



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

Widespread influenza activity and increased trends in acute respiratory disease continued this week.

In Canada, the national influenza-like illness (ILI) consultation rate increased again relative to the last week and remained above average for the fourth consecutive week. There was a sharp increase in the number of influenza outbreaks and these continued to be reported mostly in school settings. The proportion of tests positive for influenza sharply increased this week to 29.0% from 16.9% (EW 41).

In the United States, ILI consultations continued to increase, remaining above the national baseline for the ninth consecutive week. Laboratory-confirmed influenza hospitalization rates remained high, especially in persons 5–49 years of age. The proportion of deaths attributed to pneumonia and influenza remained above the epidemic threshold for the third consecutive week. All subnational regions continued to report outpatient ILI activity above their regional baseline, but some regions in the south and west reported some small decreases over the past week. A total of 22 influenza-associated pediatric deaths were reported this week, of which 19 were associated with the pandemic virus. Of these pediatric deaths, the majority were in children 5–17 years of age.

Caribbean

These countries continue to report variable trends in acute respiratory disease. Intensity of acute respiratory disease was reported as both high and low/moderate, while impact of acute respiratory disease on health care services was reported as both low and moderate.

This week, Barbados reported 8 cases of co-infection with pandemic influenza and dengue-3, diagnosed by RT-PCR.

In this region, for countries providing these data, severe acute respiratory infection (SARI) hospitalization rates¹ have been increasing over the past three weeks, reaching the highest rate this year in EW 41.

Central America

This week, trends of acute respiratory disease remained unchanged or were decreasing. Intensity of acute respiratory disease remained low/moderate and impact of acute respiratory disease on health care services was low. This week, Nicaragua reported eight cases of co-infection with influenza and dengue diagnosed by RT-PCR and ELISA, respectively.

Weekly Summary

- The trends of acute respiratory disease in North America continue to increase; there were 22 influenza-associated pediatric deaths reported in the United States this week, twice as many as last week
- Caribbean countries reported variable trends in 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, which reported an increasing trend for the seventh consecutive week
- Barbados and Nicaragua reported the detection of cases of co-infection with pandemic (H1N1) 2009 and dengue
- Venezuela reported an outbreak of acute respiratory infection in the indigenous Yanomami community
- A median of 100% of subtyped influenza A viruses were pandemic (H1N1) 2009
- 224 new confirmed deaths in 10 countries were reported; in total there have been 4,399 cumulative confirmed deaths

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

South America

Andean

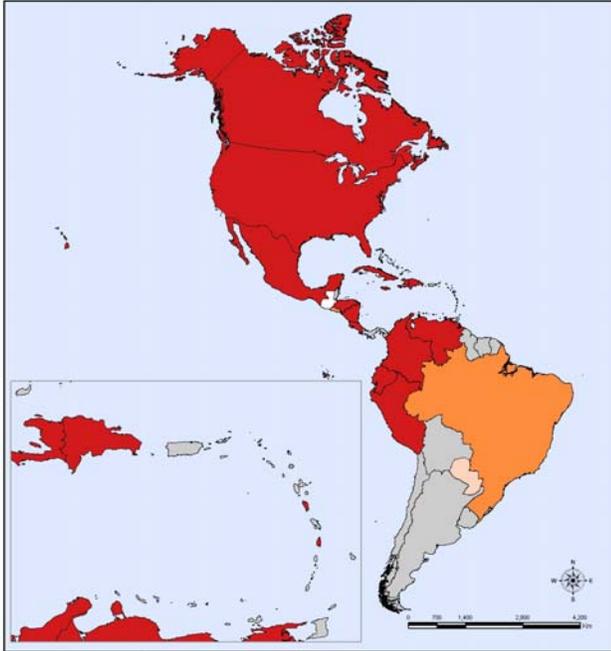
These countries continued to report widespread influenza activity. The majority of the countries reported decreasing trends in acute respiratory disease. Colombia, however, has been reporting increasing trends for seven consecutive weeks. Overall, intensity of acute respiratory disease remained low/moderate as did impact of acute respiratory disease on health care services.

Venezuela reported an outbreak of acute respiratory infection in the indigenous Yanomami community of Mawaka parish in the municipality of Alto Orinoco in Amazonas State. Thus far, two samples were positive for pandemic (H1N1) 2009.

