



## Regional Update

### Pandemic (H1N1) 2009

(July 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

##### **South America**

##### **Southern Cone**

Argentina, Brazil and Chile reported regional influenza activity. The trends in acute respiratory disease were reported as unchanged in Brazil and Chile, and decreasing in Argentina. All these countries reported low to moderate intensity of acute respiratory disease. Brazil reported low impact on health care services.

In Chile<sup>1</sup>, nationally, consultations for influenza-like illness (ILI) remained low and within the endemic channel. At the regional level, one region (Tarapaca) reported high ILI activity, ten regions reported low ILI intensity and four regions have not reported ILI activity. The proportion of consultations in emergency services for respiratory illness out of the total number of consultations, increased from 26.5% to 29%, between epidemiological week (EW) 25 and 26. Children under 15 years old, had the highest proportion (49%) of consultations for respiratory illness in emergency services, but it was lower than what was observed in the same week in 2009 (65%).

In EW 25, Paraguay<sup>2</sup> reported a decrease of 13% in the number of ILI consultations as compared to the previous EW and was 28.4% less as compared to the same week in 2009.

##### **Andean**

Bolivia, Colombia and Peru reported regional influenza activity, while Ecuador and Venezuela reported localized influenza activity. Bolivia and Colombia reported an increasing trend in acute respiratory disease, Ecuador and Venezuela reported an unchanged trend, and Peru reported a decreasing trend in acute respiratory disease. All the countries reported low/moderate intensity of acute respiratory disease, and low impact on health care services.

In EW 26, Bolivia<sup>3</sup> reported, at the national level, an increase in the number of acute respiratory illness (ARI) cases as compared to the previous week, but remaining within the endemic channel. Regionally, however, in the departments of Oruro and Pando, the number of ARI cases was above the epidemic threshold.

#### Weekly Summary

- In South America, Bolivia and Colombia reported an increasing trend of acute respiratory disease.
- In Central America, Honduras and Panama reported increasing trends in acute respiratory disease. Panama reported high intensity of acute respiratory disease and moderate impact on health care services for the second consecutive week. Costa Rica reported a steady increase in confirmed pandemic influenza cases during the last three EWs.
- In the Caribbean, Guyana reported a steady increase in the number of ILI outpatient consultations, from EW 24 to 26
- In North America, acute respiratory disease activity remained low.
- The respiratory viruses circulating in Central America and Caribbean are diverse, with different predominance of influenza viruses (H1N1 pandemic, seasonal influenza A H3N3 and influenza B) in each country.
- 7 new confirmed deaths in 4 countries were reported; in total there have been 8,523 cumulative confirmed deaths in 28 countries of the Region

Peru<sup>4</sup> from EW 24-26, nationally, reported a decreasing trend in the number of severe acute respiratory illness (SARI) and pneumonia cases; however, at the regional level, the southern region reported an increase in the number of SARI and pneumonia cases.

### ***Central America***

Influenza activity was reported as widespread in Costa Rica and Panama, regional in Nicaragua, and no activity in El Salvador and Honduras. Honduras and Panama reported increasing trends in acute respiratory disease, Costa Rica reported an unchanged trend, while El Salvador and Nicaragua reported decreasing trends. All the countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services, except Panama, which reported high intensity and moderate impact of acute respiratory disease on health care services for two consecutive weeks.

Costa Rica<sup>5</sup> reported an increase in confirmed pandemic influenza cases during the last three EW (22-25), in five of the seven provinces: Alajuela, Guanacaste, Heredia, Puntarenas and San Jose.

### ***Caribbean***

Influenza activity was reported as widespread in Jamaica, regional in Cuba, and localized in Dominica. Trends of acute respiratory disease were reported as unchanged in Dominica and Jamaica, and decreasing in Cuba. All countries reported low/moderate intensity of acute respiratory disease, and low impact of acute respiratory disease on health care services.

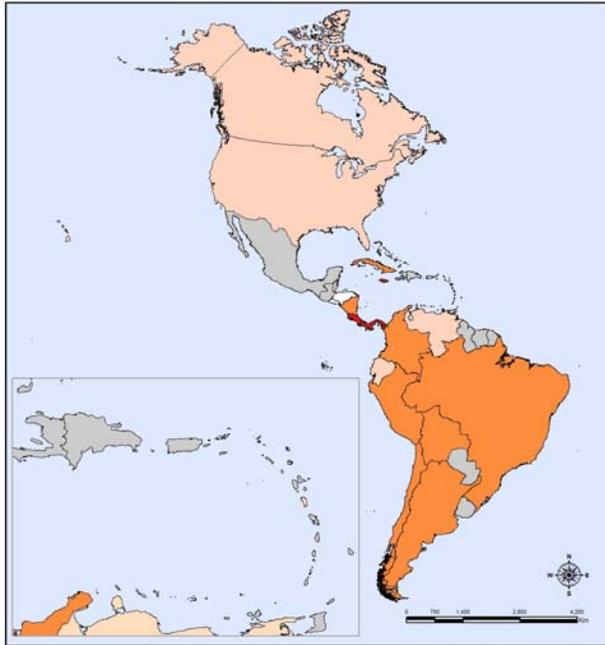
Guyana<sup>6</sup> reported an increase in the number of outpatient ILI consultations during EW 24-26, especially in EW 26, when it surpassed the national baseline.

### ***North America***

In the United States<sup>7</sup>, in EW 26, the proportion of outpatient consultations for ILI continued to remain below the national baseline. All the sub-national surveillance regions reported the proportion of ILI to be below their region-specific baseline. The proportion of deaths attributed to pneumonia and influenza was below the epidemic threshold. No influenza-associated pediatric deaths were reported this week.

In Canada<sup>8</sup>, in EWs 25 and 26, the ILI consultation rate continued to remain low; the rate for EW 25 was slightly above expected levels while during EW 26 the rate was below expected levels for this time of year. All reporting provinces had similar or lower ILI consultation rates as compared to their respective ILI rates in the previous weeks. In EW 25 and 26, no new influenza-associated hospitalizations were reported.

