



Regional Update

Pandemic (H1N1) 2009

(April 12, 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 13 the national influenza-like illness (ILI) consultation rate was similar to the previous week and was still below the historical average. Only one new hospitalization related to the pandemic virus and no deaths were reported this week. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In Mexico², from EW 11 to EW 12 there was a 10.75% decrease in the number ILI and severe acute respiratory illness (SARI) cases. However, the National Institute of Respiratory Infections (INER) reported an increasing trend in the number of hospitalizations and ICU admission since the beginning of February.

In the United States³, the proportion of outpatient consultations for ILI has remained below the national baseline for thirteen consecutive weeks. All ten 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. One pediatric death associated with laboratory confirmed influenza A was reported. A total of 64 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

Influenza activity was reported as regional in Barbados and Cuba, and no influenza activity in Dominica and Santa Lucia. All 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.

Cuba reported an unchanged trend in acute respiratory disease this week, nevertheless there has been an 88.7% increase of confirmed cases of pandemic virus compared to the previous week (35 cases in EW 12 to 66 cases in EW 13).

Although Santa Lucia reported an unchanged trend in acute respiratory disease in EW 13, there has been a slight increase in the number of SARI cases especially in children.

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.
- Central American countries reported decreasing trends in acute respiratory disease.
- In South America, Peru reported an increasing trend in acute respiratory disease.
- In Canada and the United States, the 100% of all subtyped influenza A viruses were pandemic (H1N1) 2009.
- 57 new confirmed deaths in 4 countries were reported; in total there have been 8,274 cumulative confirmed deaths.

Central America

Nicaragua reported regional influenza activity, and El Salvador, Guatemala and Panama reported no influenza activity. All these countries reported decreasing trends in acute respiratory disease, low/moderate intensity and low impact of acute respiratory disease on health care services.

South America

Andean

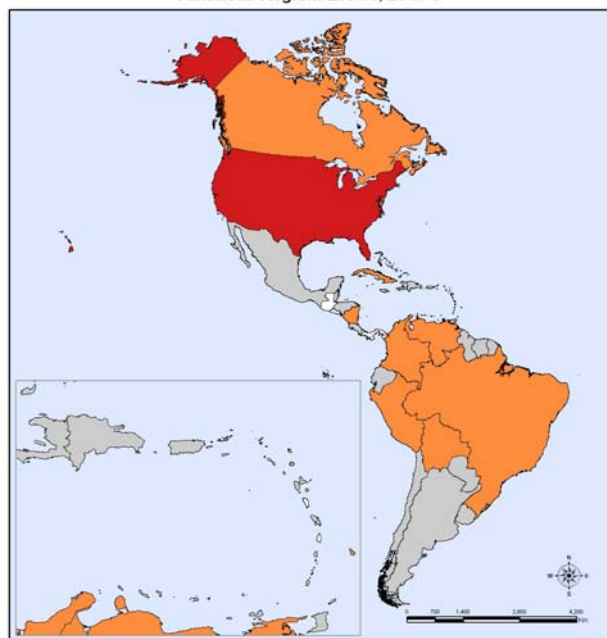
Influenza activity was reported as regional in Bolivia, Colombia, Peru and Venezuela. These countries reported unchanged or decreasing trends except Peru which reported an increasing trend. All these countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

In Peru⁴, the number of pneumonia cases has increased since EW 10, especially in children under 5 years of age. In Lima and Callao, the number of pneumonia cases in this < 5 year age group was above their region specific epidemic threshold.

Southern Cone

Brazil reported regional influenza activity and an unchanged trend in acute respiratory disease. Low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services was reported by this country. No information on qualitative indicators for other southern cone countries was available this week.

**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 13, 2010*.**



Geographical Spread

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

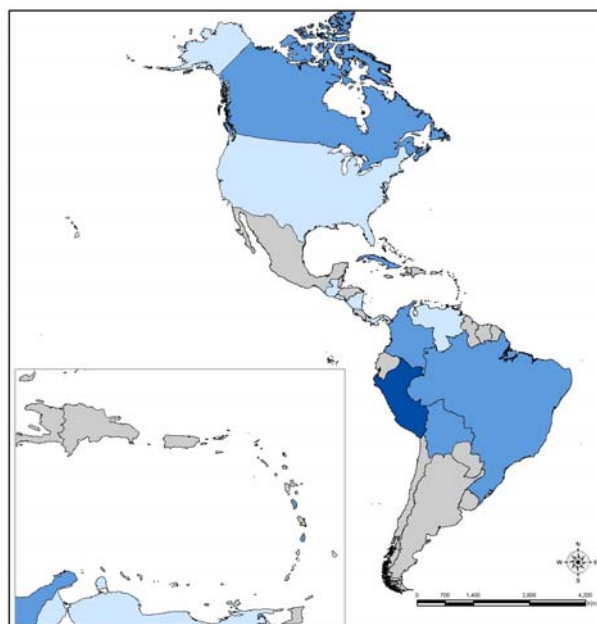
Map Production: PAHO/HS/DCD
April 9, 2010

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 13 = epidemiological week from March 28 to April 3, 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 13, 2010*.**



Trend

- No information available
- Decreasing
- Unchanged
- Increasing

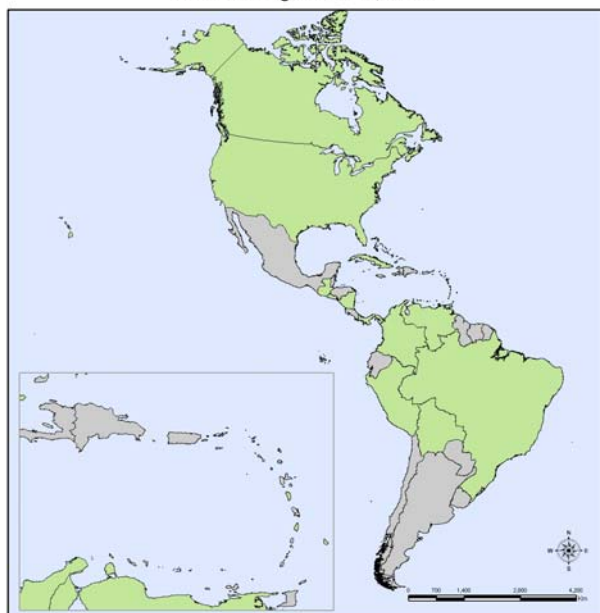
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**Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 13, 2010*.**



Intensity of acute respiratory disease

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

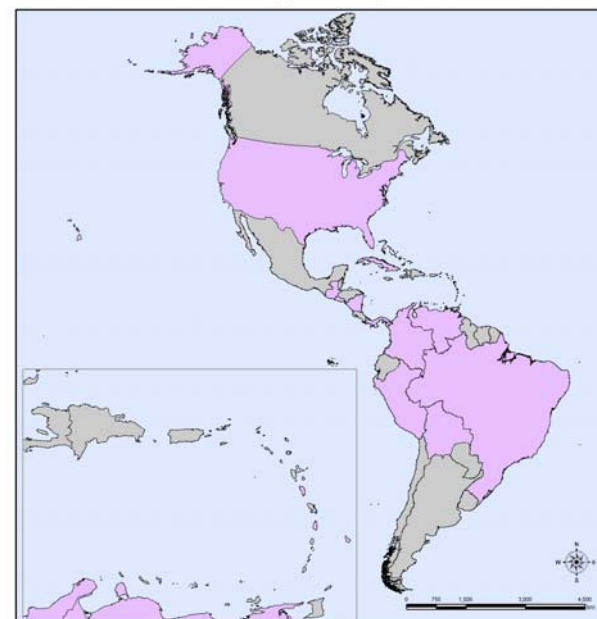
Map Production: PAHO/HS/DCD
April 9, 2010

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 13 = epidemiological week from March 28 to April 3, 2010.
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**Map 4. Pandemic (H1N1) 2009,
Impact of Acute Respiratory Disease on Health-Care Services.
Americas Region. EW 13, 2010*.**



Impact on health-care services

- No information available
- Low
- Moderate
- Severe

Map Production: PAHO/HS/DCD
April 9, 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 13 = epidemiological week from March 28 to April 3, 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.

In Canada, the ratio of males to females among hospitalized cases was one (Table 1). The median age among hospitalizations was 29 years. Underlying comorbidities were present in 56% of hospitalized cases.

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

| | Canada |
|--|------------------------------|
| Reporting period | April 12, 2009–April 3, 2010 |
| Type of cases reported | Hospitalized, confirmed |
| Number of cases | 8,227 |
| Percentage of women | 50 |
| Age | Median 29 years |
| Percent with underlying co-morbidities | 55.9 |
| 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

Overall, approximately half of deceased cases were among women (Table 2). The percentage of deaths with underlying co-morbidities varied from 61 to 83%.

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

| | Canada | Mexico | Peru |
|--|------------------------------|--|--|
| Reporting period | April 12, 2009–April 3, 2010 | 2009 – April 7, 2010 | 2009 –April 5, 2010 |
| Number of confirmed deaths | 423 | 1,172 | 223 |
| Percentage of women | 49.6 | 47.9 | 52 |
| Age | Median 53 years | Highest percentage (70,1%) in 20–54 year age group | Median 38 years |
| Percent with underlying co-morbidities | 82.7 | 61 | 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 | 8* | - | 14.7** |

* 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 North America and Cuba, pandemic (H1N1) 2009 continues to predominate among circulating subtyped influenza A viruses in the Region (Table 3). Cumulatively in Canada, pandemic (H1N1) 2009 continues to predominate as well (Table 4).

In Canada, during EW 13, 2010 the proportion of tests that were positive for influenza was 0.32%, respiratory syncytial virus 14.7%, parainfluenza virus 3.1%, and adenovirus 1.6%. These proportions have remained stable over the past 13 weeks.

In Cuba, from EW 01-EW 13, 2010, 16.9% of all samples tested were positive for respiratory viruses and 5.5% were positive for influenza viruses.

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

| Country | Epidemiologic Week | Percentage of pandemic (H1N1) 2009* |
|---|--------------------|-------------------------------------|
| Canada | 13 | 100 |
| Cuba | 13 | 100 |
| USA | 13 | 100 |
| MEDIAN percentage pandemic (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 | Time Period | Percentage of pandemic (H1N1) 2009* |
|---|--------------------------------|-------------------------------------|
| Canada | August 30, 2009– April 3, 2010 | 99.8 |
| MEDIAN percentage pandemic (H1N1) 2009 | | 99.8 |

*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 13, 2010

| Country | Geographic spread | Trend | Intensity | Impact on Health Care Services | EW |
|----------------------------------|-------------------|------------|-----------------|--------------------------------|----|
| Antigua and Barbuda | | | | | |
| Argentina | | | | | |
| Bahamas | | | | | |
| Barbados | Regional | Decreasing | Low or moderate | Low | 13 |
| Belize | | | | | |
| Bolivia | Regional | Unchanged | Low or moderate | Low | 13 |
| Brazil | Regional | Unchanged | Low or moderate | Low | 13 |
| Canada | Regional | Unchanged | Low or moderate | NIA | 13 |
| Chile | | | | | |
| Colombia | Regional | Unchanged | Low or moderate | Low | 13 |
| Costa Rica | | | | | |
| Cuba | Regional | Unchanged | Low or moderate | Low | 13 |
| Dominica | No activity | Unchanged | Low or moderate | Low | 13 |
| Dominican Republic | | | | | |
| Ecuador | | | | | |
| El Salvador | No activity | Decreasing | Low or moderate | Low | 13 |
| Grenada | | | | | |
| Guatemala | No activity | Decreasing | Low or moderate | Low | 13 |
| Guyana | | | | | |
| Haiti | | | | | |
| Honduras | | | | | |
| Jamaica | | | | | |
| Mexico | | | | | |
| Nicaragua | Regional | Decreasing | Low or moderate | Low | 13 |
| Panama | No activity | Decreasing | Low or moderate | Low | 13 |
| Paraguay | | | | | |
| Peru | Regional | Increasing | Low or moderate | Low | 13 |
| Saint Kitts and Nevis | | | | | |
| Saint Lucia | No activity | Unchanged | Low or moderate | Low | 12 |
| Saint Vincent and the Grenadines | | | | | |
| Suriname | | | | | |
| Trinidad and Tobago | | | | | |
| United States of America | Widespread | Decreasing | Low or moderate | Low | 13 |
| Uruguay | | | | | |
| Venezuela | Regional | Decreasing | Low or moderate | Low | 13 |

NIA: No information Available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.
As of 9 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 2, 2010, 12 h EST) |
|----------------------------|-----------------------------|---|
| Southern Cone | | |
| Argentina | 626 | |
| Brazil | 2,087 | |
| Chile | 153 | |
| Paraguay | 47 | |
| Uruguay | 20 | |
| Andean Area | | |
| Bolivia | 59 | 0 |
| Colombia | 231 | 3 |
| Ecuador | 124 | |
| Peru | 223 | 0 |
| Venezuela | 134 | 0 |
| Caribbean Countries | | |
| Antigua & Barbuda | 0 | |
| Bahamas | 1 | |
| Barbados | 3 | |
| Cuba | 58 | 3 |
| Dominica | 0 | |
| Dominican Republic | 23 | |
| Grenada | 0 | |
| Guyana | 0 | |
| Haiti | 0 | |
| Jamaica | 7 | |
| 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 | 18 | 0 |
| Honduras | 18 | |
| Nicaragua | 11 | 0 |
| Panama | 12 | 0 |
| North America | | |
| Canada | 428 | 0 |
| Mexico | 1,172 | 20 |
| United States* | 2,720 | 31 |
| TOTAL | 8,274 | 57 |

*These deaths include both laboratory-confirmed pandemic (H1N1) 2009 and other influenza associated deaths.

As of **9 April, 2010**, a total of **8,274 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 21. April, 2, 2010.
- 3.- Fluvie. Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>
- 4.- Infecciones Respiratorias Agudas y Neumonías en menores de 5 años de edad en el Perú, EW 11, 2010. <http://www.dge.gob.pe/vigilancia/sala/2010/SE11/neumonias.pdf>