Regional Update EW 17, 2013



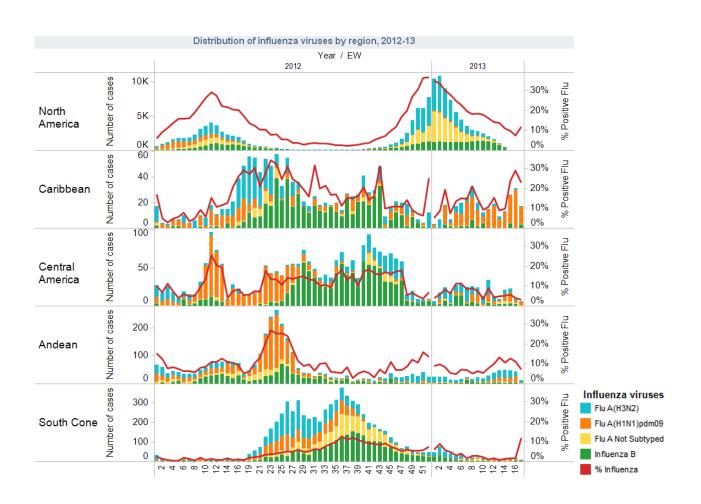
Influenza and other respiratory viruses (May 7, 2013)

PAHO interactive influenza data: http://ais.paho.org/phip/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

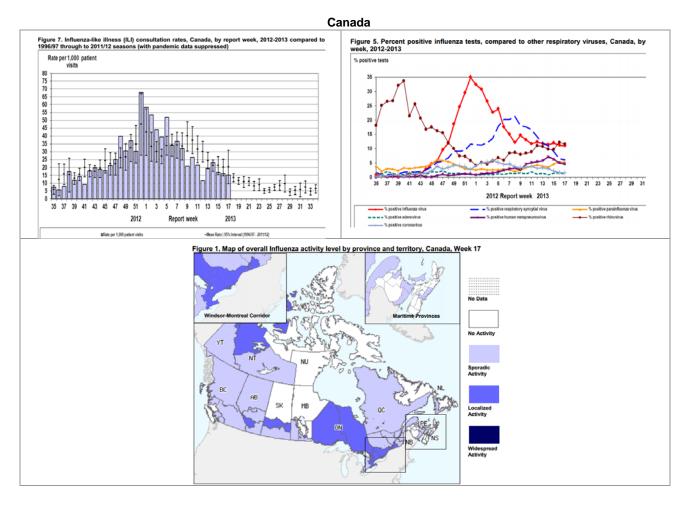
- North America: in Canada and the US, most influenza activity indicators were within the expected level for this
 time of year. Influenza B continued to increase and remained the dominant circulating influenza virus in Canada
 and the US. In Mexico, influenza A(H3N2) remained the most prevalent virus.
- <u>Central America and the Caribbean:</u> similar or increasing respiratory virus activity was reported in this sub-region as compared to previous weeks. In this sub-region, among influenza viruses, influenza A(H1N1)pdm09 (Cuba, Dominican Republic and Nicaragua) was the predominant circulating virus. Among other respiratory viruses, parainfluenza (Dominican Republic, Honduras and Panama) and RSV (Costa Rica) were also circulating.
- 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 co-circulation of influenza A(H3N2) in Ecuador, with influenza A(H1N1)pdm09 in Colombia and with influenza B in Bolivia. In the Southern Cone, RSV circulated predominantly. In Brazil, influenza A(H1N1)pdm09 was the predominant virus.



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

North America:

In Canada¹, in epidemiological week (EW) 17, none of the regions reported widespread activity. Nationally, the influenza-like-illness (ILI) consultation rate decreased slightly from 16.1 ILI consultations per 1,000 patient visits in EW 16 to 15.2 / 1,000 in EW 17 and remained within the expected range and the number of regions reporting localized activity was the same as the previous week. During EW 17, the highest consultation rate was observed in children under 5 years of age (33.2/1,000). As for influenza-associated hospitalizations, the highest proportion of hospitalizations continued to be among adults ≥65 years of age (37.2%). Among the total samples analyzed, the percentage of positive influenza tests decreased slightly compared to recent weeks, from an average of 11.7% during EWs 11 to 16, to 11.0% in EW 17. Of all the positive influenza cases this week, 81.7% were influenza B (continued to increase) and 18.3% were positive for influenza A viruses [45.6% were A(H1N1)pdm09, 16.2% were influenza A(H3), and 38.2% were influenza A(unsubtyped)]. As for other respiratory viruses, the percentage of tests positive for RSV (6.1%) continued its decline from a peak in EW 08. In contrast, the percentage of positive tests for rhinovirus (11.6%) and parainfluenza (5.2%) have been increasing gradually over the past weeks.