Southern Cone

Although there were no significant changes in acute respiratory disease activity as compared to last week, Argentina reported high levels of ILI activity in the provinces of Buenos Aires and Santa Fe. Brazil continued to experience a decreasing trend of acute respiratory disease, with low/moderate intensity of acute respiratory disease, and low impact on health care services.

**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 42*.**



Geographical Spread

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

Map Production:
PAHO/MSD/CDC
October 30, 2009
Cartographic projection:
Lambert Equal Area Azimuthal
Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 42 = epidemiological week from October 18 to October 24, 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 42*.**



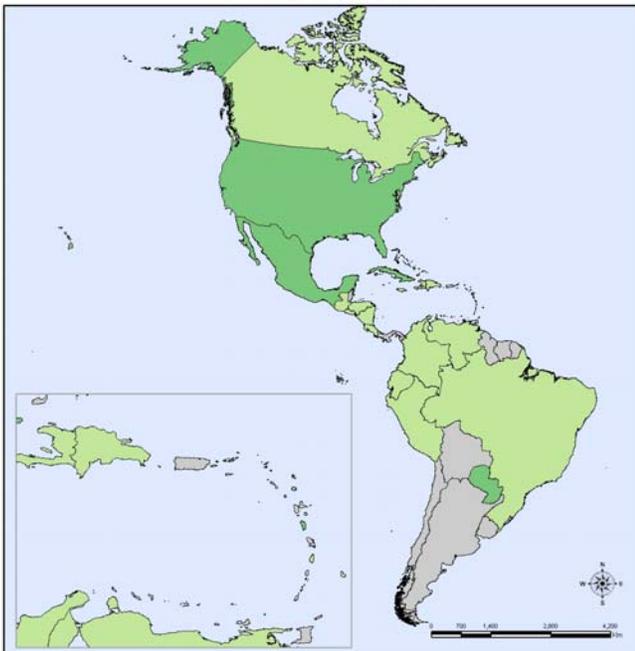
Trend

- No information available
- Decreasing
- Unchanged
- Increasing

Map Production:
PAHO/MSD/CDC
October 30, 2009
Cartographic projection:
Lambert Equal Area Azimuthal
Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 42 = epidemiological week from October 18 to October 24, 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 42*.**



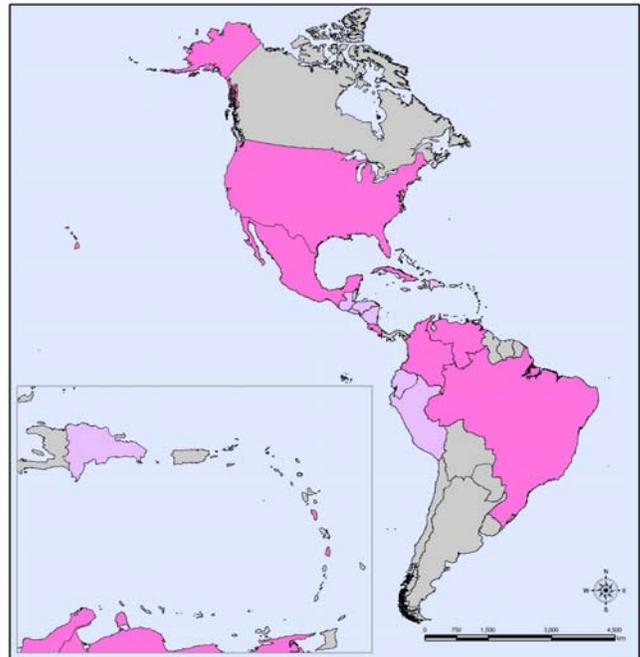
Intensity of acute respiratory disease

- No information available
- Low or moderate
- High
- Very high

Map Production:
PAHO/MSD/CDC
October 30, 2009
Cartographic projection:
Lambert Equal Area Azimuthal
Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 42 = epidemiological week from October 18 to October 24, 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 42*.**



Impact on health-care services

- No information available
- Low
- Moderate
- Severe

Map Production:
PAHO/MSD/CDC
October 30, 2009
Cartographic projection:
Lambert Equal Area Azimuthal
Source: Ministries of Health of the countries
Consolidated by PAHO/WHO
Created by PAHO/WHO

* EW 42 = epidemiological week from October 18 to October 24, 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.

