



PAHO interactive influenza data: http://ais.paho.org/phip/viz/ed_flu.asp
 Influenza Regional Reports: www.paho.org/influenzareports

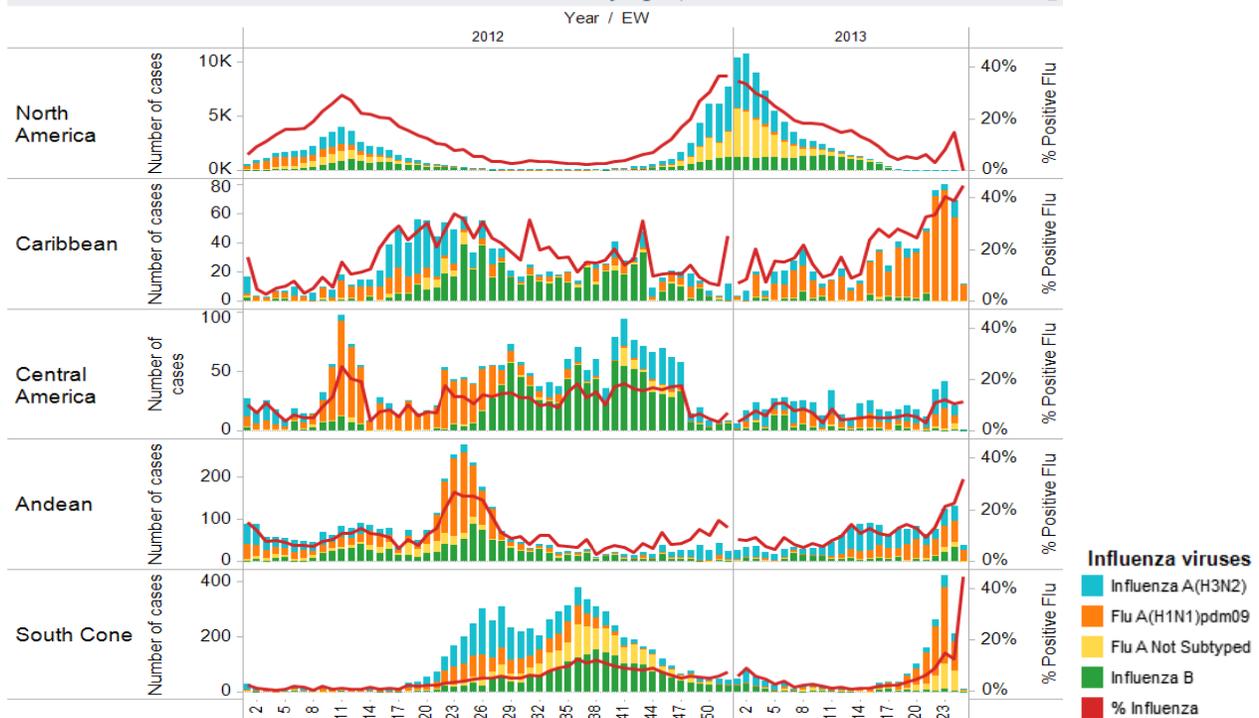
The information presented in this update is based on data provided by Ministries of Health and National Influenza Centers of Member States to the Pan American Health Organization (PAHO) or from updates on the Member States' Ministry of Health web pages.

WEEKLY SUMMARY

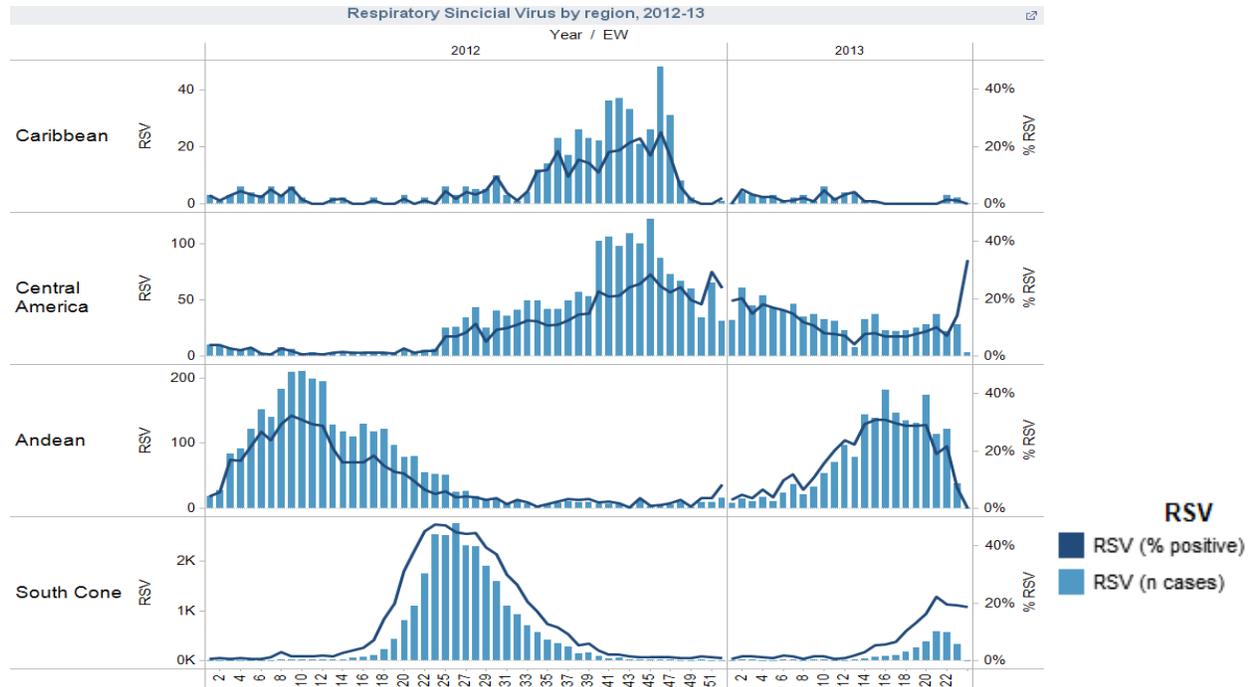
- **North America:** most influenza activity indicators were low and within expected levels for this time of year.
- **The Caribbean and Central America:** the influenza activity in Cuba and Dominican Republic remained high, associated with circulation of influenza A(H1N1)pdm09. In Central America, influenza A(H1N1)pdm09 increased in Costa Rica, A(H3N2) in El Salvador and Panama, and RSV in El Salvador. Acute respiratory illness in the rest of the Caribbean and Central America remained low or within the expected levels.
- **South America – Andean Countries:** acute respiratory illness activity was high in Colombia and Venezuela, but with some decreasing indicators in the last 2 weeks. In the rest of the Andean region, acute respiratory illness remained within the expected levels. Among respiratory viruses, RSV predominates in Ecuador and Peru, influenza A(H1N1)pdm09 in Colombia and Venezuela, A(H3N2) in Bolivia-La Paz, and influenza B in Bolivia-Santa Cruz.
- **South America - South Cone:** acute respiratory illness activity was high with increasing trends. In Chile and Argentina, ILI activity was above the epidemic threshold during the last weeks. RSV predominated in most countries, with co-circulation of influenza A(H1N1)pdm09 in Argentina, Chile and Uruguay, and influenza A(H3N2) in Paraguay. In Brazil, through EW 24, influenza A(H1N1)pdm09 predominated, followed by influenza B, which increased in some States.

