

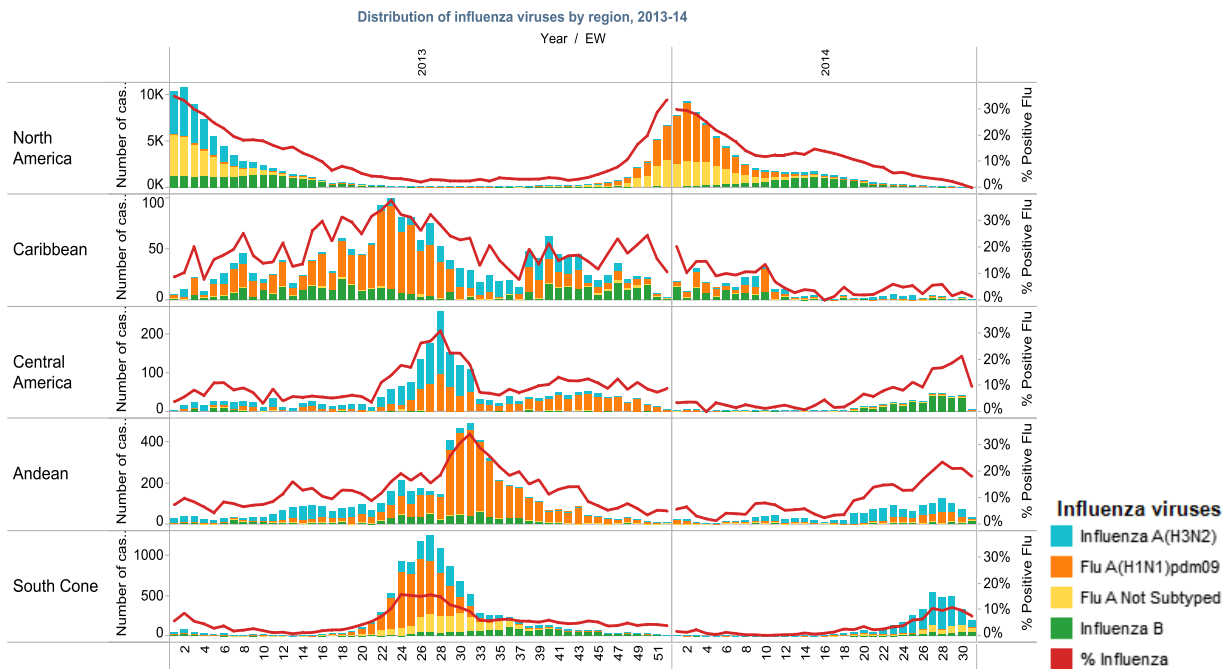
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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.

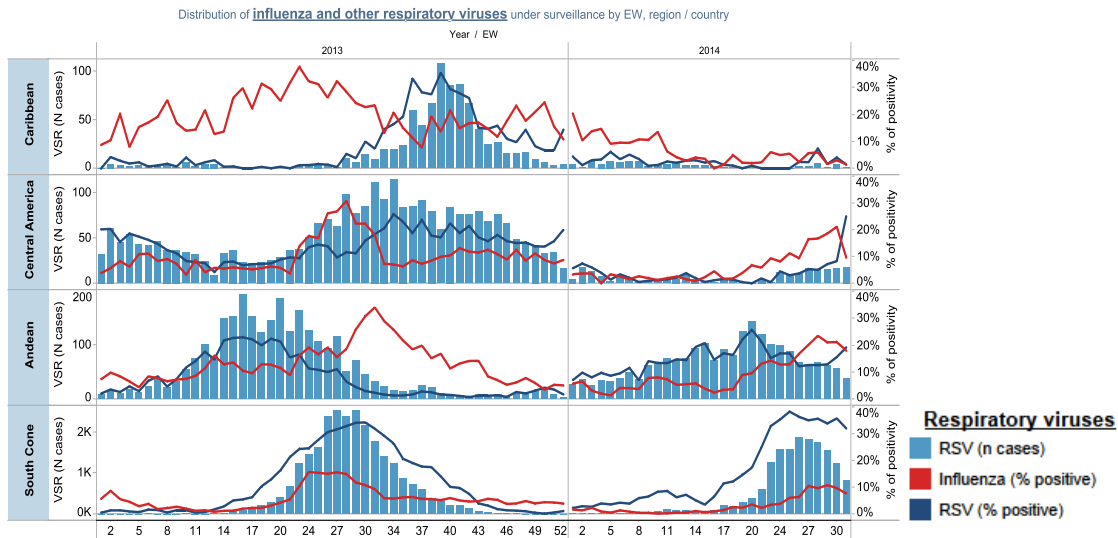
WEEKLY SUMMARY

- **North America:** Influenza activity remained low in the sub-region with co-circulation of influenza B and A(H3N2).
- **The Caribbean and Central America:** Increased circulation of influenza B was observed in most countries of the sub-region (Jamaica, El Salvador, Guatemala, Honduras, Nicaragua and Panama), and co-circulation with influenza A(H1N1)pdm09 was observed in Panama.
- **South America – Andean Countries:** Influenza activity increased in Colombia, Ecuador and Peru. In Bolivia, although influenza activity was high, it began to decrease. 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 began to decrease. RSV continued to circulate, and among influenza viruses, A(H3N2) predominated.

