



## Regional Update

### Pandemic (H1N1) 2009

(June 14, 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<sup>1</sup>, in EW 21 and 22, the national influenza-like illness (ILI) consultation rate continued to remain low. All reporting provinces had similar or lower ILI consultation rates as compared to their respective ILI rates in the previous weeks. In EW 21 and 22, no new influenza-associated hospitalizations were reported.

In the United States<sup>2</sup>, the proportion of outpatient consultations for influenza-like illness (ILI) continued to remain below the national baseline, and the traditional influenza season came to a close in EW 20. All sub-national surveillance regions reported the proportion of outpatient visits for ILI to be below their region-specific baseline. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. One influenza-associated pediatric death was reported and was associated with an influenza type B virus.

##### **Caribbean**

Jamaica reported widespread influenza activity and Dominica and Saint Lucia reported no influenza activity. Jamaica and Dominica reported unchanged trends in acute respiratory disease, while Saint Lucia reported a decreasing trend. All these countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

##### **Central America**

Costa Rica reported widespread influenza activity, Nicaragua reported regional activity, and El Salvador, Honduras and Panama reported no influenza activity. Guatemala did not provide the geographical spread indicator this week. All these countries reported decreasing or unchanged trends in acute respiratory disease, low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services, except Nicaragua which reported moderate impact on health care services.

In Costa Rica<sup>3</sup>, in EW 21, an outbreak of ILI was reported in a school in the Province of Heredia. In Guatemala<sup>4</sup> the number of acute respiratory infections has been above the epidemic threshold in the municipality of Villa Canales since EW 19.

#### Weekly Summary

- In North America, acute respiratory disease activity remained low.
- The Caribbean countries, reported decreasing or unchanged trends in acute respiratory disease.
- Central American countries reported decreasing or unchanged trends in acute respiratory disease.
- In South American countries, Colombia and Peru reported increasing trends of acute respiratory disease.
- From EW 1 to 22, 2010, the Caribbean and Central American countries reported variable circulation of respiratory viruses. In Bolivia, influenza B predominated. Argentina, Chile and Paraguay reported the predominance of respiratory syncytial virus.
- 4 new confirmed deaths in 2 countries were reported; in total there have been 8,427 cumulative confirmed deaths.

## ***South America***

### **Andean**

Bolivia, Colombia and Peru reported regional influenza activity. Bolivia reported a decreasing trend in acute respiratory disease, while Colombia and Peru reported increasing trends. Low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services were reported by both countries.

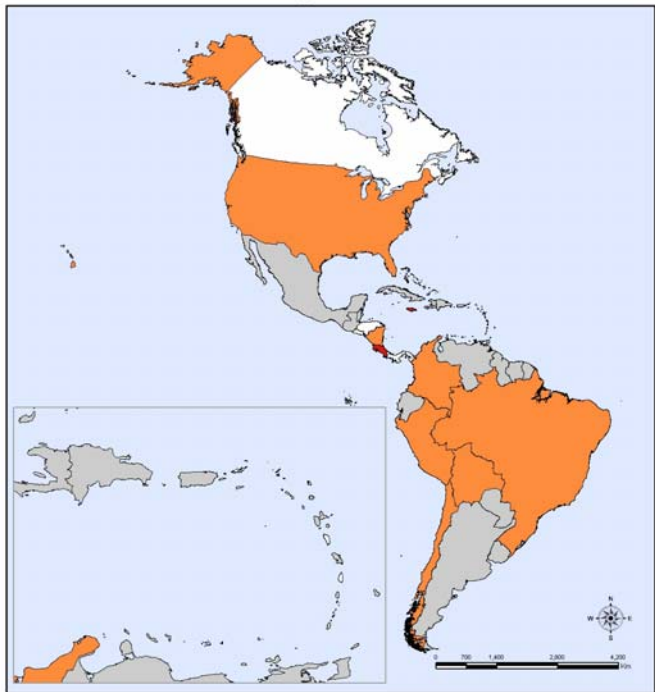
### **Southern Cone**

Brazil and Chile reported regional influenza activity, unchanged trends in acute respiratory disease and low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

In Argentina<sup>5</sup> and Chile<sup>6</sup>, the national ILI rates were below the levels observed for the same period in previous years. Argentina reported its first oseltamivir-resistant pandemic virus case.

In Paraguay<sup>7</sup>, from EW 13 to EW 21, there was an increase of the number of ILI cases reported, and this number of cases is higher than what was seen during the same period last year.

