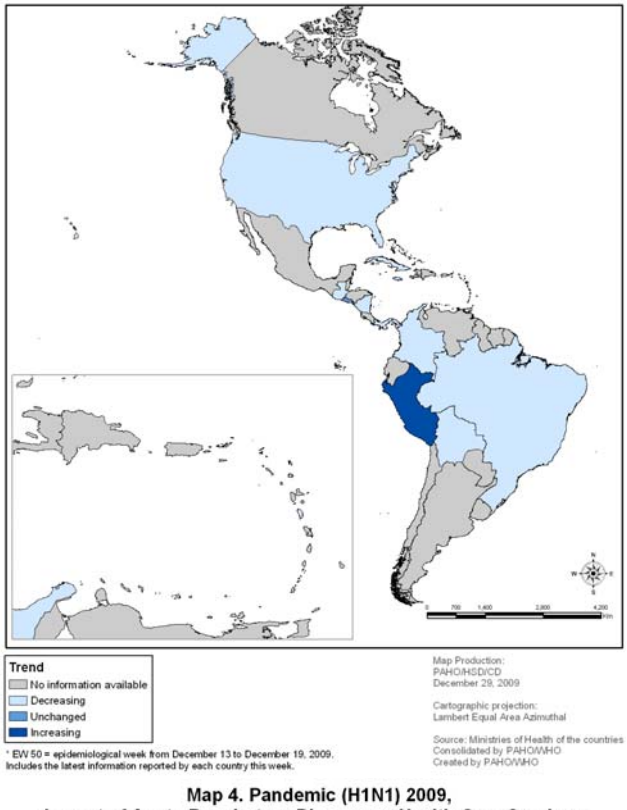
Qualitative Indicator Maps- EW 50 and 51

Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 50*.



* EW 50 = epidemiological week from December 13 to December 19, 2009.
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 50*.

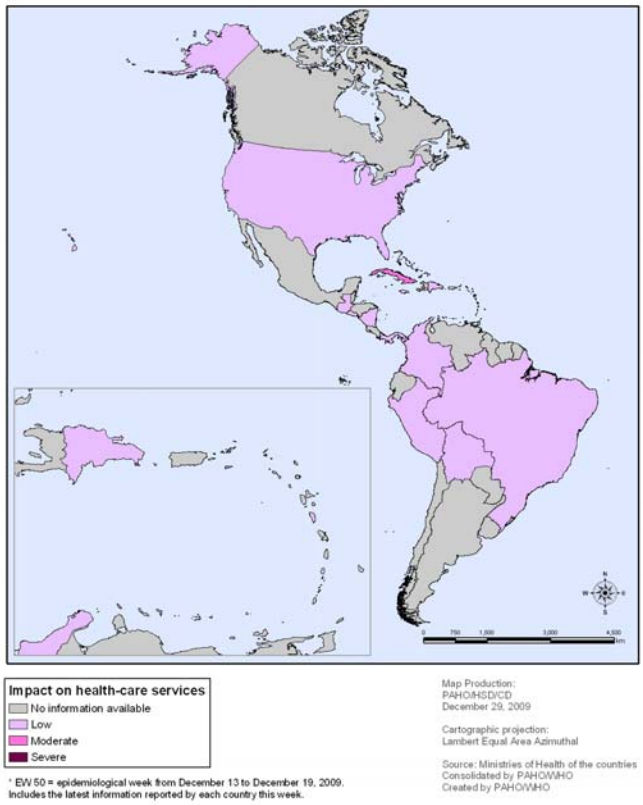


* EW 50 = epidemiological week from December 13 to December 19, 2009.
Includes the latest information reported by each country this week.

Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 50*.

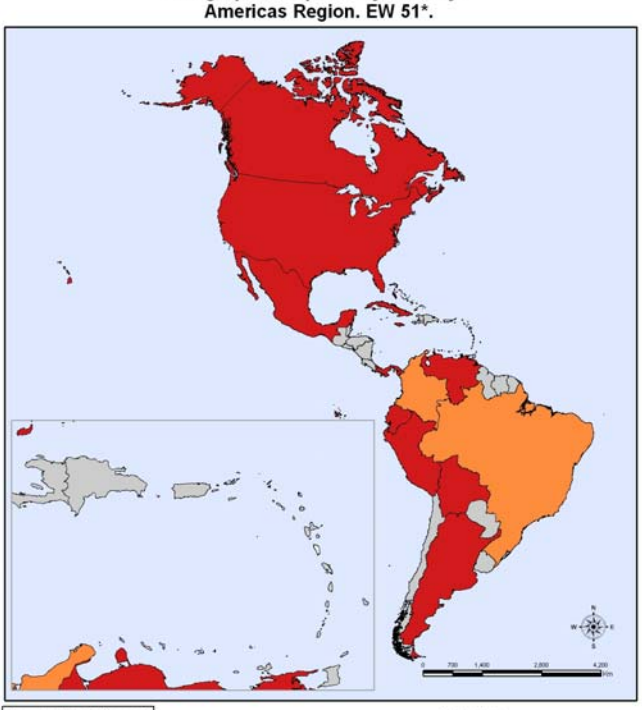
* EW 50 = epidemiological week from December 13 to December 19, 2009.
Includes the latest information reported by each country this week.

