



Regional Update

Pandemic (H1N1) 2009

(November 16, 2009 - 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, the national influenza-like illness (ILI) consultation rate slightly decreased compared to last week but remained above average for the sixth consecutive week. The number of influenza outbreaks remained high and these outbreaks were mostly reported in the school setting. The proportion of tests positive for influenza again increased this week to 38.1% from 36.3% (EW 43). The total number of hospitalizations of persons with pandemic influenza increased again this week; and hospitalization rates were highest among those less than 20 years of age.

In Mexico, trends of acute respiratory disease remained unchanged, with high intensity of acute respiratory disease, and moderate impact of acute respiratory disease on health care services. Of note is that the number of ILI and severe acute respiratory illness (SARI) cases, in EW 39, surpassed what was observed in the first wave of the pandemic.

In the United States, the proportion of outpatient consultations for ILI decreased for the second consecutive week. Laboratory-confirmed influenza hospitalization rates remained high, especially in children 0–17 years of age. The proportion of deaths attributed to pneumonia and influenza remained above the epidemic threshold for the sixth consecutive week. Nine of ten sub-national surveillance regions reported decreases in proportion of outpatient visits for ILI as compared to the previous week, but all ten reported a the ILI proportion to be above their region-specific baseline. A total of 35 influenza-associated pediatric deaths were reported this week, of which 26 were associated with the pandemic virus. In total, since August 30, 2009, 98 pediatric deaths associated with the pandemic virus have occurred.

Caribbean

These countries are reporting mostly unchanged trends in acute respiratory disease and high intensity of acute respiratory disease. Impact of acute respiratory disease on health care services was reported as moderate.

In countries providing these data¹, severe acute respiratory infection (SARI) hospitalization rates decreased this week, after four consecutive weeks of increases.

Weekly Summary

- Influenza-like illness activity remained above what is expected for this time of year in Canada and the United States; in Mexico, it surpassed the level that was observed during the first wave of the pandemic
- Caribbean countries reported mostly unchanged trends but high intensity of acute respiratory disease this week
- Central America continues to report overall decreasing trends in acute respiratory disease
- Most of South America had stable or decreasing trends of acute respiratory disease, with the exception of Colombia and Peru, which reported an increasing trend
- Venezuela reported that the outbreak of acute respiratory illness in the Yanomami communities has ended
- A median of 99.9% of subtyped influenza A viruses were pandemic (H1N1) 2009
- 294 new confirmed deaths in eight countries were reported; in total there have been 4,806 cumulative confirmed deaths

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

Central America

This week, among the countries that provided information, trends of acute respiratory disease decreased.

Intensity of acute respiratory disease remained low/moderate and impact of acute respiratory disease on health care services was low.

South America

Andean

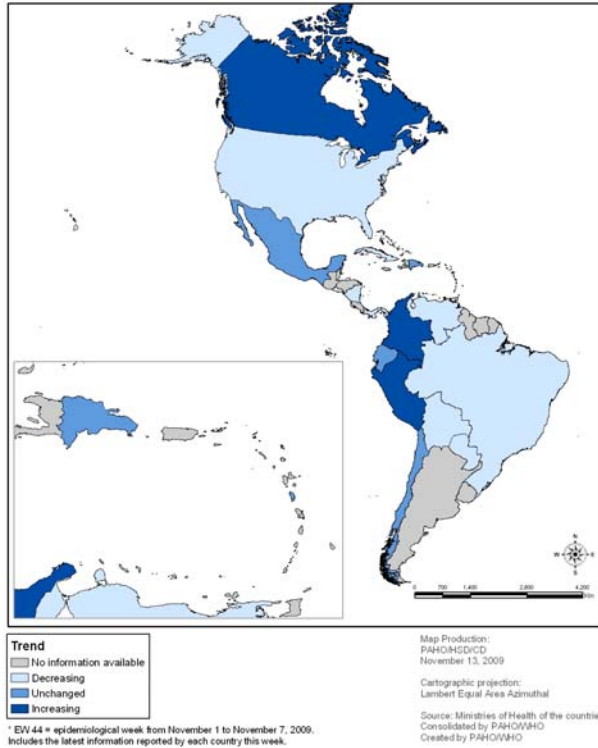
These countries continued to report widespread influenza activity. Acute respiratory disease trends were reported as decreasing or unchanged in most countries of the region, except Colombia and Peru, which reported an increasing trend in acute respiratory disease. In Peru, in the last week, the greatest increase in the number of confirmed cases was observed in parts of the northeast jungle region. In Ecuador, nationally, trends of acute respiratory disease were reported as unchanged, but 3 of 24 provinces reported increases in the number of SARI cases as compared to the prior week.

Venezuela's Ministry of Health reported that the outbreak of acute respiratory infection in indigenous Yanomami communities has ended.

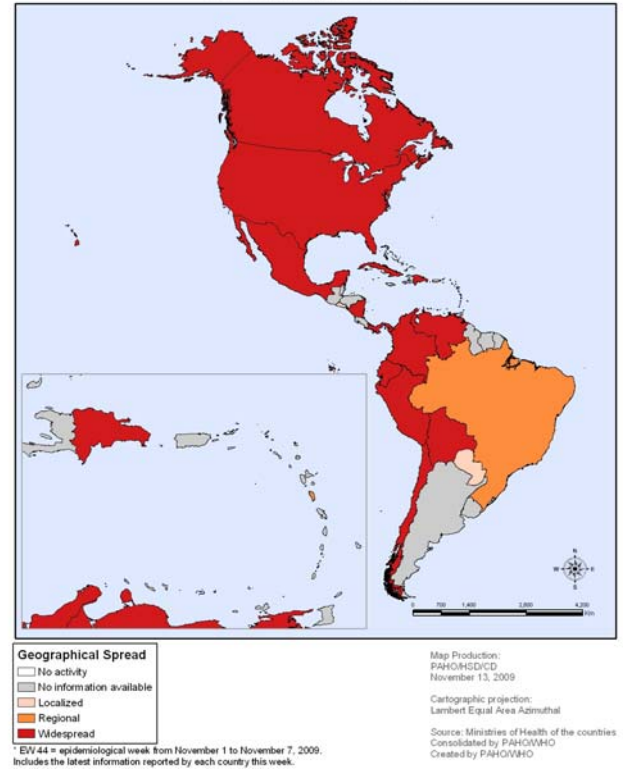
Southern Cone

Most of these countries reported decreasing or unchanged trends of acute respiratory disease. This week, Paraguay reported 2 of 17 departments with an increasing trend of acute respiratory disease, as compared to 8 departments last week; its overall national trend was decreasing. All of these countries are reporting a low or moderate impact of acute respiratory disease on health care services.

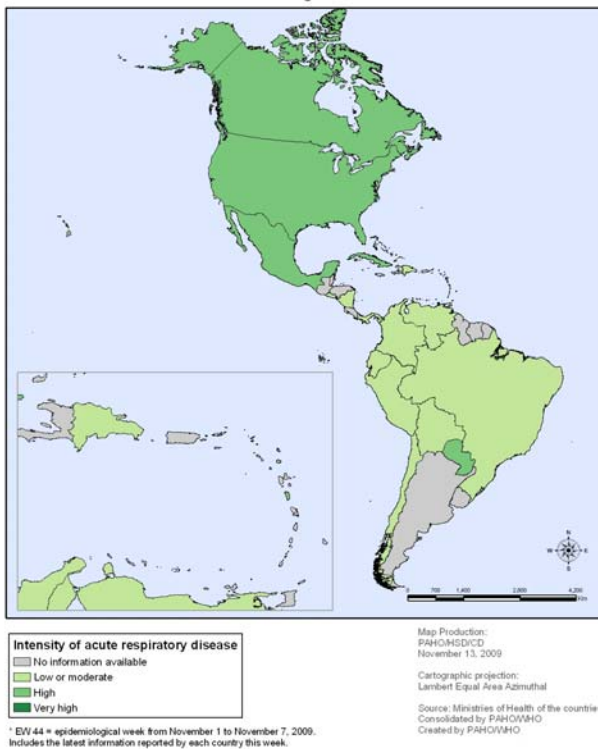
**Map 2. Pandemic (H1N1) 2009,
Trend of respiratory disease activity compared to the previous week.
Americas Region. EW 44*.**



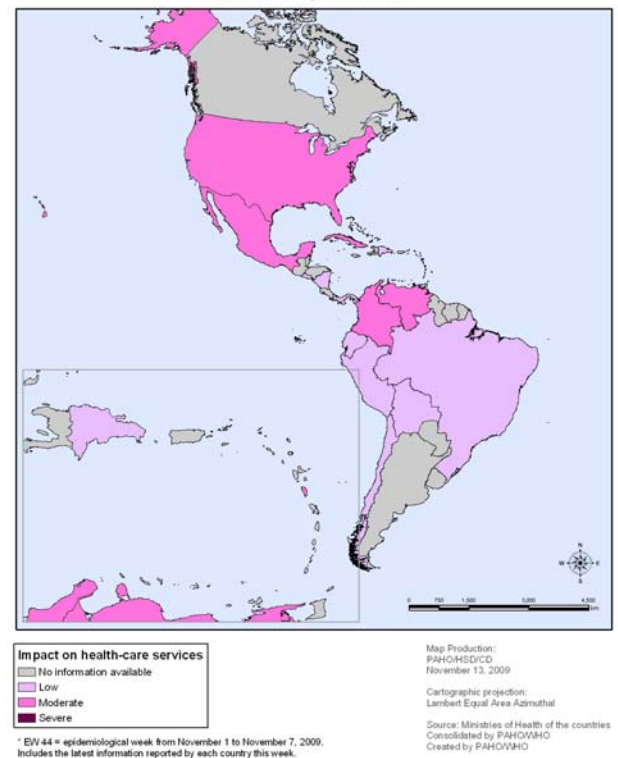
**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 44*.**



**Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 44*.**



**Map 4. Pandemic (H1N1) 2009,
Impact of Acute Respiratory Disease on Health-Care Services.
Americas Region. EW 44*.**



II- Description of hospitalizations and deaths among confirmed cases of pandemic (H1N1) 2009

A table containing case counts reported to PAHO is included in Annex 2.

Approximately half of hospitalized cases were among women (Table 1). Children continued to be the age group with highest hospitalization rates. Underlying comorbidities were present in approximately half of hospitalized cases.

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

	Argentina	Canada	Chile	Guadalupe, French Guyana and Martinique	CAREC ²	Paraguay	Peru
Reporting period	Until EW 43	From August 30, 2009 to November 7, 2009	Until November 3, 2009	Until November 6, 2009	Until November 6, 2009	Until November 13, 2009	Until November 9, 2009
Type of cases reported	Hospitalized	Hospitalized, confirmed	Hospitalized, confirmed	Hospitalized	Hospitalized, confirmed	Hospitalized, confirmed	Severe, confirmed
Number of hospitalizations	12,471	1,885	1,852	295	248	154	635
Percentage of women	-	51.4%	51%	57.3%	47.3%	54%	52%
Age	Most affected age group: 0-4 years	Median: 25 years	Median 32 years; highest rate in group ≤1 year of age	-	Most affected age group: 0-14 and 20-49 years	Median: 24 years; highest number in 20-39 year age group	Highest percentage (38%) in 0-9 year age group
Percent with underlying co-morbidities	-	57.5%	53%		-	-	-
Co-morbidities most frequently reported (%)	-	-	Asthma (17%), Arterial hypertension (10%), Diabetes mellitus (9%), COPD (7%)	Obesity (14.2%), Asthma (12.2%), Sickle cell anemia (9.8%), Respiratory disease (5.4%)	-	-	-
Percent pregnant among women of child-bearing age	-	17.4%*	-	-	11.5%**	-	-

* 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

² CAREC countries and territories include Anguilla, Antigua, Barbados, Belize, Cayman Islands, Dominica, Guyana, Jamaica, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent, Suriname, Turks and Caicos Islands

Overall, approximately half of deceased cases were among women (Table 2). In the Dominican Republic, however, 82% of their 22 deaths were among women and approximately 67% of deaths among women were in pregnant women.

The percentage of cases with underlying co-morbidities varied from 58.3% to 76.1%.

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

	Argentina	Canada	Peru	Chile	CAREC ³	Dominican Republic	El Salvador
Reporting period	Until EW 43	From August 30, 2009 to November 7, 2009	Until EW 44	Until November 3, 2009	Until November 6, 2009	Until November 11, 2009	Until EW 44
Number of confirmed deaths	600	56	188	140	17	22	25
Percentage of women	"No gender difference"	52.8%	52%	48.6%	-	82%	52%
Age	Highest rate in 50-59 years age group	Median 45 years	Highest percentage in 50-59 years and 0-9 years age group	Mean 44 years	-	Median 22 years	-
Percent with underlying co-morbidities	-	68.3%	76.1%	64.2%	58.8%	-	58.3%
Co-morbidities most frequently reported (%)	-	-	Metabolic (23.3%), Cardiovascular (22.2%), Respiratory (12.8%), Neurologic (8.9%), Renal (8.3%)	Pulmonary disease (including COPD, asthma) (14.5%), Diabetes Mellitus (14.8%), Arterial hypertension (12.8%), Obesity (8.6%)	Obesity (52.9%)	-	-
Percent pregnant among women of child-bearing age	-	12.9%*	-	-	-	66.7%**	38.5%**

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

** The denominator used was all deaths among women as information was not provided about women of child-bearing age

³ CAREC countries and territories include Anguilla, Antigua, Barbados, Belize, Cayman Islands, Dominica, Guyana, Jamaica, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent, Suriname, 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.

Pandemic (H1N1) 2009 continues to predominate among circulating subtyped influenza A viruses.

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

Country	Epidemiologic Week	Percentage of pandemic (H1N1) 2009*
Canada	44	99.8
USA	44	100
MEDIAN percentage pandemic (H1N1) 2009		99.9

*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
French Guyana	30-44	92.5
Nicaragua	Through November 13	97.6
Saint Martin	01-44	95.0
MEDIAN		95.0

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

IV-Antiviral Resistance

The Centers for Disease Control and Prevention (CDC) complete antiviral susceptibility testing on isolates submitted by various countries in the Region. To date, 277 samples submitted from 18 countries were found to be sensitive to neuraminidase inhibitors (oseltamivir and zanamivir). In the United States, a total of 15 cases of oseltamivir-resistance have been identified. Of the 15 oseltamivir-resistant cases, 13 had documented exposure to oseltamivir, one case had no documented oseltamivir-exposure, and one case is under investigation.

Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 44

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	44
Brazil	Regional	Decreasing	Low or moderate	Low	44
Canada	Widespread	Increasing	High	NIA	44
Chile	Widespread	Unchanged	Low or moderate	Low	44
Colombia	Widespread	Increasing	Low or moderate	Moderate	44
Costa Rica					
Cuba	Widespread	Decreasing	High	Moderate	44
Dominica	Regional	Unchanged	High	Moderate	44
Dominican Republic	Widespread	Unchanged	Low or moderate	Low	44
Ecuador	Widespread	Unchanged	Low or moderate	Low	44
El Salvador	Localized	Decreasing	Low or moderate	Low	44
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras					
Jamaica					
Mexico	Widespread	Unchanged	High	Moderate	44
Nicaragua	Widespread	Decreasing	Low or moderate	Low	44
Panama	Widespread	Decreasing	Low or moderate	Low	44
Paraguay	Localized	Decreasing	High	NIA	44
Peru	Widespread	Increasing	Low or moderate	Low	44
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Decreasing	High	Moderate	44
Uruguay					
Venezuela	Widespread	Decreasing	Low or moderate	Moderate	44

NIA = No information available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus
Region of the Americas. Updated as of 13th November 2009, (17 h GMT; 12 h EST).**

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

Country	Cumulative number of deaths	New deaths (since Nov. 6)
Southern Cone		
Argentina	593	0
Brazil	1,368	0
Chile	140	0
Paraguay	43	0
Uruguay	20	0
Andean Area		
Bolivia	56	0
Colombia	140	4
Ecuador	82	2
Peru	190	7
Venezuela	103	8
Caribbean Countries		
Antigua & Barbuda	0	0
Bahamas	0	0
Barbados	3	0
Cuba	7	0
Dominica	0	0
Dominican Republic	22	0
Grenada	0	0
Guyana	0	0
Haiti	0	0
Jamaica	5	0
Saint Kitts & Nevis	1	0
Saint Lucia	1	0
Saint Vincent & Grenadines	0	0
Suriname	2	0
Trinidad & Tobago	5	1
Central America		
Belize	0	0
Costa Rica	38	0
El Salvador	23	0
Guatemala	18	0
Honduras	16	0
Nicaragua	11	0
Panama	11	0
North America		
Canada	161	46
Mexico	482	84
United States*	1,265	142
TOTAL	4,806	294

*The increase in number of deaths for the United States was accumulated over a two-week period.

As of **13 November**, a total of **4,806 deaths** have been reported among the confirmed cases in **27 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: Martinique (1 death); Guadeloupe (1 death).