**Map 1. Pandemic (H1N1) 2009,  
Geographical Spread by Country.  
Americas Region. EW 22, 2010\*.**



**Geographical Spread**

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

Map Production: PAHO/HS/ICD  
June 14, 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 22 = epidemiological week from May 30 to June 5, 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 22, 2010\*.**



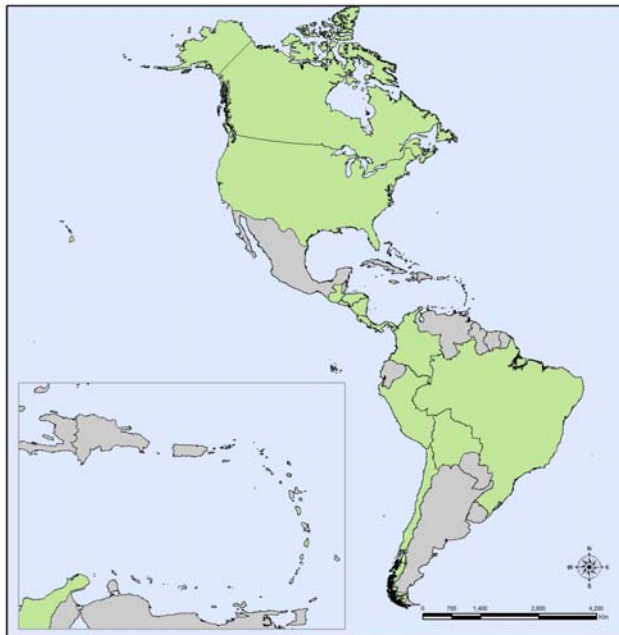
**Trend**

- No information available
- Decreasing
- Unchanged
- Increasing

Map Production: PAHO/HS/ICD  
June 14, 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 22 = epidemiological week from May 30 to June 5, 2010.  
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 22, 2010\*.**



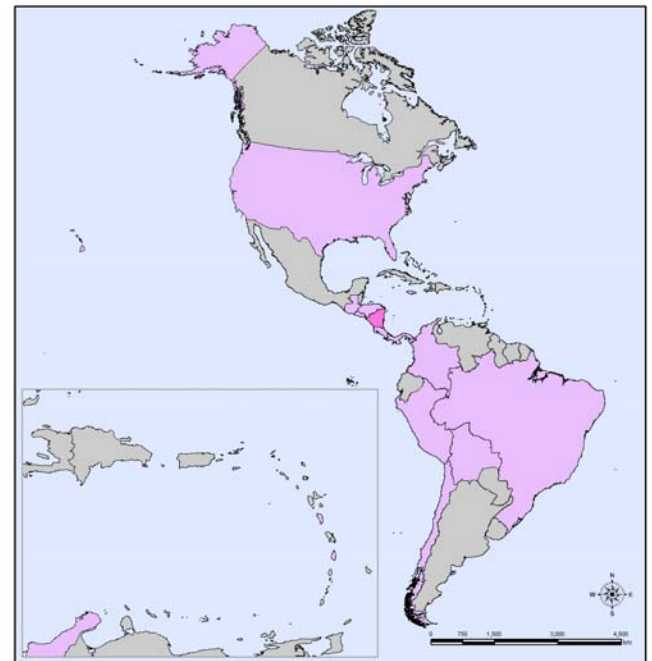
**Intensity of acute respiratory disease**

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

Map Production: PAHO/HS/ICD  
June 14, 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 22 = epidemiological week from May 30 to June 5, 2010.  
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 22, 2010\*.**



**Impact on health-care services**

- No information available
- Low
- Moderate
- Severe

Map Production: PAHO/HS/ICD  
June 14, 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 22 = epidemiological week from May 30 to June 5, 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.

The ratio of males to females among hospitalized cases was approximately one (Table 1). Hospitalizations were mainly in young adults. Underlying comorbidities were present in 53% of hospitalized cases.

**Table 1: Description of hospitalizations and severe cases in countries with data reported this week**

	Chile	Costa Rica
<b>Reporting period</b>	2009 – June 2, 2010	April 24, 2009 – May 29, 2010
<b>Type of cases reported</b>	Hospitalized, confirmed	Hospitalized, confirmed
<b>Number of cases</b>	1,636	552
<b>Percentage of women</b>	52*	55.2
<b>Age</b>	Median 32 years, highest incidence in age group < 5 years*	Mean 39.5
<b>Percent with underlying co-morbidities</b>	53*	-
<b>Co-morbidities most frequently reported (%)</b>	Asthma (17%) Hypertension (10%) Diabetes (8%) COPD (7%)*	Asthma (25.2%) Diabetes (14%) Obesity (14%) COPD (7.9%) Cardiopathy (6.9%)
<b>Percent pregnant among women of child-bearing age</b>	-	6**

\* Information available on 1,622 cases from 2009

\*\* The denominator was all hospitalizations 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 71 to 77%.