Map 4. Pandemic (H1N1) 2009,
Impact of Acute Respiratory Disease on Health-Care Services.
Americas Region. EW 50*.



* EW 50 = epidemiological week from December 13 to December 19, 2009.
Includes the latest information reported by each country this week.

Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 51*.



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

* EW 51 = epidemiological week from December 20 to December 26, 2009.
Includes the latest information reported by each country this week.

Map Production:
PAHO/HSD/CD
January 4, 2010

Cartographic projection:
Lambert Equal Area Azimuthal

Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

Map 2. Pandemic (H1N1) 2009,
Trend of respiratory disease activity compared to the previous week.
Americas Region. EW 51*.

Trend
- No information available
- Decreasing
- Unchanged
- Increasing

* EW 51 = epidemiological week from December 20 to December 26, 2009.
Includes the latest information reported by each country this week.

Map Production:
PAHO/HSD/CD
January 4, 2010

Cartographic projection:
Lambert Equal Area Azimuthal

Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 51*.

Intensity of acute respiratory disease
- No information available
- Low or moderate
- High
- Very high

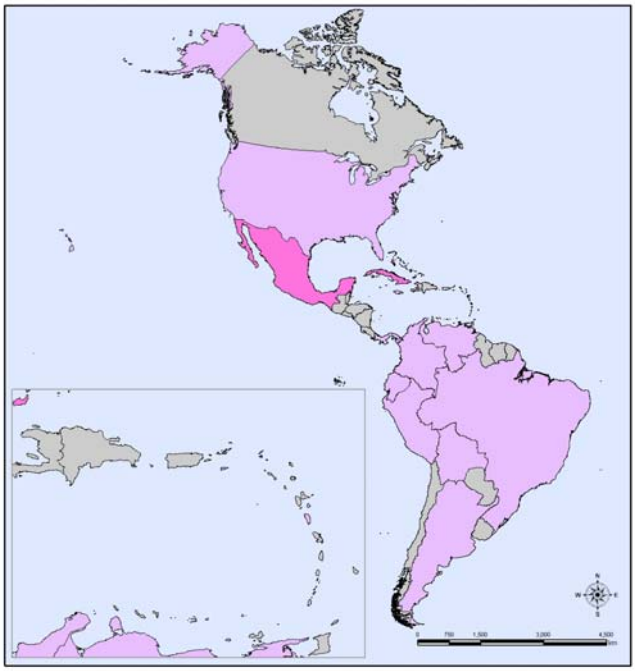
* EW 51 = epidemiological week from December 20 to December 26, 2009.
Includes the latest information reported by each country this week.

Map Production:
PAHO/HSD/CD
January 4, 2010

Cartographic projection:
Lambert Equal Area Azimuthal

Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

Map 4. Pandemic (H1N1) 2009,
Impact of Acute Respiratory Disease on Health-Care Services.
Americas Region. EW 51*.



Impact on health-care services
- No information available
- Low
- Moderate
- Severe

* EW 51 = epidemiological week from December 20 to December 26, 2009.
Includes the latest information reported by each country this week.

Map Production:
PAHO/HSD/CD
January 4, 2010

Cartographic projection:
Lambert Equal Area Azimuthal

Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

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 50% of hospitalized cases.

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

	Countries		
	Argentina	**Canada**	**CAREC[2]**
Reporting period	Until EW 49	April 12–December 19, 2009	April 16 – December 16, 2009
Type of cases reported	Hospitalized	Hospitalized, confirmed	Hospitalized
Number of cases	13,924	7,564	325
Percentage of women	-	49.8	47.3
Age	Most affected age group: 0-4 years (incidence 75.7/ 100,000 hab)	Median 28 years	Most affected age groups: 0–14 and 20–49
Percent with underlying co-morbidities	–	50.7	–
Co-morbidities most frequently reported (%)	–		–
Percent pregnant among women of child-bearing age	–	21.1*	9.6**

* Percent of pregnant women among women 15 to 44 years of age
** The denominator used was among all women as information was not provided about women of child-bearing age

[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 58% to 77%.

