



Regional Update

Pandemic (H1N1) 2009

(June 1, 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 20, the national influenza-like illness (ILI) consultation rate was below the expected range for this time of year, as it has been since the beginning of 2010. All reporting provinces had similar or lower ILI consultation rates as compared to their respective ILI rates in the previous weeks. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In the United States², the proportion of outpatient consultations for ILI has remained below the national baseline for twenty consecutive weeks. 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. Three influenza-associated pediatric deaths were reported this week and were associated with pandemic virus. A total of 67 oseltamivir-resistant isolates have been detected since April 2009.

Caribbean

In countries providing these data^{*} SARI hospitalization incidence decreased slightly compared to the previous week, but remained much lower than the peak levels seen in EW 40 and 41 of 2009. From EW 1 to EW 18 of 2010, a total of seven hospitalizations and no deaths due to pandemic virus were reported³.

Jamaica reported widespread influenza activity and Cuba reported regional activity. Both countries reported unchanged trends in acute respiratory disease, low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

Central America

Honduras reported localized influenza activity while El Salvador and Panama reported no influenza activity. Honduras and El Salvador reported decreasing trends in acute respiratory disease while Panama reported an increasing trend. All these countries reported low/moderate intensity and low impact of acute respiratory disease on health care services.

Weekly Summary

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- In the Caribbean countries, Cuba and Jamaica reported unchanged trends in acute respiratory disease.
- In Central American countries, El Salvador and Honduras reported decreasing trends in acute respiratory disease while Panama reported an increasing trend.
- All South American countries reported decreasing or unchanged trends in acute respiratory disease.
- From EW 1 to 20, in Colombia, Cuba, Guatemala and Jamaica, the pandemic virus predominated. Argentina and Paraguay detected the predominance of respiratory syncytial virus.
- 9 new confirmed deaths in 3 countries were reported; in total there have been 8,410 cumulative confirmed deaths.

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

South America

Andean

Bolivia and Peru reported regional influenza activity, Ecuador reported localized activity, and Colombia and Venezuela reported no influenza activity. Ecuador and Peru reported unchanged trends in acute respiratory disease, while Bolivia and Colombia reported decreasing trends. All these countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

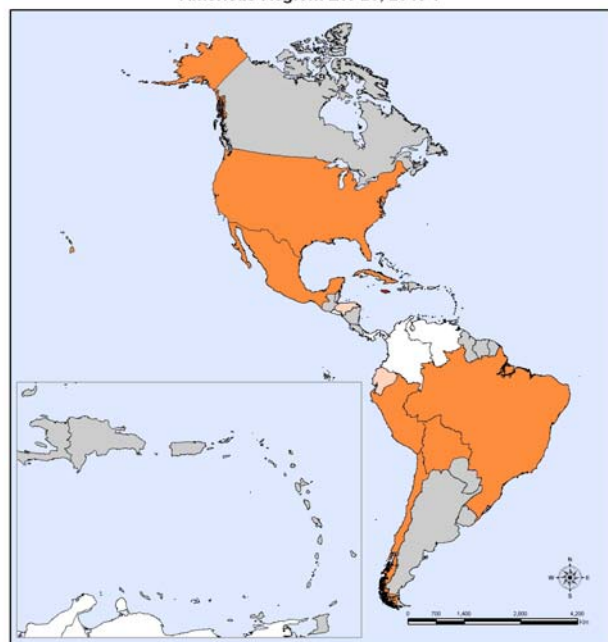
Southern Cone

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

In Argentina⁴ in EW 20 the national ILI rate was below than levels observed for the same period in previous years; this pattern persisted throughout the country except in Buenos Aires, Entre Rios, Santa Fe, San Luis, Corrientes, Catamarca, and Rio Negro which reported an increased ILI rate as compared to the previous years.

In Paraguay⁵ (EW 19), the number of ILI cases has been above the epidemic threshold since EW 13. The number of pneumonia cases in children under 5 years was similar in 2010 when compared to same period of the previous year.

