



Regional Update

Pandemic (H1N1) 2009

(July 6, 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 the United States¹, in EW 25, the proportion of outpatient consultations for influenza-like illness (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.

Caribbean

Influenza activity was reported as widespread in Jamaica, regional in Cuba, and localized in Dominica. Trends of acute respiratory disease were reported as increasing in Dominica, unchanged in 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.

Jamaica², in EW 24, reported an unchanged SARI (severe acute respiratory illness) and ARI (acute respiratory illness) rate as compared to the previous week, remaining slightly above the national baseline.

Central America

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

In EW 24, Costa Rica³ reported a slight increase in SARI hospitalizations and increased trends in confirmed pandemic cases in five of the provinces, especially in Alajuela, Heredia, and Puntarenas,.

In EW 24 and 25, Panama reported an increased number of cases of seasonal influenza (H3N2) in the province of Panama and some pandemic influenza cases in the northern province of Chiriqui.

Weekly Summary

- In North America, acute respiratory disease activity remained low.
- In the Caribbean, Jamaica reported an increasing trend in acute respiratory disease
- In Central America, El Salvador and Panama reported increasing trends in acute respiratory disease. Panama reported high intensity of acute respiratory disease and moderate impact on health care services
- In South America, Colombia reported increased trend of acute respiratory disease.
- In EW 22-25, Panama reported a sharp increase in the number of influenza A/H3 viruses and influenza A not subtyped. In Argentina (EW 24) and Chile (EW 25) continue to report a predominance of RSV
- 54 new confirmed deaths in 5 countries were reported; in total there have been 8,516 cumulative confirmed deaths in 28 countries of the Region

South America

Andean

Bolivia and Colombia reported regional influenza activity. Colombia reported an increasing trend in acute respiratory disease, and Bolivia reported a decreasing trend in acute respiratory disease. Both countries reported low/moderate intensity of acute respiratory disease, and low impact on health care services.

In EW 25 in Bolivia⁴, at the national level, the number of SARI cases decreased compared to the previous week, remaining within the endemic channel. In the northern department of Pando, the number of SARI cases was above the epidemic threshold.

In EW 24, Peru⁵ reported an increase in the number of confirmed pandemic influenza cases in the southern region during the last four EW, especially in the department of Arequipa.

In EW 24, Venezuela⁶ reported a decrease of 7.7% in the number of acute respiratory disease cases, as compared to the previous week and an increase of 1.7% in the number of pneumonia cases, with the highest percentage in the 1-4 year age group.

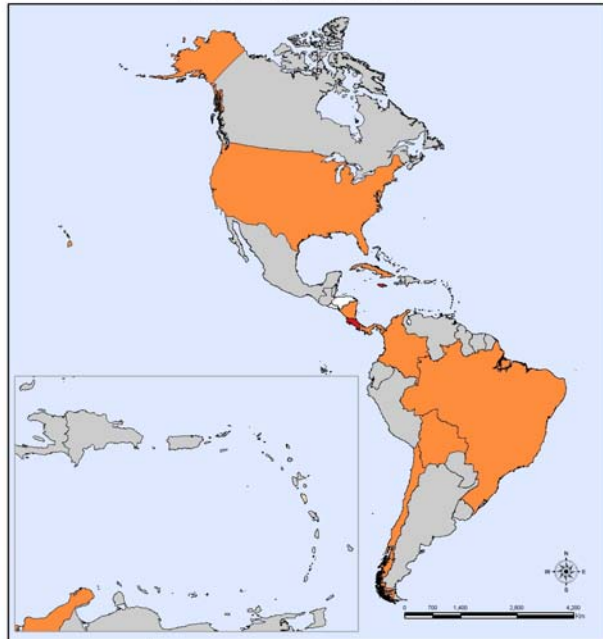
Southern Cone

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

In Argentina⁷, between EW 21-23, the number of hospitalizations among children under 5 years of age, with acute lower respiratory infection has remained stable, after an increase of 122% between EW 16-21.

In Chile⁸, nationally, consultations for ILI remained low and within the endemic channel. At the regional level, one region (Tarapaca) reported high ILI activity, one reported moderate ILI activity, ten regions reported low ILI activity, and four regions reported no ILI activity. The percentage of consultations for pneumonia out of the total number of consultations, increased by 2%, especially among children under 15 years of age.

**Map 1. Pandemic (H1N1) 2009,
Geographical Spread by Country.
Americas Region. EW 25, 2010*.**



Geographical Spread
 No activity
 No information available
 Localized
 Regional
 Widespread

* EW 25 = epidemiological week from June 20 to June 26, 2010.
Includes the latest information reported by each country this week.

Map Production: PAHO/MSD/C/D
 July 2, 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

**Map 2. Pandemic (H1N1) 2009,
Trend of respiratory disease activity compared to the previous week.
Americas Region. EW 25, 2010*.**