Influenza circulation by region. 2012-2013

Distribution of influenza viruses by region, 2012-13



Respiratory Sincial Virus circulation by region. 2012-2013

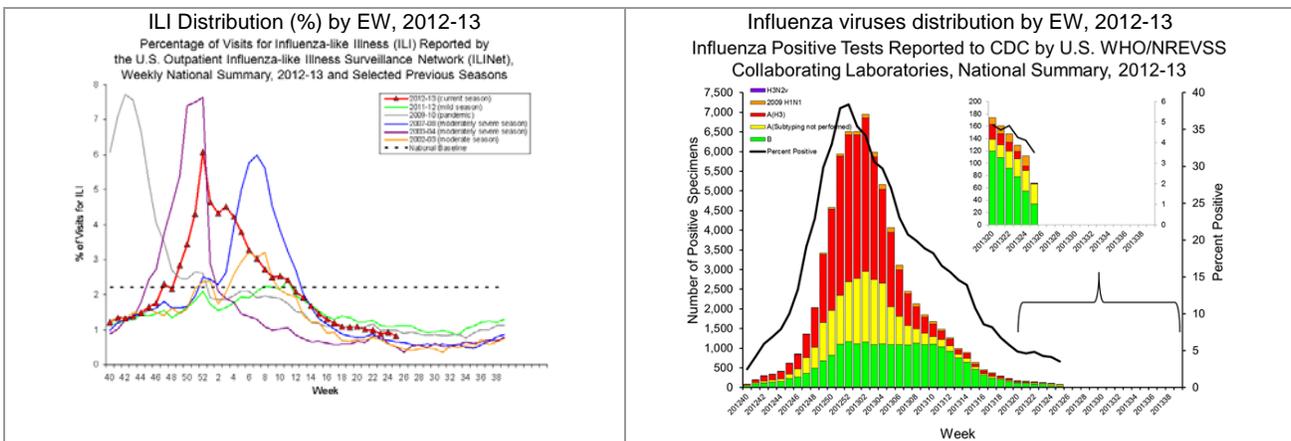


EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America:

In the United States¹, during EW 25, influenza activity remained low. Nationally, the proportion of ILI consultations (0.8%) was below the national baseline of 2.2%. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 25 (5.5%) was below the epidemic threshold for this time of year. In EW 25, no influenza-associated pediatric were reported. Among all samples tested during EW 25 (n=1,925), the percentage of samples positive for influenza (3.5%) decreased from the previous week. Nationally, among the positive samples, 49.3% were influenza A (majority A not subtyped) and 50.7% were influenza B. Recently, four human infections with an influenza A(H3N2) variant (H3N2v) were reported by Indiana. One virus sample has been fully characterized by CDC and is 99% similar to the H3N2v viruses identified in the United States in 2012. None of the four persons were hospitalized. At this time, no ongoing human-to-human transmission has been identified and all four cases have reported close contact with swine in the week prior to illness onset.

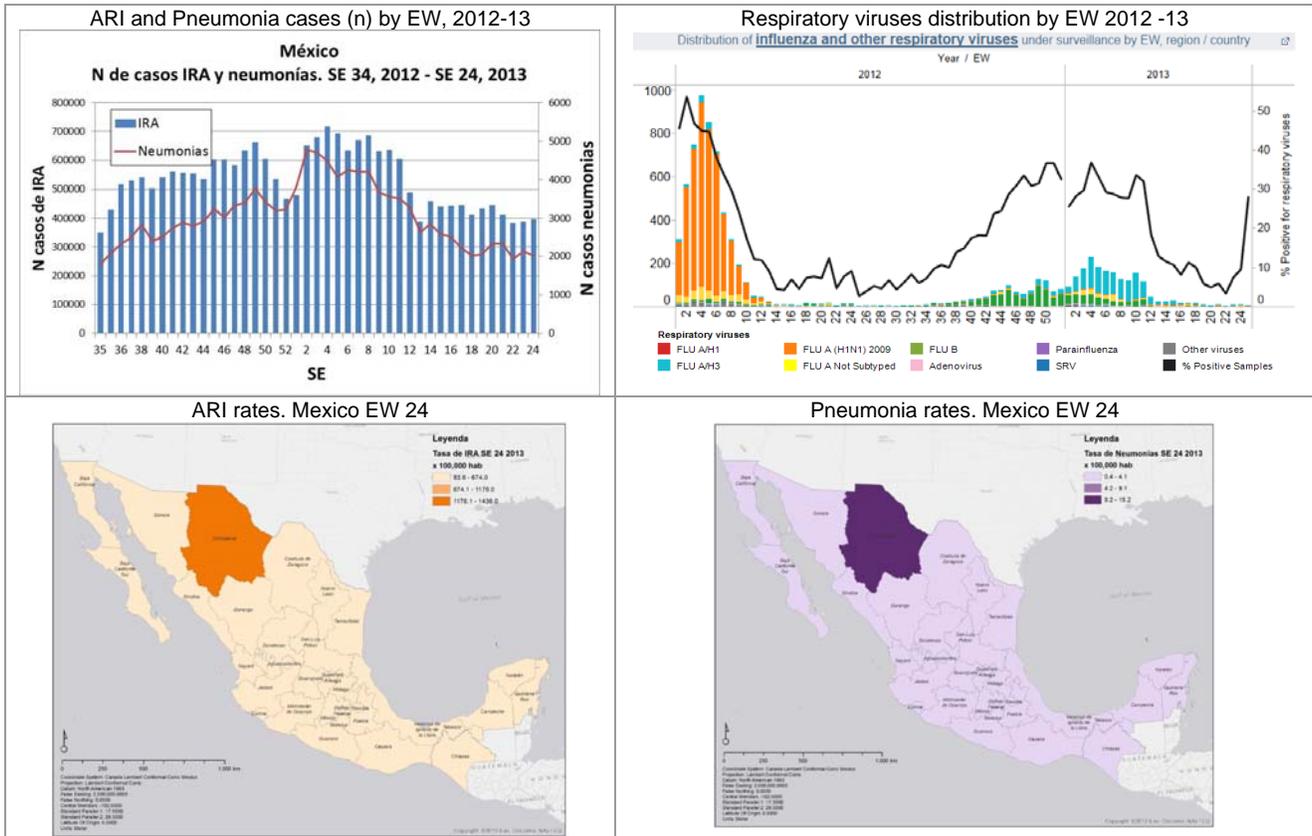
United States



¹ USA: CDC FluView report. EW 25. Available at: <http://www.cdc.gov/flu/weekly/>

In Mexico², nationally in EW 24, the number of ARI cases increased by 1.8% as compared to EW 23 and the number of pneumonia cases decreased by 5.3% as compared to the previous week; however, since their peaks (EW 02 for ARI and EW 04 or pneumonia), both showed decreasing trends during 2013. Regionally, the states that reported the highest rates of pneumonia per 100,000 inhabitants in EW 24 were: Nuevo Leon (3.6), Aguas Calientes (3.3), Jalisco (3.3), and Sonora (3.1). According to laboratory data, between EWs 22-25, among 458 samples tested, 7.6% were positive for influenza. Among the positive influenza cases, 94.3% were influenza A (39.4% were A(H1N1)pdm09, 51.5% were A(H3N2) and 3% A not subtyped) and 5.7% were influenza B.

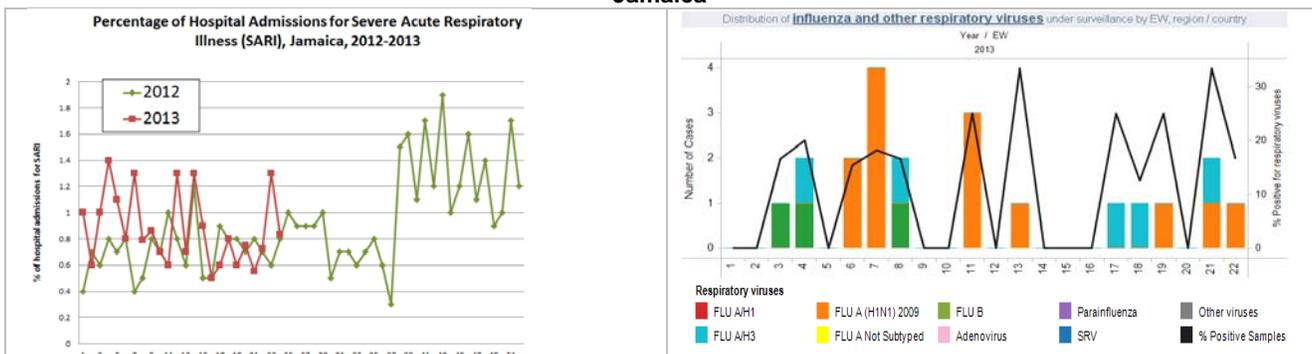
Mexico



Caribbean

In Jamaica, for EW 24, sentinel data show that the proportion of consultations for Acute Respiratory Illnesses (ARI) was 3.9% which was a 0.2% decrease compared to that reported for EW 23. The proportion of admissions due to SARI was less than 1% and stable compared to the previous week. There was no SARI death reported for EW 23.