Approximately half of confirmed hospitalized cases were among women (Table 1). Children continue to be the age group with highest hospitalization rates. Underlying comorbidities were present in 50–60% of hospitalized cases, while approximately 25% of confirmed cases in child-bearing age women were pregnant.

Table 1: Description of hospitalizations and severe cases among confirmed cases of pandemic (H1N1) 2009 in selected countries

	Canada	CAREC ²	Paraguay	Argentina	Costa Rica
Reporting period	Through EW 41	Through October 21, 2009	Through EW 42	Through EW 41	Through October 27, 2009
Type of cases reported	Hospitalized	Hospitalized	Hospitalized	Severe Cases	Hospitalized
Number of hospitalizations	1,604	226	137	1590	1728
Percentage of women	51.6%	48%	55%	51.6%	-
Age	Median 23 years Highest rate in children <15 years	Most affected age groups: 0-14 years and 20-49 years	Median 24 years	Median 32 years Highest rates in children <1 year	-
Co-morbidities	61.9%	-	20.0%	53.0%	-
Co-morbidities most frequently reported	-	-	-	Asthma (17%), Arterial Hypertension (9%), Diabetes Mellitus (9%), COPD (7%)	Asthma (23.4%), Diabetes Mellitus (11%), COPD (10.1%), Cardiopathy (7.4%), Smoking (7.6%), Obesity (7.3%)
Percent pregnant among women of child-bearing age	27.8%	12.0%	-	-	-

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

With regard to deceased cases, some countries reported observed differences in sex distribution (Canada, Dominican Republic), but overall, most deaths were among adults (Table 2). The percentage of cases with underlying comorbidities varied among countries, ranging from 41.0–76.1%.

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

	Brazil	Argentina	Ecuador	Canada	Mexico	Dominican Republic	Peru
Reporting period	Through EW 40	Through EW 42	Through EW 41	Through EW 41	Until October 26, 2009	Until October 28, 2009	Until October 26, 2009
Number of confirmed deaths	1368	593	75	83	328	22	180
Percentage of women	-	No gender differences	52%	61%	48.5%	82%	-
Age	Highest number in ≥60 years age group	Highest rate in 50-59 year age group	Highest number in 20-29 year age group	Median 49.5 years	Highest number in 30-39 year age group	-	-
Co-morbidities	41.0%	-	-	77.4%			76.1%
Co-morbidities most frequently reported (%)	In order of decreasing frequency: Cardiovascular, Respiratory, Immunosuppressive disease, Metabolic, Diabetes, Renal, Obesity, Hemoglobinopathy	-	-	-	Metabolic disorders (31.8%), Smoking (22.9%), Cardiovascular (12.8%), Respiratory (7.9%)	-	Metabolic (23.3%), Cardiovascular (22.2%), Respiratory (12.8%), Neurology (9.9%), Renal (8.3%), Genetic (7.8%), Rheumatologic (4.4%)
Percent pregnant among women of child-bearing age	29.4%	-	-	23.5%	-	55%	-

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.

Among the selected countries, there is a continued predominant circulation of the pandemic (H1N1) 2009 virus.

**Table 3. Relative circulation of pandemic (H1N1) 2009 for selected countries
Last EW Available**

Country	Epidemiological Week	Percentage of Pandemic (H1N1) 2009*
Brazil	40	100.0%
Canada	42	99.7%
Panama	41	100.0%
United States	42	100.0%
MEDIAN percentage pandemic (H1N1) 2009		100%

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

IV- Viral resistance

To date, CDC has tested 240 influenza pandemic isolates from 18 countries of the region, all of which were sensitive to neuraminidase inhibitors. In the United States, however, a total of 14 isolates have been identified which are resistant to oseltamivir.

Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information. Region of the Americas.

