



Regional Update EW 14, 2013

Influenza and other respiratory viruses

(April 16, 2013)

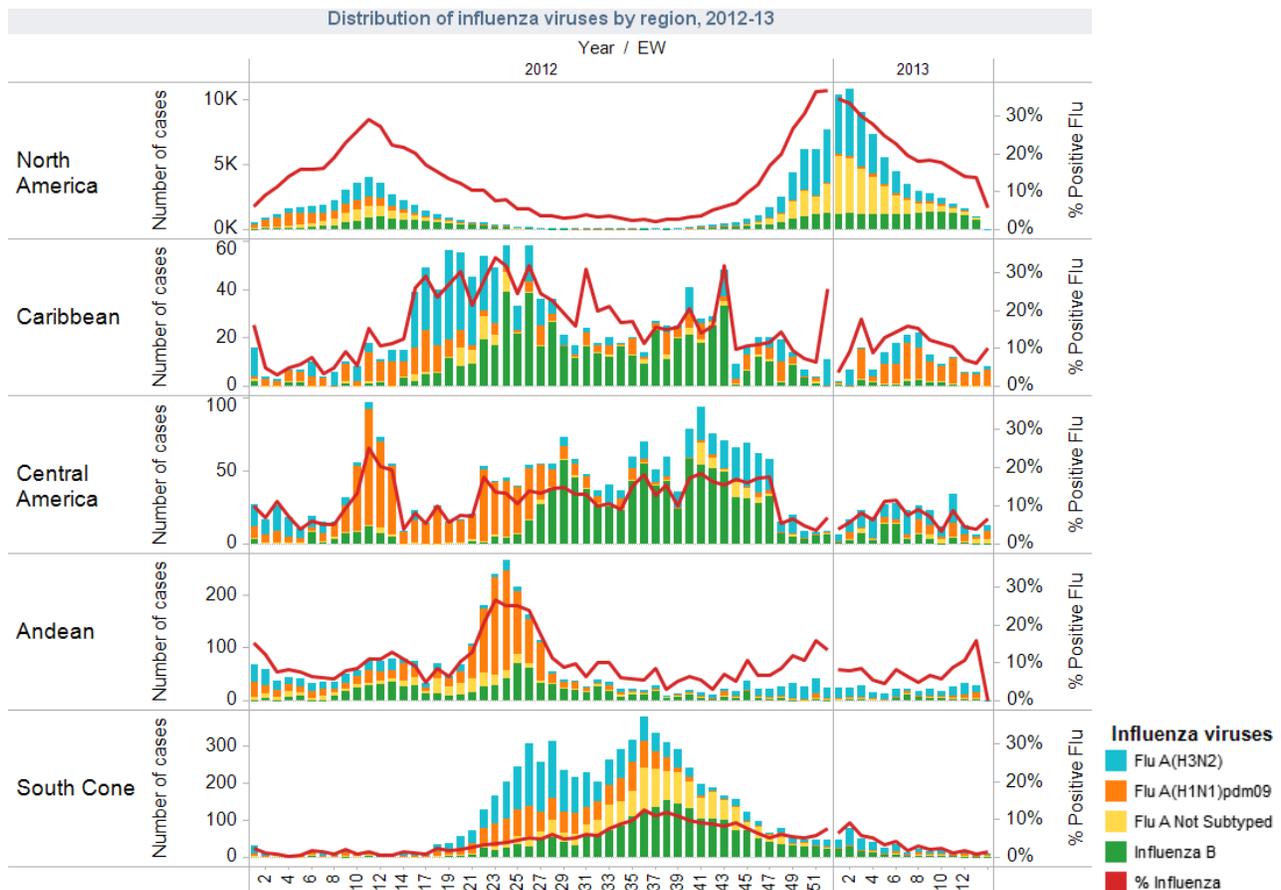
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp

Influenza Regional Reports: www.paho.org/influenzareports

The information presented in this update is based on data provided by Ministries of Health and National Influenza Centers of Member States to the Pan American Health Organization (PAHO) or from updates on the Member States' Ministry of Health web pages.

WEEKLY SUMMARY

- **North America:** in Canada and the US, most of influenza activity indicators were within the expected level for this time of year. Influenza B continued to increase and remained the dominant circulating influenza virus in Canada and the US. In Mexico, influenza A(H3N2) remained the most prevalent virus.
- **Central America and the Caribbean:** similar respiratory virus activity was reported in this sub-region as compared to previous weeks. In this sub-region influenza A(H1N1)pdm09 (Cuba, Jamaica, Trinidad & Tobago, Dominican Republic) was the predominant circulating virus, followed by influenza A(H3N2). Among other respiratory viruses, RSV was the predominant circulating virus in El Salvador and Guatemala.
- **South America:** acute respiratory infection (ARI) activity showed an increasing trend in most countries but remained within the expected levels for this time of the year. In the Andean countries, RSV was the predominant circulating virus, with exception of the Southern cone where co-circulation of RSV and influenza A(H3N2) was reported. In Brazil, RSV circulation was documented in the northeast and the southeast areas of the country. In the Southern Cone, adenovirus circulated predominantly.



EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America

In Canada¹, in epidemiological week (EW) 14, overall influenza activity continued to decline. In week 14, no regions reported widespread activity. Nationally, the influenza-like-illness (ILI) consultation rate increased from 20.5 ILI consultations per 1,000 patient visits in week 13, to 23.4 in week 14 but remains within the expected range. During EW14, the highest consultation rate was observed in children 5 to 19 years of age (35.8/1,000). As for influenza-associated hospitalizations, the highest proportion of hospitalizations continued to be among adults ≥65 years of age (37.3%). Among the total samples analyzed, the percentage of positive influenza tests declined slightly (11.1%) in EW 14 as compare to EW 13 (12.2%). Of all the positive influenza cases this week, 72.7% were influenza B and 27.3% were positive for influenza A viruses [of which 20.5% were A(H1N1)pdm09, 15.4% were A(H3), and 64.1% were A(untsubtyped)]. As for other respiratory viruses the percentage of tests positive for RSV decreased slightly to 11.3% in EW 14, continuing its decline from a peak in EW 08. The percentage of positive tests for hMPV increased sharply to 7.4% while the percentage of positive tests for rhinovirus continued its slow increase since EW 01 to 9.1% in EW 14.

Canada

Figure 7. Influenza-like illness (ILI) consultation rates, Canada, by report week, 2012-2013 compared to 1996/97 through to 2011/12 seasons (with pandemic data suppressed)

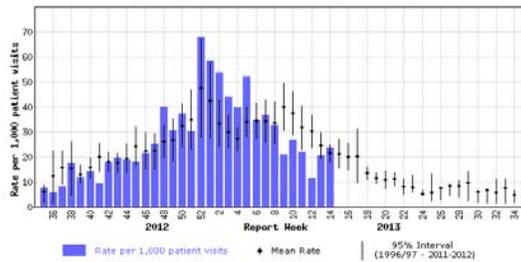


Figure 5. Percent positive influenza tests, compared to other respiratory viruses, Canada, by reporting week, 2012-2013

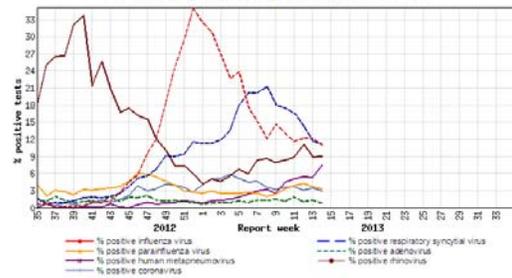
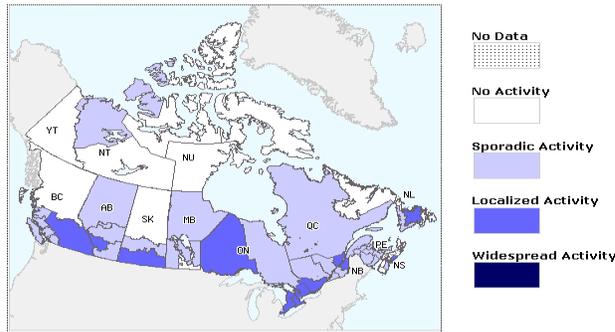


Figure 1. Map of overall Influenza activity level by province and territory, Canada, Week 14