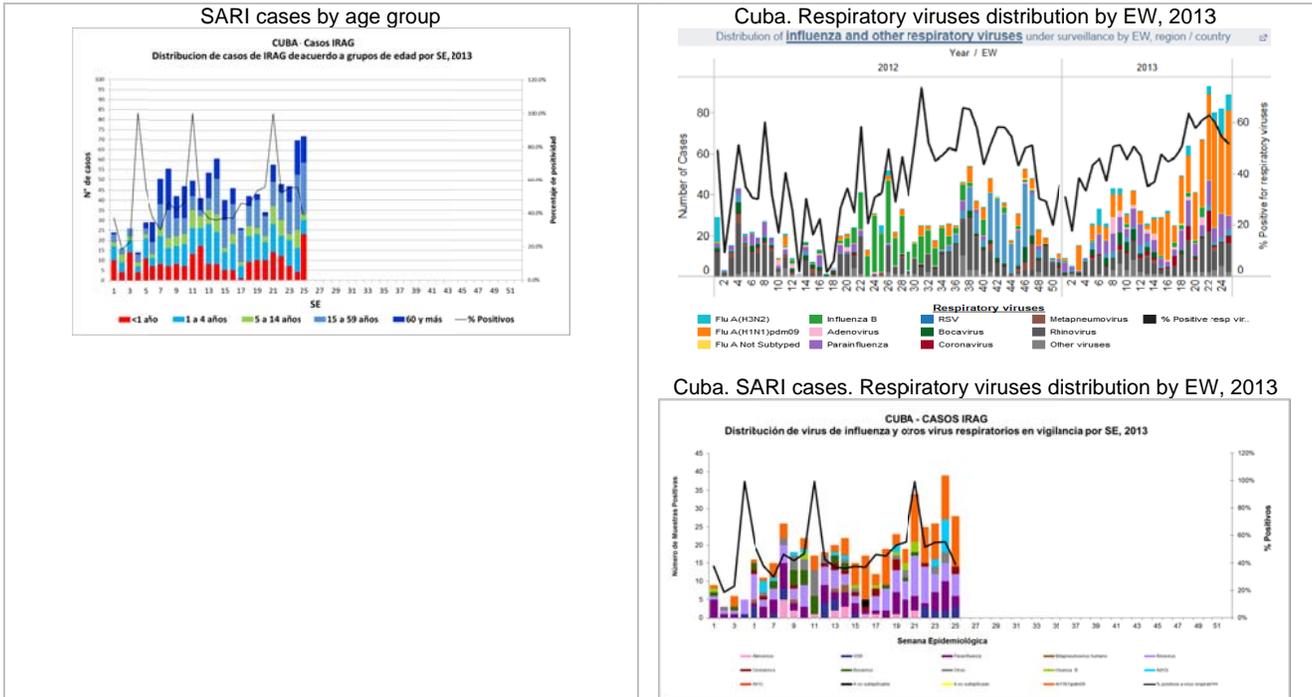
Jamaica



² México. Dirección General de Epidemiología. Información epidemiológica. SE 25.

In Cuba, according to national laboratory data, among all samples analyzed (n=604) between EW 22 to 25, the average percent positivity was 57.3% for respiratory viruses and 35.3% for influenza viruses. Of the total of positive samples by influenza A, 86.8% were influenza A(H1N1)pdm09, which maintains an increased circulation since EW 18, followed by influenza A(H3N2) with 13.2% of positivity. Also, rhinovirus and parainfluenza are circulating (8.9% and 6.3% of positivity respectively). Among SARI cases, 237 samples were analyzed between EW 22 to 25; influenza A(H1N1)pdm09, human metapneumovirus, parainfluenza and RSV had been detected during the same period. Of the total of positive samples in the EW 25, 31.4% were SARI cases and 55% were ILI cases. Children less than 1 year old were the age group most affected by SARI. One death associated with SARI was reported.

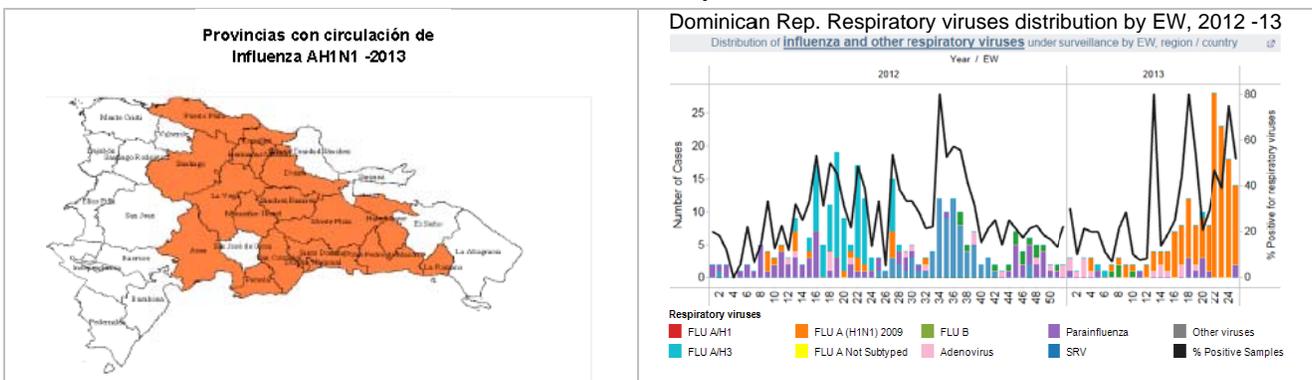
Cuba



Cuba. SARI cases. Respiratory viruses distribution by EW, 2013

In the Dominican Republic³, from the EWs 01-24, 2013, a total of 1,066,913 ILI cases were reported, with a rate of 480 by 10,000 inhab, 21% less to what was reported for the same period in 2012 (605 by 10,000 inhab). In EWs 01-24, through sentinel surveillance, 700 SARI cases (4.7% less than the same period in 2012) with 14 SARI deaths (higher than the number observed in 2012 (n=5)) were reported. According to laboratory data, from EW 23 to 26, among samples analyzed (n=166), the average percent positivity for respiratory viruses was 45.9% for influenza viruses. Influenza A(H1N1)pdm09 was the predominant virus detected, followed by parainfluenza.

Dominican Republic



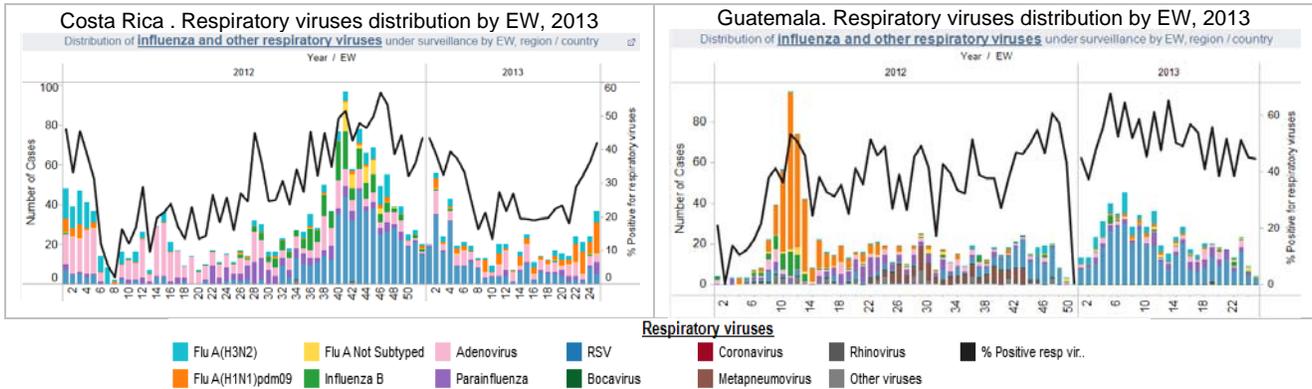
³ República Dominicana. Dirección Nacional de Vigilancia Epidemiológica. Boletín Semanal SE 24.

