



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

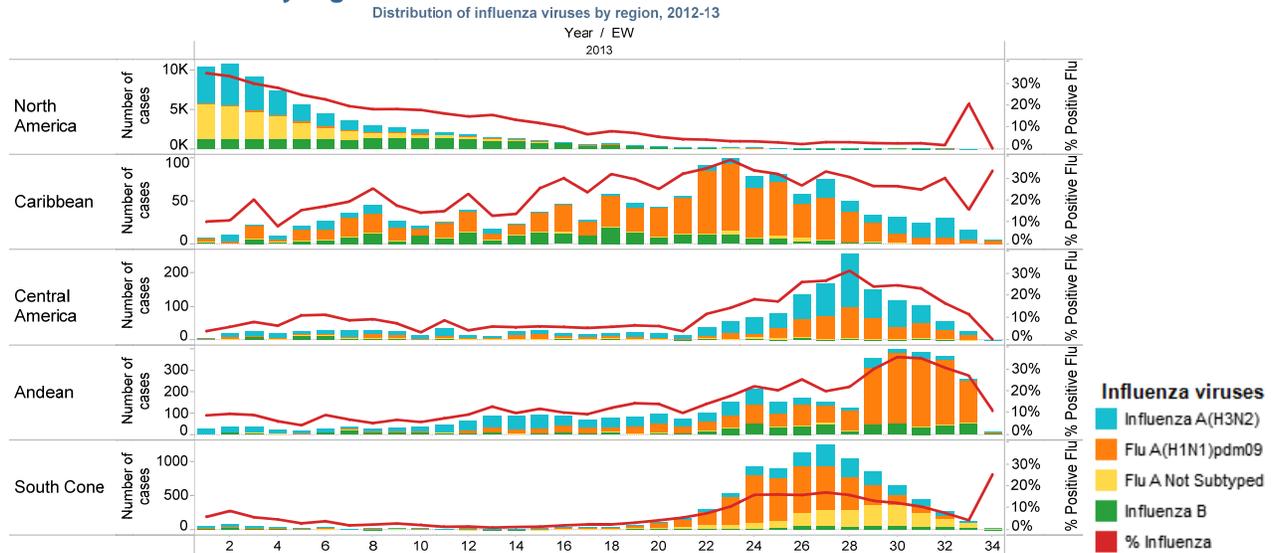
Influenza Regional Reports: www.paho.org/reportesinfluenza

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.

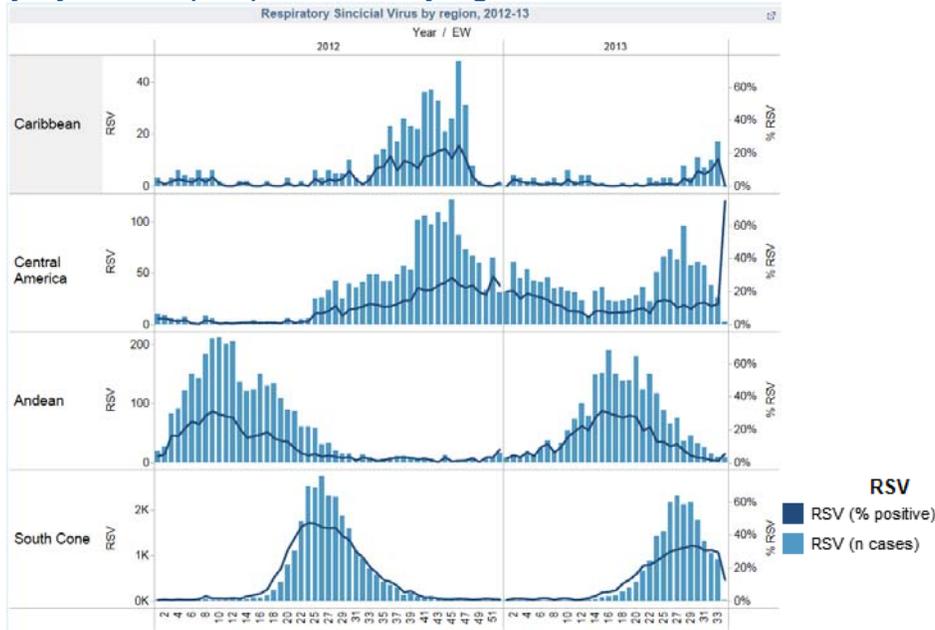
WEEKLY SUMMARY

- **North America:** most influenza activity indicators were low and within expected levels for this time of year. In the United States, there have been 16 cases of influenza A(H3N2v) reported this summer, including one hospitalization and no deaths. These infections have mostly been associated with prolonged exposure to pigs.
- **The Caribbean and Central America:** acute respiratory virus infections continued their decreasing trend in this region. Co-circulation of influenza A(H1N1)pmd09 (in Cuba, Costa Rica, Dominican Republic, Guatemala and Nicaragua) and influenza A(H3N2) (in Costa Rica, Cuba and Nicaragua) continued. Among other respiratory viruses, RSV continued to predominate in Costa Rica and Guatemala and adenovirus predominated in Honduras.
- **South America – Andean Countries:** acute respiratory virus activity remained elevated in Peru, Ecuador and Bolivia (La Paz and Santa Cruz), with an increased circulation of influenza A(H1N1)pmd09. Meanwhile Venezuela and Colombia continued to see a decline in activity.
- **South America - South Cone and Brazil:** acute respiratory virus activity was within the expected level for this time of year and all countries showed decreasing trends. RSV predominated in most countries with co-circulation of influenza A(H3N2) in Paraguay. In Southern and Southeastern Brazil co-circulation of influenza A(H1N1)pdm09 and influenza B continued..

Influenza circulation by region. 2012-2013



Respiratory syncytial virus (RSV) circulation by region. 2012-2013

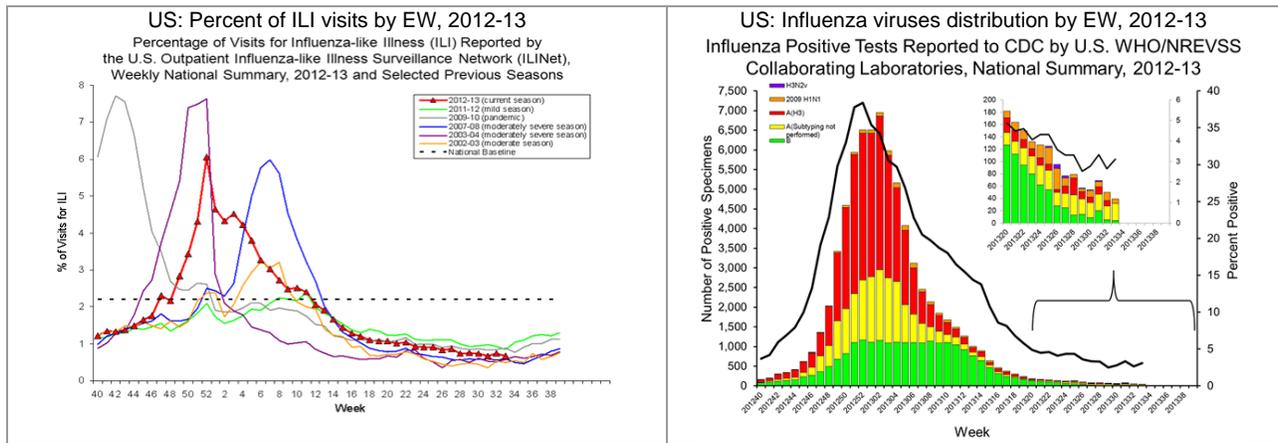


EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America:

In the United States¹ during EW 33, influenza activity remained low with 0.7% of outpatient visits associated with ILI (below the national baseline of 2.2%) and 5.4% of deaths associated with pneumonia and influenza (below the epidemic threshold of 6.2% for this time of year). No influenza-associated pediatric deaths were reported during this time. Based on laboratory data for EW 33, 1,253 samples were tested of which 3.1% were positive for influenza, an increase from the previous week. Among the positive samples (n=39), 89.7% were influenza A (of which 80.0% were not subtyped and 20.0% were A(H1N1)pdm09) and 10.3% were influenza B. No new human infections with an influenza A(H3N2) variant (H3N2v) were reported during EW 33. The total number of H3N2v cases reported this summer is 16 (Illinois: 1, Indiana: 14, Ohio: 1). There has been one hospitalization associated with the H3N2v infection, but no deaths have occurred. All cases have reported close contact with swine in the week prior to illness onset, and no ongoing human-to-human transmission has been identified. Public health and agriculture officials are investigating the disease among humans and swine, and more cases may be identified as the investigation continues.

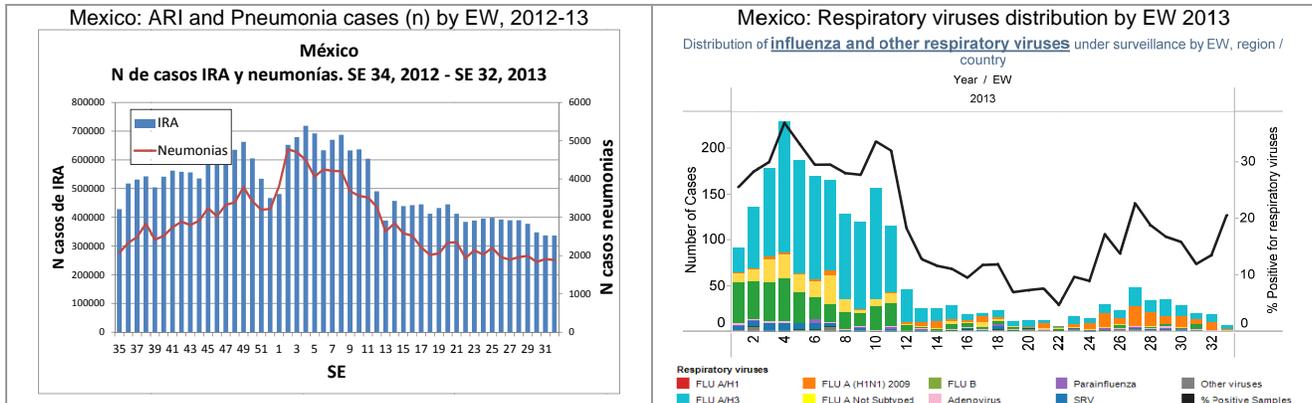
United States



¹ USA: CDC FluView report. EW 33. Available at: <http://www.cdc.gov/flu/weekly/>

In Mexico², nationally during EW 32 the number of reported ARI and pneumonia cases decreased by 0.1% and 1.2%, respectively, continuing decreasing trends since their peaks in 2013 (EW 4 for ARI and EW 2 for pneumonia). The highest rates of pneumonia (cases per 100,000 population) were in Jalisco and Aguascalientes. According to laboratory data from EW 31-32, 175 samples were tested, of which 14.9% were positive for a respiratory virus and 14.3% were positive for influenza. Among the positive influenza samples, 92.0% were influenza A (of which 58.1% were H3N2 and 43.5% were A(H1N1)pdm09) and 8.0% were influenza B.

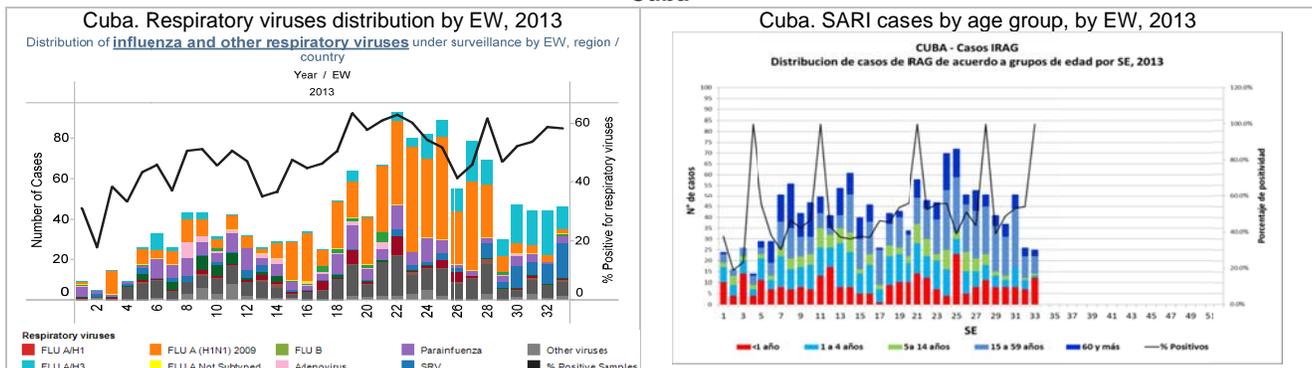
Mexico



Caribbean

In Cuba, SARI-associated hospitalizations decreased for the last two weeks, and children less than 1 year of age were the most affected age group. No SARI-associated deaths were reported during this time. Based on laboratory data from EW 30-33, 326 samples were analyzed, of which 55.7% were positive for a respiratory virus and 25.8% were positive for influenza. Among all samples positive for influenza A, A(H3N2) predominated (83.2%), with a higher than average positivity (74.5%) in the previous weeks, followed by influenza A(H1N1)pdm09 (16.8%). RSV, rhinovirus and parainfluenza were also circulating. Similarly, among the samples analyzed from SARI-patients during EW 30-33 (n=139), RSV, parainfluenza, rhinovirus, influenza A(H3N2) and influenza A(H1N1)pdm09 were detected.