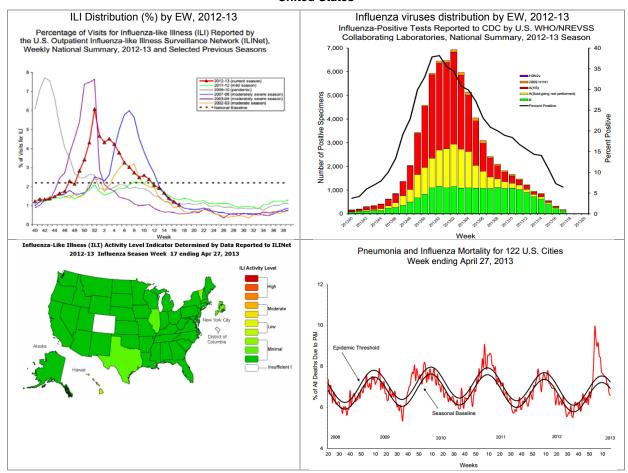
In the United States², overall influenza activity continued to decrease during EW 17. Nationally, the proportion of ILI consultations (1.0%) was below the national baseline of 2.2%. Regionally, all 10 regions reported a proportion of outpatient visits for ILI below their region-specific baseline levels. No state experienced high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 17 (6.6%) was below the epidemic threshold for this time of year. In EW 17, seven influenza-associated pediatric deaths were reported (one associated with influenza A(H3N2), one with influenza A unsubtyped

¹ FluWatch Report. EW17. Available at http://www.phac-aspc.gc.ca/fluwatch/

² USA: CDC FluView report. EW 17. Available at: http://www.cdc.gov/flu/weekly/

and five with influenza B). During the period from October 1st of 2012 to April 27th of 2013, the rate of influenza-associated hospitalizations was 44.2per 100,000 population, with the highest rates seen in patients 65 years of age and older (50% of the reported cases). Among all samples tested during EW 17 (n=2,746), the percentage of samples positive for influenza (6.5%) continued to decrease. Nationally, among the positive samples, 66.7% were influenza B and 33.3% were influenza A [22.0% A(H3N2), 15.3% A(H1N1)pdm09 and 62.7% influenza A unsubtyped].

United States

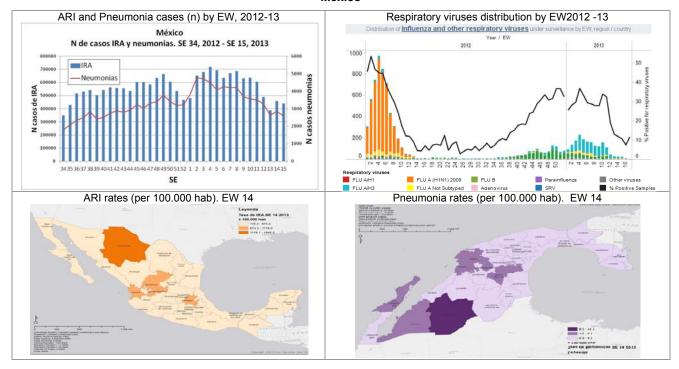


In Mexico³, nationally in EW 15, the number of ARI cases (n= 439,053) decreased by 4% as compared to EW 14 (n=456,784). The number of pneumonia cases (n=2581) also decreased and was 9% less than the number reported during EW 14 (n=2,848). Regionally, the states that reported the highest rates of pneumonia per 100,000 habitants of in EW 15 were: Sonora (8.7), Jalisco (5.1) and Colima (4.5). According to laboratory data, in 2013, between EWs 14-17, among the samples tested (n=602) the percent positivity for influenza viruses was 10%. In EWs 14-17, among the positive influenza cases, 83% were influenza A (70.8% influenza A(H3N2), 25% A(H1N1)pdm09 and 4.2% influenza A unsubtyped) and 17% were influenza B.