**Table 2: Description of deaths among confirmed cases of pandemic (H1N1) 2009 in countries with data reported this week**

	Chile	Peru
<b>Reporting period</b>	2009-June 2, 2010	2009 – June 7, 2010
<b>Number of confirmed deaths</b>	150	226
<b>Percentage of women</b>	47	52
<b>Age</b>	Median 44 years	Median 38
<b>Percent with underlying co-morbidities</b>	70.6	77.4
<b>Co-morbidities most frequently reported (%)</b>	-	Metabolic (29.1%), Cardiovascular (24 %), Respiratory (16 %), Neurologic (10.9%)
<b>Percent pregnant among women of child-bearing age</b>	1.4*	14.5*

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

### III- Viral circulation

The Tables 3 and 4, and the graphs below are contributions from National Influenza Centers and influenza laboratories from the Region. The percentages of pandemic and H1 or H3 seasonal influenza were calculated using all samples positives for influenza A as the denominator.

**Table 3: Viral circulation in countries with data reported.**

Country	Time period EW 2010	# Samples Tested	% Positive Samples	% Influenza A	% Pandemic influenza	% Influenza H1 / H3	% Influenza B	% RSV	% Parainfluenza	% Adenovirus	% Other Viruses
Bolivia*	1 - 21	351	26.5	9.7	77.8	22.2	83.9	5.4	1.1	0.0	0.0
Chile	1 - 21	5542	12.0	10.2	97.1	2.9	0.0	63.9	11.6	14.3	0.0
El Salvador	1 - 20	419	5.7	29.2	57.1	14.3	33.3	0.0	25.0	12.5	0.0
Jamaica	1 - 22	405	4.7	68.4	61.5	15.4	5.3	0.0	5.3	21.1	0.0
Panama	1 - 22	434	5.3	34.8	12.5	12.5	8.7	17.4	34.8	4.3	0.0
Paraguay	1 - 21	466	30.7	1.4	100	0	0.7	73.4	20.3	4.2	0.0

\* Data provided by CENTROP

**Table 4: Viral circulation in countries with data reported this week.**

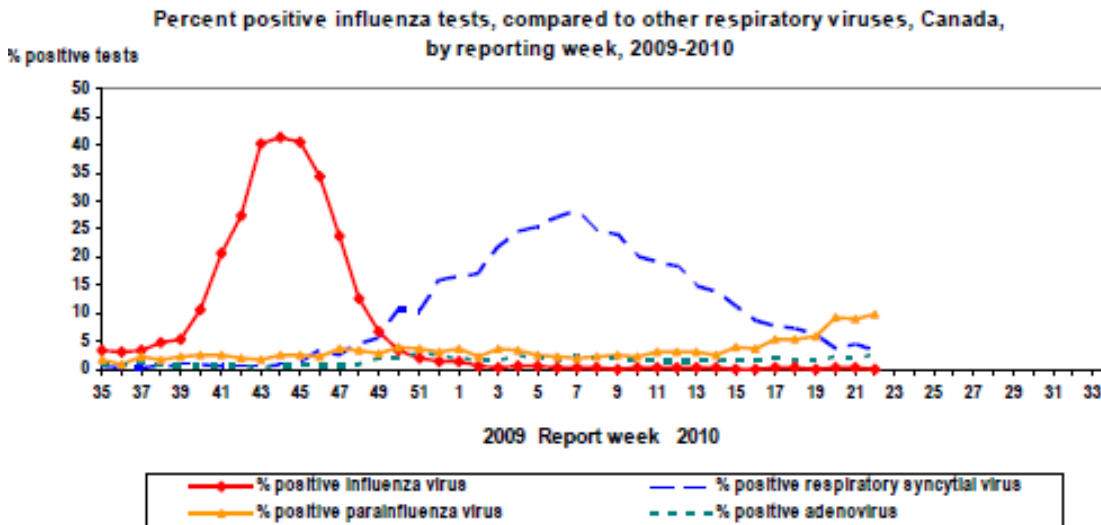
Country	EW 2010	# Samples Tested	% Positive Samples	% Influenza A	% Pandemic influenza	% Influenza H1 / H3	% Influenza B	% RSV	% Parainfluenza	% Adenovirus	% Other Viruses
Bolivia*	21	13	23.1	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Chile	21	688	25.9	3.9	85.7	14.3	0.0	81.5	8.4	6.2	0.0
El Salvador	20	38	7.9	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Jamaica	22	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Panama	22	14	21.4	33.3	0.0	0.0	0.0	0.0	66.7	0.0	0.0
Paraguay	21	33	30.3	0.0	0.0	0.0	0.0	70.0	30.0	0.0	0.0