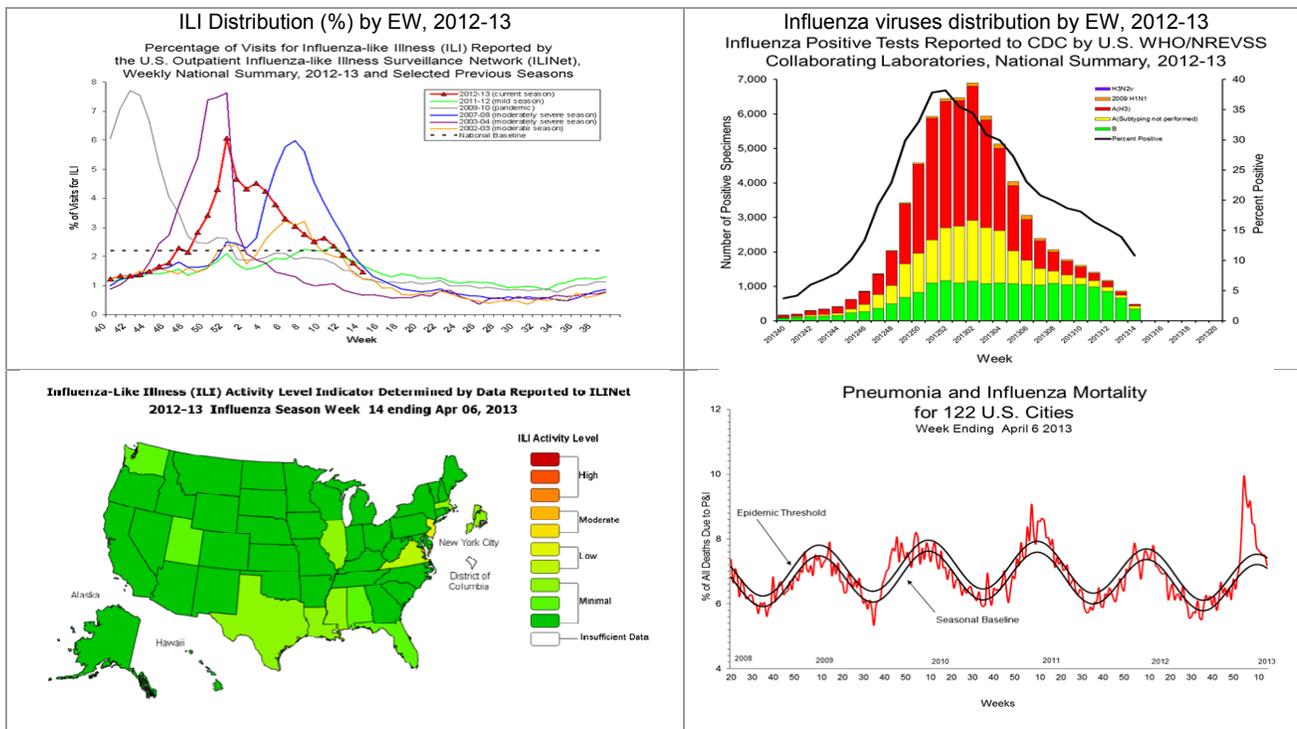
In the United States², the overall influenza activity continued to decrease during EW 14. Nationally, the proportion of ILI consultations (1.5%) was below the national baseline of 2.2%. Regionally, 2 out of 10 Regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline levels. None of the states, however, experienced high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 14 (7.2%) was below the epidemic threshold for this time of year. In EW 14, five influenza-associated pediatric death was reported (one associated with influenza A(H3) and four with influenza B). From October 1st of 2012 to April 6th of 2013, the rate of influenza-associated hospitalization was 43.2 (per 100,000 population), with the highest rates in those 65 years of age and older (50% of the reported cases). Among all samples tested during EW 14 (n=4,462), the percentage of samples positive for influenza (10.9%) continued to decrease. Nationally, among the positive samples, 71.1% were influenza B

¹ FluWatch Report. EW14. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² USA: CDC FluView report. EW 14. Available at: <http://www.cdc.gov/flu/weekly/>

and 28.9% were influenza A [27.9% A(H3N2), 9.3% A(H1N1)pdm09 and 62.9% influenza A unsubtype]. Since the beginning of October of last year, 2,998 influenza samples have been tested for resistance to neuraminidase inhibitors; 0.4% of influenza A (H1N1)pdm09 samples were resistant to oseltamivir and 0.1% of influenza A(H3N2) samples were resistant to oseltamivir; however, all were sensitive to zanamivir. Among other respiratory viruses, the percentage of positive samples for RSV continued decreasing from EW 06 (25.7%) to EW 13 (11.7%).

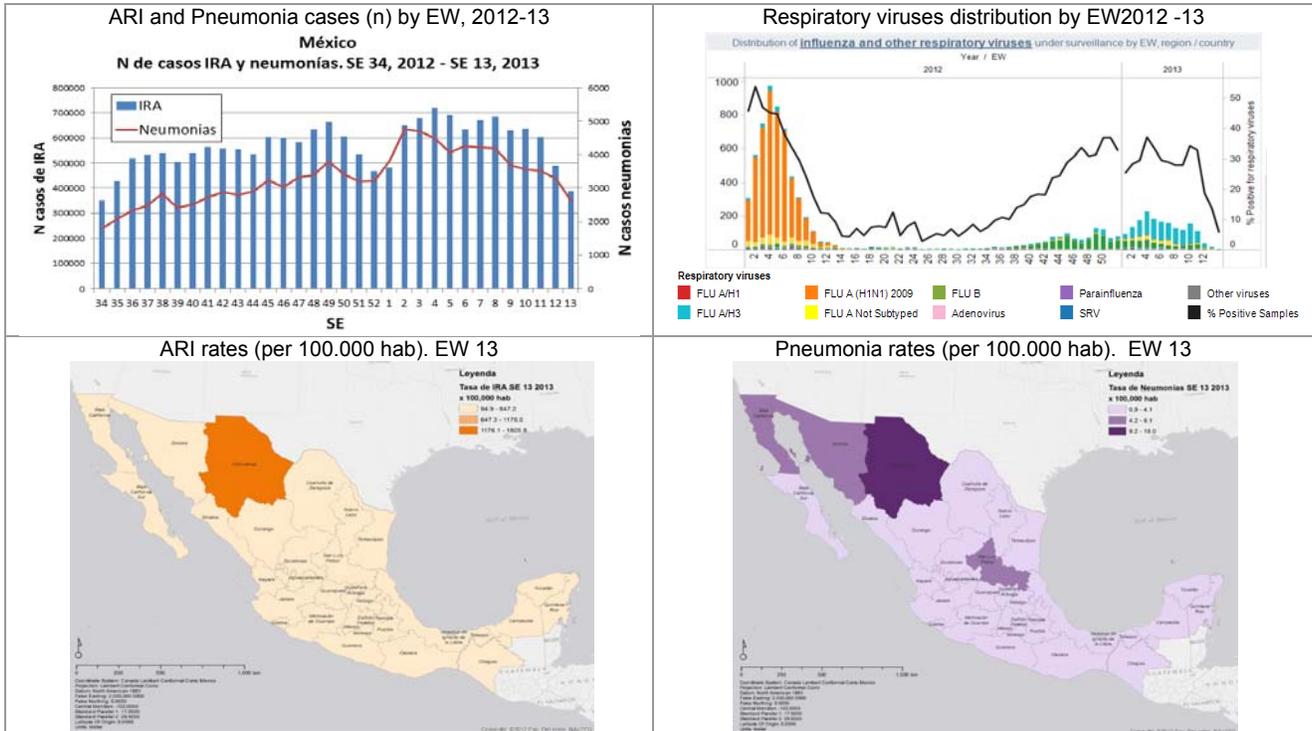
United States



In Mexico³, nationally in EW 13, the number of ARI cases (n= 388,637) decreased significantly by 21% as compared to EW 12 (n=490,643). The number of pneumonia cases (n=2,631) also continued to decrease and was 19.6% less than the number reported during EW 12 (n=3,274). Regionally, the states that reported the highest rates of pneumonia per 100,000 habitants of in EW 13 were: Sonora (5.7), Baja California (5), Colima (4.8) and Jalisco (3.9). According to laboratory data, in 2013, between EWs 11-14, among the samples tested (n=732) the percent positivity for influenza viruses was 22.8%. In EWs 11-14, among the positive influenza cases, 80.8% were influenza A (82.2% influenza A(H3N2), 8.1% influenza A unsubtype) and ~23.7% were influenza B.