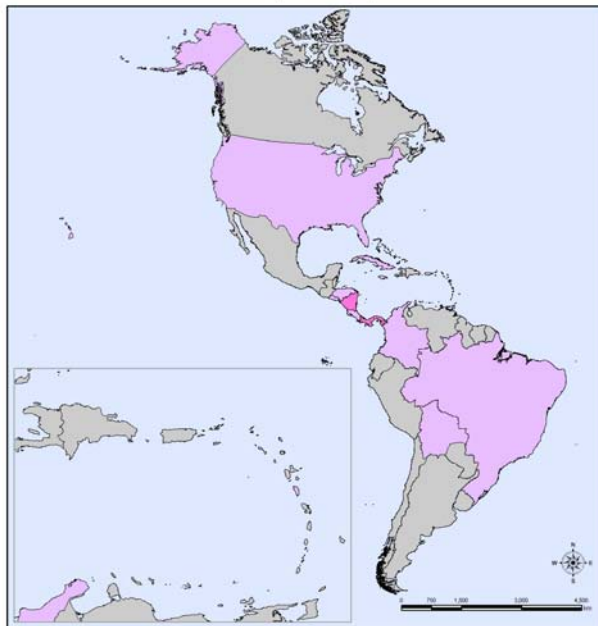


Trend
 No information available
 Decreasing
 Unchanged
 Increasing

* EW 25 = epidemiological week from June 20 to June 26, 2010.
Includes the latest information reported by each country this week.

Map Production: PAHO/MSD/C/D
 July 2, 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

**Map 4. Pandemic (H1N1) 2009,
Impact of Acute Respiratory Disease on Health-Care Services.
Americas Region. EW 25, 2010*.**

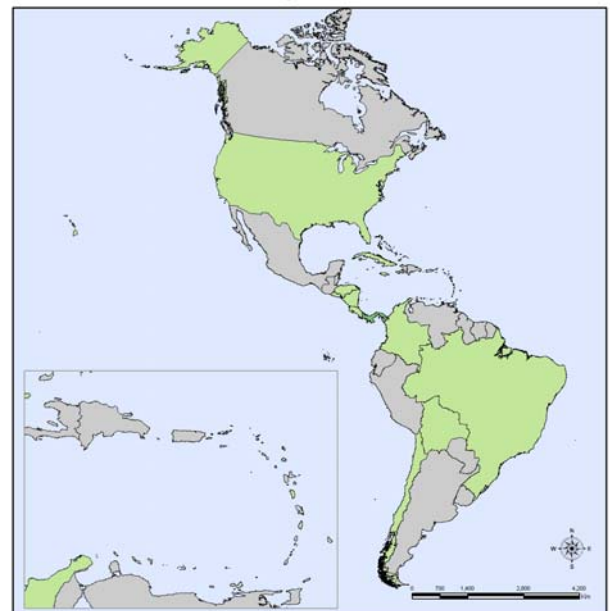


Impact on health-care services
 No information available
 Low
 Moderate
 Severe

* EW 25 = epidemiological week from June 20 to June 26, 2010.
Includes the latest information reported by each country this week.

Map Production: PAHO/MSD/C/D
 July 2, 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

**Map 3. Pandemic (H1N1) 2009,
Intensity of Acute Respiratory Disease in the Population.
Americas Region. EW 25, 2010*.**



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

* EW 25 = epidemiological week from June 20 to June 26, 2010.
Includes the latest information reported by each country this week.

Map Production: PAHO/MSD/C/D
 July 2, 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

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

	Costa Rica⁹
Reporting period	April 24, 2009 – June 19, 2010
Type of cases reported	Hospitalized, confirmed
Number of cases	569
Percentage of women	55.8
Age	Mean 39.3
Percent with underlying co-morbidities	-
Co-morbidities most frequently reported (%)	Asthma 25.5%, Diabetes Mellitus 13.9%, Obesity 13.6%, COPD 7.8%, Cardiopathy 6.8%
Percent pregnant among women of child-bearing age	6%*

* 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
Reporting period	April, 2009 – June 28, 2010	June, 2009 – June 28, 2010
Number of confirmed deaths	1289	238
Percentage of women	48	52
Age	Highest percentage 70.3% in 20–54 year age group	Median 38 years. Highest rates in >60 years old
Percent with underlying co-morbidities	60.3	76.9
Co-morbidities most frequently reported (%)	-	Metabolic 22.3%, cardiovascular 18.5%, respiratory 11.8%, neurologic 8%, genetics 8%
Percent pregnant among women of child-bearing age	-	-

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 Flu A		
										% Pandemic	% Not subtyped	% Seasonal H1/H3
Chile	EW 1-24	10205	15.9	68.5	12.5	11.2	0.0	7.0	0.4	7.4	94.2	0.0
Colombia	EW 1-25	5045	6.8	14.9	5.8	2.3	0.0	6.1	70.8	91.4	0.0	8.6
Cuba	EW 1-25	6829	24.6	2.2	9.2	1.6	37.2	1.3	48.6	95.8	2.7	1.5
Dominican Republic	EW 1-23	422	25.8	5.5	54.1	33.9	0.0	5.5	0.9	0.0	100.0	0.0
Guatemala	EW 1-25	1541	8.2	22.2	16.7	8.7	0.0	2.4	50.8	96.9	1.6	1.6
Jamaica	EW 1-25	449	4.7	0.0	4.8	19.0	0.0	4.8	71.4	53.3	33.3	13.3
Mexico	EW 1-25	14026	23.6	2.0	1.1	0.3	9.2	0.1	87.3	84.8	15.1	0.1
Nicaragua	EW 1-25	1572	25.3	8.8	4.0	0.5	0.0	2.5	84.4	3.0	0.0	97.0
Panama	EW 1-25	578	14.2	6.1	11.0	3.7	0.0	3.7	75.6	9.7	43.5	46.8

