



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

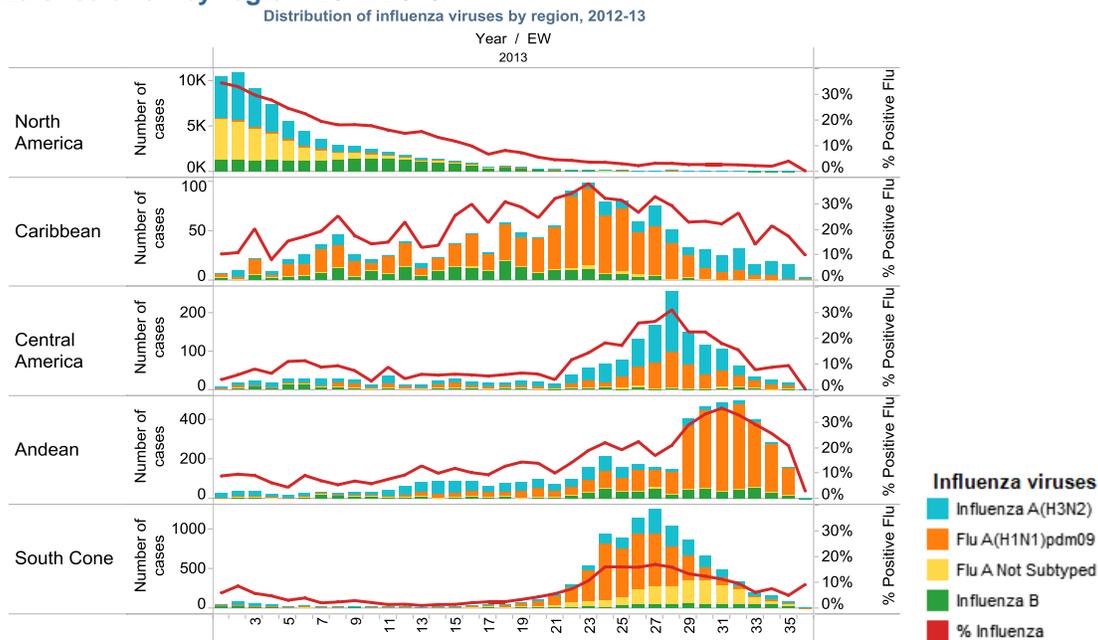
Influenza Regional Reports: www.paho.org/reportesinfluenza

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.

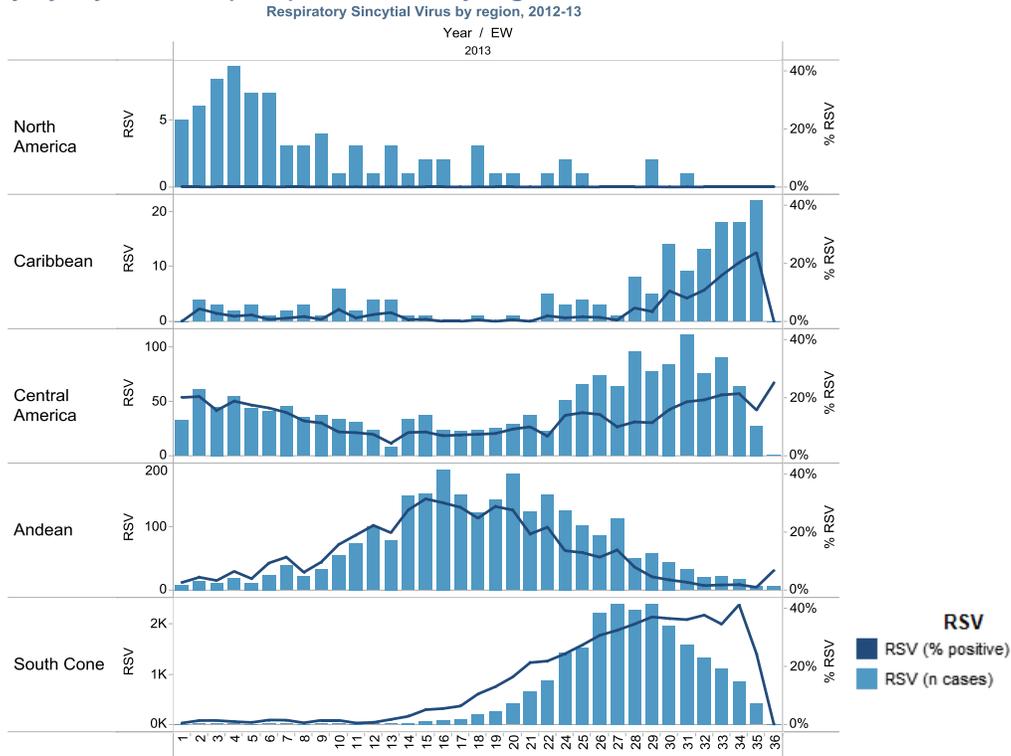
WEEKLY SUMMARY

- **North America:** most influenza activity indicators were low and within expected levels for this time of year. In the United States, one new case of influenza A(H3N2v) was reported, bringing the total to 18 cases 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. In the majority of countries, co-circulation of influenza A(H3N2) and A(H1N1)pdm09 was reported, with the exception of Honduras, where influenza B predominated. Among other respiratory viruses, RSV continued to predominate throughout the region.
- **South America – Andean Countries:** acute respiratory virus activity remained elevated with a predominance of influenza A(H1N1)pdm09. Activity in Santa Cruz (Bolivia) increased however, activity in Peru and Ecuador decreased. In Colombia activity continued to decrease and in Venezuela no respiratory viruses were detected in the samples processed during the last few weeks.
- **South America - South Cone and Brazil:** acute respiratory virus activity was within the expected level for this time of year in all countries except Paraguay where ILI activity was elevated. RSV predominated in most countries with co-circulation of influenza B and A(H3N2) in Paraguay. In Southern and Southeastern Brazil circulation of influenza A(H1N1)pdm09 and influenza B decreased.

Influenza circulation by region. 2012-2013



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

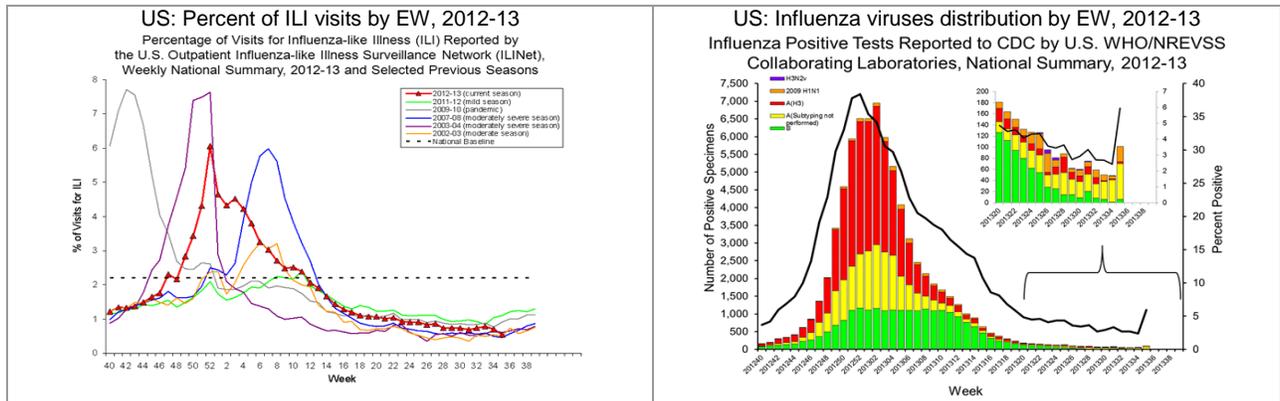


EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America:

In the United States¹ during EW 35, influenza activity remained low with 0.6% of outpatient visits associated with ILI and 5.6% of deaths associated with pneumonia and influenza. One influenza-associated pediatric death was reported during EW 35. The death occurred during EW 6 and was associated with influenza B. Based on laboratory data for EW 35, 1,694 samples were tested of which 6.0% were positive for influenza, an increase from the previous week. Among the positive samples (n=101), 94.1% were influenza A (of which 63.4% were not subtyped and 26.7% were A(H1N1)pdm09) and 5.9% were influenza B. One new human infection with an influenza A(H3N2) variant (H3N2v) was reported during EW 35. The total number of H3N2v cases reported this summer is 18 (Illinois: 1, Indiana: 14, Michigan: 2, 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.

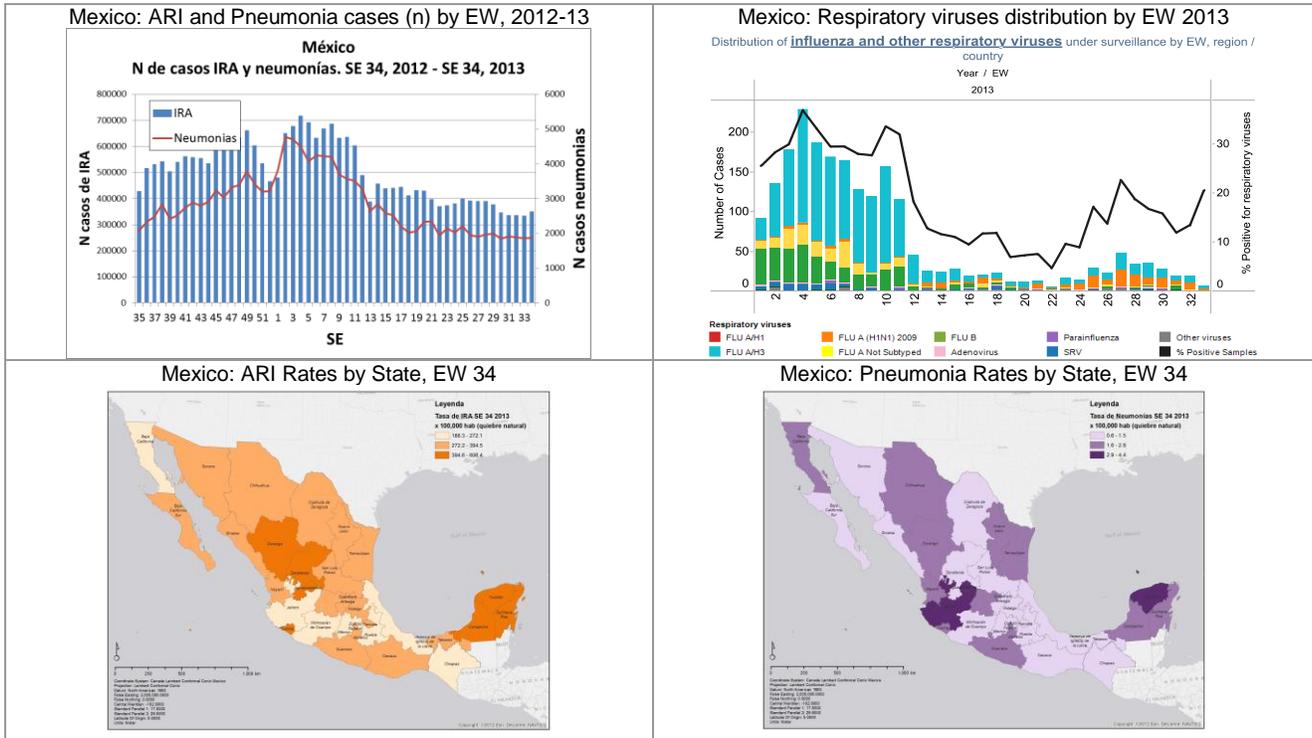
United States



¹ USA: CDC FluView report. EW 35. Available at: <http://www.cdc.gov/flu/weekly/>

In Mexico², nationally during EW 35 the number of ARI and pneumonia cases increased by 4.9% and 1.1%, respectively compared to the previous EW. However, both are showing decreasing trends since their peaks in early 2013 (EW 4 for ARI and EW 2 for pneumonia). According to laboratory data from EW 32-33, 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 56.5% were A(H3N2) and 43.5% were A(H1N1)pdm09) and 8.0% were influenza B.

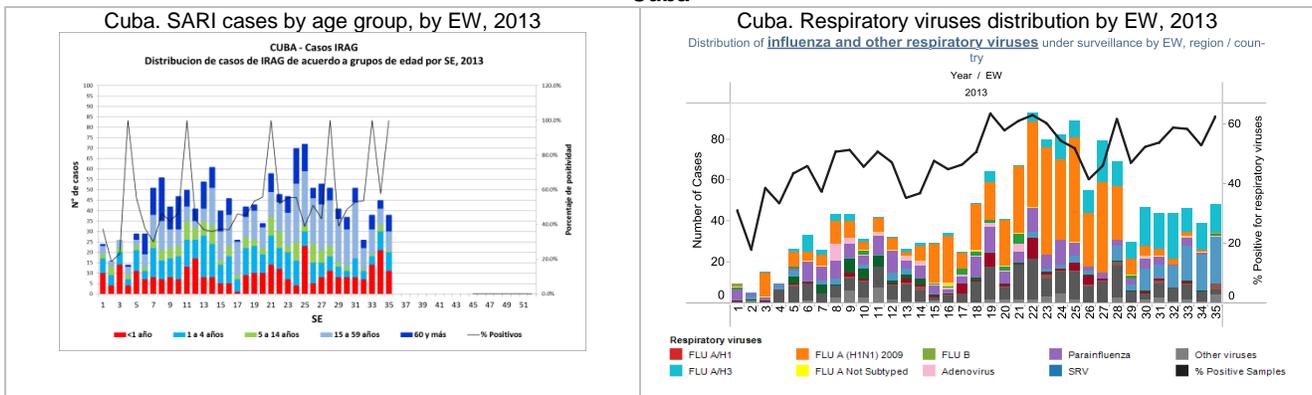
Mexico



Caribbean

In Cuba during EW 35, children less than one year of age comprised the largest proportion of SARI cases. No SARI-associated deaths were reported during this period. According to national laboratory data for EW 32-35, 305 samples were analyzed, of which 58% were positive for a respiratory virus and 22% were positive for influenza. Of the total positive samples, 41% were from ILI cases and 56% were from SARI cases. Among all samples positive for influenza A, A(H3N2) predominated (91.4%) followed by influenza A(H1N1)pdm09 (8.6%). RSV, rhinovirus and parainfluenza were also circulating. Among the samples analyzed from SARI-patients during EW 32-35 (n=134), RSV and influenza A(H3N2) were primarily detected.

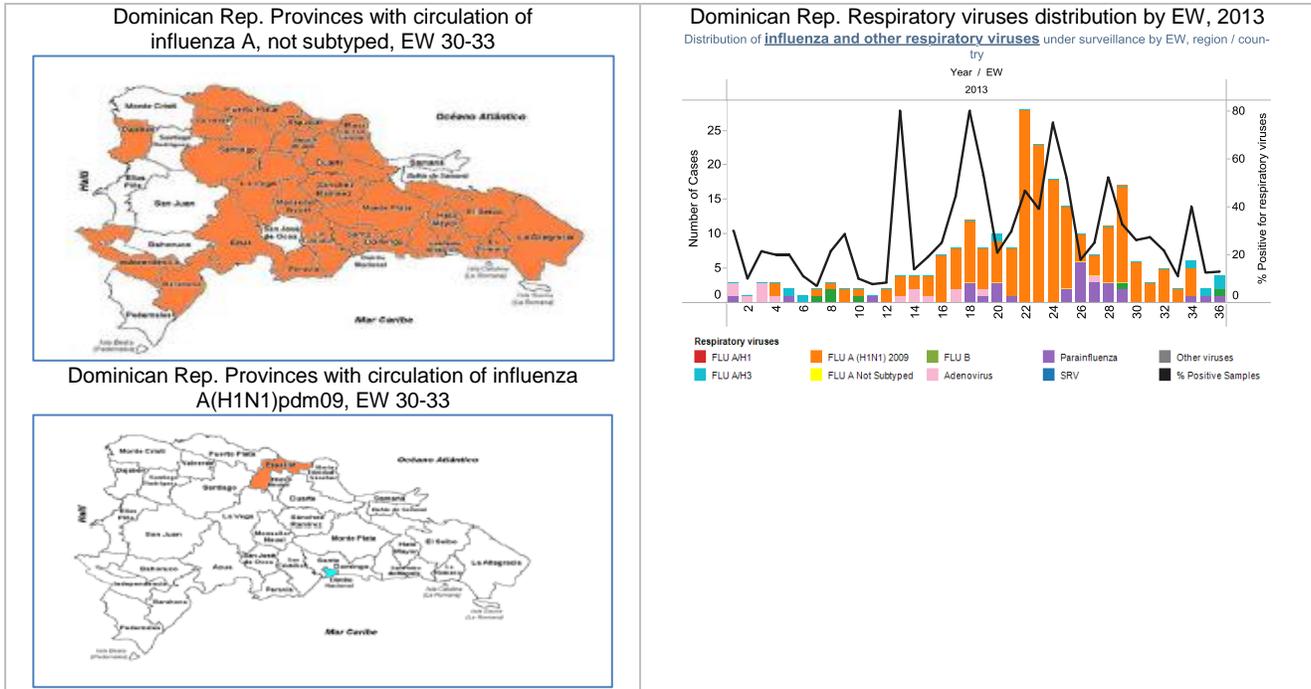
Cuba



² México. Dirección General de Epidemiología. Información epidemiológica. SE 35.

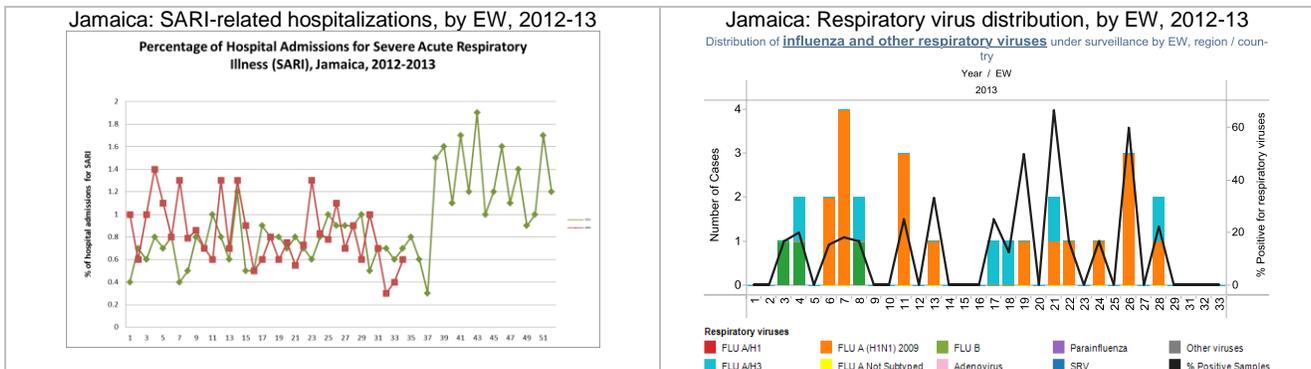
In the Dominican Republic³, from EW 1-34 a total of 1,576,975 ILI cases were reported (rate: 1,005 per 10,000 inhabitants). This is 14% less than what was reported for the same period in 2012 (1,174 per 10,000 inhabitants). Between EWs 1-34, 1,098 SARI cases were reported through sentinel surveillance, primarily in Santo Domingo, Santiago and San Cristobal provinces. There were no SARI-associated deaths reported during EW 33, however 24 SARI-associated deaths have been reported this year (compared to 5 in 2012). According to laboratory data for EWs 33-36, 80 samples were analyzed, of which 19.1% were positive for a respiratory virus and 15.1% were positive for influenza. Circulation of influenza A(H3N2), A(H1N1)pmd09 and parainfluenza was identified.

Dominican Republic



In Jamaica, based on sentinel surveillance data for EW 34, the proportion of ARI-associated consultations was 2.2% and was similar to 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.

Jamaica



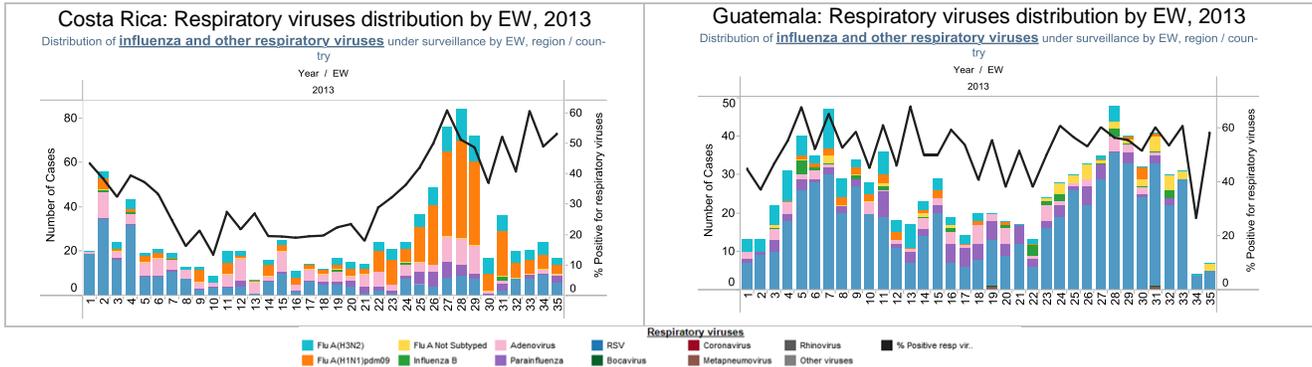
Central America

In Costa Rica, based on national laboratory data from EWs 32-35, 163 samples were analyzed, of which 49.7% were positive for a respiratory virus and 25.2% were positive for influenza. Among samples positive for a respiratory virus, RSV (19.6%) predominated followed by parainfluenza (3.1%) and adenovirus (1.8%). Among samples positive for influenza, 100% were influenza A (of which 56.1% were A(H1N1)pmd09 and 43.9% were A(H3N2)).

³ República Dominicana. Dirección Nacional de Vigilancia Epidemiológica. Boletín Semanal SE 35.

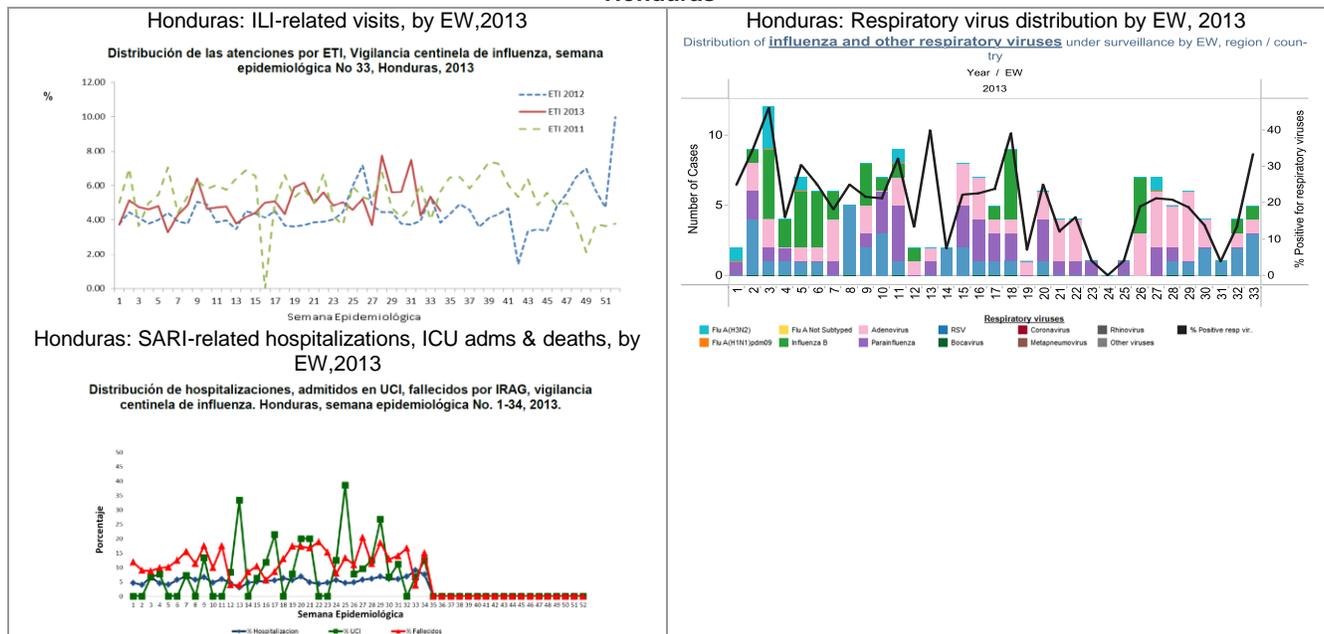
In Guatemala, influenza activity has decreased since peaking in SE 28. Based on laboratory data from EWs 32-34, 134 samples were analyzed of which 53.7% were positive for a respiratory virus and 7.5% were positive for influenza. Among the samples positive for other respiratory viruses, RSV (44.8%) predominated, followed by parainfluenza (1.5%). Among samples positive for influenza, 80.0% were influenza A (of which 100% were influenza A, not subtyped) and 20.0% were influenza B.

Costa Rica and Guatemala



In Honduras⁴, based on sentinel surveillance during EW 34, ILI accounted for 4.5% of outpatient visits, a decrease compared to EW 33 (5.3%). The proportion of SARI-associated hospitalizations was 7.6%, also a decrease compared to the previous EW (9.0%). Among all deaths during EW 34, 15.1% were SARI-associated (11/73). Based on national laboratory data for EW 31-34, 100 samples were analyzed, of which 14.0% were positive for respiratory viruses and 2.0% were positive for influenza. Among the samples positive for a respiratory virus, RSV (8.0%) and adenovirus (4.0%) predominated. Among samples positive for influenza, 100% were influenza B.

Honduras



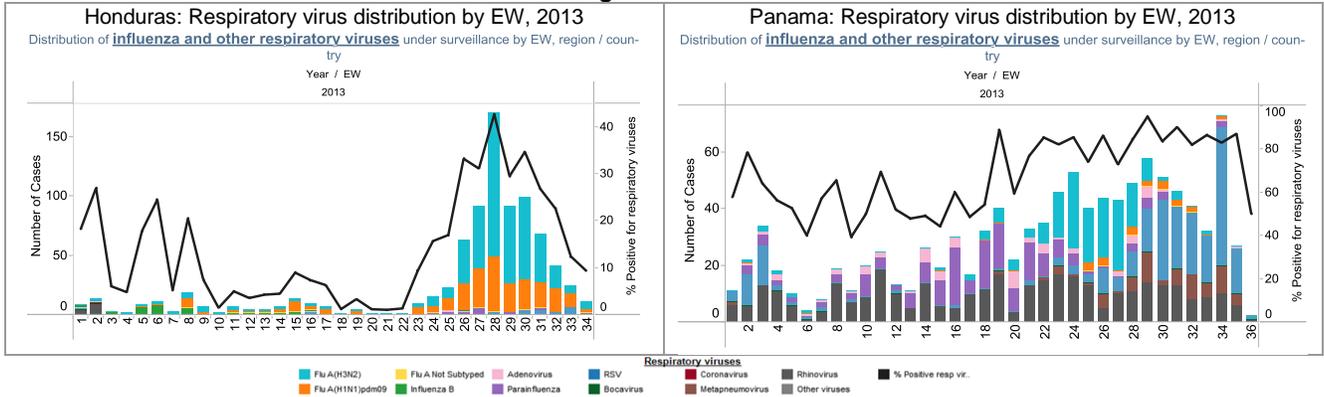
In Nicaragua, according to intensified sentinel surveillance data from EW 35, the decrease in SARI cases observed since the peak in EW 28 continued. Based on national laboratory data from EW 32-35, 625 samples were analyzed, of which 13.9% were positive for a respiratory virus and 12.0% were positive for influenza. Among samples positive for influenza, 100% were influenza A (of which 50.7% were A(H1N1)pdm09 and 49.3% were A(H3N2)).

In Panama, according to national laboratory data from EW 32-35, 206 samples were analyzed, of which 84% were positive for a respiratory virus and 1.9% were positive for influenza. Among samples positive for a respiratory virus, RSV predominated (50.5%), followed by rhinovirus (16.0%) and metapneumovirus (13.6%).

⁴ Honduras. Influenza Bulletin, EW 34

Among samples positive for influenza, 100% were influenza A (of which 75.0% were A(H1N1)pmd09 and 25.0% were A(H3N2)).

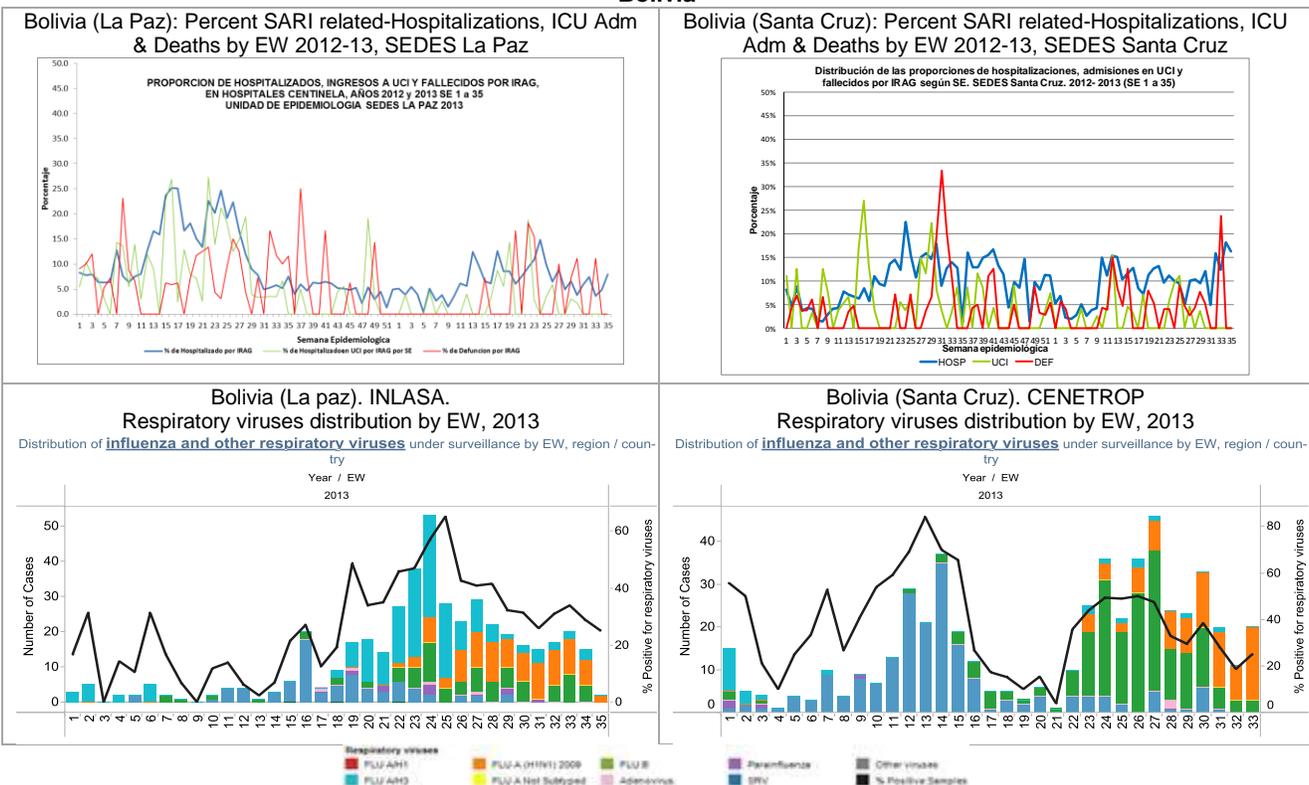
Nicaragua and Panama



South America – Andean countries

In Bolivia, according to data from Santa Cruz during EW 35, the proportion of SARI hospitalizations (16%) has been showing an increasing trend for the previous few EWs. Based on laboratory data from CENETROP (Santa Cruz) during EW 33-34, 169 samples were analyzed of which 29% were positive for a respiratory virus. Among the positive samples, influenza A(H1N1)pdm09 (89%) predominated. According to data from La Paz, the proportion of SARI-associated hospitalizations (7.9% in EW 35) has remained stable since EW 28. Based on laboratory data from INLASA (La Paz) from EW 34-35, 95 samples were analyzed of which 36% were positive for influenza. Among positive samples, influenza A(H1N1)pdm09 (56%) and influenza B (32%) predominated.

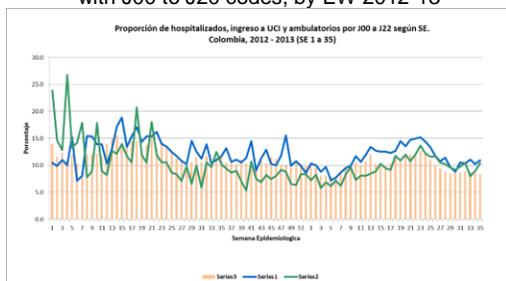
Bolivia



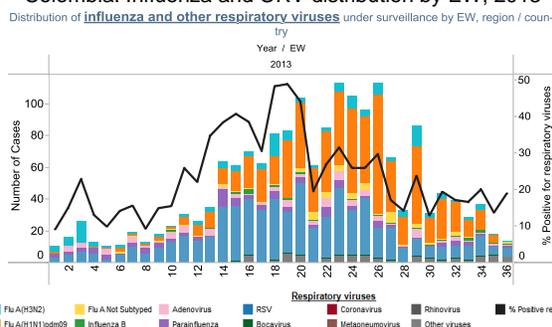
In Colombia, nationally during EW 35, the proportions of outpatient visits (8.4%), hospitalizations (11%), and ICU admissions (10.4%) with ARI-associated ICD-10 codes (J00 to J22) did not change significantly from the previous EW. and are similar to what was observed during this same period last year. Based on INS national laboratory data from EWs 34-35, 317 samples were analyzed, of which 17.4% were positive for a respiratory virus and 7.6% were positive for influenza. Among the positive samples, RSV (33%) and influenza A(H1N1)pdm09 (31%) predominated.

Colombia

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



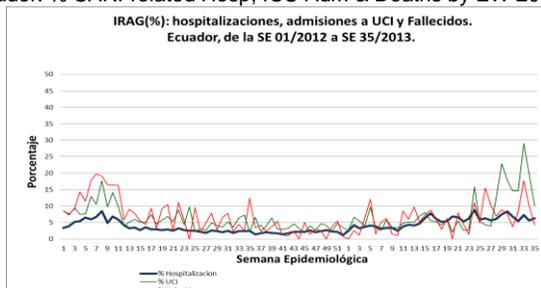
Colombia: Influenza and ORV distribution by EW, 2013



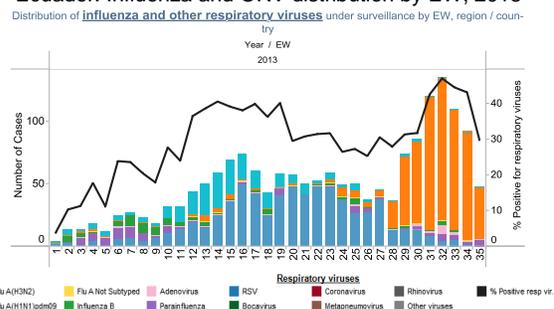
In Ecuador, based on SARI surveillance data from EW 35, the proportion of SARI-associated hospitalizations (6%) did not change significantly from the previous week, but exceeded the values observed during this same period last year. The proportion of ICU admissions (10%) decreased from the previous EW, but continued to show an increasing trend. Based on national reference laboratory data from EW 34-35, 288 SARI samples were analyzed, of which 29% were positive for a respiratory virus and 26% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (88%) predominated. Since the beginning of the year there have been 49 SARI-associated deaths with a confirmed respiratory virus. Among these, influenza A(H1N1)pdm09 (31%), influenza A(H3N2) (24%) and RSV (22%) predominated.

Ecuador

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



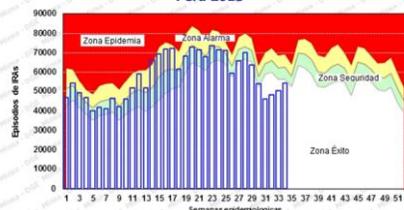
Ecuador: Influenza and ORV distribution by EW, 2013



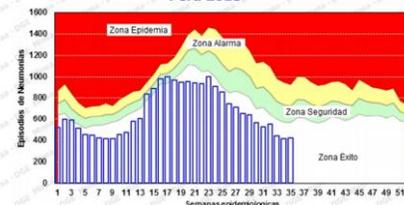
In Peru⁵, ARI reports in children less than 5 years of age have been increasing for the previous four weeks. Conversely, pneumonia reports in the same age group are still within the success zone of the endemic channel. Based on national laboratory data from EW 35, 322 samples were analyzed, of which 25.4% were positive for a respiratory virus and 24.5% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (68%) and influenza B (22%) predominated.

Peru

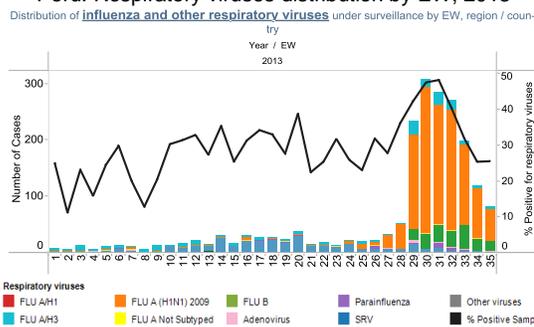
Peru. ARI endemic channel among children < 5 yrs, 2013
Canal de Infecciones Respiratorias Agudas (IRA) en menores de 5 años, Perú 2013*



Peru. Pneumonia endemic channel, children < 5 yrs, 2013
Canal endémico de neumonías en menores de 5 años, Perú 2013*



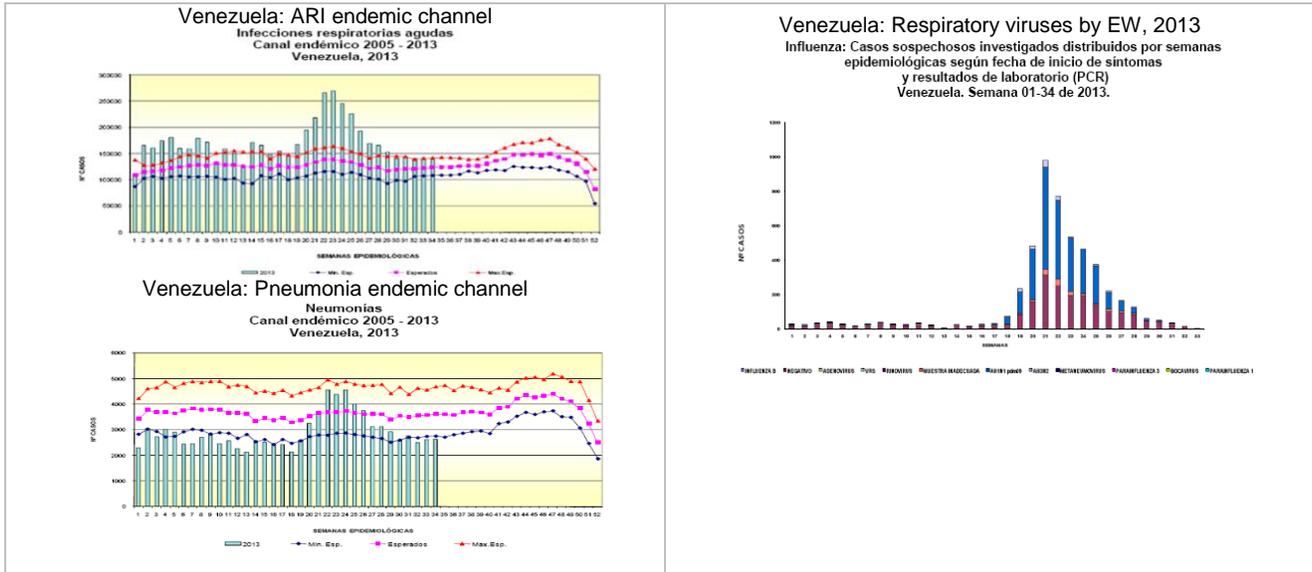
Perú. Respiratory viruses distribution by EW, 2013



⁵ Perú. Sala de Situación de Salud. EW 35, 2013. Ministerio de Salud. Dirección General de Epidemiología

In Venezuela⁶, the ARI activity during EW 34 was similar to that from the last six EWs and remained near the upper limit of expected activity for this time of year. Pneumonia notification levels were below the lower limit of expected activity for this time of year. Based on virologic surveillance data between EWs 1-34, 5,089 samples were analyzed. The decrease in samples processed for respiratory viruses observed since EW 21 continues, and during the last three EWs, all samples analyzed were negative for the tested viruses.

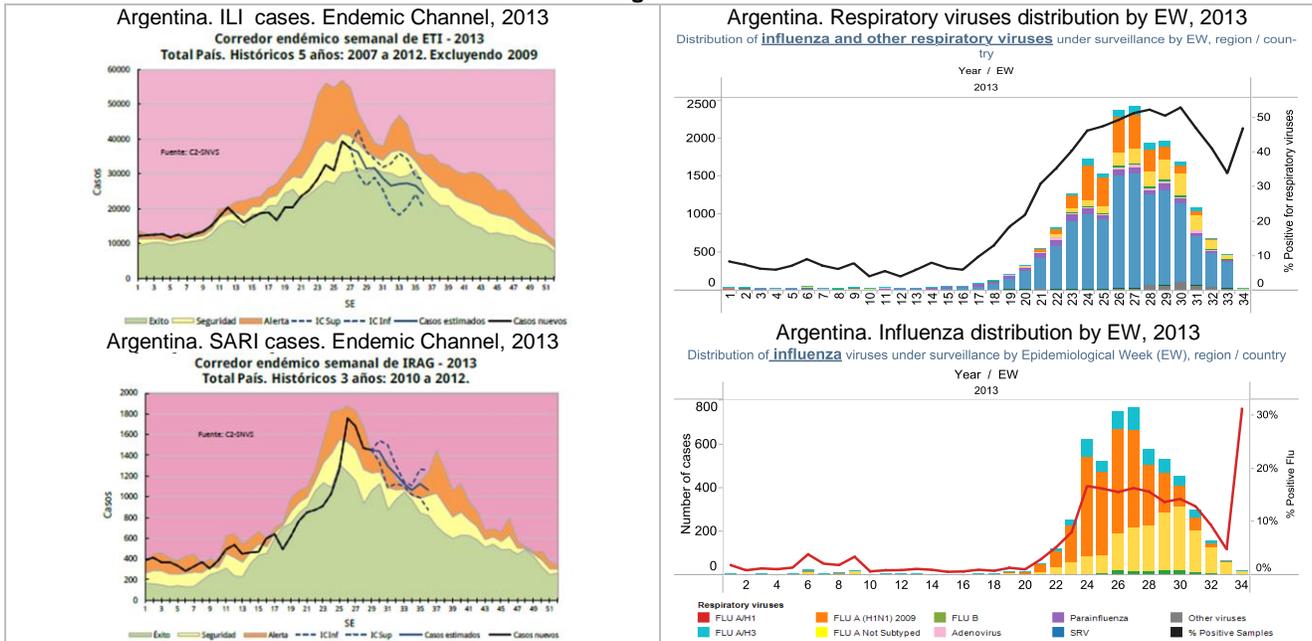
Venezuela



South America – Southern Cone and Brazil

In Argentina⁷, according to reports and calculated estimations, national ILI activity is within the success zone of the endemic channel and showed a decreasing trend for the previous weeks. The proportion of SARI-associated hospitalizations entered the alert zone of the endemic channel and also showed a decreasing trend. Based on laboratory data from EW 35, 1,060 samples were analyzed, of which 34% were positive for a respiratory virus and 5% were positive for influenza. Among the positive samples, RSV (63%), and parainfluenza (11%) predominated.

Argentina

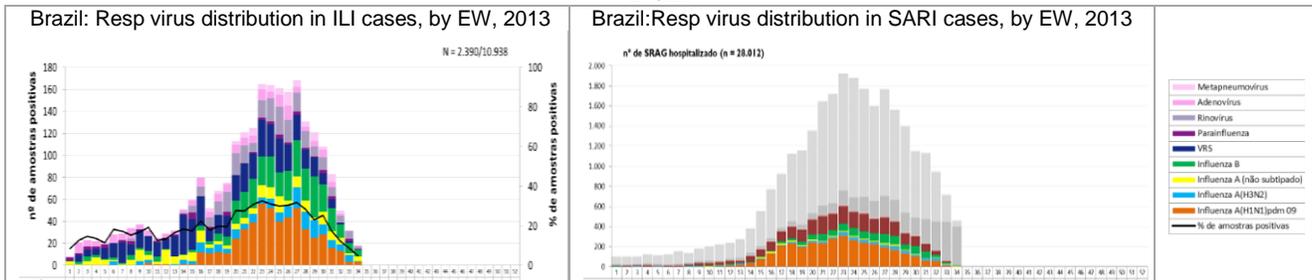


⁶ Venezuela. Boletín epidemiológico, EW 35, 2013.

⁷ Argentina. Boletín integrado de vigilancia. SE 35.

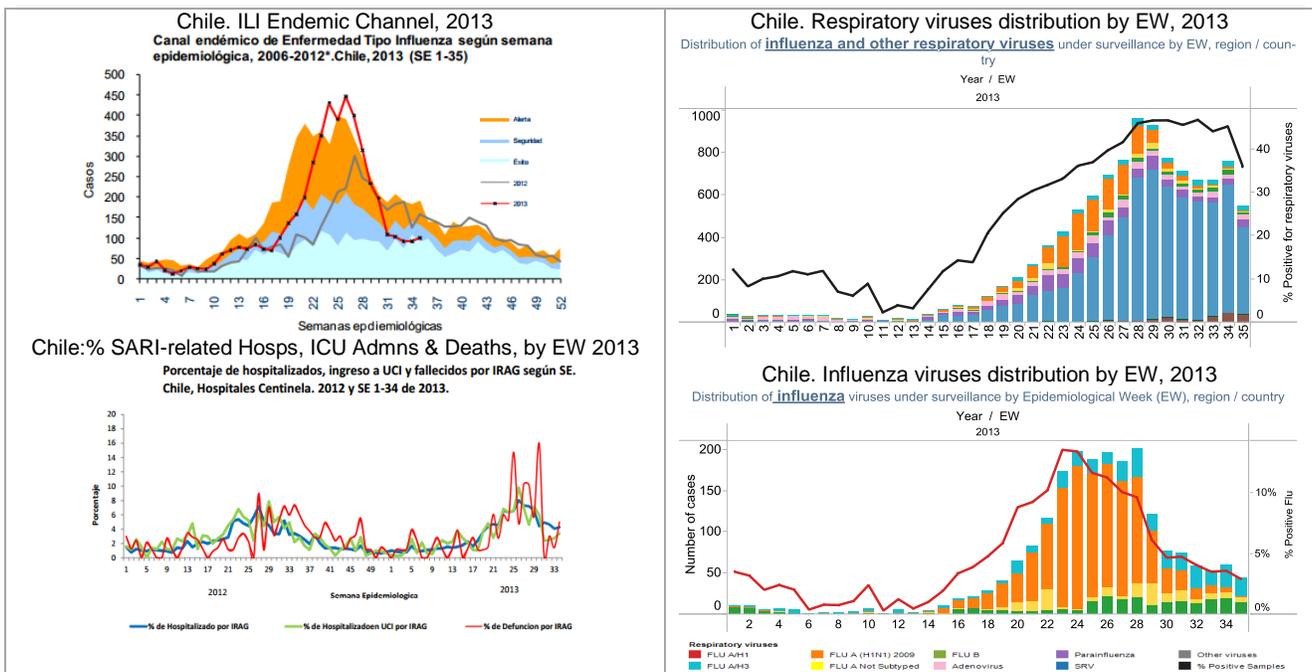
In Brazil⁸, according to sentinel surveillance data through EW 34, 10,938 samples have been analyzed and 27.9% were positive for influenza or another respiratory virus. There has been a decrease in influenza and other respiratory virus positivity since EW 27. During EW 33-34, co-circulation of influenza B, influenza A(H1N1)pmd09 and influenza A(H3N2) was observed, primarily in the Southern region. Based on universal SARI surveillance data during this same period, 28,012 cases were reported and 18.3% were positive for influenza. A decrease in the number of SARI cases and influenza positivity since EW 27 was also observed. Through EW 34, 3,068 SARI-associated deaths were reported with 27% positive for influenza, and of these, 84% were associated with influenza A(H1N1)pmd09.

Brazil



In Chile⁹ ILI activity during EW 35 (rate: 6.4 per 100,000 inhabitants) did not change significantly from the previous five EWs and is still at the boundary of the security and success zones of the endemic channel. The proportions of SARI-associated hospitalizations (4.2%) and ICU admissions were also similar to the previous week. Based on laboratory data from EW 35, 1,533 samples were analyzed, of which 36% were positive for a respiratory virus and 3% were positive for influenza. Among the positive samples RSV predominated (74%) followed by metapneumovirus (7%) and parainfluenza (6%).

Chile



In Paraguay¹⁰ during EW 35, ILI activity (rate: 146 per 100,000 inhabitants) decreased compared to the previous EW but was higher than expected and continued to be in the epidemic zone of the endemic channel. However, the proportions of ILI consultations (4.2%) and SARI hospitalizations (5.8%) showed a decreasing trend. Based on reference laboratory data from EWs 33-34, 298 samples were analyzed, of which 17% were positive for a respiratory virus and 13% were positive for influenza. Among the positive

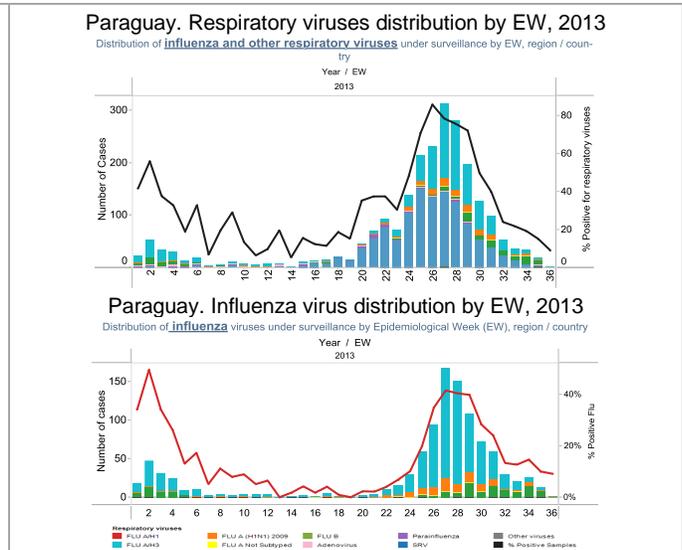
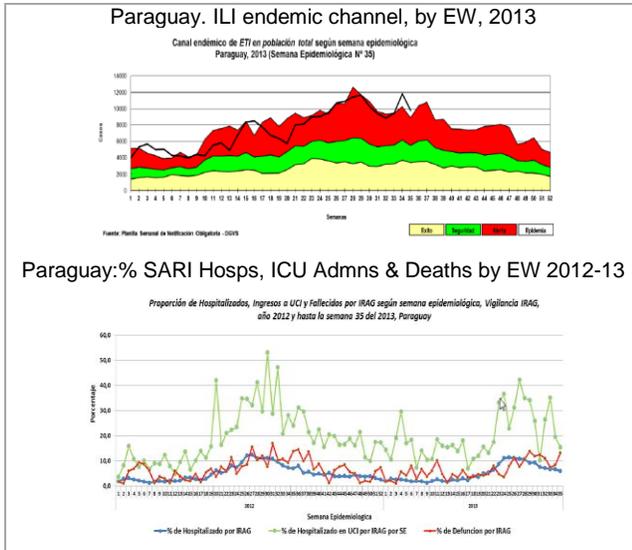
⁸ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 35, 2013.

⁹ Chile. Informe de situación. EW 35. Disponible en: www.pandemia.cl

¹⁰ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 35, 2013

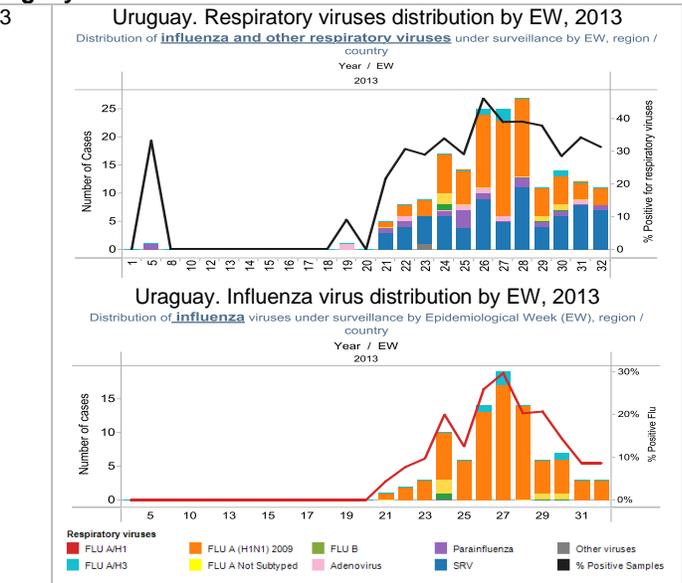
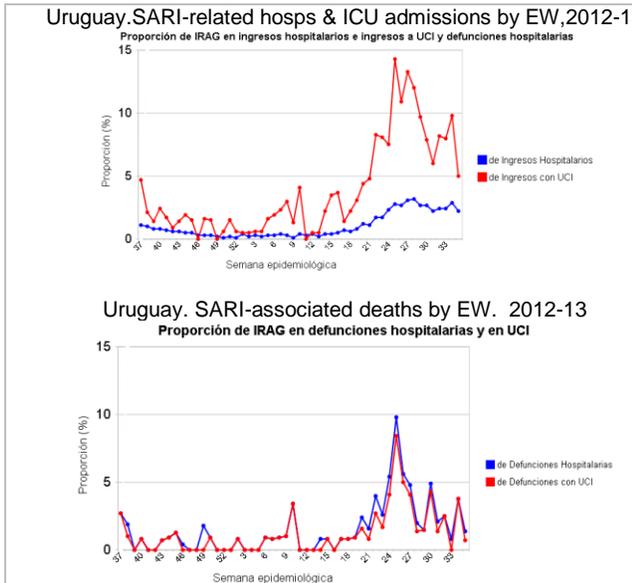
samples, influenza B (46%, increasing), RSV (23%) and influenza A(H3N2) (17%, decreasing) predominated.

Paraguay



In Uruguay¹¹, during EW 34 the proportion of SARI-associated hospitalizations maintained an elevated level of activity and has not changed significantly since EW 25. Conversely, the proportions of ICU admissions and SARI-associated deaths demonstrated a decrease during the same period. Based on laboratory data from EWs 33-34, 32 SARI samples were analyzed, of which 12% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (4/4) predominated.

Uruguay



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