³ México. Dirección General de Epidemiología. Información epidemiológica. SE 14.

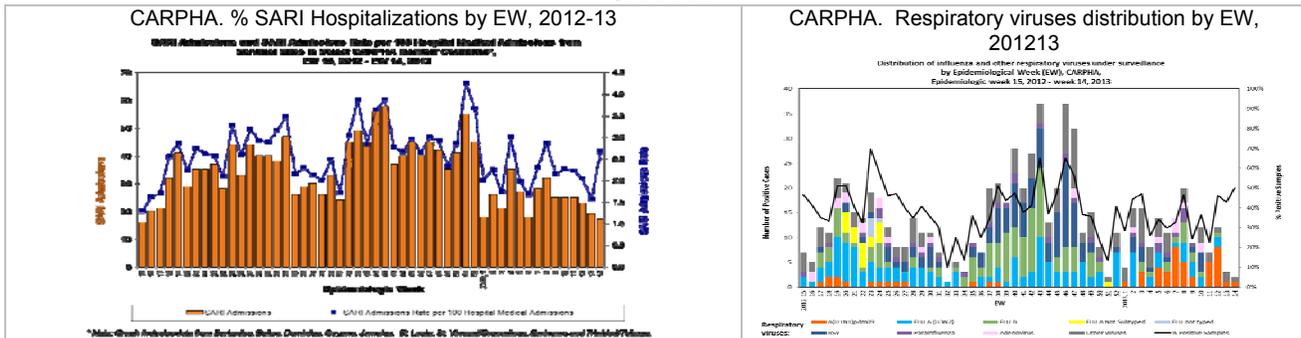
Mexico



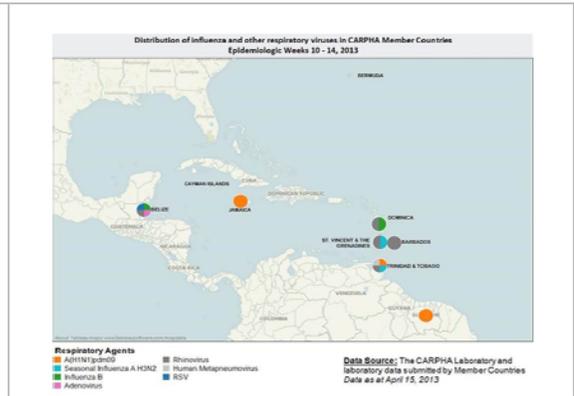
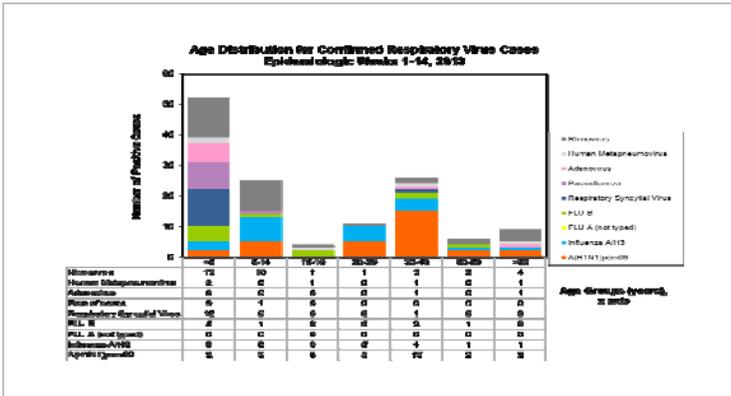
Caribbean

CARPHA⁴, received the weekly SARI/ARI data from 3 countries for EW 14, 2013: Jamaica, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 14, 2013, the proportion of severe acute respiratory infection (SARI) hospitalizations was 2.7%. The highest rate of SARI was among children 6 months to 4 years of age (7.5%). No SARI deaths were reported from the region in EW 14. For cases with dates of onset between EW 10 and EW 14, the following viruses have been laboratory confirmed in member countries: influenza A (H1N1) pdm09 (Jamaica, Trinidad & Tobago), influenza A (H3N2) (St. Vincent & Grenadines and Trinidad & Tobago), influenza B (Belize, Dominica), adenovirus (Belize), human metapneumovirus (Trinidad and Tobago), rhinovirus (Barbados, Belize, Dominica, St. Vincent & Grenadines and Trinidad & Tobago), RSV (Belize). In 2013, to date, the CARPHA laboratory has confirmed 146 cases as positive for 1 or more respiratory agent. The overall percentage positivity for specimens tested is 35.3%.

CARPHA

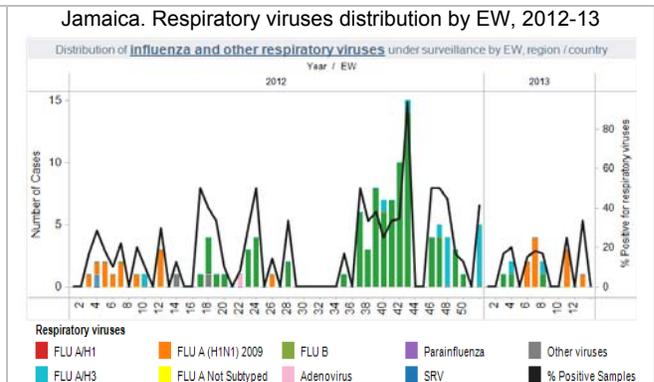
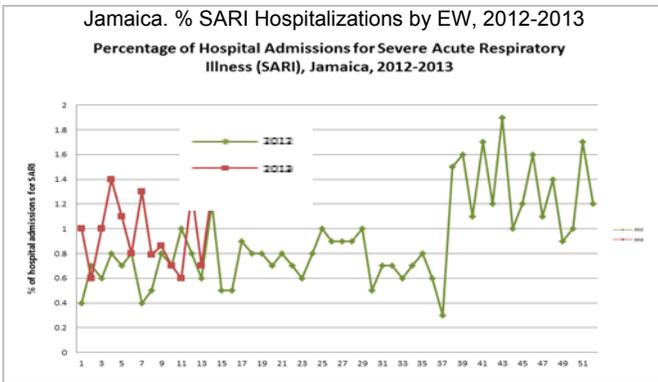


⁴ Agencia de Salud Pública del Caribe (CARPHA por sus siglas en inglés).



In Jamaica, for EW 14, the proportion of ARI consultations was 4.2% (0.7% lower than EW 12). The proportion of admissions due to SARI was less than 1.3% and stable as compared to EW 13. There were no SARI-related deaths reported for epidemiological week 14. According to laboratory data two samples were tested during EW 14 none of which was positive for influenza virus.

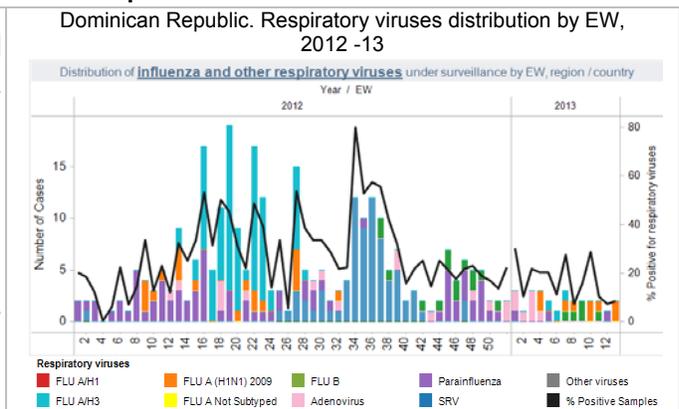
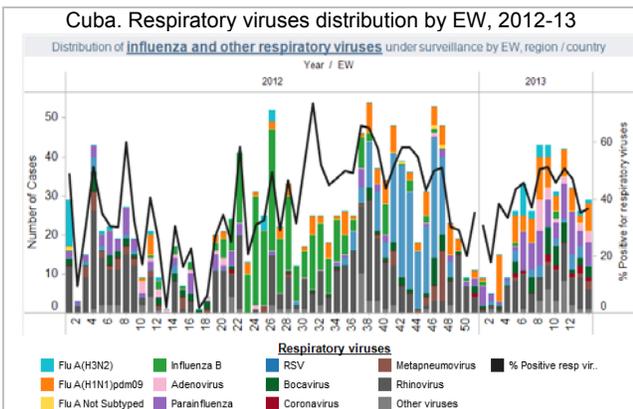
Jamaica



In Cuba, according to national laboratory data, among all samples analyzed (n=304) between EWs 11-14, the average percent positivity for respiratory viruses was 42.4% and 7.9% for influenza viruses. Rhinovirus and parainfluenza were the most dominant viruses among all the positives, followed by influenza A (H1N1) pdm09. According to the national epidemiological report for EW 14, 75.8% of the positive samples were collected from SARI patients and 17.2% from ILI patients. The highest numbers of SARI cases were among children between 1-4 years old (7/29). One SARI-related death was reported in EW 14.