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 Flu A		
										% Pandemic	% Not subtyped	% Seasonal H1/H3
Chile	EW 24	1009	35.7	82.2	7.5	2.2	0.0	0.8	7.2	88.5	0.0	11.5
Colombia	EW 24	30	10.0	33.3	0.0	0.0	0.0	0.0	66.7	100.0	0.0	0.0
Cuba	EW 25	268	21.6	3.4	12.1	5.2	24.1	0.0	55.2	78.1	18.8	3.1
Dominican Republic	EW 23	32	18.8	0.0	100.0	0.0	0.0	0.0	0.0			
Guatemala	EW 24	46	4.3	100.0	0.0	0.0	0.0	0.0	0.0			
Jamaica	EW 25	14	0.0									
Mexico	EW 24	56	17.9	0.0	0.0	10.0	40.0	0.0	50.0	0.0	100.0	0.0
Nicaragua	EW 25	34	23.5	0.0	12.5	0.0	0.0	0.0	87.5	0.0	0.0	100.0
Panama	EW 25	38	68.4	0.0	0.0	3.8	0.0	0.0	96.2	4.0	64.0	32.0

* Respiratory Syncytial Virus

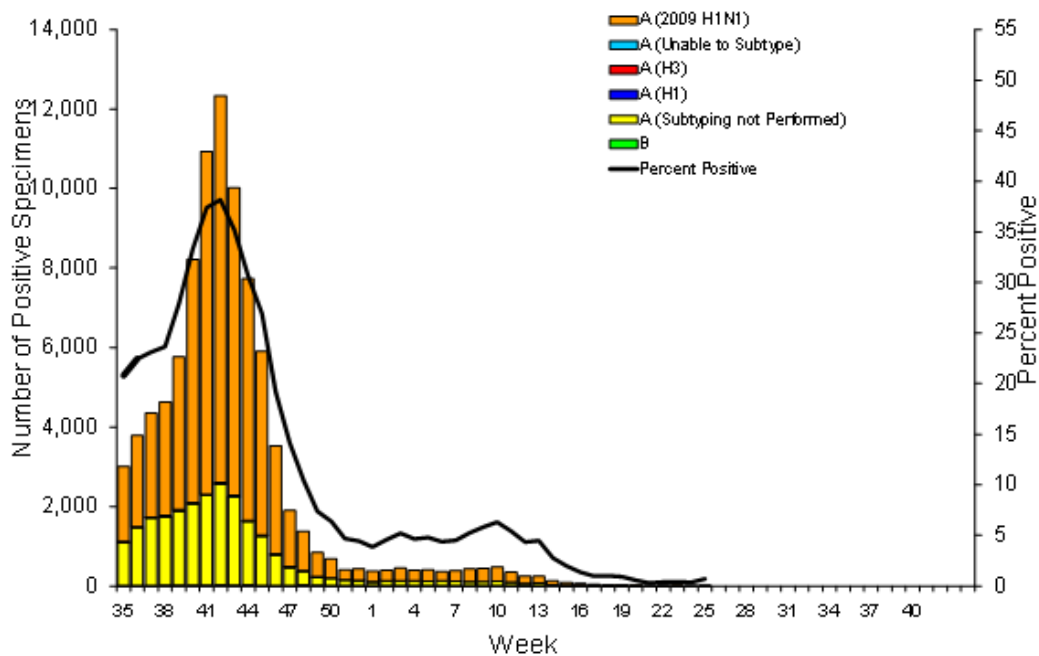
† Parainfluenza Virus

‡ Adenovirus

North America

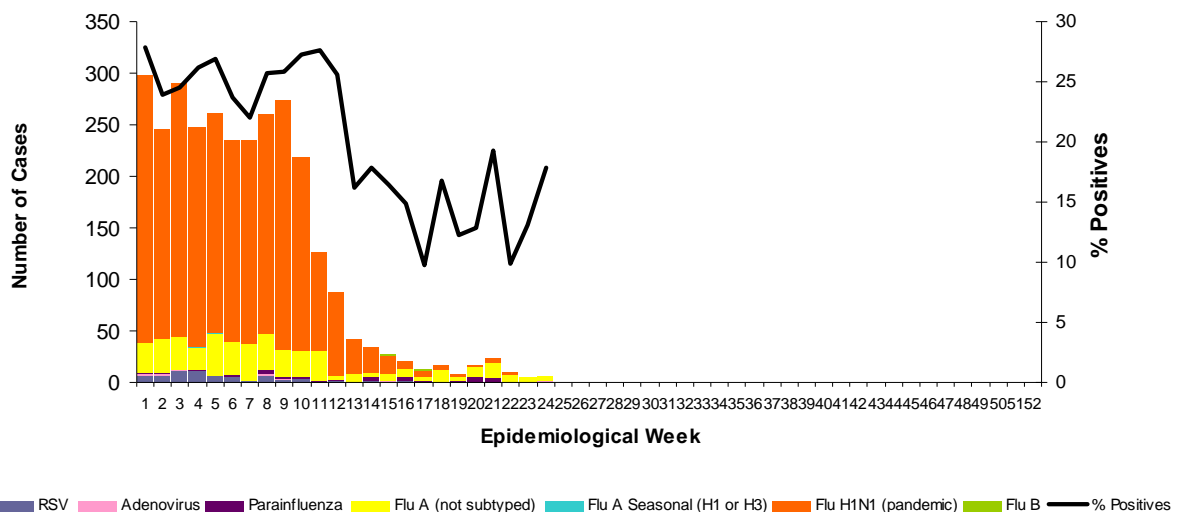
The percentage of positive specimens tested during EW 25 in United States was 0.7%; half of them were pandemic influenza, and half were seasonal influenza A/H3. In Mexico, the detection of respiratory viruses has diminished since peaking in late 2009 and early 2010.