Cuba

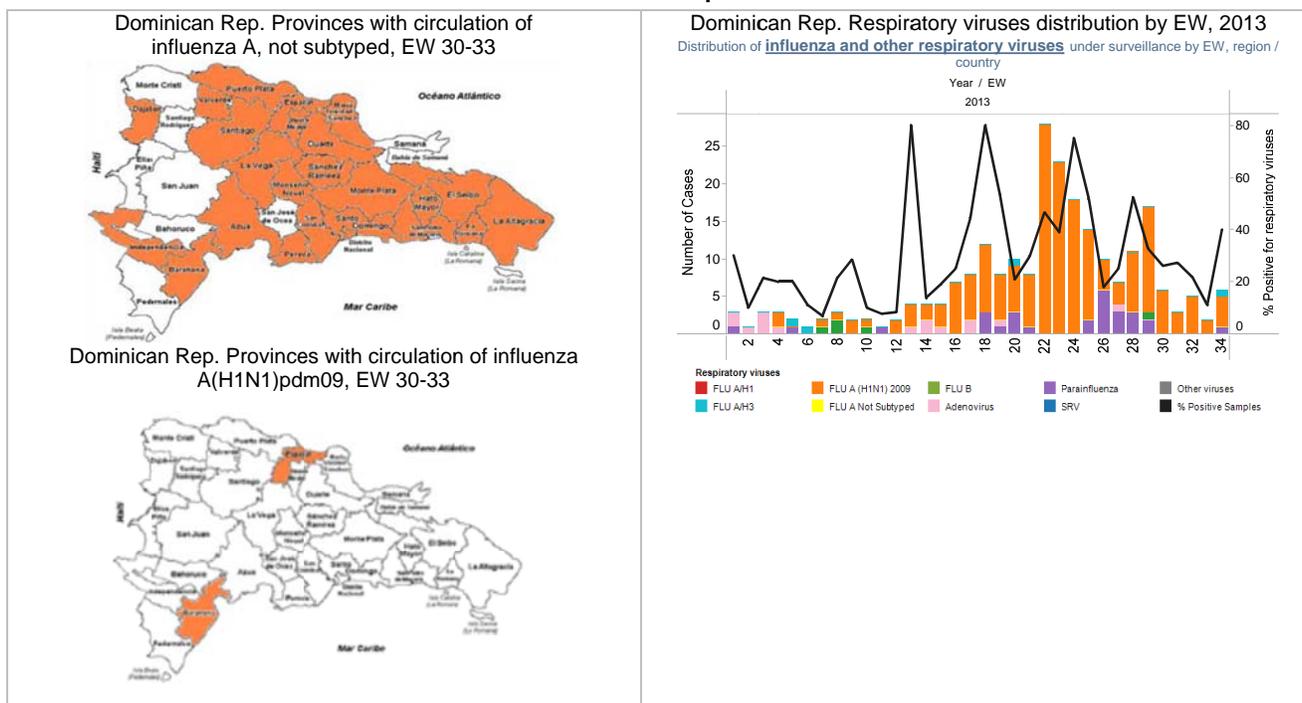


In the Dominican Republic³, from EW 1-33 a total of 1,533,881 ILI cases were reported (rate: 948 per 10,000 inhabitants). This is 14% less than what was reported for the same period in 2012 (1,108 per 10,000 inhabitants). Between EWs 1-33, 1,054 SARI cases were reported through sentinel surveillance, primarily in Santo Domingo, Santiago and San Cristobal provinces. There were no SARI-associated deaths reported during EW 33, however 23 SARI-associated deaths have been reported this year (compared to 5 in 2012). According to laboratory data for EW 31-34, 67 samples were analyzed and indicated circulation of influenza A(H1N1)pdm09, influenza A(H3N2) and parainfluenza.

² México. Dirección General de Epidemiología. Información epidemiológica. SE 33.

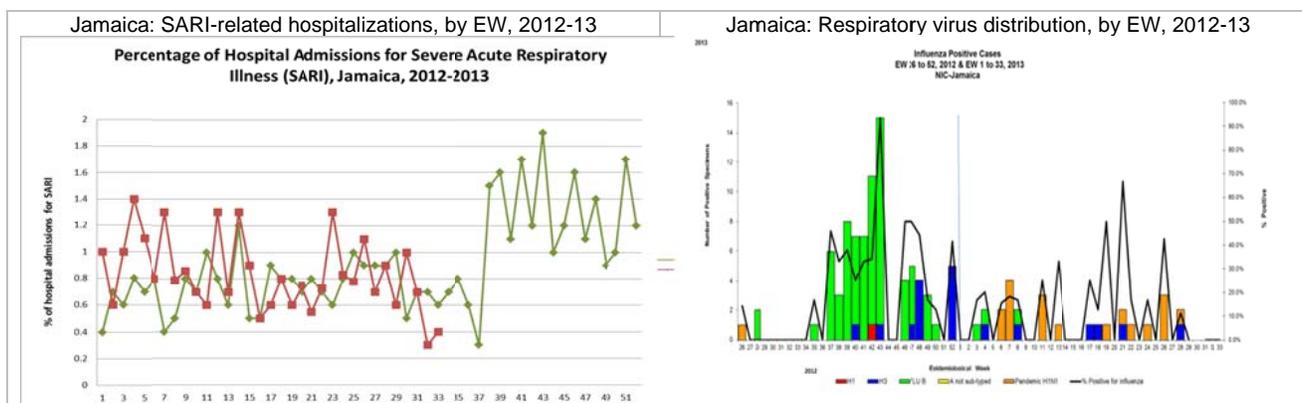
³ República Dominicana. Dirección Nacional de Vigilancia Epidemiológica. Boletín Semanal SE 33.

Dominican Republic



In Jamaica, based on sentinel surveillance data for EW 33, the proportion of ARI-associated consultations was 2.2% and did not change from the previous EW. The proportion of SARI-associated hospitalizations was less than 1% and also remained stable compared to the previous week. There were no SARI-associated deaths reported during this time. According to laboratory data, influenza viruses were not detected in the analyzed samples (n=6).

Jamaica

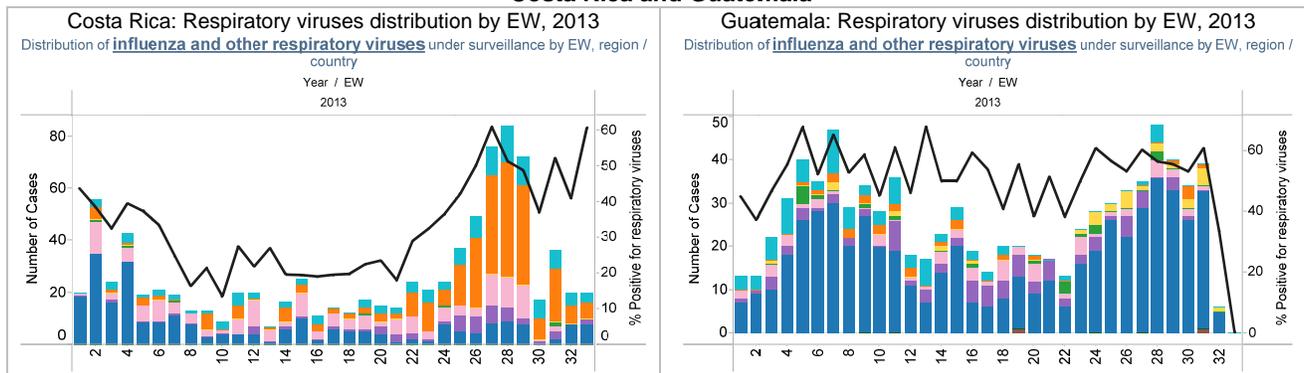


Central America

In Costa Rica, based on laboratory data from EW 30-33, 197 samples were analyzed, of 47.2% were positive for a respiratory virus and 33.5% were positive for influenza. Among influenza positive samples 97.0% were positive for influenza A (64.1% for A(H1N1)pdm09 and 35.9% for A(H3N2)), and 3% were positive for influenza B. Among other respiratory viruses, RSV predominated (19.4%).