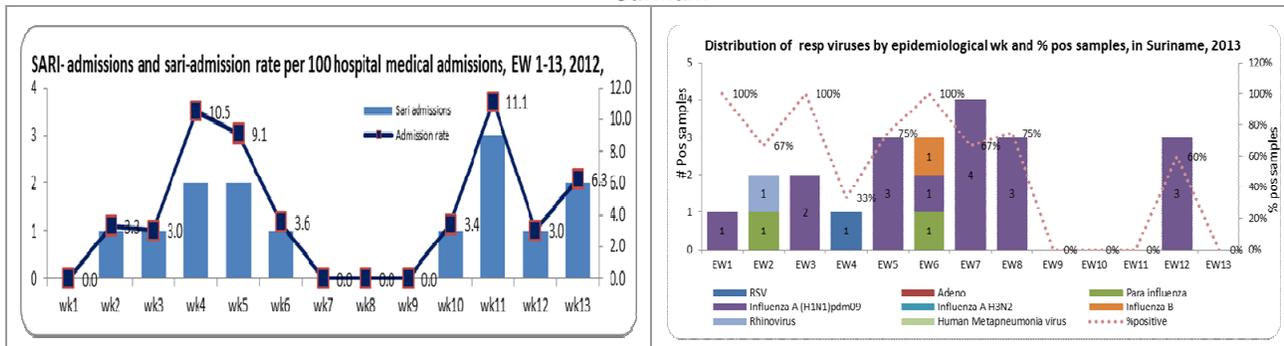
In the Dominican Republic, according to laboratory data, from EWs 12 -15, among samples analyzed (n=79), the average percentage positive for respiratory viruses was 30.3% and for influenza viruses was 22.4%. Between EW 12 to 15, Influenza A (H1N1) pdm09 and adenovirus were identified.

Cuba and Dominican Republic



In Suriname, from EW 01-13, 2013, the proportion of SARI hospitalizations varied from none to 11.1% reaching its highest peak in EW 11. The highest rate of SARI was among the following age groups; children between 6 months-4yrs, adults between 50-64 years of age and adults ≥ 65 years of age (50%, 33% and 40% respectively). Three SARI-related deaths were reported by Suriname in EW 08, 11 and 12, 2013. In 2013, the following viruses were identified by the ARI/SARI surveillance: influenza A(H1N1)pdm09, influenza B, parainfluenza 1, rhinovirus and RSV.

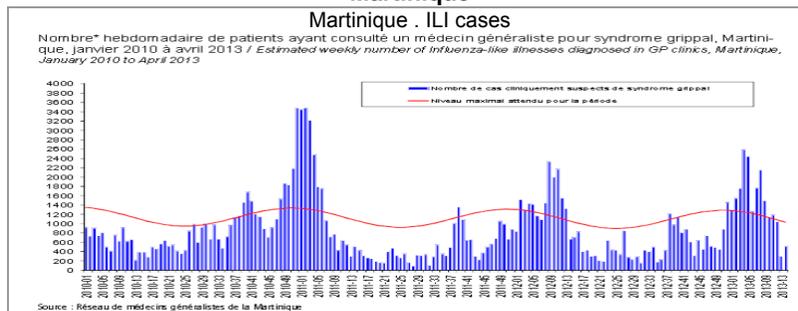
Surinam



In French Territories:

In Martinique, the health authorities declared the end of the influenza epidemic. The number of ILI cases had significantly decreased, and it is now lower than the maximum values expected for this period. To date, an estimate of 22,000 ILI cases, 5 pediatric hospitalizations and 5 adults ICU admissions were reported. Viral co-circulation of influenza A(H3N2), influenza A(H1N1)pdm09 and influenza B were observed during the season. In addition, Guadelupe, Saint Martin, San Bartholome and French Guiana reported the end of the epidemic.

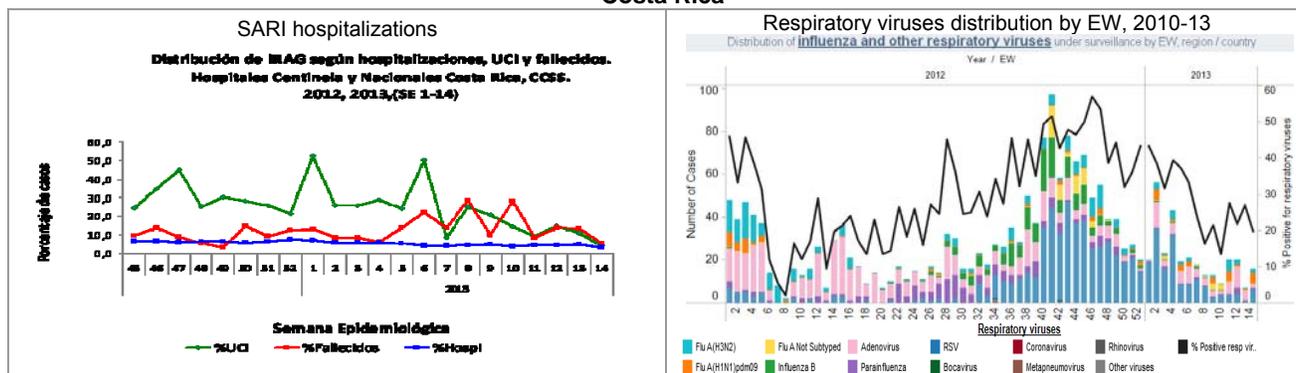
Martinique



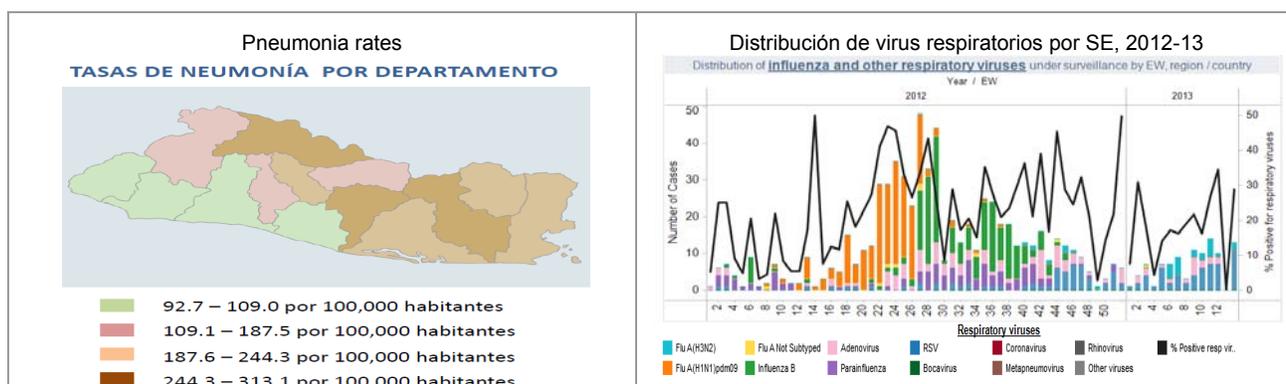
Central America

In Costa Rica, the activity of influenza and other respiratory viruses decreased. In EW 14, at national level, there were 2.9% of SARI hospitalizations, most of which have occurred within groups of 0-4 years of age and adults in the group of 18-49 years. Among all SARI cases, 4% required ICU and 5.6% of SARI cases have been reported deceased. According to laboratory data between EW 11-15, 2013, among all samples tested (n =273), the percent positivity for respiratory viruses was 23.1% and for influenza viruses was 7.7%. During the period between EW 11-15, adenovirus was the most prevalent virus followed by RSV. Among influenza viruses, influenza A predominated (both influenza A(H1N1)pdm09 and A(H3N2)).