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



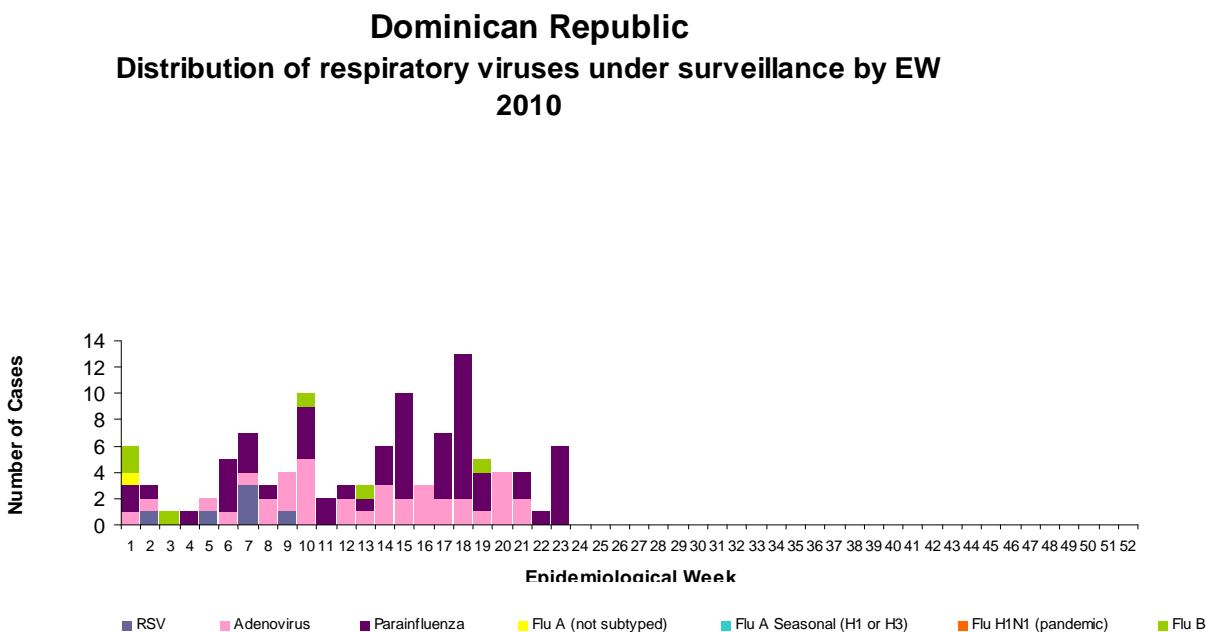
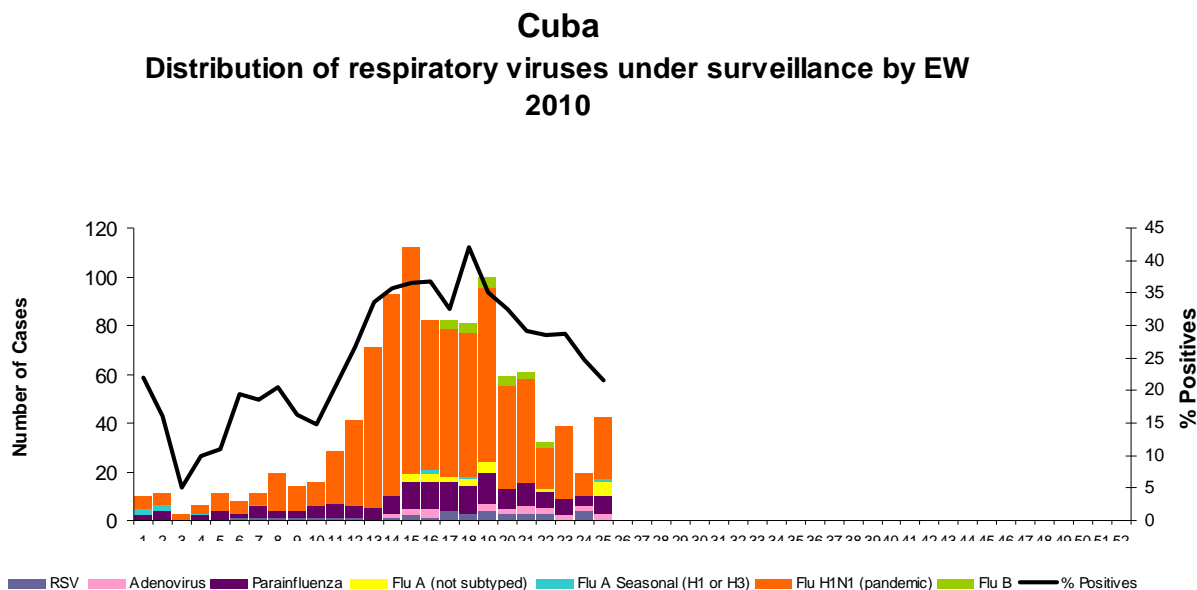
Mexico