**Map 1. Pandemic (H1N1) 2009, Geographical Spread by Country. Americas Region. EW 26, 2010\*.**



**Geographical Spread**

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

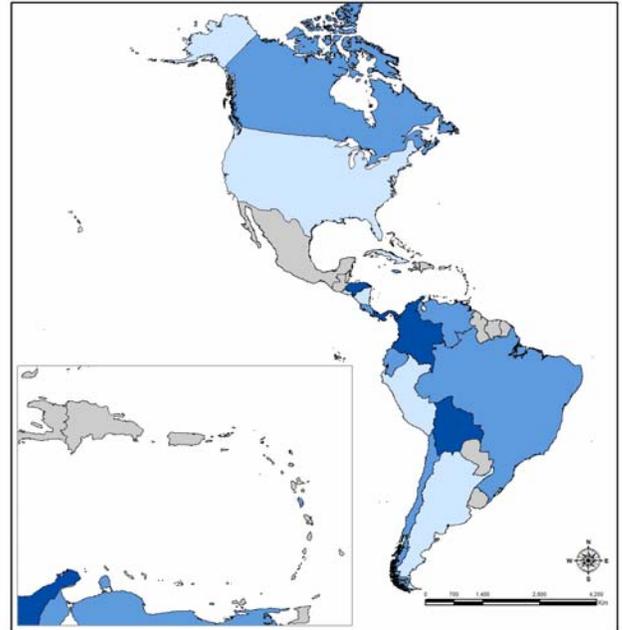
Map Production: PAHO/HS/D/CD  
July 9, 2010

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 26 = epidemiological week from June 27 to July 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 26, 2010\*.**



**Trend**

- No information available
- Decreasing
- Unchanged
- Increasing

Map Production: PAHO/HS/D/CD  
July 9, 2010

Cartographic projection:  
Lambert Equal Area Azimuthal  
Central Meridian: -90.00000  
Latitude of Origin: 10.00000

Source: Ministries of Health of the countries  
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Created by PAHO/WHO

\* EW 26 = epidemiological week from June 27 to July 3, 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 26, 2010\*.**



**Intensity of acute respiratory disease**

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

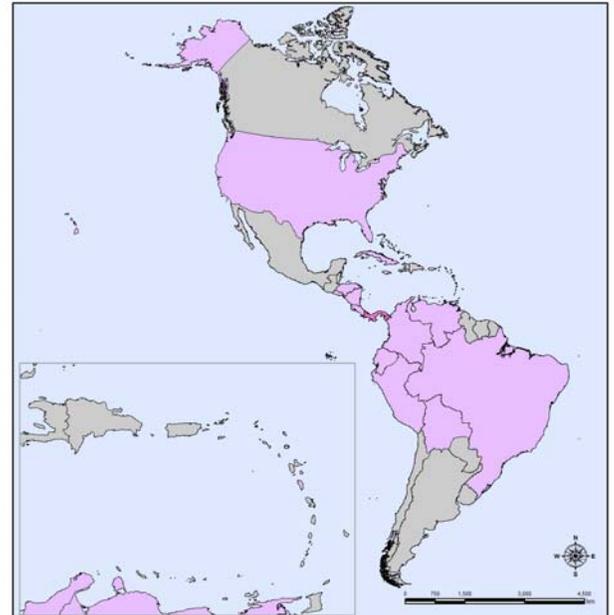
Map Production: PAHO/HS/D/CD  
July 9, 2010

Cartographic projection:  
Lambert Equal Area Azimuthal  
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\* EW 26 = epidemiological week from June 27 to July 3, 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 26, 2010\*.**



**Impact on health-care services**

- No information available
- Low
- Moderate
- Severe

Map Production: PAHO/HS/D/CD  
July 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 26 = epidemiological week from June 27 to July 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 Costa Rica, the ratio of males to females among hospitalized cases was approximately one (Table 1). Hospitalizations were mainly in adults.

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

	<b>Costa Rica<sup>9</sup></b>
<b>Reporting period</b>	April 24, 2009 – June 27, 2010
<b>Type of cases reported</b>	Hospitalized, confirmed
<b>Number of cases</b>	585
<b>Percentage of women</b>	55.8
<b>Age</b>	Mean 39.3
<b>Percent with underlying co-morbidities</b>	-
<b>Co-morbidities most frequently reported (%)</b>	Asthma 25.7%, Diabetes Mellitus 13.7%, Obesity 13.6%, COPD 7.6%, Cardiopathy 6.6%
<b>Percent pregnant among women of child-bearing age</b>	6.5%*

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

Overall, approximately half of deceased cases in Mexico and Peru were among women (Table 2). In both countries, underlying comorbidities were present in approximately 60 to 77% of hospitalized cases.

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

	Mexico	Peru
<b>Reporting period</b>	April 2009 – July 5, 2010	June, 2009 – July 4, 2010
<b>Number of confirmed deaths</b>	1292	238
<b>Percentage of women</b>	48	52
<b>Age</b>	Highest percentage (70.4%) in 20–54 year age group	Median 38 years. Highest rates in >60 years old
<b>Percent with underlying co-morbidities</b>	60.2	76.9
<b>Co-morbidities most frequently reported (%)</b>	-	Metabolic 22.3%, Cardiovascular 18.5%, Respiratory 11.8%, Neurologic 8%, Genetics 8%
<b>Percent pregnant among women of child-bearing age</b>	-	-

### III- Viral circulation

The information below is based on reports from National Influenza Centers and influenza laboratories from the Region.