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

	Countries					
	Argentina	**Canada**	**CAREC[3]**	**Colombia**	**Mexico**	**Peru**
Reporting period	Until EW 48	April 12 – December 19, 2009	April 16 – December 16, 2009	Until EW 51	Until December 23, 2009	Until December 28, 2009
Number of confirmed deaths	617	379	19	196	823	2
Percentage of women	"No gender difference"	51.5	-	-	49.3	52
Age	Highest rate in 50–59 year age group	Median 53 years	-	Highest percentage: 78.1% in 15–64 year age group	Highest percentage (52.2%) in 25-50 year age group	Median 39 years
Percent with underlying co-morbidities	-	72.5	57.9	-	-	76.9
Co-morbidities most frequently reported (%)	-	-	-	-	Metabolic (37.1%), cardiovascular (12.9%), smoking (12.8%), respiratory (4.5%)	Metabolic (23.1%), cardiovascular (19.7%), respiratory (13%)
Percent pregnant among women of child-bearing age	-	8.5*	15.8**	-	-	-

* 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

[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

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 (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	50	99.1
USA	51	100
MEDIAN percentage pandemic (H1N1) 2009		99.6

#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 – December 19, 2009	99.8
CAREC[4]	January 4 – December 16, 2009	95.5
MEDIAN percentage 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 50

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados					
Belize					
Bolivia	Widespread	Decreasing	Low or moderate	Low	50
Brazil	Regional	Decreasing	Low or moderate	Low	50
Canada					
Chile					
Colombia	Regional	Decreasing	Low or moderate	Low	50
Costa Rica					
Cuba	Widespread	Decreasing	Low or moderate	Moderate	50
Dominica	No activity	Decreasing	Low or moderate	Low	50
Dominican Republic	Widespread		Low or moderate	Low	50
Ecuador					
El Salvador	Regional	Unchanged	Low or moderate	Low	50
Grenada					
Guatemala	No activity	Decreasing	Low or moderate	Low	49
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Decreasing	Low or moderate	Low	49
Mexico					
Nicaragua	Widespread	Decreasing	Low or moderate	Low	49
Panama	Widespread	Decreasing	Low or moderate	Low	49
Paraguay					
Peru	Widespread	Increasing	Low or moderate	Low	50
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Decreasing	Low or moderate	Low	50
Uruguay					
Venezuela					

NIA = No information available

Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 51

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina	Widespread	Decreasing	Low or moderate	Low	48
Bahamas	Widespread	Decreasing	Low or moderate	Moderate	49
Barbados					
Belize					
Bolivia	Widespread	Decreasing	Low or moderate	Low	51
Brazil	Regional	Decreasing	Low or moderate	Low	51
Canada	Widespread	Decreasing	Low or moderate		50
Chile					
Colombia	Regional	Decreasing	Low or moderate	Low	51
Costa Rica					
Cuba	Widespread	Decreasing	Low or moderate	Moderate	51
Dominica	No activity	Unchanged	Low or moderate	Low	51
Dominican Republic					
Ecuador	Widespread	Decreasing	Low or moderate	Low	51
El Salvador					
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Decreasing	Low or moderate	Low	51
Mexico	Widespread	Decreasing	High	Moderate	51
Nicaragua					
Panama	Widespread	Decreasing	Low or moderate	Low	51
Paraguay					
Peru	Widespread	Decreasing	Low or moderate	Low	51
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Decreasing	Low or moderate	Low	51
Uruguay					
Venezuela	Widespread	Decreasing	Low or moderate	Low	51

NIA = No information available

Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas. Updated as of January 1, 2010 (17 h GMT; 12 h EST).

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

Country	Cumulative number of deaths	New deaths (Dec 18, 2009, 12 h EST through Dec 25, 2009, 12 h EST)	New deaths (since Dec 25, 2009, 12 h EST)
Southern Cone			
Argentina	617		1
Brazil	1,632		
Chile	150		
Paraguay	46		0
Uruguay	20		
Andean Area			
Bolivia	59		1
Colombia	196		6
Ecuador	96		0
Peru	208	3	0
Venezuela	116		0
Caribbean Countries			
Antigua & Barbuda	0	0	
Bahamas	1	0	
Barbados	3	0	0
Cuba	49	2	2
Dominica	0	0	
Dominican Republic	23	0	
Grenada	0	0	
Guyana	0	0	
Haiti	0	0	
Jamaica	6	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	38		
El Salvador	31	0	0
Guatemala	18		
Honduras	16	0	0
Nicaragua	11		
Panama	11		0
North America			
Canada	410	4	9
Mexico	823	43	
United States	2,290	63	67
TOTAL	**6,880**	**124**	**79**

As of **1 January, 2010**, a total of **6,880 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).