Distribution of respiratory viruses under surveillance by EW 2010



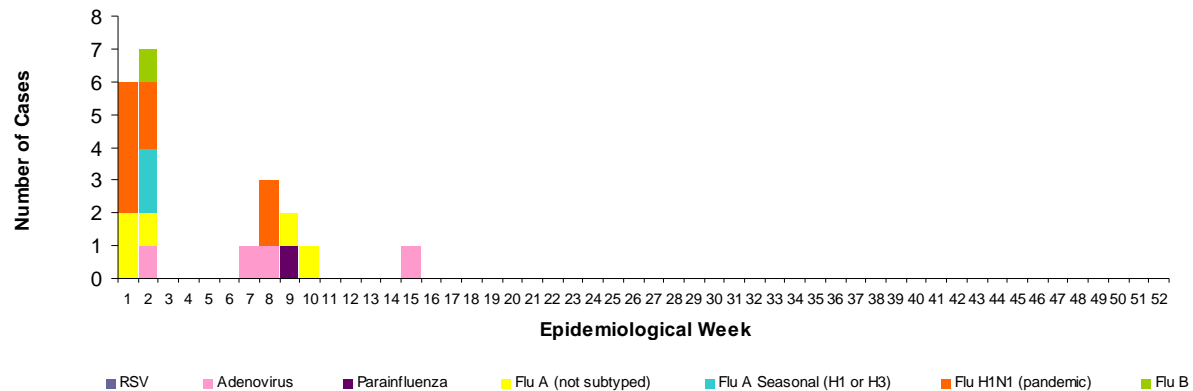
Caribbean

Circulation of respiratory viruses is varied in Caribbean. Cuba reported predominant circulation of pandemic influenza; however, respiratory syncytial virus, adenovirus and parainfluenza virus were also identified. Dominican Republic reported circulation of parainfluenza virus and adenovirus. Jamaica reported no respiratory virus activity since EW 16.



Jamaica

Distribution of respiratory viruses under surveillance by EW 2010

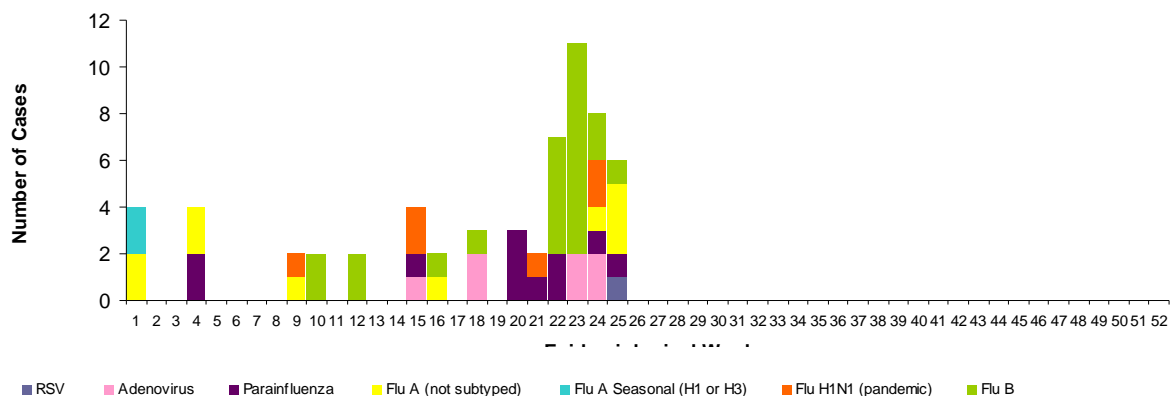


Central America

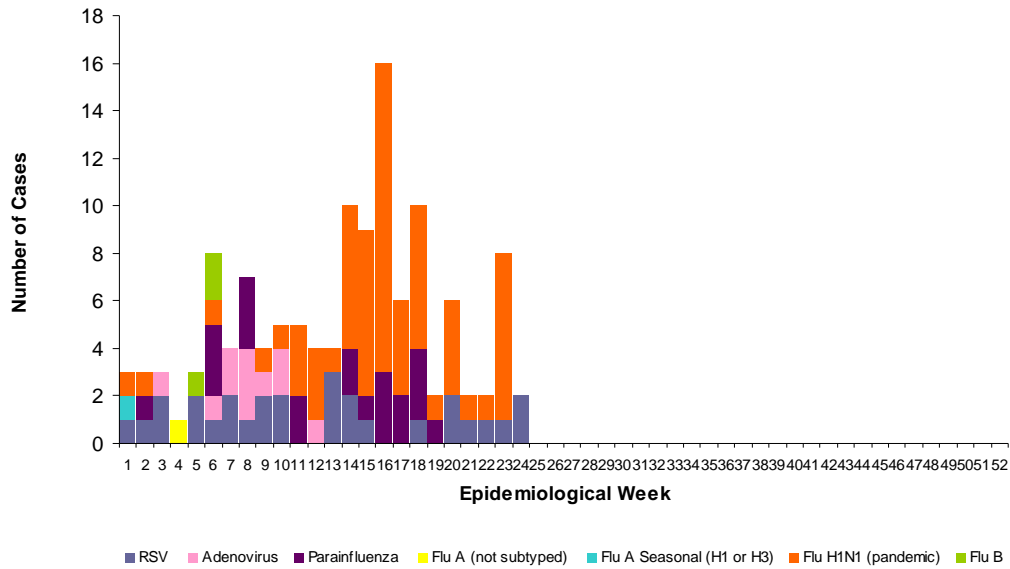
Circulation of respiratory viruses continues to be varied in Central America. In El Salvador, there is continued circulation of influenza A and B viruses, as well as detection of respiratory syncytial virus for the first time this year. Guatemala reported circulation of pandemic influenza and respiratory syncytial virus. Nicaragua reported decreasing isolations of seasonal influenza A (H3N2) in the last three weeks. Panama has seen a sharp increase in the detection of seasonal influenza A (H3N2), including influenza A not subtyped, during EW 22-25, with some isolation of pandemic influenza and adenovirus.

