Regional Update

Pandemic (H1N1) 2009

(May 24, 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.

Weekly Summary

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- All Caribbean countries reported unchanged or decreasing trends in acute respiratory except Dominican Republic which reported an increasing trend.
- All Central American countries reported decreasing or unchanged trends in acute respiratory disease, except El Salvador which reported an increasing trend.
- All South American countries reported decreasing or unchanged trends in acute respiratory disease, except Brazil, Peru, and Venezuela which reported an increasing trend.
- From EW 1 to 18, in Cuba, Jamaica, Mexico, and Uruguay the pandemic virus predominated. Bolivia detected the predominance of influenza B and Canada and Chile detected mostly respiratory syncytial virus.
- 5 new confirmed deaths in 3 countries were reported; in total there have been 8,401 cumulative confirmed deaths.

I- Evolution of the pandemic

North America

In Canada[1], in EW 19 the national influenza-like illness (ILI) consultation rate was within what is expected for this time of year and has been similar to the previous weeks since the beginning of 2010. All reporting provinces had similar ILI consultation rates compared to their respective ILI rates in the previous weeks. Since the beginning of 2010 until May 24, 14 hospitalizations and two deaths have occurred. A total of 13 oseltamivir-resistant isolates have been reported since April 2009.

In the United States[2], the proportion of outpatient consultations for ILI has remained below the national baseline for nineteen 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. No influenza-associated pediatric deaths were reported this week. A total of 66 oseltamivir-resistant isolates have been detected since April 2009.

In Mexico[3], in EW 18 there was a 29% decrease in the number ILI and severe acute respiratory illness (SARI) cases with respect to the previous week. The number of hospitalizations and ICU patients at the *Instituto Nacional de Enfermedades Respiratorias* (INER) has been decreasing since the beginning of April and remains stable. Mexico has reported one oseltamivir-resistant case since the beginning of the pandemic.

Caribbean

Dominican Republic reported widespread influenza activity, while Dominica and Saint Lucia reported no influenza activity. Dominican Republic reported an increasing trend in acute respiratory disease, while Dominica and Saint Lucia reported unchanged trends. 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, Honduras reported localized activity, while El Salvador and Panama reported no influenza activity. El Salvador reported an increasing trend in acute respiratory disease, while Costa Rica, Honduras, and Panama reported decreasing

trends. These countries reported low/moderate intensity and low impact of acute respiratory disease on health care services.

South America

Andean

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

In Peru[4], nationally, the number of pneumonia cases in children under five years of age in EW 18 was below the epidemic threshold. However, the amazonian regions of Loreto and Ucayali, for the last four weeks, have reported pneumonia counts in children less than five years, to be in the epidemic zone

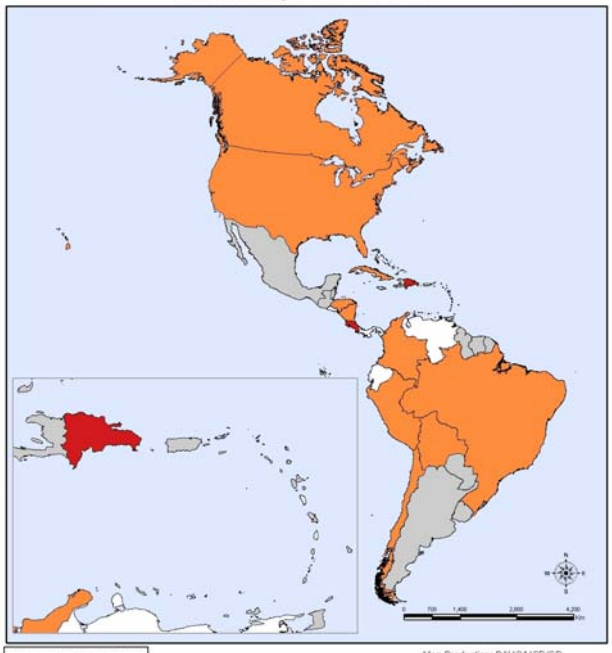
Southern Cone

Brazil and Chile reported regional influenza activity. Brazil reported an increasing trend in acute respiratory disease for the last two weeks, while this week, Chile reported an unchanged trend. These countries reported low/moderate intensity of acute respiratory disease and low impact of acute respiratory disease on health care services.

In Chile[5], sentinel surveillance indicated that the national ILI rate in EW 18 (7.1/100,000 population) was below the epidemic threshold. In Los Lagos, the ILI rate (13.7/100,000) has been above the epidemic threshold for the last four weeks.