Influenza circulation by region. 2013-14



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



ACRONYMS

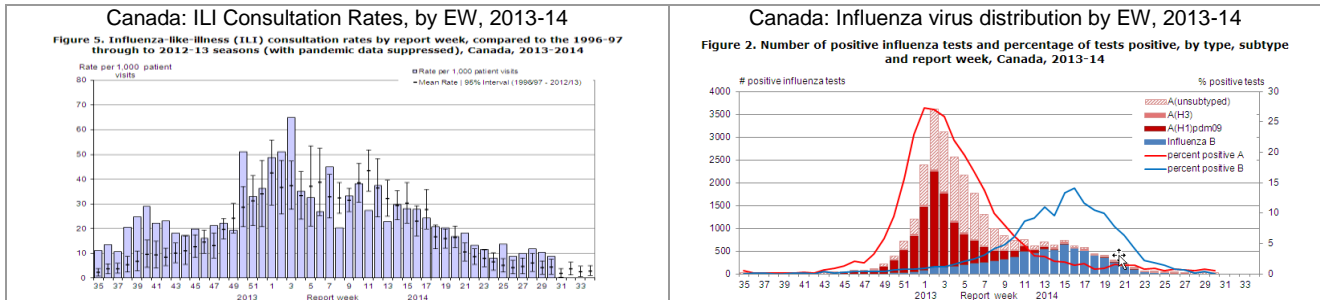
ARI	Acute respiratory infection
CARPHA	Caribbean Public Health Agency
CENETROP	Centro de Enfermedades Tropicales (Santa Cruz, Bolivia)
EW	Epidemiological Week
ILI	Influenza-like illness
INLASA	Instituto Nacional de Laboratorios de Salud (La Paz, Bolivia)
INS	Instituto Nacional de Salud
ORV	Other respiratory 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 30, influenza activity was low. The national ILI consultation rate was 8.7 per 1,000 patient visits, a decrease compared to the previous week and slightly above expected levels. Since the beginning of the 2013-14 influenza season, 5,431 influenza-associated hospitalizations have been reported, of which 68.4% were associated with influenza A. During this same period, 339 deaths were reported, most of which were associated with influenza A (64.6%). The highest proportion of deaths (56.6%) has been among adults ≥ 65 years of age. Based on laboratory data for EW 30 the overall percentage of positive influenza tests was <2%. Among the positive tests during EW 29-30, 73.1% were influenza A (10.5% were influenza A(H1N1)pdm09, 63.2% were A(H3) and 26.3% were not subtyped) and 26.9% were influenza B. Among other circulating respiratory viruses, rhinovirus predominated.

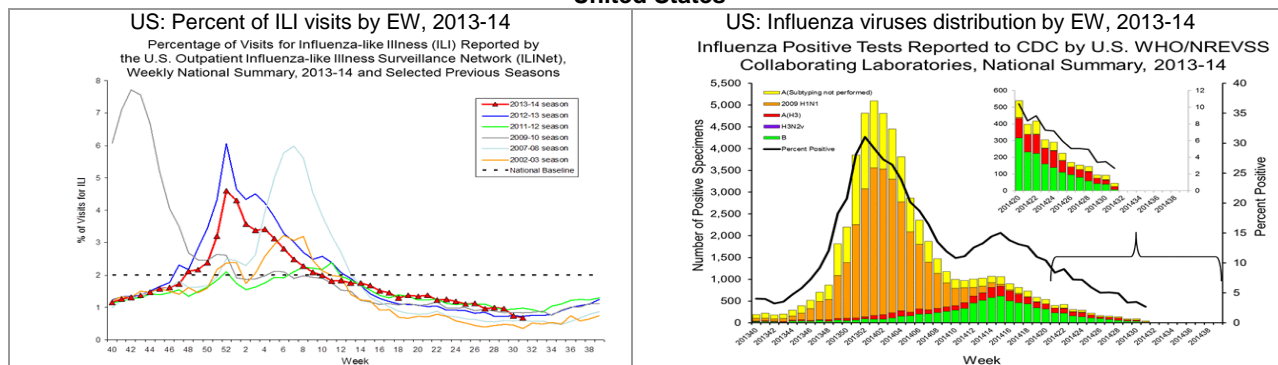
Canada



¹ Canada: FluWatch Report. EW 29-30. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

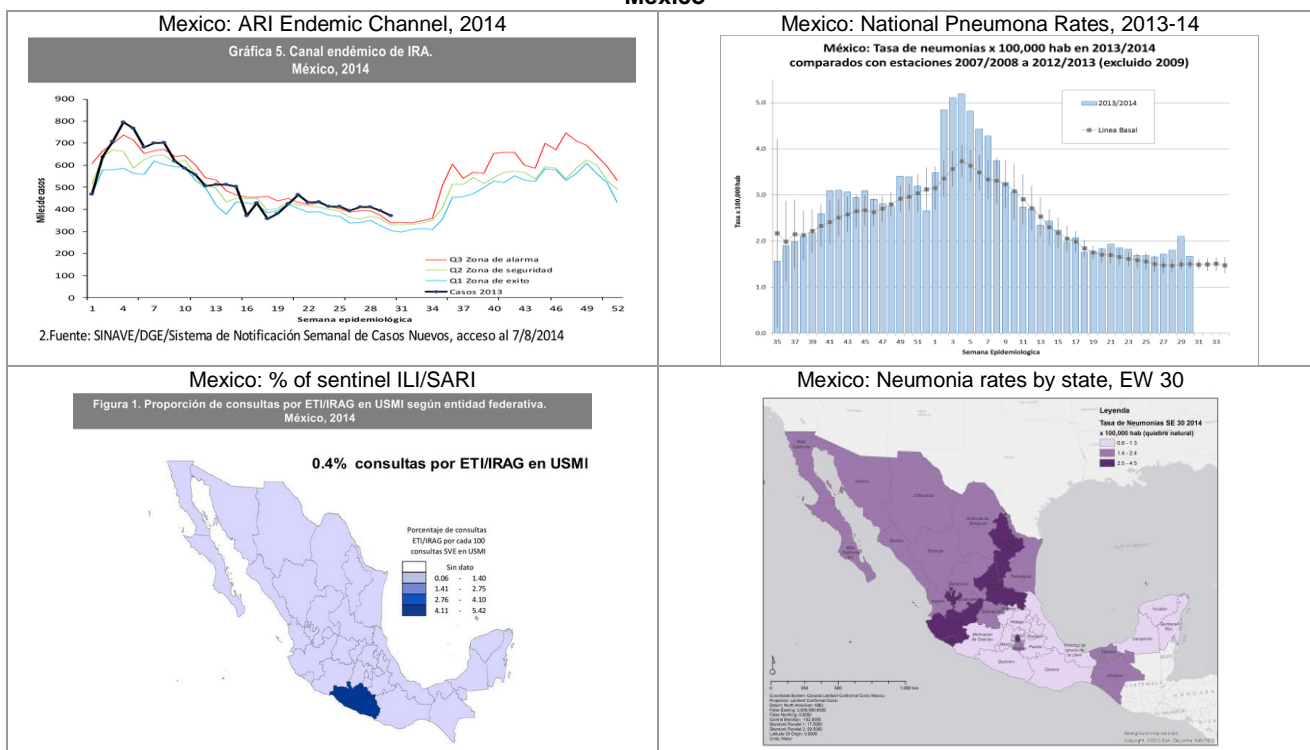
In the United States² during EW 31, influenza activity was low. The national proportion of ILI-associated outpatient visits (0.7%) was below the national baseline (2.0%). The proportion of deaths attributed to pneumonia and influenza (5.8%) was also below the epidemic threshold (6.0%). A total of 106 influenza-associated pediatric deaths have been reported this season (one death was reported during EW 31). According to laboratory data for EW 31, 1,666 samples were analyzed, of which 2.7% were positive for influenza. Among the positive samples, 86.7% were influenza A (0% A(H1N1)pdm09, 48.7% A(H3) and 51.3% not subtyped) and 13.3% were influenza B.