Central America

In Costa Rica, according to laboratory data from EWs 21-25, of the total samples tested (n=380), 31.6% were positive for respiratory viruses. The percent of positive influenza viruses increased from 5% in EW 21 to 42% in EW 25. During EW 21-25, among influenza viruses, influenza A predominated (98.5%) (68.8% were A(H1N1)pdm09 and 31.3% were A(H3N2)), and 1.5% were influenza B.

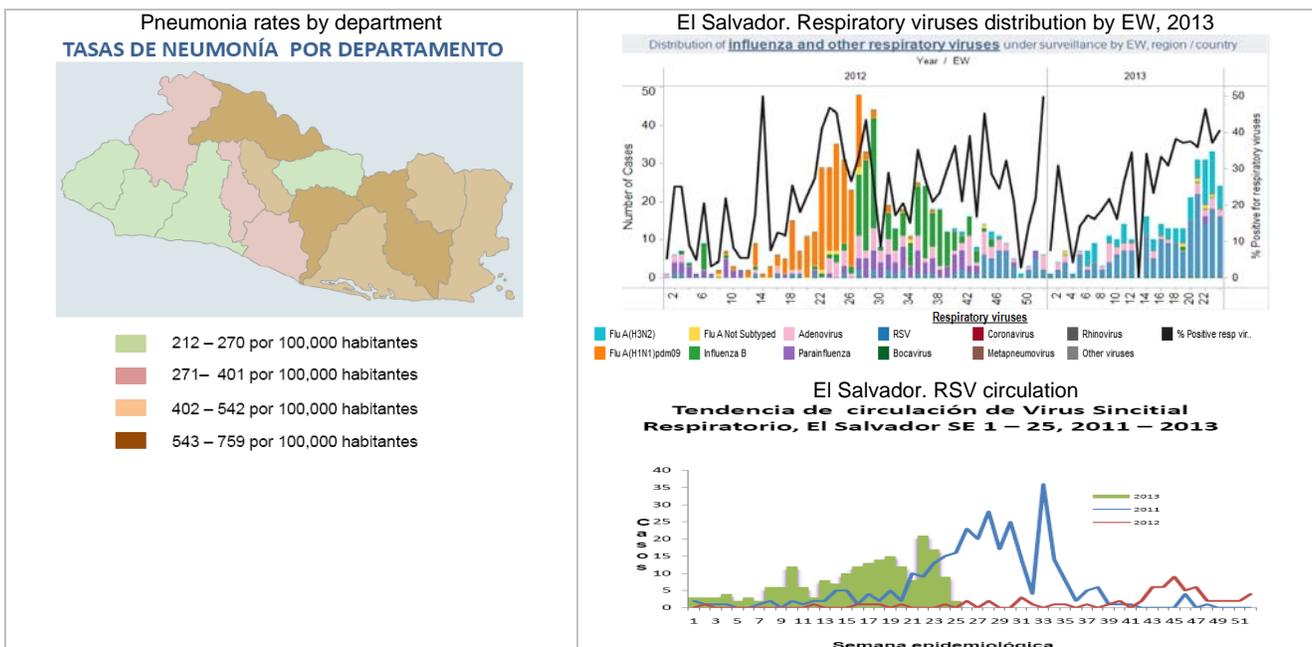
In Guatemala, according to national laboratory data from EWs 22-25, of all samples tested (n =108), 44.7% were positive for respiratory viruses and 10% for influenza viruses. Among influenza viruses, influenza A, not subtyped, was the most prevalent virus. Regarding other respiratory viruses, among the total samples tested, RSV was the predominant virus (26.9% of positive samples) followed by parainfluenza (5.6% of positive samples).

Costa Rica and Guatemala



In El Salvador, for EW 25, 55,639 SARI cases were reported nationally, 8.4% less than what was reported in the previous week (60,728 cases). The cumulative number of SARI cases reported for SE 01-25 in 2013 (n=1,316,045) is similar to that reported during the same period in 2012. The number of pneumonia cases in EW 25 (n=1,710) indicates a 4.6% increase from the previous week. Through EW 25 of 2013, 2,149 SARI associated-hospitalizations (20% of the total number of hospitalizations), and 50 SARI-associated deaths were reported. The highest regional SARI rates per 100,000 population were reported in Chalatenango (26.4), San Salvador (26.3) and San Vicente (22.7). According to national laboratory data from EWs 22-25, among all sample tested (n=270), 41.1% were positive for respiratory viruses and 13.5% were positive for influenza viruses, maintaining an upward trend. RSV was the predominant virus (27.3% of positive samples), maintaining a level similar to previous weeks. Among flu viruses, 100% of samples were influenza A(H3N2), which has been circulating since EW 06.

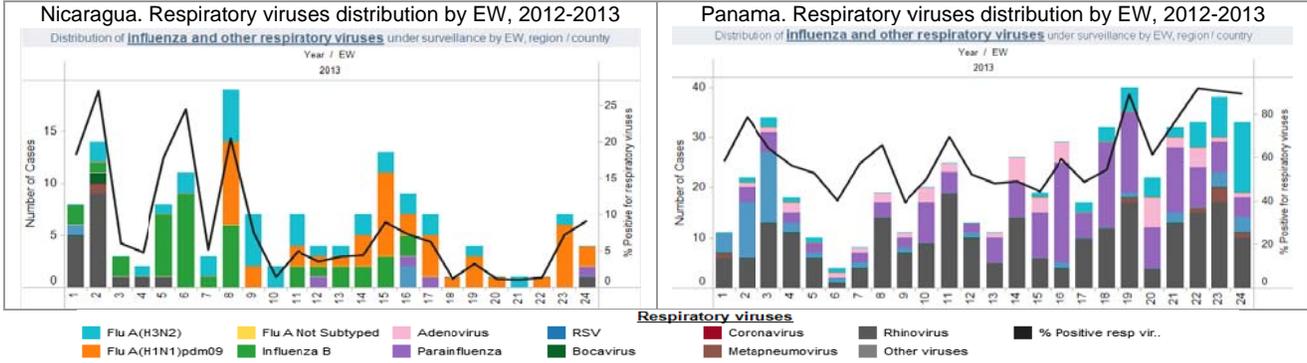
El Salvador



In Nicaragua, according to national laboratory data for EWs 22-25, among the total samples tested (n=398), the percent of positive samples increased from 1.3% (EW 22) to 13.6% (EW 25). Influenza A(H1N1)pdm09 and A(H3N2) were the predominant influenza viruses.

In Panama, according to national laboratory data from EWs 22-25, of all samples tested (n =150), 88.7% were positive for respiratory viruses and 28.7% were positive for influenza viruses. Among the influenza positive samples in EWs 22-25, 100% were influenza A(H3N2). Among other respiratory viruses, rhinovirus (33% of positive samples) and parainfluenza (12.7% of positive samples) predominated.

