

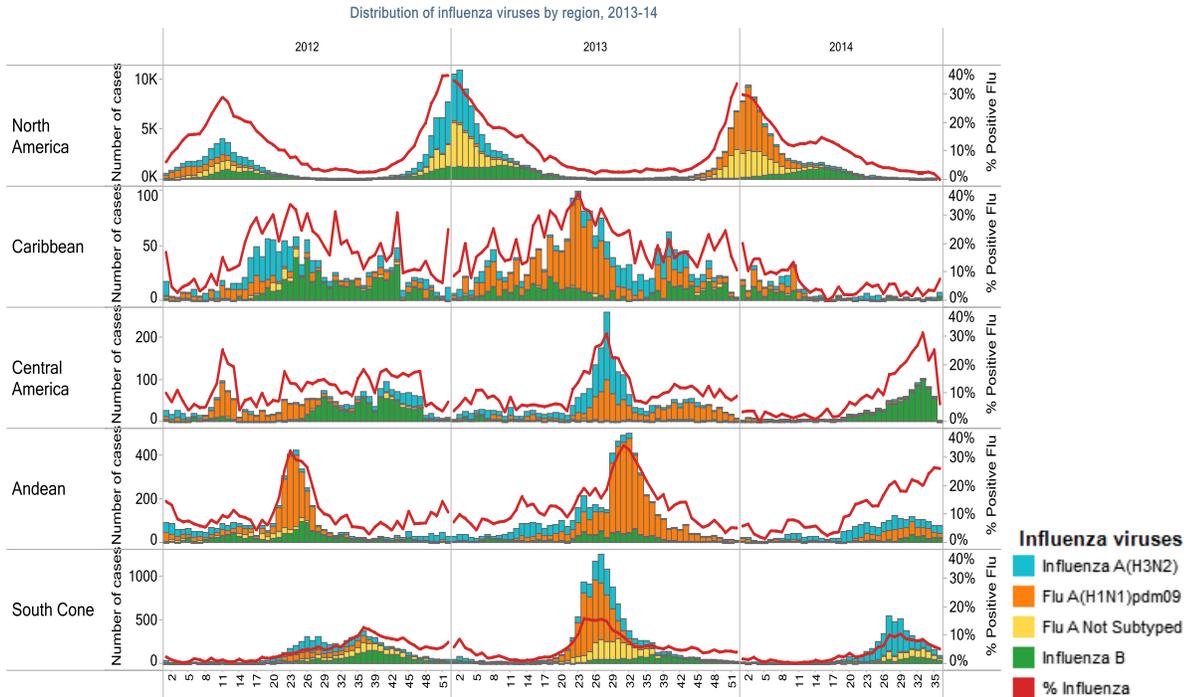
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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

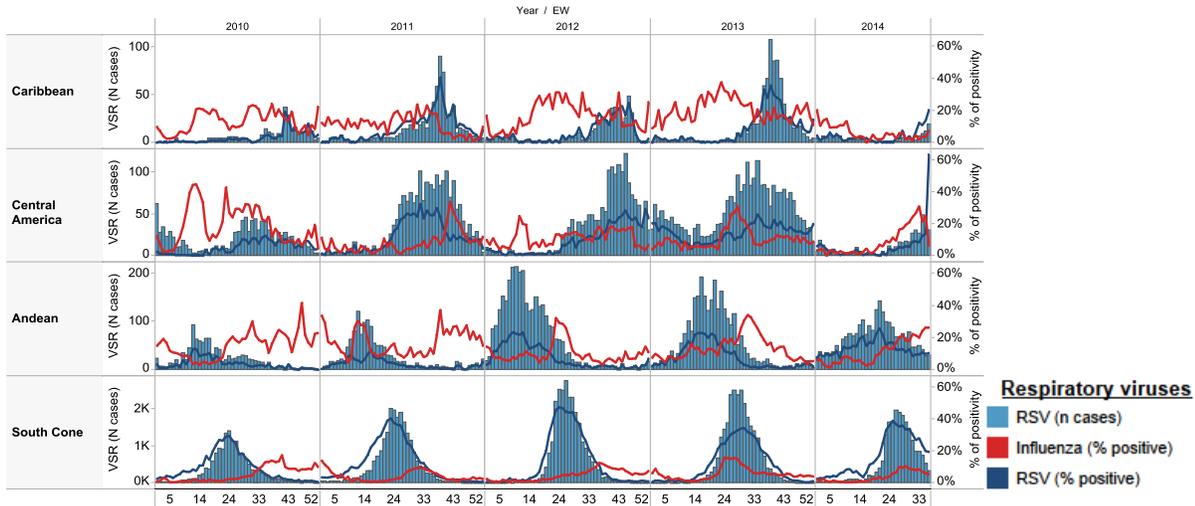
- **North America:** Influenza activity remained low in the sub-region with co-circulation of influenza A(H1N1)pdm09, A(H3N2) and influenza B. In the United States, no new human infections with influenza A(H3N2) variant (H3N2v) were reported. A total of two H3N2v cases have been reported in 2014 and are not epidemiologically linked.
- **The Caribbean and Central America:** Circulation of influenza B was observed in most countries of this sub-region. Co-circulation with influenza A(H3N2) was observed in Cuba, Dominican Republic, Honduras, and Panama. RSV also continued to circulate in several countries (Cuba, Dominican Republic, Costa Rica, Honduras and Panama).
- **South America – Andean Countries:** Continued influenza circulation was observed in Bolivia, Colombia, Ecuador and Peru. Co-circulation of influenza A(H1N1)pdm09, A(H3N2) and influenza B was observed, as well as continued circulation of RSV.
- **South America - South Cone and Brazil:** Although most acute respiratory illness activity indicators in the sub-region remained elevated, they were within expected levels for this time of year and continued to decrease. RSV continued to circulate, and among influenza viruses, A(H3N2) predominated, with influenza B co-circulation.

Influenza circulation by region. 2013-14



Respiratory syncytial virus (RSV) circulation by region. 2013-14

Distribution of **Respiratory Sincial Virus** under surveillance by EW, region



ACRONYMS

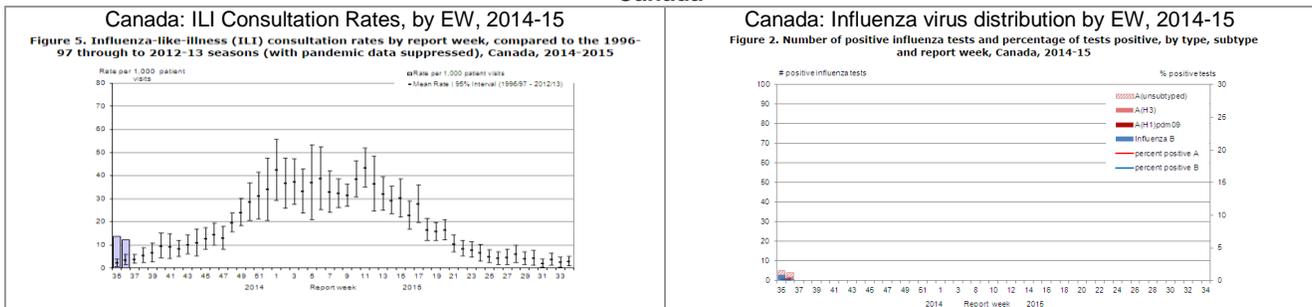
ARI	Acute respiratory infection
CARPHA	Caribbean Public Health Agency
CENETROP	Centro de Enfermedades Tropicales (Santa Cruz, Bolivia)
EW	Epidemiological Week
ILI	Influenza-like illness
INLASA	Instituto Nacional de Laboratorios de Salud (La Paz, Bolivia)
INS	Instituto Nacional de Salud
ORV	Other respiratory viruses
SARI	Severe acute respiratory infection
SEDES	Servicio Departamental de Salud (Bolivia)
ICU	Intensive Care Unit
RSV	Respiratory Syncytial Virus

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

North America:

In Canada¹ during EW 36, influenza activity was low. The national ILI consultation rate was 13.6 per 1,000 patient visits, a decrease compared to the previous week but slightly above expected levels. During this same period there no influenza-associated hospitalizations or deaths reported. Based on laboratory data for EW 36 the overall percentage of positive influenza tests was <1%. Among the positive tests during EW 35-36, 55.6% were influenza A (0% A(H1N1)pdm09, 20.0% A(H3) and 80.0% not subtyped) and 44.4% were influenza B. Among other circulating respiratory viruses, rhinovirus predominated.