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³ México. Dirección General de Epidemiología. Información epidemiológica. SE 16.

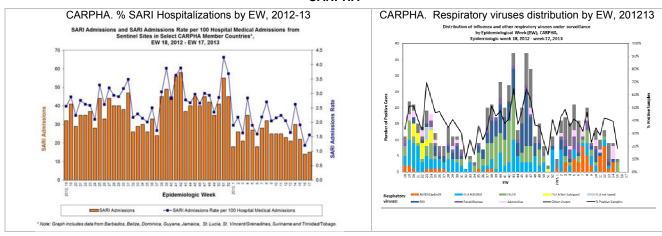
Mexico



Caribbean

CARPHA⁴, received weekly SARI/ARI data from 4 countries for EW 17, 2013: Jamaica, St. Lucia, St. Vincent & the Grenadines and Trinidad & Tobago. In EW 17, 2013, the proportion of severe acute respiratory infection (SARI) hospitalizations was 1.6%. The highest rate of SARI was among children under 6 months of age (5.4%). No SARI deaths were reported from the region in EW 17, 2013. For cases with dates of onset between EW 12 to EW 17, 2013, the following viruses have been laboratory confirmed in member countries: influenza A (H1N1)pdm09 (Belize, Jamaica, Suriname, Trinidad & Tobago), influenza A(H3N2) (Belize, Trinidad & Tobago), influenza B (Belize, Trinidad & Tobago), adenovirus (Barbados, Belize), human metapneumovirus(Trinidad and Tobago), parainfluenza type 1 (Belize). In 2013, to date, the CARPHA laboratory has confirmed 174 cases as positive for one or more respiratory agent. The overall percentage positivity for specimens tested in 2013 is 34.9%.

CARPHA

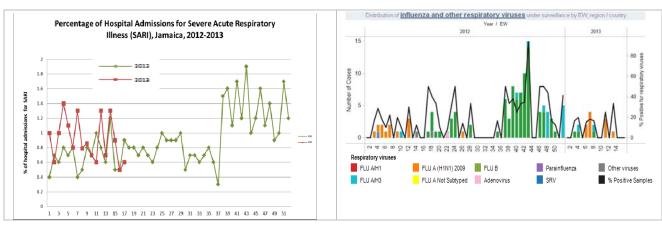


 $^{^{4}}$ Agencia de Salud Pública del Caribe (CARPHA por sus siglas en inglés) EW 17.



In Jamaica for EW 17, the proportion of consultations for ARI was 3.8% (which was 0.4% higher than EW 16). The proportion of SARI admissions was less than 1% and stable compared to the previous week. There was no SARI deaths reported for EW 17.

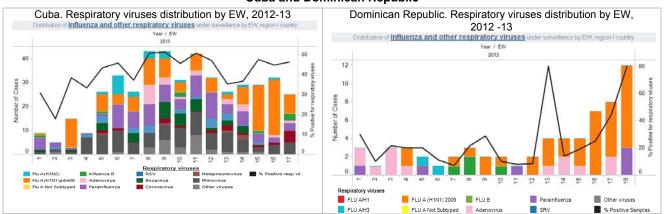
Jamaica



In Cuba, according to national laboratory data, among all samples analyzed (n=270) between EW 14-17, the average percent positivity for respiratory viruses was 43.8% and 24.4% for influenza viruses. Influenza A(H1N1)pdm09, rhinovirus and parainfluenza were the most dominant viruses among all the positives, followed by, coronavirus, adenovirus, influenza B and influenza A(H3N2). Among the SARI cases, 173 samples were analyzed between EW 14 to 17, with influenza A(H1N1)pdm09 detected mainly during the same period.

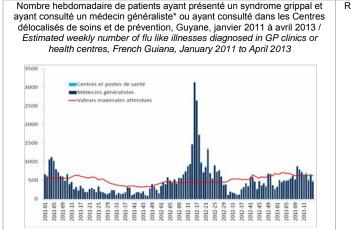
In the Dominican Republic, according to laboratory data, from EWs 15 to 18, among samples analyzed (n=82), the average percentage positive for respiratory viruses was 42.1% and for influenza viruses was 33.2%. Between EWs 15 to 18, influenza A(H1N1)pdm09, adenovirus and parainfluenza were identified.