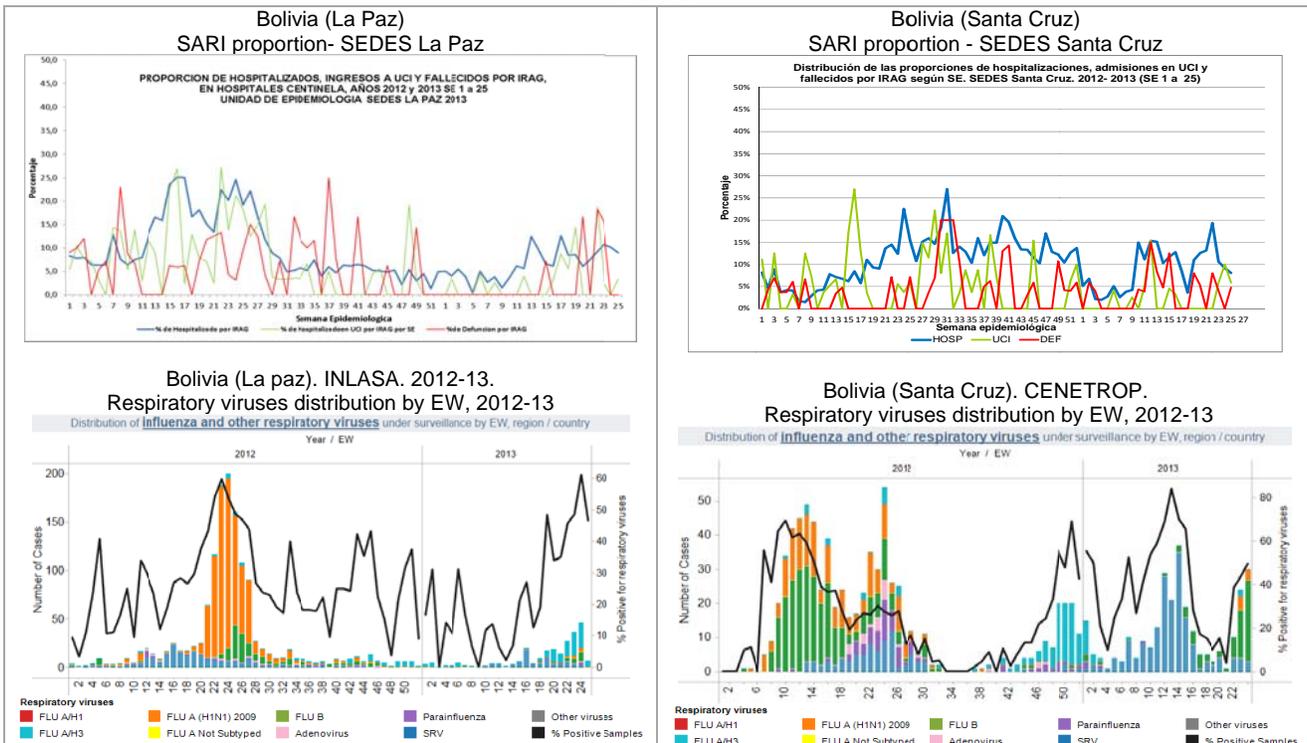
Nicaragua and Panama



South America – Andean countries

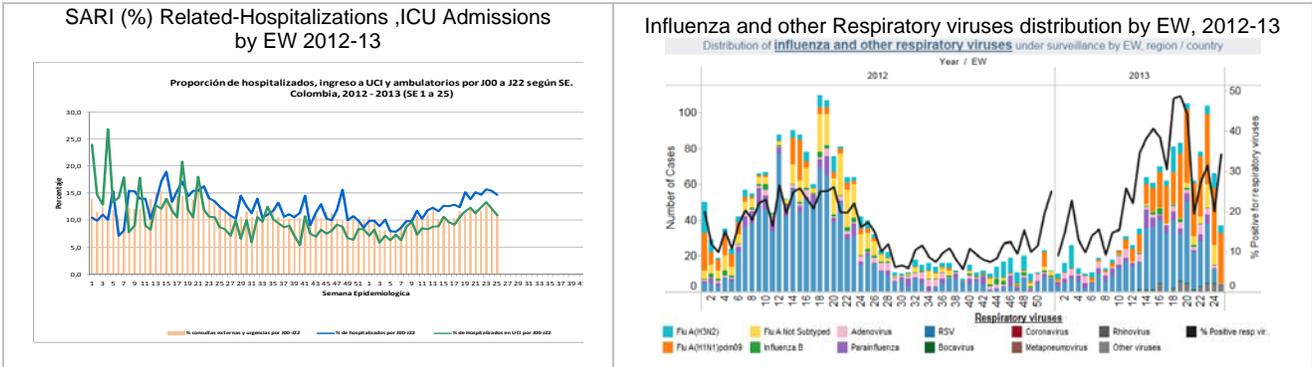
In Bolivia, according to data from Santa Cruz, during EW 25 the proportion of SARI hospitalizations (7%) remained similar to the previous week. According to laboratory data from CENETROP (Santa Cruz), among 30 samples analyzed from SARI cases from EWs 23-24 of 2013, 27% were positive respiratory viruses and 23% were positive for influenza viruses. Influenza B (7/8) continued to be the most prevalent respiratory virus. In La Paz, in EW 25, the proportion of SARI hospitalizations (9%) decreased as compared to the previous week. According to laboratory data from INLASA (La Paz), among 125 samples processed during EWs 24-25 of 2013, 62% were positive for respiratory viruses and 58% were positive for influenza viruses. Among the positives samples, influenza A(H3N2) (63%) predominated.

Bolivia



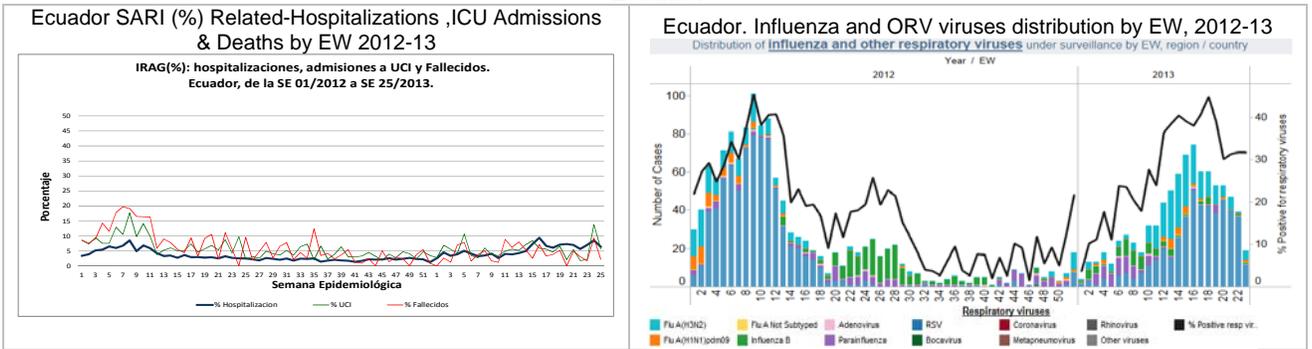
In Colombia, nationally, in EW 25, the proportions of ARI outpatients-J codes (11%), SARI hospitalizations (14.7%) and SARI ICU admissions (11%) decreased as compared to the previous week. According to the national laboratory data (INS), among virus samples analyzed (n=588) in EW 24-25, 23% were positive for respiratory viruses and 18% were positive for influenza viruses. Among the positive samples, influenza A(H1N1)pdm09 (60%) and RSV (12%) predominated.

Colombia



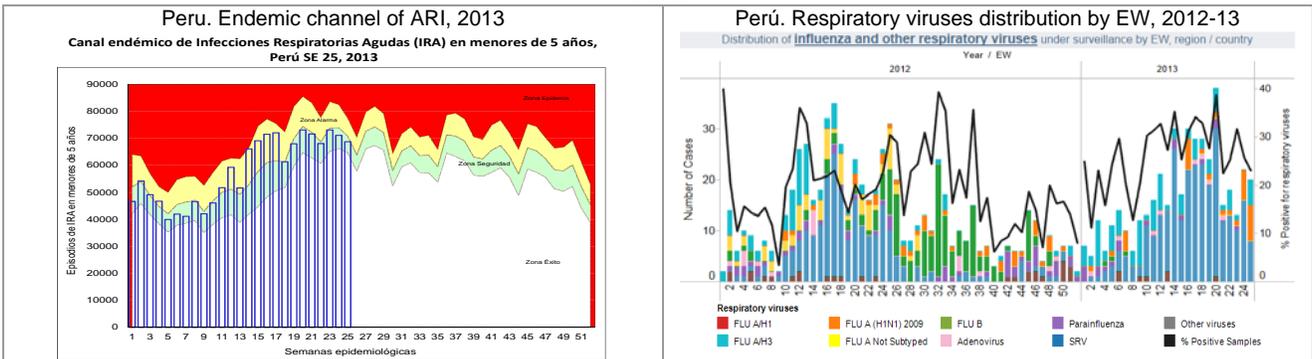
In Ecuador, during EW 25, the proportion of SARI hospitalizations (6%), SARI ICU admissions (6%) and SARI deaths (2%) decreased as compared to the previous week. According to national laboratory data, among 125 samples tested from SARI cases, between EWs 24-25, 31% were positive for respiratory viruses and 14% were positive for influenza viruses. Among all the positive samples, RSV (54%), influenza A(H1N1)pdm09 (28%) and A(H3N2) (13%) predominated.