Costa Rica



In El Salvador⁵, nationally in EW 14, the accumulative number of ARI cases up to date this year (n=678,291) was 3.7% less than that reported during the same period of last year (26,437 cases). The accumulative number of pneumonia cases reported thus far this year to (n=10,779) was 3.3% more than that reported during the same period of last year (n=10,436). Regionally, the states that reported the highest rates of pneumonia per 100,000 habitants of in EW 14 were: San Vicente (313.1), Chalatenco (271.7) and San Miguel (261.6). According to laboratory data between EW 11-14, 2013, among all samples tested (n =140), the percent positivity for respiratory viruses was 26.4% and for influenza viruses was 5.7%. During the period between EW 11-14, RSV was the most prevalent virus (25/37) followed by influenza A(H3N2); the latter was also the only influenza virus detected during this time.



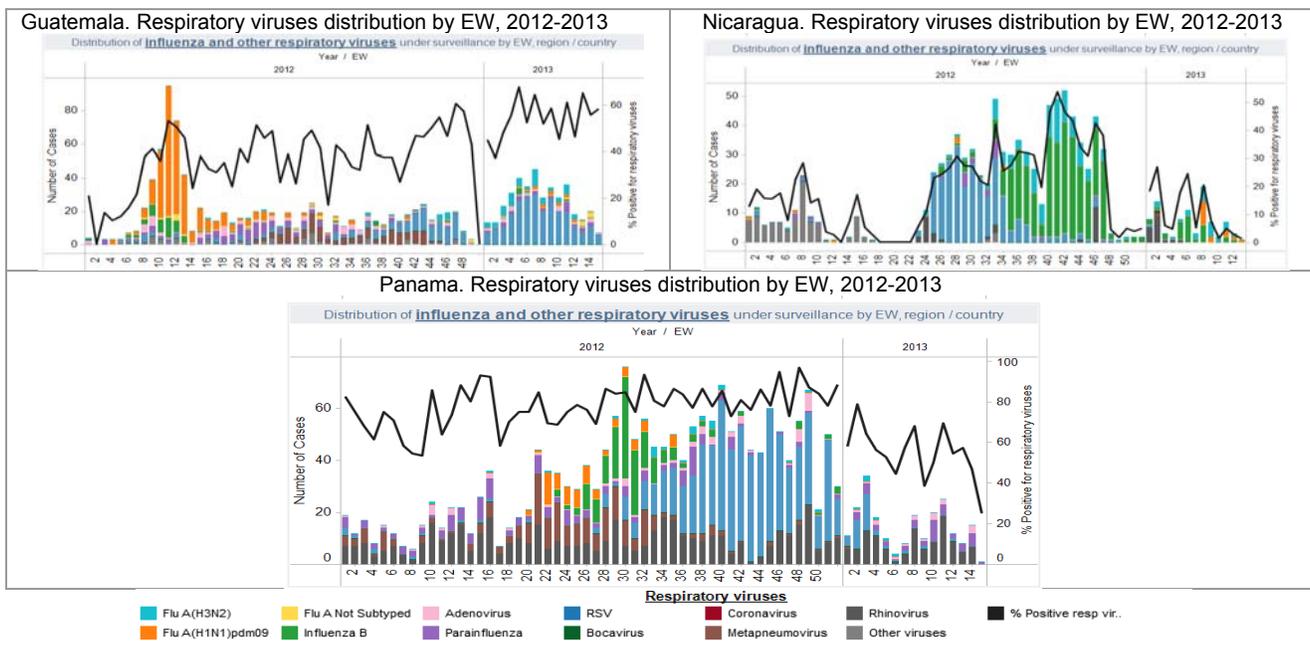
In Guatemala, according to national laboratory data from EWs 12-15, 2013, of all samples tested (n =110), 54.4% were positive for all respiratory viruses and 11.8% for influenza viruses. Among the positive samples, parainfluenza was the most dominant virus followed by, adenovirus and influenza B virus.

In Nicaragua, according to national laboratory data from EWs 10-13, of all samples tested (n =470), 2.8% were positive for influenza viruses. Influenza A (H3N2) was the most prevalent among all the positives (6/13), followed by influenza A (H1N1) pdm09 (4/13) and influenza B (3/13). No other respiratory viruses were detected during this time

In Panama, according to national laboratory data from EWs 12-15, of all samples tested (n =70), 50% were positive for respiratory viruses and none were positive for influenza viruses. Rhinovirus was the most prevalent virus (21/36) followed by parainfluenza (11/36).