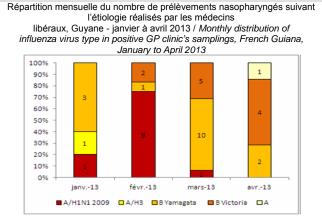
Cuba and Dominican Republic



In French Guyana, during the month of April, the influenza epidemic continued and remained at a moderate magnitude. The number of patients with ILI remained around the expected maximum values for the period, however, SARI activity in hospitals related to this outbreak is stable. Influenza B and influenza A (H1N1) pdm2009 co-circulated.

French Guyana

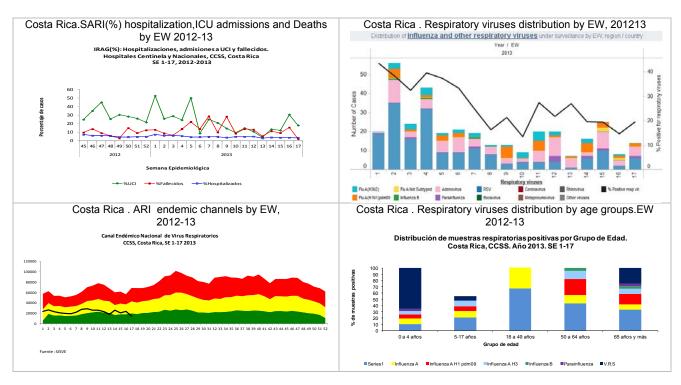




Central America

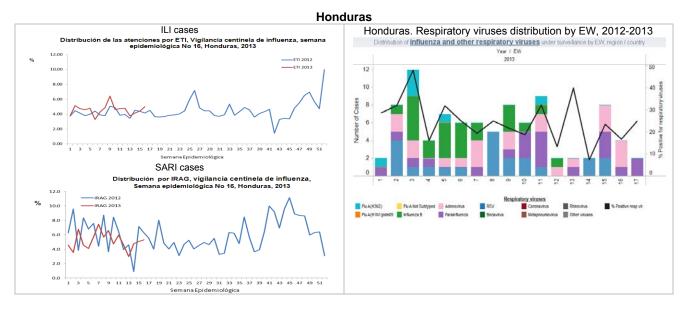
In Costa Rica⁵, the activity of influenza and other respiratory viruses remains low. In EW 17, at national level, the proportion of SARI hospitalizations was 3.3%. The majority of SARI cases occurred among children between 0-4 years of age and adults between 18-49 years. Among all SARI cases reported in EW 17, 18% were admitted to ICU and 2.8% were reported as SARI-related deaths. According to laboratory data between EW 14-17, among all samples tested (n =338), the percent positivity for respiratory viruses was 18% and for influenza viruses was 5%. During the period between EW 14-17, RSV and adenovirus were the most prevalent viruses. Among influenza viruses, influenza A predominated (mainly influenza A(H1N1)pdm09 and followed by A(H3N2)).

Costa Rica



⁵ Costa Rica. Caja Costarricense de Seguro Social, INCIENSA. Influenza y otras virosis respiratorias. SE 17.

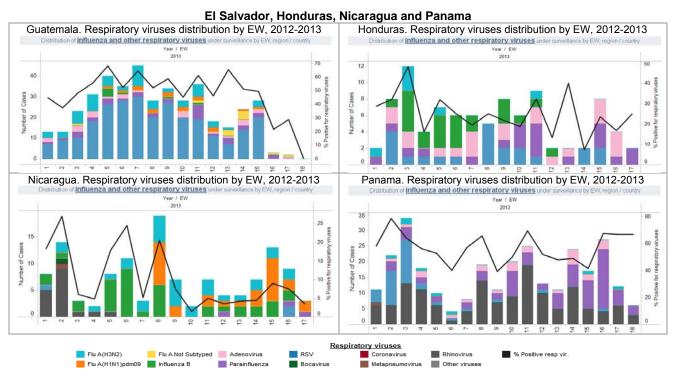
In Honduras, in EW 16, the proportion of ILI consultations (5%) and the proportion of SARI hospitalizations (5%) were slightly higher than the previous week, but remained similar to the last year for this time of the year. According to national laboratory data from EWs 14-17, of all samples tested (n =93), 18,2% were positive for respiratory viruses and no influenza viruses were detected. Adenovirus and parainfluenza were the most prevalent detected viruses.