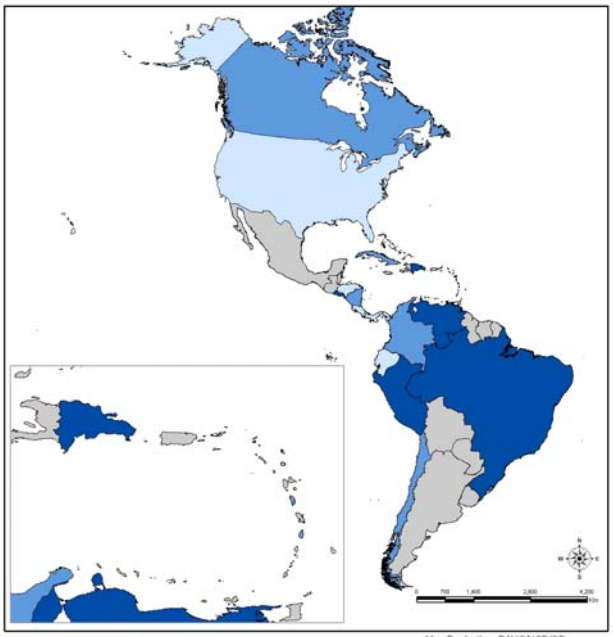
Paraguay reported, from EW 1–EW 18, a slight increase in the number of SARI cases in those less than in 5 years of age.

Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 19, 2010*.



* EW 19 = epidemiological week from May 9 to May 15, 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 19, 2010*.

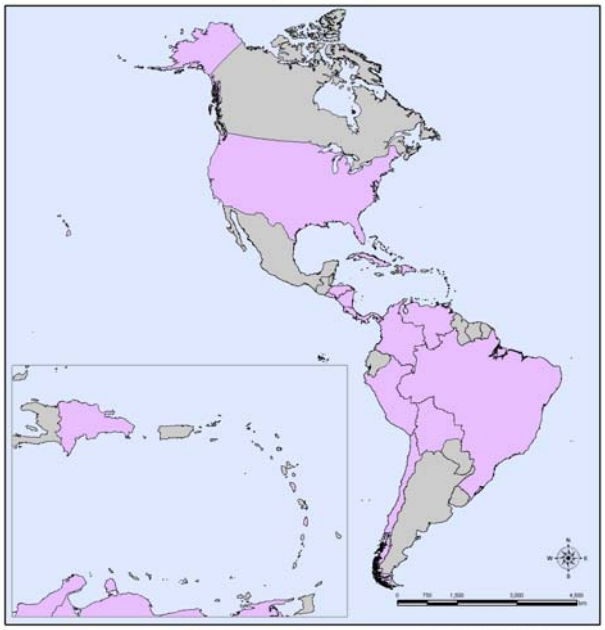


* EW 19 = epidemiological week from May 9 to May 15, 2010.
Includes the latest information reported by each country this week.

Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 19, 2010*.

* EW 19 = epidemiological week from May 9 to May 15, 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 19, 2010*.



* EW 19 = epidemiological week from May 9 to May 15, 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—countries with data reported this week

	Chile	Costa Rica[6]
Reporting period	2009 – May 14, 2010	April 24, 2009 – May 15, 2010
Type of cases reported	Hospitalized, confirmed	Hospitalized, confirmed
Number of cases	1,627	537
Percentage of women	52*	54.9
Age	Median 32 years, highest incidence in age group< 5 years*	-
Percent with underlying co-morbidities	53*	-
Co-morbidities most frequently reported (%)	Asthma 17% Hypertension 10% Diabetes 8% COPD 7%*	Asthma 25.3 %Diabetes 13.7% Obesity 14% COPD 8% Cardiopathy 7%
Percent pregnant among women of child-bearing age	-	6.1**

* 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 61 to 77%.

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

	Chile	Mexico	Peru
Reporting period	2009-May 14, 2010	2009 – May 17, 2010	2009 – May 17, 2010
Number of confirmed deaths	150	1,228	224
Percentage of women	47	47.7	52
Age	Median 44 years	Highest percentage (70.1%) in 20-54 year age group	Median 38
Percent with underlying co-morbidities	70.6	60.7	77.2
Co-morbidities most frequently reported (%)	-	-	Metabolic (29.5%), Cardiovascular (24.3 %), Respiratory (15.6 %), Neurologic (10.9%)
Percent pregnant among women of child-bearing age	1.4*	-	15.2*

* 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.