⁵ El Salvador. Boletín Epidemiológico. Semana Epidemiológica 14

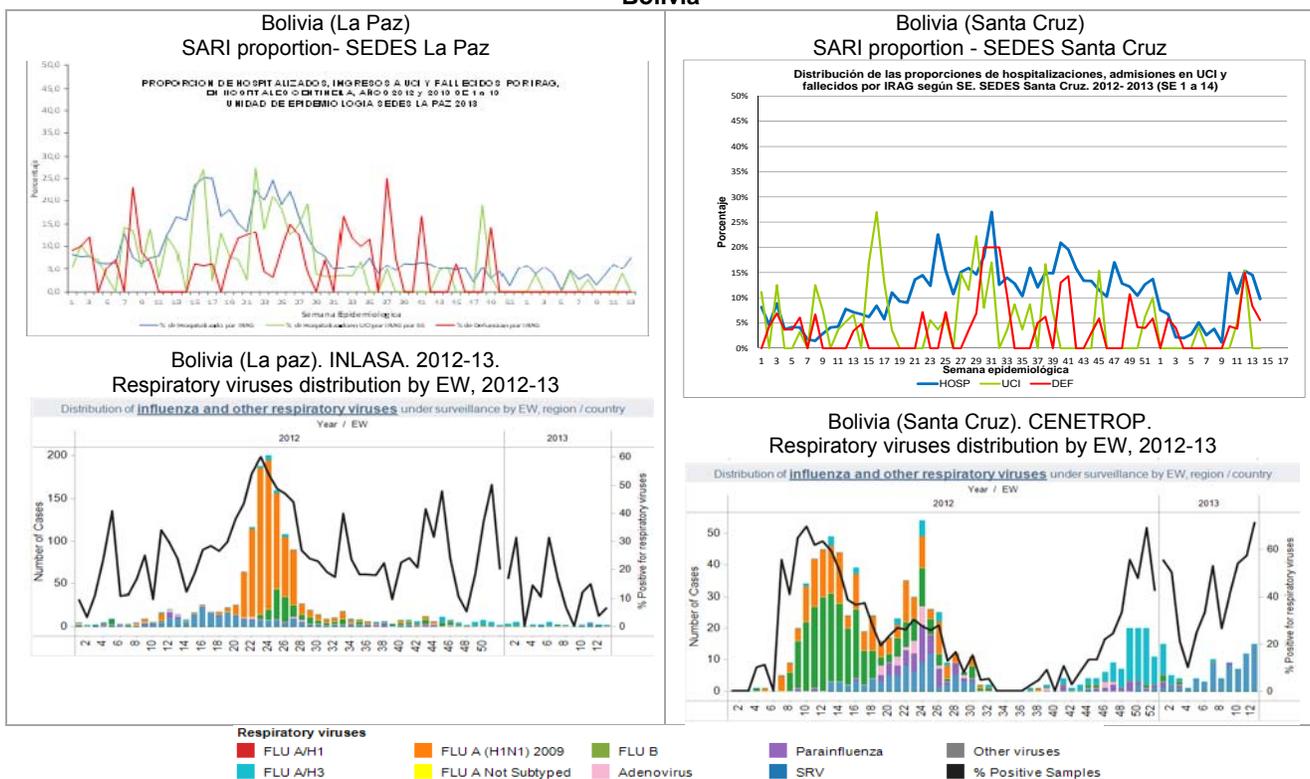
Guatemala, Nicaragua and Panama



South America – Andean countries

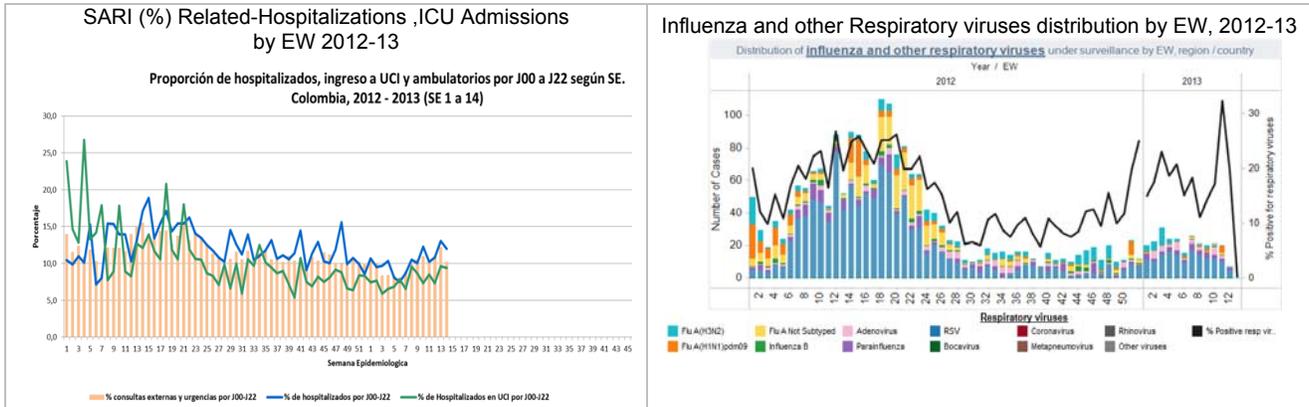
In Bolivia, according to data from Santa Cruz, during EW 14 the proportion of SARI hospitalizations was 10% (decreased since the previous week). According to laboratory data from CENETROP (Santa Cruz), among 58 samples analyzed between EWs 13-14 of 2013, the percent positivity for all respiratory viruses was 72%, (predominantly RSV), and 3% for influenza viruses. RSV was the most prevalent virus in all analyzed SARI cases during this period and among all age group. In La Paz, the proportion of SARI hospitalizations decreased slightly during EW 13 (7.6%) as compared to EW 12, but continued to show an upward trend. No SARI-related deaths were reported. According to laboratory data from INLASA (La Paz), among 70 samples processed in EWs 12-13 of 2013, the percent positivity for all respiratory viruses was 4.3%, and 1.4% for influenza viruses. RSV was predominant among the positives.

Bolivia



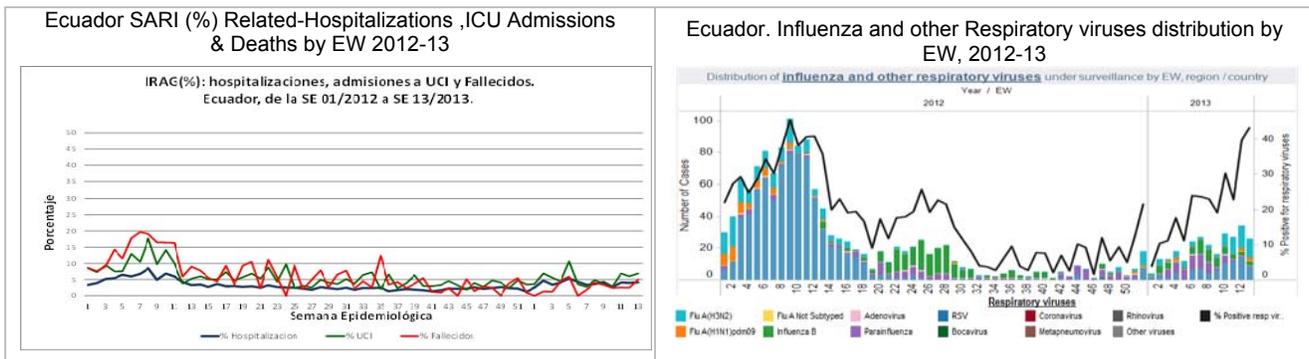
In Colombia, nationally during EW 14, the proportion of ILI outpatient visits (10%) and SARI hospitalizations (12%) continued to show an upward trend. According to data from the national laboratory (INS), including data from the Departments of Bogotá, Antioquia and Nariño, among 82 samples analyzed during EWs 13-14 of 2013, the percent positivity was 33% for all respiratory viruses and 11% for influenza viruses. RSV was predominant among all the positives.

Colombia



In Ecuador, the proportion of SARI hospitalizations (4%) remained without significant changes during EW 13. Two SARI-related deaths were reported during this EW. According to national laboratory data from the national laboratory (NIH), among 146 SARI samples tested between EWs 12-13 of 2013, the percent positivity was 41.1% for respiratory viruses and 25% for influenza viruses. Among all the positive samples, influenza A (H3N2) and RSV were the most dominant viruses.

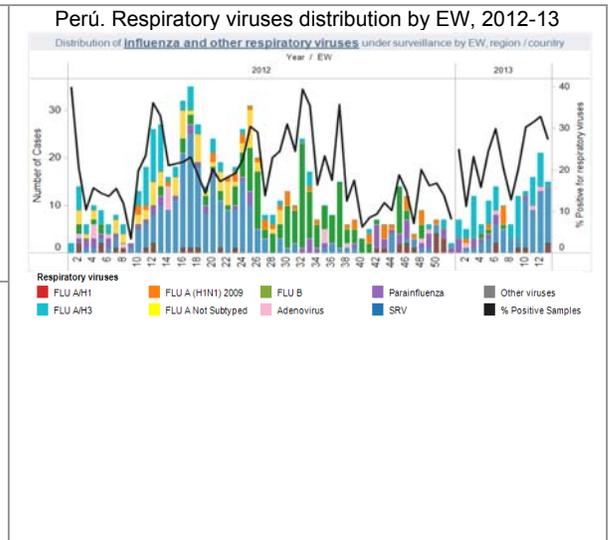
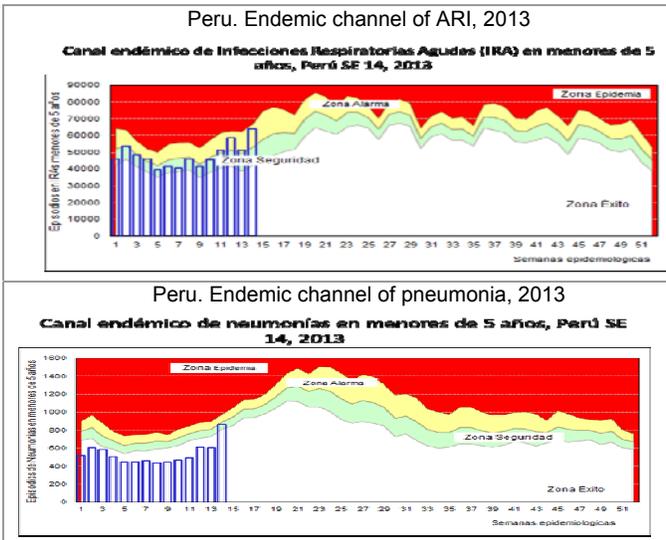
Ecuador



In Peru⁶, nationally, in EW 14 of 2013, the number of ARI cases in children less than 5 years of age continued to increase and it is now at the alarm zone of the endemic channels maintaining the upward trend of recent weeks. The number of pneumonia cases in children less than 5 years of age increased significantly since EW 13; but was within the safety zone of the endemic channels. According to national laboratory data, during EWs 13-14 of 2013, among the 140 samples analyzed, the percentage positivity was 32% for all respiratory viruses and 2% for influenza viruses. RSV was the most prevalent virus during this time.