\* Data provided by CENTROP

## North America

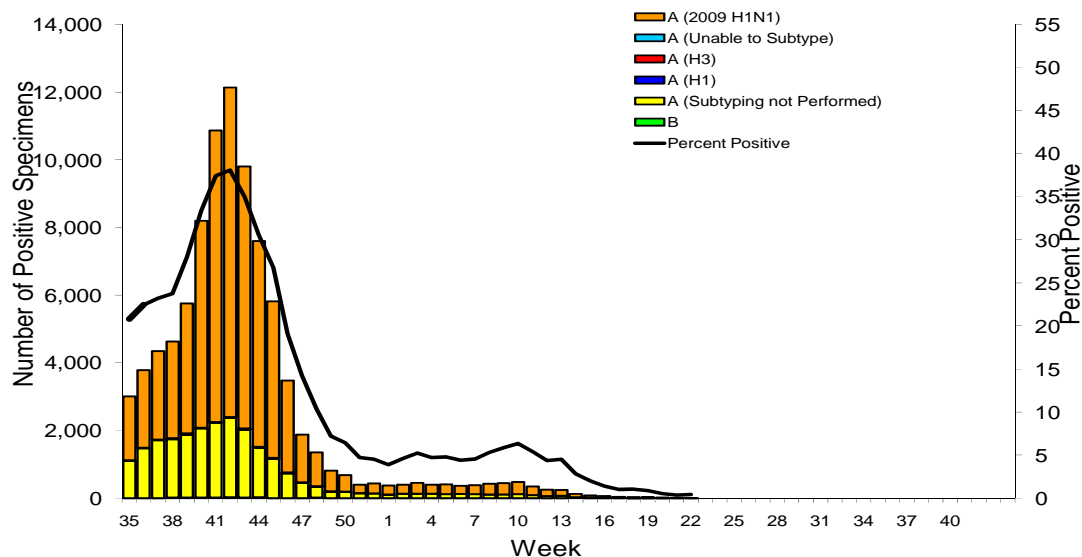
In North America, circulation of pandemic influenza viruses predominated until the end of 2009. In early 2010, Canada experienced a higher circulation of respiratory syncytial virus as compared to pandemic virus. The proportion of positive parainfluenza tests has been increasing for the last four weeks. In the United States, circulation of pandemic influenza viruses predominated until the end of 2009. In EW 22, only four samples were positive for influenza A and none were positive for influenza B.

### Canada. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



### United States. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.

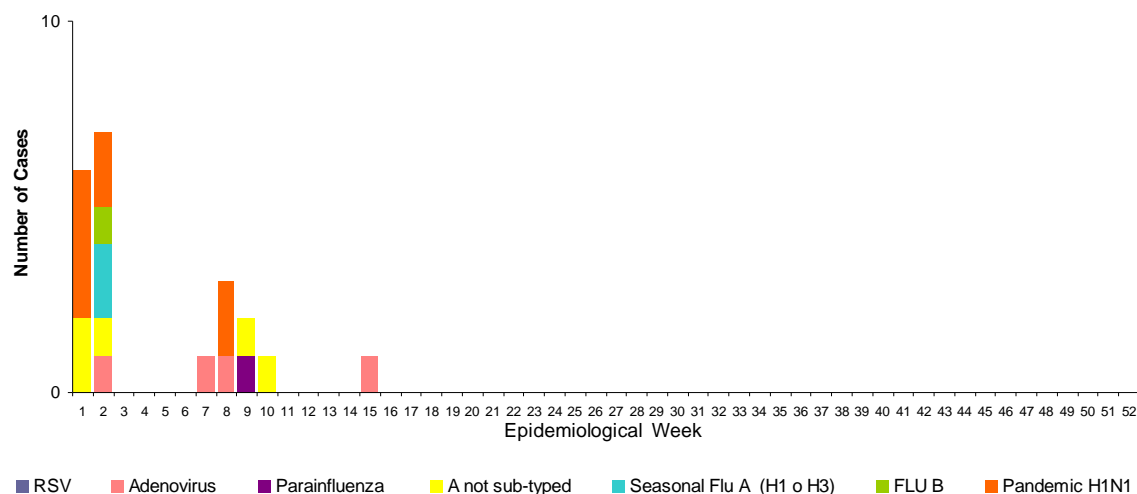
#### Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2009-10



## Caribbean

Jamaica has detected an irregular pattern of respiratory viruses circulation. While this difference could represent differing viral circulation patterns, it could also be a result of differing sampling strategies.