El Salvador

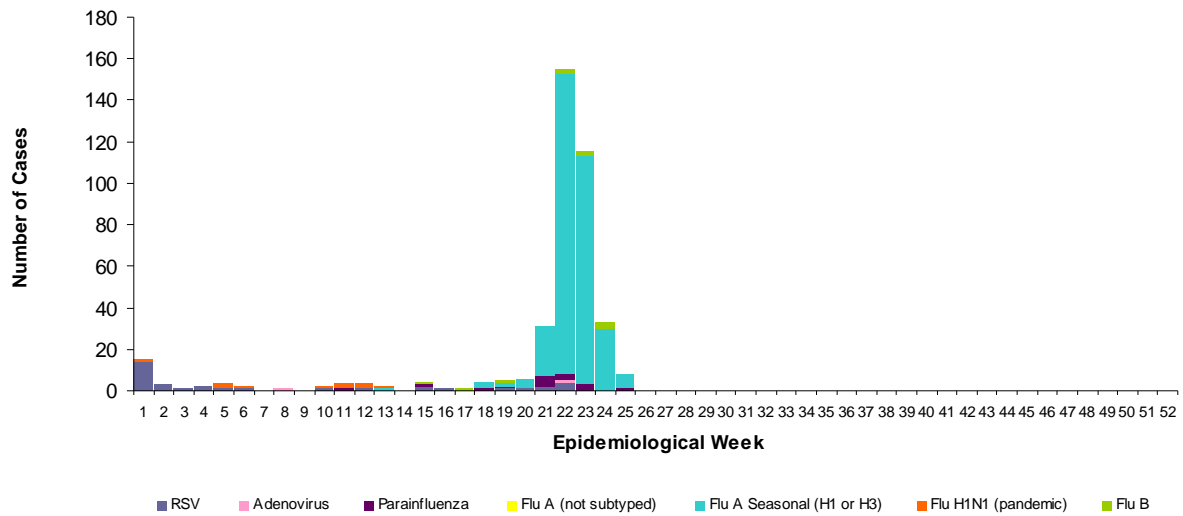
Distribution of respiratory viruses under surveillance by EW 2010

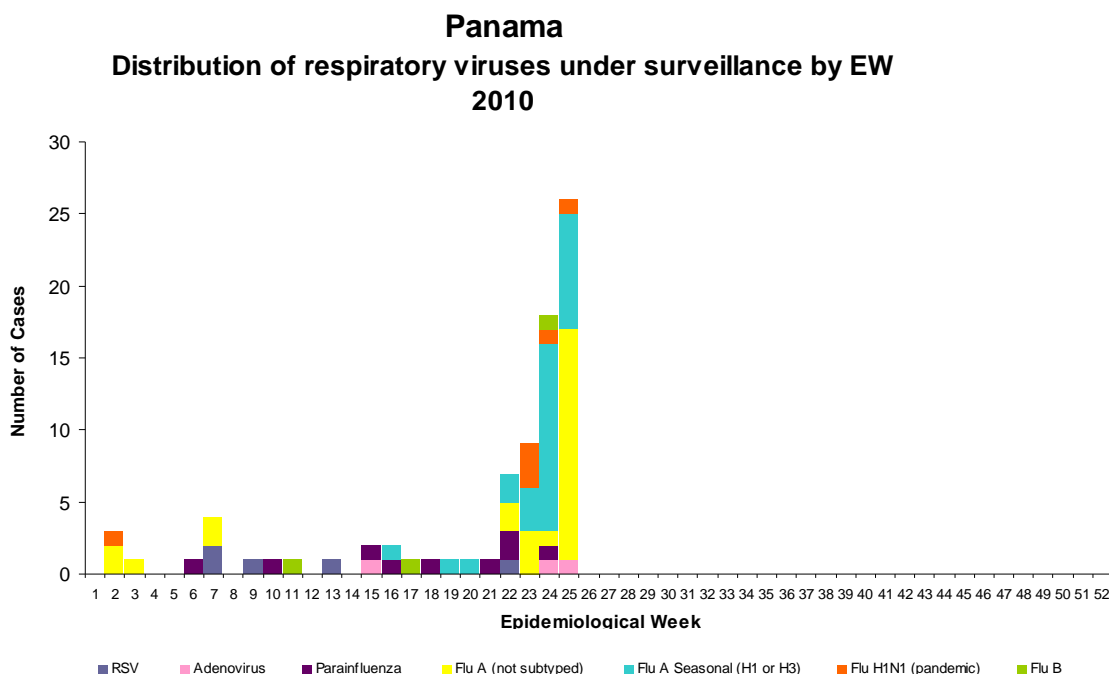


Guatemala **Distribution of respiratory viruses under surveillance by EW** **2010**



Nicaragua **Distribution of respiratory viruses under surveillance by EW** **2010**