United States



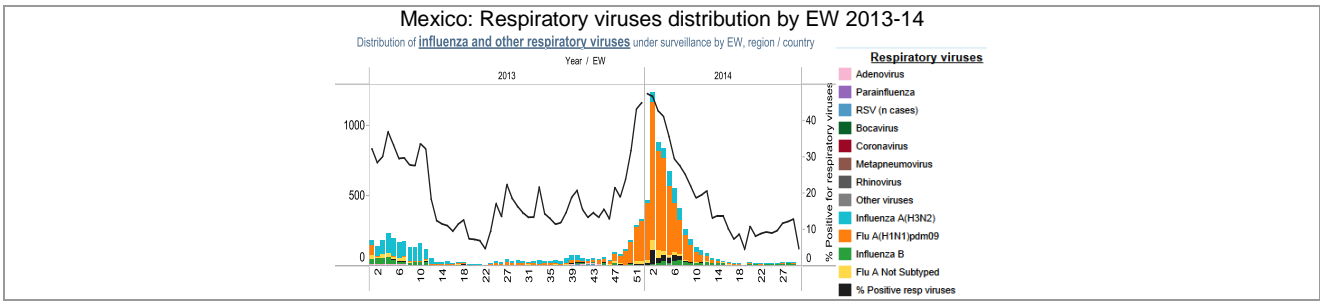
In Mexico³ during EW 31, influenza activity remained low. ARI activity decreased from the previous week and was within the epidemic zone of the endemic channel. Pneumonia activity decreased compared to the previous week (rate: 1.7 per 100,000 inhabitants) and was slightly above expected levels for this time of year. The highest levels of pneumonia activity were reported in Jalisco, Nuevo Leon and Colima. Nationally, through August 7, 2014, the proportion of ILI/SARI-associated medical visits was 0.4%. The highest proportions of ILI/SARI-associated medical visits were reported in Guerrero, Veracruz and Michoacán. During this same period, 757 influenza-associated deaths were reported, of which 90.2% were associated with influenza A(H1N1)pdm09. Based on laboratory data from EW 27-30, 584 samples were analyzed, of which 10.3% were positive for influenza. Among the positive samples, influenza B predominated (72.1%), followed by influenza A(H3N2) (14.7%).

Mexico



² USA: CDC FluView report. EW 31. Available at: <http://www.cdc.gov/flu/weekly/>

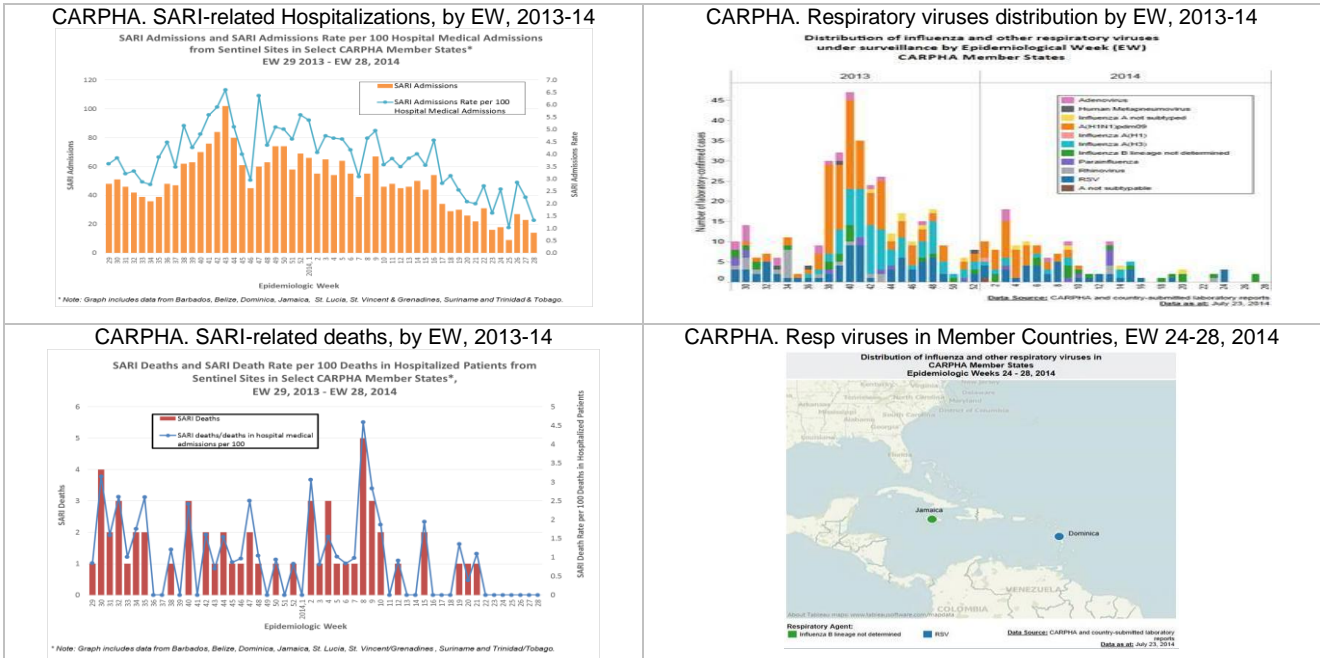
³ México. Dirección General de Epidemiología. Información epidemiológica. Informes Epidemiológicos Semanales 2014.



Caribbean

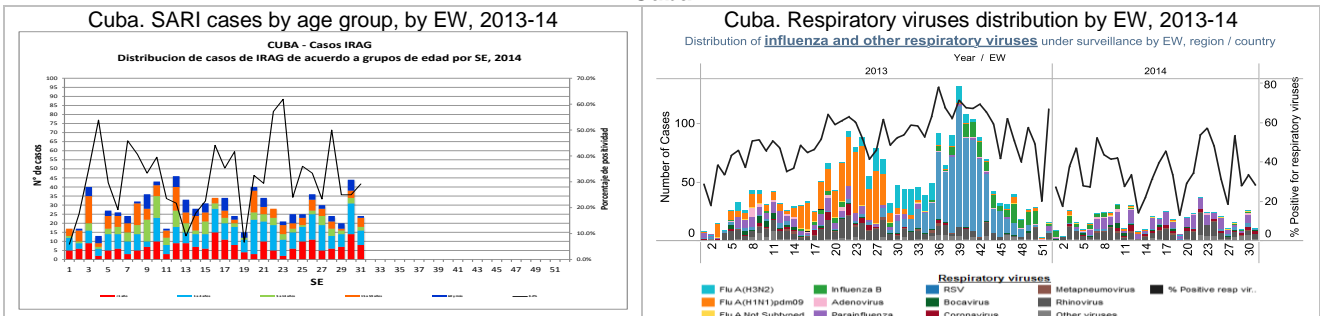
CARPHA⁴ received weekly SARI/ARI data from the following countries for EW 24-28: Barbados, Jamaica, St Vincent & the Grenadines, and Trinidad & Tobago. The proportion of SARI-associated hospitalizations during EW 28 was 1.3%, a decrease compared to the previous EW. Children 5-14 years of age had the highest proportion of SARI admissions (7.1% of all admissions). No SARI-associated deaths were reported during this period. According to laboratory data from EW 24-28, the following viruses were detected: influenza B (Jamaica) and RSV (Dominica).

