



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 18 the national influenza-like illness (ILI) consultation rate was similar to the twenty previous weeks and was still below the historical average. All reporting provinces had similar or lower ILI consultation rates compared to their respective ILI rates in the previous weeks, except in Newfoundland and Labrador which had a higher rate this week. Since the beginning of 2010, 14 hospitalizations and two deaths have occurred. 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 eighteen consecutive weeks. All sub-national surveillance regions reported the proportion of outpatient visits for ILI to be below their region specific baseline. Laboratory-confirmed influenza hospitalization rates remained stable, and children 0–4 years of age continue to have the highest rate. 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 65 oseltamivir-resistant isolates have been detected since April 2009.

In Mexico, 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 pandemic.

Caribbean

Cuba reported regional influenza activity, while Dominica and Saint Lucia reported no influenza activity. 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.

Central America

Guatemala and Honduras reported localized influenza activity while El Salvador and Panama reported no influenza activity. All of these countries reported unchanged or decreasing trends in acute respiratory disease. Low/moderate intensity and low impact of acute respiratory disease on health care services were reported by all countries.

Weekly Summary

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- Caribbean countries reported unchanged or decreasing trends in acute respiratory.
- Central American countries reported decreasing or unchanged trends in acute respiratory disease.
- All South American countries reported decreasing or unchanged trends in acute respiratory disease, except Brazil which reported an increasing trend.
- From EW 1 to 17, in Mexico, Colombia and Cuba, the pandemic virus predominated. Bolivia detected the predominance of influenza B and Canada and Chile detected mostly respiratory syncytial virus.
- 35 new confirmed deaths in 3 countries were reported; in total there have been 8,396 cumulative confirmed deaths.

South America

Andean

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

In Peru³, nationally, the number of pneumonia cases in children under five years of age in EW 17 was above the epidemic threshold. In Loreto, Moquegua, Pasco, and Ucayali, pneumonia counts in children less than five years of age have been in the epidemic zone for the last two weeks.

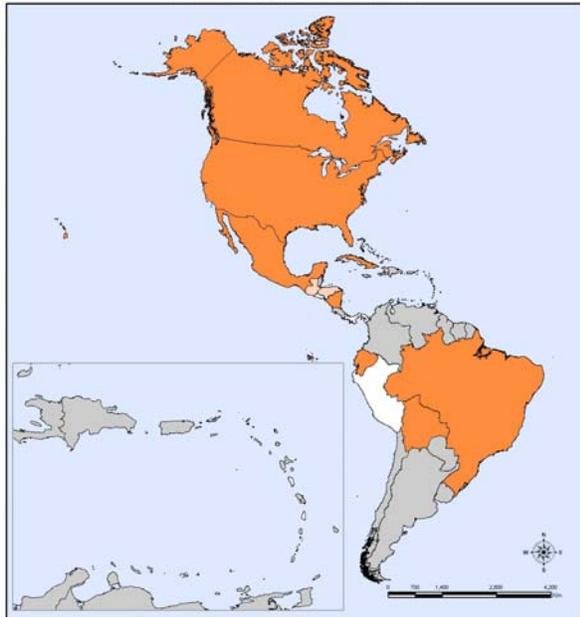
Southern Cone

Brazil reported regional influenza activity, increasing trend in acute respiratory disease, low/moderate intensity of acute respiratory disease, and low impact of acute respiratory disease on health care services. From EW 1 to 17, 62 laboratory-confirmed deaths were registered in the country. In the state of Para (Northern region), 28 deaths were reported and the case fatality among pregnant women was 17.8%.

In Argentina⁴, since the beginning of 2010, the number of ILI cases has been below expected levels.. From EW 1 to EW 17, laboratory data indicate that respiratory syncytial virus predominated among all viruses isolated, although influenza B was also detected in the last two weeks.

In Paraguay⁵, in EW 17, the number of ILI cases was above the epidemic threshold and has been so for four consecutive weeks. The number of SARI cases in children under five years was in the epidemic zone. Laboratory data have revealed that respiratory syncytial virus, parainfluenza virus, and adenovirus are circulating.

Map 1. Pandemic (H1N1) 2009, Geographical Spread by Country. Americas Region. EW 18, 2010*.