**Table 3: Cumulative viral circulation in countries which reported to PAHO this week.**

Country	Time period	# Samples Tested	% Positive Samples	% RSV*	% PIV†	% Adv‡	% Other Viruses	% Influenza B	% Influenza A	Among Influenza A		
										% Pandemic	% Not subtyped	% Seasonal H3
Bolivia	EW 1-26	396	23.7	6.4	1.1	0.0	0.0	83.0	9.6	77.8	0.0	0.0
Colombia	EW 1-26	5306	7.4	14.1	5.1	2.1	0.0	5.6	73.1	90.2	0.0	9.8
Costa Rica	EW 1-25	2931	40.2	6.9	2.8	40.3	0.0	0.0	50.0	90.3	0.0	9.7
Cuba	EW 1-26	6974	24.4	2.3	9.2	1.5	37.4	1.2	48.3	95.7	2.8	1.5
Dominican Republic	EW 1-27	504	26.6	5.5	54.1	33.9	0.0	5.5	0.9	0.0	100.0	0.0
Jamaica	EW 1-26	476	4.4	0.0	4.8	19.0	0.0	4.8	71.4	53.3	33.3	13.3
Mexico	EW 1-26	14144	23.6	2.0	1.2	0.3	9.5	0.1	86.9	84.7	15.3	0.1

**Table 4: Viral circulation in last week reported**

Country	Time period	# Samples Tested	% Positive Samples	% RSV*	% PIV†	% Adv‡	% Other Viruses	% Influenza B	% Influenza A	Among Influenza A		
										% Pandemic	% Not subtyped	% Seasonal H3
Colombia	EW 25	33	30.3	40.0	0.0	0.0	0.0	10.0	50.0	80.0	0.0	20.0
Cuba	EW 26	145	15.2	9.1	9.1	0.0	54.5	0.0	27.3	83.3	16.7	0.0
Costa Rica	EW 25	358	40.2	6.9	2.8	40.3	0.0	0.0	50.0	90.3	0.0	9.7
Dominican Republic	EW 27	33	27.3	22.2	44.4	33.3	0.0	0.0	0.0			
Jamaica	EW 26	27	0.0									
Mexico	EW 25	48	18.8	0.0	11.1	0.0	33.3	0.0	55.6	40.0	60.0	0.0

\* Respiratory Syncytial Virus

† Parainfluenza Virus

‡ Adenovirus

## South America

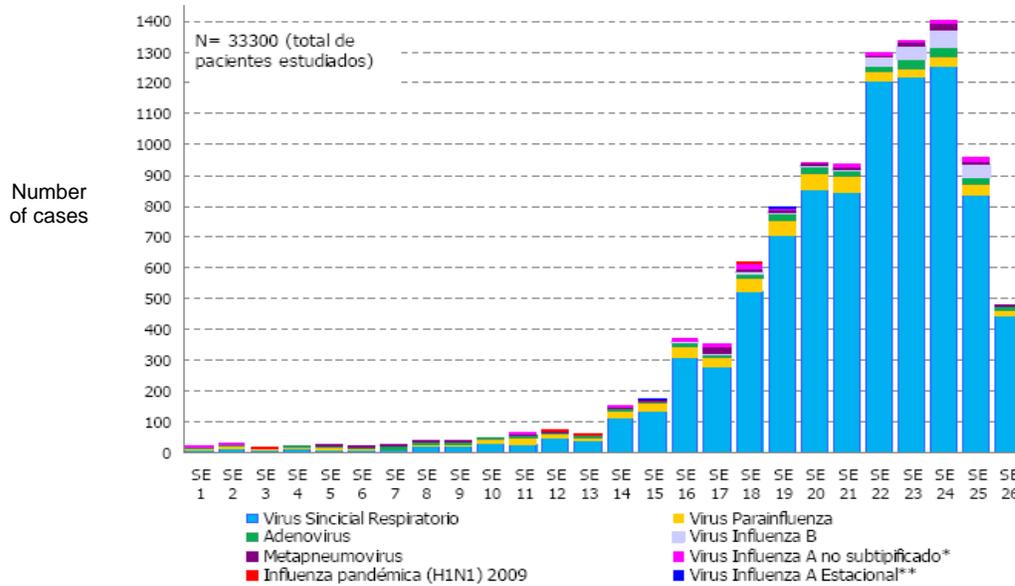
### Southern Cone

Argentina and Chile continue to report predominant circulation of respiratory syncytial virus. Paraguay reported circulation of pandemic influenza as well as parainfluenza virus, respiratory syncytial virus and influenza B.

## Argentina

### Distribution of respiratory viruses under surveillance by EW

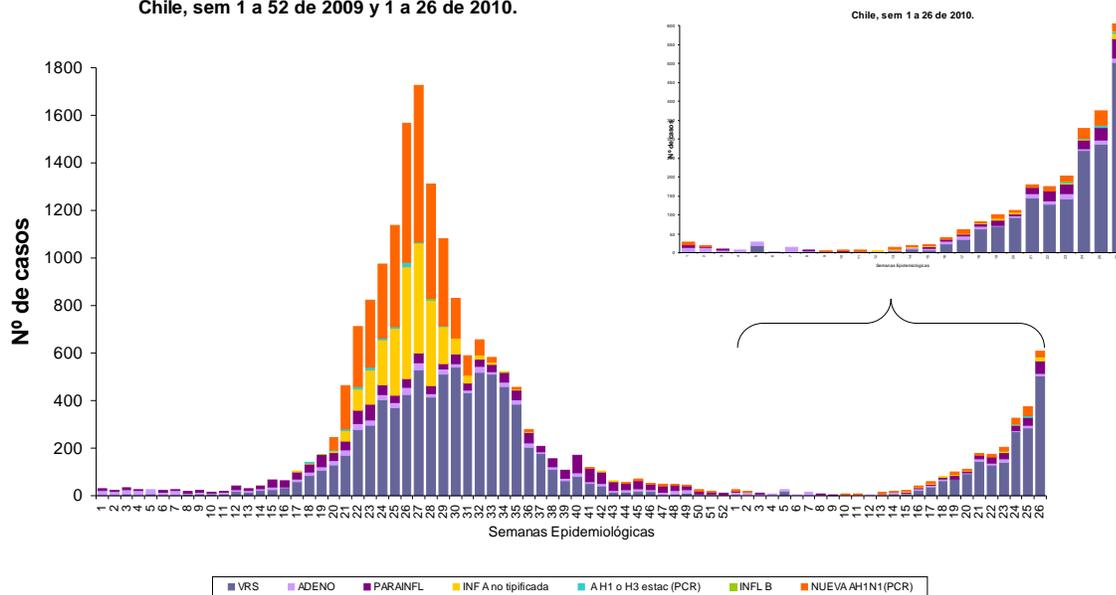
Virus Respiratorios según Semana Epidemiológica. Total País.  
Año 2010. n=10333



