

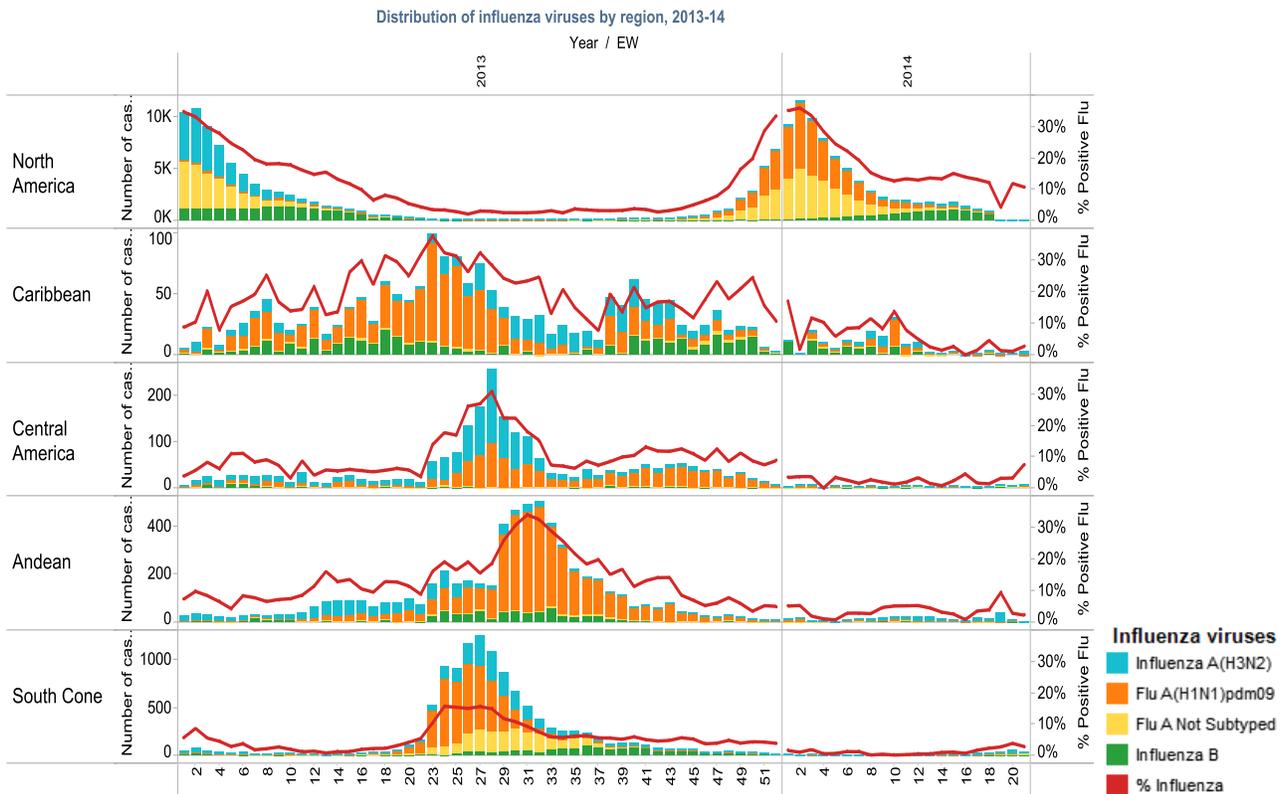
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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

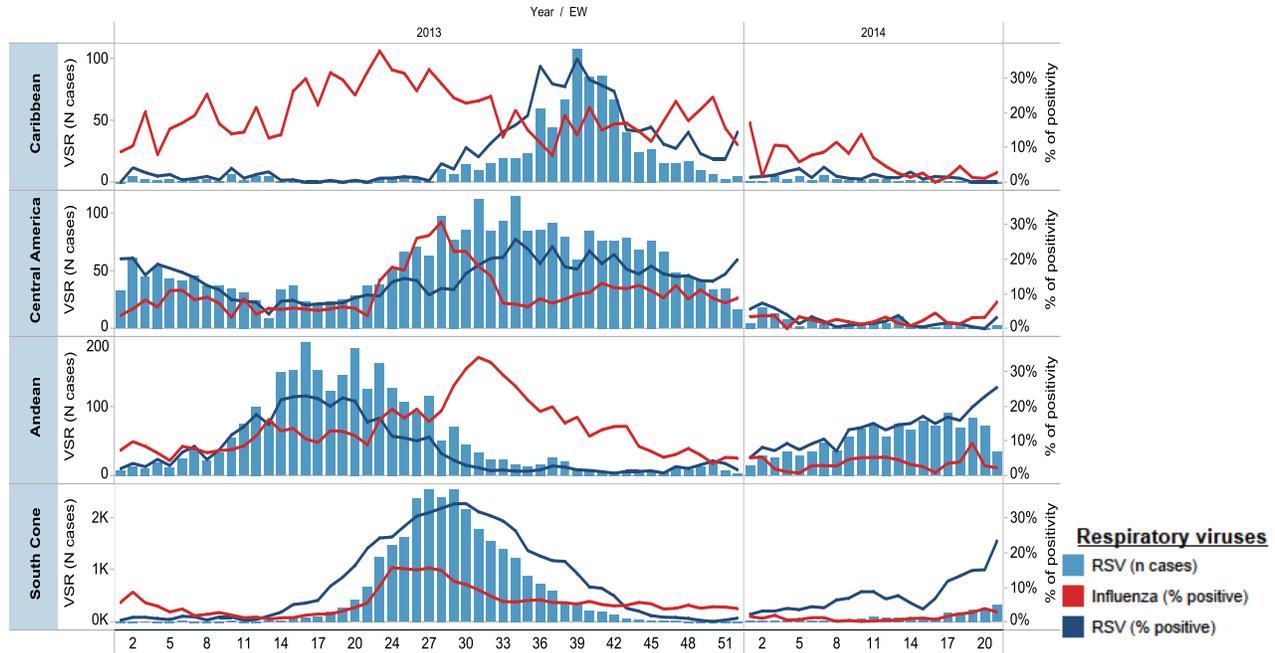
- **North America:** Influenza activity continued to decline in the sub-region. Although influenza B predominated in all countries, co-circulation of influenza A(H1N1)pdm09 and A(H3N2) was observed.
- **The Caribbean and Central America:** Influenza and other respiratory virus activity remained low in the sub-region.
- **South America – Andean Countries:** Influenza A(H3N2) activity increased slightly in Peru while circulation of RSV continued in Bolivia, Colombia, Ecuador and Peru.
- **South America - South Cone and Brazil:** Increases in some indicators of influenza and other respiratory virus activity were observed in some South Cone countries (Argentina, Chile, Paraguay, Uruguay), but these were within expected levels for this time of year.

Influenza circulation by region. 2013-14



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

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



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 |

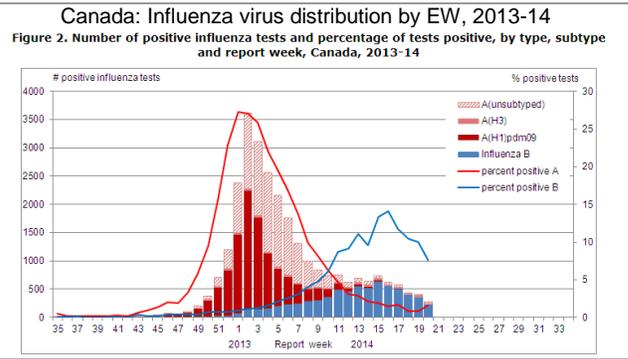
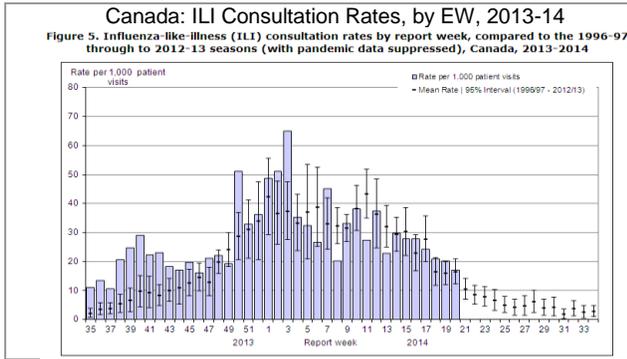
EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America:

In Canada¹ during EW 20, influenza activity continued to decline and was within expected levels for this time of year. The national influenza-like illness (ILI) consultation rate was 17.2 per 1,000 patient visits, a decrease compared to the previous week and within expected levels. Since the beginning of the 2013-14 influenza season, 4,862 influenza-associated hospitalizations have been reported, of which 74.4% were associated with influenza A. Although influenza A(H1N1)pdm09 predominated this season and mostly affected adults 20-64 years of age, influenza B is having a greater impact on adults ≥65 years and young persons from 5 -19 years of age. To date this season, 291 deaths have been reported, most of which were associated with influenza A (72.9%). The highest proportion of deaths (51.9%) has been among adults ≥65 years of age followed by adults 20-64 years of age (39.2%). Based on laboratory data for EW 20, the overall percentage of positive influenza tests was 9.2% (N=283), a decrease compared to the previous week. Among the positive tests, 83.4% were influenza B and 16.6% were influenza A, of which 17.9% were influenza A(H1N1)pdm09, 42.9% were A(H3) and 39.3% were A, not subtyped. Among other circulating respiratory viruses, rhinovirus predominated.

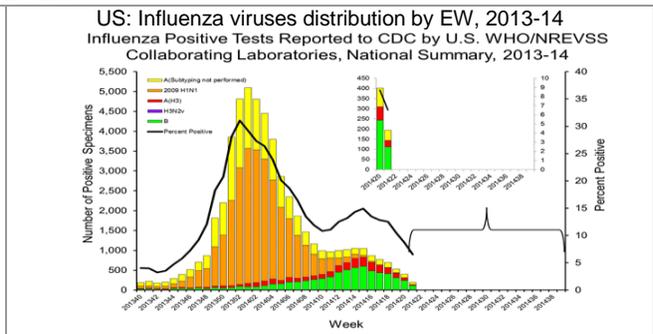
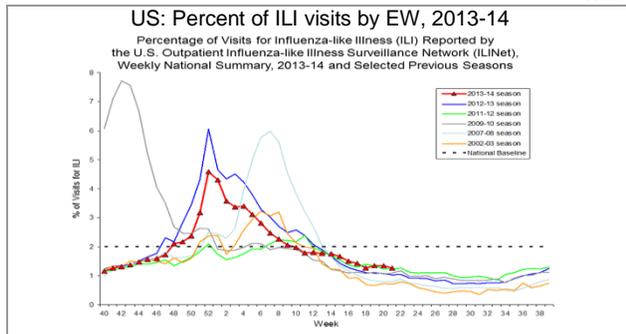
¹ Canada: FluWatch Report. EW 20. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

Canada



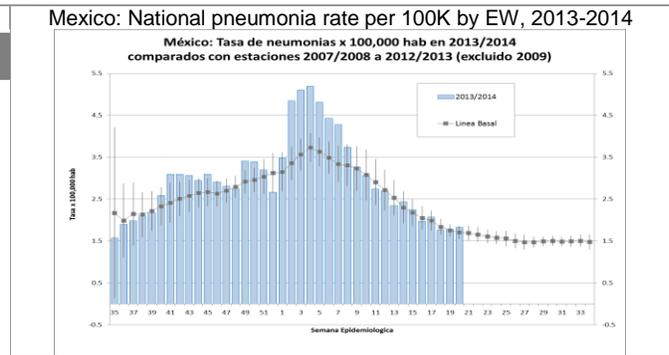
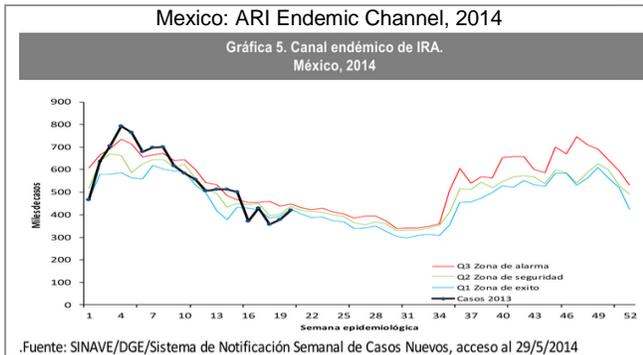
In the United States² during EW 21, influenza activity continued to decrease. The national proportion of ILI-associated outpatient visits was 1.3% and below the national baseline (2.0%). The proportion of deaths attributed to pneumonia and influenza for EW 21 (5.9%) decreased compared to the previous EW and was below the epidemic threshold (6.7%). A total of 96 influenza-associated pediatric deaths have been reported this season, of which one was reported during EW 21. According to laboratory data for EW 21, 2,963 samples were analyzed, of which 6.6% were positive for influenza. Among the positive samples, 58.2% were influenza B and 41.8% were influenza A (1.2% A(H1N1)pdm09, 35.8% A(H3) and 63.0% not subtyped).

United States



In Mexico³ during EW 21, influenza activity remained within expected levels for this time of year. ARI activity increased slightly compared to the previous week but was within the success zone of the endemic channel. The highest levels of ARI activity were reported in Aguascalientes, Hidalgo and Campeche. Pneumonia activity also increased slightly compared to the previous week (rate: 1.8 per 100,000 inhabitants). The highest levels of pneumonia activity were reported in Nuevo Leon, Sonora and Jalisco. Nationally, through May 29, 2014, the proportion of ILI/SARI-associated medical visits was 0.4%. The highest proportions of ILI/SARI-associated medical visits were reported in Oaxaca, Veracruz and Queretaro. During this same period, 729 influenza-associated deaths were reported, of which 90.4% were associated with influenza A(H1N1)pdm09. Based on laboratory data from EW 18-21, 636 samples were analyzed, of which 8.8% were positive for influenza. Among the positive samples, 73.2% were influenza B and 26.8% were influenza A (13.3% A(H1N1)pdm09, 80.0% A(H3N2) and 6.7% A, not subtyped).

Mexico

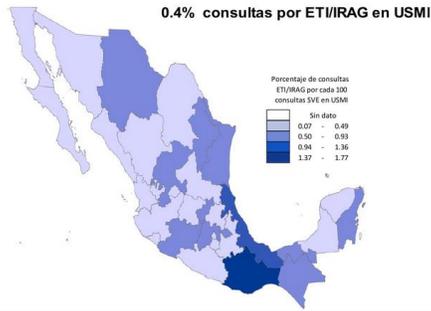


² USA: CDC FluView report. EW 21. Available at: <http://www.cdc.gov/flu/weekly/>

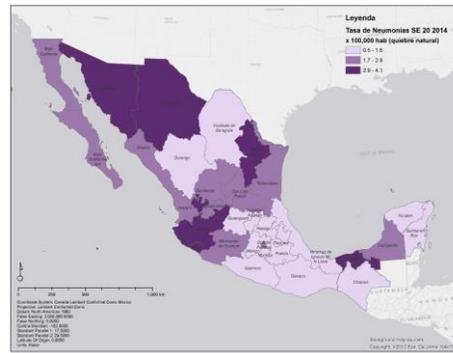
³ México. Dirección General de Epidemiología. Información epidemiológica. Informes Epidemiológicos Semanales 2014.

Mexico: Proportion of ILI/SARI consultations by State, EW 21

Figura 1. Proporción de consultas por ETI/IRAG en USMI según entidad federativa, México, 2014

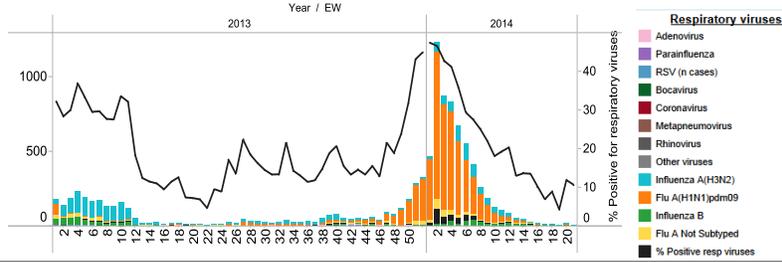


Mexico: Pneumonia Rates by State, EW 20



Mexico: Respiratory viruses distribution by EW 2013-14

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

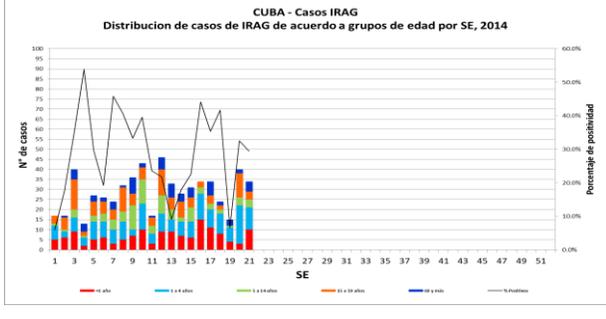


Caribbean

In Cuba during EW 21, the number of SARI-associated hospitalizations (n=34) decreased compared to the previous week. Children 1-4 years 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 18-21, 229 samples were analyzed, of which 28.8% were positive for a respiratory virus and 0.4% were positive for influenza. Among the positive samples, parainfluenza (43.9%) and rhinovirus (28.8%) predominated.

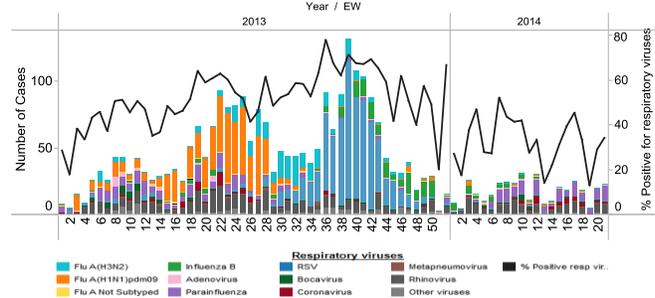
Cuba

Cuba. SARI cases by age group, by EW, 2013-14



Cuba. Respiratory viruses distribution by EW, 2013-14

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

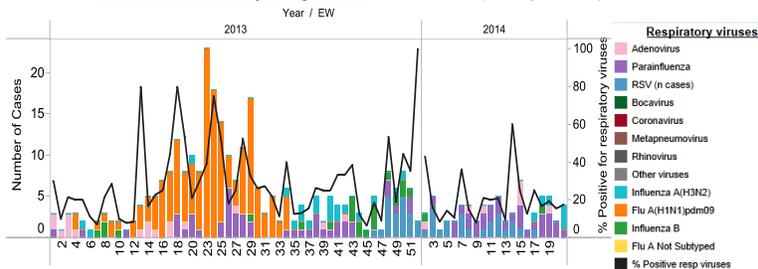


In the Dominican Republic, during EW 18-21, 92 samples were analyzed, of which 17.4% were positive for a respiratory virus and 6.5% were positive for influenza. Among the positive samples, parainfluenza (56.3%) and influenza A(H3N2) (31.3%) predominated.

Dominican Republic

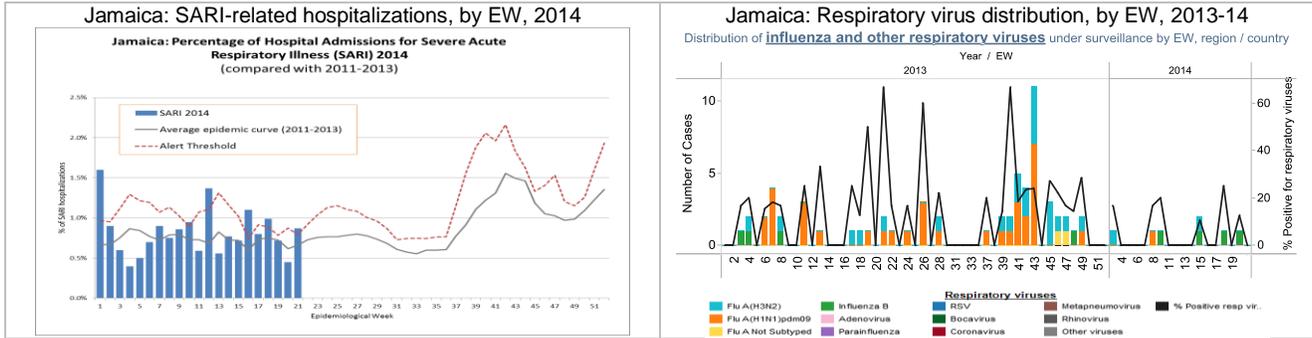
Dominican Rep.: Respiratory viruses distribution by EW, 2013-14

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



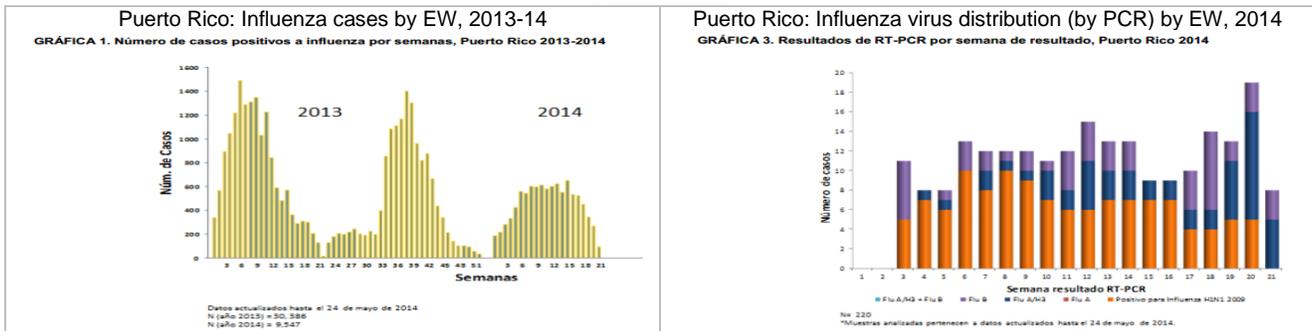
In Jamaica, based on sentinel surveillance data for EW 21, the proportions of ARI-associated consultations (3.5%) decreased compared to the previous week while the proportion of SARI-associated hospitalizations (1.0%) increased. No SARI-associated deaths were reported during this EW. Based on laboratory data for EW 18-21, 42 samples were analyzed of which two were positive for influenza B.

Jamaica



In Puerto Rico⁴ during EW 21, the number of influenza cases (n=93) remained low. Of these, 51 cases were associated with influenza A, 40 with influenza B and 2 with an influenza A and B co-infection. Since the beginning of 2014, 9,547 influenza cases have been reported (54% influenza A and 45% influenza B) and persons aged 0-19 years accounted for 50% of those cases. During this same period, 469 influenza-associated hospitalizations and 12 influenza-associated deaths were reported.

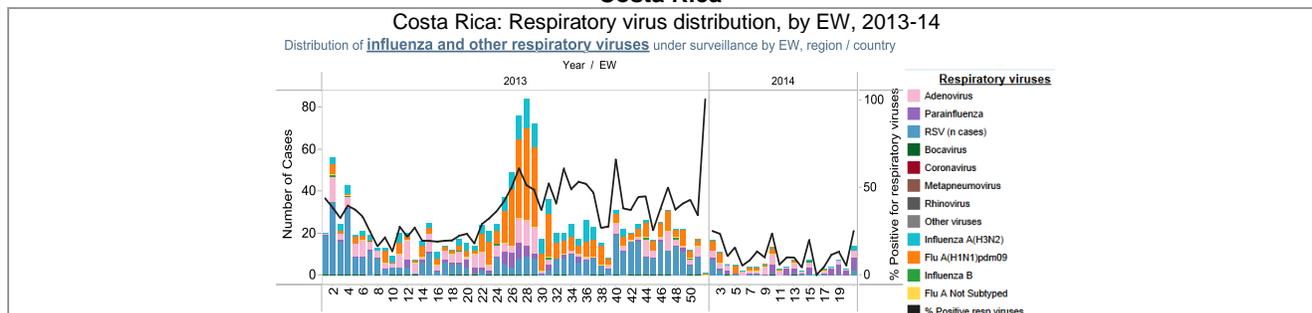
Puerto Rico



Central America

In Costa Rica, according to laboratory data from EW 18-21, 201 samples were analyzed of which 13.9% were positive for a respiratory virus and 1.0% were positive for influenza. Among the positive samples, parainfluenza (57.1%) and adenovirus (28.6%) predominated.

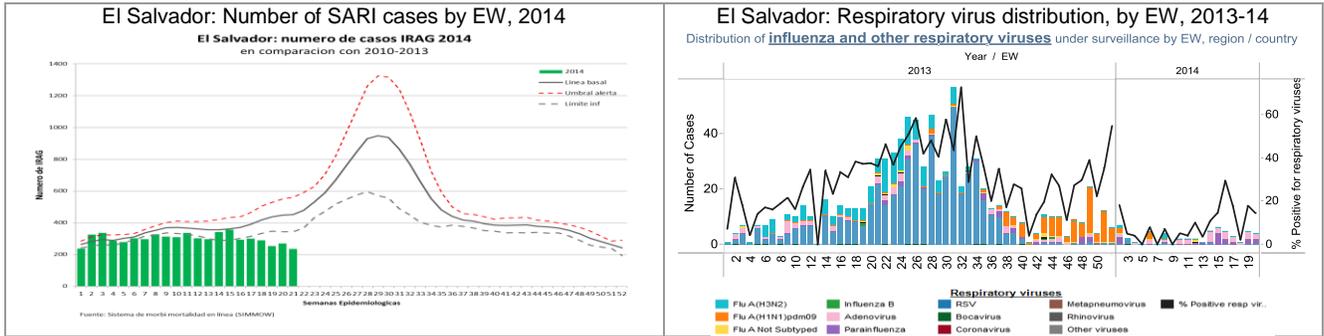
Costa Rica



In El Salvador, during EW 21, the proportions of SARI-associated hospitalizations (4.9%) and SARI-associated deaths (6.8%) increased compared to the previous week while the proportion of SARI-associated ICU admissions (11.1%) decreased. Based on laboratory data from EW 17-20, 122 samples were analyzed, of which 10.7% were positive for a respiratory virus. Among the positive samples, adenovirus (61.5%) and parainfluenza (38.5%) were detected.

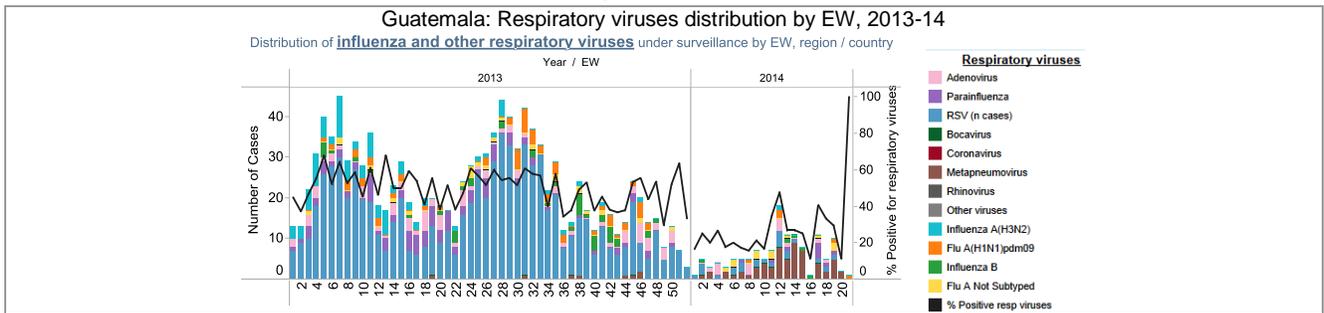
⁴ Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 21

El Salvador



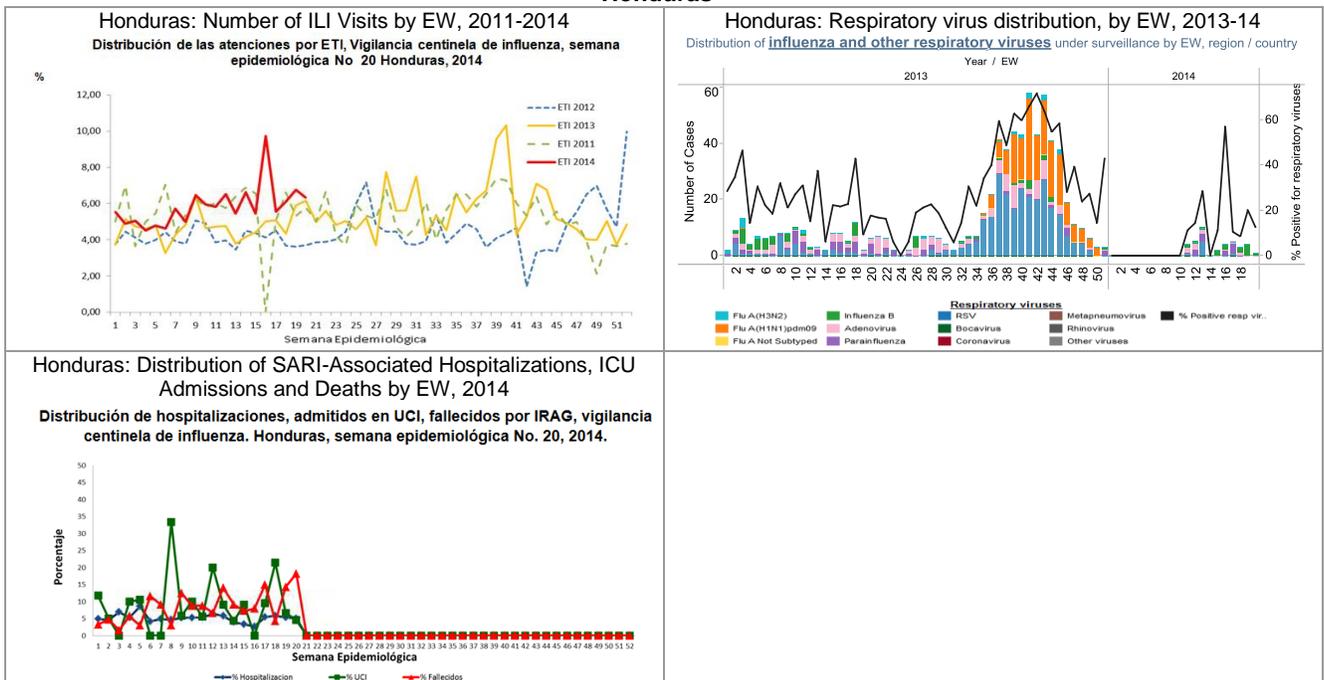
In Guatemala, based on laboratory data from EW 18-21, 68 samples were analyzed, of which 26.5% were positive for a respiratory virus and 5.9% were positive for influenza. Among the influenza positive samples, 100% were influenza A (50.0% A(H1N1)pdm09 and 50.0% not subtyped). Among other respiratory viruses, human metapneumovirus (50.0%) predominated.

Guatemala



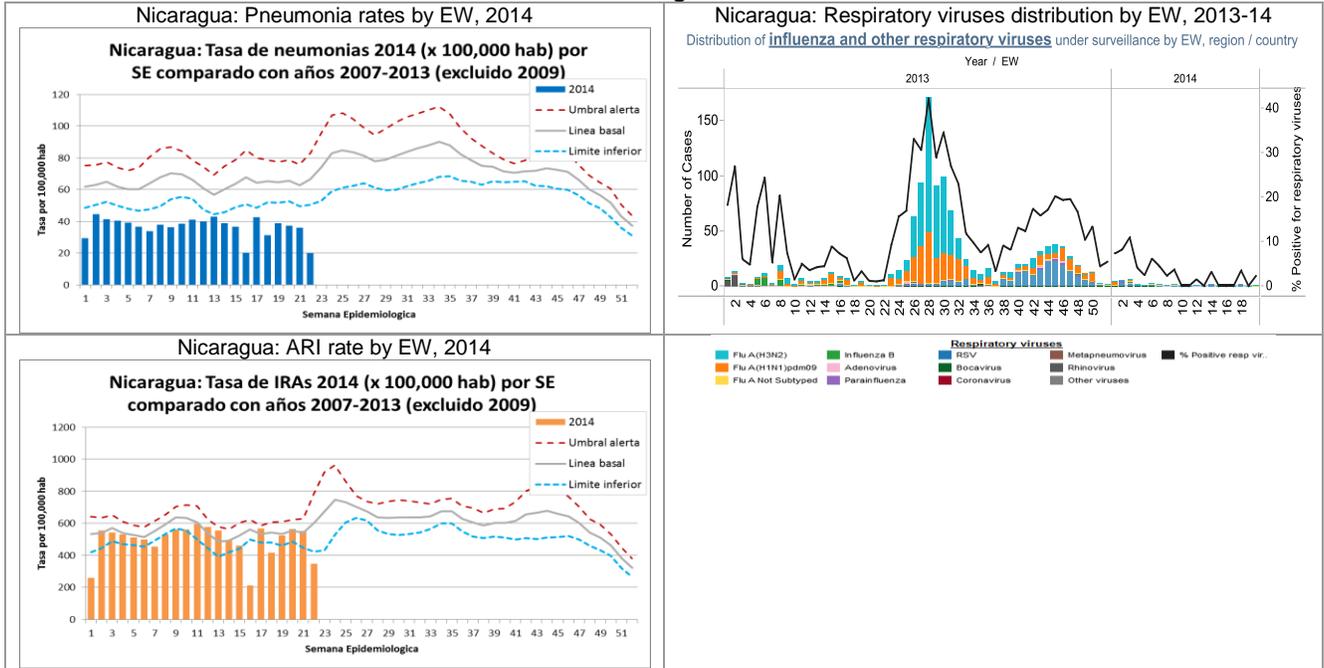
In Honduras, during EW 20, the proportions of ILI-associated medical visits (6.3%) and SARI-associated hospitalizations (5.1%) decreased compared to the previous week. There were two SARI-associated deaths reported during this time. Based on laboratory data from EW 17-20, 112 samples were analyzed, of which 11.6% were positive for a respiratory virus and 6.3% were positive for influenza. Among the positive samples, influenza B (53.8%) and parainfluenza (23.1%) predominated.

Honduras



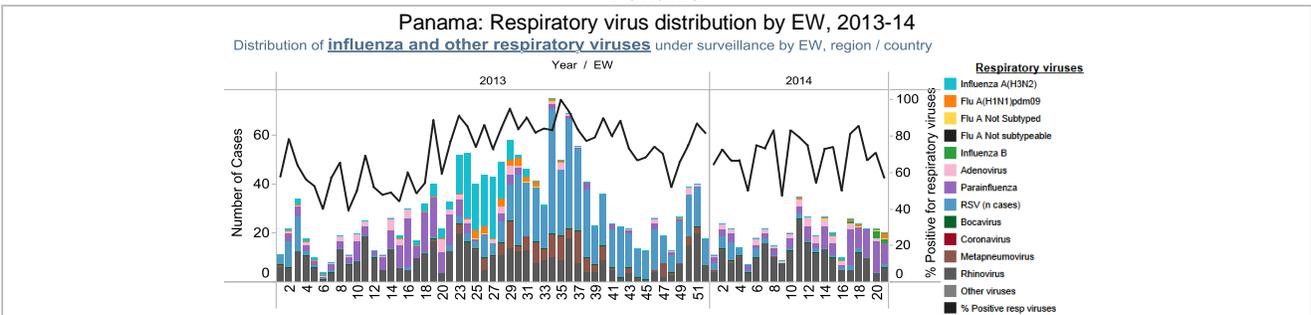
In Nicaragua, during EW 21, the national rates of pneumonia and ARI decreased compared to the previous week and were within expected levels for this time of year. Based on laboratory data from EW 17-20, 221 samples were analyzed, of which three (1.4%) were positive for a respiratory virus (parainfluenza and influenza A(H1N1)pdm09).

Nicaragua



In Panama, based on national laboratory data from EW 18-21, 127 samples were analyzed, of which 69.3% were positive for a respiratory virus and 7.1% were positive for influenza. Among the positive samples, parainfluenza (48.9%), rhinovirus (36.4%) and influenza B (5.7%) predominated.

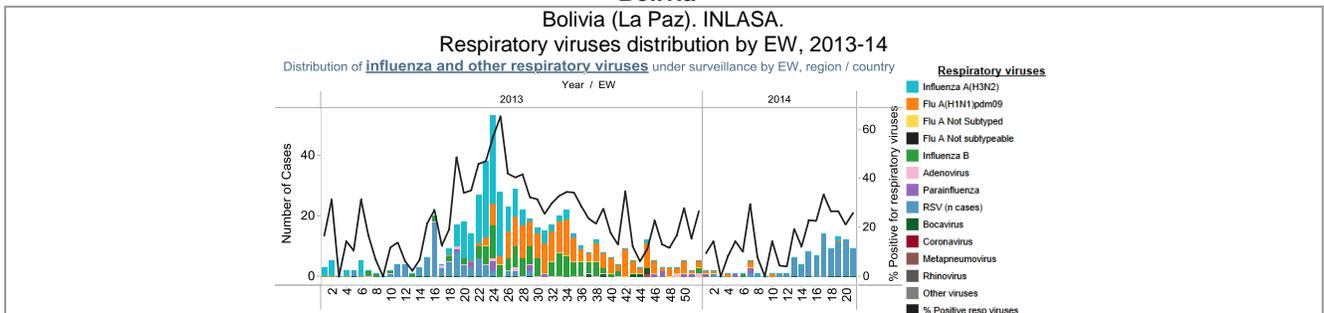
Panama



South America – Andean countries

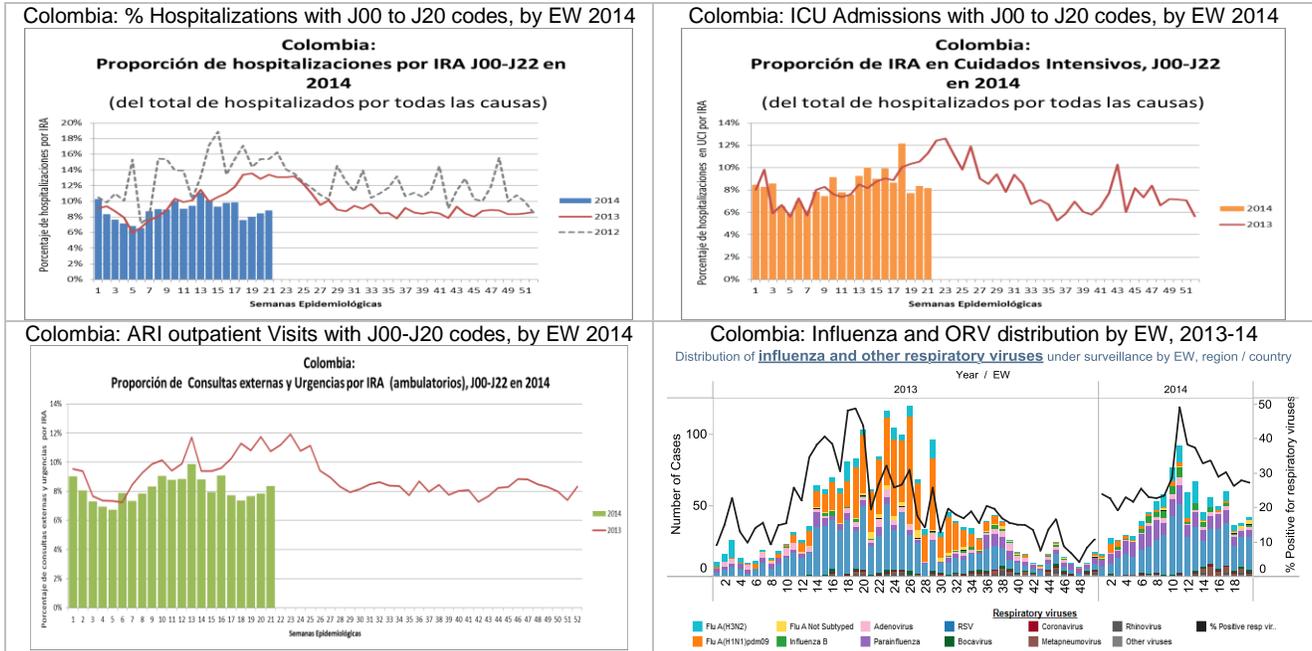
In Bolivia, according to the National Laboratory in La Paz (INLASA) from EW 18-21, 175 samples were analyzed, of which 24.6% were positive for a respiratory virus and 0.6% were positive for influenza. Among the positive samples, 97.7% were RSV.

Bolivia



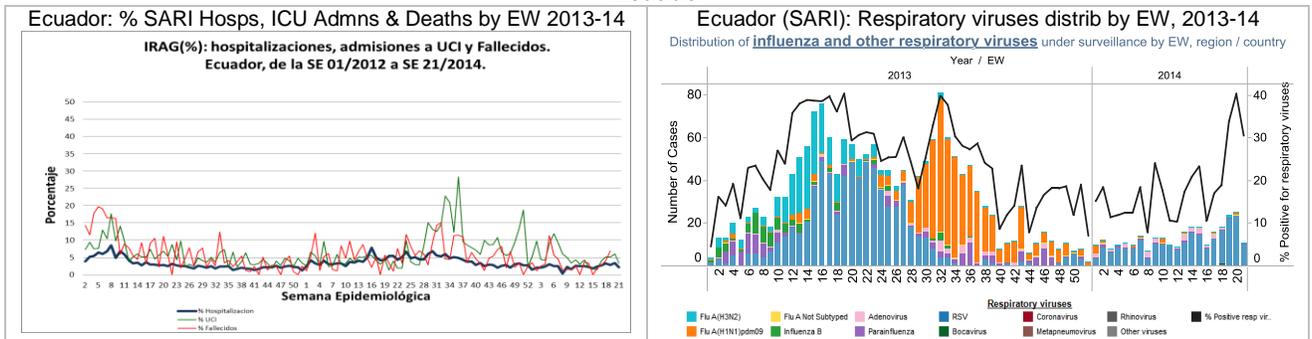
In Colombia, nationally during EW 21, the proportions of hospitalizations (8.6%) and outpatient and urgent visits (8.3%) with SARI/ARI-associated ICD-10 codes (J00 to J22) increased compared to the previous week but were below values observed last year. Meanwhile the proportion of ICU admissions (8.2%) decreased compared to the previous week. Based on INS laboratory data from EW 17-20, 625 samples were analyzed, of which 28.2% were positive for a respiratory virus and 4.6% were positive for influenza. Among the positive samples, RSV (52.3%) and parainfluenza (13.6%) predominated.

Colombia



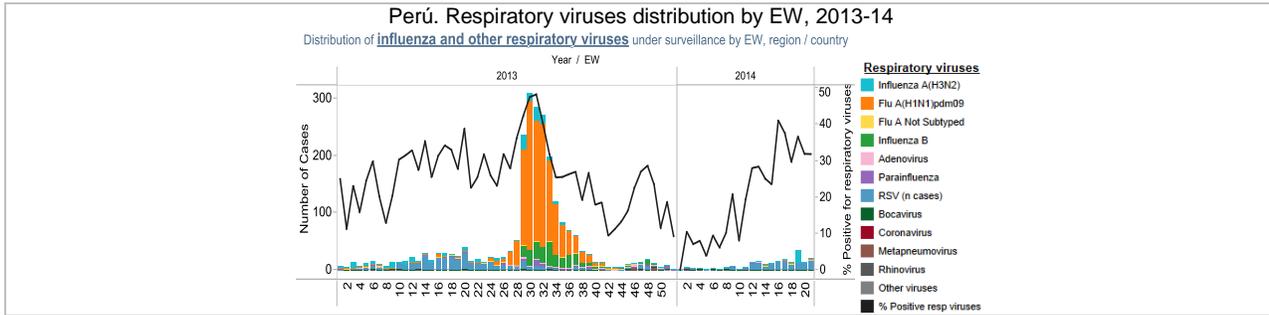
In Ecuador during EW 21, the proportion of SARI-associated hospitalizations (2.1%) and ICU admissions (3.4%) decreased compared to the previous week, while the proportion of SARI-associated deaths (6.9%) increased. Based on national reference laboratory data from EW 18-21, 264 SARI samples were analyzed, of which 29.5% were positive for a respiratory virus and 0.8% were positive for influenza. Among the positive samples, RSV predominated (92.3%).

Ecuador



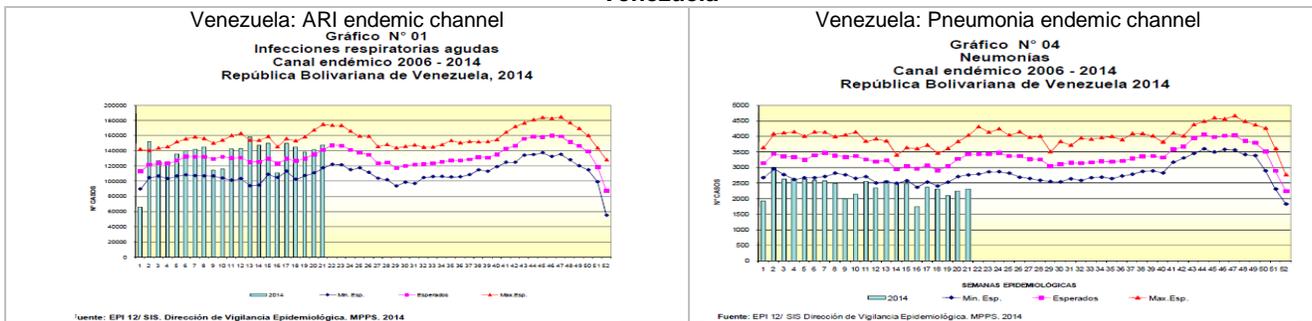
In Peru, based on national laboratory data from EW 18-21, 244 samples were analyzed, of which 33.2% were positive for a respiratory virus and 11.2% were positive for influenza. Among the positive samples, RSV (60.5%) and influenza A(H3N2) (29.6%) predominated.

Peru



In Venezuela⁵ during EW 21, the number of ARI and pneumonia cases increased by 4.0% and 2.7%, respectively, compared to the previous EW. Both were within the expected levels for this time of year. During EW 21, 64 SARI-associated hospitalizations were reported, with children 1-4 years of age comprising the largest proportion of cases. Based on virologic data from EW 1-21, 279 samples were analyzed from suspected influenza cases and of these, 13.6% were positive for influenza. Among the positive samples, influenza A(H3N2) predominated (73.7%).

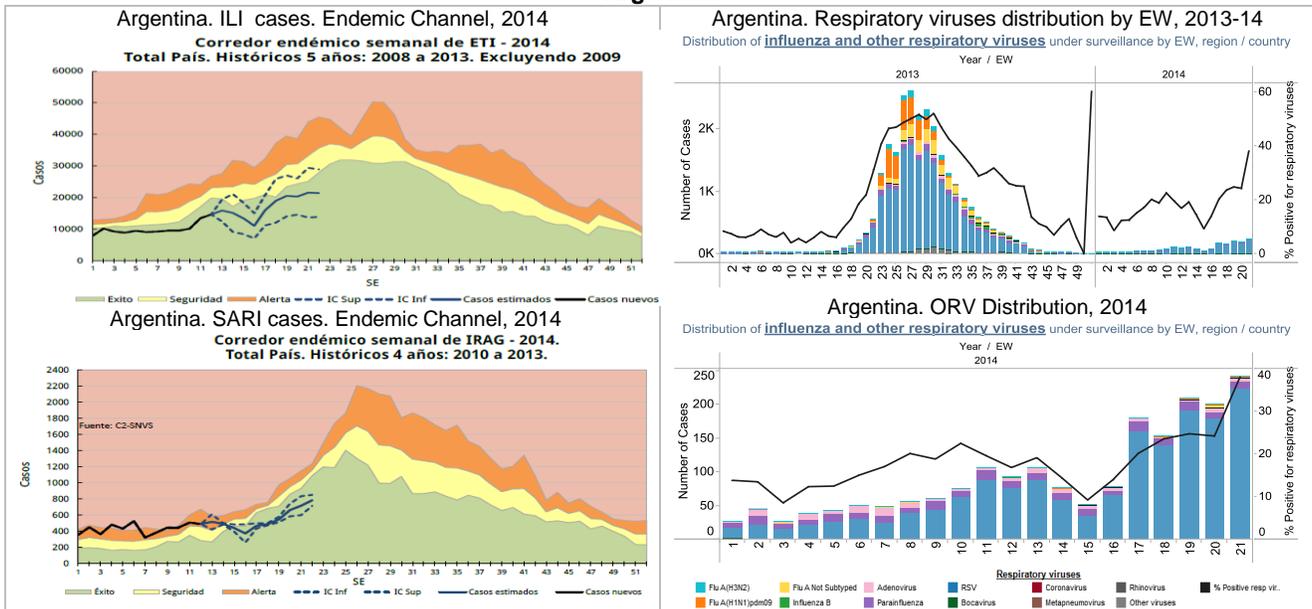
Venezuela



South America – South Cone and Brazil

In Argentina⁶, according to reports and calculated estimations, for EW 21 the number of cases of ILI and SARI were both within the success zone of the endemic channel. Based on laboratory data from EW 20-21, 1,462 samples were analyzed, of which 30.2% were positive for a respiratory virus and 0.5% were positive for influenza. Among the positive samples, RSV (90.9%) predominated.

Argentina

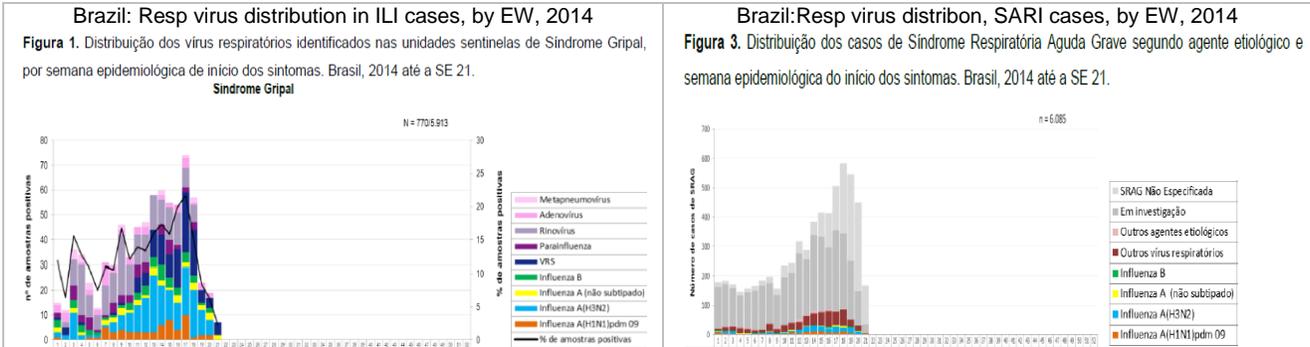


⁵ Venezuela. Boletín epidemiológico, EW 21.

⁶ Argentina. Boletín integrado de vigilancia. SE 21.

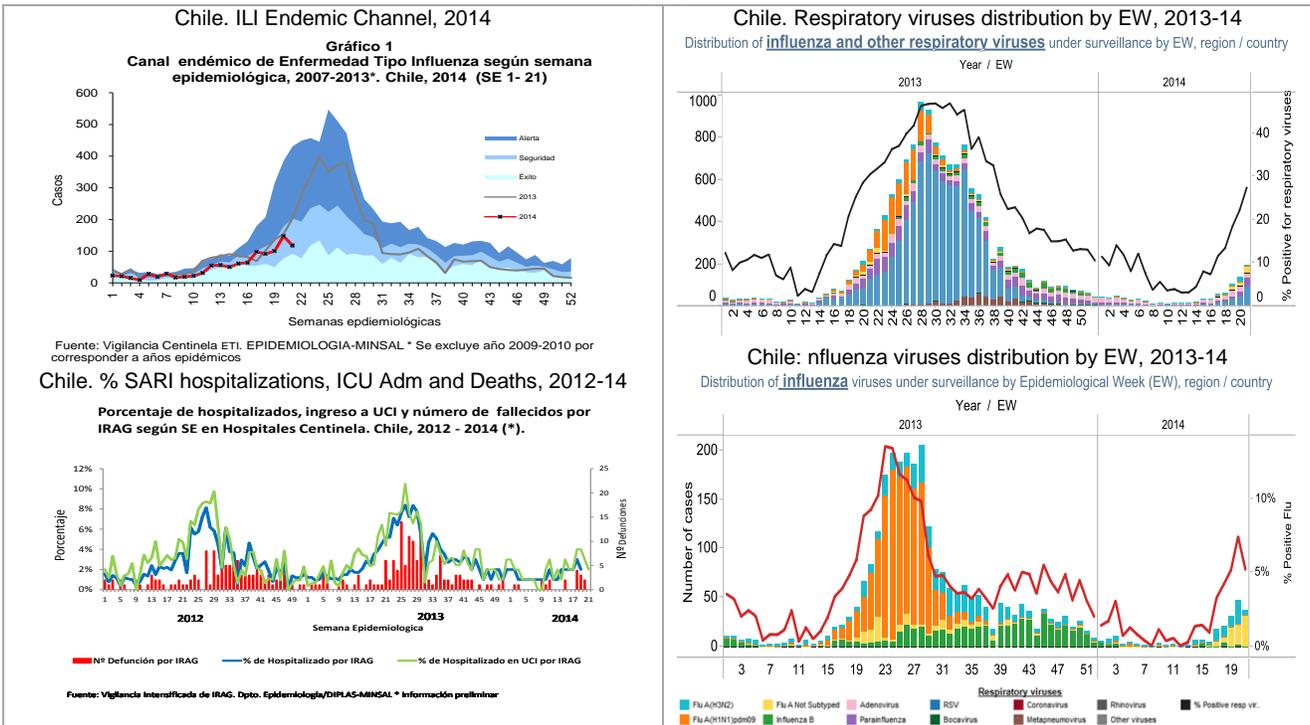
In Brazil⁷, according to ILI sentinel surveillance data through EW 21, 5,913 samples were analyzed, of which 13.0% were positive for influenza or another respiratory virus. Among the influenza positive samples, A(H3N2) predominated. Based on national SARI surveillance data during this same period, 6,085 SARI cases were reported and 5.6% of these were positive for influenza. Influenza A(H3N2) also predominated among these positive samples. Through EW 21, 551 SARI-associated deaths were reported, of which 6.7% were positive for influenza (56.8% A(H1N1)pdm09 and 29.7% A(H3N2)).

Brazil



In Chile⁸, during EW 21, ILI activity (rate: 7.8 per 100,000 inhabitants) decreased compared to the previous week and was within the security zone of the endemic channel. Through EW 21, 622 SARI cases were reported through sentinel surveillance and of these, 19% were positive for a respiratory virus. Based on laboratory data from EW 20-21, 1,346 samples were analyzed, of which 24.8% were positive for a respiratory virus and 6.2% were positive for influenza. Among the positive influenza samples, 97.6% were influenza A (35.4% A(H3N2) and 64.6% not subtyped) and 2.4% were influenza B. Among the other respiratory viruses, RSV (40.4% of positive samples) and parainfluenza (20.1%) predominated.

Chile

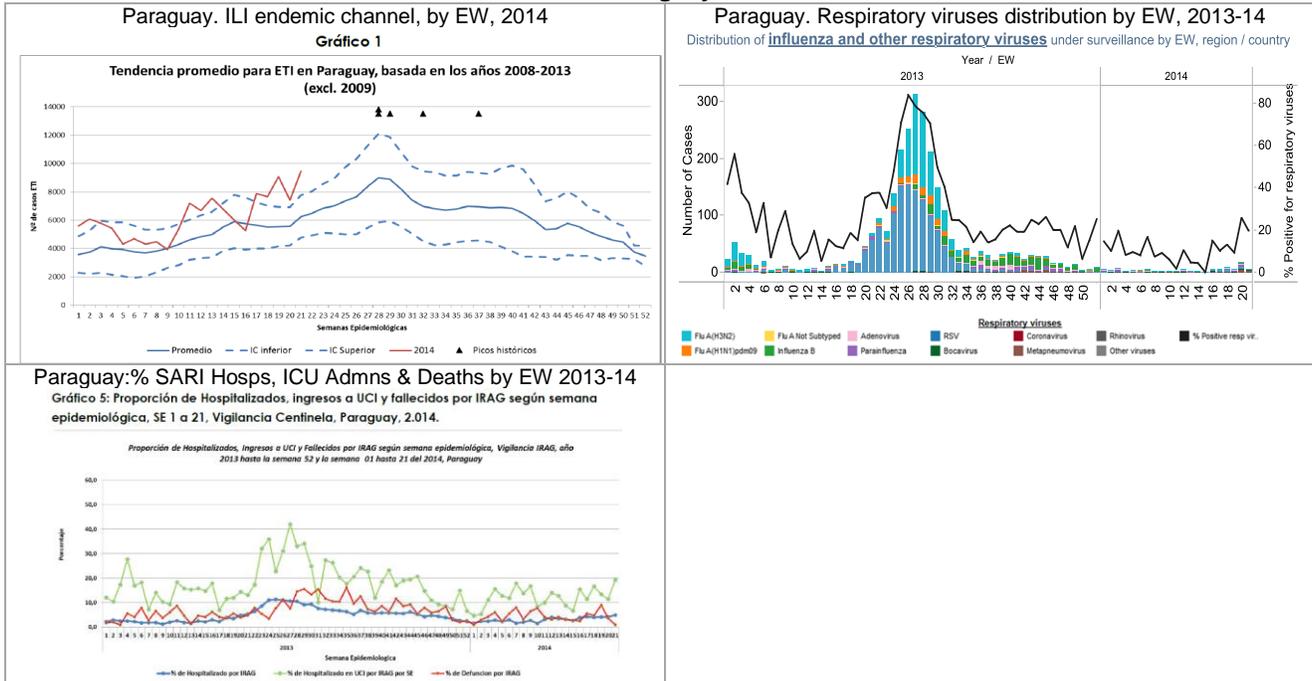


In Paraguay⁹ during EW 21, the ILI consultation rate (141.6 per 100,000 inhabitants) increased from the previous EW and was above the expected levels for this time of year. The proportion of SARI-associated

⁷ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 21, 2014.
⁸ Chile. Informe de situación. EW 21. Available at: <http://epi.minsal.cl/>
⁹ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 21.

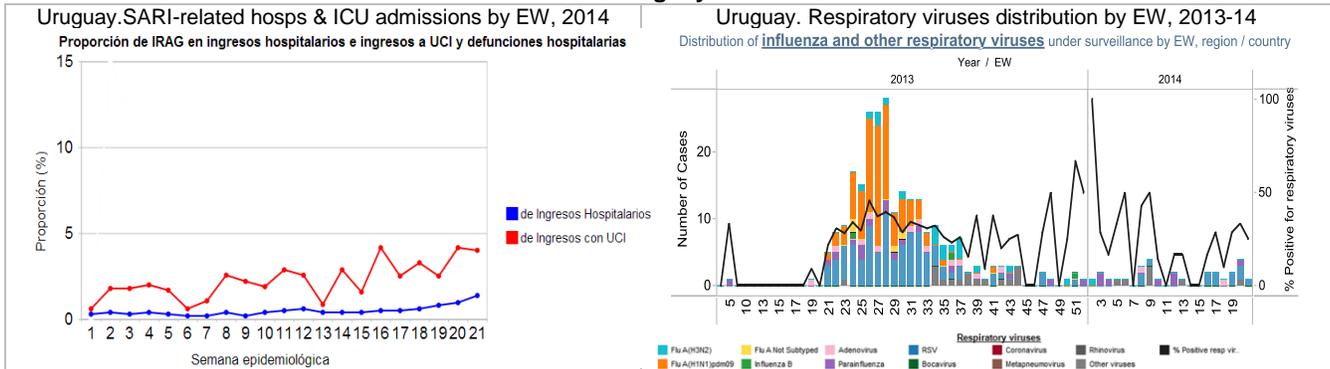
hospitalizations (4.8%) remained within the expected range for this time of year. The most affected age groups were children <5 years of age and adults ≥60 years. Based on reference laboratory data from EW 18-21, 236 samples were analyzed of which 16.5% were positive for a respiratory virus and 2.5% were positive for influenza. Among the positive influenza samples, 100% were influenza B. Among the other respiratory viruses, RSV (33.3% of positive samples) and human metapneumovirus (30.8%) predominated.

Paraguay



In Uruguay¹⁰ during EW 21, the proportions of SARI-associated hospitalizations, ICU admissions and deaths increased slightly, but remained at low levels. Based on laboratory data from EW 18-21, 33 samples were analyzed, of which eight (24.2%) were positive for a respiratory virus. Among the positive samples, RSV (62.5%) predominated.

Uruguay



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