



Regional Update EW 31, 2013

Influenza and other respiratory viruses (August 13, 2013)

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

Influenza Regional Reports: www.paho.org/reportesinfluenza

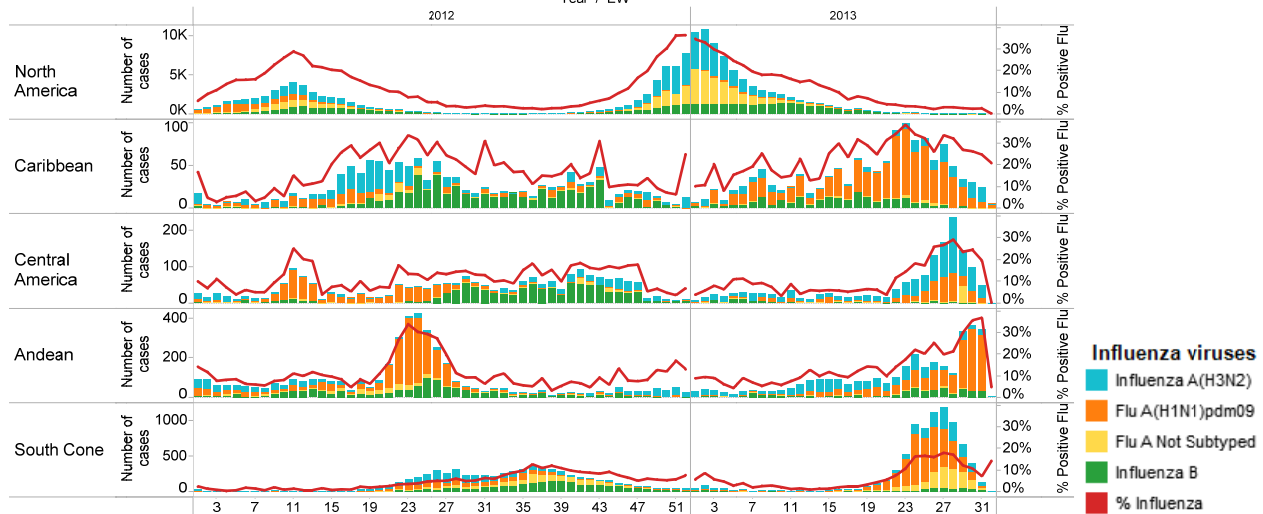
The information presented in this update is based on data provided by Ministries of Health and National Influenza Centers of Member States to the Pan American Health Organization (PAHO) or from updates on the Member States' Ministry of Health web pages.

WEEKLY SUMMARY

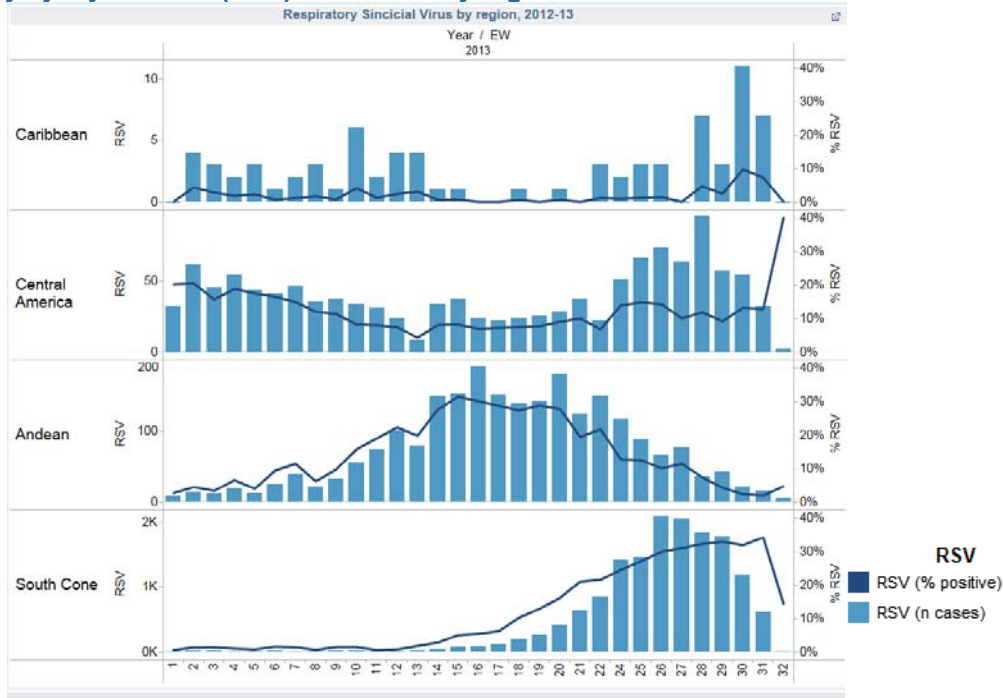
- **North America:** most influenza activity indicators were low and within expected levels for this time of year. In the United States, 1 new case of influenza A(H3N2v) was reported, bringing the total to 16 cases for the summer. One hospitalization and no deaths have been reported. These infections have mostly been associated with prolonged exposure to pigs.
- **The Caribbean and Central America:** acute respiratory virus infections were low and decreasing in this region. Co-circulation of influenza A(H1N1)pmd09 (in the Dominican Republic and Nicaragua) and influenza A(H3N2) (in Cuba, Nicaragua and Panama) were reported. Among other respiratory viruses, RSV continued to predominate in Guatemala and Panama.
- **South America – Andean Countries:** acute respiratory virus infections increased 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 infections were within the expected level for this time of year and all countries, with the exception of Southern Brazil, showed decreasing trends. RSV predominated in most countries with co-circulation of influenza A(H1N1)pmd09 in Argentina, Brazil and Uruguay; and with influenza A(H3N2) in Paraguay and Southern Brazil.

Influenza circulation by region. 2012-2013

Distribution of influenza viruses by region, 2012-13
Year / EW



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

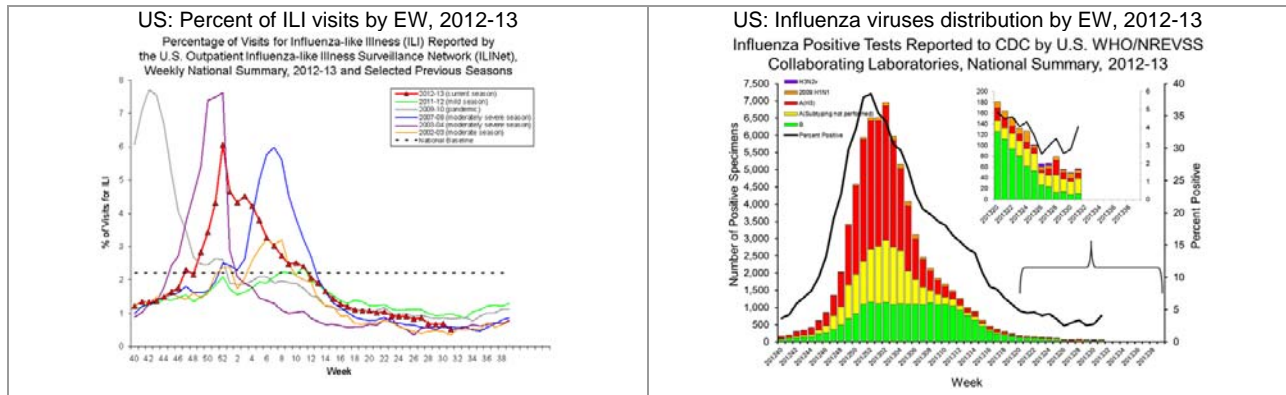


EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America:

In the United States¹ during EW 31, influenza activity remained low with 0.5% of outpatient visits associated with ILI (below the national baseline of 2.2%) and 6.0% of deaths associated with pneumonia and influenza (below the epidemic threshold of 6.2% for this time of year). One influenza-associated pediatric death was reported; it occurred during EW 9 and was associated with influenza B. Based on laboratory data for EW 31, 1,406 samples were tested of which 4.1% were positive for influenza, an increase from the previous week. Among the positive samples, 80% were influenza A (of which 63.6% were not subtyped) and 20% were influenza B. During EW 31, one new human infection with an influenza A(H3N2) variant (H3N2v) was reported, bringing the total number of H3N2v cases reported this summer to 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, 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.

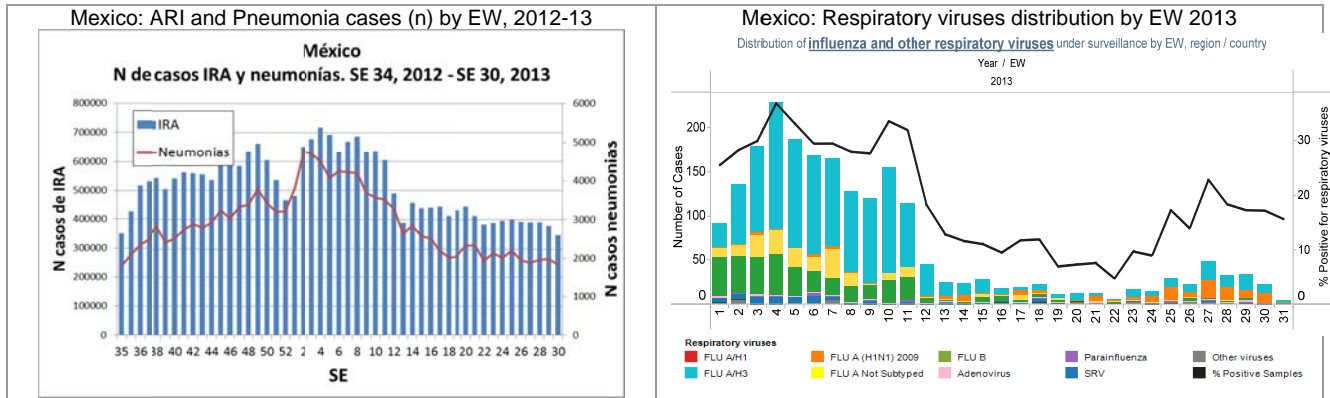
United States



¹ USA: CDC FluView report. EW 31. Available at: <http://www.cdc.gov/flu/weekly/>

In Mexico², nationally during EW 30 the number of reported ARI and pneumonia cases decreased by 8.0% and 7.8%, respectively, continuing decreasing trends since their peaks in 2013 (EW 4 for ARI and EW 2 for pneumonia). The highest ARI rates were reported in Yucatan, Campeche and Zacatecas (588, 557 and 512 per 100,000 inhabitants, respectively), and the highest pneumonia rates were in Jalisco, Campeche, Nuevo Leon and Yucatan (4.2, 3.0, 3.0 and 3.0 per 100,000 inhabitants, respectively). According to laboratory data from EWs 28-31, 537 samples were tested and 15.6% were positive for influenza. Among the positive influenza samples, 94.0% were influenza A (of which 44.3% were A(H1N1)pdm09 and 54.4% were H3N2) and 6.0% were influenza B.

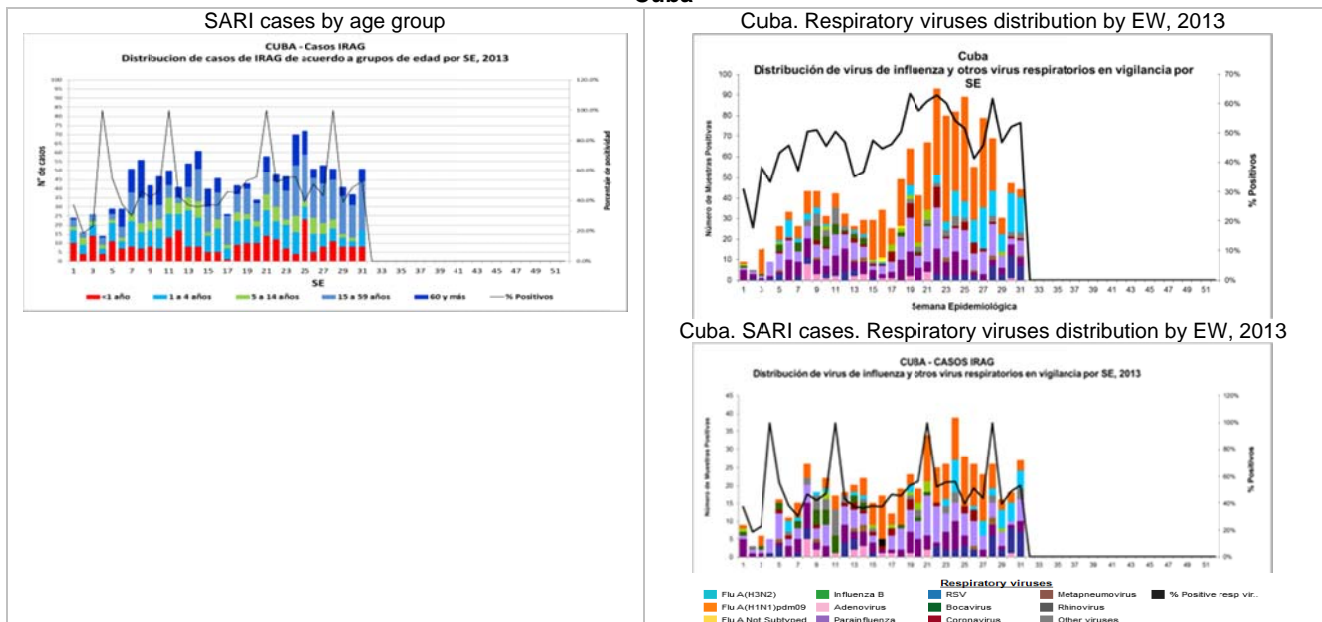
Mexico



Caribbean

In Cuba, based on national laboratory data from EW 28-31, 348 samples were analyzed of which 53.6% were positive for a respiratory virus and 28.6% were positive for influenza. Among the samples positive for influenza A, 60.4% were influenza A(H3N2) (higher than the average reported in the previous weeks (48%)) and 39.6% were influenza A(H1N1)pmd09. Rhinovirus, RSV and parainfluenza were also circulating. In EW 31, among the total positive samples, 38.6% were from ILI cases and 61.3% were from SARI cases. The age group most affected by SARI were those 15-54 years of age. Among the SARI cases between EW 28-31, 155 samples were analyzed, and influenza A(H1N1)pdm09, influenza A(H3N2), RSV, rhinovirus and parainfluenza were detected. No deaths were reported during this period.