⁶ Perú. Sala de Situación de Salud. EWs 13, 2013. Ministerio de Salud. Dirección General de Epidemiología

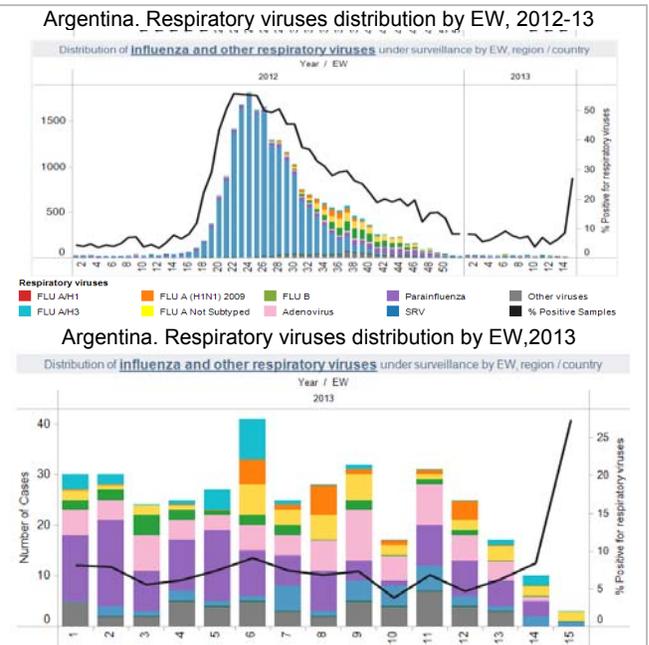
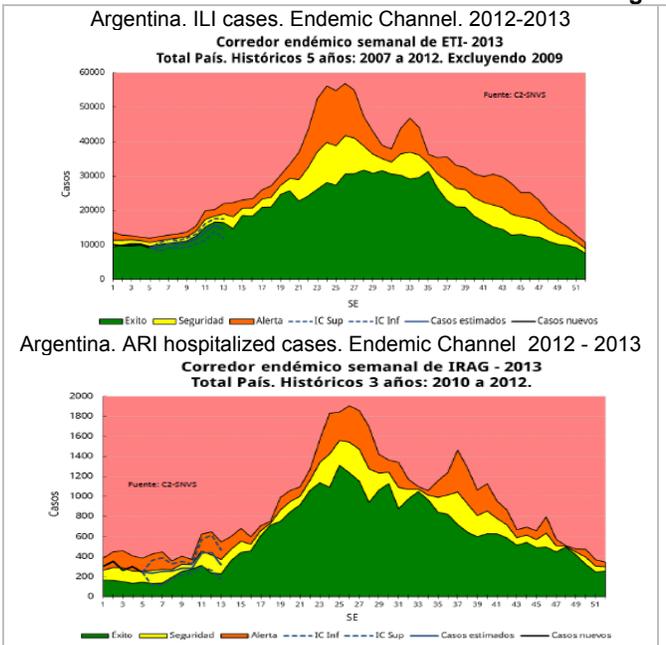
Peru



South America – Southern Cone

In Argentina⁷, nationally, it was estimated that the ILI activity in EW 13 was at the success zone of the endemic channel with an upward trend. It was also estimated that the number of ARI hospitalizations declined during EW 13 and is now at the safety zone of the endemic channels. According to national laboratory data, 393 samples were processed between EWs 13-14 of 2013, of which 7% were positive for all respiratory viruses and 2% for influenza viruses. Parainfluenza virus, RSV and influenza A virus predominated among the positives.

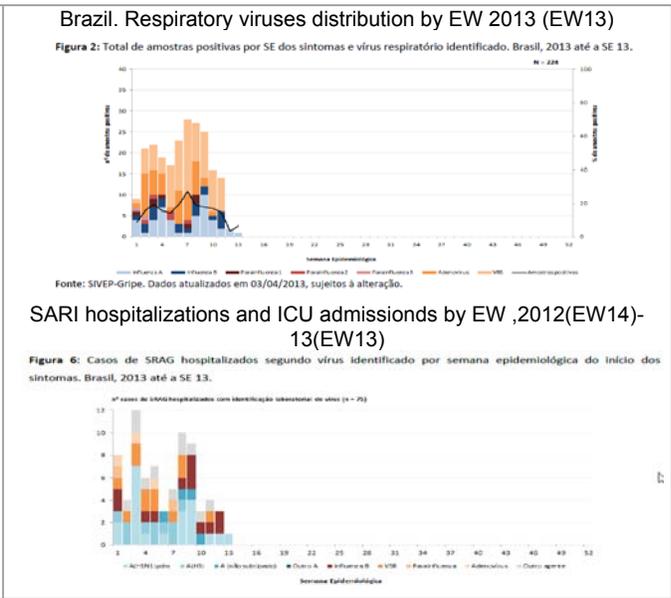
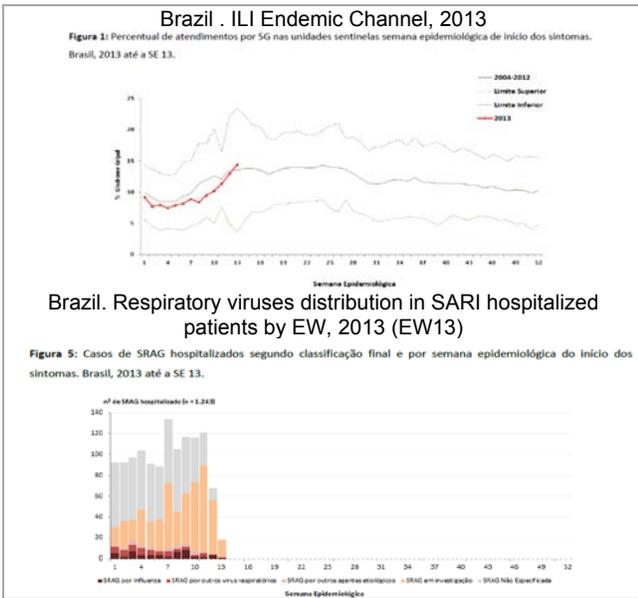
Argentina



In Brazil⁸, in EW 13, the proportion of ILI consultations was within the expected level for this time of the year showing an upward trend. The Northern region of the country reported high influenza circulation among the analyzed ILI samples. The other regions of Brazil reported a low influenza circulation among all analyzed ILI-samples. Among SARI samples processed for the same week, influenza A(H1N1)pdm09 was identified.

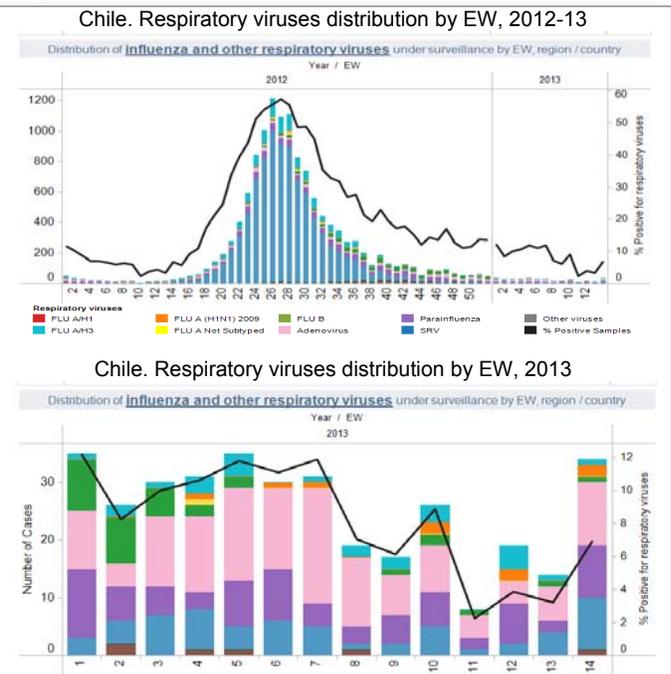
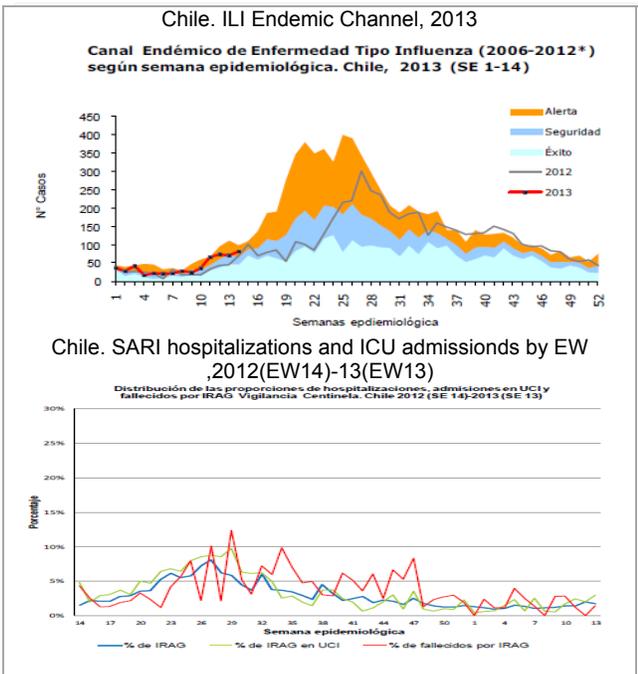
⁷ Argentina. Boletín integrado de vigilancia. SE 14.
⁸ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 14, 2013.

