



Pandemic (H1N1) 2009

(January 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 Canada, in EW 1, the national influenza-like illness (ILI) consultation rate decreased as compared to EW 52 and remained below the historical average. The overall number of hospitalizations, ICU admissions, and deaths associated with the pandemic virus remained low, as compared to the levels seen in October and November 2009. A total of ten oseltamivir-resistant isolates have been detected since April 2009.

In Mexico, from EW 51 to EW 52, there was a 19% decrease in the number ILI and severe acute respiratory illness (SARI) cases, and activity has now been decreasing for ten consecutive weeks.

In the United States, the proportion of outpatient consultations for ILI decreased in EW 01 and fell below the national baseline. Just one of ten sub-national surveillance regions reported the proportion of outpatient visits for ILI to be above its 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 below the epidemic threshold. A total of seven influenza-associated pediatric deaths were reported, of which six were associated with the pandemic virus. A total of 52 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

These countries reported variable spread of influenza and decreasing or unchanged trends in acute respiratory disease. The Bahamas and

Dominica reported low/moderate intensity of acute respiratory disease, however Belize reported high intensity. Low and moderate impact of acute respiratory disease on health care services was reported by these countries. Of note, Dominica continued to report no influenza activity.

In countries providing these data¹, SARI hospitalization incidence in EW 52 decreased as compared to the previous week.

Weekly Summary

- •In North America, acute respiratory disease activity continued to decrease and is lower than expected in most areas
- In the Caribbean, all countries reported unchanged and decreasing trends in acute respiratory disease
- Central American countries reported decreasing trends in acute respiratory disease
- South American countries reported mostly decreasing or unchanged trends of acute respiratory disease, except Paraguay, which reported an increasing trend
- In North America, a median of 100% of subtyped influenza A viruses were pandemic (H1N1) 2009
- 79 new confirmed deaths in 6 countries were reported; in total there have been 7,094 cumulative confirmed deaths

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

Central America

Costa Rica and Panama reported widespread influenza activity, decreasing trends in acute respiratory disease, low/moderate intensity of acute respiratory disease, and low impact of acute respiratory disease on health care services.

South America

Andean

Influenza activity was reported as widespread in Ecuador and Venezuela, localized in Colombia, and with no activity in Bolivia. Acute respiratory disease trends were reported mostly as decreasing or unchanged. The intensity of acute respiratory disease and the impact of acute respiratory disease on health-care services were reported as low or moderate for these countries.

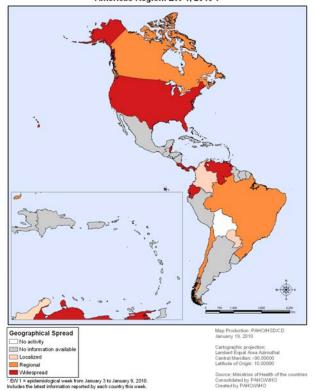
Southern Cone

Influenza activity was reported as regional in Brazil and Chile, and localized in Paraguay. The trends of acute respiratory disease were reported as increasing in Paraguay, decreasing in Brazil, and unchanged in Chile. These countries reported low/moderate intensity of acute respiratory disease, and low impact of acute respiratory disease on health-care services.

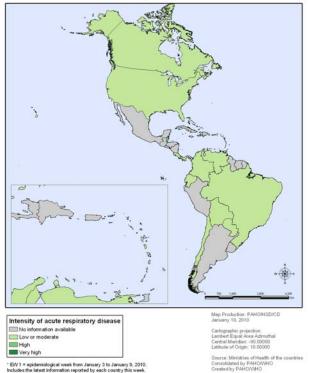
Paraguay (EW 01) reported an increased number of consultations for ILI and SARI (21.9% and 46.3%, respectively) as compared to EW 52. Eleven of seventeen departments reported increasing trends of acute respiratory disease and fifteen of seventeen departments reported high or very high intensity of acute respiratory disease.

According to the latest data available for Argentina and Chile (EW 51 and EW 52, respectively), these countries had a low incidence of ILI (0.4 and 1.3 per 100,000 population, respectively). In Argentina, this incidence has remained under the epidemic threshold for twelve consecutive weeks.

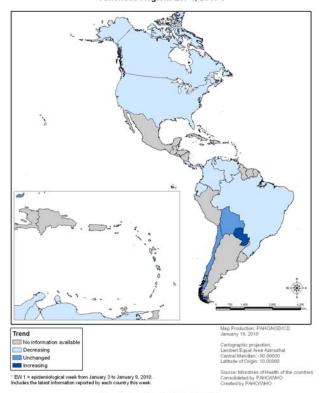
Map 1. Pandemic (H1N1) 2009, Geographical Spread by Country. Americas Region. EW 1, 2010*.



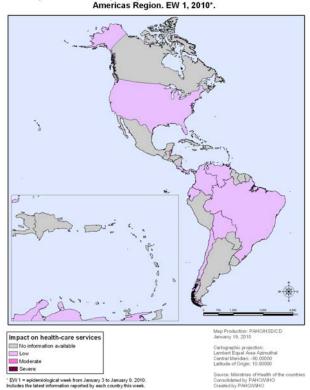
Map 3. Pandemic (H1N1) 2009, Intensity of Acute Respiratory Disease in the Population. Americas Region. EW 1, 2010*.



Map 2. Pandemic (H1N1) 2009, Trend of respiratory disease activity compared to the previous week. Americas Region. EW 1, 2010*.



Map 4. Pandemic (H1N1) 2009, Impact of Acute Respiratory Disease on Health-Care Services. Americas Region. EW 1, 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 children and young adults. Underlying comorbidities were present in approximately 50% of hospitalized cases.