**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 20, 2010*.**



Geographical Spread
 No activity
 No information available
 Localized
 Regional
 Widespread

Map Production: PAHO/HS/DICD
 May 28, 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 20 = epidemiological week from May 16 to May 22, 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 20, 2010*.**



Trend
 No information available
 Decreasing
 Unchanged
 Increasing

Map Production: PAHO/HS/DICD
 May 28, 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 20 = epidemiological week from May 16 to May 22, 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 20, 2010*.**



Intensity of acute respiratory disease
 No information available
 Low or moderate
 High
 Very high

Map Production: PAHO/HS/DICD
 May 28, 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 20 = epidemiological week from May 16 to May 22, 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 20, 2010*.**



Impact on health-care services
 No information available
 Low
 Moderate
 Severe

Map Production: PAHO/HS/DICD
 May 28, 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 20 = epidemiological week from May 16 to May 22, 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 Brazil⁶ the percentage of women hospitalized was higher than Chile (Table 1). Hospitalizations were mainly in young adults. Underlying comorbidities were present in 53 – 60.5% of hospitalized cases.

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

	Brazil	Chile
Reporting period	January 3, 2010 – May 8, 2010	2009 – May 20, 2010
Type of cases reported	Hospitalized, confirmed	Hospitalized, confirmed
Number of cases	540	1,629
Percentage of women	62.7	52**
Age	Median 30 years	Median 32 years, highest incidence in age group < 5 years**
Percent with underlying co-morbidities	60.5	53**
Co-morbidities most frequently reported (%)	-	Asthma 17% Hypertension 10% Diabetes 8% COPD 7%**
Percent pregnant among women of child-bearing age	41.2*	-

* Percent of pregnant women among women 15 to 49 years of age

** Information available on 1,622 cases from 2009

In Brazil the percentage of deceased women was higher than in Chile (Table 2). The percentage of deaths with underlying co-morbidities varied from 52 to 71%.

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

	Brazil	Chile
Reporting period	January 3, 2010 – May 8, 2010	2009-May 20, 2010
Number of confirmed deaths	64	150
Percentage of women	75	47
Age	Median 27 years	Median 44 years
Percent with underlying co-morbidities	52	70.6
Co-morbidities most frequently reported (%)	-	-
Percent pregnant among women of child-bearing age	56*	1.4**

* Percent of pregnant women among women 15 to 49 years of age

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

III- Viral circulation

The Table 3 and graphs below are contributions from National Influenza Centers and influenza laboratories from the Region.

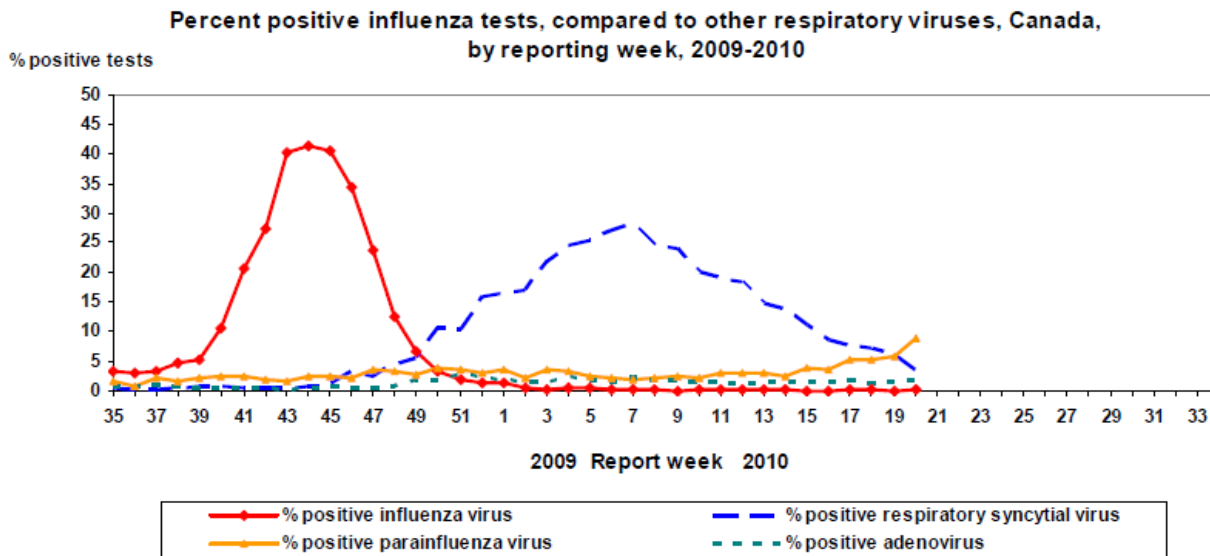
Table 3: Viral circulation in countries with data reported.