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados					
Belize					
Bolivia					
Brazil	Regional	Decreasing	Low or moderate	Moderate	42
Canada	Widespread	Increasing	Low or moderate		42
Chile					
Colombia	Widespread	Increasing	Low or moderate	Moderate	42
Costa Rica	Widespread	Decreasing	Low or moderate	Moderate	42
Cuba	Widespread	Increasing	High	Moderate	42
Dominica	Widespread	Unchanged	High	Moderate	42
Dominican Republic	Widespread	Unchanged	Low or moderate	Low	42
Ecuador	Widespread	Decreasing	Low or moderate	Low	42
El Salvador	Regional	Unchanged	Low or moderate	Low	42
Grenada					
Guatemala	No activity	Decreasing	Low or moderate	Low	42
Guyana					
Haiti	Widespread	Increasing	Low or moderate	NIA	42
Honduras	Widespread	Decreasing	Low or moderate	Low	42
Jamaica	Widespread	Unchanged	Low or moderate	Low	42
Mexico	Widespread	Increasing	High	Moderate	42
Nicaragua	Widespread	Unchanged	Low or moderate	Low	42
Panama					
Paraguay	Localized	Decreasing	High		42
Peru	Widespread	Decreasing	Low or moderate	Low	42
Saint Kitts and Nevis					
Saint Lucia	Widespread	Decreasing	Low or moderate	Moderate	42
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Widespread	Increasing	High	Moderate	42
Uruguay					
Venezuela	Widespread	Decreasing	Low or moderate	Moderate	42

**Annex 2: Number of cases and deaths confirmed for the Pandemic (H1N1) 2009 virus
Region of the Americas. Updated as of 30th October 2009, (17 h GMT; 12 h EST).**

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

Country	Cumulative number of confirmed cases	Cumulative number of deaths	New cases (Since October 23 rd)	New deaths (Since October 23 rd)
Southern Cone				
Argentina	9,196	585	0	0
Brazil**	17,219	1,368	0	0
Chile	12,257	136	0	0
Paraguay	850	43	158	1
Uruguay*	550	20	0	0
Andean Area				
Bolivia	2,310	56	1	0
Colombia	2,722	130	179	12
Ecuador	2,251	80	77	5
Peru	8,724	180	0	18
Venezuela	1,931	95	138	4
Caribbean Countries				
Antigua & Barbuda	4	0	1	0
Bahamas	24	0	1	0
Barbados	153	3	6	0
Cuba	793	7	116	0
Dominica	30	0	20	0
Dominican Republic	464	22	40	0
Grenada	20	0	17	0
Guyana	17	0	0	0
Haiti	91	0	48	0
Jamaica	149	5	45	1
Saint Kitts & Nevis	6	1	0	0
Saint Lucia	55	0	42	0
Saint Vincent & Grenadines	2	0	0	0
Suriname	108	2	0	0
Trinidad & Tobago	194	4	31	0
Central America				
Belize	36	0	0	0
Costa Rica	1,572	38	20	0
El Salvador	785	22	13	0
Guatemala	1,080	18	269	5
Honduras	543	16	0	0
Nicaragua	2,152	11	0	0
Panama	787	11	0	0
North America				
Canada*	10,156	95	0	9
Mexico	50,234	328	2,446	50
United States***	57,602	1,123	6,834	119
TOTAL	185,067	4,399	10,502	224

*This country no longer updates on the total number of confirmed cases; only on the number of deaths.

**Brazil reports the number of cases of severe acute respiratory infections (SRAG) that have been confirmed for pandemic (H1N1) 2009.

*** Since August 30, 2009 the United States has replaced the weekly report of all laboratory confirmed pandemic (H1N1) 2009 cases with a new reporting system of only confirmed hospitalized cases and deaths. Furthermore, the results of its syndromic surveillance of pneumonias and influenza are also notified. While the later includes all influenza subtypes, 99% of influenza viruses detected are pandemic (H1N1) 2009.

As of 30 **October**, a total of **185,067 confirmed cases** have been notified in all **35 countries** in the Americas Region. A total of **4,399 deaths** have been reported among the confirmed cases in **26 countries** of the Region.

In addition to the figures displayed in **Annex 2**, the following overseas territories have confirmed cases of pandemic (H1N1) 2009: American territories: American Samoa (8); Guam (1); Puerto Rico (20) and U.S. Virgin Islands (49). 2. United Kingdom Overseas Territories: Bermuda (1); Cayman Islands (104, 1 death); British Virgin Islands (12); Turks and Caicos Islands (36). French Overseas Communities: Martinique (44, 1 death); Guadeloupe (27); Guyane (29, 1 death); Saint Martin (30); Saint Bartholomew (2); Netherlands Antilles: Aruba (13); Bonaire (31); Curaçao (53)*; St. Eustatius (1); and St. Maarten (24).

* Three cases were reported on a cruise-ship.

The distribution of cases and deaths at the first sub-national level can be found in the interactive map available through the following link: <http://new.paho.org/hq/images/atlas/en/atlas.html>