



Regional Update

Pandemic (H1N1) 2009

(April 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 Canada¹, in EW 12 the national influenza-like illness (ILI) consultation rate was similar to the previous week and was still below the historical average. No new pandemic-related hospitalizations and deaths were reported this week. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In the United States², the proportion of outpatient consultations for ILI has remained below the national baseline for twelve consecutive weeks. One of ten sub-national surveillance regions (Region 9 which includes Arizona, California, Hawaii and Nevada) reported the proportion of outpatient visits for ILI to be above their region specific baseline. Laboratory-confirmed influenza hospitalization rates remained stable, and children 0–4 years of age had the highest rate. The proportion of deaths attributed to pneumonia and influenza was slightly above the epidemic threshold. One influenza-associated pediatric death was reported and was associated with pandemic. A total of 64 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

Influenza activity was reported as widespread in Jamaica, regional in Barbados and Cuba, and no influenza activity in Dominica and Dominican Republic. All these countries reported unchanged or decreasing trends in acute respiratory disease, except Cuba 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.

Central America

Nicaragua reported regional influenza activity while Panama reported no influenza activity. Panama reported an increasing trend in acute respiratory disease, while Nicaragua reported a decreasing trend. Both countries reported low/moderate intensity and low impact of acute respiratory disease on health care services.

South America

Andean

Influenza activity was reported as regional in Bolivia, Ecuador and Venezuela, and localized in Peru. Colombia did not provide geographical spread indicator this week. All these countries reported unchanged

Weekly Summary

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- In the Caribbean, Cuba reported an increasing trend in acute respiratory disease.
- In Central American, Panama reported an increasing trend in acute respiratory disease.
- South American countries reported unchanged or decreasing trends in acute respiratory disease.
- In Canada, Cuba and the United States, the 99.4% of all subtyped influenza A viruses were pandemic (H1N1) 2009.
- 45 new confirmed deaths in 4 countries were reported; in total there have been 8,217 cumulative confirmed deaths.

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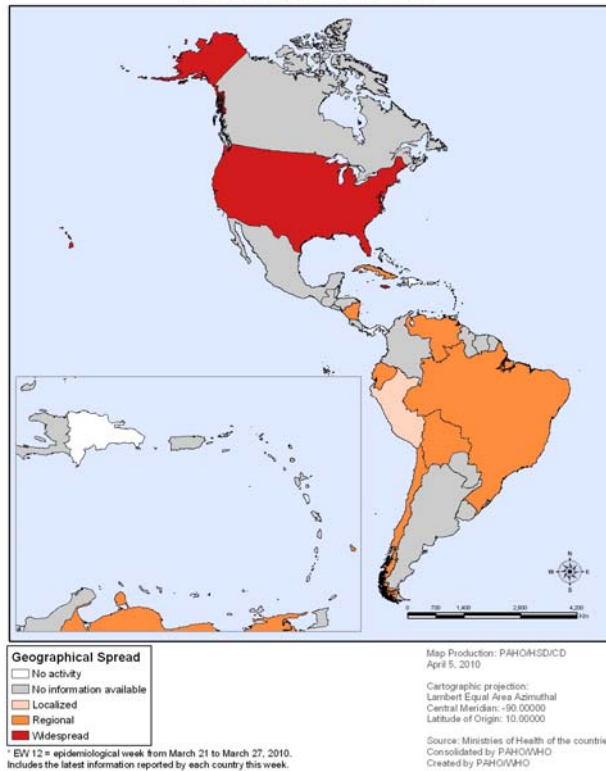
In Peru³, the trend of severe acute respiratory illness has been decreasing since EW 34, 2009.

Southern Cone

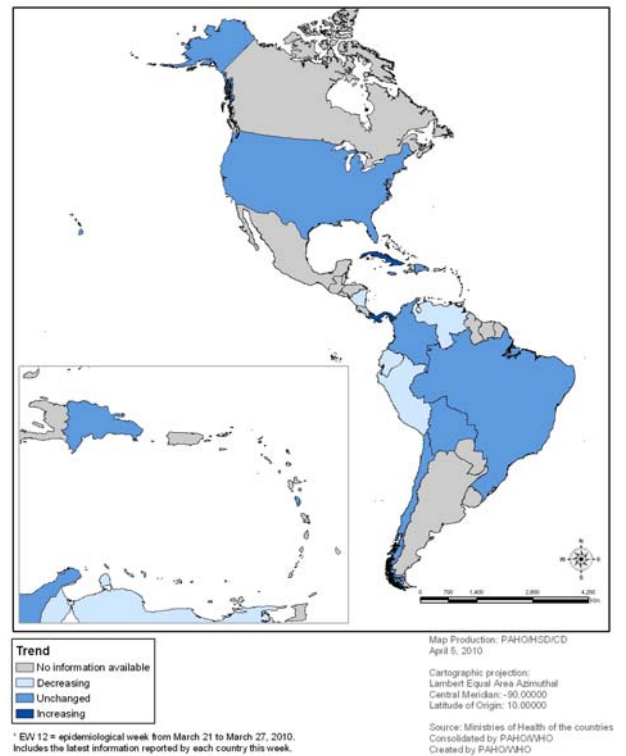
Brazil and Chile reported regional influenza activity. Both countries reported unchanged trends in acute respiratory disease, low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

In Chile⁴, sentinel surveillance indicated that the ILI rate in EW 12 was low (3.3/100,000 population) and there was a slight increase compared to the previous week. This ILI rate remains below the epidemic threshold.