Ecuador

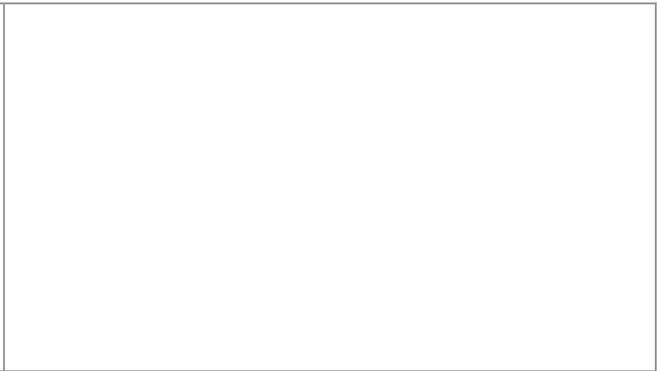
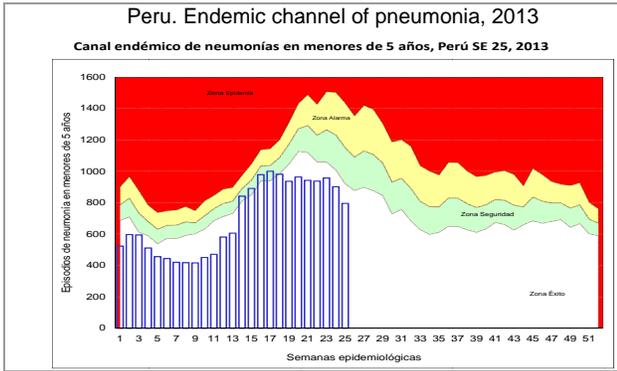


In Peru⁴, nationally, in EW 25, the number of ARI and pneumonia cases in children less than 5 years of age remained within the expected level for this time of year. According to national laboratory data, during EWs 24-25, among the 172 samples analyzed, 24% were positive for respiratory viruses and 10% were positive for influenza viruses. Among all the positive viruses, RSV (57%) and influenza A(H1N1)pdm09 (31%) predominated.

Peru

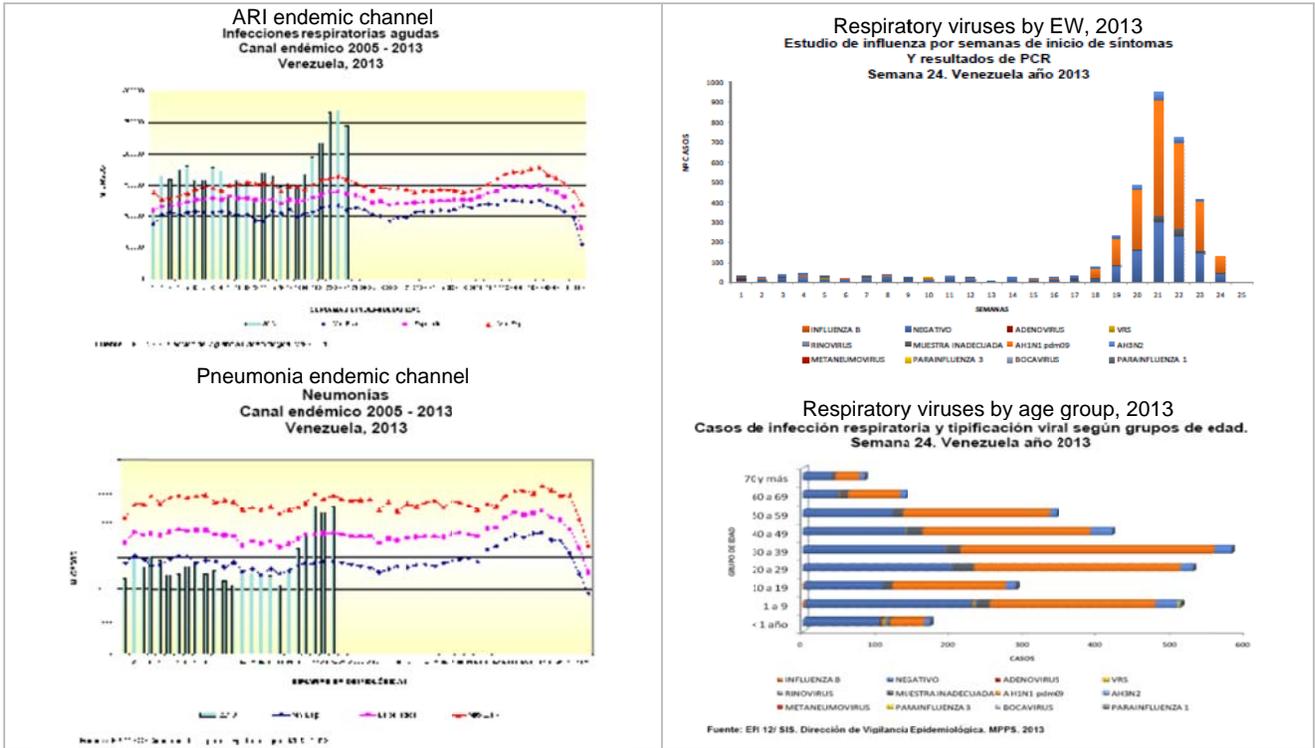


⁴ Perú. Sala de Situación de Salud. EW 25, 2013. Ministerio de Salud. Dirección General de Epidemiología



In Venezuela⁵, according to data published through EW 24, the endemic channel of ARI showed ARI activity above the epidemic threshold for this time of the year with an increasing trend. The pneumonia endemic channel showed activity within what is expected for this time of the year, but with an increasing trend in the last 6 EWs. The highest incidences for pneumonia cases were reported in children less than 5 years. Regionally, the highest numbers of pneumonia cases were reported in Zulia. In virological surveillance, thus far this year through EW 24, a predominance of influenza A(H1N1)pdm09 (90.8% of the total number of positive samples) was reported, followed by influenza A(H3N2) (7.5% of the total number of positive samples).

Venezuela



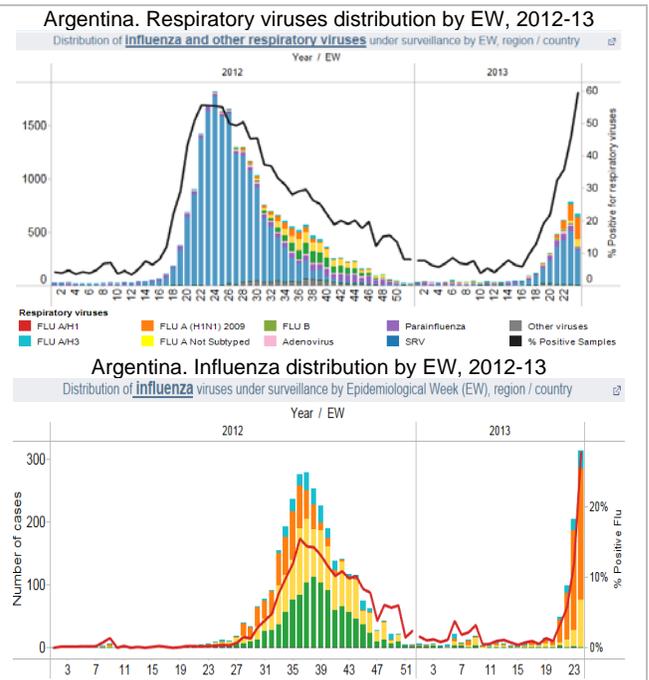
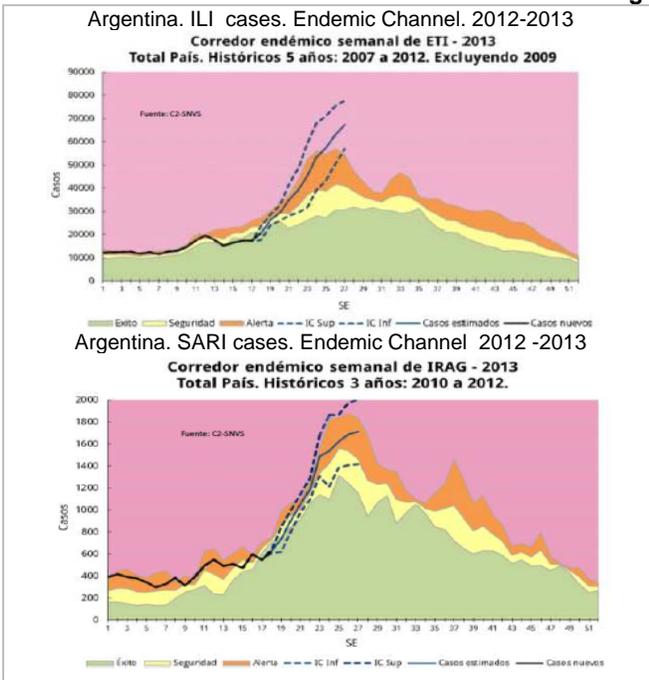
South America – Southern Cone