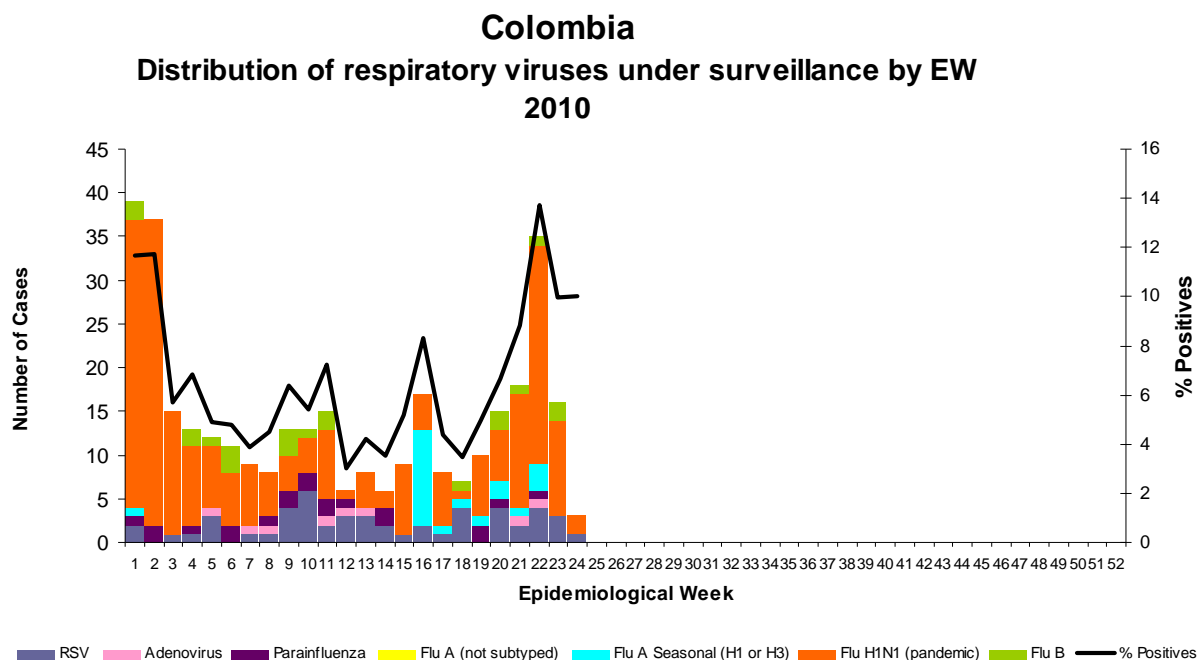




South America

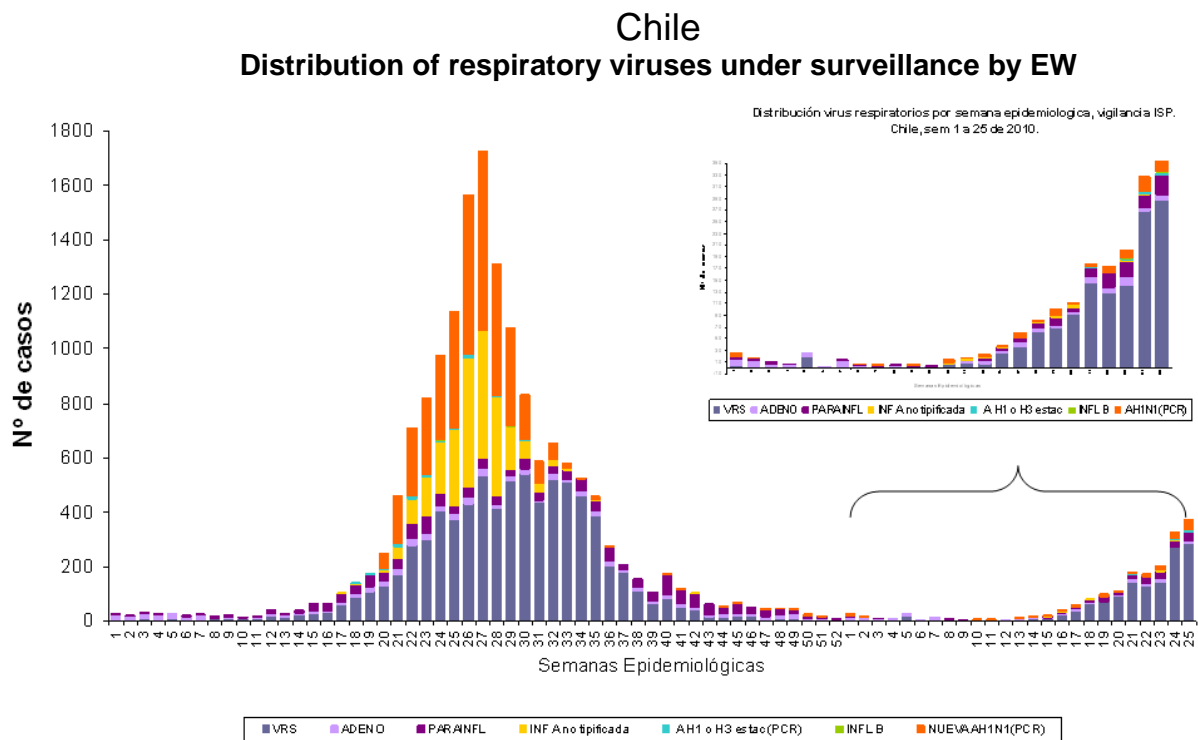
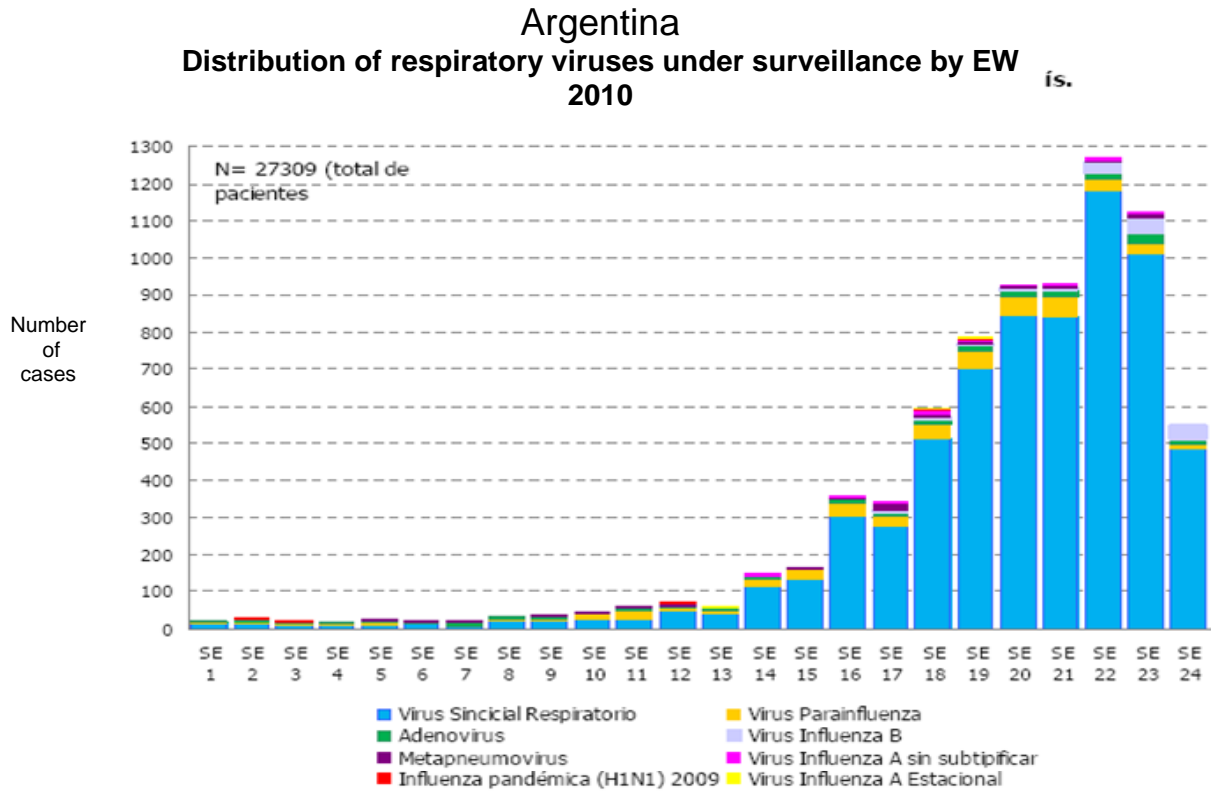
Andean