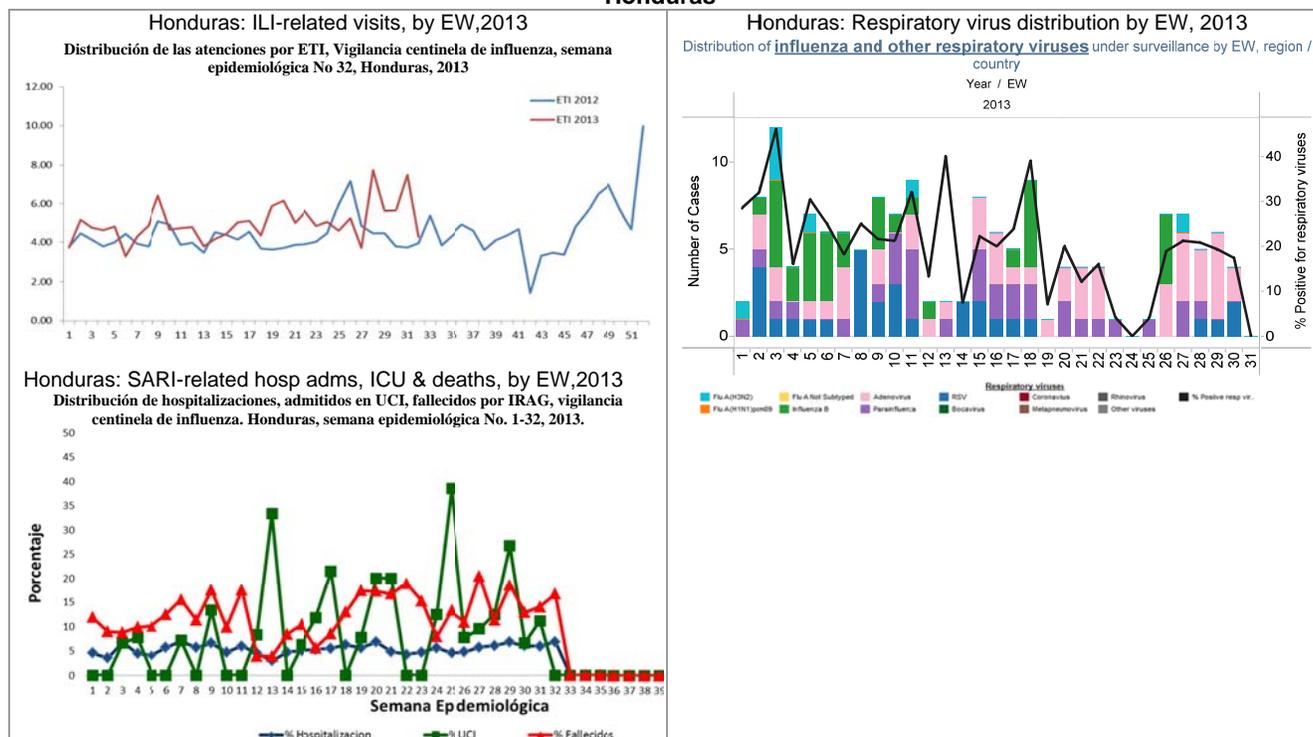
In Guatemala, based on laboratory data from EW 30-33, 152 samples were analyzed of which 52.0% were positive for a respiratory virus and 7.2% were positive for influenza. Among samples positive for influenza, 100% were influenza A (of which 63.6% were influenza A, not subtyped and 36.4% were influenza A(H1N1)pdm09). Among other respiratory viruses, RSV (79.7%) predominated.

Costa Rica and Guatemala



In Honduras⁴, based on sentinel surveillance during EW 32, ILI accounted for 4.3% of outpatient visits, a decrease compared to the previous EW (7.5% in EW 31). However, the proportion of SARI-associated hospitalizations was 6.8%, an increase compared to the previous EW. Among all deaths during EW 32, 16.7% were SARI-associated (12/72). Based on laboratory data for EW 28-31, 67 samples were analyzed, of which 18.3% were positive for respiratory viruses and 0% were positive for influenza. Among the positive samples, adenovirus predominated (12.2%).

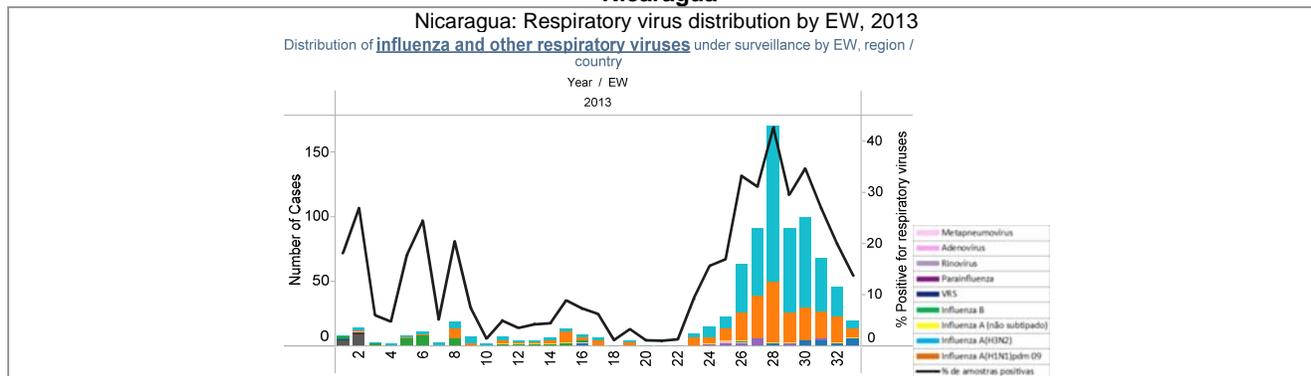
Honduras



In Nicaragua, based on laboratory data from EW 30-33, 915 samples were analyzed, of which 25.5% were positive for a respiratory virus and 23.2% were positive for influenza. Among positive samples, influenza A(H3N2) (65.6%) predominated, followed by influenza A (H1N1)pdm09 34.4%.

⁴ Honduras. Boletín de influenza SE 33

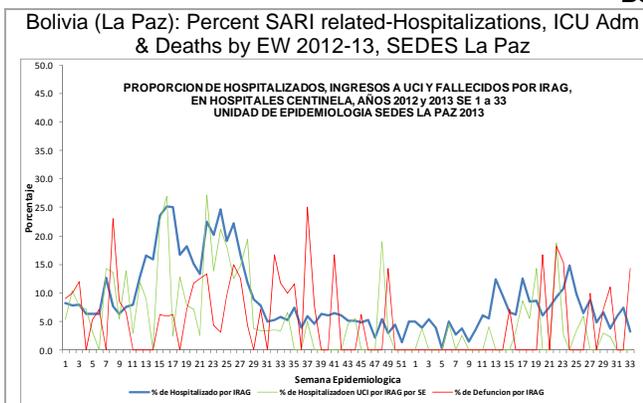
Nicaragua



South America – Andean countries

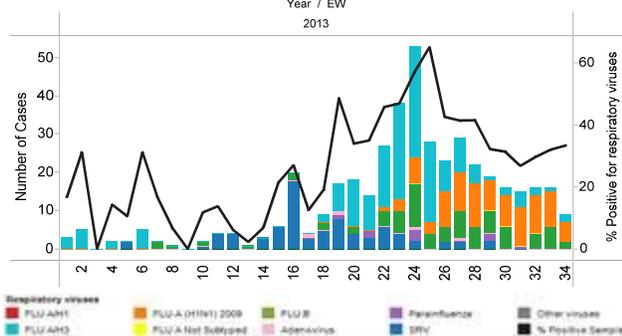
In Bolivia, according to data from Santa Cruz, during EW 33 the proportion of SARI hospitalizations (11%) was lower than what was observed during the previous week. Based on laboratory data from CENETROP (Santa Cruz) during EW 32-33, 139 samples were analyzed of which 22.3% were positive for influenza. Among positive samples, influenza A(H1N1)pdm09 (80.6%) predominated. According to data from La Paz, during EW 33 the proportion of SARI-associated hospitalizations (3.3%) continued a decreasing trend since EW 24. Based on laboratory data from INLASA (La Paz) from EW 32-33, 104 samples were analyzed of which 31% were positive for influenza. Among positive samples, influenza A(H1N1)pdm09 (59%) and influenza B (31%) predominated.