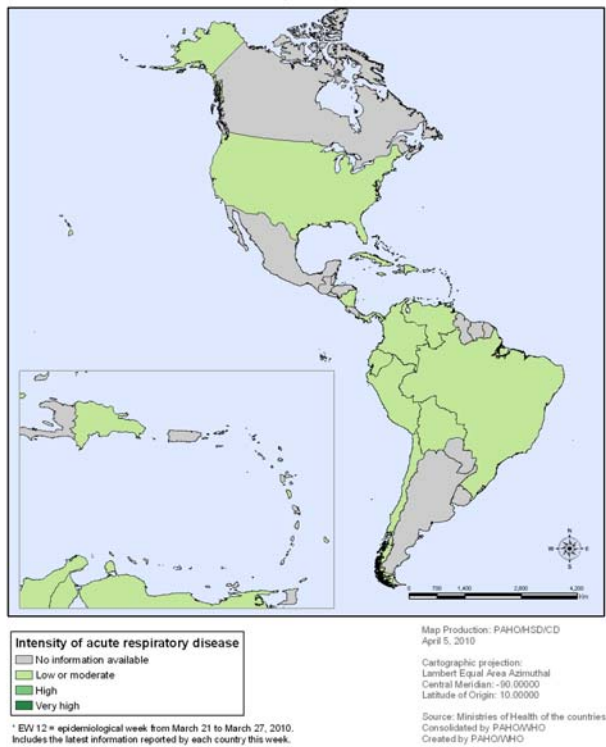
**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 12, 2010*.**



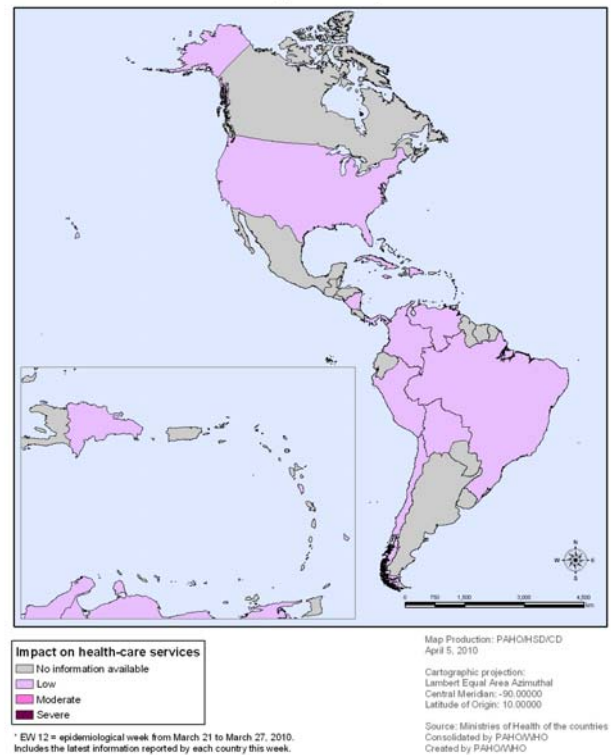
**Map 2. Pandemic (H1N1) 2009,
Trend of respiratory disease activity compared to the previous week.
Americas Region. EW 12, 2010*.**



**Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 12, 2010*.**



**Map 4. Pandemic (H1N1) 2009,
Impact of Acute Respiratory Disease on Health-Care Services.
Americas Region. EW 12, 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 young adults. Underlying comorbidities were present in 53% - 56% of hospitalized cases.

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

	Canada	Chile
Reporting period	April 12, 2009–March 27, 2010	2009 - March 16, 2010
Type of cases reported	Hospitalized, confirmed	Severe, confirmed
Number of cases	8,227	1,624
Percentage of women	51	52**
Age	Median 29 years	Median 32 years, highest incidence in age group < 5 year**
Percent with underlying co-morbidities	55.9	53**
Co-morbidities most frequently reported (%)	-	-
Percent pregnant among women of child-bearing age	20.2*	-

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

** Information available on 1,622 cases (2009).

Overall, approximately half of deceased cases were among women, except in Brazil where the 77.8% of all deaths were female (Table 2). The percentage of cases with underlying co-morbidities varied from 42 to 83%. In Brazil⁵, of deaths among women of child-bearing age, 61.1% were pregnant.

