



Regional Update

Pandemic (H1N1) 2009

(April 19, 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 14 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 were reported this week. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In Mexico², from EW 12 to EW 13 there was a 38.6% decrease in the number ILI and severe acute respiratory illness (SARI) cases. Mexico reported the first case resistant to oseltamivir in the country confirmed by the National Laboratory.

In the United States³, the proportion of outpatient consultations for ILI has remained below the national baseline for fourteen 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 had the highest rate. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. Three influenza-associated pediatric deaths were reported this week. A total of 64 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

Influenza activity was reported as widespread in Jamaica and no influenza activity in Dominica. These countries reported unchanged or decreasing trends in acute respiratory disease. 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

Guatemala and Nicaragua reported regional influenza activity and El Salvador reported no activity. Nicaragua reported a decreasing trend in acute respiratory disease while Guatemala and El Salvador reported increasing trends in acute respiratory disease. Low/moderate intensity and low impact of acute respiratory disease on health care services were reported by these countries.

In Guatemala (EW 14), the number of respiratory disease consultations increased an 80% compared to the previous week.

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.
- In Central America, Guatemala and El Salvador reported increasing trends in acute respiratory disease.
- South American countries reported unchanged or decreasing trends in acute respiratory disease except Ecuador which reported an increasing trend.
- In Canada, Chile and the United States, the 99% of all subtyped influenza A viruses were pandemic (H1N1) 2009.
- 45 new confirmed deaths in 7 countries were reported; in total there have been 8,309 cumulative confirmed deaths.

South America

Andean

Influenza activity was reported as regional in Bolivia (Beni and Santa Cruz), Colombia, Ecuador, Peru and Venezuela. All these countries reported unchanged or decreasing trends in acute respiratory disease, except Ecuador 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.

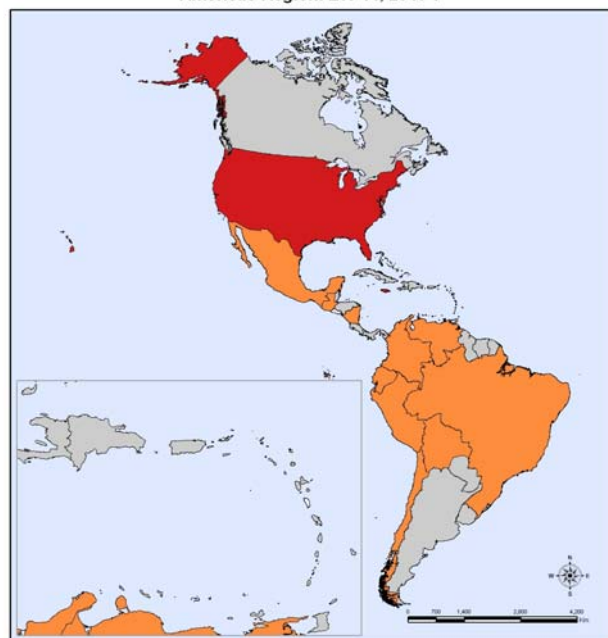
In Peru⁴, the number of pneumonia cases in children under 5 years of age has been increasing since EW 10, especially in Lima where this increase continues to be above the specific epidemic threshold for five consecutive weeks.

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 Chile⁵, sentinel surveillance indicated that the national ILI rate in EW 14 (5.0/100,000 population) has been increasing slightly for the last four weeks. In some southern regions and in Tarapacá the ILI rates were in the alert zone. In Los Lagos the ILI rate was above epidemic threshold.

**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 14, 2010*.**



Geographical Spread
 No activity
 No information available
 Localized
 Regional
 Widespread

Map Production: PAHO/HS/DICD
 April 16, 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 14 = epidemiological week from April 4 to April 10, 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 14, 2010*.**