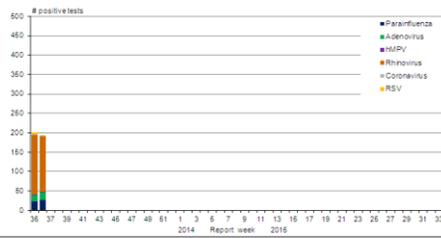
Canada



¹ Canada: FluWatch Report. EW 35-36. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

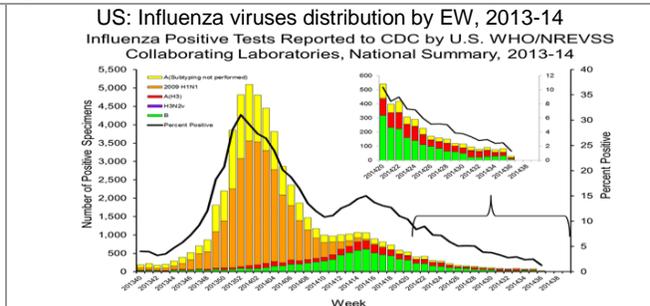
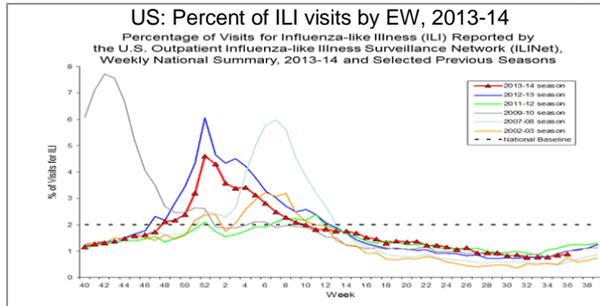
Canada: Other respiratory virus distribution by EW, 2014-15

Figure 3. Number of positive laboratory tests for other respiratory viruses by report week, Canada, 2014-15



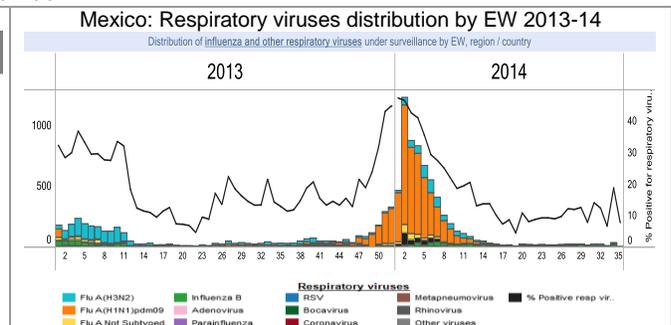
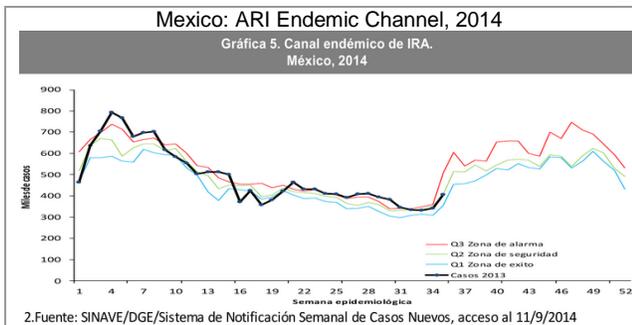
In the United States² during EW 36, influenza activity was low. The national proportion of ILI-associated outpatient visits (0.9%) was below the national baseline (2.0%). The proportion of deaths attributed to pneumonia and influenza (5.7%) was also below the epidemic threshold (6.0%). A total of 107 influenza-associated pediatric deaths have been reported this season (no deaths were reported during EW 36). According to laboratory data for EW 36, 2,214 samples were analyzed, of which 1.3% were positive for influenza. Among the positive samples, 75.9% were influenza A (9.1% A(H1N1)pdm09, 40.9% A(H3) and 50.0% not subtyped) and 24.1% were influenza B. During EW 36, no new human infections with influenza A(H3N2) variant (H3N2v) were reported. A total of two H3N2v cases have been reported in 2014 and are not epidemiologically linked.

United States



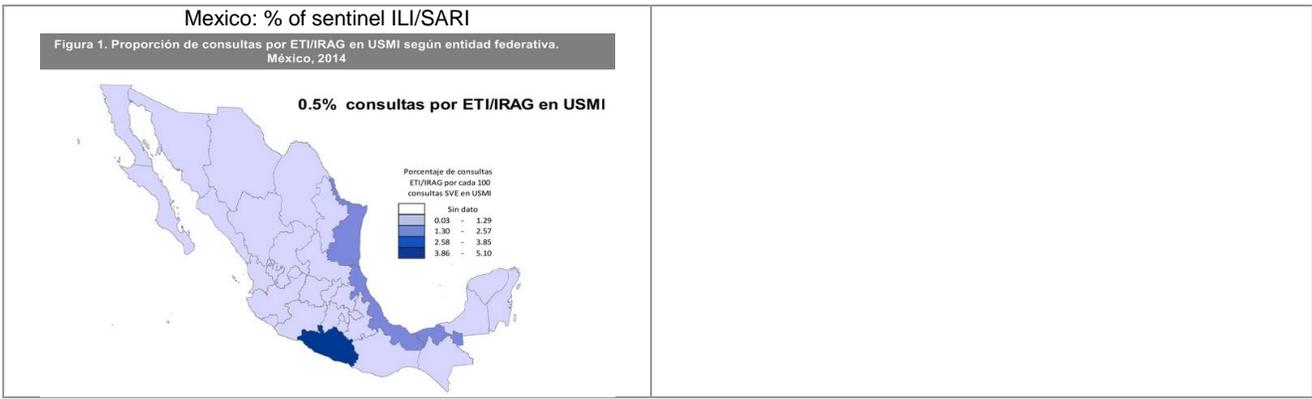
In Mexico³ during EW 36, influenza activity remained low. ARI activity increased from the previous week and was within the alarm zone of the alarm channel. Pneumonia activity increased slightly compared to the previous week (rate: 1.8 per 100,000 inhabitants) and was within expected levels for this time of year. The highest levels of pneumonia activity were reported in Nayarit, Jalisco and Colima. Nationally, through September 11, 2014, the proportion of ILI/SARI-associated medical visits was 0.5%. The highest proportions of ILI/SARI-associated medical visits were reported in Guerrero, Tabasco and Tamaulipas. During this same period, 770 influenza-associated deaths were reported, of which 89.9% were associated with influenza A(H1N1)pdm09. Based on laboratory data from EW 32-35, 664 samples were analyzed, of which 11.9% were positive for influenza. Among the positive samples, 41.8% were influenza A (6.1% A(H1N1)pdm09, 84.8% A(H3N2), and 9.1% not subtyped) and 58.2% were influenza B.