CARPHA



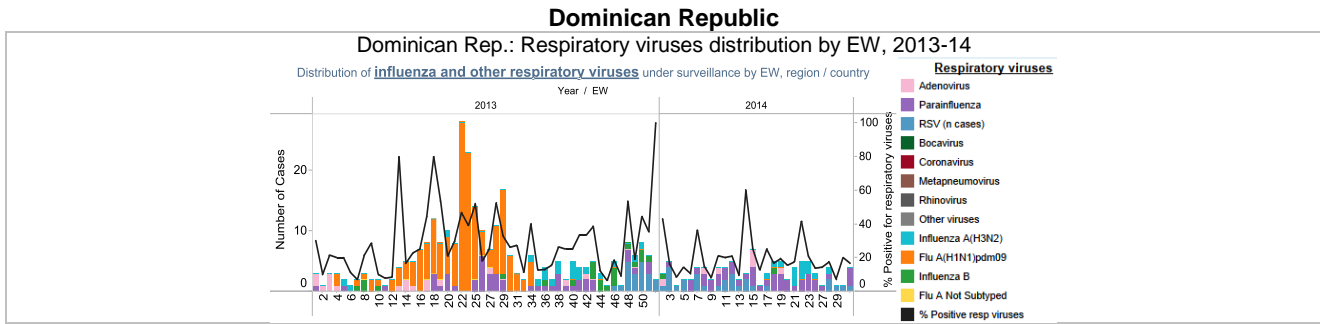
In Cuba during EW 31, the number of SARI-associated hospitalizations (n=24) decreased from the previous week. Children 0-4 years of age comprised the largest proportion of these cases. No SARI-associated deaths were reported during this period. According to national laboratory data for EW 28-31, 183 samples were analyzed, of which 34.4% were positive for a respiratory virus and 2.7% for influenza. Among the positive samples, rhinovirus (22.2%) and parainfluenza (19.0%) predominated. Among the influenza viruses, influenza B and A(H1N1)pdm09 were detected.

Cuba

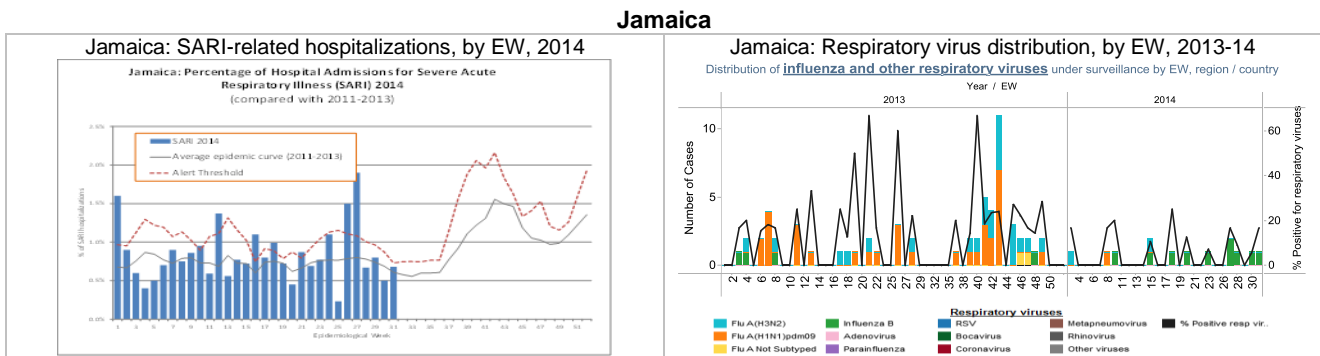


⁴ Caribbean Public Health Agency (CARPHA) EW 24-28

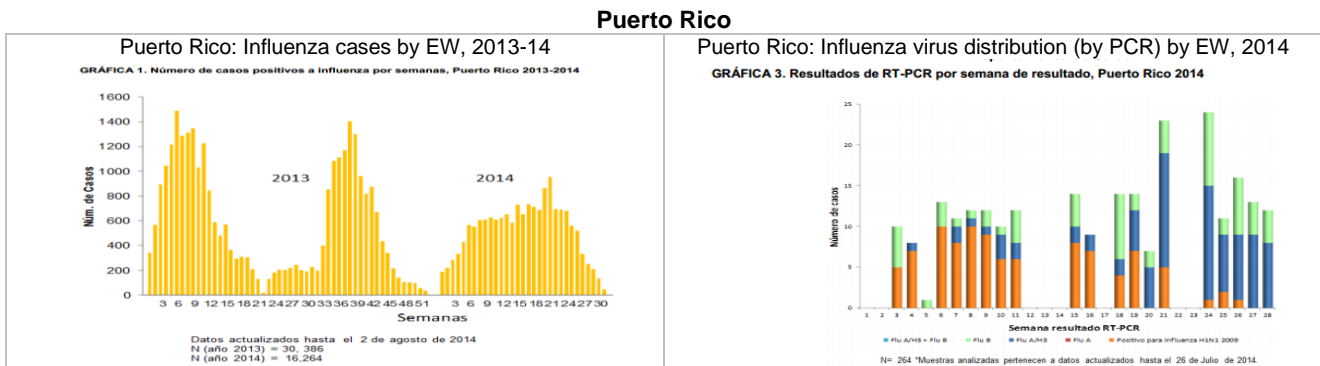
In the Dominican Republic, during EW 28-31, 66 samples were analyzed, of which 15.2% were positive for a respiratory virus and 1.5% were positive for influenza. Among the positive samples, RSV (50.0%), parainfluenza (40.0%) and influenza A(H3N2) (10.0%) were detected.