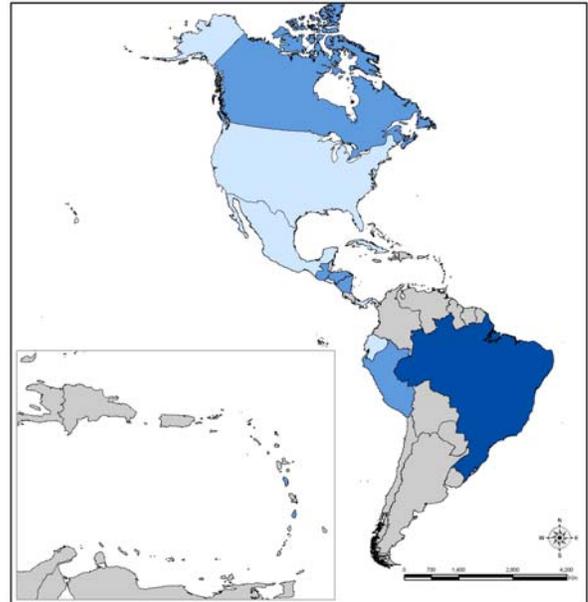
Geographical Spread

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

Map Production: PAHO/HS/DICD
May 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 18 = epidemiological week from May 2 to May 8, 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 18, 2010*.



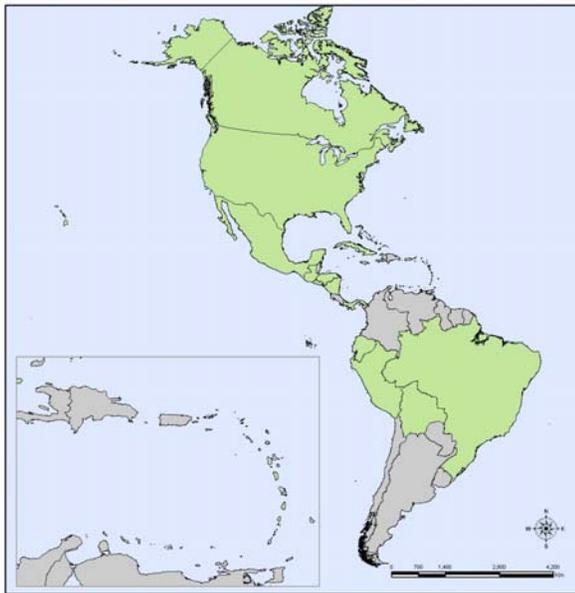
Trend

- No information available
- Decreasing
- Unchanged
- Increasing

Map Production: PAHO/HS/DICD
May 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 18 = epidemiological week from May 2 to May 8, 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 18, 2010*.



Intensity of acute respiratory disease

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

Map Production: PAHO/HS/DICD
May 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 18 = epidemiological week from May 2 to May 8, 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 18, 2010*.



Impact on health-care services

- No information available
- Low
- Moderate
- Severe

Map Production: PAHO/HS/DICD
May 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 18 = epidemiological week from May 2 to May 8, 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. No epidemiological information on hospitalizations and severe cases was received this week.

Overall, approximately half of deceased cases were among women (Table 1). The percentage of cases with underlying co-morbidities varied from 60 to 77%.

Table 1: Description of deaths among confirmed cases of pandemic (H1N1) 2009 in selected countries

	Mexico	Peru
Reporting period	2009 – May 10, 2010	2009 – May 10, 2010
Number of confirmed deaths	1,227	224
Percentage of women	47,8	52
Age	Highest percentage (70.1%) in 20-54 year age group	Median 38
Percent with underlying co-morbidities	60.7	77.2
Co-morbidities most frequently reported (%)	-	Metabolic (29.5%), Cardiovascular (24.27%), respiratory (15.6 %), Neurologic (10.9%)
Percent pregnant among women of child-bearing age	-	15.2*

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

III- Viral circulation

From May 3rd–6th, 2010, the second regional National Influenza Center (NIC) meeting was held in Guayaquil, Ecuador. The purpose was to convene representatives from the NICs in Latin American countries and the Caribbean to discuss laboratory experiences during the 2009 (H1N1) pandemic, to update attendees with recent technical and administrative information, and to provide a forum for the discussion of challenges and sharing of best practices. Several topics received particular attention throughout the meeting, including the integration of virological and epidemiological surveillance data, decentralization of influenza diagnosis, contingency planning, quality control, and the need for improved collection and transport of specimens. Preliminary results of the 2010 NIC survey were presented, which demonstrated some improvements in training, equipment, and staffing, amidst increasing sample workload. Additionally, survey respondents highlighted problems in procuring reagents, securing budget resources, retaining trained personnel, and communicating with epidemiologists and other NICs. Strategies were discussed to address some of the concerns raised, such as: strengthening of laboratory contingency plans, increasing laboratory surge capacity including the automating nucleic acid extraction, testing of other respiratory viruses by real time RT-PCR, implementing additional proficiency testing, and training laboratory staff in basic epidemiologic and data analysis methods.