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

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	Argentina	Canada	CAREC ²	Chile	Costa Rica
Reporting period	Until EW 52	April 12, 2009–January 9, 2010	April 16 – January 6, 2010	Until January 13, 2010	Until December 31, 2009
Type of cases reported	Hospitalized	Hospitalized, confirmed	Hospitalized, confirmed	Severe, confirmed	Hospitalized, confirmed
Number of cases	14,084	8,053	328	1,622	3,167
Percentage of women	-	50	47.7	51.7	53
Age	Most affected age group: 0–4 years (incidence 76/ 100,000 hab)	Median 29 years	Most affected age groups: 0–14 and 20–49	Median 33 years, highest incidence in age group < 1 year (76/100,000 hab), 1–4 years (21/100,000 hab)	Mean 32.4 years
Percent with underlying co-morbidities	-	51.3	_	53	-
Co- morbidities most frequently reported (%)	-		Obesity (7%)	Asthma (17.6%), arterial hypertension (15.4%), diabetes (12.5%), COPD (8.5%), obesity (4.3%)	Asthma (29.9%), DM (11.2%), COPD (9.4%), cardiopathy (7.2%), obesity (7.1%), smoking (6.8%)
Percent pregnant among women of child-bearing age	-	20.5*	10.4**	-	3.2%***

^{*} Percent of pregnant women among women 15 to 44 years of age

***The denominator used was all hospitalized cases

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

² CAREC countries and territories include Anguilla, Antigua, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos Islands

Overall, approximately half of deceased cases were among women (Table 2). The percentage of cases with underlying co-morbidities varied from 60 to 77%.

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

Countries	Countries							
	Argentina	Canada	CAREC ³	Chile	Costa Rica	Mexico	Paraguay	Peru
Reporting period	Until EW 52	April 12, 2009 – January 9, 2010	April 16 – January 6, 2010	Until January 11, 2010	Until January 7, 2010	Until January 11, 2010	Until EW 01, 2010	Until January 11, 2010
Number of confirmed deaths	617	414	19	153	47	896	46	208
Percentage of women	"No gender difference"	50.2	-	47.5	47.5	49.6	43	-
Age	Highest rate in 50–59 year age group	Median 53 years	-	Mean 44 years	Mean 40.4 years	Highest percentage (59.8%) in 20–49 year age group	Median 37 years	Mean: 37.7 years, Highest percentage (18.3%) in 50–59 year age group
Percent with underlying co- morbidities	-	75.8	57.9	70.6	79	60.2	74	76.9
Co-morbidities most frequently reported (%)	-	-	Obesity (47.4%)	-	Arterial hypertension (33%), diabetes mellitus (33%), morbid obesity (31%), asthma (11%), smoking (14%)	-	Chronic Cardiopathy (20%), metabolic (17%), inmunologic (12%), neurologic (6%)	Metabolic (23.1%), cardiovascul ar (19.7%), respiratory (13%), neurologic (8.7%)
Percent pregnant among women of child- bearing age		8*	15.8**	4.2**	14**	-	12**	-

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

³ CAREC countries and territories include Anguilla, Antigua, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos Islands

^{**} 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	01	100	
USA	01	100	
MEDIAN percentage pand	demic (H1N1) 2009	100	

^{*}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 30, 2009 – January 9, 2010	99.8	
CAREC ⁴ January 4, 2009– January 6, 2010		95.5	
MEDIAN percentage pand	demic (H1N1) 2009	97.7	

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

^{**}Only one specimen was tested

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⁴ CAREC countries and territories include Anguilla, Antigua, Aruba, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos Islands

Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 01, 2010

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas	Regional	Unchanged	Low or moderate	Low	52
Barbados					
Belize	Widespread	Decreasing	High	Moderate	52
Bolivia	No activity	Unchanged	Low or moderate	Low	1
Brazil	Regional	Decreasing	Low or moderate	Low	1
Canada	Regional	Decreasing	Low or moderate	NIA	1
Chile	Regional	Unchanged	Low or moderate	Low	52
Colombia	Localized	Decreasing	Low or moderate	Low	1
Costa Rica	Widespread	Decreasing	Low or moderate	Low	52
Cuba					
Dominica	No activity	Unchanged	Low or moderate	Low	1
Dominican Republic					
Ecuador	Widespread	Decreasing	Low or moderate	Low	1
El Salvador					
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras					
Jamaica					
Mexico					
Nicaragua					
Panama	Widespread	Decreasing	Low or moderate	Low	1
Paraguay	Localized	Increasing	Low or moderate	NIA	1
Peru					
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	1
Uruguay					
Venezuela	Widespread	Decreasing	Low or moderate	Low	1

NIA = No information available

Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas. Updated as of January 15, 2010 (17 h GMT; 12 h EST). Source: Ministries of Health of the countries in the Region.

Country	Cumulative number of deaths	New deaths (since Jan 8, 2010, 12 h EST)
Southern Cone		
Argentina	617	0
Brazil	1,632	
Chile	153	3
Paraguay	46	0
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	198	0
Ecuador	117	0
Peru	208	0
Venezuela	129	5
Caribbean Countries		
Antigua & Barbuda	0	0
Bahamas	1	
Barbados	3	0
Cuba	53	
Dominica	0	0
Dominican Republic	23	
Grenada	0	0
Guyana	0	0
Haiti	0	
Jamaica	6	0
Saint Kitts & Nevis	1	0
Saint Lucia	1	0
Saint Vincent & Grenadines	0	0
Suriname	2	0
Trinidad & Tobago	5	0
Central America		
Belize	0	0
Costa Rica	47	9
El Salvador	31	
Guatemala	18	
Honduras	16	
Nicaragua	11	0
Panama	11	
North America		
Canada	418	2
Mexico	896	16
United States	2,372	44
TOTAL	7,094	79

As of 15 January, 2010, a total of 7,094 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).