In Jamaica, based on sentinel surveillance data for EW 31, the proportions of ARI-associated consultations (2.6%) and SARI-associated hospitalizations (0.7%) increased compared to the previous week. No SARI-associated deaths were reported during this EW. Based on laboratory data for EW 28-31, 43 samples were analyzed, of which three (7.0%) were positive for influenza B.



In Puerto Rico⁵ during EW 31, the number of influenza cases (n=43) decreased compared to the previous week. Of these, 14 cases were associated with influenza A, 28 with influenza B and 1 with an influenza A and B co-infection. Since the beginning of 2014, 16,264 influenza cases have been reported (45% influenza A, 54% influenza B and 1% influenza A and B) and persons aged 0-19 years accounted for 50% of those cases. During this same period, 792 influenza-associated hospitalizations and 13 influenza-associated deaths were reported.



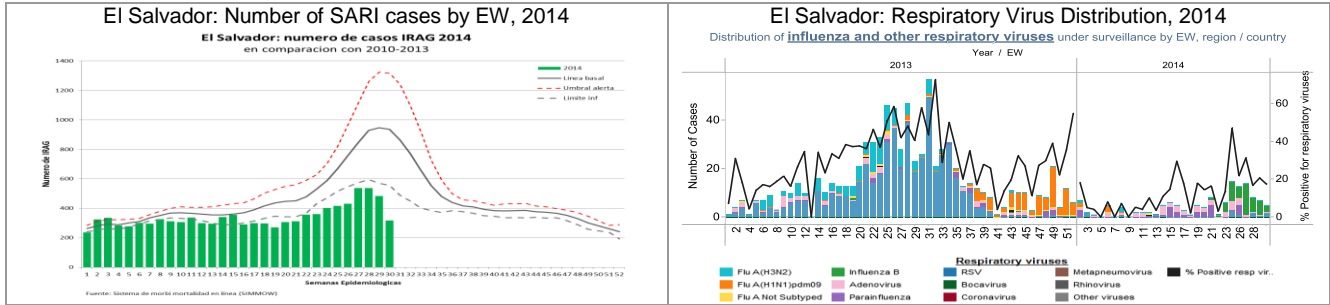
Central America

In El Salvador, during EW 30, the proportions of SARI-associated hospitalizations (6.6%), ICU admissions (5.9%) and deaths (4.8%) decreased compared to the previous week and were within expected levels for this of year. According to laboratory data from EW 27-30, 156 samples were analyzed of which 21.8% were

⁵ Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 31

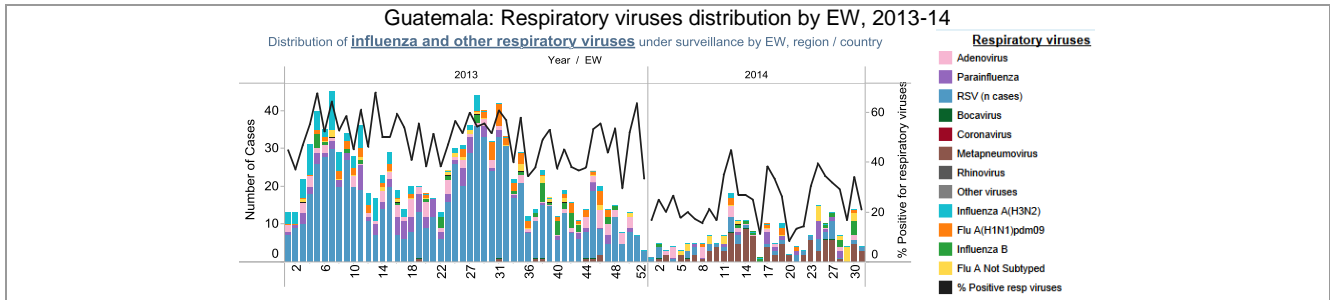
positive for a respiratory virus and 17.9% were positive for influenza. Among the positive samples, influenza B (82.4%) predominated.

El Salvador



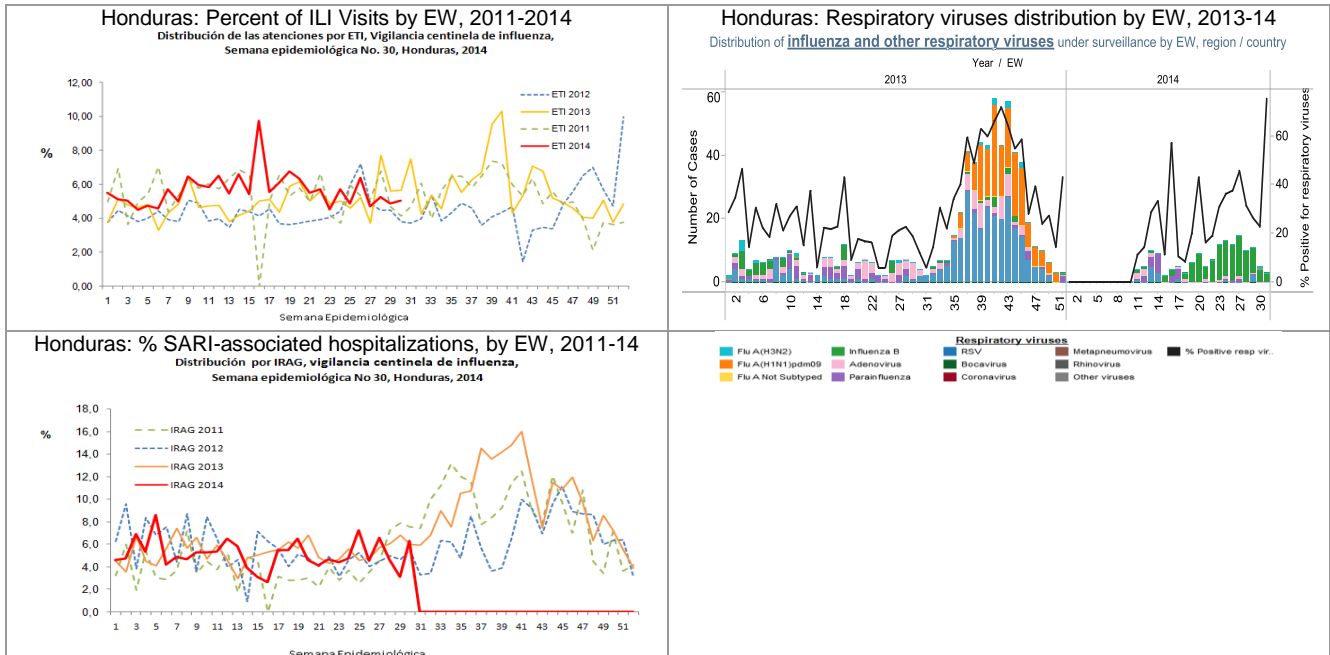
In Guatemala, based on laboratory data from EW 28-31, 108 samples were analyzed, of which 26.9% were positive for a respiratory virus and 13.0% were positive for influenza. Among the positive samples, human metapneumovirus (31.0%) predominated. Among the influenza positive samples, 57.1% were influenza A (12.5% A(H1N1)pdm09 and 87.5% not subtyped) and 42.9% were influenza B (41.7%).