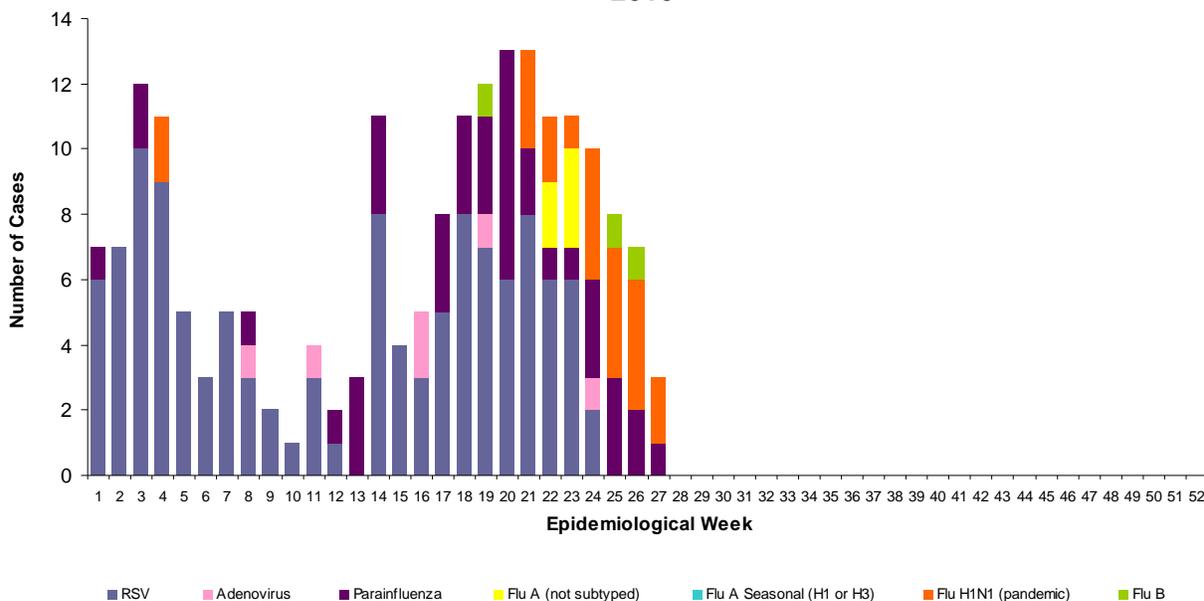
## Chile

### Distribution of respiratory viruses under surveillance by EW

Distribución virus respiratorios por semana epidemiológica, vigilancia ISP.  
Chile, sem 1 a 52 de 2009 y 1 a 26 de 2010.



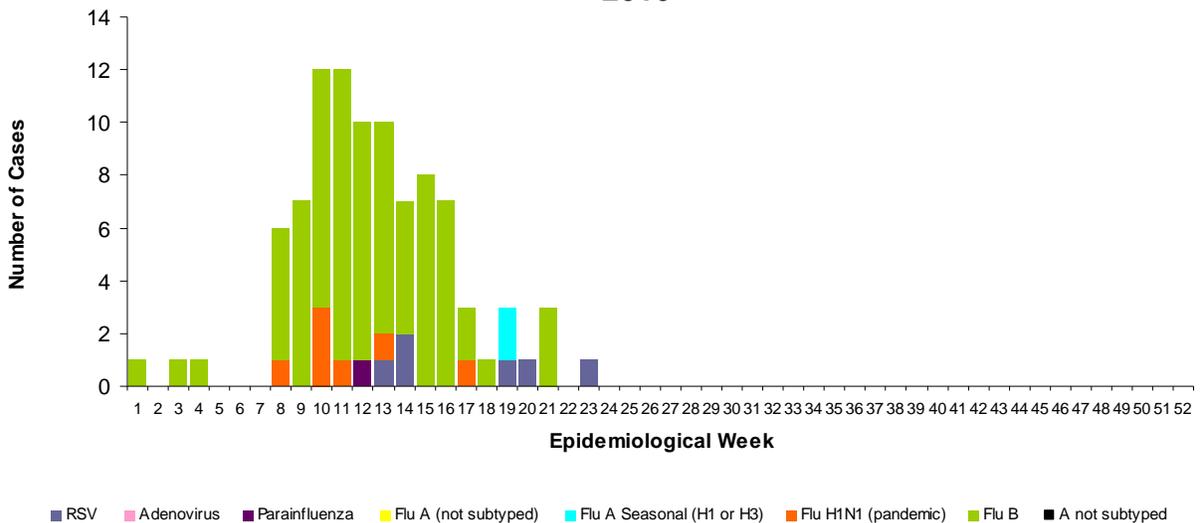
### Paraguay Distribution of respiratory viruses under surveillance by EW 2010



#### Andean

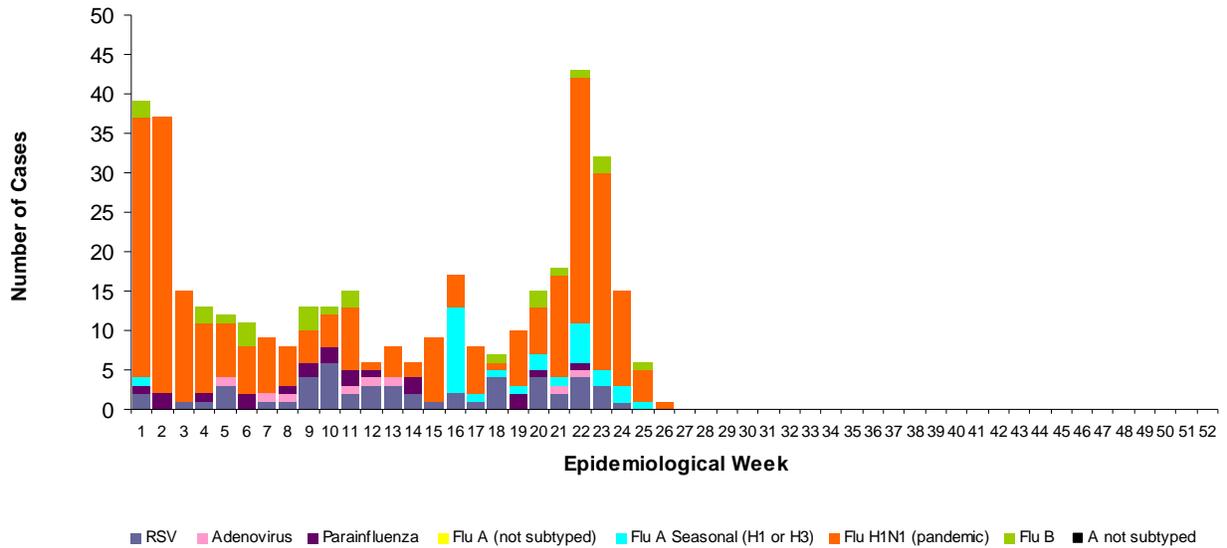
Bolivia has not reported any influenza virus isolations since EW 22. In Colombia, the predominant influenza virus in circulation continues to be the pandemic virus, but seasonal influenza A/H3 and influenza B have also been detected.