An additional result of the NIC meeting was the renewed commitment to sharing virological data with other members of WHO's Global Influenza Surveillance Network.

The Table 2 and graphs below are contributions from National Influenza Centers and influenza laboratories from the Region.

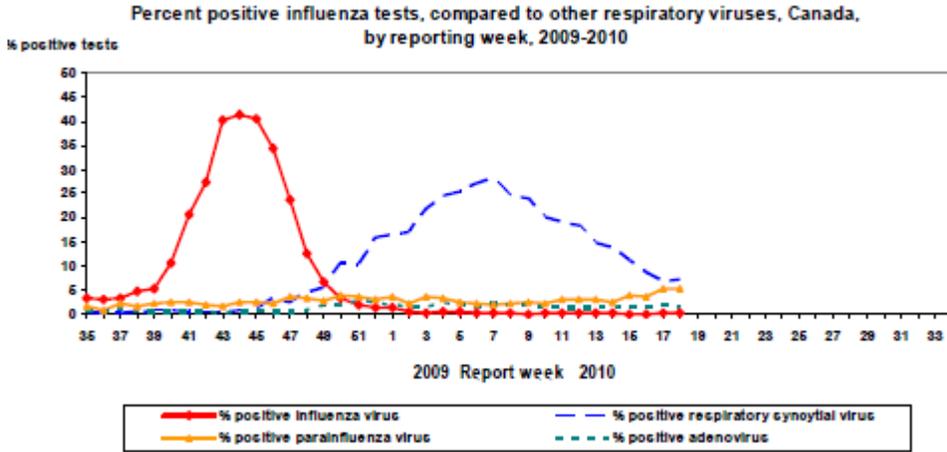
Table 2: Viral circulation in selected countries

Country	Time Period	# Samples Tested	% Positive Samples	% Influenza A	% Influenza B	% RSV	% Parainfluenza	% Adenovirus	% Other Viruses
Bolivia*	EW 1-EW 18	307	28.01	8.14	87.21	3.50	1.16	0.00	0
Colombia	EW 1-EW 16	3507	11.86	37.74	3.12	6.00	3.12	1.45	48.55
Cuba	EW 1-EW 18	5140	23.00	48.00	0.60	1.52	8.30	0.76	40.90
Dominican Rep	EW 1-EW 17	300	25.34	1.32	6.58	7.90	47.36	36.84	
El Salvador	EW 1-EW 16	279	7.50	58.80	23.52	0.00	11.80	5.90	
Mexico	EW 1-EW 17	12730	24.40	90.25	0.06	2.10	0.55	0.26	6.80
Panama	EW 1-EW 16	529	9.26	20.40	12.25	24.50	32.65	10.20	