In Guatemala, according to national laboratory data from EWs 15-18, of all samples tested (n =85), 24.8% were positive for all respiratory viruses and 7% for influenza viruses. Among the positive samples, RSV was the most dominant virus followed by parainfluenza and adenovirus.

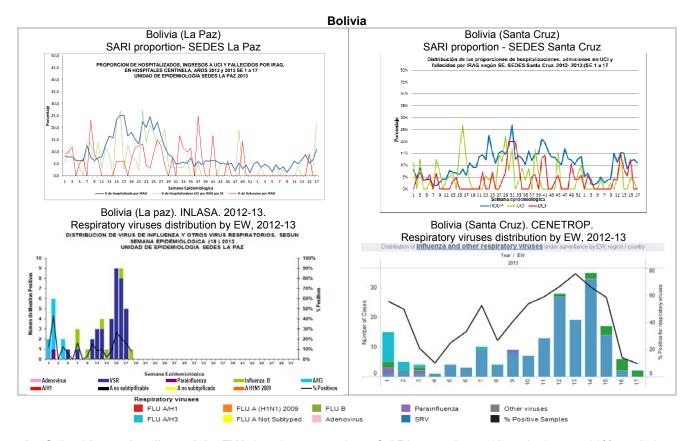
In Nicaragua, according to national laboratory data from EWs 14-17, of all samples tested (n =514), 6% were positive for respiratory viruses and 5.1% for influenza viruses. Influenza A(H1N1)pdm09 was the most prevalent among all the positives (15/32), followed by influenza B (7/32) and influenza A(H3N2) (6/32).

In Panama, according to national laboratory data from EWs 15-18, of all samples tested (n =108), 60% were positive for respiratory viruses and only 2% were positive for influenza viruses. Parainfluenza (36/62) and rhinovirus (18/62) were the most prevalent viruses.

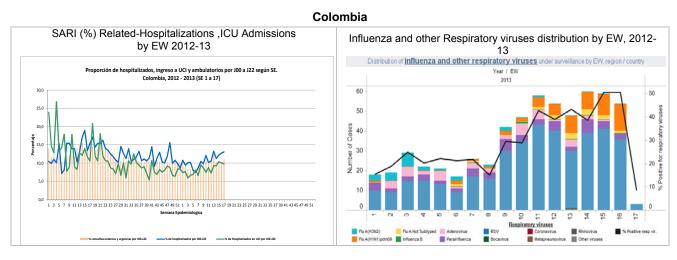


South America - Andean countries

In Bolivia, according to data from Santa Cruz, during EW 17 the proportion of SARI hospitalizations was 11% (decreased slightly since the previous week). According to laboratory data from CENETROP (Santa Cruz), among 64 samples analyzed between EWs 16-17 of 2013, the percent positivity for all respiratory viruses was 12%, and 9% for influenza viruses. Influenza B became the most prevalent respiratory virus. In La Paz, the proportion of SARI hospitalizations continued increasing during EW 17 as compared to past weeks. According to laboratory data from INLASA (La Paz), among 77 samples processed in EWs 16-17 of 2013, the percent positivity for all respiratory viruses was 22%, and for influenza viruses was 2%. RSV was the predominant respiratory virus identified.

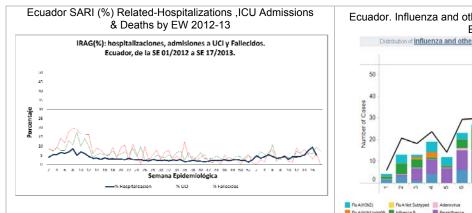


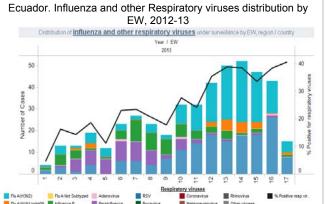
In Colombia, nationally and in EW 17, the proportion of ARI outpatients (J codes) was 11% and the proportion of ARI hospitalizations (J codes) was 13%, showing an upward trend. According to the INS laboratory data including statistics from the Departments of Bogotá, Antioquia and Nariño, between samples and viruses analyzed (n=86) in EW 16-17, the positivity was 40% for all respiratory viruses and 10% for influenza viruses. Among the positive samples for respiratory viruses, RSV (68%) and influenza A(H1N1)pdm09 (24%) were prevalent.