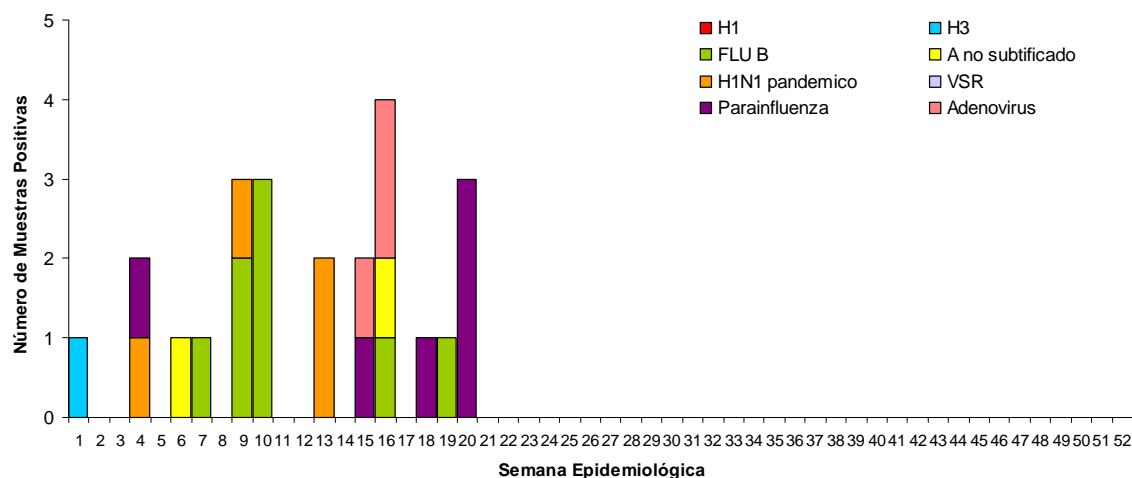
### Jamaica. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season \*



## Central America

El Salvador reported circulation of parainfluenza, adenovirus and influenza B viruses in 2010. Pandemic virus cases were also identified up to EW 13. Panama reported circulation of parainfluenza, syncytial respiratory virus, influenza A and influenza B viruses in 2010.

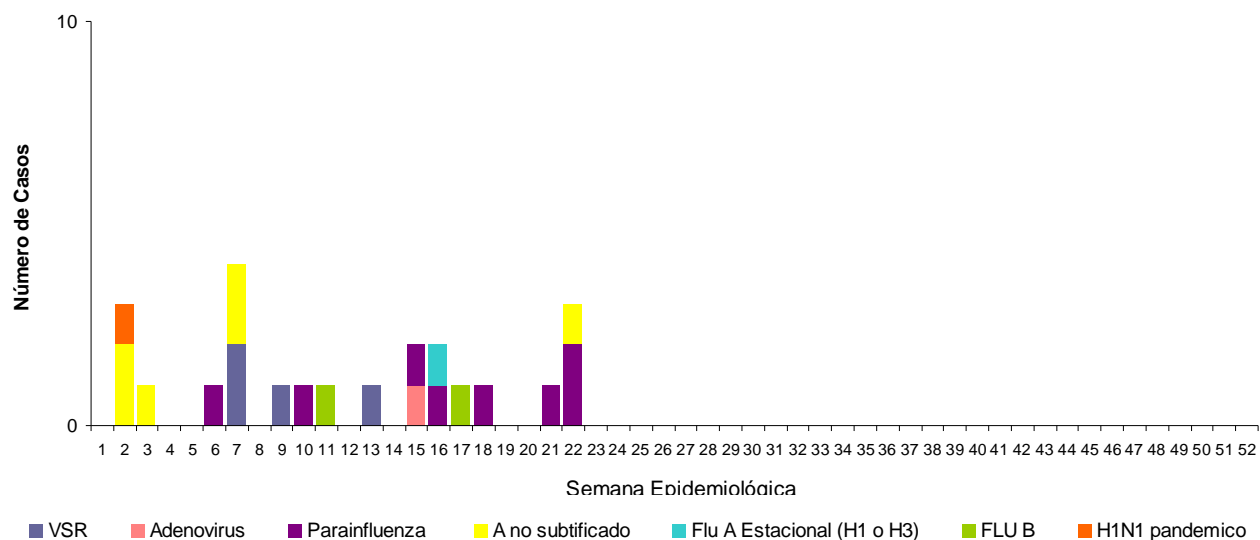
### El Salvador. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season\*