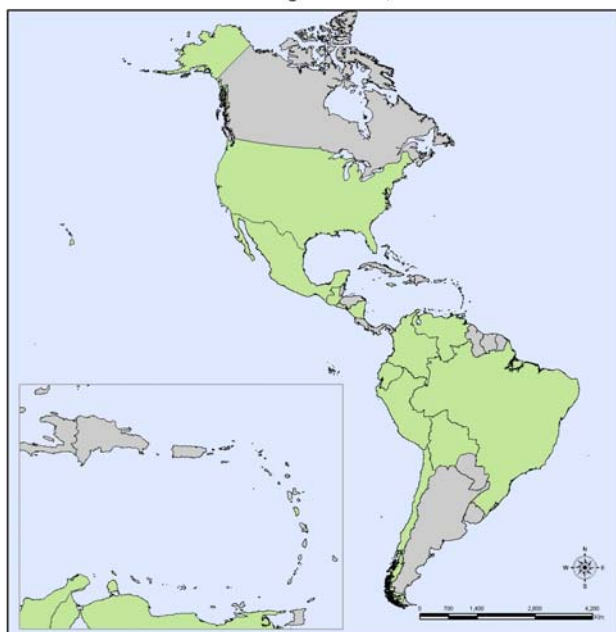


Trend
 No information available
 Decreasing
 Unchanged
 Increasing

Map Production: PAHO/HS/DICD
 April 16, 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
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* EW 14 = epidemiological week from April 4 to April 10, 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 14, 2010*.**

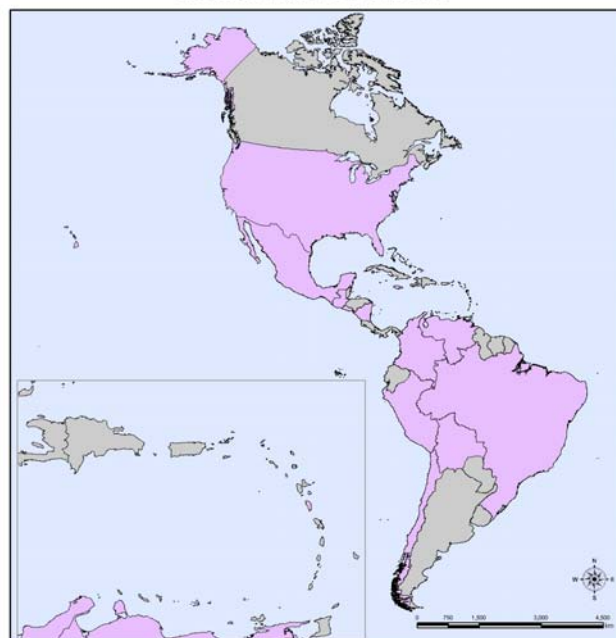


Intensity of acute respiratory disease
 No information available
 Low or moderate
 High
 Very high

Map Production: PAHO/HS/DICD
 April 16, 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 14 = epidemiological week from April 4 to April 10, 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 14, 2010*.**



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

Map Production: PAHO/HS/DICD
 April 16, 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 14 = epidemiological week from April 4 to April 10, 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 (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– April 10, 2010	2009 – April 14, 2010
Type of cases reported	Hospitalized, confirmed	Hospitalized, confirmed
Number of cases	8,227	1,627
Percentage of women	51	52**
Age	Median 29 years	Median 32 years, highest incidence in age group < 5 year**
Percent with underlying co-morbidities	56.1	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 76% of all deaths were in women (Table 2). The percentage of cases with underlying co-morbidities varied from 61 to 83%. In Brazil⁶, of deaths among women of child-bearing age, 57% were pregnant.

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

	Brazil	Canada	Chile	Mexico	Peru
Reporting period	January 3, 2010 – April 2, 2010	April 12, 2009– April 10, 2010	2009-April 14, 2010	2009 – April 14, 2010	2009 –April 12, 2010
Number of confirmed deaths	50	423	150	1,185	223
Percentage of women	76	49.6	47	48.2	52
Age	Median 25 years	Median 53 years	Median 44 years	Highest percentage (70%) in 20–54 year age group	Median 38 years
Percent with underlying co-morbidities	64	83	70.6%	60.8	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	57*	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 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 and Chile, pandemic (H1N1) 2009 continues to predominate as well (Table 4).

In Canada, during EW 14, 2010 the proportion of tests that were positive for influenza was 0.36%, respiratory syncytial virus 13.0%, parainfluenza virus 2.6%, and adenovirus 1.7%. These proportions have remained stable over the past 14 weeks.