### Bolivia Distribution of respiratory viruses under surveillance by EW 2010



## Colombia

### Distribution of respiratory viruses under surveillance by EW 2010

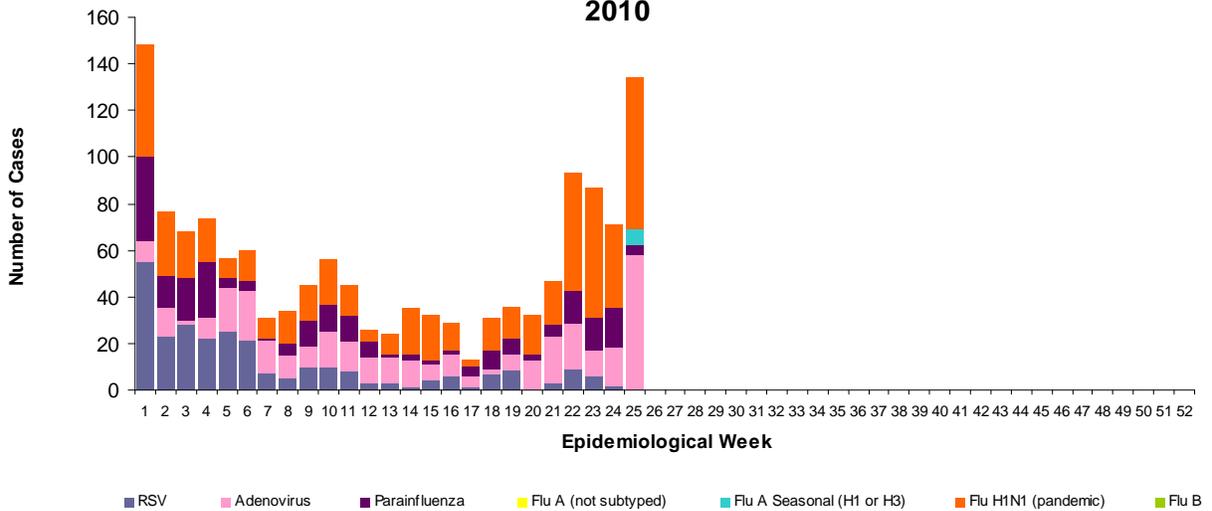


### Central America

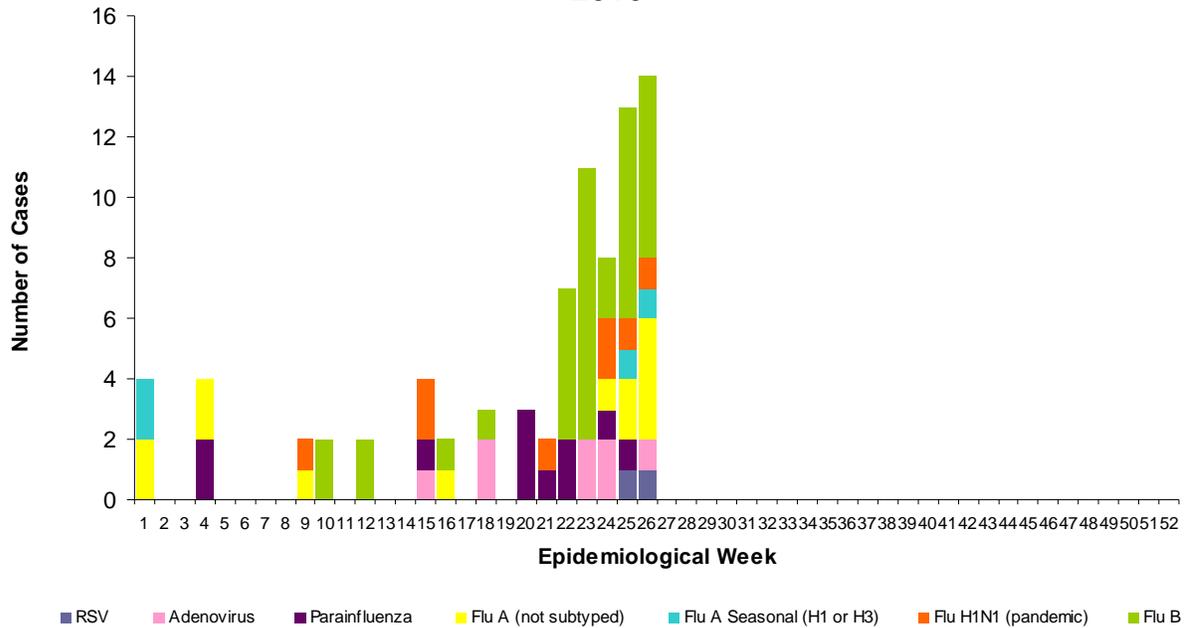
Circulation of respiratory viruses continues to be variable in Central America. Costa Rica reported an overall increase in the number of viruses isolated during the last EWs, where among the positive influenza virus cases, there is a predominance of pandemic influenza A cases and few cases of seasonal influenza A/H3 virus; there is also an important presence of adenovirus and some parainfluenza virus. In El Salvador, there is continued circulation of influenza A and B viruses, as well as a low detection of respiratory syncytial virus, adenovirus and parainfluenza virus.