Mexico



² USA: CDC FluView report. EW 36. Available at: <http://www.cdc.gov/flu/weekly/>

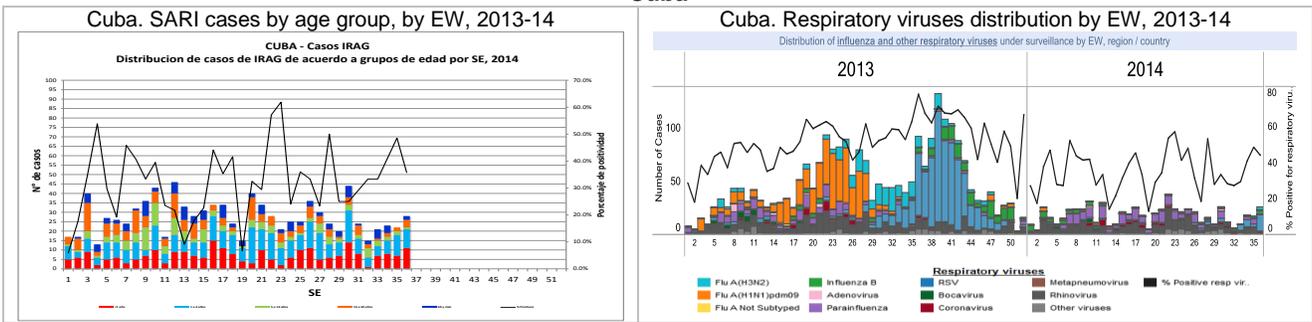
³ México. Dirección General de Epidemiología. Información epidemiológica. Informes Epidemiológicos Semanales 2014.



Caribbean

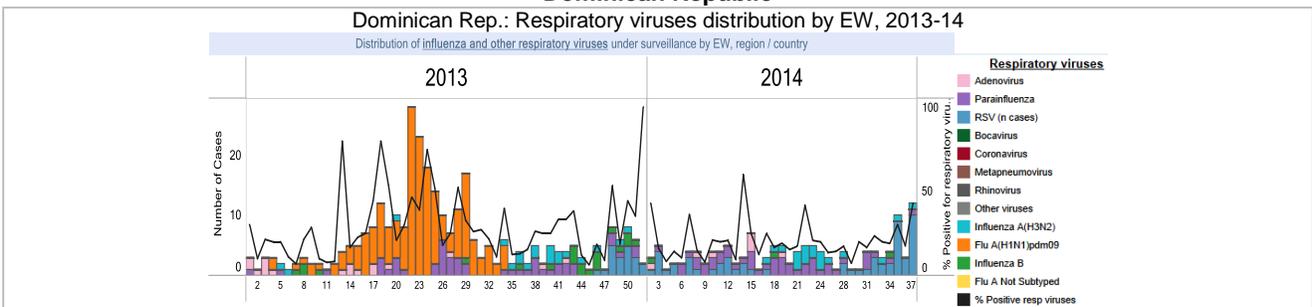
In Cuba during EW 36, the number of SARI-associated hospitalizations (n=28) increased from the previous week. Children ≤ 1 year of age comprised the largest proportion of these cases. No SARI-associated deaths were reported during this period. According to national laboratory data for EW 33-36, 172 samples were analyzed, of which 41.3% were positive for a respiratory virus and 5.8% for influenza. Among the positive samples, RSV (43.7%) and rhinovirus (21.1%) predominated. Among the influenza viruses, 40.0% were influenza A (100% A(H3N2) and 60.0% were influenza B.

Cuba



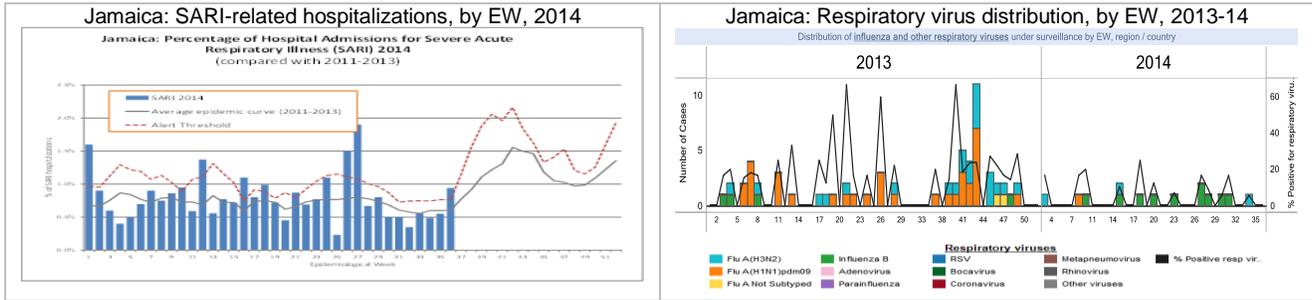
In the Dominican Republic, during EW 34-37, 99 samples were analyzed, of which 29.3% were positive for a respiratory virus and 3.0% were positive for influenza. Among the positive samples, RSV predominated (82.8%). Among the influenza positive samples, 66.7% were influenza A (100% A(H3N2)) and 33.3% were influenza B.

Dominican Republic



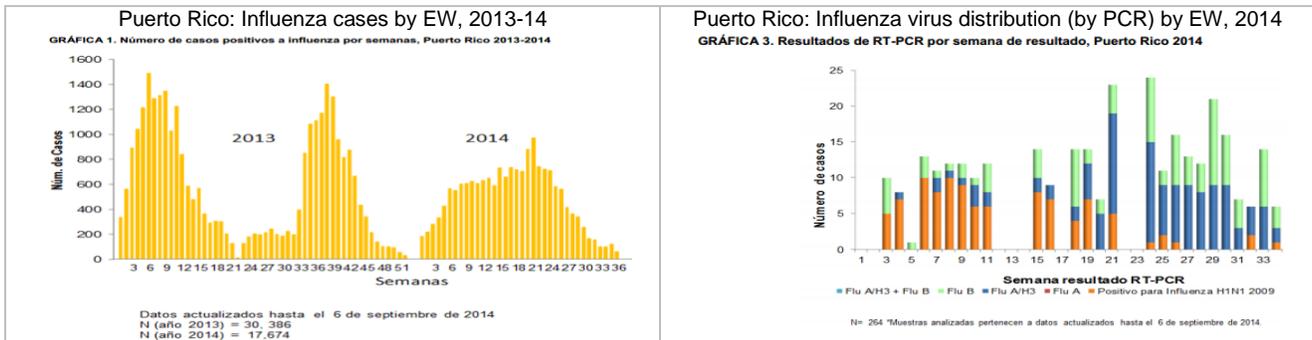
In Jamaica, based on sentinel surveillance data for EW 36, the proportion of ARI-associated consultations (2.5%) was similar to the previous week, while the proportion of SARI-associated hospitalizations (1.0%) increased. No SARI-associated deaths were reported during this EW. Based on laboratory data for EW 33-36, 65 samples were analyzed, of which one (1.5%) was positive for influenza A(H3N2).

Jamaica



In Puerto Rico⁴ during EW 36, the number of influenza cases (n=63) decreased compared to the previous week. Of these, 20 cases were associated with influenza A, 41 with influenza B, and 2 with an influenza A and B co-infection. Since the beginning of 2014, 17,674 influenza cases have been reported (43% influenza A, 56% influenza B, and 1% influenza A and B) and persons aged 0-19 years accounted for 50% of those cases. During this same period, 824 influenza-associated hospitalizations and 13 influenza-associated deaths were reported.