In Chile from EW 01 to EW 14, 2010, 4.8% of sentinel surveillance samples tested positive for respiratory viruses. Of these positive samples, 23% were positive for influenza, 40.5% for adenovirus, 19.8% for parainfluenza virus, and 16.7% for respiratory syncytial virus.

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

Country	Epidemiologic Week	Percentage of pandemic (H1N1) 2009 [#]
Canada	14	100
Chile	14	100
USA	14	97.1
MEDIAN percentage pandemic (H1N1) 2009		99.0

[#]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– April 10, 2010	99.8
Chile	EW 1, 2010 – EW 14, 2010	100
MEDIAN percentage pandemic (H1N1) 2009		99.9

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

IV. Topics

It is estimated that Latin American countries and territories will have access to approximately 170 million doses of influenza A (H1N1) vaccine to cover the risk groups estimated by Ministries of Health of the Member States.

Twenty two countries in the Region have initiated the vaccination of risk groups including: Anguilla, Argentina, Bahamas, Barbados, Belize, Bermuda, Brazil, Cayman Islands, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Montserrat, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago, and Uruguay; with approximately 49 million doses administered as of 16 April. It is expected that during Vaccination Week in the Americas 26 million people will be vaccinated.

Information available at:

http://new.paho.org/hq/index.php?option=com_content&task=view&id=2527&Itemid=2030&lang=en

Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 14, 2010

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados					
Belize					
Bolivia	Regional	Unchanged	Low or moderate	Low	14
Brazil	Regional	Unchanged	Low or moderate	Low	14
Canada					
Chile	Regional	Unchanged	Low or moderate	Low	14
Colombia	Regional	Unchanged	Low or moderate	Low	14
Costa Rica					
Cuba					
Dominica	No activity	Unchanged	Low or moderate	Low	14
Dominican Republic					
Ecuador	Regional	Increasing	Low or moderate	NIA	14
El Salvador	No activity	Increasing	Low or moderate	Low	14
Grenada					
Guatemala	Regional	Increasing	Low or moderate	Low	14
Guyana					
Haiti					
Honduras					
Jamaica	Widespread	Decreasing	Low or moderate	Low	13
Mexico	Regional	Decreasing	Low or moderate	Low	14
Nicaragua	Regional	Decreasing	Low or moderate	Low	14
Panama					
Paraguay					
Peru	Regional	Unchanged	Low or moderate	Low	14
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	14
Uruguay					
Venezuela	Regional	Decreasing	Low or moderate	Low	14

NIA: No information Available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.
As of 16 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 9, 2010, 12 h EST)
Southern Cone		
Argentina	626	
Brazil	2,101	14
Chile	153	0
Paraguay	47	
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	233	2
Ecuador	129	5
Peru	223	0
Venezuela	134	0
Caribbean Countries		
Antigua & Barbuda	0	
Bahamas	1	
Barbados	3	
Cuba	63	5
Dominica	0	
Dominican Republic	23	
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	19	1
Honduras	18	
Nicaragua	11	0
Panama	12	
North America		
Canada	428	0
Mexico	1,182	10
United States*	2,718	8
TOTAL	8,309	45

*These deaths include both laboratory-confirmed pandemic (H1N1) 2009 and other influenza associated deaths. Correction: As of 9 April the new deaths reported in USA was 21 and the cumulative number of deaths was 2,710.

As of **16 April, 2010**, a total of **8,309 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.- Influenza en México. Temporada primavera verano 2010. Num 22. April, 9, 2010.
- 3.- Fluview. Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>
- 4.- Informe de Vigilancia de Infecciones Respiratorias Agudas y neumonías en menores de 5 años en el Perú 2010 SE 13. 14 de abril, 2010 <http://www.dge.gob.pe/vigilancia/sala/2010/SE13/iras.pdf>
- 5.- Influenza pandémica (H1N1) 2009. Reporte de situación. April, 14, 2010. <http://www.pandemia.cl>
- 6.- Informe Técnico Mensal de Influenza, April 2010.
http://portal.saude.gov.br/portal/saude/profissional/area.cfm?id_area=1650