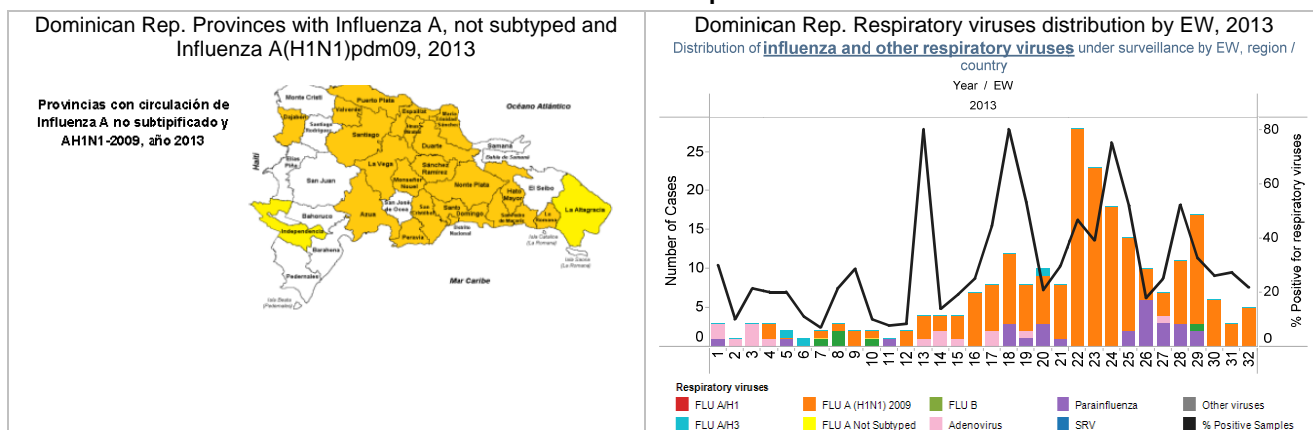
Cuba



² México. Dirección General de Epidemiología. Información epidemiológica. SE 31.

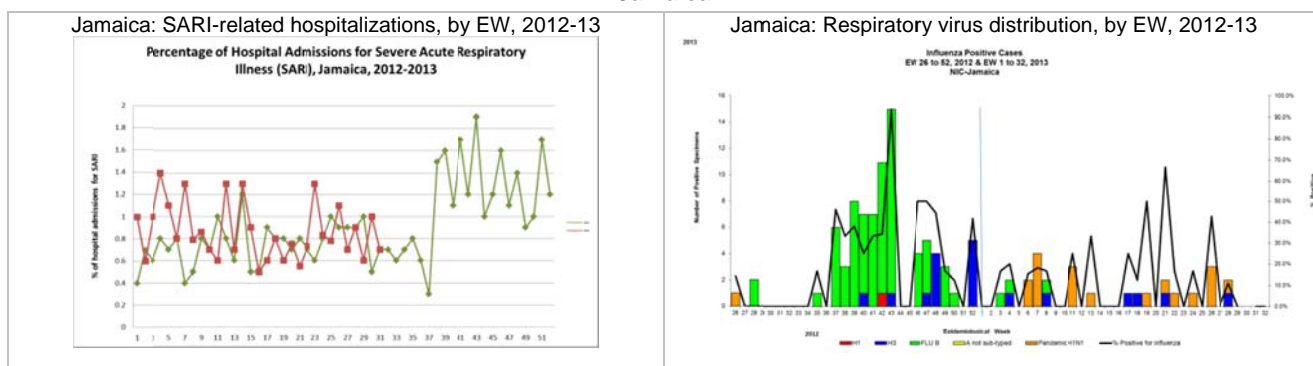
In the Dominican Republic³, from EWs 1-30 a total of 1,405,349 ILI cases were reported (rate: 790 per 10,000 inhabitants). This is 15% less than what was reported for the same period in 2012 (924 per 10,000 inhabitants). Between EWs 1-30, 951 SARI cases were reported through sentinel surveillance, primarily in Santo Domingo, Santiago and San Cristobal provinces. Based on laboratory data from EW 29-32, 109 samples were analyzed, of which 26.9% were positive for influenza. During this time, circulation of influenza A, not subtyped, was identified in La Altagracia, San Pedro de Macoris, Santo Domingo, Santiago and Independencia; influenza A(H1N1)pmd09 was identified in Santo Domingo, National District, Santiago, Espaillat, San Pedro de Macoris and Azua; influenza B was identified in Santo Domingo; and parainfluenza in the National District, Barahona and San Pedro de Macoris. No deaths were reported during EW 30, but there have been 17 deaths reported to date of which 16 were associated with influenza A (H1N1)pdm09 (higher than the number observed in 2012 (n=5)).

Dominican Republic



In Jamaica, sentinel surveillance data showed that for EW 31 the proportion of ARI-associated consultations was 2.3%, a decrease of 0.2% compared to the previous EW. The proportion of SARI-associated hospitalizations was less than 1% and remained stable compared to the previous week. During EW 31, there were no SARI-associated deaths reported and, according to laboratory data, there were no influenza viruses detected.

Jamaica



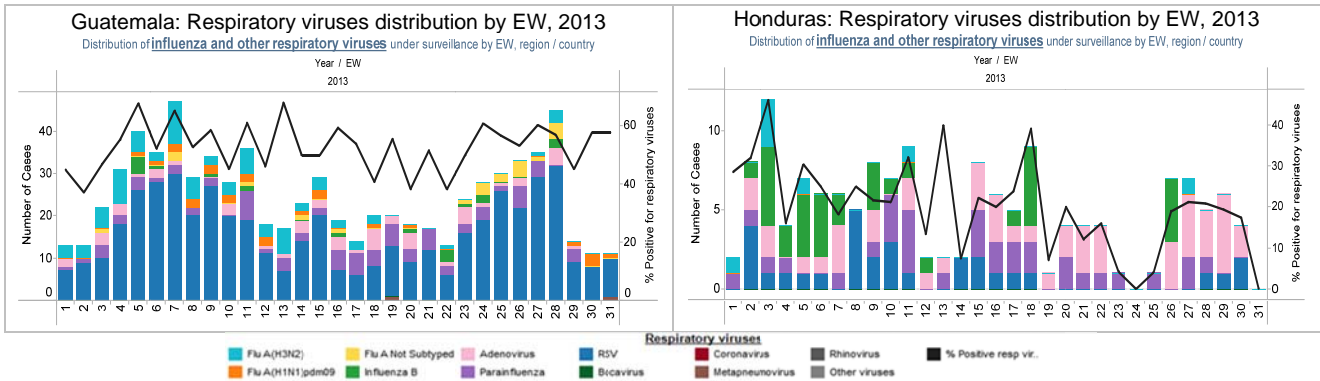
Central America

In Guatemala, based on national laboratory data from EW 28-31, 233 samples were analyzed of which 55.8% were positive for a respiratory virus and 7.3% were positive for influenza. The percent of positive samples increased from 50.9% in EW 30 to 62.5% in EW 31. Among respiratory viruses, RSV (43.8%), adenovirus (3.0%) and parainfluenza (1.3%) predominated. Among samples positive for influenza, 88.2% were influenza A (46.7% were influenza A untyped, 33.3% were influenza A(H1N1)pdm09 and 20.0% were influenza A(H3N2)) and 11.8% were influenza B.