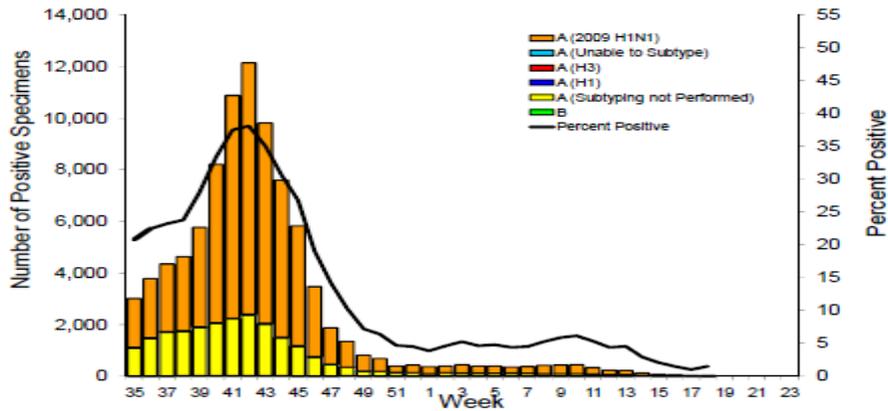
* Data provided by the CENETROP

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

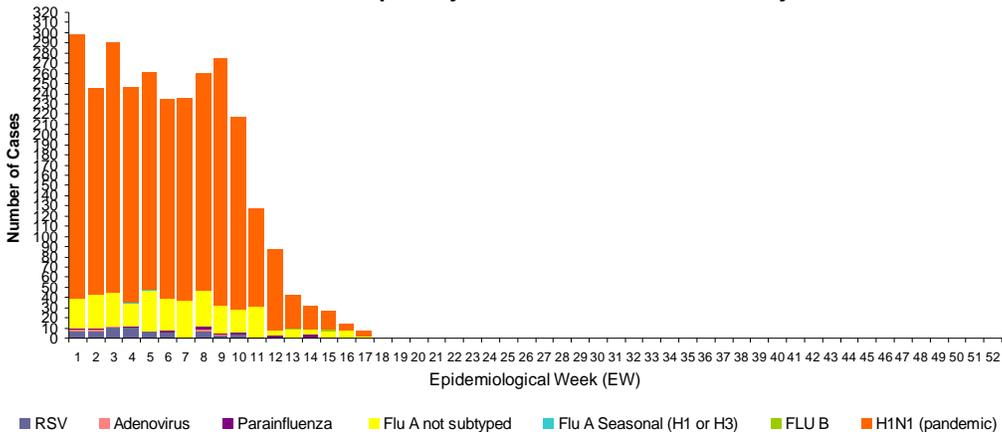


Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, August 30, 2009-May 8, 2010



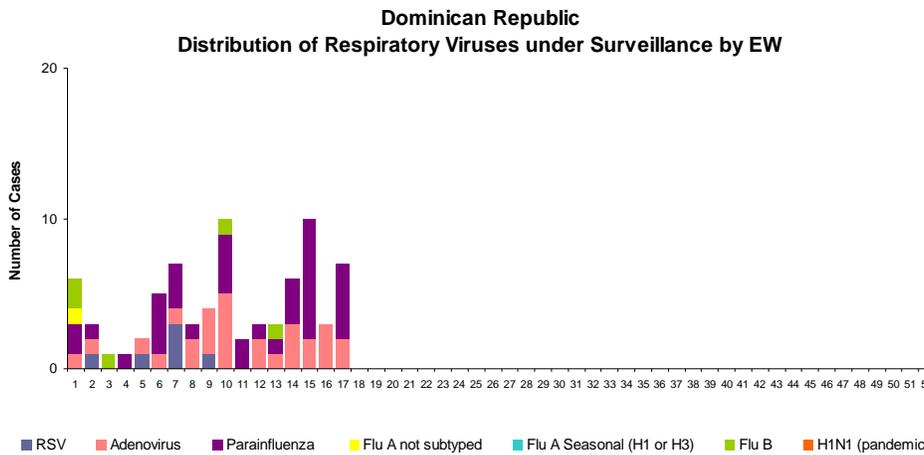
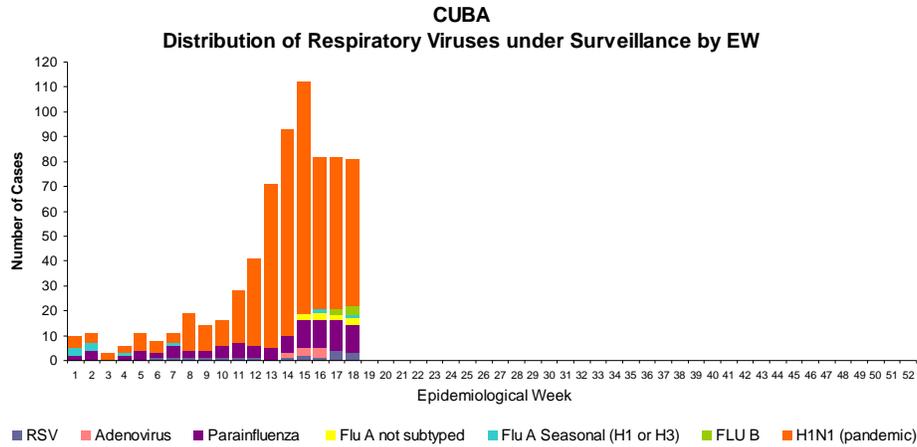
MEXICO