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

	Brazil	Canada	Mexico	Peru
Reporting period	January 3, 2010 – March 22, 2010	April 12, 2009–March 27, 2010	2009 - March 29, 2010	2009 -March 29, 2010
Number of confirmed deaths	36	423	1,152	223
Percentage of women	77.8	49.6	47.8	52
Age	-	Median 53 years	Highest percentage (69.9%) in 20–54 year age group	Median 38 years
Percent with underlying co-morbidities	41.7	82.7	60.6	77.1
Co-morbidities most frequently reported (%)	-	-	-	Metabolic (29.1%), Cardiovascular (24.4%), respiratory (15.7%), Neurologic (11%)
Percent pregnant among women of child-bearing age	61.1*	8**	-	14.7***

* 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 women as information was not provided about women of child-bearing 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 North America and Cuba, pandemic (H1N1) 2009 continues to predominate among circulating subtyped influenza A viruses in the Region (Table 3). Cumulatively, in Canada and Chile, pandemic (H1N1) 2009 continues to predominate as well (Table 4).

In Canada, during EW 12, 2010 the proportion of tests that were positive for influenza was 0.32%, respiratory syncytial virus 17.7%, parainfluenza virus 2.9%, and adenovirus 1.2%. These proportions have remained stable over the past 12 weeks.

In Chile from EW 01-EW 12, 2010 4.2% of sentinel site samples tested positive for respiratory viruses. Of these positive samples, 20.8% were positive for influenza, 47% for adenovirus, 25% for parainfluenza virus, and 7.3% for respiratory syncytial virus.

In Cuba from EW 01-EW 12, 2010, 15.4% of all samples tested were positive for respiratory viruses and 3.9% were positive for influenza viruses.

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

Country	Epidemiologic Week	Percentage of pandemic (H1N1) 2009 [#]
Canada	12	100
Cuba	12	100
USA	12	98.3
MEDIAN percentage pandemic (H1N1) 2009		99.4

[#]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 27, 2010	99.8
Chile	EW 1, 2010 – EW 9, 2010	100
MEDIAN percentage pandemic (H1N1) 2009		99.9

[#]Percentage of pandemic (H1N1) 2009 virus = Pandemic (H1N1) 2009 virus / All subtyped influenza A viruses

Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 12, 2010

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados	Regional	Decreasing	Low or moderate	Low	12
Belize					
Bolivia	Regional	Unchanged	Low or moderate	Low	12
Brazil	Regional	Unchanged	Low or moderate	Low	12
Canada					
Chile	Regional	Unchanged	Low or moderate	Low	9
Colombia	NIA	Unchanged	Low or moderate	Low	12
Costa Rica					
Cuba	Regional	Increasing	Low or moderate	Low	12
Dominica	No activity	Unchanged	Low or moderate	Low	12
Dominican Republic	No activity	Unchanged	Low or moderate	Low	12
Ecuador	Regional	Decreasing	Low or moderate	Low	12
El Salvador					
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Unchanged	Low or moderate	Low	11
Mexico					
Nicaragua	Regional	Decreasing	Low or moderate	Low	12
Panama	No activity	Increasing	Low or moderate	Low	12
Paraguay					
Peru	Localized	Decreasing	Low or moderate	Low	12
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	12
Uruguay					
Venezuela	Regional	Decreasing	Low or moderate	Low	11

NIA: No information Available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.
As of 2 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 March 26, 2010, 12 h EST)
Southern Cone		
Argentina	626	
Brazil	2,087	
Chile*	153	0
Paraguay	47	
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	228	9
Ecuador	124	
Peru	223	0
Venezuela	134	1
Caribbean Countries		
Antigua & Barbuda	0	
Bahamas	1	
Barbados	3	
Cuba	55	0
Dominica	0	
Dominican Republic	23	0
Grenada	0	
Guyana	0	
Haiti	0	
Jamaica	7	0
Saint Kitts & Nevis	2	
Saint Lucia	1	
Saint Vincent & Grenadines	0	
Suriname	2	
Trinidad & Tobago	5	
Central America		
Belize	0	
Costa Rica	56	
El Salvador	33	
Guatemala	18	
Honduras	18	
Nicaragua	11	0
Panama	12	0
North America		
Canada*	428	0
Mexico	1,152	16
United States**	2,689	19
TOTAL	8,217	45

* Deaths retrospectively discarded: one in Canada and two in Chile.

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

As of **2 April, 2010**, a total of **8,217 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).

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/>
- 3.- Situación actual de la nueva influenza A (H1N1) en el Perú. March, 29, 2010. http://www.dge.gob.pe/influenza/AH1N1/sala/Sala_pandemia_29-03-2010.pdf
- 4.- Influenza pandémica (H1N1) 2009. Reporte de situación. March, 16, 2010. <http://www.pandemia.cl>
- 5.- Informe Técnico Mensal de Influenza, March 2010. http://portal.saude.gov.br/portal/saude/profissional/area.cfm?id_area=1650