³ República Dominicana. Dirección Nacional de Vigilancia Epidemiológica. Boletín Semanal SE 31.

In Honduras, based on laboratory data from EW 28-31, 82 samples were analyzed, of which 18.3% were positive for a respiratory virus and 0% were positive for influenza. Among the positive samples, adenovirus (12.2%), RSV (4.9%) and parainfluenza (1.2%) predominated.

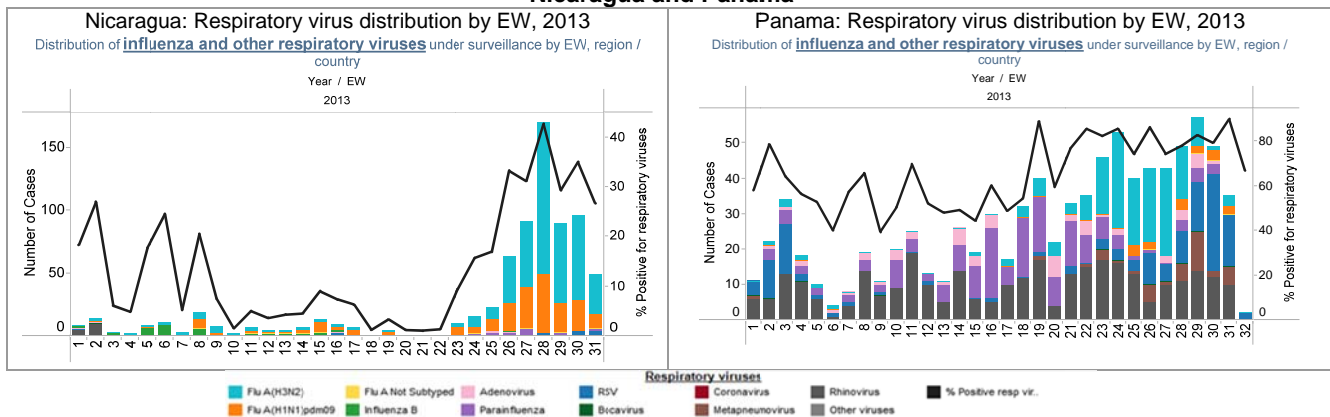
Guatemala and Honduras



In Nicaragua, based on laboratory data from EW 28-31, of the total samples analyzed (n=1,166), the percentage of samples positive for a respiratory virus has decreased since its peak in EW 28 (41.8%) to 23.4% in EW 31. Among positive influenza samples, influenza A(H3N2) (72.8%) predominated, followed by influenza A (H1N1)pdm09 (27.2%).

In Panama, based on national laboratory data from EW 28-31, 233 samples were analyzed of which 81.5% were positive for a respiratory virus and 15.9% were positive for influenza. The percentage of positive samples increased from 77.8% in EW 28 to 89.7% in EW 31. Among positive influenza samples, 100% were influenza A (73% were influenza A(H3N2) and 27% were A(H1N1)pdm09). Among samples positive for other respiratory viruses, RSV (27.9%), rhinovirus (20.2%) and metapneumovirus (9.9%) predominated.

Nicaragua and Panama



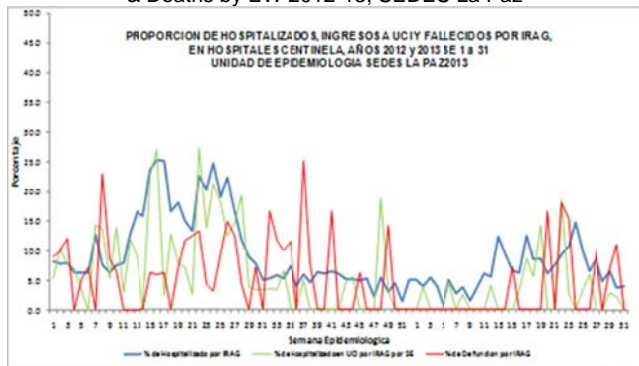
South America – Andean countries

In Bolivia, according to data from Santa Cruz, during EW 31 the proportion of SARI hospitalizations (10.3%) was similar to what was observed during the previous weeks. Based on laboratory data from CENETROP (Santa Cruz) from EW 30-31, 125 samples were analyzed of which 37% were positive for a respiratory virus and 21% were positive for influenza, both showing declining positivity. Among positive samples, influenza A(H1N1)pdm09 (45%) and influenza B (39%) predominated.

According to data from La Paz, during EW 31 the proportion of SARI-associated hospitalizations (4.1%) has shown a decreasing trend since EW 24. Based on laboratory data from INLASA (La Paz) from EW 30-31, 96 samples were analyzed of which 26% were positive for a respiratory virus and 25% were positive for influenza. Among positive samples, influenza A(H1N1)pdm09 (68%) predominated.