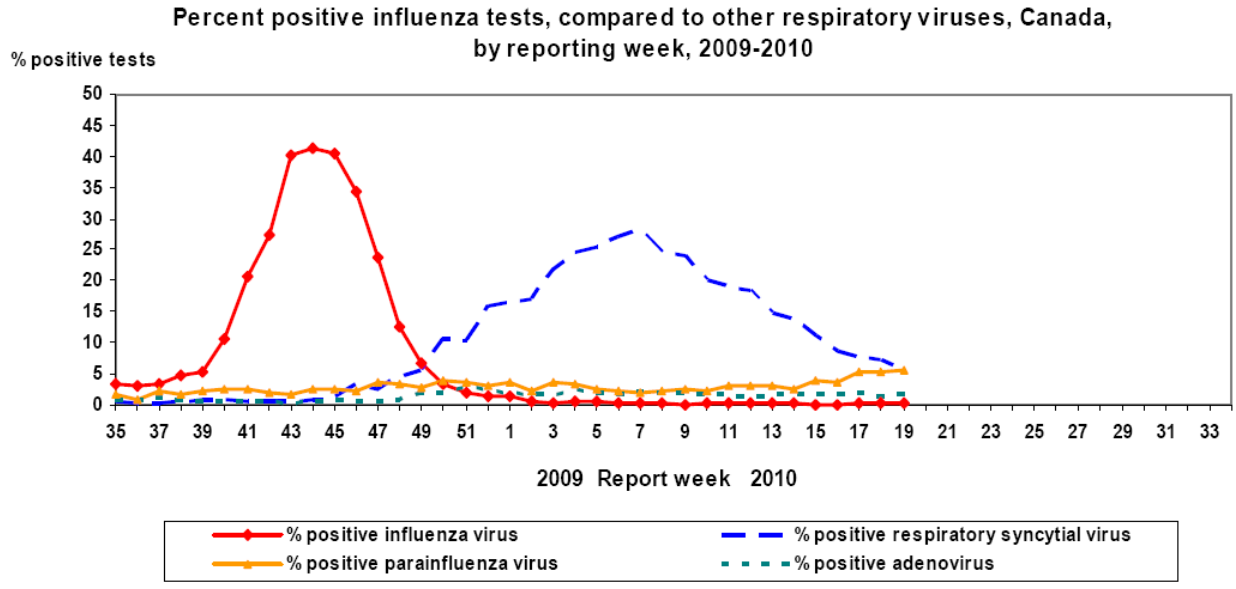
Country	Time Period 2010	# Samples Tested	% Positive Samples	% Influenza A	% Influenza B	% RSV	% Parainfluenza	% Adenovirus	% Other Viruses
Bolivia*	EW 1-EW 19	319	27.9	10.1	84.3	4.5	1.1	0.0	0
Chile	EW 1-EW 18	4078	8.1	17.2	0.0	45.2	14.2	23.5	0
Costa Rica	EW 1-EW 19	2388	38.5	31.8	0.0	27.0	19.0	21.4	0.0
Cuba	EW 1-EW 19	5504	23.8	47.0	0.9	1.7	8.5	0.9	39.0
Jamaica	EW 1-EW 19	350	5.4	68.4	5.3	0.0	5.3	21.1	0.0
Mexico	EW 1-EW 19	12925	24.3	89.4	0.1	2.1	0.7	0.3	7.4
Panamá	EW 1-EW 18	505	9.3	21.3	12.8	23.4	31.9	10.6	0
Paraguay	EW 1-EW 16	300	33.0	2.0	0.0	79.6	14.3	4.1	0
Uruguay	EW 1-EW 17	163	19.0	58.1	0.0	0.0	6.5	35.5	0.0