Country	Time Period 2010	# Samples Tested	% Positive Samples	% Influenza A	% Influenza B	% RSV	% Parainfluenza	% Adenovirus	% Other Viruses
Chile	EW 1-EW 19	4657	9.0	13.8	0.0	52.1	14.8	19.3	0.0
Colombia	EW 1-EW 20	4109	11.2	35.8	3.0	7.4	3.5	1.3	49.0
Cuba	EW 1-EW 20	5747	24.2	49.2	1.2	1.8	8.6	1.0	38.2
Guatemala	EW 1-EW 20	370	30.0	47.7	2.7	19.8	18.9	10.8	0.0
Jamaica	EW 1-EW 20	379	5.0	68.4	5.3	0.0	5.3	21.1	0.0
Panama	EW 1-EW 20	377	13.0	18.4	16.3	22.4	32.7	10.2	2.0
Paraguay	EW 1-EW 20	418	30.1	1.6	0.8	76.2	17.5	4.0	0.0

North America

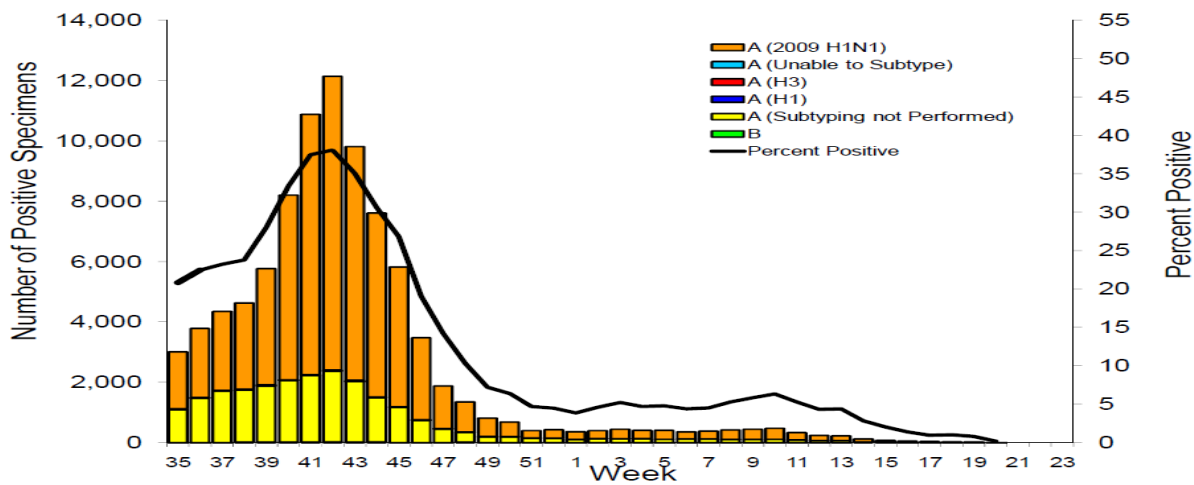
In North America, circulation of pandemic influenza viruses predominated until the end of 2009. In early 2010, Canada experienced a higher circulation of respiratory syncytial virus as compared to pandemic virus. The proportion of positive parainfluenza tests has been increasing for the last four weeks. In USA, during EW 20, no influenza B viruses were reported, and two samples tested positive for pandemic virus.