In Ecuador, the proportion of SARI hospitalizations during EW 17 (5%) was lower as compared to the previous week. According to national laboratory data from the national laboratory (NIH), among 149 SARI samples tested between EWs 16-17 of 2013, the percent positivity was 40% for respiratory viruses and 15% for influenza viruses. Among all the positive samples, RSV and influenza A(H3N2) were the most dominant viruses.

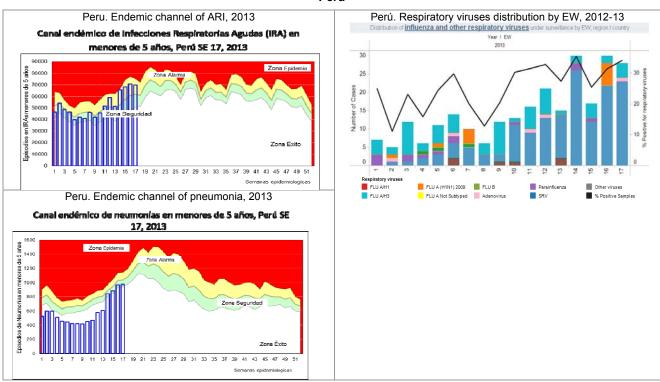
Ecuador





In Peru⁶, nationally, in EW 17, the number of ARI cases in children less than 5 years of age continued to increase and remained 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 in the last 4 weeks; and was within the safety zone of the endemic channels. According to national laboratory data, during EWs 16-17, among the 120 samples analyzed, the percentage positivity was 33% for all respiratory viruses and 7% for influenza viruses. RSV was the most prevalent virus during this time (77%).

Peru

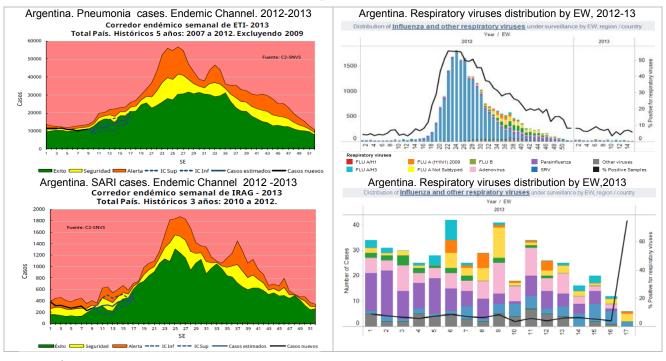


⁶ Perú. Sala de Situación de Salud. EWs 17, 2013. Ministerio de Salud. Dirección General de Epidemiología

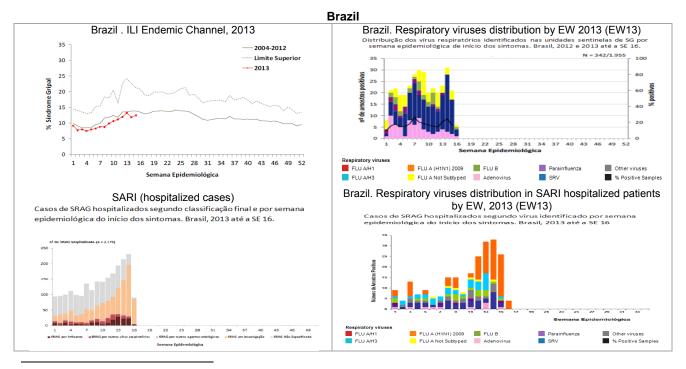
South America - Southern Cone

In Argentina⁷, according to national estimates the activity of ILI and SARI during EW 17 were at the safety zone of their respective endemic channel with increasing trends. According to national laboratory data, 700 samples were processed between EWs 15-16 of 2013, of which 5% were positive for all respiratory viruses and 1% for influenza viruses. RSV was the predominant virus among the positives.