* Data provided by the CENETROP

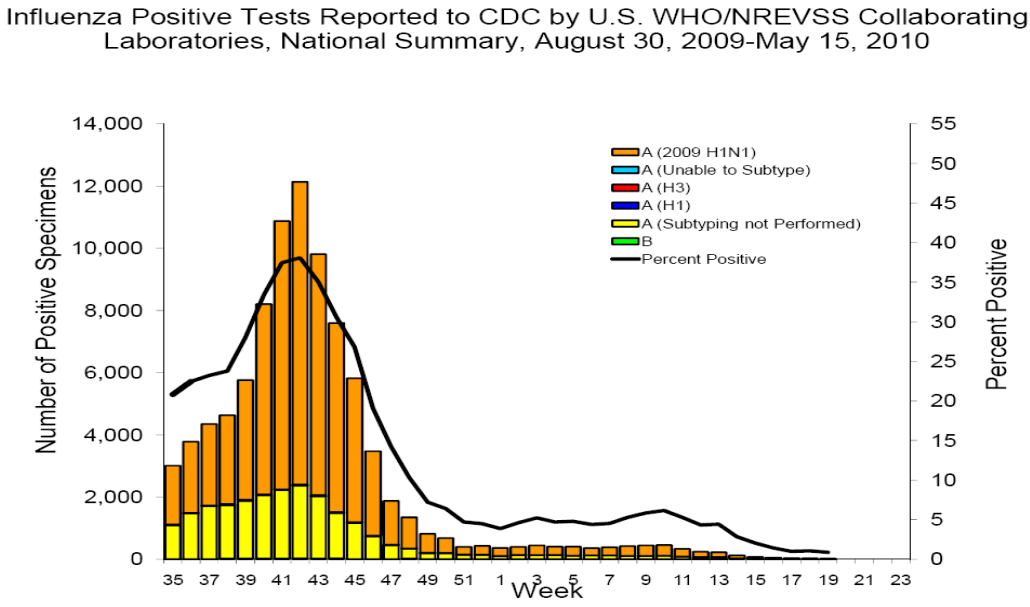
North America

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. While the number of pandemic influenza infections has decreased in Mexico, the pandemic virus still appears to predominate among circulating influenza viruses.

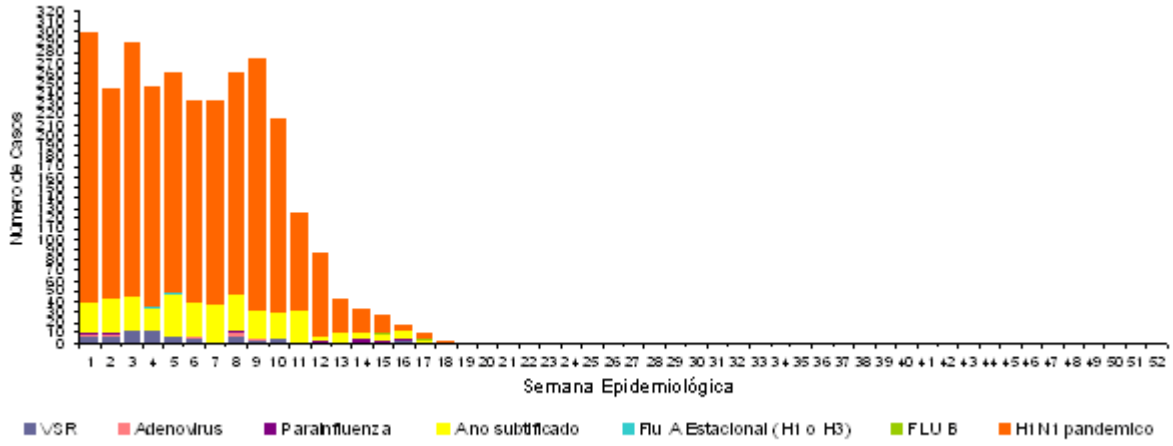
Canada. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



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



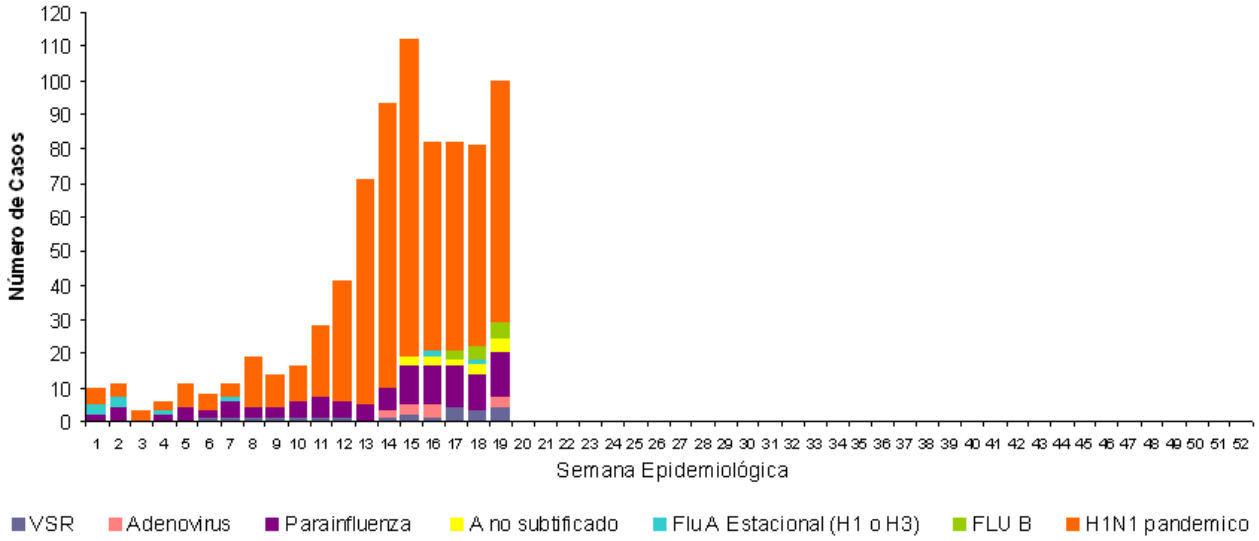
Mexico. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