## Costa Rica

### Distribution of respiratory viruses under surveillance by EW 2010



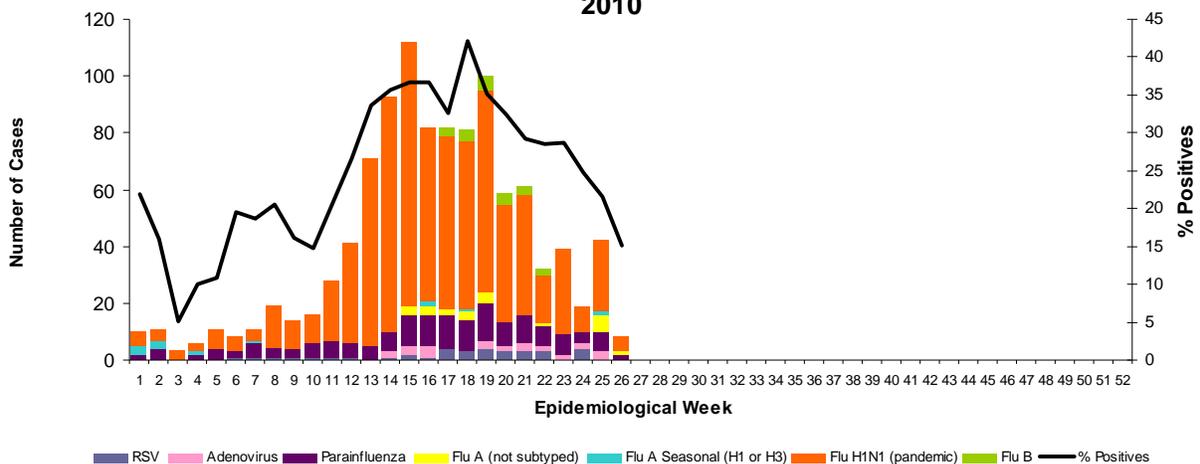
## El Salvador Distribution of respiratory viruses under surveillance by EW 2010



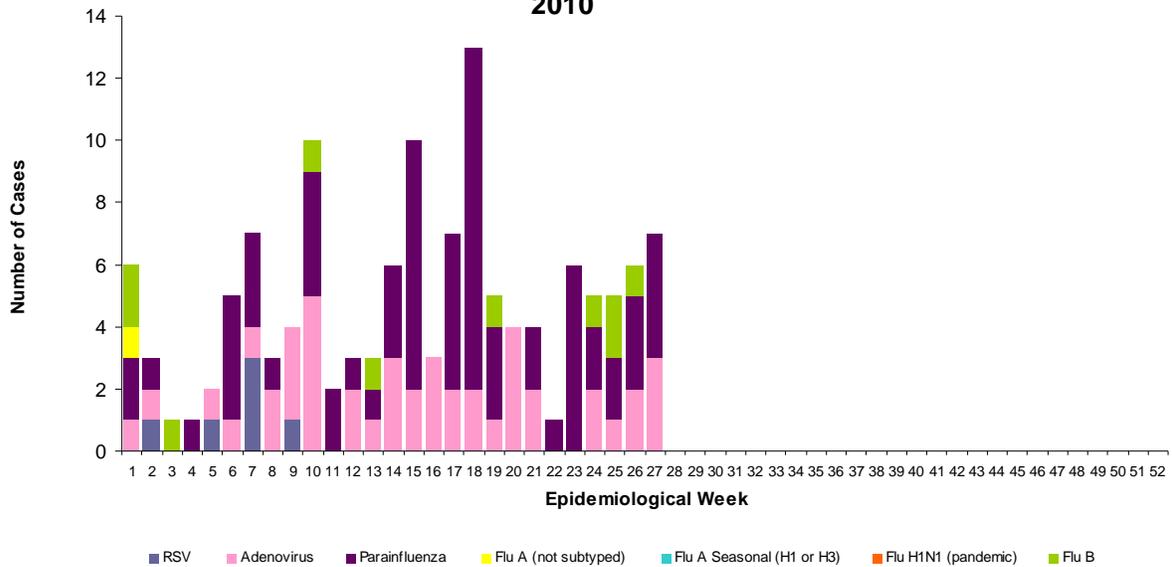
### Caribbean

Circulation of respiratory viruses is variable in the Caribbean. Cuba reported a steady decrease of the positive proportion of respiratory viruses, the predominant influenza virus in circulation continues to be the pandemic virus, however, respiratory syncytial virus, adenovirus and parainfluenza virus were also identified. Dominican Republic reported circulation of parainfluenza virus and adenovirus, and occasional influenza B virus. Jamaica has not reported any respiratory virus activity since EW 16. Guyana reported the co-circulation of influenza B and pandemic influenza, with predominance of the influenza B virus.

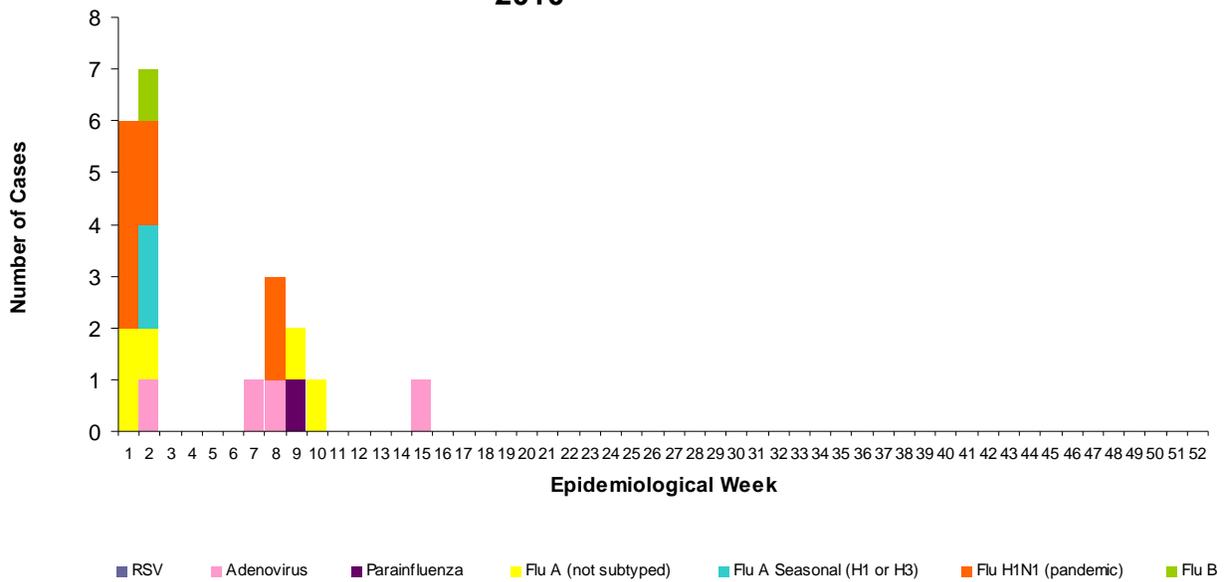
## Cuba Distribution of respiratory viruses under surveillance by EW 2010