Distribution Respiratory Viruses under Surveillance by EW



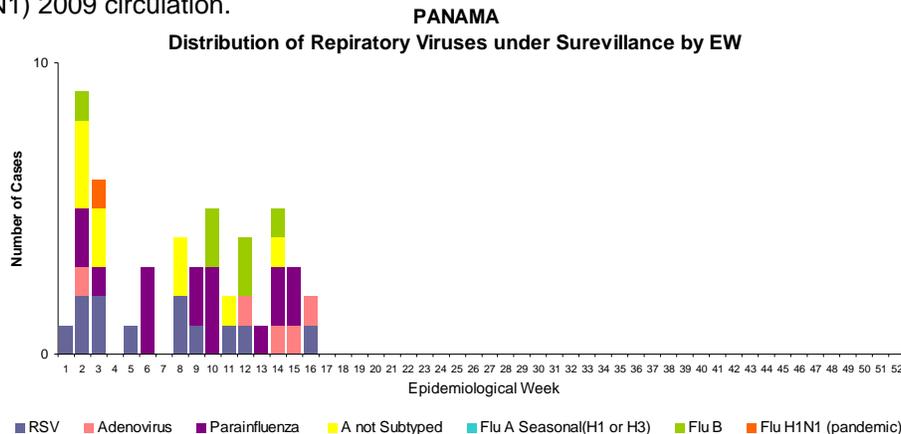
Caribbean

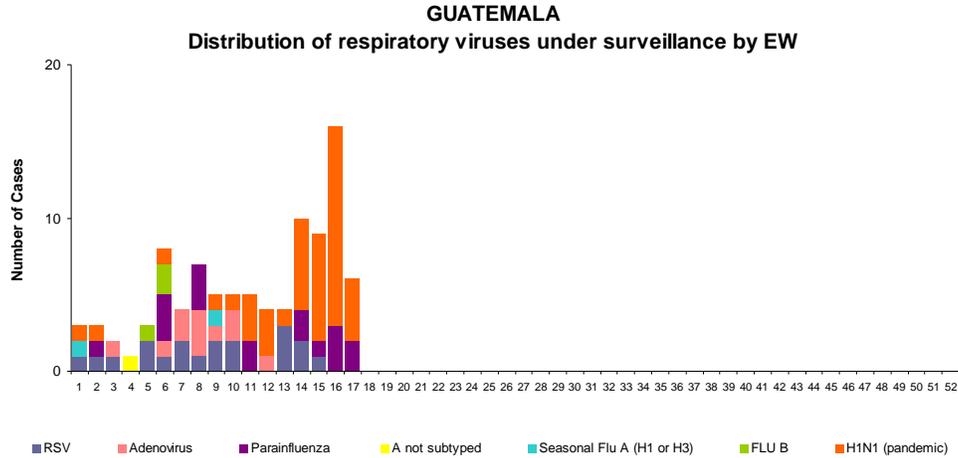
The Caribbean sub-region presents more variability in the circulation of respiratory viruses. While in Cuba there is a clear predominance of pandemic influenza virus, the Dominican Republic has detected circulation of parainfluenza viruses and adenovirus. While this difference could represent differing viral circulation patterns, it could also be a result of differing sampling strategies.



Central America

Panama reported circulation of respiratory syncytial virus, parainfluenza and adenovirus, and pandemic influenza has not been detected in 12 weeks. On the other hand, Guatemala reports having predominant pandemic (H1N1) 2009 circulation.