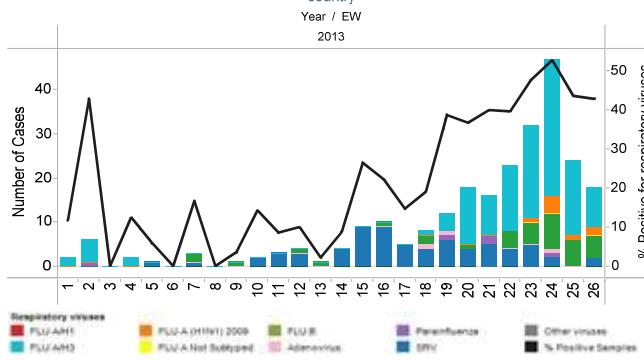
Bolivia

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

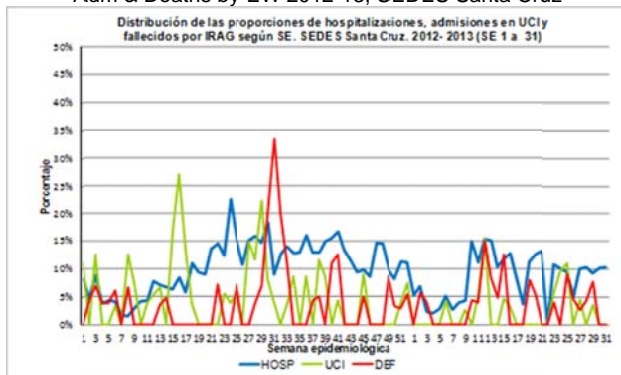


Bolivia (La Paz). INLASA. Respiratory viruses distribution by EW, 2013

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

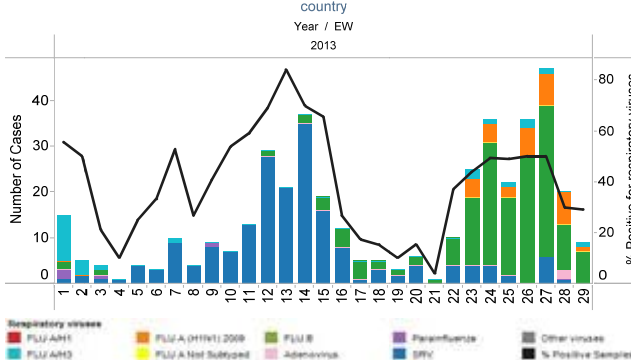


Bolivia (Santa Cruz): Percent SARI related-Hospitalizations, ICU Adm & Deaths by EW 2012-13, SEDES Santa Cruz



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

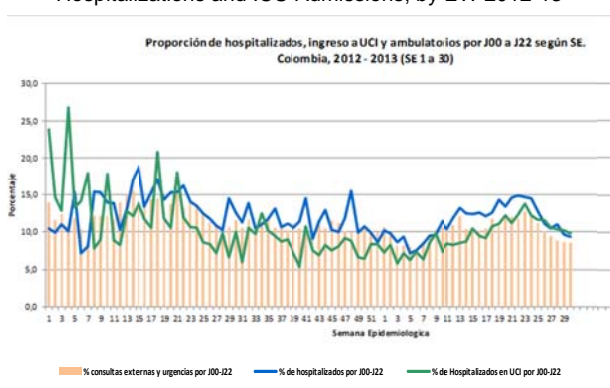
Distribution of influenza and other respiratory viruses under surveillance by EW, region / country



In Colombia, nationally during EW 30, the proportions of SARI outpatient visits (8.5%), SARI hospitalizations (9.8%), and SARI ICU admissions (10.2%) (based on J00 and J22 codes) decreased compared to the previous week, and have been showing a decreasing trend since EW 23. Based on INS national laboratory data from EW 31-32, 413 samples were analyzed, of which 15% were positive for a respiratory virus and 11% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (59%) predominated.

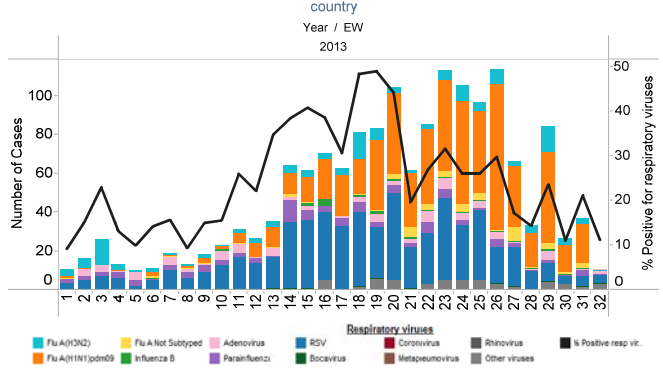
Colombia

Colombia: Percent SARI-related Outpatient visits, Hospitalizations and ICU Admissions, by EW 2012-13



Influenza and ORV distribution by EW, 2013

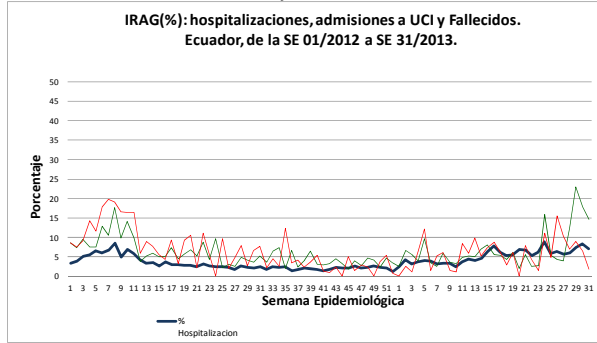
Distribution of influenza and other respiratory viruses under surveillance by EW, region / country



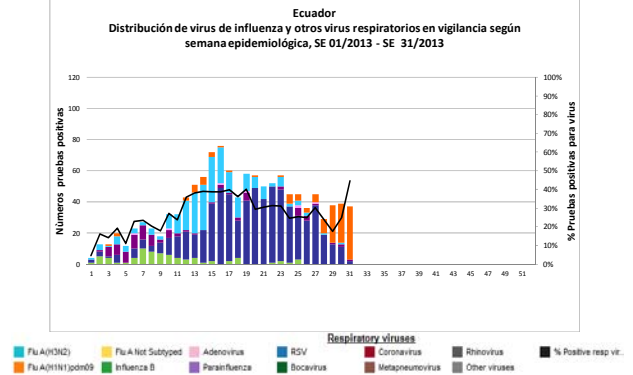
In Ecuador, SARI sentinel surveillance data from EW 31 indicated that the proportion of SARI hospitalizations (7%), ICU admissions (15%) and deaths (2%) decreased compared to the previous EW. Based on National Reference Laboratory data from EW 30-31, 239 samples were analyzed, of which 32% were positive for a respiratory virus and 25% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (78%) predominated and showed an increasing trend.

Ecuador

Ecuador: % SARI-related Hospitalizations, ICU Admissions & Deaths by EW 2012-13



Ecuador. Influenza and ORV distribution by EW, 2013

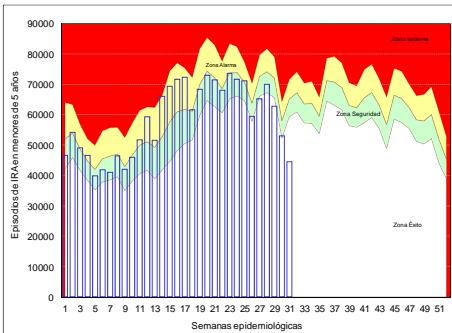


In Peru⁴, nationally for the previous weeks ARI and pneumonia reports in children less than 5 years of age have been decreasing and are within the expected range for this time of year. Based on national laboratory data from EW 31, 592 samples were analyzed, of which 48% were positive for a respiratory virus and 45% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (74%) predominated.

Peru

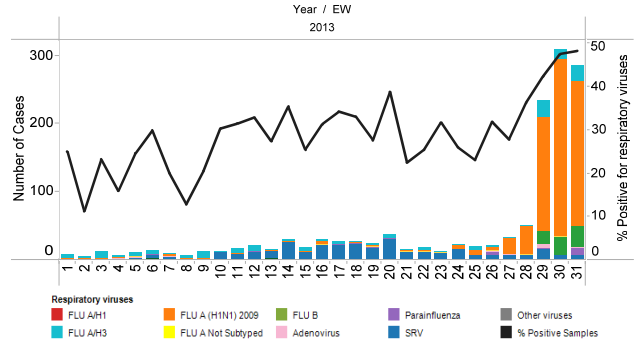
Peru. ARI endemic channel among children < 5 yrs, 2013

Canal endémico de Infecciones Respiratorias Agudas (IRA) en menores de 5 años, Perú SE 31, 2013



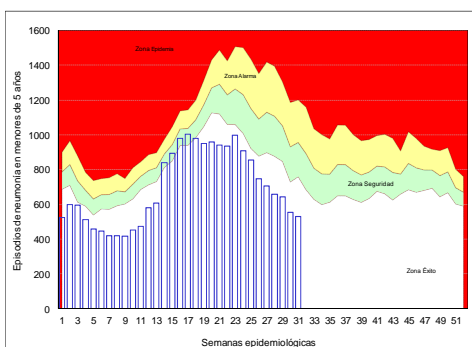
Perú. Respiratory viruses distribution by EW, 2013

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



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

Canal endémico de neumonías en menores de 5 años, Perú SE 31, 2013

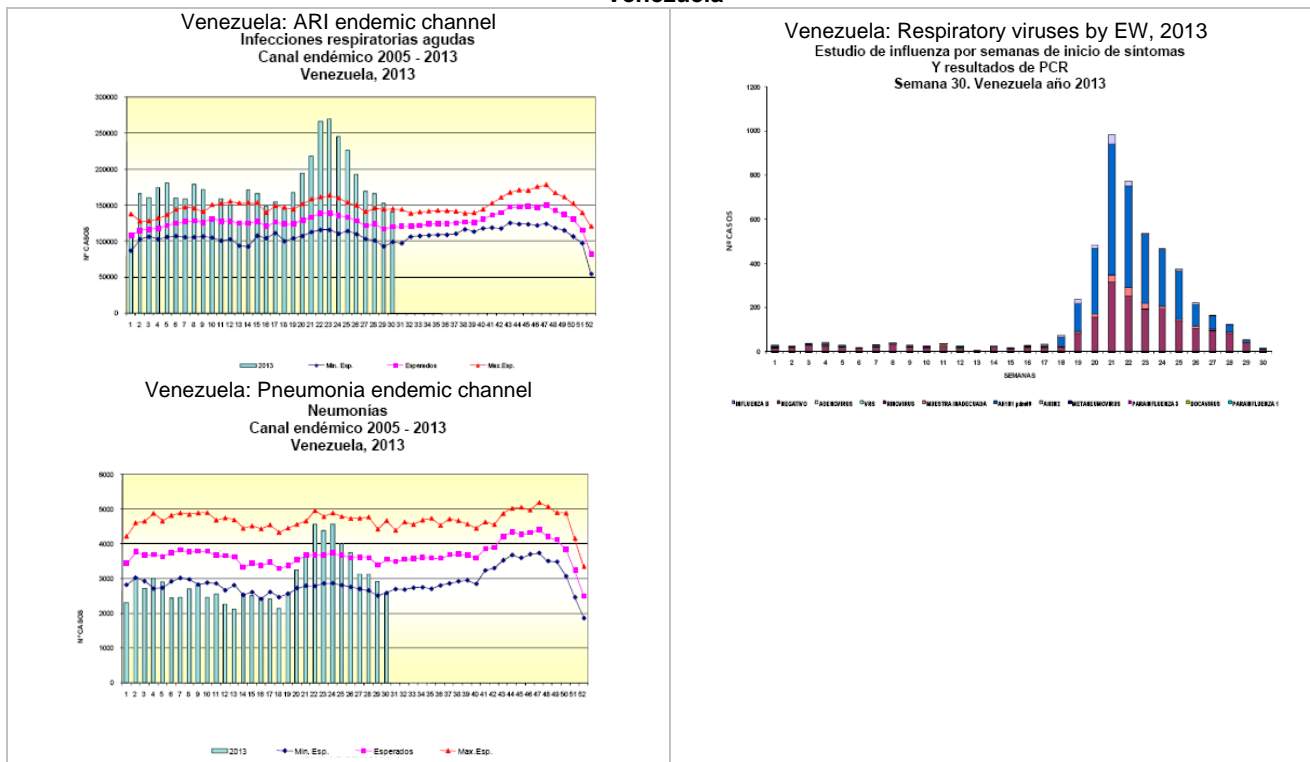


In Venezuela⁵, during EW 30, ARI activity decreased compared to the previous EW, showing a decreasing trend and remaining within the expected levels for this time of year. Similarly, pneumonia notifications showed a decreasing trend and were also within the expected levels for this time of year. Based on virologic surveillance data, there continues to be a decrease in samples processed for respiratory viruses observed since EW 21.

⁴ Perú. Sala de Situación de Salud. EW 31, 2013. Ministerio de Salud. Dirección General de Epidemiología

⁵ Venezuela. Boletín epidemiológico, EW 31, 2013.

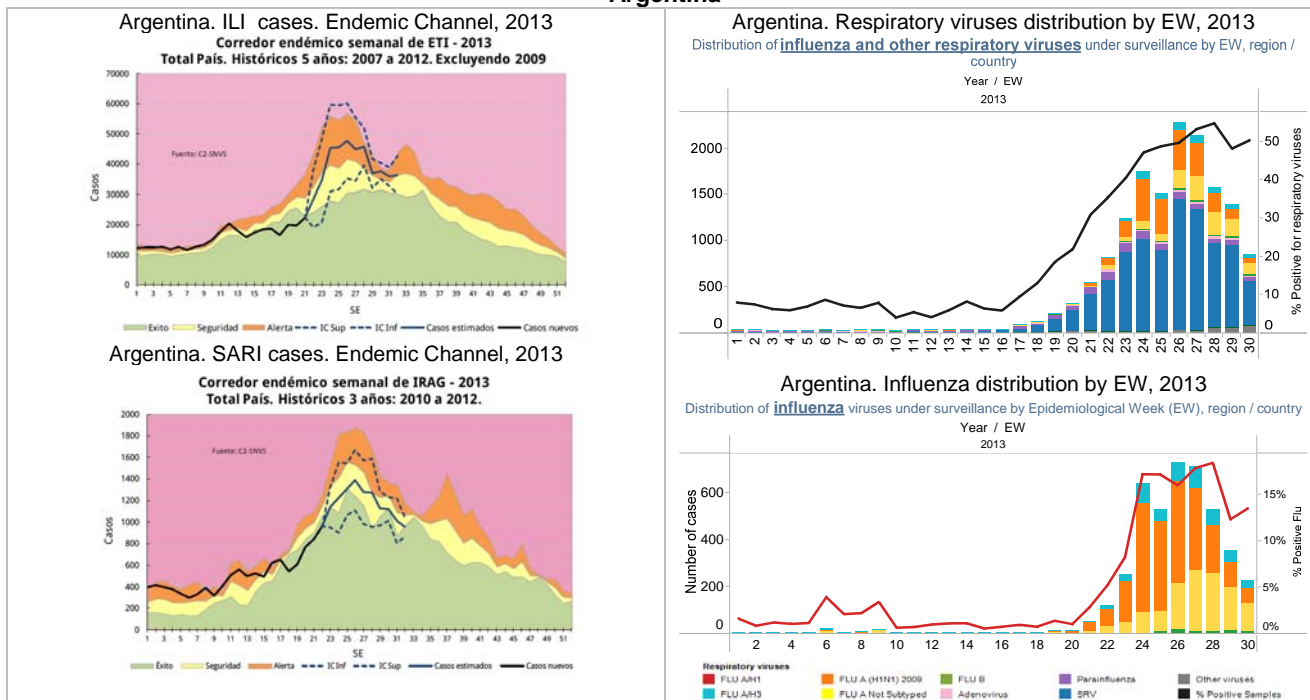
Venezuela



South America – Southern Cone and Brazil

In Argentina⁶, at the national level, according to reports and calculated estimations, the number of ILI reports is within the expected level and is showing a decreasing trend. Based on laboratory data from EW 30, 1,700 samples were analyzed, of which 50% were positive for a respiratory virus and 13% were positive for influenza. Among the positive samples, RSV (57%), and influenza A(H1N1)pdm09 and influenza, not subtyped (21%) predominated.

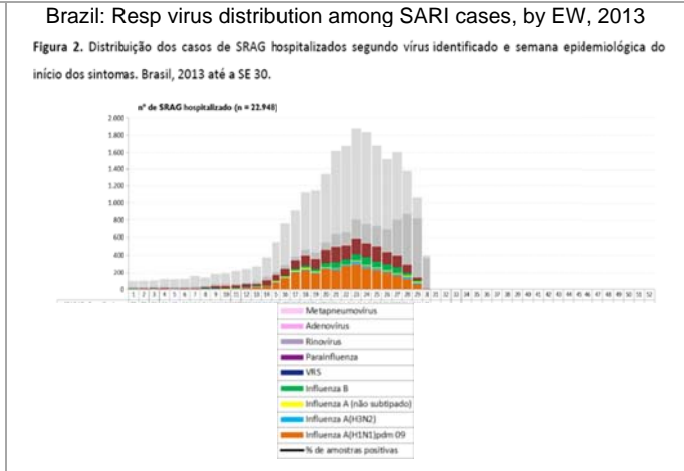
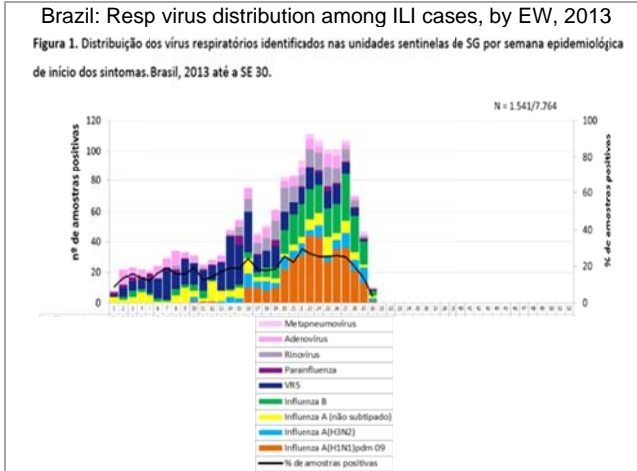
Argentina



⁶ Argentina. Boletín integrado de vigilancia. SE 31.

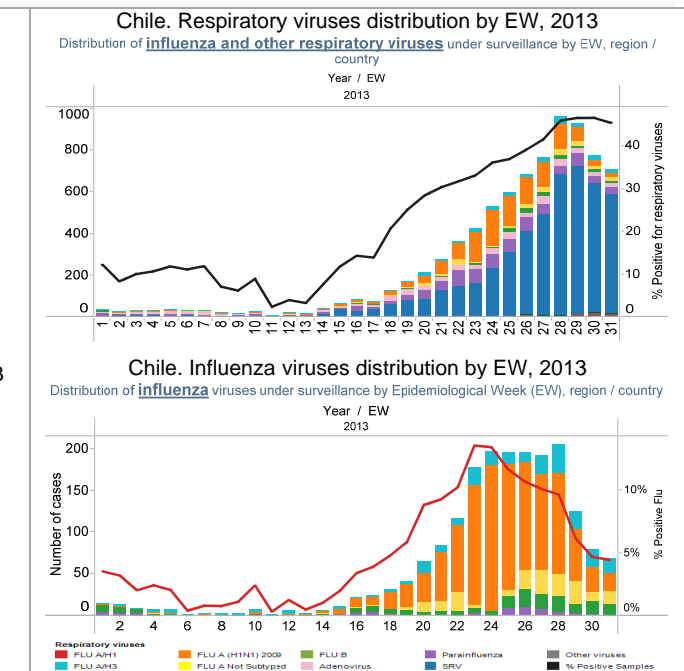
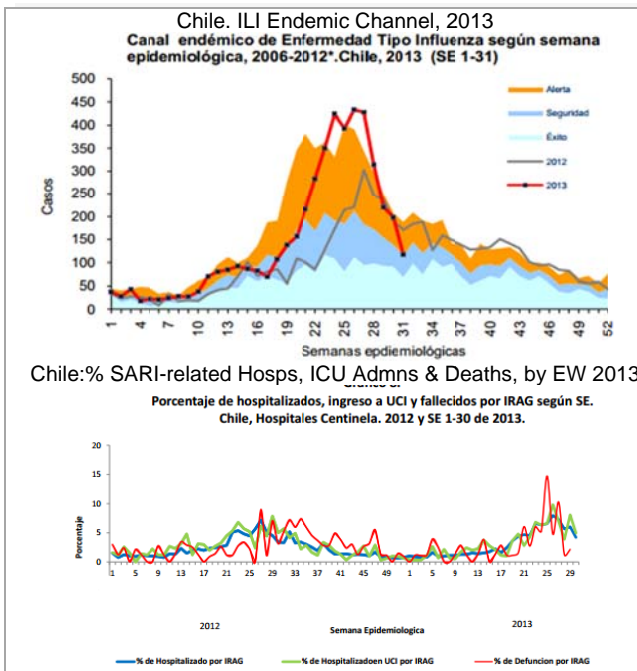
In Brazil⁷, according to sentinel surveillance data through EW 30, 7,764 samples were analyzed, of which 19.8% were positive for a respiratory virus. Among positive samples, RSV has predominated since the beginning of the year, and influenza A(H1N1)pdm09 and influenza B have had increased circulation 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, 22,948 cases were reported, of which 18.3% were positive for influenza. Although influenza A(H1N1)pdm09 has been increasing since SE 12, influenza B is currently co-circulating.

Brazil



In Chile⁸, during EW 31, ILI activity (rate: 7.4 per 100,000 inhabitants) decreased compared to the previous EW, and entered the safety zone of the endemic channel. Sub-nationally, the majority of regions continued a decreasing trend, with the exception of Araucania where activity increased compared to the previous EW. Similarly, the proportion of SARI-associated hospitalizations (4.2%) has been declining since EW 26. Based on laboratory data from EW 31, 1,560 samples were analyzed, of which 45% were positive for a respiratory virus and 4% were positive for influenza. Among the positive samples, RSV predominated (81%).

Chile

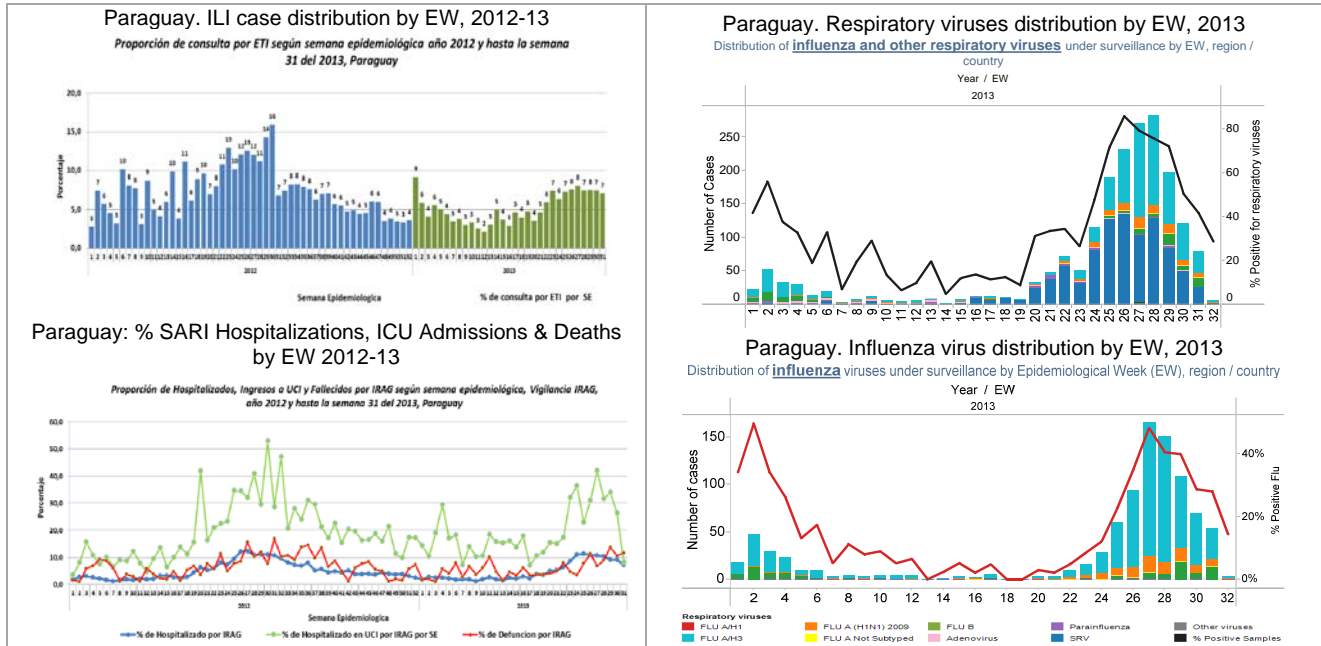


⁷ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 31, 2013.

⁸ Chile. Informe de situación. EW 30. Disponible en: www.pandemia.cl

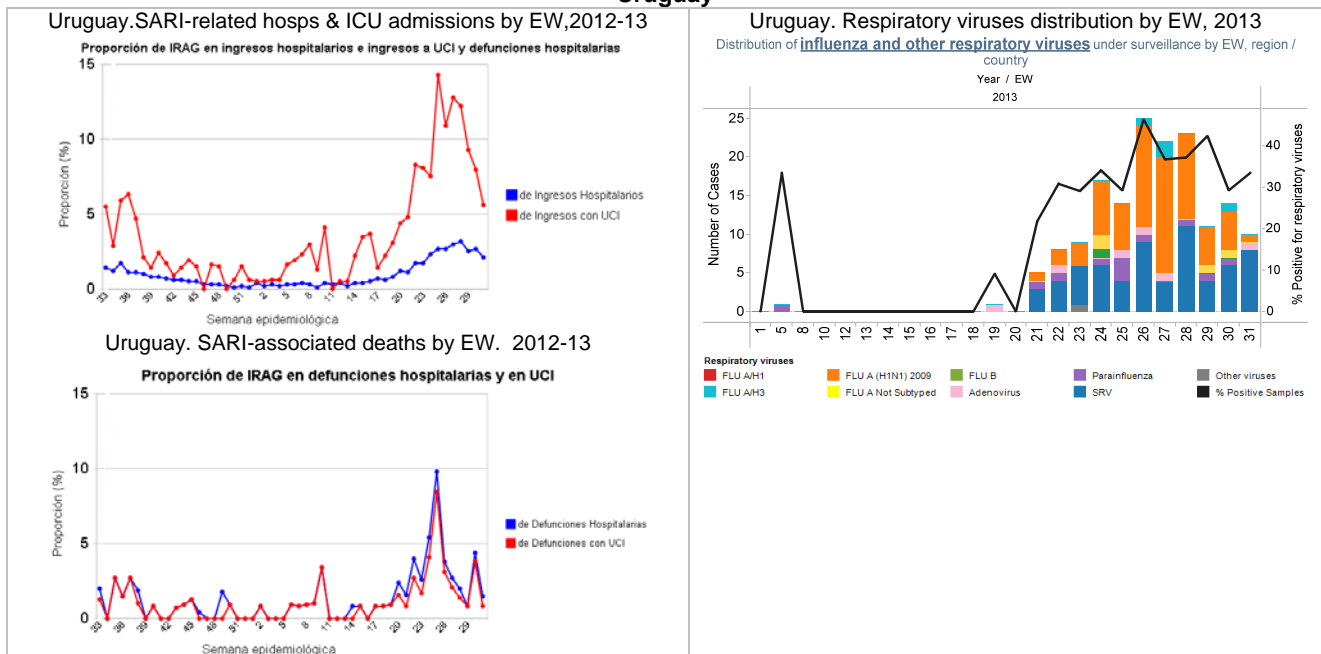
In Paraguay⁹, during EW 31, ILI activity (rate: 141 per 100,000 inhabitants) decreased compared to the previous EW, and remained within the alert zone of the endemic channel. The proportion of ILI consultations (7%) and SARI hospitalizations (7%) did not change significantly. Based on reference laboratory data from EW 31, 190 samples were analyzed, of which 42% were positive for a respiratory virus and 28% were positive for influenza. Among the positive samples, influenza A(H3N2) (40%) and RSV (33%) predominated. RSV and influenza A(H3N2) also predominated among the respiratory samples collected from SARI sentinel sites.

Paraguay



In Uruguay¹⁰, nationally the proportions of SARI-associated hospitalizations and ICU admissions, were lower than the previous EW and have been showing a decreasing trend since EW 28. Based on laboratory data from EW 30-31, 78 SARI samples were analyzed, of which 31% were positive for a respiratory virus and 10% were positive for influenza. Among the positive samples, RSV (14/24) and influenza A(H1N1)pdm09 (6/24) predominated.

Uruguay



⁹ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 31, 2013

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