Guatemala



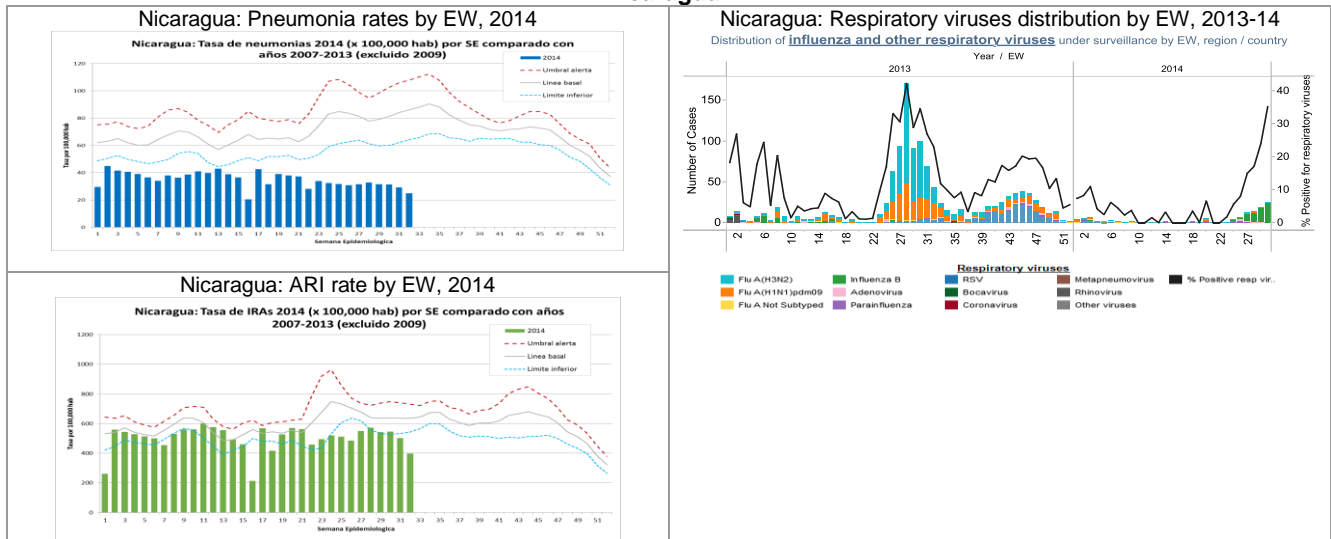
In Honduras, during EW 30, the proportions of ILI-associated medical visits (5.0%) and SARI-associated hospitalizations (6.0%) increased compared to the previous week, but remained within expected levels for this time of year. According to laboratory data from EW 28-31, 100 samples were analyzed, of which 29.0% were positive for a respiratory virus and 26.0% were positive for influenza. Among positive samples, influenza B predominated (86.2%).

Honduras



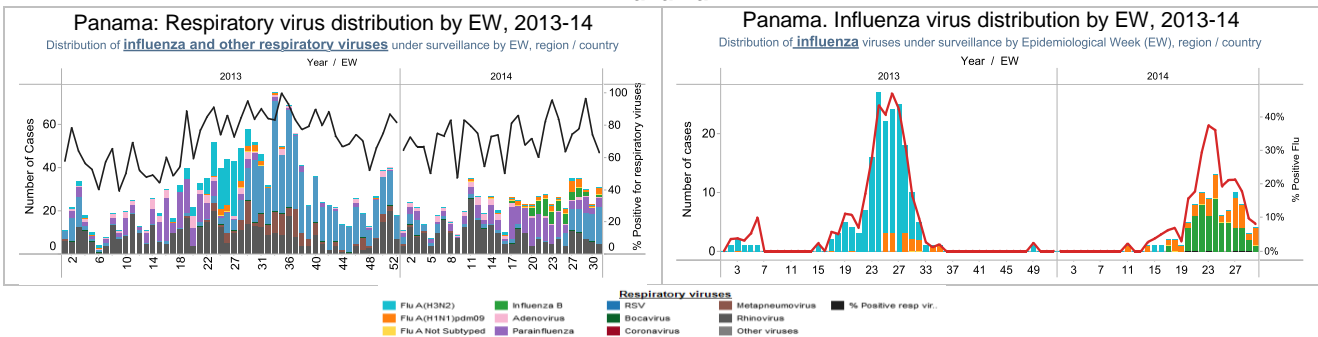
In Nicaragua, during EW 32, the national rates of pneumonia (24.8 per 100,000 population) and ARI (397.8 per 100,000 population) were within expected levels for this time of year. Based on laboratory data from EW 27-30, 319 samples were analyzed, of which 22.3% were positive for a respiratory virus and 21.0% were positive for influenza. Among the positive samples, influenza B (91.5%) predominated.

Nicaragua



In Panama, based on national laboratory data from EW 28-31, 156 samples were analyzed, of which 76.3% were positive for a respiratory virus and 10.3% were positive for influenza. Among the positive samples, RSV (44.5%) and rhinovirus (23.5%) predominated. Among the influenza positive samples, 56.3% were influenza A (100% A(H1N1)pdm09) and 43.7% were influenza B.

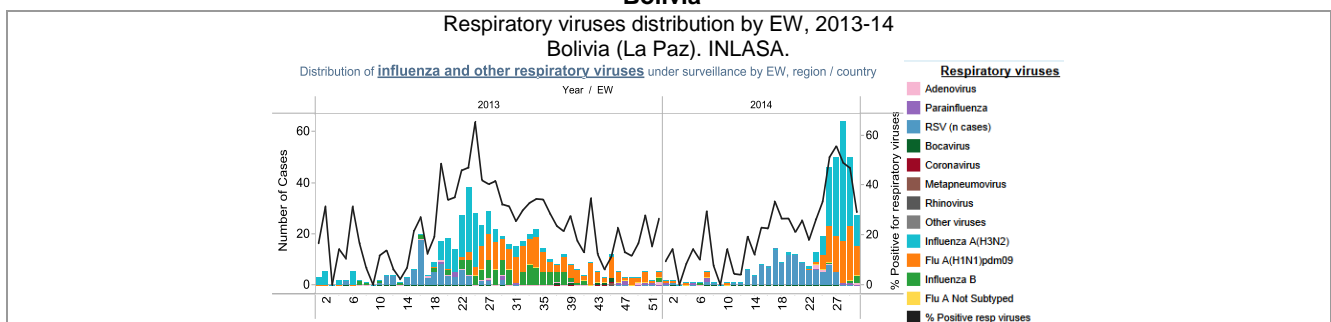
Panama



South America – Andean countries

In Bolivia, according data from the National Laboratory in La Paz (INLASA) from EW 27-30, 421 samples were analyzed, of which 45.4% were positive for a respiratory virus and 43.5% were positive for influenza. Among the positive samples, influenza A(H3N2) (61.3%) and influenza A(H1N1)pdm09 (32.5%) predominated.