### Dominican Republic Distribution of respiratory viruses under surveillance by EW 2010



### Jamaica Distribution of respiratory viruses under surveillance by EW 2010

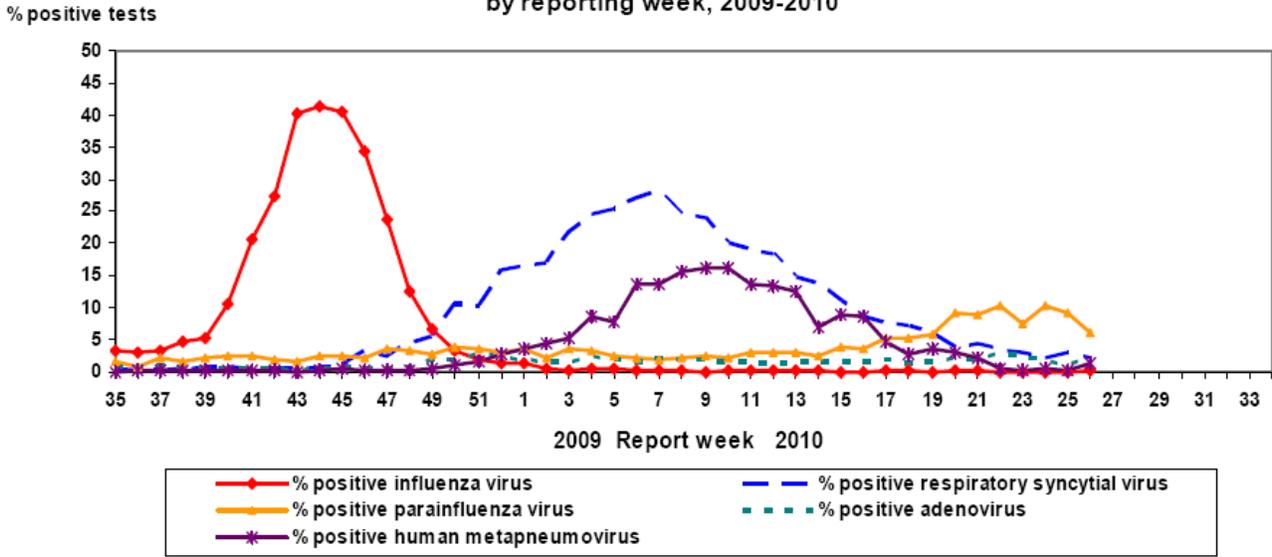


**North America**

In Canada, during EW 25-26, the proportion of positive parainfluenza tests decreased slightly but remained close to 5% while low levels of respiratory syncytial virus, adenovirus detections and human metapneumovirus continue to be reported. The percentage of positive specimens tested for influenza in Canada (EW 25-26) and in United States was low (0.1% and 0.3% respectively). In Mexico, the detection of respiratory viruses has diminished since peaking in late 2009 and early 2010.