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.

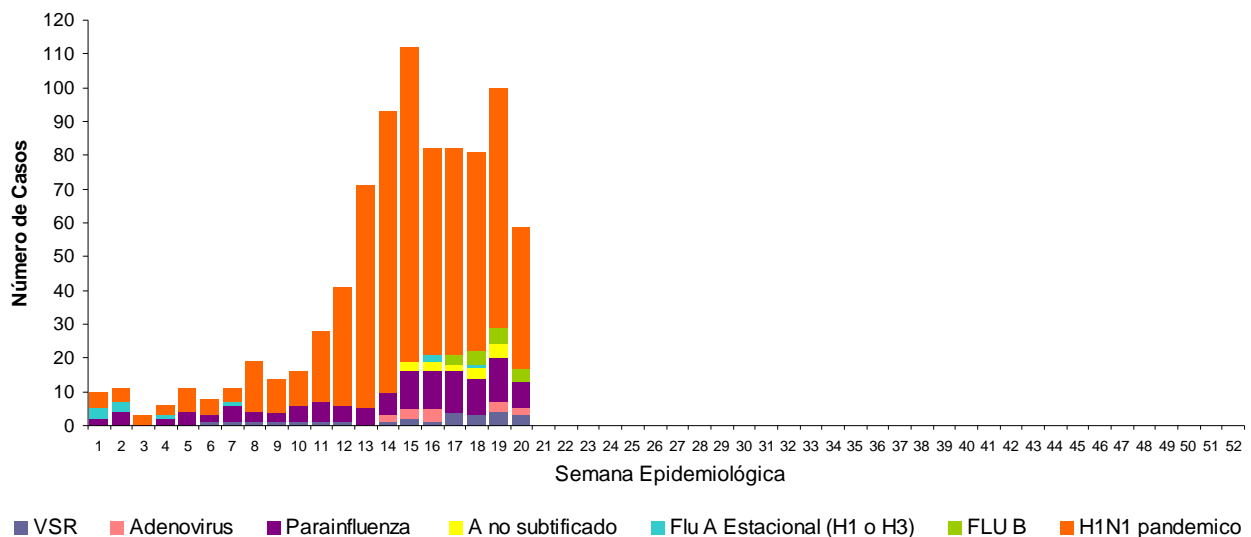
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, August 30, 2009-May 22, 2010