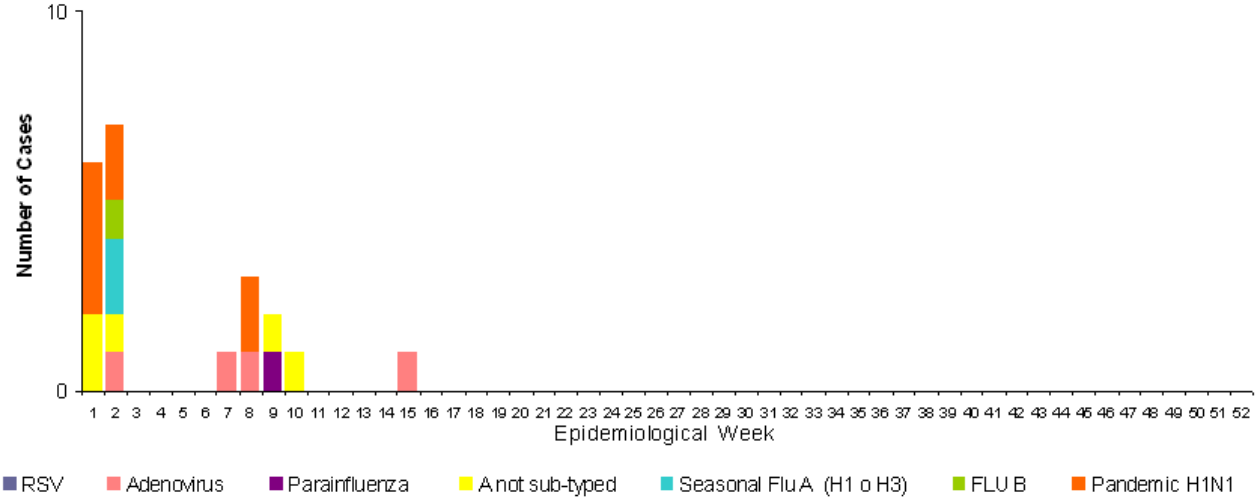
Caribbean

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.



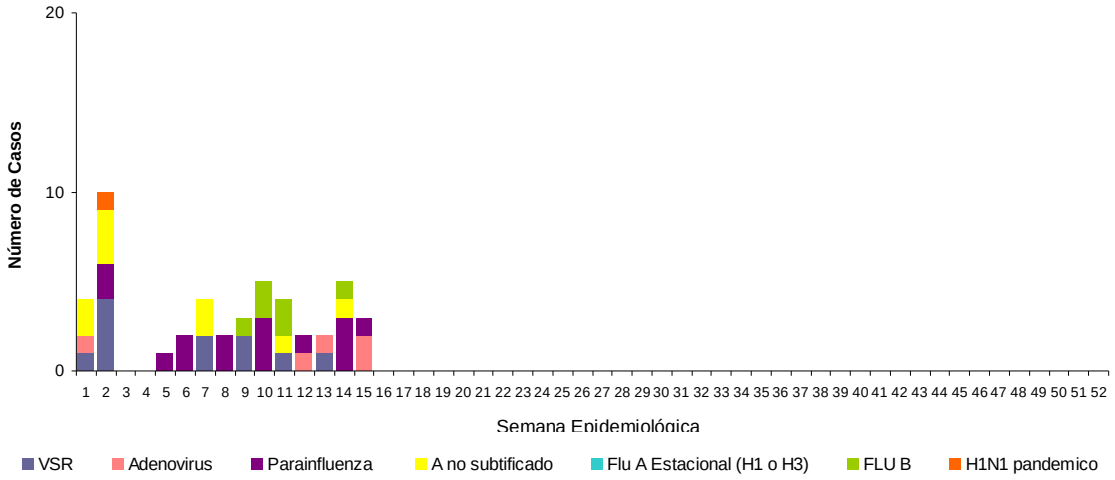
Jamaica. Distribution respiratory viruses under surveillance by EW, 2009-2010 influenza season.