\* Percentage of positive tests for respiratory virus was not showed due to small number of samples tested



**Panama. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season<sup>†</sup>.**

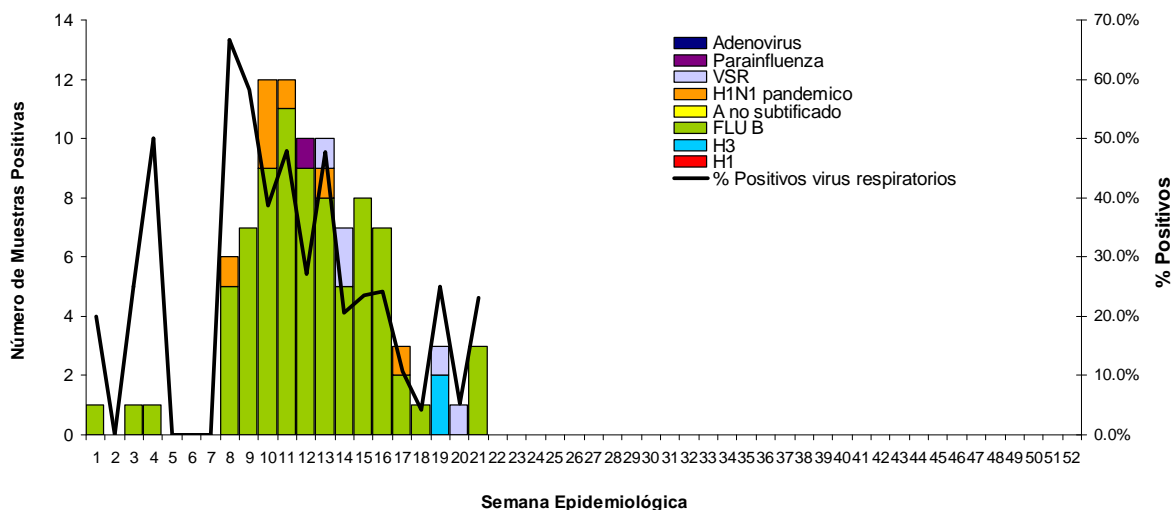


**South America**

**Andean**

Bolivia reported a predominant circulation of influenza B viruses, which were confirmed by RT-PCR, immunofluorescence assay, and viral culture. Recently seasonal influenza and syncycial respiratory virus were also identified.

**Bolivia. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.**

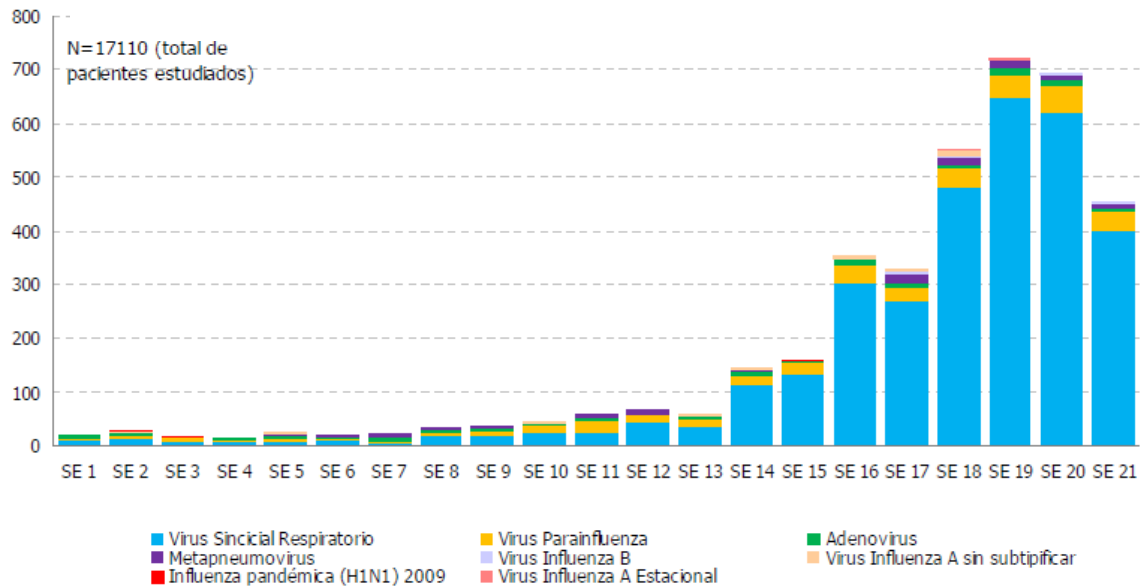


<sup>†</sup> Percentage of positive tests for respiratory virus was not showed due to small number of samples tested