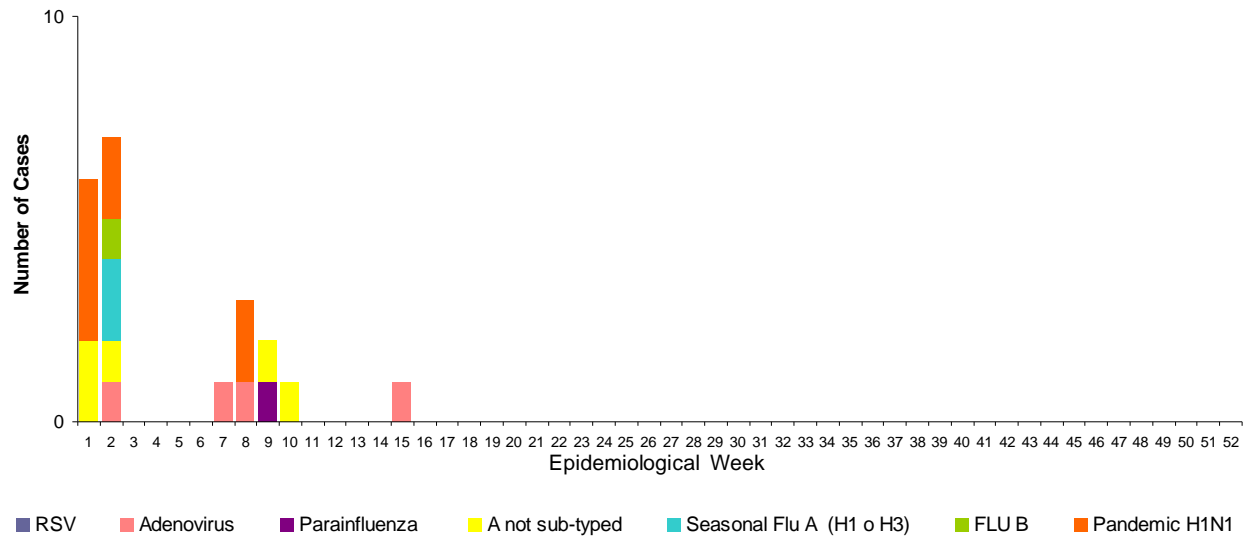
Caribbean

The Caribbean sub-region presents more variability in the circulation of respiratory viruses. While in Cuba there is a clear predominance of pandemic influenza virus, 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.

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



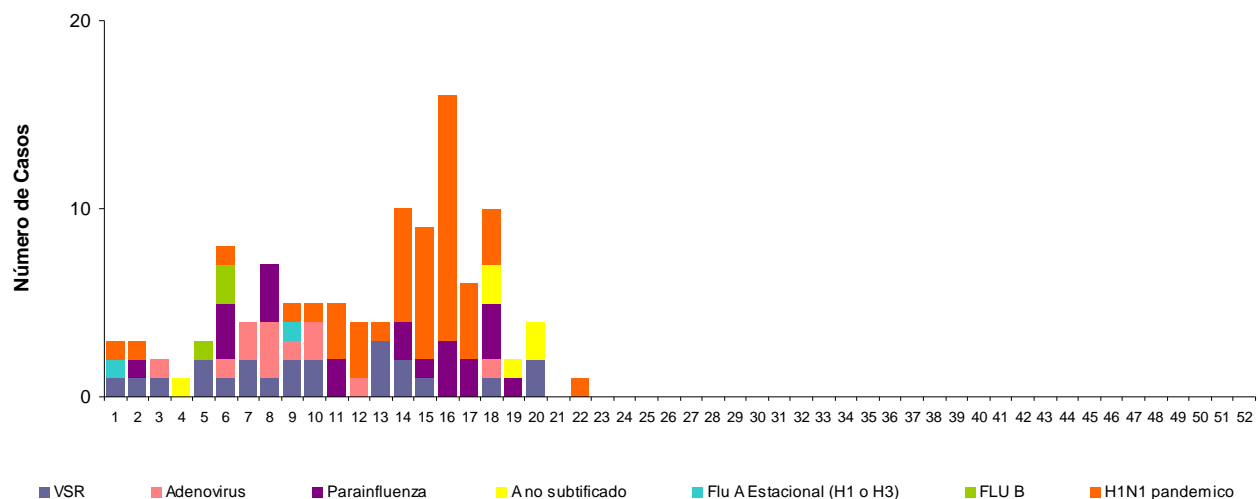
Jamaica. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



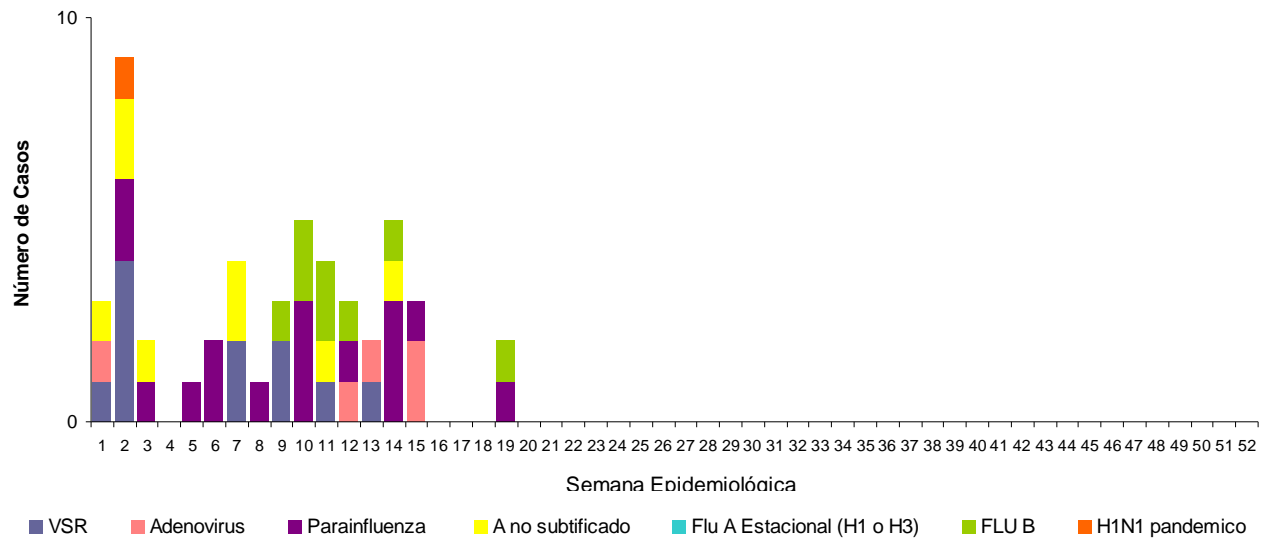
Central America

In Guatemala, circulation of pandemic influenza viruses predominated through EW 20. However, parainfluenza virus, respiratory syncytial virus and adenovirus were also identified. Panama reported circulation of parainfluenza, respiratory syncytial virus and influenza A virus through EW 15. In the last week, two samples were positive for parainfluenza and influenza B.

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



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

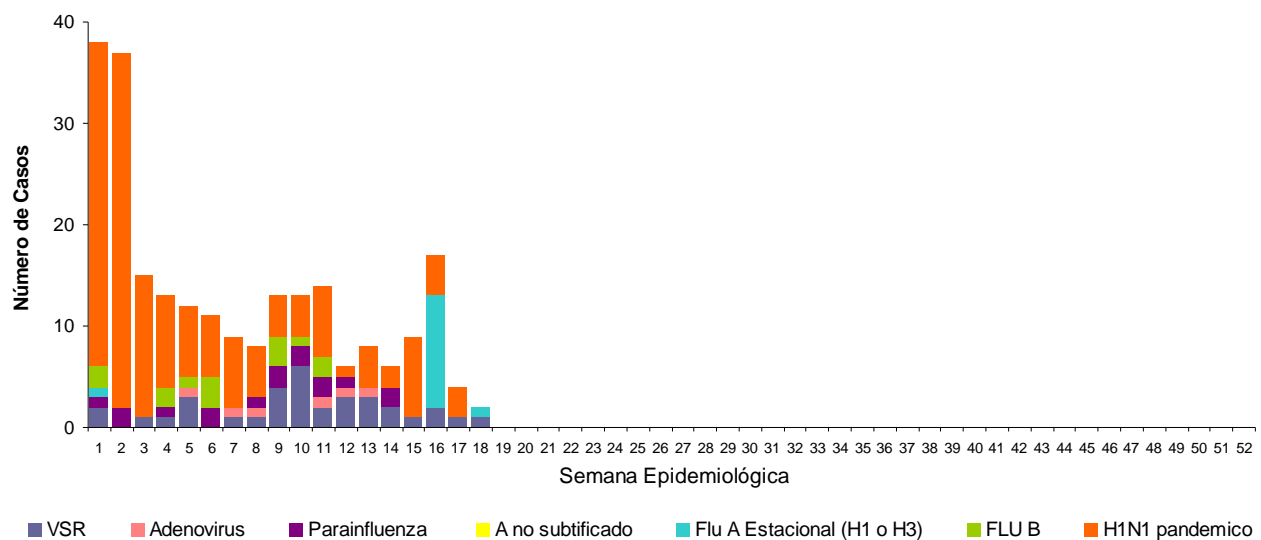


South America

Andean

Colombia experienced primarily circulation of pandemic virus for the first few weeks of 2010, but recently detected circulation of seasonal influenza as well.

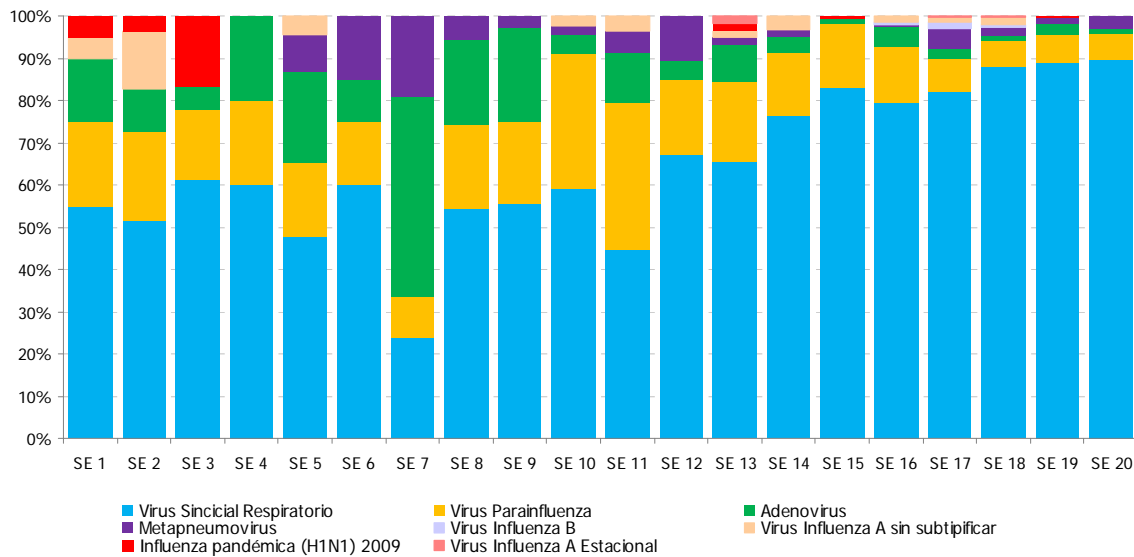
Colombia. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