Bolivia

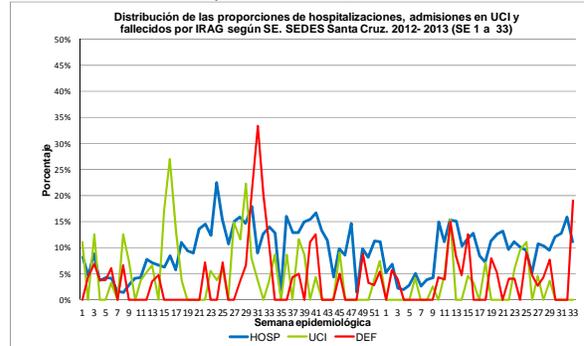


Bolivia (La Paz). INLASA. Respiratory viruses distribution by EW, 2013

Distribution of influenza and other respiratory viruses under surveillance by EW, region / country
Year / EW
2013

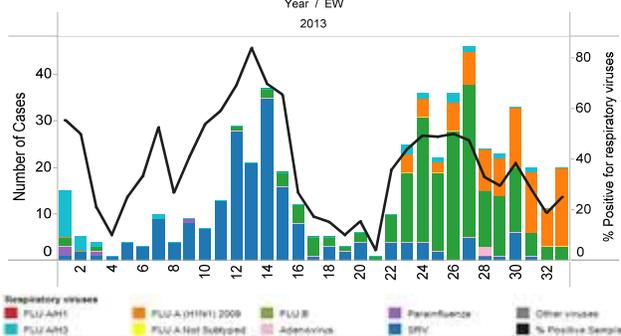


Bolivia (Santa Cruz): Percent SARI related-Hospitalizations, ICU Adm & Deaths by EW 2012-13, SEDES Santa Cruz



Bolivia (Santa Cruz). CENETROP Respiratory viruses distribution by EW, 2013

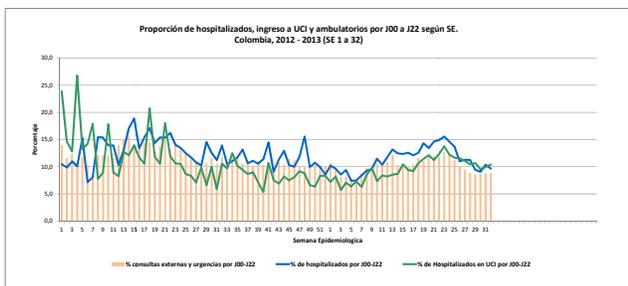
Distribution of influenza and other respiratory viruses under surveillance by EW, region / country
Year / EW
2013



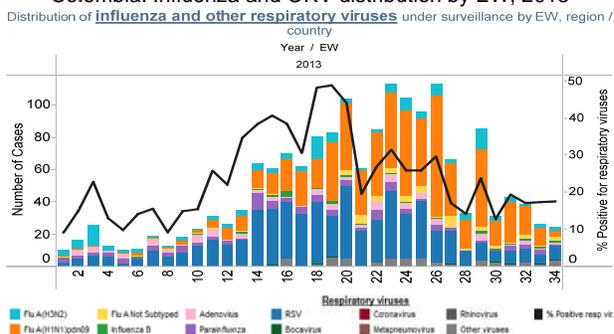
In Colombia, nationally during EW 32, the proportions of outpatient visits (8.8%), hospitalizations (9.6%), and ICU admissions (10.4%) with ARI-associated ICD-10 codes (J00 to J22) did change significantly from the previous EW. Based on INS national laboratory data from EW 32-33, 378 samples were analyzed, of which 17% were positive for a respiratory virus and 10% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (45%) and RSV (21%) predominated.

Colombia

Colombia: Percent Outpatient Visits, Hosps and ICU Adms with J00 to J20 codes, by EW 2012-13



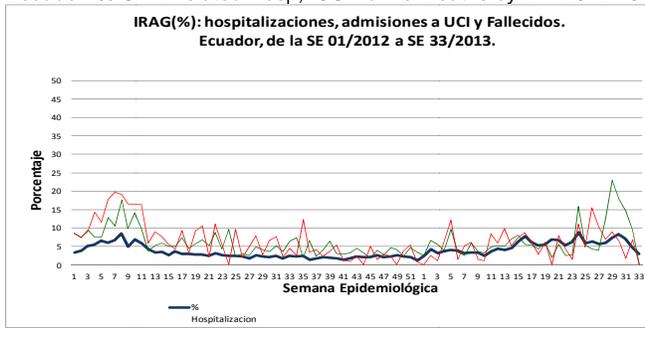
Colombia: Influenza and ORV distribution by EW, 2013



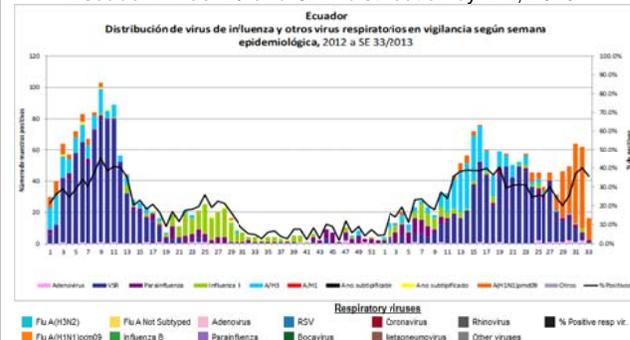
In Ecuador, according to sentinel surveillance data from EW 33, the proportion of SARI hospitalizations (3%) continued the decrease observed since EW 31. Based on national reference laboratory data from EW 32-33, 146 SARI samples were analyzed, of which 53% were positive for a respiratory virus and 47% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (85%) predominated.