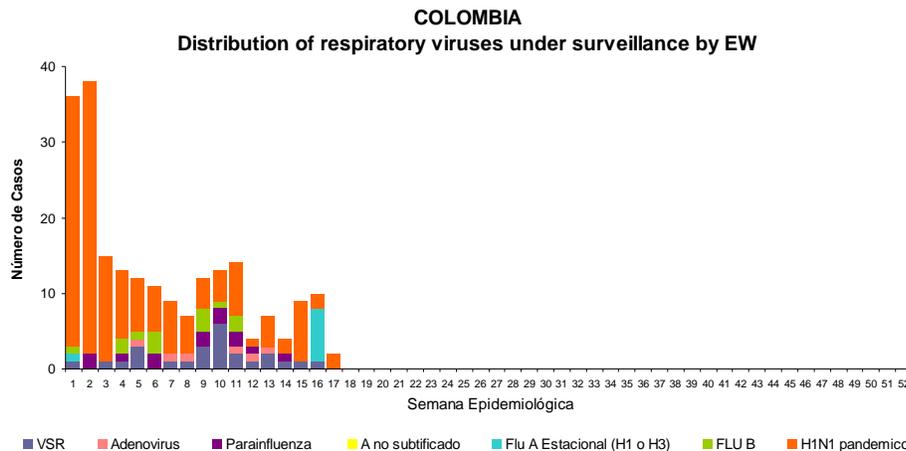
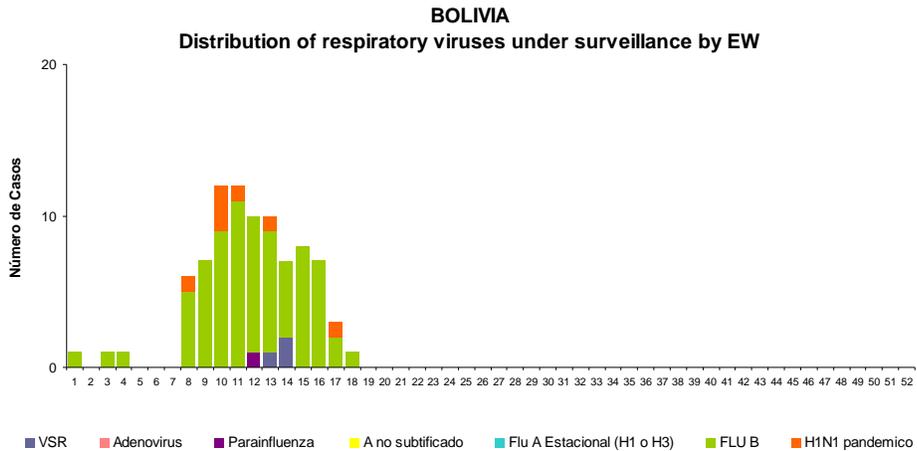




South America

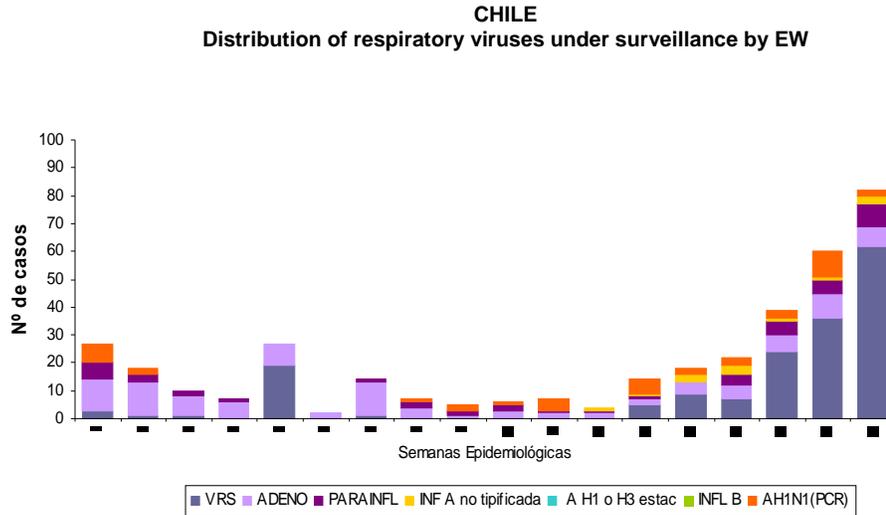
Andean

Unlike any of the other countries who reported detailed virological information this week, Bolivia reports a predominant circulation of influenza B viruses, which were confirmed by RT-PCR, immunofluorescence assay, and viral culture. Colombia experienced increased circulation of pandemic virus for the first few weeks of 2010, but detected circulation of seven cases with seasonal influenza (H3) in EW 16.