In Argentina⁶, according to national estimates, ILI and SARI activity during EW 25 were above the epidemic threshold, continuing an increasing trend. Regionally, the regions of Northwest and Cuyo, showed SARI rates higher than what was observed last year. According to national laboratory data, 2,832 samples were processed during EWs 23-24, of which 51% were positive for all respiratory viruses and 18% for influenza viruses. Among the positive samples, 56% were RSV (the predominant virus) and 25% were A(H1N1)pdm09.

⁵ Venezuela. Boletín epidemiológico, SE 24, 2013.

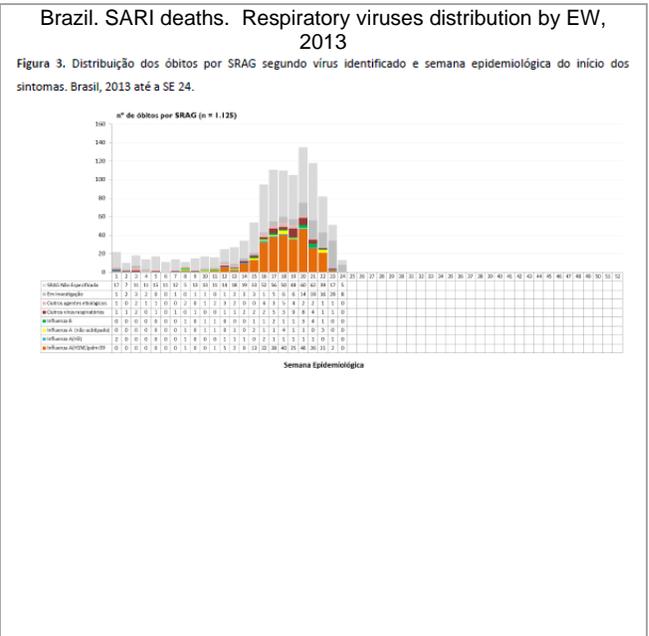
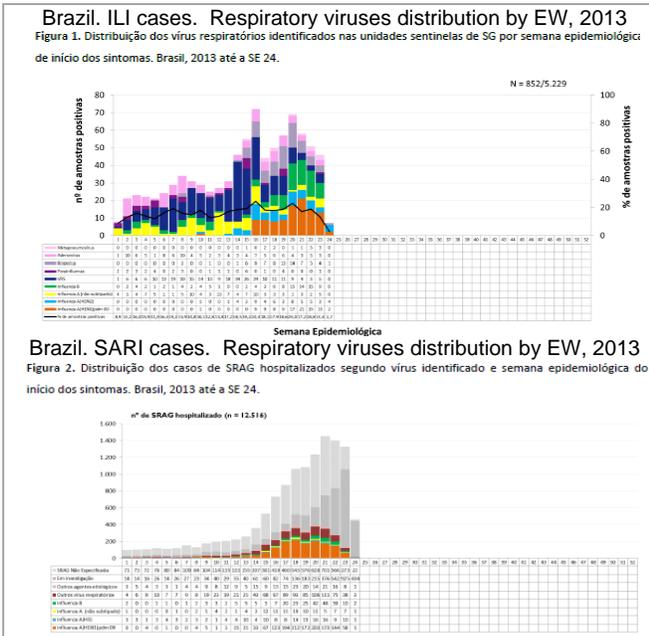
⁶ Argentina. Boletín integrado de vigilancia. SE 25.

Argentina



In Brazil⁷, the proportion of ILI cases (sentinel surveillance system) increased from EW 16 to EW 25; however, it remained within expected levels. Regionally, the southeast region reported ILI activity above the expected level for this time of year, associated with circulation of influenza A(H1N1)pdm09 in EWs 23-24. The number of SARI cases and SARI deaths showed an increasing trend, with predominance of influenza A(H1N1)pdm09, mainly in the southeast region.

Brazil



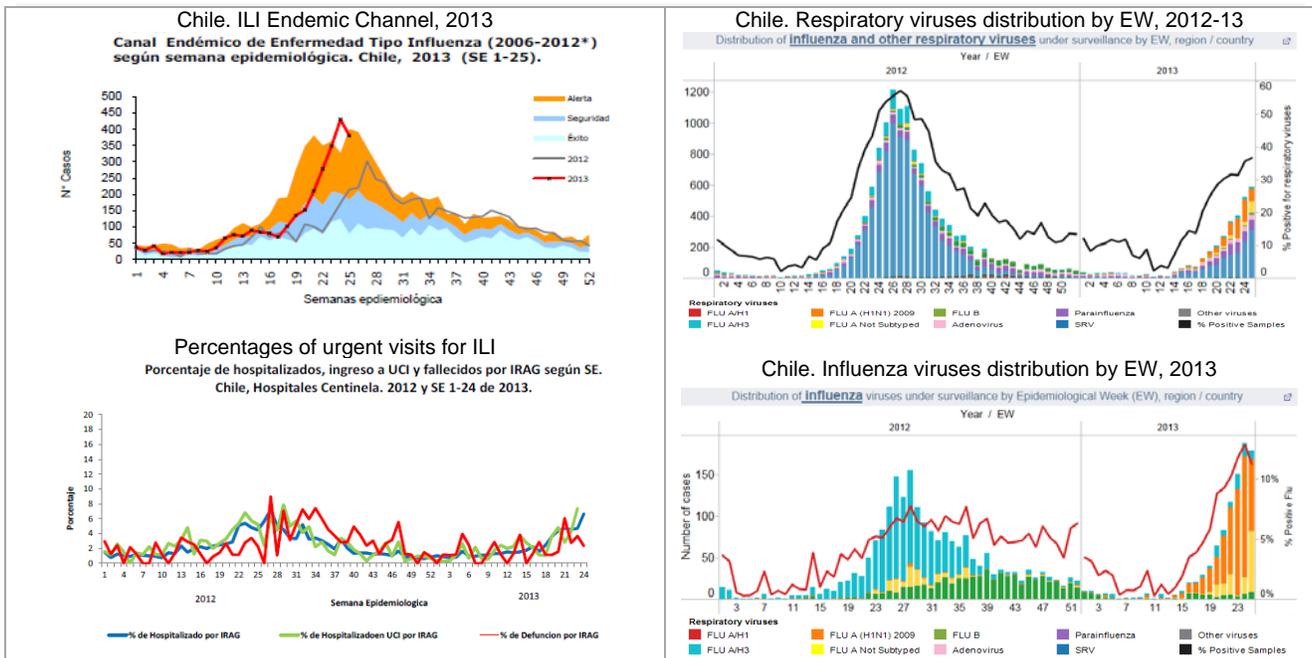
In Chile⁸, nationally, in EW 25, ILI activity (rate: 24 per 100,000 population) decreased and was below the epidemic threshold (alert zone) of the endemic channel. Regionally, Coquimbo was the only region that showed an increase in its ILI activity as compared to the previous week. The southern regions reported decreased ILI activity, and the rest of regions remained similar. The percentage of SARI hospitalizations showed an increasing trend since EW 16. According to national laboratory data, in EWs 24-25, 3,060

⁷ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 25, 2013.