Ecuador

Ecuador: % SARI-related Hosp, ICU Adm & Deaths by EW 2012-13



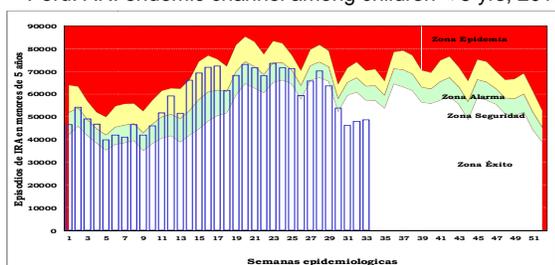
Ecuador. Influenza and ORV distribution by EW, 2013



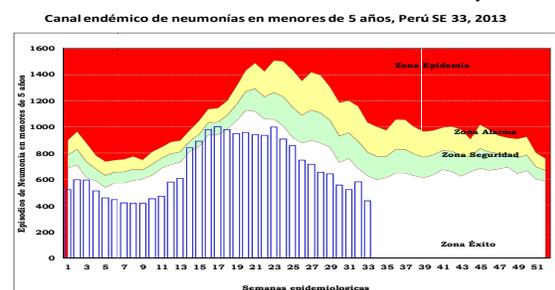
In Peru⁵, nationally for the previous weeks ARI and pneumonia reports in children less than 5 years of age have not changed significantly, and remain within the success zone of the endemic channel. Based on national laboratory data from EW 33, 623 samples were analyzed, of which 32% were positive for a respiratory virus and 31% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (72%) and influenza B (22%) predominated.

Peru

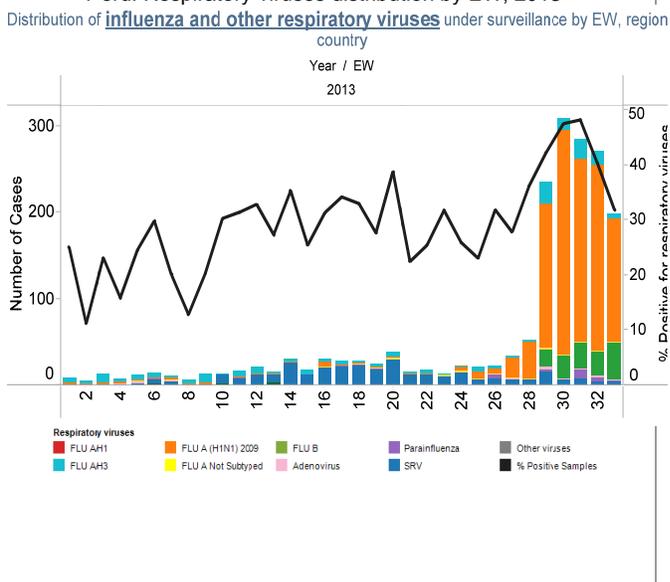
Peru. ARI endemic channel among children < 5 yrs, 2013



Peru. Pneumonia endemic channel, children <5yrs, 2013



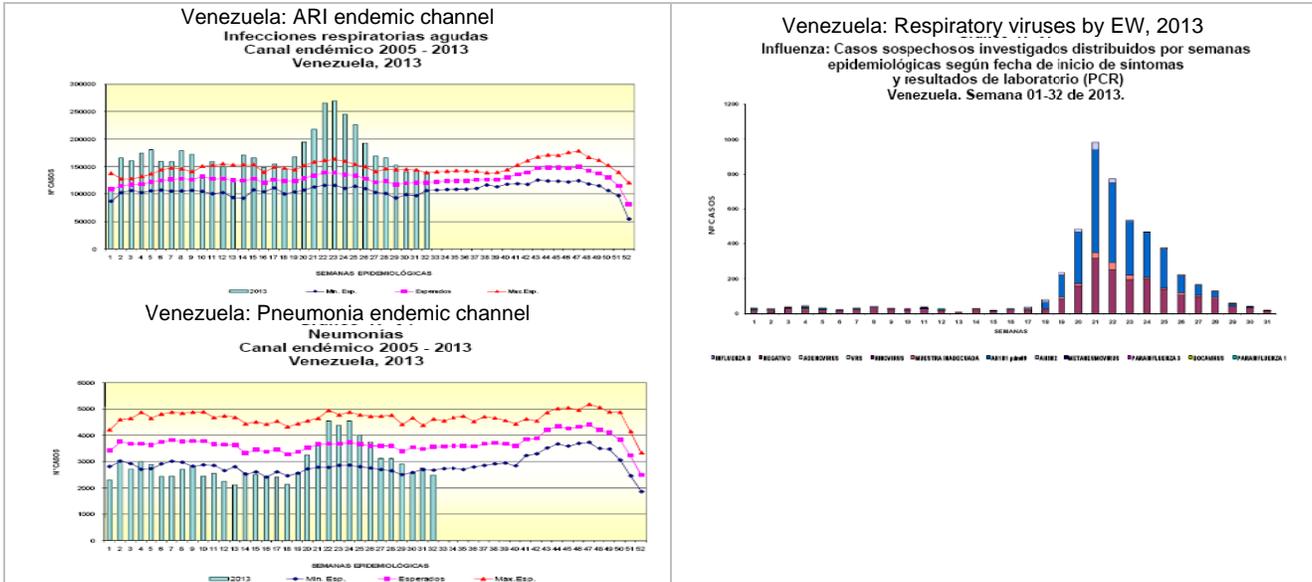
Perú. Respiratory viruses distribution by EW, 2013



⁵ Perú. Sala de Situación de Salud. EW 33, 2013. Ministerio de Salud. Dirección General de Epidemiología

In Venezuela⁶, ARI activity has not shown any significant changes for the last four EWs (29-32) and remains near the upper limit of expected activity for this time of year. Pneumonia notification levels are below the lower limit of expected activity for this time of year. Based on virologic surveillance data between EW 1-32, 5,037 were analyzed, of which 54.7% were positive for a respiratory virus. The decrease in samples processed for respiratory viruses observed since EW 21 continues. During EW 31, all samples analyzed were negative for the investigated viruses.