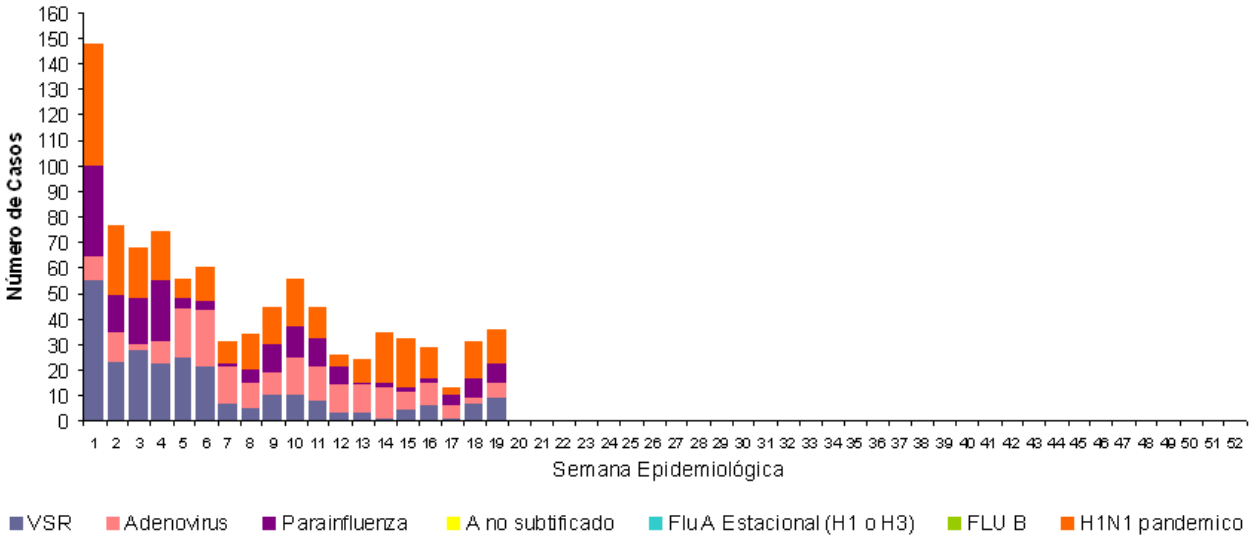
Central America

Panama reported circulation of parainfluenza, respiratory syncytial virus and influenza A virus through EW 15, but for the last three weeks, all samples tested were negative for respiratory viruses. Costa Rica has detected influenza A and respiratory syncytial virus as the predominant viruses since the beginning of 2010.