Brazil



In Chile⁹, nationally, in EW 14, 2013, the ILI activity (rate: 5.2/ 100,000 pop.) showed an increase since EW 13 and was at the alert zone of the endemic channel (with an upward trend). The proportion of SARI hospitalizations in EW 13 (2%) remained in low levels. According to national laboratory data, 929 samples were analyzed during EWs 13-14, of which 5.2 % were positive for respiratory viruses and 0.6% for influenza viruses. Adenovirus, RSV and parainfluenza were the most prevalent among the positives. In the SARI surveillance system, 40 samples were processed during the same period, RSV was identified predominantly.

Chile

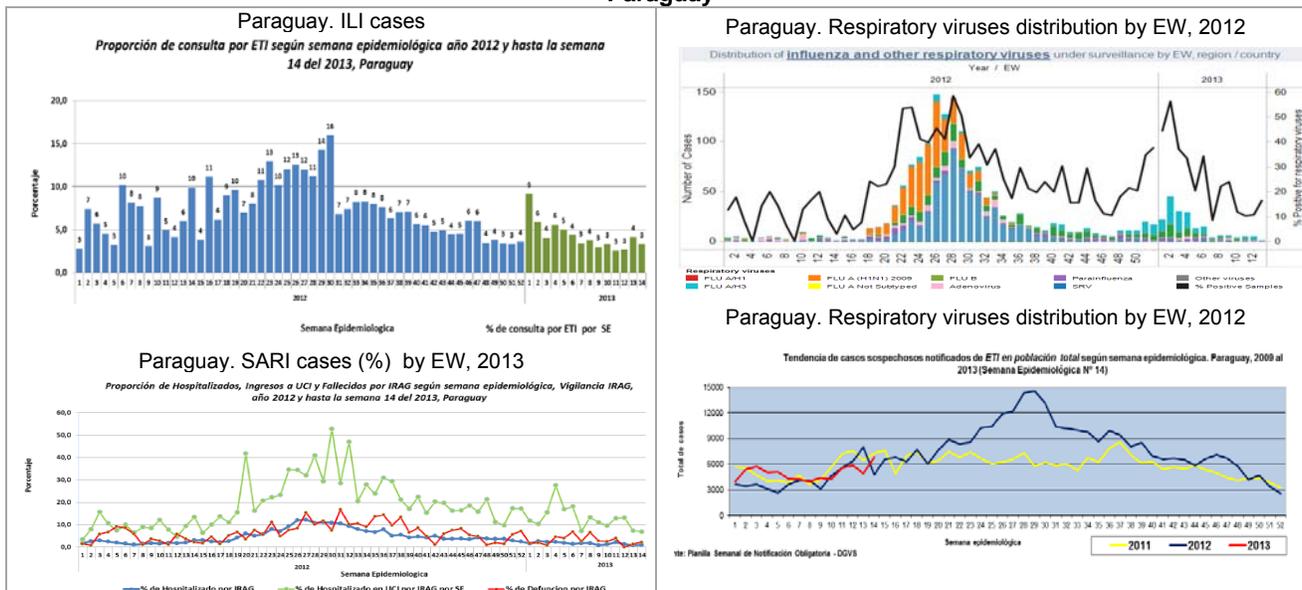


In Paraguay¹⁰, nationally in EW 14 of 2013, the rate of ILI consultations (102/100.000) increased since EW 13. The proportion of SARI-related hospitalizations (0.8%) remained low and within the expected range for this time of the year. According to data from PSCA, 67 samples were processed between EWs 12-13, 2013 with a percent positivity of 9.5% for respiratory viruses and 5.4% for influenza viruses. Influenza A (H3N2) and adenovirus were the most dominant viruses.

⁹ Chile. Informe de situación. EW14. Disponible en: www.pandemia.cl

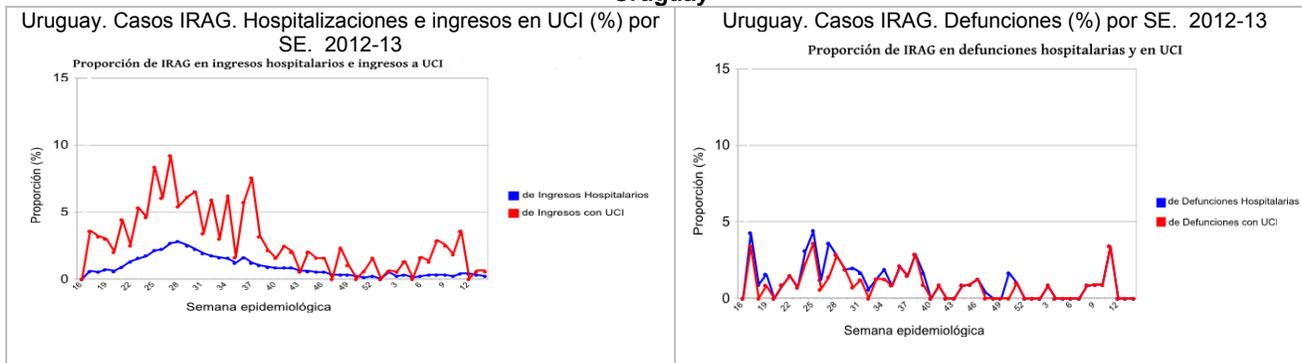
¹⁰ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 14, 2013

Paraguay



In Uruguay¹¹, The proportion of SARI-related hospitalizations continued to decline during EW 14, without significant changes from the previous week. There were no reports of SARI-ICU admissions and no reports the SARI-related deaths during this time.

Uruguay



¹¹ Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública

Human infection with influenza A (H7N9) virus in China - update

15 April 2013 - As of 15 April 2013 (18:00 CET), the National Health and Family Planning Commission notified WHO of an additional nine laboratory-confirmed cases of human infection with influenza A(H7N9) virus. Of the latest laboratory confirmed cases, four are from Zhejiang, three are from Shanghai and two from Jiangsu.

The patients include:

- a 64-year-old woman from Zhejiang who became ill on 6 April 2013;
- a 62-year-old woman from Zhejiang who became ill on 29 March 2013;
- a 75-year-old man from Zhejiang who became ill on 6 April 2013;
- a 79-year-old man from Zhejiang who became ill on 9 April 2013;
- a 73-year-old man from Shanghai who became ill on 5 April 2013;
- a 54-year-old man from Shanghai who became ill on 8 April 2013;
- a 78-year-old man from Shanghai who became ill on 4 April 2013;
- a 50-year-old man from Jiangsu who became ill on 1 April 2013;
- a 26-year-old man from Jiangsu who became ill on 8 April 2013.

Additionally two patients earlier reported from Shanghai have died.

To date, a total of 60 patients have been laboratory-confirmed with influenza A(H7N9) virus in China; including 13 deaths. More than a thousand close contacts of the confirmed cases are being closely monitored.

Investigations into the possible sources of infection and reservoirs of the virus are ongoing. Until the source of infection has been identified, it is expected that there will be further cases of human infection with the virus in China. So far, there is no evidence of ongoing human-to-human transmission.

WHO does not advise special screening at points of entry with regard to this event, nor does it recommend that any travel or trade restrictions be applied.

About this Disease Outbreak News

1. WHO is currently publishing information on laboratory confirmed cases received through the official notification from the Chinese National International Health Regulations (IHR) Focal Point once a day. This formal notification and publication follows verification of the information, and may therefore come after, or not include, some cases reported through public media and other sources.
2. To date, there is limited information to determine whether the reported number of cases represents some or all of the cases actually occurring. As some relatively mild cases of illness have now been reported, it is possible that there are other such cases that have not been identified and reported.
3. If the current pattern of sporadic infections continues, WHO will cease frequent reporting of case numbers, and focus its Disease Outbreak News on new developments or changes in the pattern or presentation of infections.

http://www.who.int/csr/don/2013_04_15/en/index.html

Related links:

- Standardization of the influenza A(H7N9) virus terminology. 16 April 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/H7N9VirusNaming_16Apr13.pdf
- WHO RISK ASSESSMENT. Human infections with influenza A(H7N9) virus. 13 April 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/RiskAssessment_H7N9_13Apr13.pdf
- Influenza WHO
<http://www.who.int/topics/influenza/en/>
- Influenza at the Human-Animal interface (HAI)
http://www.who.int/influenza/human_animal_interface/en/