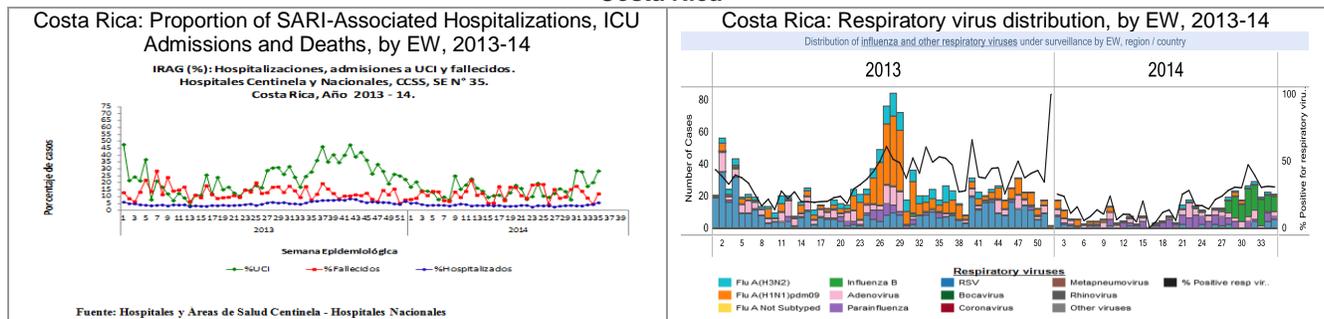
Puerto Rico



Central America

In Costa Rica, during EW 35, the proportions of SARI-associated hospitalizations (5.6%), ICU admissions (29.0%) and deaths (12.0%) increased from the previous week. According to laboratory data from EW 32-35, 277 samples were analyzed of which 32.9% were positive for a respiratory virus and 21.3% were positive for influenza. Among the positive samples, influenza B (68.1%), RSV (14.3%) and adenovirus (12.1%) predominated.

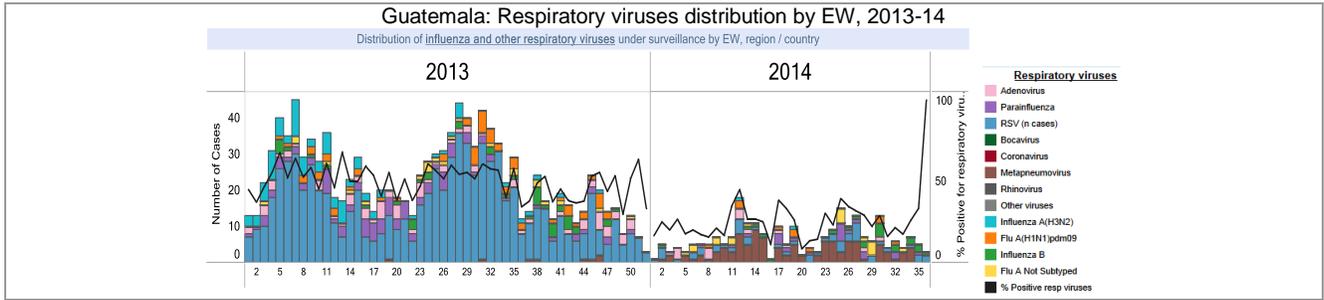
Costa Rica



In Guatemala, based on laboratory data from EW 33-36, 68 samples were analyzed, of which 27.9% were positive for a respiratory virus and 8.8% were positive for influenza. Among the positive samples, human metapneumovirus (36.8%) predominated. Among the influenza positive samples, 16.7% were influenza A (100% not subtyped) and 83.3% were influenza B.

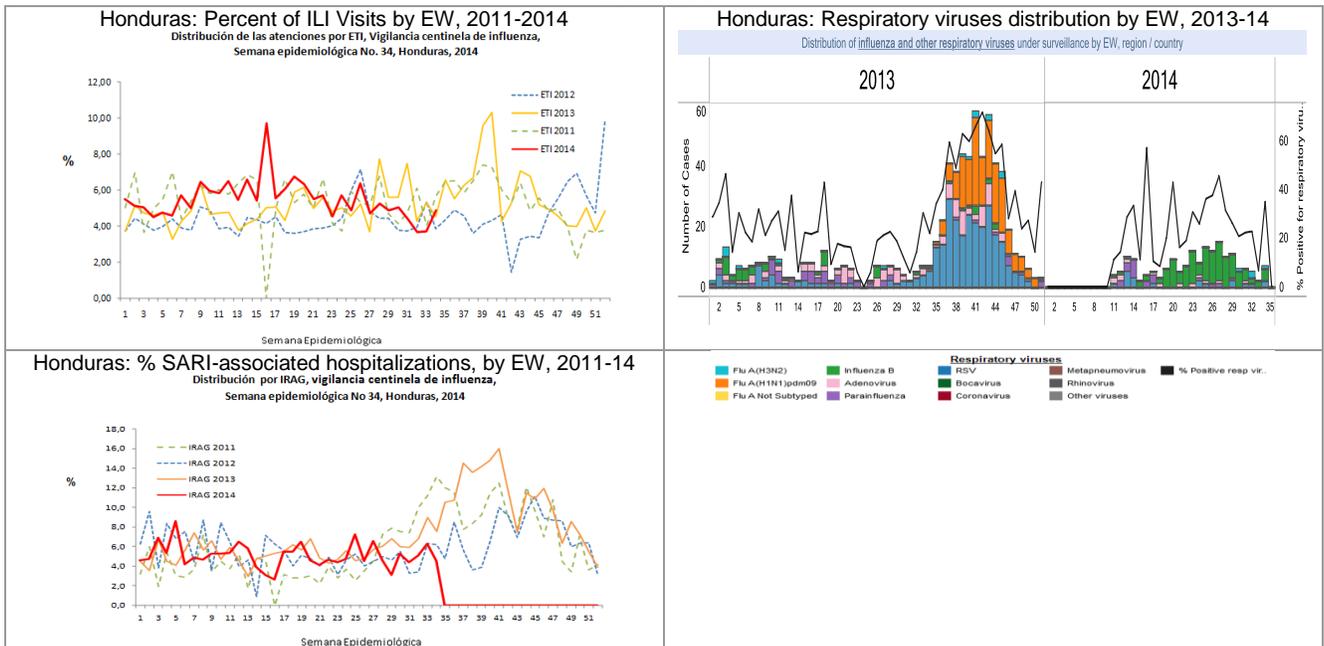
⁴ Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 36

Guatemala



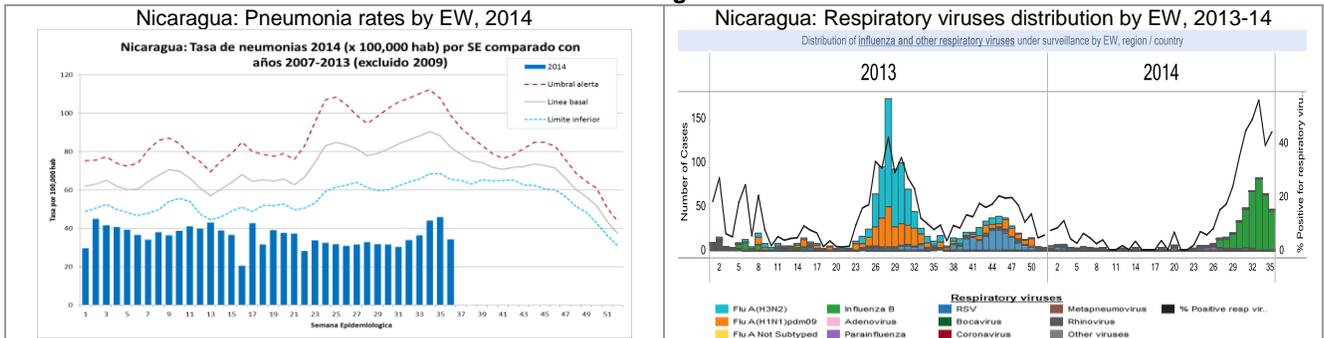
In Honduras, during EW 34, the proportion of ILI-associated medical visits (4.8%) increased compared to the previous week, while the proportion of SARI-associated hospitalizations (4.5%) decreased. Both remained within expected levels for this time of year. One SARI-associated death was reported during EW 34. According to laboratory data from EW 32-35, 81 samples were analyzed, of which 17.3% were positive for a respiratory virus and 13.6% were positive for influenza. Among positive samples, influenza B (57.1%), influenza A(H3N2) (21.4%), and RSV (21.4%) were detected.