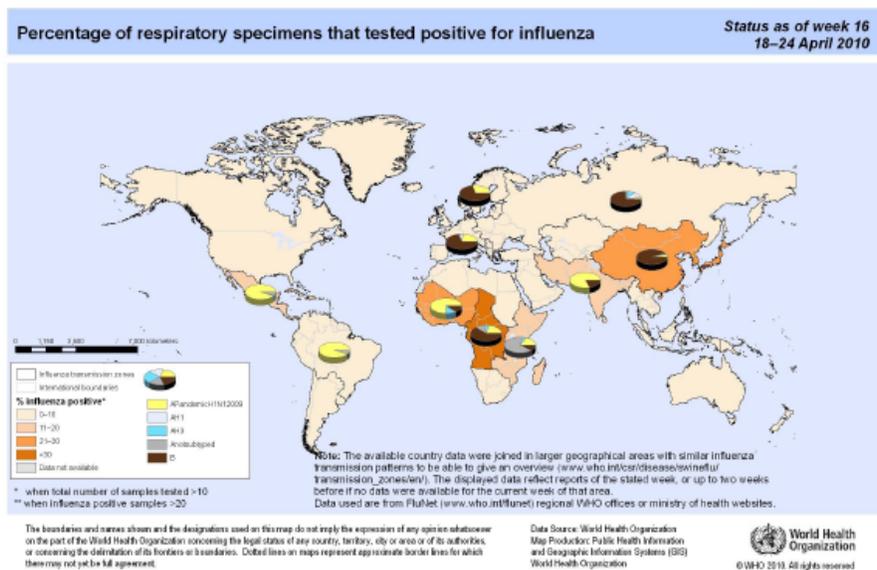
Southern Cone

In 2010, Chile has reported the predominant detection of respiratory syncytial virus and adenovirus. Nevertheless, pandemic influenza virus has also been detected sporadically.



Influenza B worldwide:

In January 2010, East Asian countries began to report an increasing number of influenza type B viruses. In March 2010, influenza B virus predominated in Mongolia, China, Russian Federation, and parts of South East Asia and Africa. Now, as of EW 17 (beginning of May) circulation of influenza B virus has expanded across the globe and is currently the dominant influenza virus in Asia, Europe, and more recently in central Africa. To date, sporadic but increasing detections of B viruses have been reported in the Americas.



Source: <http://www.who.int/csr/disease/swineflu/updates/en/index.html>

Annex 1: Weekly monitoring of pandemic epidemiological indicators for countries that provided updated information—Region of the Americas, Epidemiologic Week 18, 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	17
Brazil	Regional	Increasing	Low/moderate	Low	18
Canada	Regional	Unchanged	Low/moderate	NIA	17
Chile					
Colombia					
Costa Rica					
Cuba	Regional	Decreasing	Low/moderate	Low	18
Dominica	No activity	Unchanged	Low/moderate	Low	18
Dominican Republic					
Ecuador	Regional	Decreasing	Low/moderate	NIA	18
El Salvador	No activity	Decreasing	Low/moderate	Low	18
Grenada					
Guatemala	Localized	Unchanged	Low/moderate	Low	18
Guyana					
Haiti					
Honduras	Localized	Unchanged	Low/moderate	Low	17
Jamaica					
Mexico	Regional	Decreasing	Low/moderate	Low	18
Nicaragua	Regional	Unchanged	Low/moderate	Low	18
Panama	No activity	Decreasing	Low/moderate	Low	18
Paraguay					
Peru	No activity	Unchanged	Low/moderate	Low	18
Saint Kitts and Nevis					
Saint Lucia	No activity	Unchanged	Low/moderate	Low	18
Saint Vincent and the Grenadines					
Suriname					
Trinidad and Tobago					
United States of America	Regional	Decreasing	Low/moderate	Low	18
Uruguay					
Venezuela					

NIA: No Information Available

**Annex 2: Number of deaths confirmed for the pandemic (H1N1) 2009 virus Region of the Americas.
As of May 14, 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 7, 2010, 12 h EST)
Southern Cone		
Argentina	626	
Brazil	2,113	12
Chile	153	
Paraguay	47	
Uruguay	20	
Andean Area		
Bolivia	59	0
Colombia	238	
Ecuador	129	0
Peru	224	0
Venezuela	135	
Caribbean Countries		
Antigua & Barbuda	0	
Bahamas	1	
Barbados	3	
Cuba	75	4
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	
El Salvador	33	0
Guatemala	26	0
Honduras	18	0
Nicaragua	11	0
Panama	12	0
North America		
Canada*	428	
Mexico	1,227	19
United States**	2,718	
TOTAL	8,396	35

* 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 14, 2010**, a total of **8,396 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.- Informe de Vigilancia de Infecciones Respiratorias Agudas y neumonías en menores de 5 años en el Perú 2010 SE 17. Reviewed on May 14, 2010.
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- 4.- Vigilancia de Infecciones respiratorias agudas en Argentina. May, 6, 2010.
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<http://www.vigisalud.gov.py/images/documentos/reportes/Vigilancia%20Centinela%20de%20Influenza%20e%20Infecciones%20Respiratorias%2013-05-10.pdf>