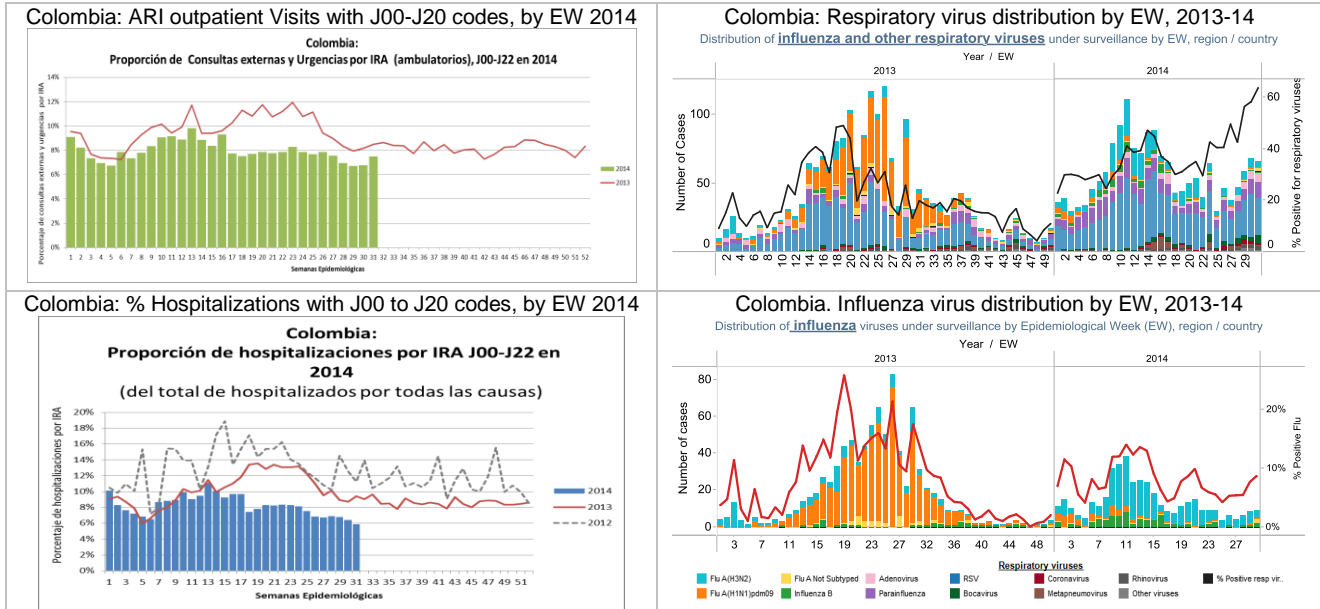
Bolivia



In Colombia, during EW 31 the proportions of outpatient and urgent visits (7.5%), hospitalizations (5.8%) and ICU admissions (6.4%) with ARI/SARI-associated ICD-10 codes (J00 to J22) were within the expected levels

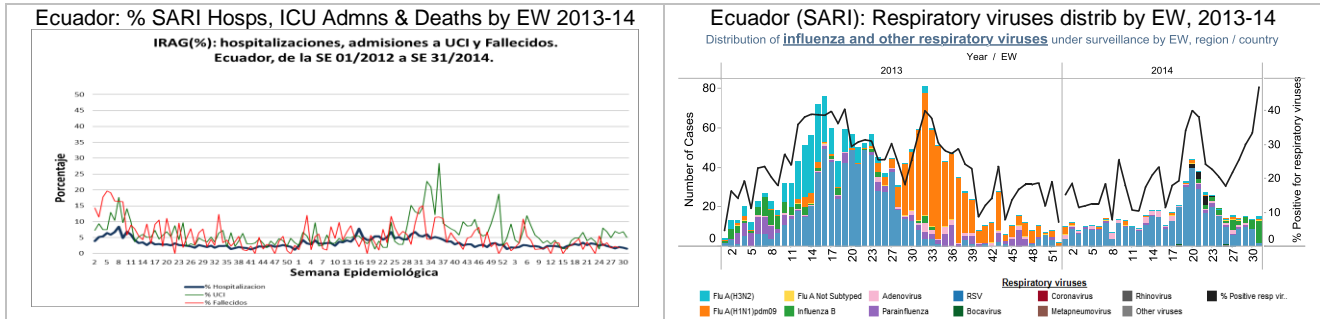
for this time of year. Based on INS laboratory data from EW 28-31, 437 samples were analyzed, of which 54.9% were positive for a respiratory virus and 7.3% were positive for influenza. Among the positive samples, RSV (43.3%) predominated. Among the influenza viruses, influenza A(H3N2) predominated.

Colombia



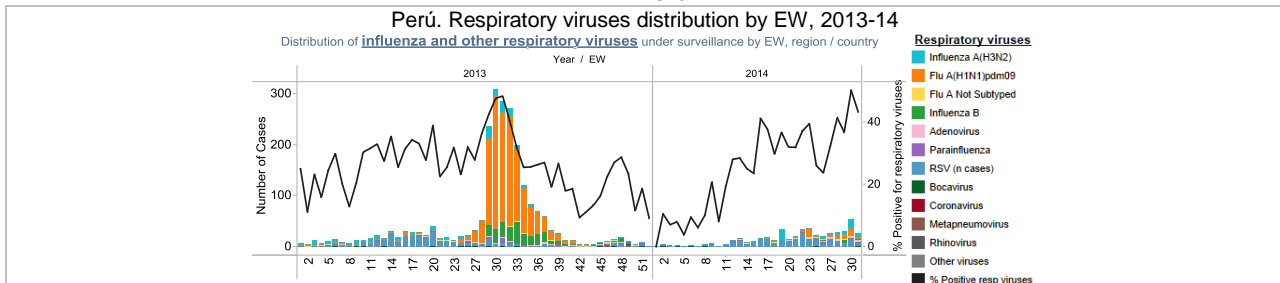
In Ecuador during EW 31, the proportions of SARI-associated hospitalizations (1.5%), ICU admissions (5.1%) and deaths (1.9%) were similar to the previous weeks. Based on national reference laboratory data from EW 28-31, 179 SARI samples were analyzed, of which 32.4% were positive for a respiratory virus and 13.4% were positive for influenza. Among the positive samples, RSV predominated (51.7%). Among the influenza viruses, influenza B predominated (87.5% of influenza samples).