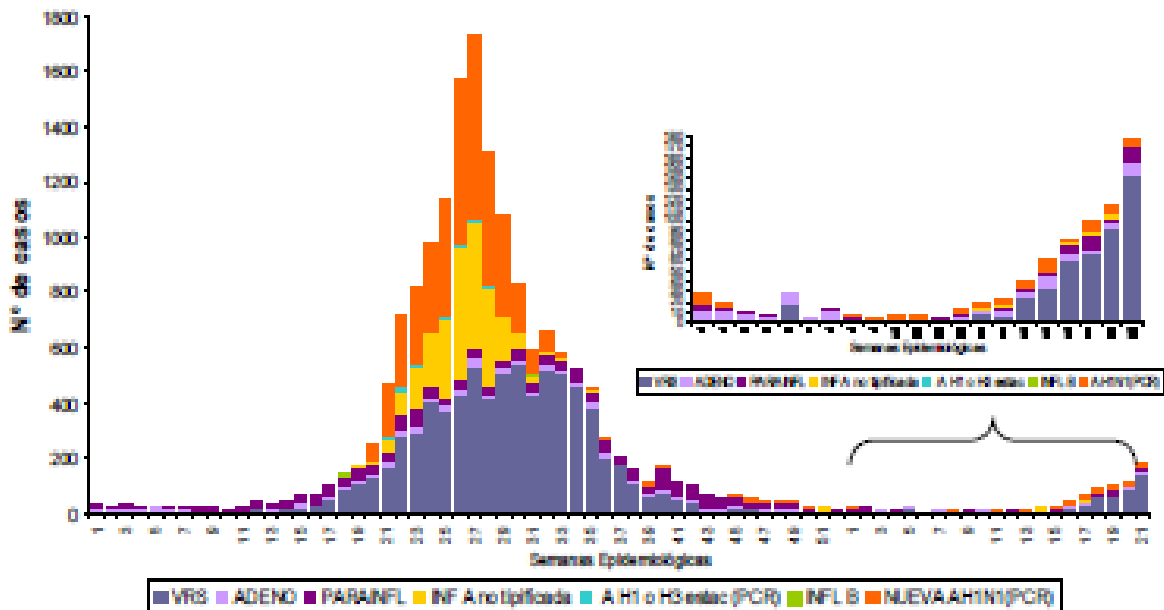
## Southern Cone

In Argentina, Chile and Paraguay, from EW 1 to EW 21, the predominant virus circulating was respiratory syncytial virus, but parainfluenza virus and adenovirus were also detected.

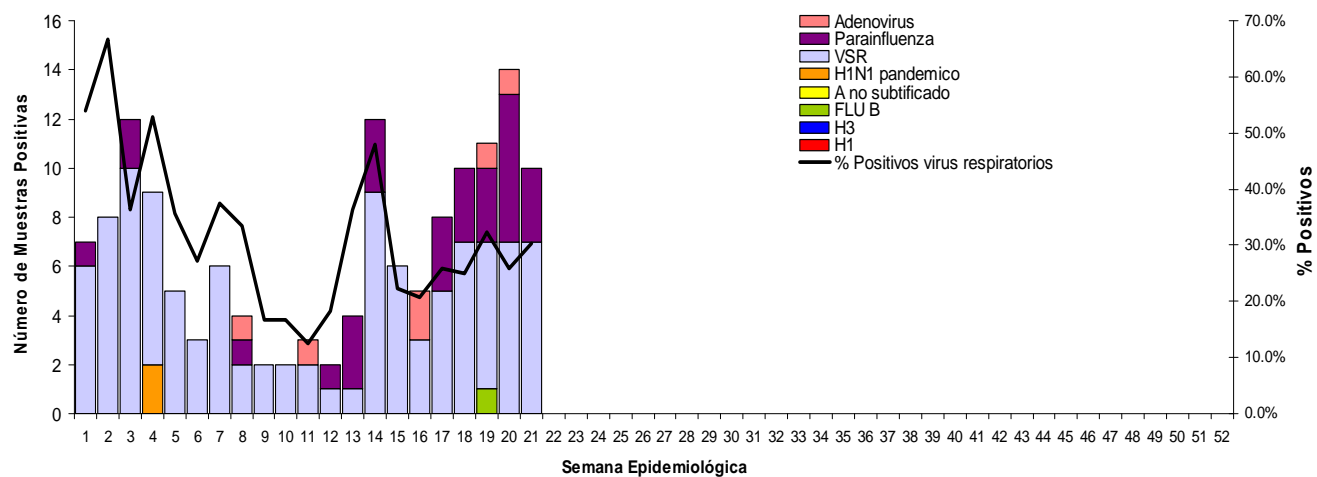
### Argentina. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