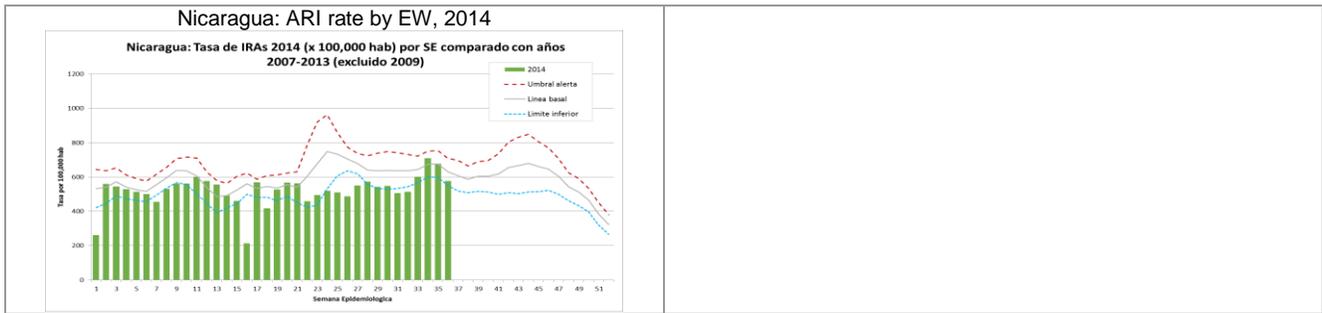
Honduras



In Nicaragua, during EW 36, the national rates of pneumonia (34.1 per 100,000 population) and ARI (576.8 per 100,000 population) were within expected levels for this time of year. According to laboratory data from EW 32-35, 546 samples were analyzed, of which 47.1% were positive for a respiratory virus and 46.9% were positive for influenza. Among positive samples, influenza B predominated (99.2%).

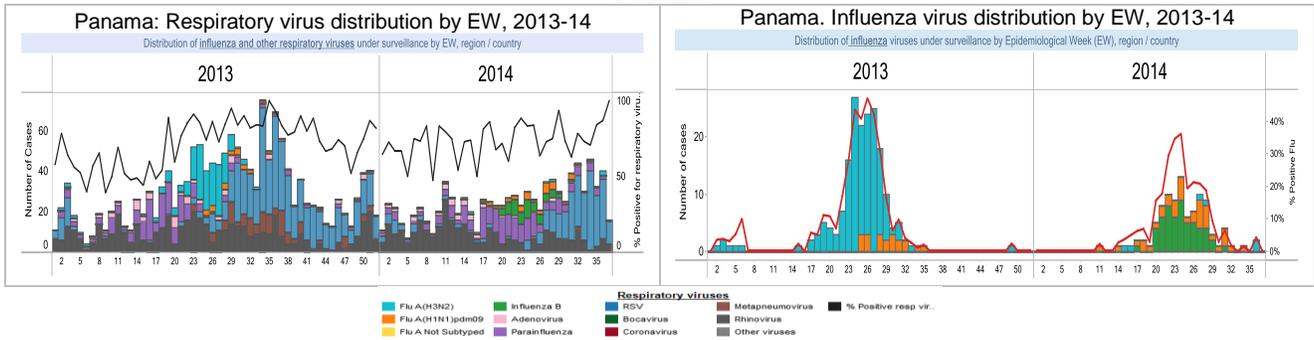
Nicaragua





In Panama, based on national laboratory data from EW 33-36, 190 samples were analyzed, of which 77.9% were positive for a respiratory virus and 1.6% were positive for influenza. Among the positive samples, RSV (79.1%) predominated. Among the influenza positive samples, 100% were influenza A (33.3% A(H1N1)pdm09 and 66.7% A(H3N2)).

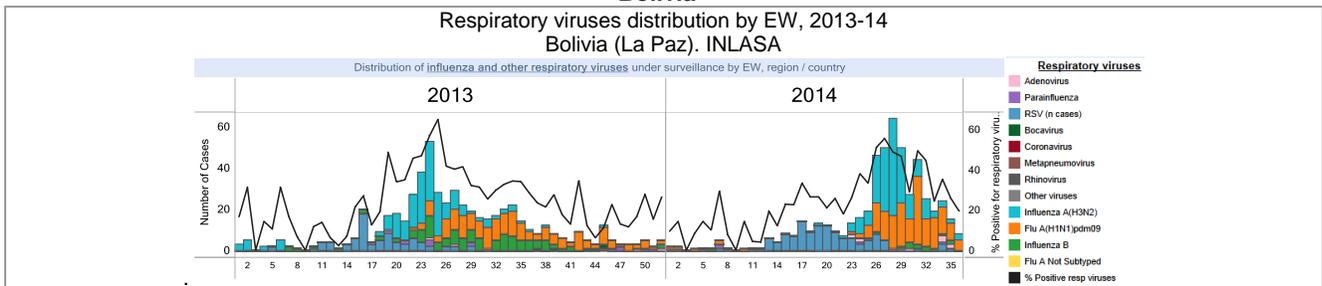
Panama



South America – Andean countries

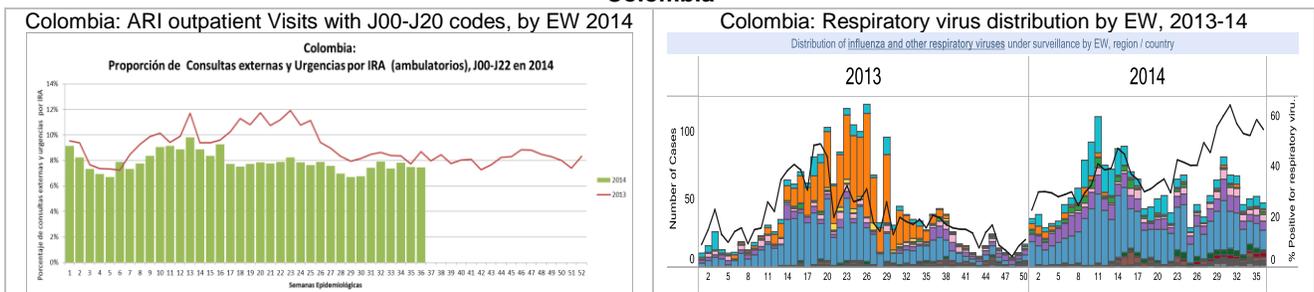
In Bolivia, based on data from the National Laboratory in La Paz (INLASA) from EW 33-36, 245 samples were analyzed, of which 26.9% were positive for a respiratory virus and 22.9% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (62.1%) and A(H3N2) (16.7%) predominated.

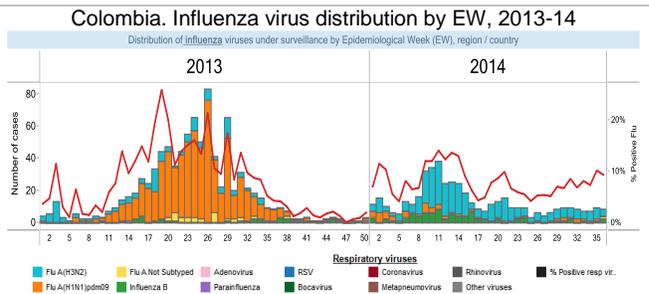
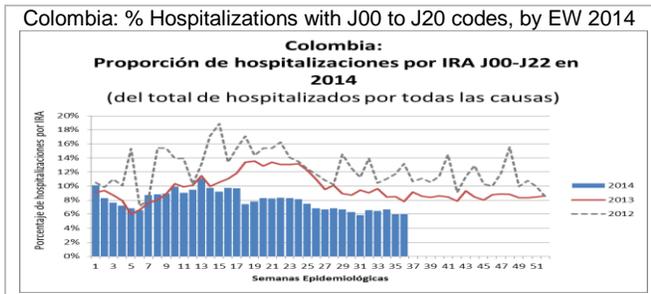
Bolivia



In Colombia, during EW 36 the proportions of outpatient and urgent visits (7.5%) and hospitalizations (6.0%) with ARI/SARI-associated ICD-10 codes (J00 to J22) were within the expected levels for this time of year. Based on INS laboratory data from EW 33-36, 358 samples were analyzed, of which 54.5% were positive for a respiratory virus and 8.7% were positive for influenza. Among the positive samples, RSV (34.9%) predominated. Among the influenza positive samples, 87.1% were influenza A (11.1% A(H1N1)pdm09, 81.5% A(H3N2) and 7.4% not subtyped) and 12.9% were influenza B.

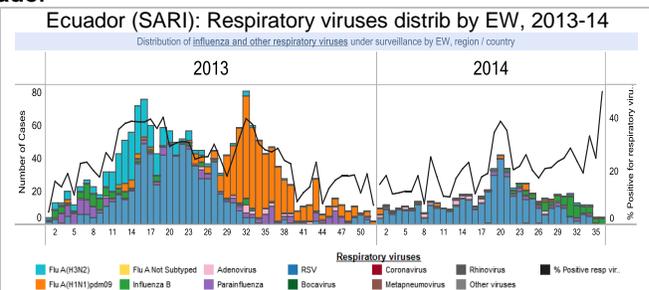
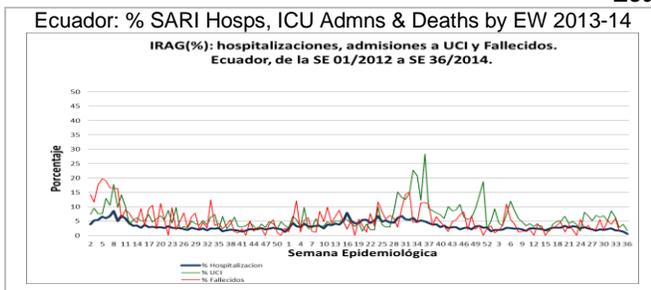
Colombia





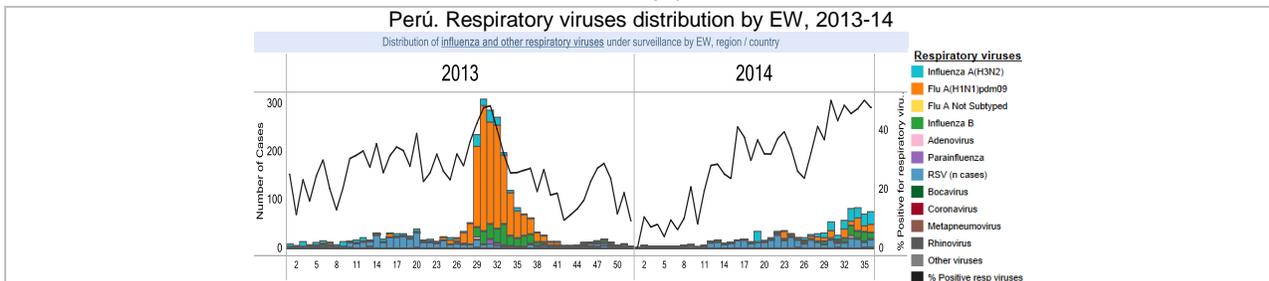
In Ecuador during EW 36, the proportions of SARI-associated hospitalizations (0.6%), ICU admissions (1.6%) and deaths (1.6%) decreased compared to the previous week. Based on national reference laboratory data from EW 33-36, 122 SARI samples were analyzed, of which 26.2% were positive for a respiratory virus and 13.9% were positive for influenza. Among the positive samples, influenza B (46.9%) and RSV (37.5%) predominated.

Ecuador



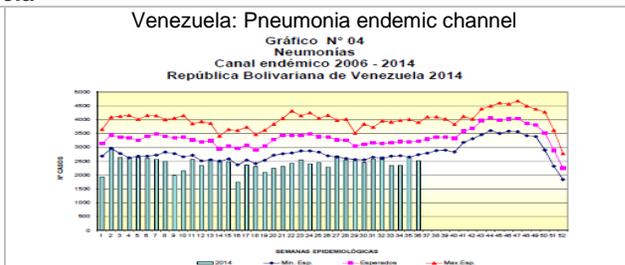
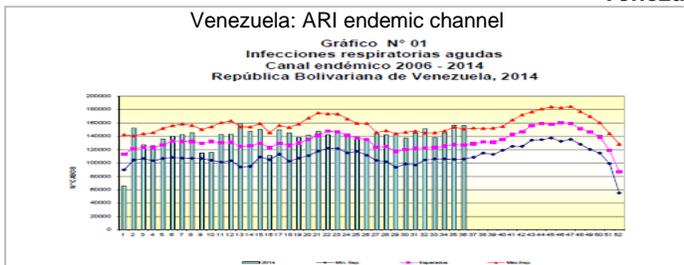
In Peru, based on national laboratory data from EW 33-36, 650 samples were analyzed, of which 47.4% were positive for a respiratory virus and 35.2% were positive for influenza. Among the influenza positive samples, 70.7% were influenza A (39.5% A(H1N1)pdm09 and 60.5% A(H3N2)) and 29.3% were influenza B. Among the other respiratory viruses, RSV predominated (19.8% of positive samples).

Peru



In Venezuela⁵ during EW 36, the numbers of ARI and pneumonia cases decreased by 0.4% and 5.1%, respectively, compared to the previous week. The number of ARI cases was slightly above the expected levels for this time of year. During EW 36, 56 SARI-associated hospitalizations were reported, with children 1-4 years of age comprising the largest proportion of cases. Based on virologic data from EW 1-36, 477 samples were analyzed from suspected influenza cases and of these, 15.7% were positive for a respiratory virus. Among the positive samples, influenza A(H3N2) predominated (40.0%).

Venezuela

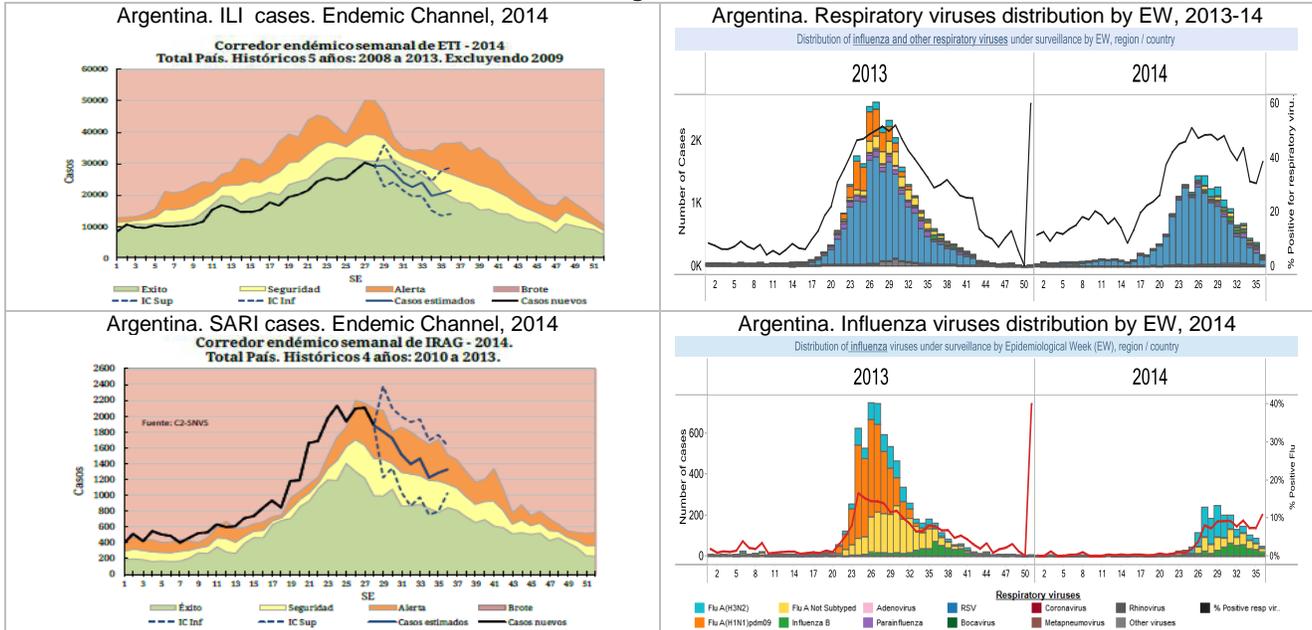


⁵ Venezuela. Boletín epidemiológico, EW 36.

South America – South Cone and Brazil

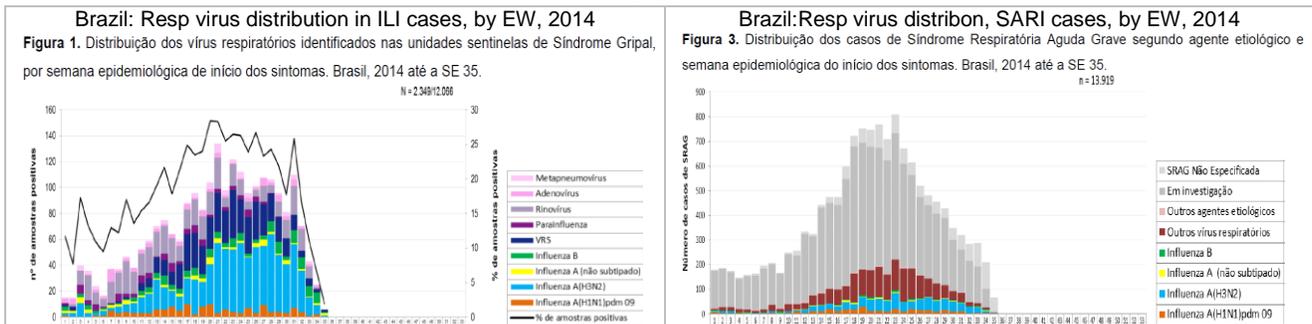
In Argentina⁶, according to reports and estimations calculated for EW 36, ILI activity was within the security zone of the endemic channel while the estimated number of SARI cases was within the alert zone of the endemic channel. Based on laboratory data from EW 35-36, 1,635 samples were processed, of which 32.6% were positive for a respiratory virus and 8.3% were positive for influenza. Among the positive samples, RSV (52.0%) predominated. Among the influenza viruses, 63.7% were influenza A (37.2% A(H3N2) and 26.5% not subtyped) and 36.3% were influenza B.

Argentina



In Brazil⁷, according to ILI sentinel surveillance data through EW 35, 12,066 samples were analyzed, and of these, 19.5% were positive for influenza or another respiratory virus. Among the positive samples, influenza A(H3N2) predominated (34.8%). Based on national SARI surveillance data during this same period, 13,919 SARI cases were reported and 9.4% of these were positive for influenza. Among the positive samples, influenza A(H3N2) (62.4%) predominated, followed by influenza A(H1N1)pdm09 (26.1%). The largest number of SARI cases was reported in the southeast region, primarily in Sao Paulo. Through EW 35, 1,583 SARI-associated deaths were reported, of which 13.6% were positive for influenza (51.2% A(H1N1)pdm09 and 35.3% A(H3N2)).

Brazil

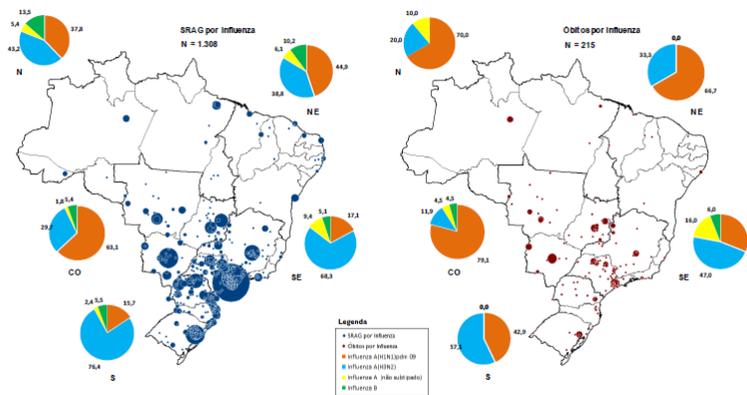


⁶ Argentina. Boletim integrado de vigilância. SE 36.

⁷ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 35, 2014.

Brazil: Distribution of SARI hospitalizations and deaths by influenza type/subtype by region

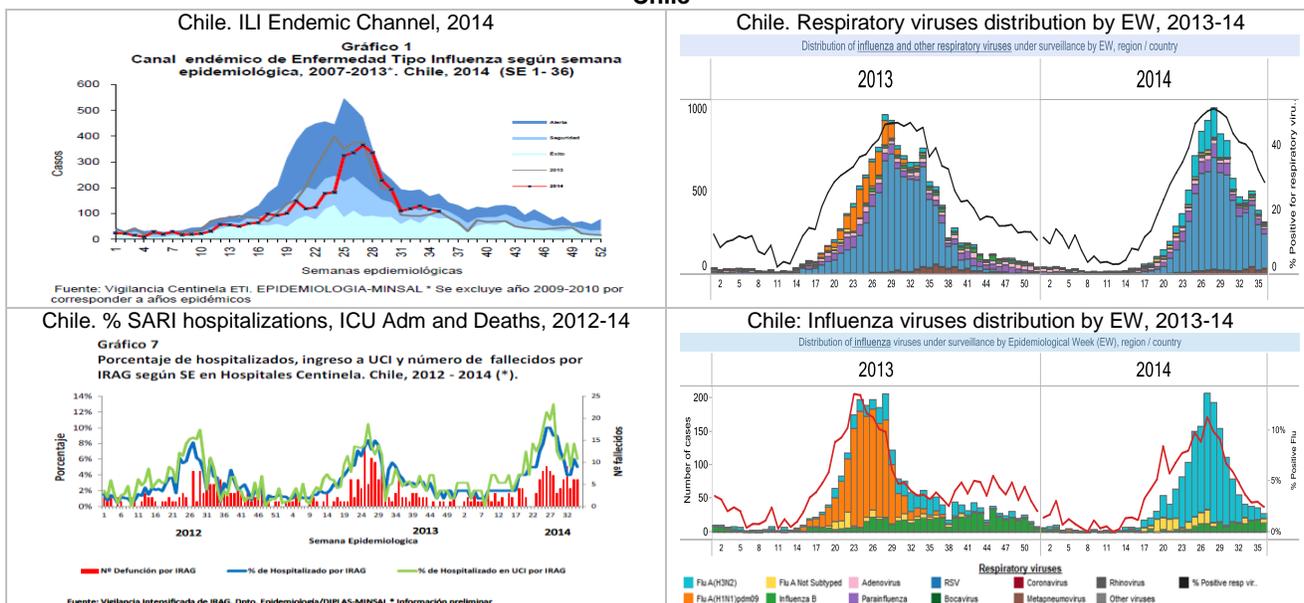
Anexo 4. Distribuição espacial dos casos e óbitos por Síndrome Respiratória Aguda Grave confirmados para influenza por município de residência e percentual dos vírus influenza identificados por região. Brasil, 2014 até a SE 35.



Fonte: SINAN Influenza Web. Dados atualizados em 02/06/2014, sujeitos a alteração.
 * O círculo é proporcional ao número de casos e óbitos. N = Norte; NE = Nordeste; SE = Sudeste; S = Sul; e CO = Centro Oeste.

In Chile⁸, during EW 36, ILI activity (rate: 5.6 per 100,000 inhabitants) decreased compared to the previous EW and was within the security zone of the endemic channel. Through EW 36, 2,621 SARI cases were reported through sentinel surveillance and of these, 49.4% were positive for respiratory virus. Among the positive SARI cases, RSV predominated (61%), followed by influenza A(H3N2) (17%). During this same period, 114 SARI-associated deaths were reported. Based on laboratory data from EW 35-36, 2,311 samples were analyzed, of which 30.3% were positive for a respiratory virus and 2.7% were positive for influenza. Among the positive samples, RSV predominated (68.9%). Among the influenza samples, 51.6% were influenza A (3.1% A(H1N1)pdm09, 75.0% A(H3N2), 21.9% not subtyped) and 48.4% were influenza B.

Chile

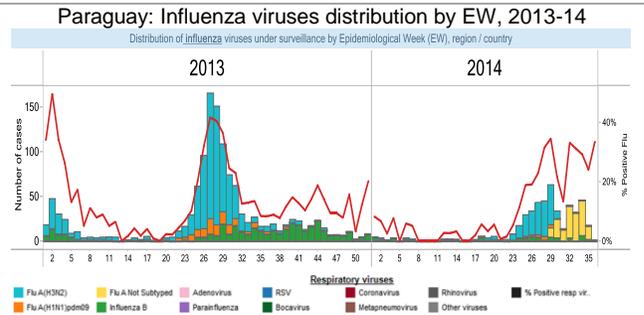
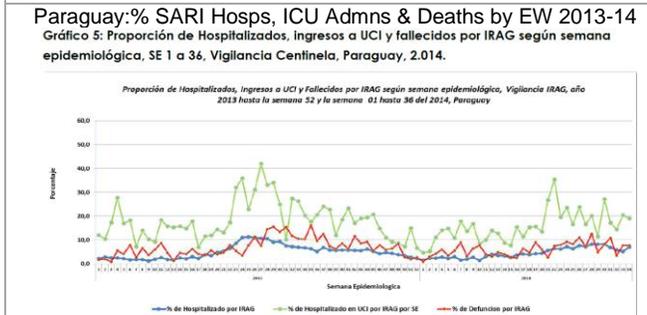
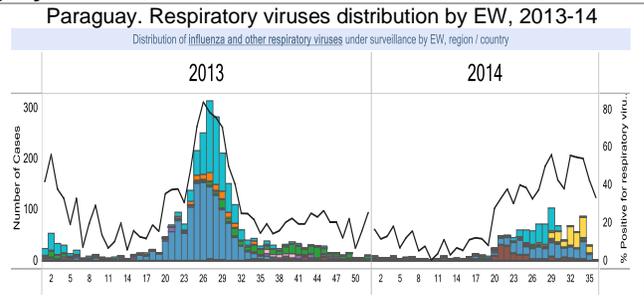
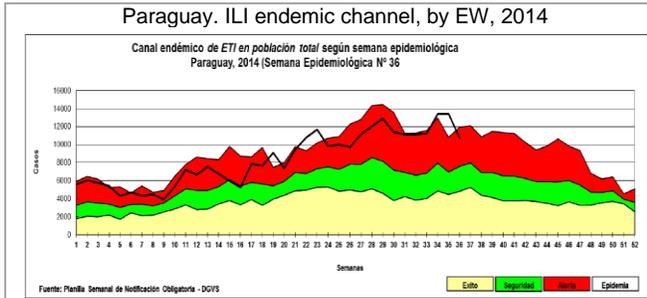


In Paraguay⁹ during EW 36, the ILI consultation rate (160.8 per 100,000 inhabitants) decreased from the previous EW and was within the alert zone of the endemic channel. The proportion of SARI-associated hospitalizations (7.5%) increased compared to the previous week. The most affected age group was children <5 years of age (55.4% of reported cases). From EW 1-36, 244 SARI-associated deaths were reported and 32 (13.1%) were positive for a respiratory virus. Based on laboratory data from EW 33-36, 335 samples were analyzed, of which 51.3% were positive for a respiratory virus and 28.7% were positive for influenza. Among the influenza samples, 91.7% were influenza A (100% not subtyped) and 8.3% were influenza B. Among the other respiratory viruses, RSV predominated (40.7% of positive samples).

⁸ Chile. Informe de situación. EW 36. Available at: <http://epi.minsal.cl/>

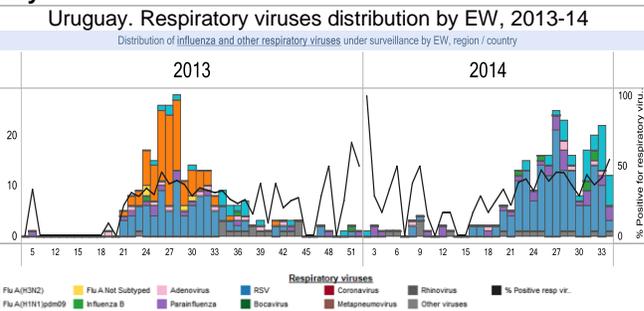
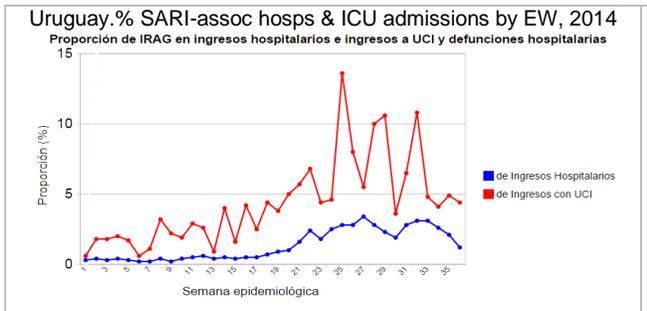
⁹ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 36.

Paraguay



In Uruguay¹⁰ during EW 36, the proportions of SARI-associated hospitalizations and ICU admissions decreased compared to the previous week. Based on laboratory data from EW 33-36, 75 samples were analyzed, of which 45.3% were positive for a respiratory virus and 20.0% were positive for influenza. Among the positive samples, influenza A(H3N2) (44.1%) and RSV predominated (35.3%).

Uruguay



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