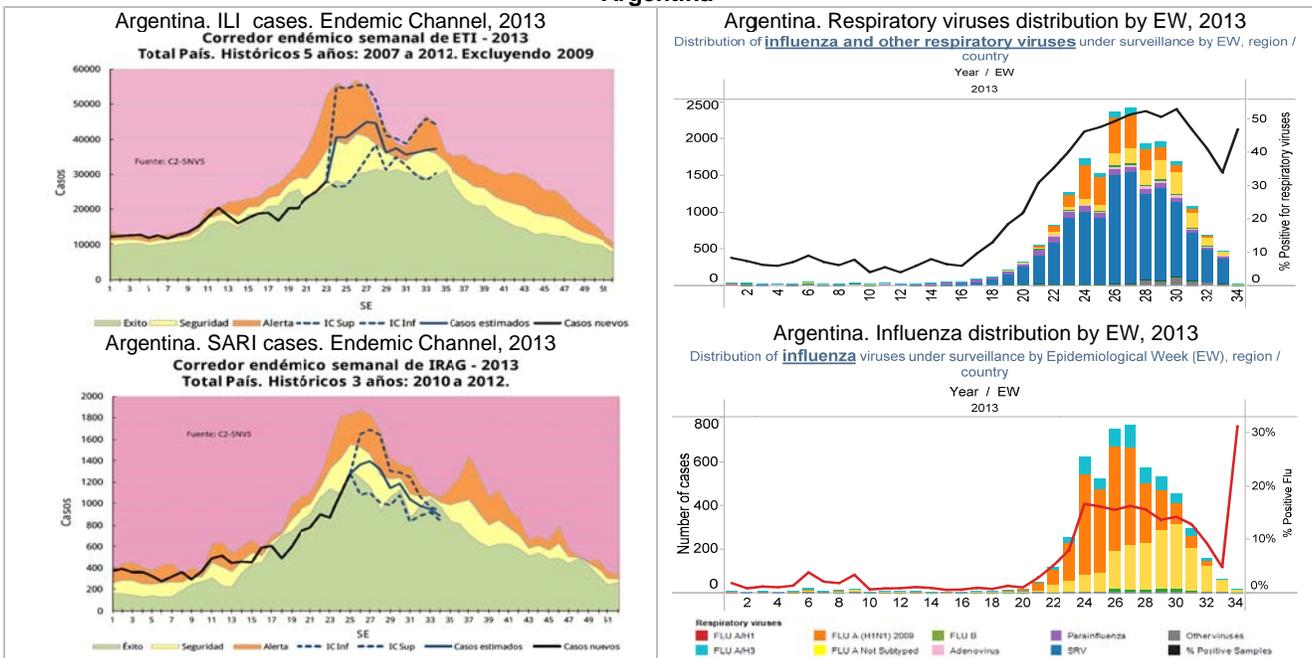
Venezuela



South America – Southern Cone and Brazil

In Argentina⁷, according to reports and calculated estimations, national ILI activity is within the alert level of the endemic channel and has been stable for the last five weeks. The proportion of SARI-associated hospitalizations is within the success zone of the endemic channel and is showing a decreasing trend. Based on laboratory data from EW 33, 1,405 samples were analyzed, of which 34% were positive for a respiratory virus and 5% were positive for influenza. Among the positive samples, RSV (71%), and influenza A, not subtyped (11%) predominated.

Argentina

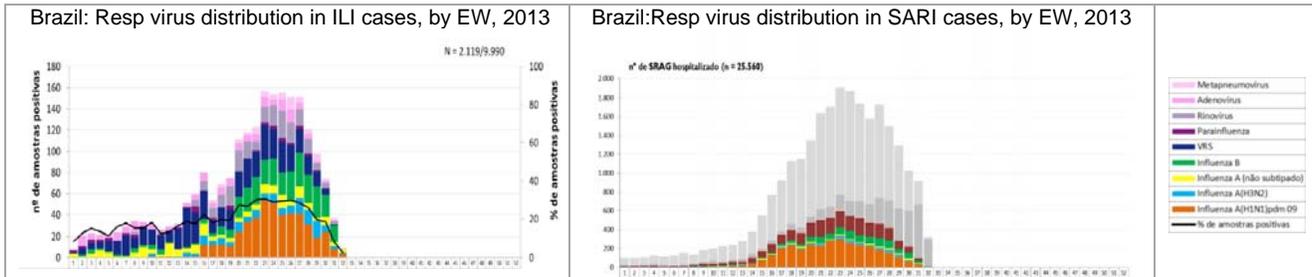


⁶ Venezuela. Boletín epidemiológico, EW 32, 2013.

⁷ Argentina. Boletín integrado de vigilancia. SE 33.

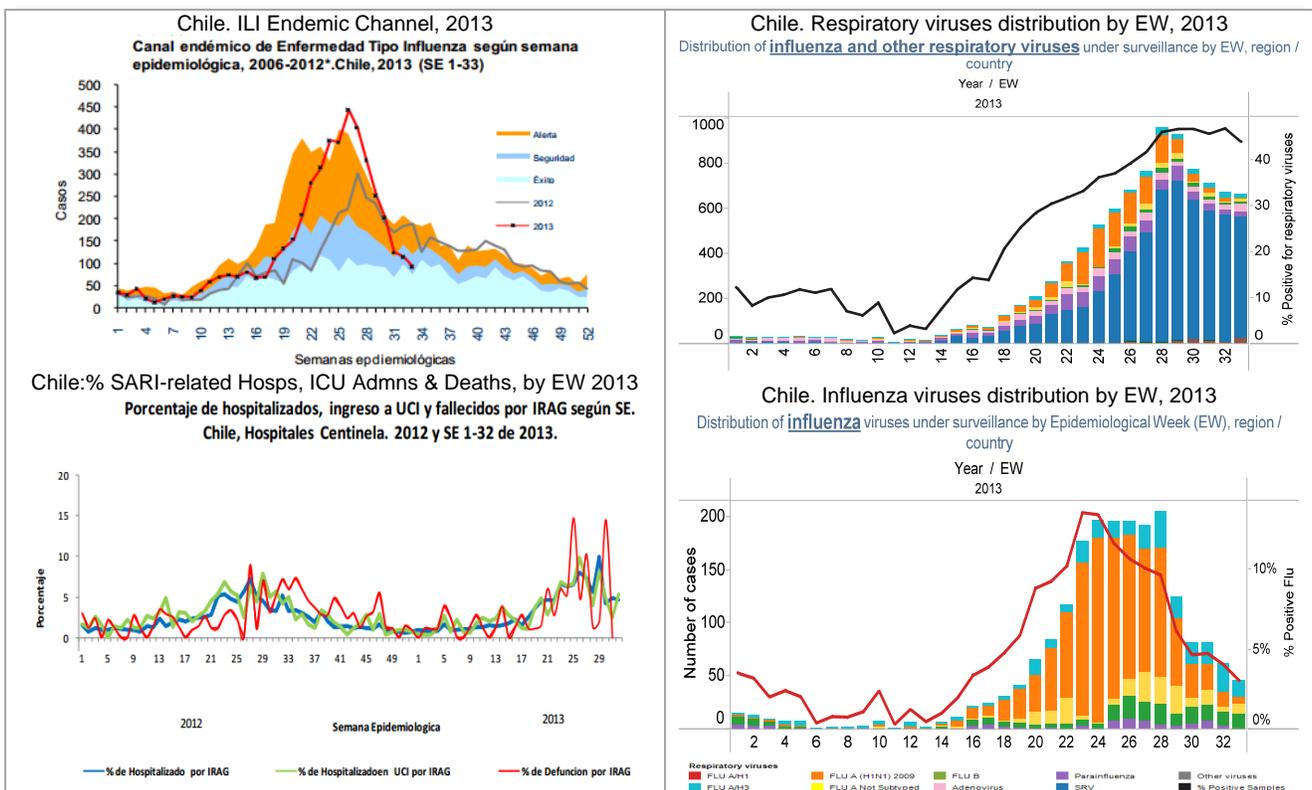
In Brazil⁸, according to sentinel surveillance data through EW 32, 9,990 samples were analyzed, of which 21.2% were positive for a respiratory virus. Among positive samples, RSV has predominated since the beginning of the year, and influenza A(H1N1)pdm09 and influenza B have had increased circulation since EW 16 and EW 20, respectively. This pattern is being observed in the south and southeast regions. Based on universal SARI surveillance data during this same period, 25,560 cases were reported, of which 18.5% were positive for influenza. Since EW 12, there has been increased detection of influenza A(H1N1)pdm09. Additionally, through EW 31, 2,719 SARI-associated deaths were reported with 27.5% positive for influenza, and of these, 85.2% were associated with influenza A(H1N1)pdm09.

Brazil



In Chile⁹, during EW 33, ILI activity (rate: 5.9 per 100,000 inhabitants) continued its decreasing trend for the previous weeks and was in the security zone of the endemic channel. The proportion of SARI-associated hospitalizations (4.6%) did not change significantly from the previous week and continued a downward trend. Based on laboratory data from EW 33, 1,438 samples were analyzed, of which 47% were positive for a respiratory virus and 4% were positive for influenza. Among the positive samples, RSV predominated (83%).

Chile



In Paraguay¹⁰, during EW 33, ILI activity (rate: 141 per 100,000 inhabitants) increased compared to the previous week, but remained within the alert zone of the endemic channel. The proportion of SARI hospitalizations (5.8%) did not change significantly compared to the last EW and is similar to what was

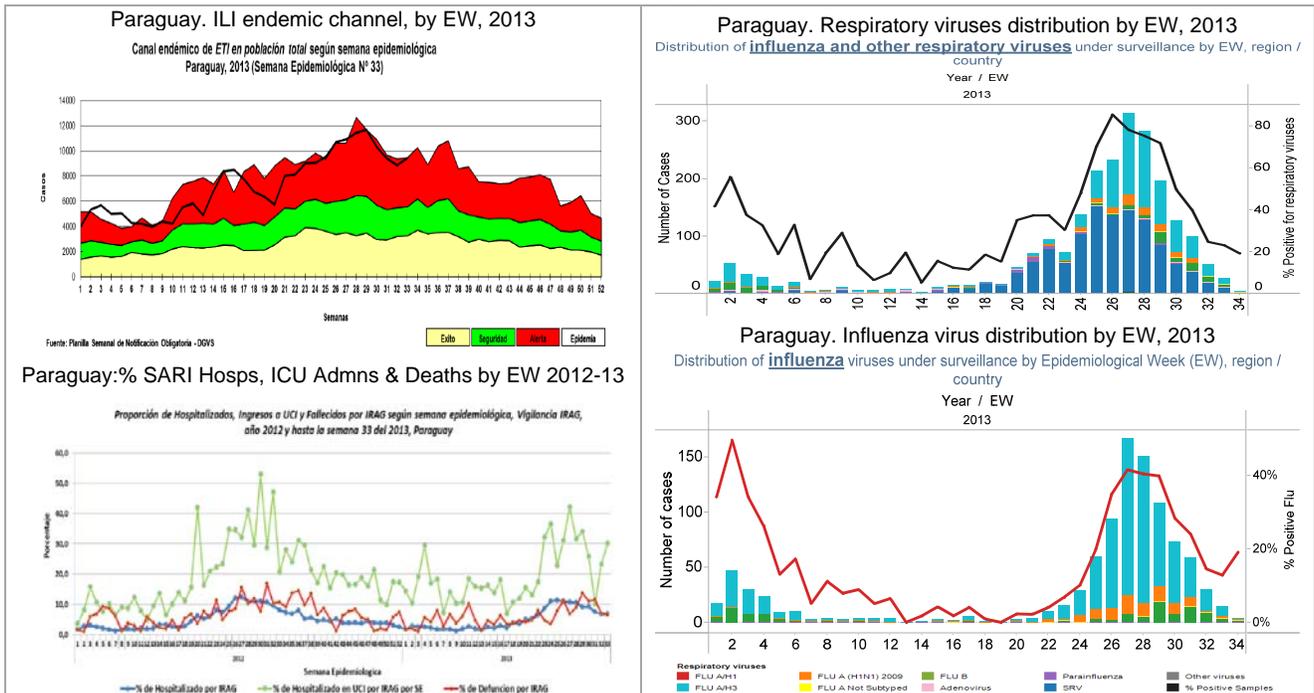
⁸ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 33, 2013.

⁹ Chile. Informe de situación. EW 32. Disponible en: www.pandemia.cl

¹⁰ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 33, 2013

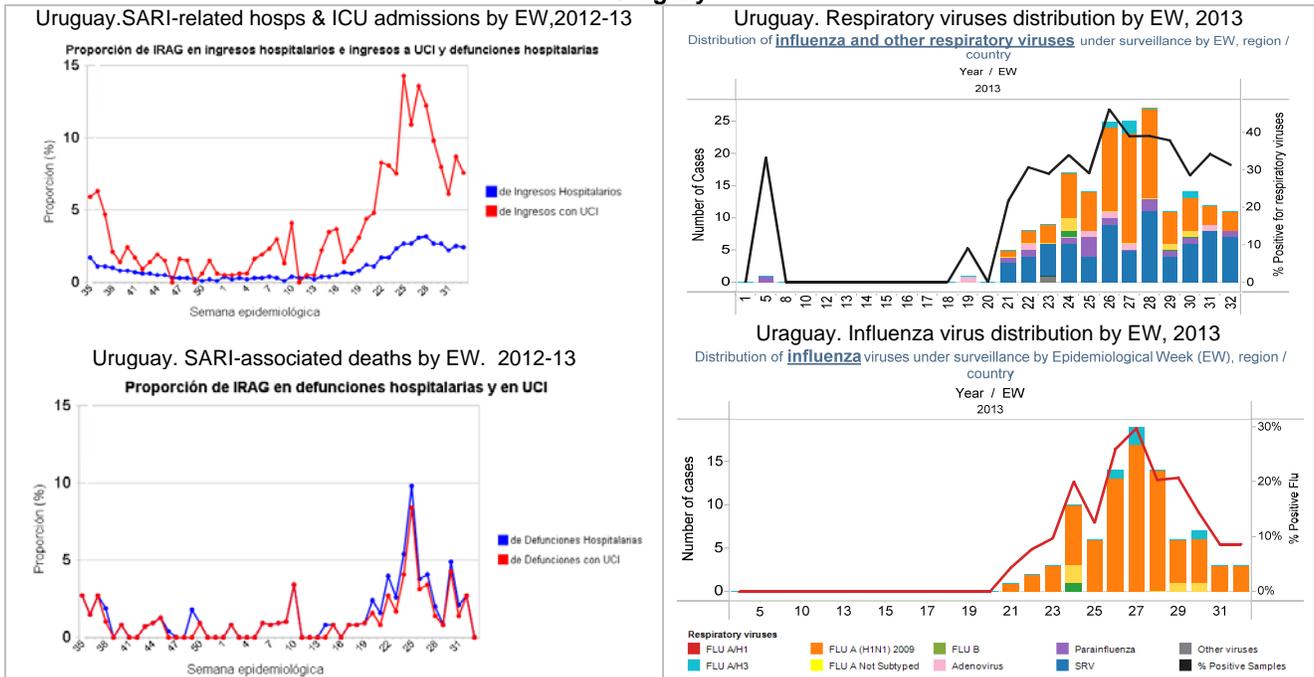
observed during this period last year. Based on reference laboratory data from EW 32-33, 324 samples were analyzed, of which 24% were positive for a respiratory virus and 14% were positive for influenza. There has been decreasing positivity observed since EW 26. Among the positive samples, influenza A(H3N2) (42%), RSV (36%) and influenza B (18%) predominated.

Paraguay



In Uruguay¹¹, nationally during EW 33 the proportion of SARI-associated hospitalizations did not change significantly from the previous EW. No SARI-associated deaths were reported during this time. Based on laboratory data from EW 32-33, 46 SARI samples were analyzed, of which 30% were positive for a respiratory virus and 6.5% were positive for influenza. Among the positive samples, RSV (10/14) and influenza A(H1N1)pdm09 (3/14) predominated.

Uruguay



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