### Chile. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



**Paraguay. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.**



**Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 22, 2010**

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados					
Belize					
Bolivia	Regional	Decreasing	Low/moderate	Low	21
Brazil	Regional	Unchanged	Low/moderate	Low	22
Canada	No activity	Decreasing	Low/moderate	NIA	22
Chile	Regional	Unchanged	Low/moderate	Low	21
Colombia	Regional	Increasing	Low/moderate	Low	22
Costa Rica	Widespread	Decreasing	Low/moderate	Low	22
Cuba					
Dominica	No activity	Unchanged	Low/moderate	Low	22
Dominican Republic					
Ecuador					
El Salvador	No activity	Decreasing	Low/moderate	Low	22
Grenada					
Guatemala	NIA	Unchanged	Low/moderate	Low	21
Guyana					
Haiti					
Honduras	No activity	Unchanged	Low/moderate	Low	22
Jamaica	Widespread	Unchanged	Low/moderate	Low	22
Mexico					
Nicaragua	Regional	Unchanged	Low/moderate	Moderate	22
Panama	No activity	Unchanged	Low/moderate	Low	22
Paraguay					
Peru	Regional	Increasing	Low/moderate	Low	22
Saint Kitts and Nevis					
Saint Lucia	No activity	Decreasing	Low/moderate	Low	22
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Regional	Decreasing	Low/moderate	Low	22
Uruguay					
Venezuela					

NIA: No information available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.  
As of June 11, 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 June 4, 2010, 12 h EST)
<b>Southern Cone</b>		
Argentina	626	
Brazil	2,115	
Chile	153	0
Paraguay	47	
Uruguay	20	
<b>Andean Area</b>		
Bolivia	59	0
Colombia	243	0
Ecuador	129	
Peru	228	2
Venezuela	136	
<b>Caribbean Countries</b>		
Antigua & Barbuda	0	
Bahamas	1	
Barbados	3	
Cuba	83	
Dominica	0	
Dominican Republic	23	
Grenada	0	
Guyana	0	
Haiti	0	
Jamaica	7	0
Saint Kitts & Nevis	2	
Saint Lucia	1	
Saint Vincent & Grenadines	0	
Suriname	2	
Trinidad & Tobago	5	
<b>Central America</b>		
Belize	0	
Costa Rica	63	2
El Salvador	33	
Guatemala	26	
Honduras	18	
Nicaragua	11	0
Panama	12	0
<b>North America</b>		
Canada*	428	
Mexico	1,235	
United States**	2,718	
<b>TOTAL</b>	<b>8,427</b>	<b>4</b>

\* As of April 24, 2010, pandemic-associated death reporting was discontinued.

\*\*These deaths include both laboratory-confirmed pandemic (H1N1) 2009 and other influenza associated deaths through April 3, 2010. As of April 3, 2010, influenza-associated death reporting through AHDRA was discontinued.

As of **June 11, 2010**, a total of **8,427 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).

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- 1.- FluWatch Report. EW 22. <http://www.phac-aspc.gc.ca/fluwatch/>
  - 2.- US Surveillance Summary. Week 22. Centers for Disease Control and Prevention.
  - 3.- Boletín Semanal de Vigilancia de la Salud Semana Epidemiológica 22. Dirección de Vigilancia de la Salud Ministerio de Salud de Costa Rica
  - 4.- Boletín Respiratorio. Unidad de vigilancia de enfermedades respiratorias. No 6-2010. XVIII Edición.
  - 5.- Vigilancia de Infecciones Respiratorias Agudas en Argentina. Ministerio de Salud de la Republica de Argentina. EW 21, May 27, 2010. [http://www.msal.gov.ar/archivos/ParteRespiratorias02-06-2010\\_conBronquiolitis.pdf](http://www.msal.gov.ar/archivos/ParteRespiratorias02-06-2010_conBronquiolitis.pdf)
  - 6.- Influenza Pandémica (H1N1) 2009. Reporte de Situación. May 28. [www.pandemia.cl](http://www.pandemia.cl)
  - 7.- Vigilancia centinela de influenza pandémica y otras infecciones respiratorias. SE 23. [www.vigisalud.gov.py](http://www.vigisalud.gov.py)