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



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

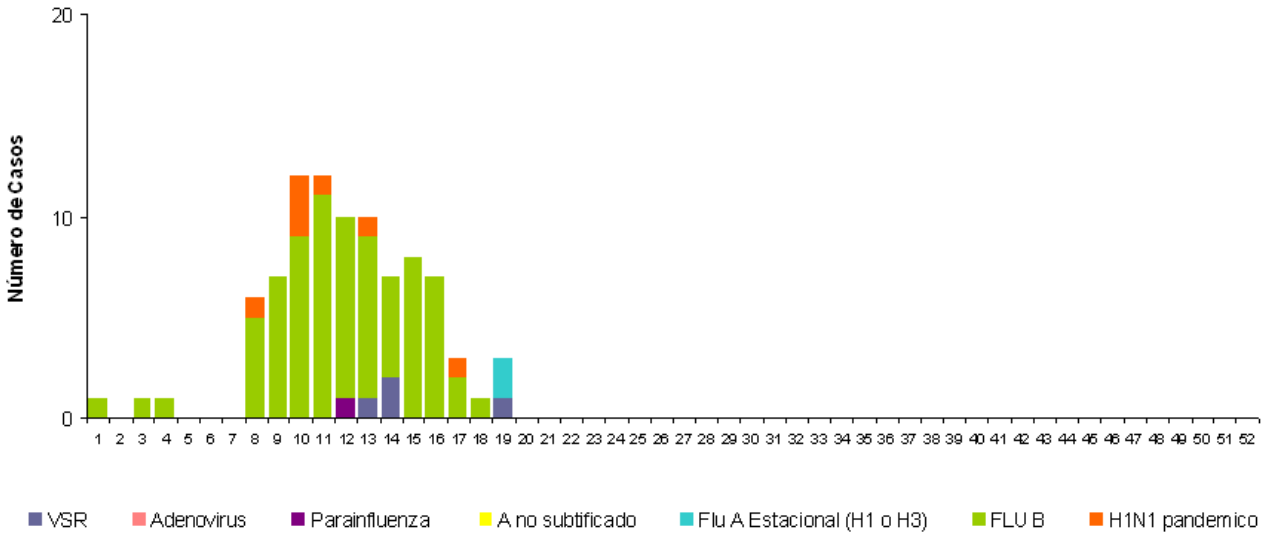


South America

Andean

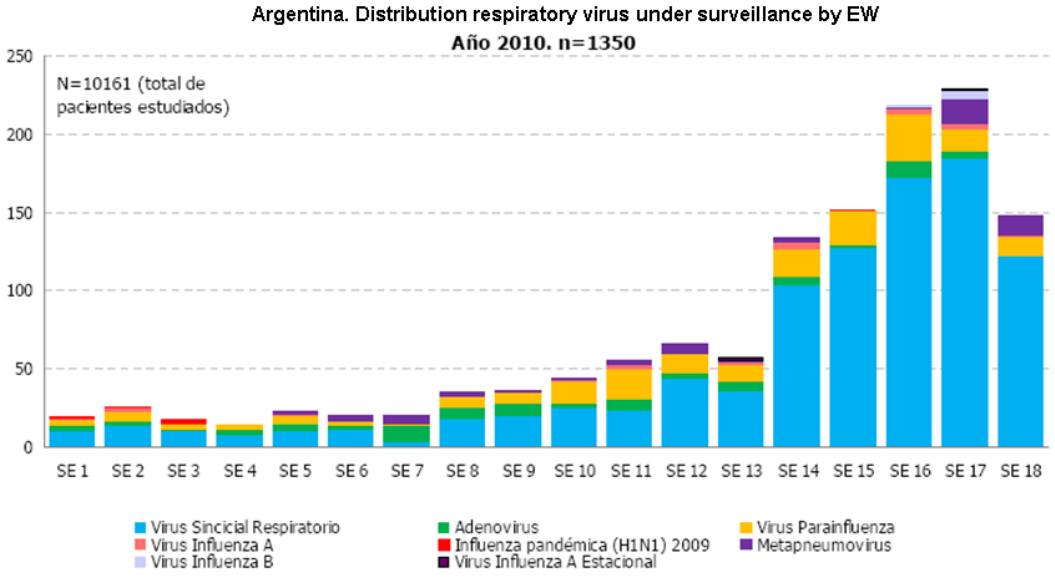
Bolivia reported a predominant circulation of influenza B viruses, which were confirmed by RT-PCR, immunofluorescence assay, and viral culture.