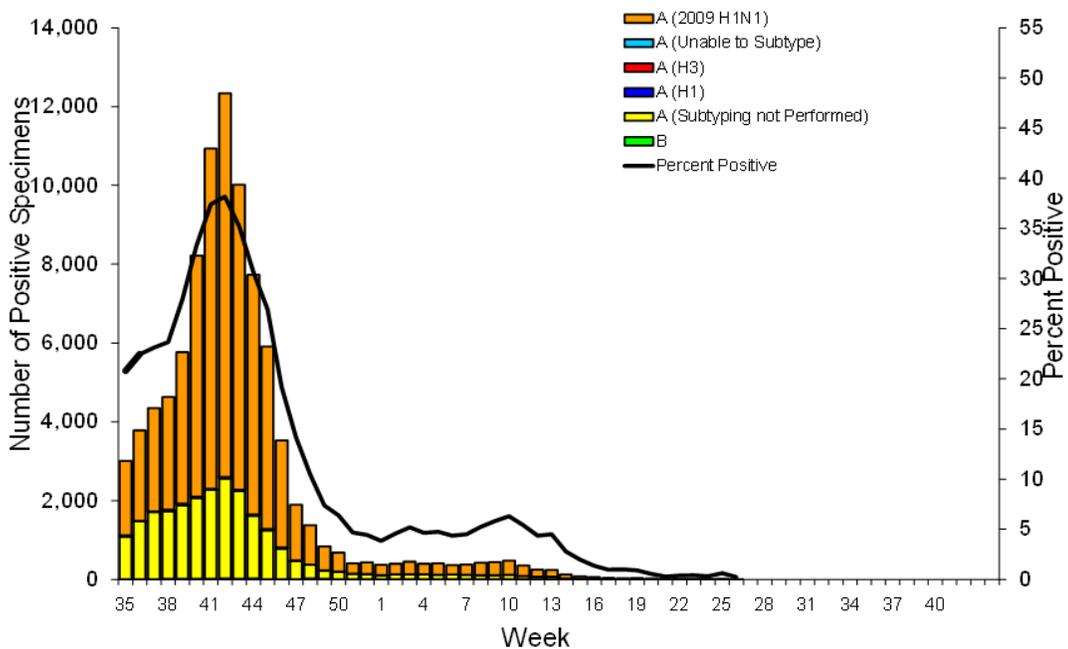
**Canada**

**Percent positive influenza tests, compared to other respiratory viruses, Canada, by reporting week, 2009-2010**

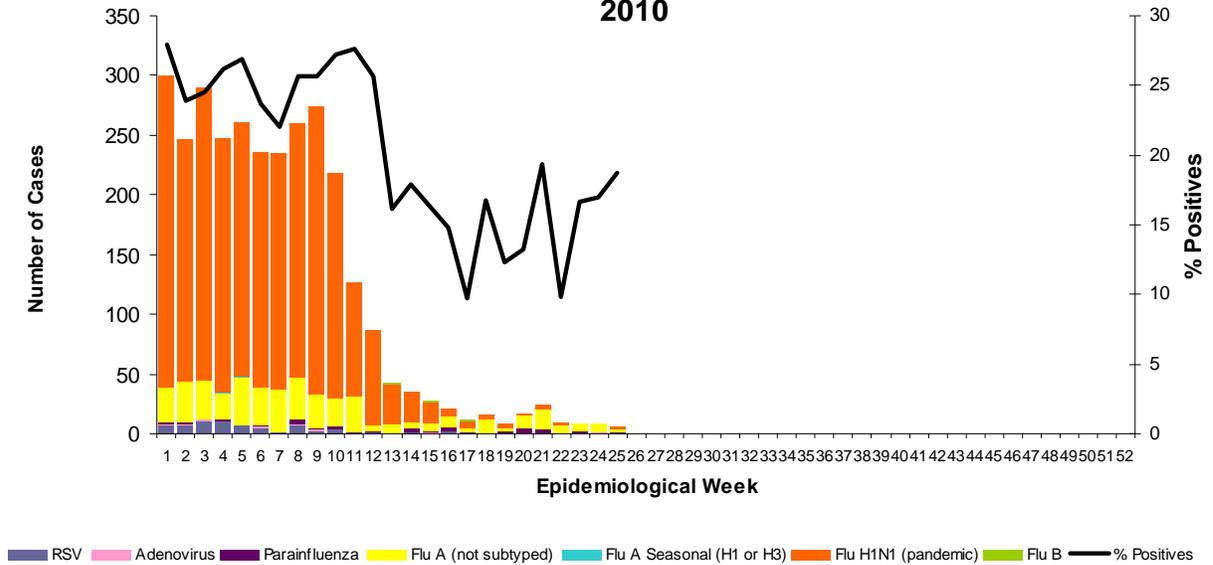


**USA**

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



### Mexico Distribution of respiratory viruses under surveillance by EW 2010



**Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 26, 2010**

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
<b>Southern Cone</b>					
Argentina	Regional	Decreasing	Low/ moderate	NIA	26
Brazil	Regional	Unchanged	Low/ moderate	Low	26
Chile	Regional	Unchanged	Low/ moderate	NIA	26
Paraguay					
Uruguay					
<b>Andean Area</b>					
Bolivia	Regional	Increasing	Low/ moderate	Low	26
Colombia	Regional	Increasing	Low/ moderate	Low	26
Ecuador	Localized	Unchanged	Low/ moderate	Low	26
Peru	Regional	Decreasing	Low/ moderate	Low	25
Venezuela	Localized	Unchanged	Low/ moderate	Low	26
<b>Caribbean Countries</b>					
Antigua & Barbuda					
Bahamas					
Barbados					
Cuba	Regional	Decreasing	Low/ moderate	Low	26
Dominica	Localized	Unchanged	Low/ moderate	Low	26
Dominican Republic					
Grenada					
Guyana					
Haiti					
Jamaica	Widespread	Unchanged	Low/ moderate	Low	26
Saint Kitts & Nevis					
Saint Lucia					
Saint Vincent & Grenadines					
Suriname					
Trinidad & Tobago					
<b>Central America</b>					
Belize					
Costa Rica	Widespread	Unchanged	Low/ moderate	Low	25
El Salvador	No activity	Decreasing	Low/ moderate	Low	26
Guatemala					
Honduras	No activity	Increasing	Low/ moderate	Low	26
Nicaragua	Regional	Decreasing	Low/ moderate	Low	26
Panama	Widespread	Increasing	High	Moderate	26
<b>North America</b>					
Canada	Localized	Unchanged	Low/ moderate	NIA	26
Mexico					
United States of America	Localized	Decreasing	Low/ moderate	Low	26

NIA: No information available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.  
As of July 9, 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 July 2, 2010, 12 h EST)
<b>Southern Cone</b>		
Argentina	626	
Brazil	2,125	
Chile	157	1
Paraguay	47	
Uruguay	20	
<b>Andean Area</b>		
Bolivia	59	0
Colombia	253	1
Ecuador	130	
Peru	238	0
Venezuela	136	0
<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	67	2
El Salvador	33	
Guatemala	26	
Honduras	18	
Nicaragua	11	
Panama	12	
<b>North America</b>		
Canada*	428	
Mexico	1,292	3
United States‡	2,718	
<b>TOTAL</b>	<b>8,523</b>	<b>7</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 **July 9, 2010**, a total of **8,523 deaths** have been reported among 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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<sup>1</sup> Chile. Informe de situación. 30 de junio de 2010. [www.pandemia.cl](http://www.pandemia.cl)

<sup>2</sup> Paraguay. Informe semanal. Vigilancia de virus respiratorios SE 26. Del 06 de Julio de 2010

<sup>3</sup> Bolivia. Notificación semanal de la situación de la pandemia por el nuevo virus Influenza A (H1N1)

<sup>4</sup> Peru. Boletín epidemiológico, SE 26. Del 5 de Julio 2010. <http://www.dge.gob.pe/boletin.php>

<sup>5</sup> Costa Rica. Boletín epidemiológico, SE 25

<sup>6</sup> Guyana. Surveillance de La grippe. Bulletin bimensual: semaines 24 et 25

<sup>7</sup> Surveillance Summary. Week 26. Centers for Disease Control and Prevention.

<sup>8</sup> FluWatch Report. EW 25-26. <http://www.phac-aspc.gc.ca/fluwatch/>

<sup>9</sup> Costa Rica, Epidemiologic Bulletin, EW 25