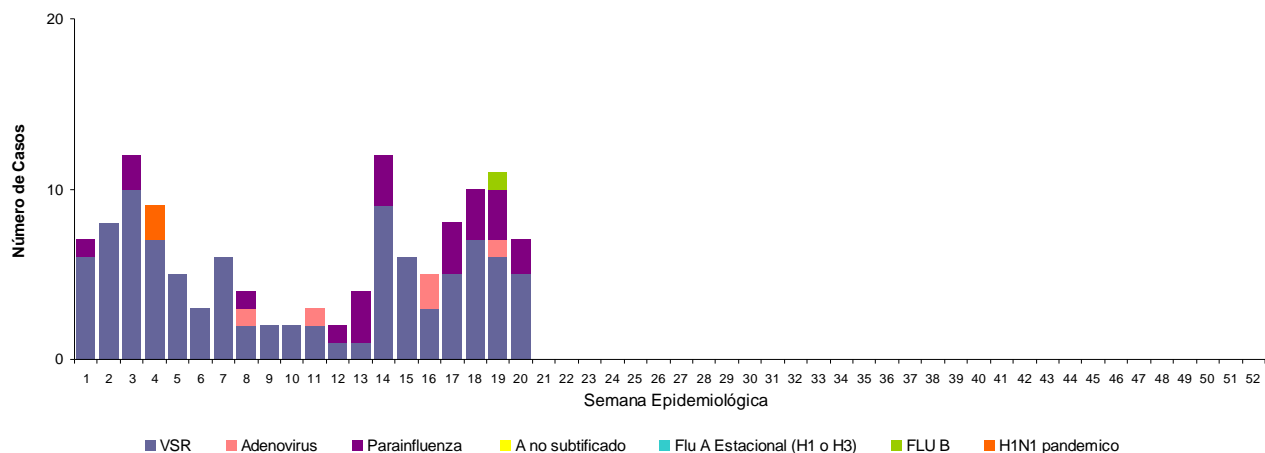
Southern Cone

In Argentina and Paraguay, from EW 1 to EW 20, the predominant virus circulating was respiratory syncytial virus, but, parainfluenza virus was also detected.

Argentina. 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 20, 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	20
Brazil	Regional	Unchanged	Low/moderate	Low	20
Canada					
Chile	Regional	Unchanged	Low/moderate	Low	19
Colombia	No activity	Decreasing	Low/moderate	Low	20
Costa Rica					
Cuba	Regional	Unchanged	Low/moderate	Low	20
Dominica					
Dominican Republic					
Ecuador	Localized	Unchanged	Low/moderate	Low	20
El Salvador	No activity	Decreasing	Low/moderate	Low	20
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras	Localized	Decreasing	Low/moderate	Low	20
Jamaica	Widespread	Unchanged	Low/moderate	Low	19
Mexico	Regional	Decreasing	Low/moderate	Low	20
Nicaragua					
Panama	No activity	Increasing	Low/moderate	Low	20
Paraguay					
Peru	Regional	Unchanged	Low/moderate	Low	20
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Regional	Decreasing	Low/moderate	Low	20
Uruguay					
Venezuela	No activity	Unchanged	Low/moderate	Low	20

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.
As of May 28, 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 May 21, 2010, 12 h EST)
Southern Cone		
Argentina	626	
Brazil	2,115	2
Chile	153	0
Paraguay	47	
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	239	0
Ecuador	129	0
Peru	226	2
Venezuela	135	0
Caribbean Countries		
Antigua & Barbuda	0	0
Bahamas	1	0
Barbados	3	0
Cuba	83	5
Dominica	0	0
Dominican Republic	23	0
Grenada	0	0
Guyana	0	0
Haiti	0	
Jamaica	7	0
Saint Kitts & Nevis	2	0
Saint Lucia	1	0
Saint Vincent & Grenadines	0	0
Suriname	2	0
Trinidad & Tobago	5	0
Central America		
Belize	0	0
Costa Rica	60	
El Salvador	33	
Guatemala	26	
Honduras	18	
Nicaragua	11	
Panama	12	0
North America		
Canada*	428	
Mexico	1,228	
United States**	2,718	
TOTAL	8,410	9

* 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 **May 28, 2010**, a total of **8,410 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.- Fluview. Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>.
- 3.- CAREC Surveillance Report-Influenza. Volume 2, Number 9. May 24, 2010. www.carec.org
- 4.- Vigilancia de Infecciones Respiratorias Agudas en Argentina. Ministerio de Salud de la Republica de Argentina. EW 20, May 24, 2010.
- 5.- Vigilancia Centinela de influenza Pandémica y otras infecciones Respiratorias (IRAs). May, 25, 2010. <http://www.vigisalud.gov.py/images/documentos/reportes/Vigilancia%20Centinela%20de%20Influenza%20e%20Infecciones%20Respiratorias%2025-05-10.pdf>
- 6.- Informe técnico mensual de influenza de la secretaria de vigilancia de la salud de Brasil. Number 3. May 2010. http://portal.saude.gov.br/portal/arquivos/pdf/informe_influenza_maior_2010.pdf