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

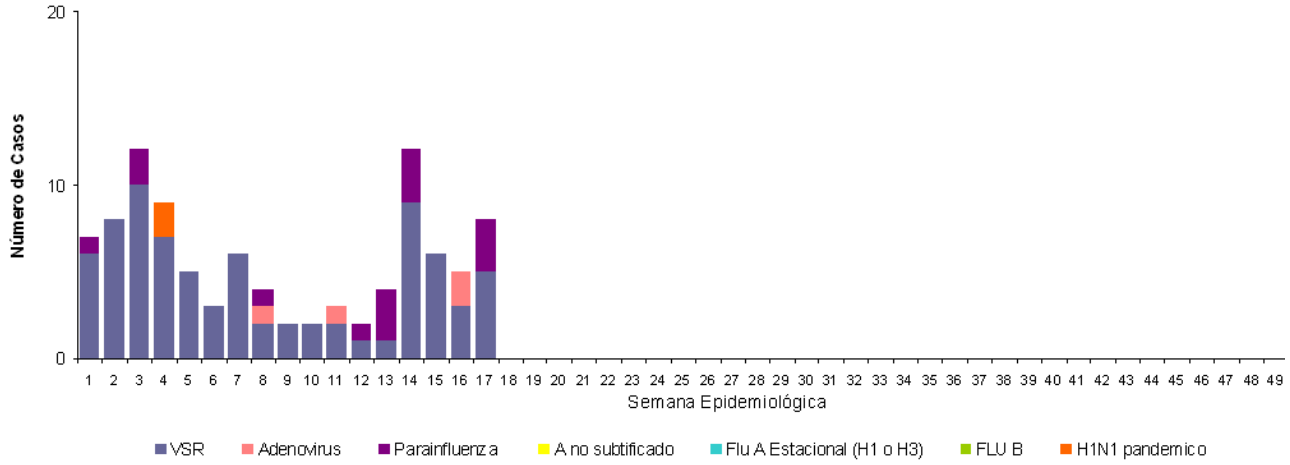


Southern Cone

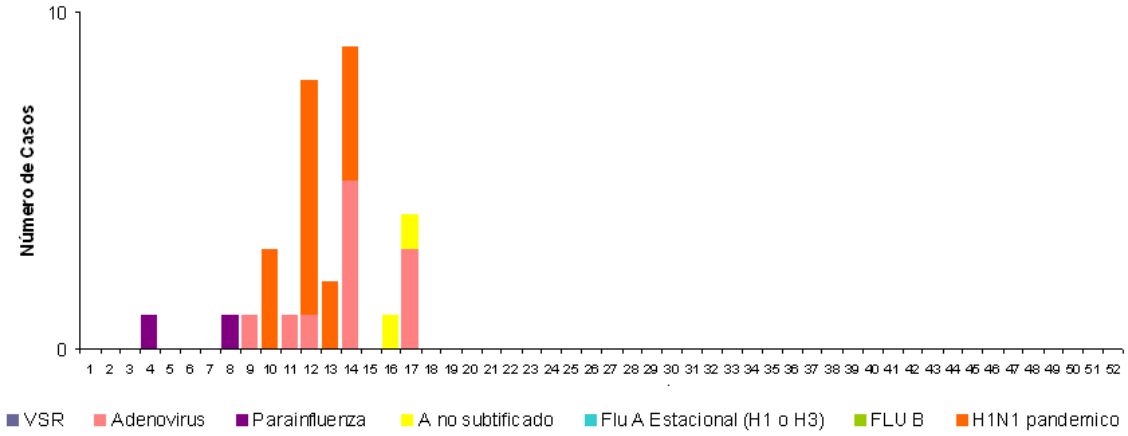
Argentina reported, from EW 8–EW 18, predominant circulation of respiratory syncytial virus. In Paraguay during the first 17 weeks of 2010, the predominant virus that was detected was respiratory syncytial virus. In Uruguay, from EW 10 to EW 14, pandemic H1N1 virus was predominant.



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



Uruguay. 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 19, 2010

Country	Geographic spread	Trend	Intensity	Impact on Health Care Services	EW
Antigua and Barbuda					
Argentina					
Bahamas					
Barbados					
Belize					
Bolivia	Regional	NIA	Low/moderate	Low	19
Brazil	Regional	Increasing	Low/moderate	Low	19
Canada	Regional	Unchanged	Low/moderate	NIA	18
Chile	Regional	Unchanged	Low/moderate	Low	18
Colombia	Regional	Unchanged	Low/moderate	Low	19
Costa Rica	Widespread	Decreasing	Low/moderate	Low	19
Cuba	Regional	Unchanged	Low/moderate	Low	19
Dominica	No activity	Unchanged	Low/moderate	Low	19
Dominican Republic	Widespread	Increasing	Low/moderate	Low	19
Ecuador	No activity	Decreasing	Low/moderate	NIA	19
El Salvador	No activity	Increasing	Low/moderate	Low	19
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras	Regional	Decreasing	Low/moderate	Low	19
Jamaica					
Mexico					
Nicaragua	Regional	Unchanged	Low/moderate	Low	19
Panama	No activity	Decreasing	Low/moderate	Low	19
Paraguay					
Peru	Regional	Increasing	Low/moderate	Low	19
Saint Kitts and Nevis					
Saint Lucia	No activity	Unchanged	Low/moderate	Low	19
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Regional	Decreasing	Low/moderate	Low	19
Uruguay					
Venezuela	No activity	Increasing	Low/moderate	Low	19

NIA: No Information Available

Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas. As of May 21, 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 14, 2010, 12 h EST)
Southern Cone		
Argentina	626	
Brazil	2,113	
Chile	153	0
Paraguay	47	
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	239	1
Ecuador	129	0
Peru	224	0
Venezuela	135	0
Caribbean Countries		
Antigua & Barbuda	0	
Bahamas	1	
Barbados	3	
Cuba	78	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	60	0
El Salvador	33	
Guatemala	26	
Honduras	18	
Nicaragua	11	0
Panama	12	
North America		
Canada*	428	
Mexico	1,228	1
United States**	2,718	
TOTAL	8,401	5

***** 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 21, 2010**, a total of **8,401 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:

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