In Colombia, the predominant influenza virus in circulation has been the pandemic virus, but respiratory syncytial virus and influenza B have also been detected.



Southern Cone

Argentina and Chile continue to report predominant circulation of respiratory syncytial virus.



Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 25, 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	25
Brazil	Regional	Decreasing	Low/moderate	Low	25
Canada					
Chile	Regional	Unchanged	Low/moderate	NIA	25
Colombia	Regional	Increasing	Low/moderate	Low	24
Costa Rica	Widespread	Unchanged	Low/moderate	Low	24
Cuba	Regional	Decreasing	Low/moderate	Low	25
Dominica	Localized	Increasing	Low/moderate	Low	25
Dominican Republic					
Ecuador					
El Salvador	No activity	Increasing	Low/moderate	Low	25
Grenada					
Guatemala					
Guyana					
Haiti					
Honduras	No activity	Unchanged	Low/moderate	Low	25
Jamaica	Widespread	Unchanged	Low/moderate	Low	24
Mexico					
Nicaragua	Regional	Decreasing	Low/moderate	Moderate	25
Panama	Regional	Increasing	High	Moderate	24
Paraguay					
Peru					
Saint Kitts and Nevis					
Saint Lucia					
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Regional	Decreasing	Low/moderate	Low	25
Uruguay					
Venezuela					

NIA: No information available

Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.
As of July 2, 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 25, 2010, 12 h EST)
Southern Cone		
Argentina	626	
Brazil	2,125	
Chile	156	1
Paraguay	47	
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	252	4
Ecuador	130	
Peru	238	10
Venezuela	136	
Caribbean Countries		
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	
Central America		
Belize	0	
Costa Rica	65	1
El Salvador	33	0
Guatemala	26	
Honduras	18	
Nicaragua	11	
Panama	12	0
North America		
Canada*	428	
Mexico	1,289	38†
United States‡	2,718	
TOTAL	8,516	54

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

†Deaths accumulated over a two week period

‡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 AHDR was discontinued

As of **July 2, 2010**, a total of **8,516 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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1. US Surveillance Summary. Week 25. Centers for Disease Control and Prevention.
 2. Jamaica. Epidemiological Week 24, 2010 (June 13 – June 19): Influenza Surveillance
 3. Costa Rica, Epidemiologic Bulletin, EW 24
 4. Bolivia. Epidemiologic Bulletin, EW 25
 5. Peru, EW 24, <http://www.dge.gob.pe/boletin.php>
 6. Venezuela, Epidemiologic Bulletin, Num 24. June 13 – 19, 2010
 7. Argentina. Acute Respiratory Infection Surveillance. June 24, 2010.
 8. Chile, Situation Report, June 30, 2010. www.pandemia.cl
 9. Costa Rica, Epidemiologic Bulletin, EW 24