⁸ Chile. Informe de situación. SE 25. Disponible en: www.pandemia.cl

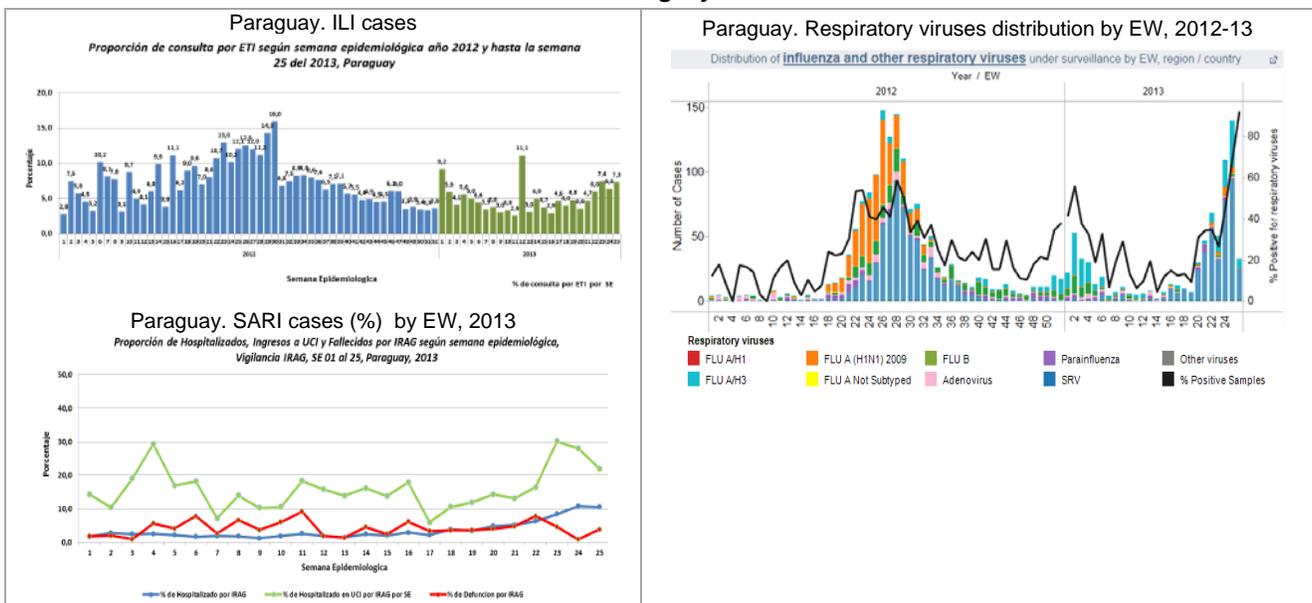
samples were analyzed, of which 36% were positive for respiratory viruses and 12% for influenza viruses. Among the positive samples, 48% were RSV, which was the most prevalent virus, followed by influenza A(H1N1)pdm09/A not subtyped (29%). Among the 217 samples tested from SARI cases, influenza A(H1N1)pdm09/A unsubtype (59% among positive samples) and RSV (32% among positive samples) were the prevalent viruses. Among SARI cases, influenza A(H1N1)pdm09 showed the highest percentage in the 40-59 years age group; and is the predominant virus among severe cases (ICU admissions and deaths).

Chile



In Paraguay⁹, nationally in EW 25, the ILI consultation rate (143 per 100,000 population), the ILI proportion (7.3%) and the proportion of SARI-related hospitalizations (8.9%) remained similar to the previous week, and with an increasing trend since EW 22. According to data from the national laboratory, among 463 samples processed during EWs 24-25, 57% were positive for respiratory viruses and 16% were positive for influenza viruses. Among the positive samples, RSV (69%) and influenza A(H3N2) (23%) were the most predominant viruses. Among the 148 samples from SARI cases, RSV also predominated.

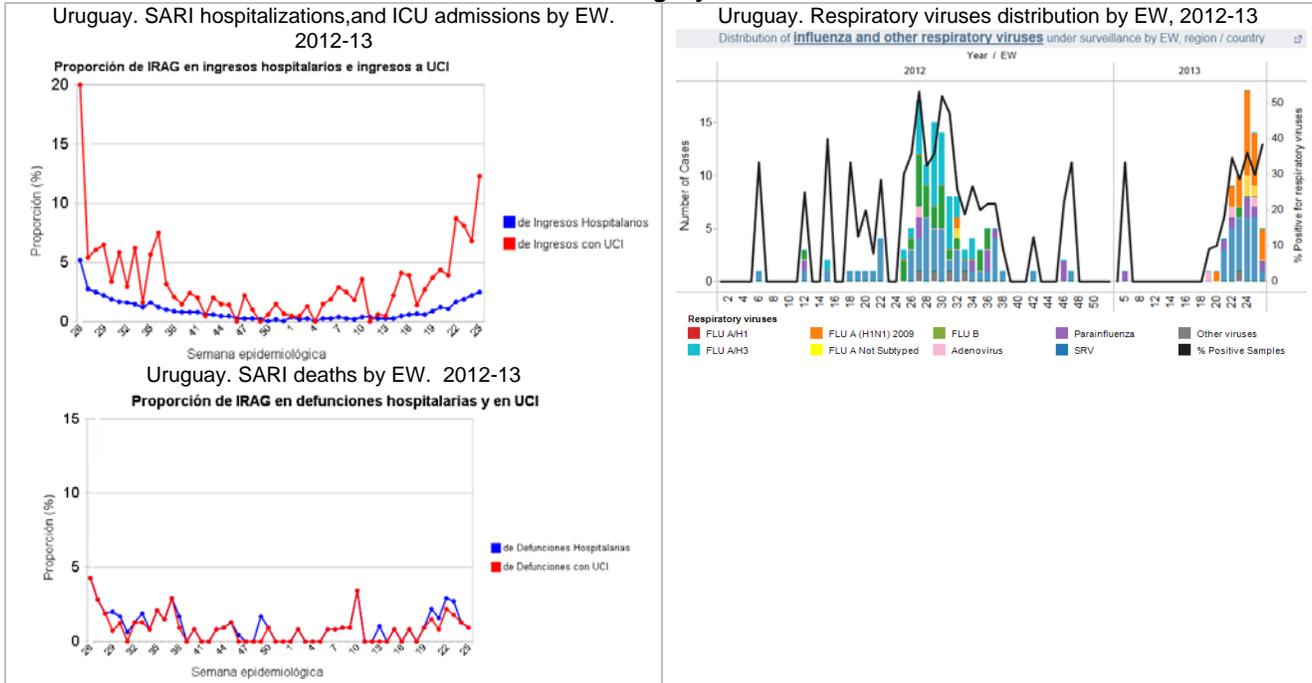
Paraguay



⁹ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 25, 2013

In Uruguay¹⁰, at the national level, the proportions of SARI hospitalizations and the SARI-related ICU admissions in EW 25, increased as compared to the previous week and continued an increasing trend. However the number of SARI deaths decreased in the last 3 weeks. According to data from the national laboratory, among 77 samples processed during EWs 24-25, 34% were positive for respiratory viruses and 18% were positive for influenza viruses. Influenza A(H1N1)pdm09 (12/26) and RSV (9/26) were the most predominant viruses.

Uruguay



Special Topics:

Novel coronavirus infection

http://new.paho.org/hq/index.php?option=com_content&view=article&id=8665&Itemid=39987&lang=en

Avian influenza A(H7N9) virus

http://new.paho.org/hq/index.php?option=com_content&view=article&id=8575&Itemid=39968&lang=en

¹⁰ Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública