



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 decreased for the sixth consecutive week and remained below the historical average. The overall number of hospitalizations, ICU admissions, and deaths associated with the pandemic virus decreased approximately 50% as compared to the prior week (EW 48). A total of seven oseltamivir-resistant isolates have been detected since April 2009.

In Mexico, from EW 46 to EW 48, there was a 24% decrease in the number of influenza-like illness (ILI) and severe acute respiratory illness (SARI) cases.

In the United States, the proportion of outpatient consultations for ILI decreased for the seventh consecutive week, but remained above the national baseline. 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 remained above the epidemic threshold for the eleventh consecutive week. A total of nine influenza-associated pediatric deaths were reported this week, eight of which were associated with the pandemic virus. A total of 44 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

All of these countries reported unchanged and decreasing trends in acute respiratory disease, except Barbados, which reported an increasing trend. All countries reported a low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

In the French territories, ILI activity has been variable, with Martinique reporting less activity than what is expected for this time of year, St. Barthelemy reporting high levels for the last three weeks, and St. Martin reporting activity below what was seen during the first wave of the pandemic.

Central America

These countries reported variable geographic spread of influenza activity, but all reported either decreasing or unchanged trends in acute respiratory disease. All reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

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, except Barbados, which reported an increasing trend
- Central America reported decreasing or unchanged trends in acute respiratory disease
- All South American countries reported a decreasing or unchanged trend of acute respiratory disease, except Ecuador which reported an increasing trend
- A median of 99.3% of subtyped influenza A viruses in North America were pandemic (H1N1) 2009
- 335 new confirmed deaths in 10 countries were reported; in total there have been 6,670 cumulative confirmed deaths

Guatemala (EW 48) reported a decrease of 7.5% and 4.6% 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. Acute respiratory disease trends were reported as unchanged or decreasing, except in Ecuador, which reported an increasing trend. The intensity of acute respiratory disease and the impact of acute respiratory disease on health-care services were reported as low or moderate.

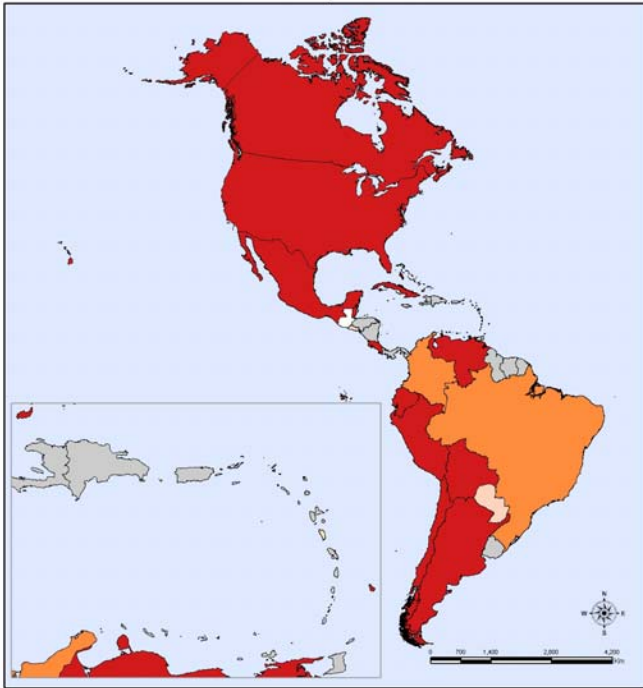
Ecuador (EW 48) reported an increase in SARI cases in 5 of 24 provinces, mainly in the north and central areas of the country.

Southern Cone

Influenza activity was reported as widespread in Chile and Argentina, regional in Brazil, and localized in Paraguay. These countries reported continued decreasing and unchanged trends of acute respiratory disease. The intensity of acute respiratory disease and the impact of acute respiratory disease on health-care services were reported as low or moderate for all countries.

This week, Chile reported decreasing ILI activity in 14 of 15 regions (national incidence of 2.7 per 100,000 population). Paraguay reported a nationally decreasing trend of influenza activity; however, there was an increasing trend of ILI and SARI (6.5% and 29.4%, respectively). In Argentina, in EW 47, the incidence of ILI continued to be low (7 per 100,000 population). In Brazil, even though ILI activity increased from EW 45 to EW 47, it was within the expected range.

**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 49*.**



Geographical Spread
 No activity
 No information available
 Localized
 Regional
 Widespread

Map Production:
PAHO/HSD/ICD
December 18, 2009
 Cartographic projection:
Lambert Equal Area Azimuthal
 Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 49 = epidemiological week from December 6 to December 12, 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 49*.**



Trend
 No information available
 Decreasing
 Unchanged
 Increasing

Map Production:
PAHO/HSD/ICD
December 18, 2009
 Cartographic projection:
Lambert Equal Area Azimuthal
 Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 49 = epidemiological week from December 6 to December 12, 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 49*.**

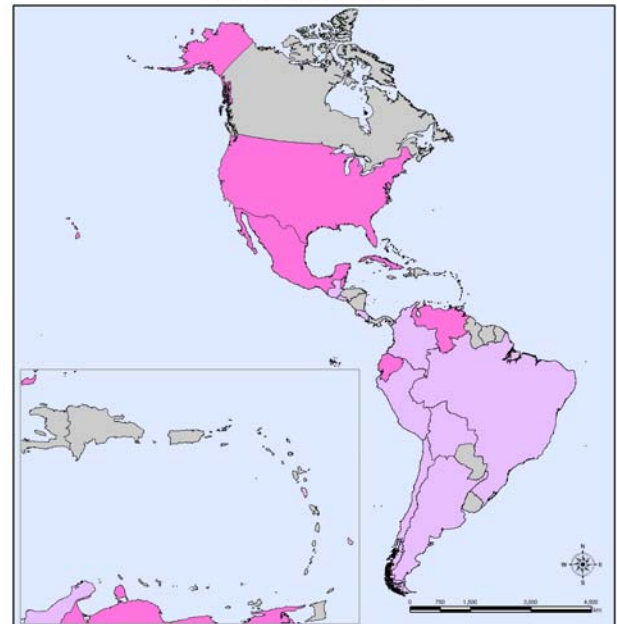


Intensity of acute respiratory disease
 No information available
 Low or moderate
 High
 Very high

Map Production:
PAHO/HSD/ICD
December 18, 2009
 Cartographic projection:
Lambert Equal Area Azimuthal
 Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 49 = epidemiological week from December 6 to December 12, 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 49*.**



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

Map Production:
PAHO/HSD/ICD
December 18, 2009
 Cartographic projection:
Lambert Equal Area Azimuthal
 Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 49 = epidemiological week from December 6 to December 12, 2009. 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 case counts 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

	Argentina	Brazil	Canada	Chile	Costa Rica	Paraguay
Reporting period	Until EW 48	Until EW 47	Until EW 49	Until December 15, 2009	Until December 8, 2009	Until December 18, 2009
Type of cases reported	Hospitalized	Severe, confirmed	Hospitalized, confirmed	Severe, confirmed	Hospitalized	Severe, confirmed
Number of cases	13,818	27,850	7,481	1,618	2,547	164
Percentage of women	-	57	49.8	52	-	55
Age	Most affected age group: 0-4 years (incidence 75.6/ 100,000 hab)	Median 25 years.; highest incidence in age group <2 years (27.3/100,000 hab) and 20-29 years (20/ 100,000 hab)	Median: 28 years	Median 32 years, highest incidence in age group < 1 y (76/100,000 hab), 1-4 y (20/ 100,000 hab)	-	Median 23 years
Percent with underlying co-morbidities	-	-	50.7	53.4	-	-
Co-morbidities most frequently reported (%)	-	-	-	Asthma (17%), arterial hypertension (10%), diabetes (8%), COPD (7%)	Asthma (21.2%), Diabetes (10.8%), COPD (9.4%), Cardiopathy (7.3%), Smoking (6.9%), Obesity (6.6%)	-
Percent pregnant among women of child-bearing age	-	22*	21.2**	-	3.3***	-

* 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 among all cases as information was not provided about women of child-bearing age

Overall, approximately half of deceased cases were among women (Table 2). The percentage of cases with underlying co-morbidities varied from 54% to 74%.

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

	Argentina	Bolivia	Brazil	Canada	Chile	Colombia	Ecuador	México	Paraguay
Reporting period	Until EW 47	Until EW 49	Until EW 47	Until EW 49	Until December 15, 2009	Until EW 49	Until December 9, 2009	Until December 16, 2009	Until December 18, 2009
Number of confirmed deaths	616	58	1632	367	150	190	96	780	46
Percentage of women	"No gender difference"	46.6	-	50.7	48.7	-	47	49.5	43
Age	Highest rate in 50-59 year age group	Highest number in 15-64 year age group	-	Median 53 years	Mean 44 years	Highest percentage: 77.9% in 15-64 year age group	Highest number in 20-59 year age group	Highest percentage (51.9%) in 25-50 year age group	Median 37 years
Percent with underlying co-morbidities	-	-	54	66.8	63.3	-	-	-	74
Co-morbidities most frequently reported (%)	-	-	In order of decreasing frequency: cardiovascular, respiratory, metabolic, immunosuppressive	-	Pulmonary disease (including COPD, asthma) (14.5%), Diabetes Mellitus (14.5%), Arterial hypertension (12.8%), Obesity (8.6%)	-	-	Metabolic (37.9%), smoking (13.1%), cardiovascular (12.7%), respiratory (4.7%)	Chronic cardiopathy (20%), metabolic (17%), immunologic (12%), neurologic (6%)
Percent pregnant among women of child-bearing age	-	-	28.5*	8.7**	4.2**	-	-	-	12***

* 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 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 (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	49	99.2
USA	49	99.3
MEDIAN percentage pandemic (H1N1) 2009		99.3

*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 3-December 12, 2009	99.8
Chile	Until EW 49	98.3
MEDIAN percentage pandemic (H1N1) 2009		99.1

*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 49

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina	Widespread	Decreasing	Low or moderate	Low	47
Bahamas	Widespread	Decreasing	Low or moderate	Moderate	48
Barbados	Widespread	Increasing	Low or moderate	Low	48
Belize	Widespread	Decreasing	Very high	Moderate	48
Bolivia	Widespread	Decreasing	Low or moderate	Low	49
Brazil	Regional	Decreasing	Low or moderate	Low	49
Canada	Widespread	Decreasing	Low or moderate	NIA	49
Chile	Widespread	Unchanged	Low or moderate	Low	49
Colombia	Regional	Decreasing	Low or moderate	Low	49
Costa Rica	Widespread	Decreasing	Low or moderate	Low	48
Cuba	Widespread	Decreasing	Low or moderate	Moderate	48
Dominica	Localized	Unchanged	Low or moderate	Low	49
Dominican Republic					
Ecuador	Widespread	Increasing	Low or moderate	Moderate	49
El Salvador	Localized	Unchanged	Low or moderate	Low	49
Grenada					
Guatemala	No Activity	Decreasing	Low or moderate	Low	48
Guyana					
Haiti					
Honduras					
Jamaica					
Mexico	Widespread	Decreasing	High	Moderate	49
Nicaragua					
Panama					
Paraguay	Localized	Decreasing	Low or moderate	NIA	49
Peru	Widespread	Unchanged	Low or moderate	Low	49
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Decreasing	Low or moderate	Moderate	49
Uruguay					
Venezuela	Widespread	Decreasing	Low or moderate	Moderate	49

NIA = No information available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus
Region of the Americas. Updated as of 18th December 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 Dec 11)
Southern Cone		
Argentina	616	3
Brazil	1,632	104*
Chile	150	
Paraguay	46	0
Uruguay	20	
Andean Area		
Bolivia	58	0
Colombia	190	7
Ecuador	96	0
Peru	205	2
Venezuela	116	0
Caribbean Countries		
Antigua & Barbuda	0	
Bahamas	1	
Barbados	3	
Cuba	36	4
Dominica	0	
Dominican Republic	23	
Grenada	0	
Guyana	0	
Haiti	0	
Jamaica	6	
Saint Kitts & Nevis	2	1
Saint Lucia	1	
Saint Vincent & Grenadines	0	
Suriname	2	
Trinidad & Tobago	5	
Central America		
Belize	0	
Costa Rica	38	
El Salvador	31	1
Guatemala	18	
Honduras	16	0
Nicaragua	11	
Panama	11	
North America		
Canada	397	24
Mexico	780	67
United States	2,160	122
TOTAL	6,670	335

*Brazil reports on a monthly basis. Therefore the increase in the number of deaths associated with the pandemic (H1N1) 2009 has been accumulated over a 4 week period.

As of **18 December**, a total of **6,670 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).