Argentina



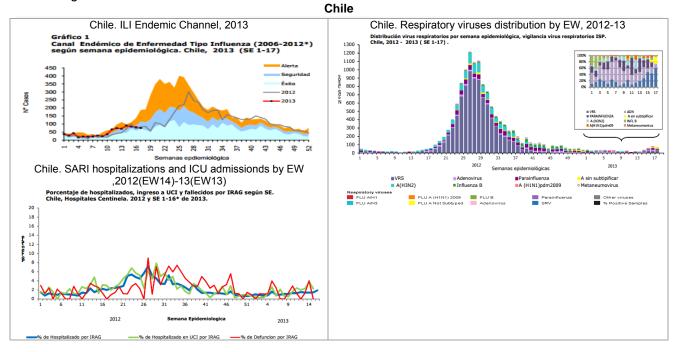
In Brazil⁸, in EW 16, the proportion of ILI consultations was within the expected level for this time of the year showing an upward trend in all regions. Nationally, among all the analyzed ILI samples, RSV was the most dominant circulating virus in all regions. Among SARI samples processed for the same week, influenza A(H1N1)pdm09 was the most dominant circulating virus especially in the State of Sao Paulo.



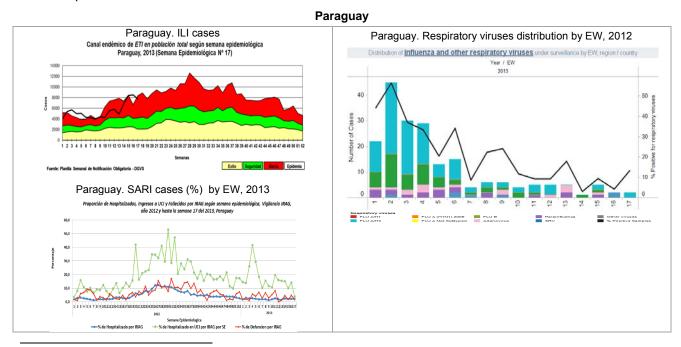
⁷ Argentina. Boletin integrado de vigilancia. SE 17.

⁸ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 17, 2013.

In Chile⁹, nationally, in EW 17, 2013, the ILI activity (rate: 4.8/ 100,000 pop.) showed no significant changes from the previous EW, remaining at the security zone of the endemic channel and at a lower level than the expected for this time of year. The proportion of SARI hospitalizations in EW 16 (2%) was higher as compared to EW 15. According to national laboratory data, in EW 17, 537 samples were analyzed, of which 13% were positive for respiratory viruses. RSV was the most prevalent among the positives and has been increasing in the last weeks.



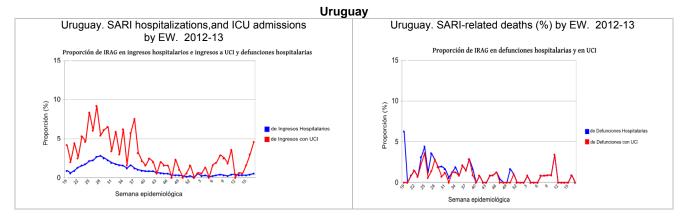
In Paraguay¹⁰, nationally in EW 17 of 2013, the rate of ILI consultations (116/100.000) remained similar to previous weeks, and was now between the epidemic and the alert zones of the endemic channels. The proportion of SARI-related hospitalizations remained low and within the expected range for this time of the year. According to data from the national laboratory, among 11 samples processed between EWs 16-17, 8.3% were positive for respiratory viruses and 3.3% for influenza viruses. RSV and influenza A(H3N2) were the most prevalent viruses.



⁹ Chile. Informe de situación. EW 17. Disponible en: www.pandemia.cl

 $^{^{10}}$ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 17, 2013

In Uruguay¹¹, at the national level, the proportion of SARI hospitalizations continued to be at a low level during EW 17, but increased slightly. ICU admissions increased over the previous EW and there were no reported deaths related to SARI in this week.



Special Topic:

Human infection with avian influenza A(H7N9) virus in China – May 7th update

http://www.who.int/csr/don/2013 05 07/en/index.html

Related links:

• Vaccine response to the avian influenza A(H7N9) outbreak - step 1: development and distribution of candidate vaccine viruses. 2 May 2013

http://www.who.int/influenza/vaccines/virus/CandidateVaccineVirusesH7N9 02May13.pdf

- 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/
- Frequently asked questions on human infection with influenza A(H7N9) in China http://www.who.int/influenza/human_animal_interface/faq_H7N9/en/index.html
 - Influenza OMS

http://www.who.int/topics/influenza/en/

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