Ecuador



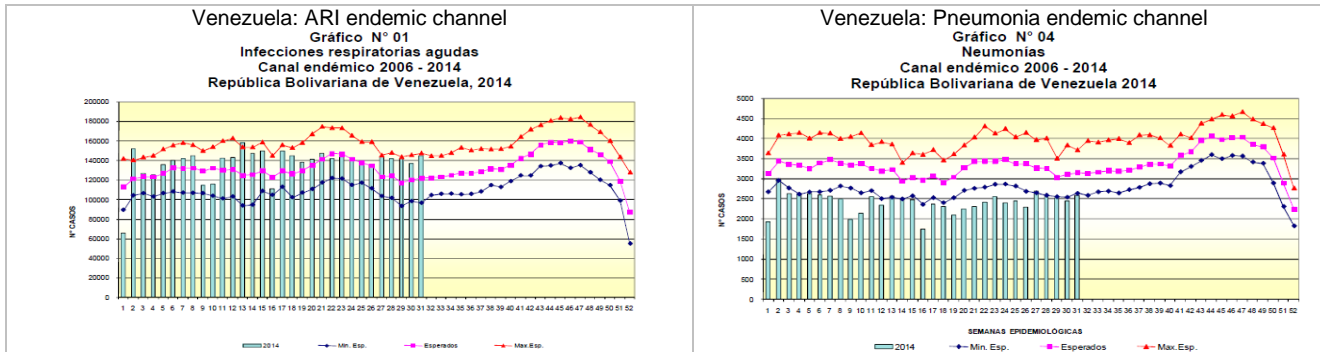
In Peru, based on national laboratory data from EW 28-31, 316 samples were analyzed, of which 43.4% were positive for a respiratory virus and 27.2% were positive for influenza. Among the positive samples, RSV predominated (31.4%). Among the influenza samples, 86.0% were influenza A (45.9% A(H1N1)pdm09 and 54.1% A(H3N2)) and 14.0% were influenza B.

Peru



In Venezuela⁶ during EW 31, the numbers of ARI and pneumonia cases increased by 5.9% and 5.2%, respectively, compared to the previous week. Both were within the expected levels for this time of year. During EW 31, 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 1-31, 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%).

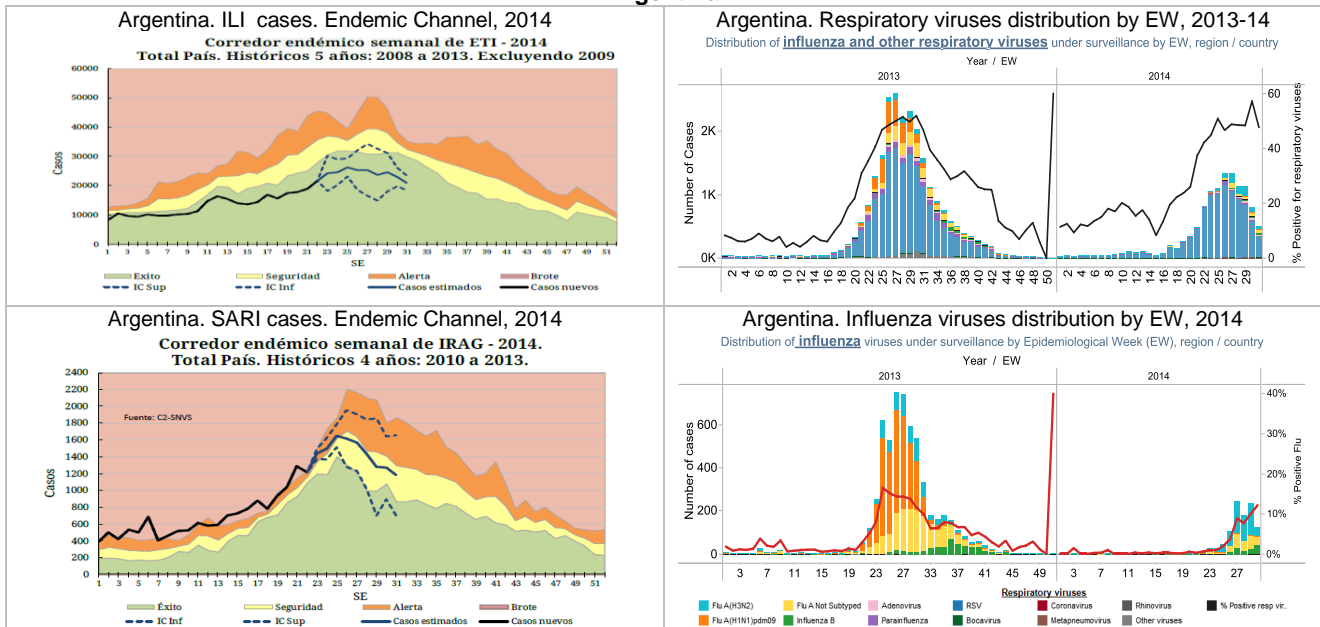
Venezuela



South America – South Cone and Brazil

In Argentina⁷, according to reports and estimations calculated for EW 30, ILI activity was within the success zone of the endemic channel while the estimated number of SARI cases was within the security zone of the endemic channel. Based on laboratory data from EW 30-31, 2,430 samples were processed, of which 53.3% were positive for a respiratory virus and 12.2% were positive for influenza. Among the positive samples, RSV (68.5%) predominated. Among the influenza viruses, 73.3% were influenza A (57.1% A(H3N2) and 40.6% not subtyped) and 26.7% were influenza B.

Argentina



In Brazil⁸, according to ILI sentinel surveillance data through EW 31, 10,230 samples were analyzed, and of these, 18.6% were positive for influenza or another respiratory virus. Among the positive samples, influenza A(H3N2) and RSV predominated. Based on national SARI surveillance data during this same period, 12,260 SARI cases were reported and 8.9% of these were positive for influenza. Among the positive samples, influenza A(H3N2) (61.8%) predominated, followed by influenza A(H1N1)pdm09 (27.3%). The largest number of SARI cases was reported in the southeast region, primarily in Sao Paulo. Through EW 31, 1,337

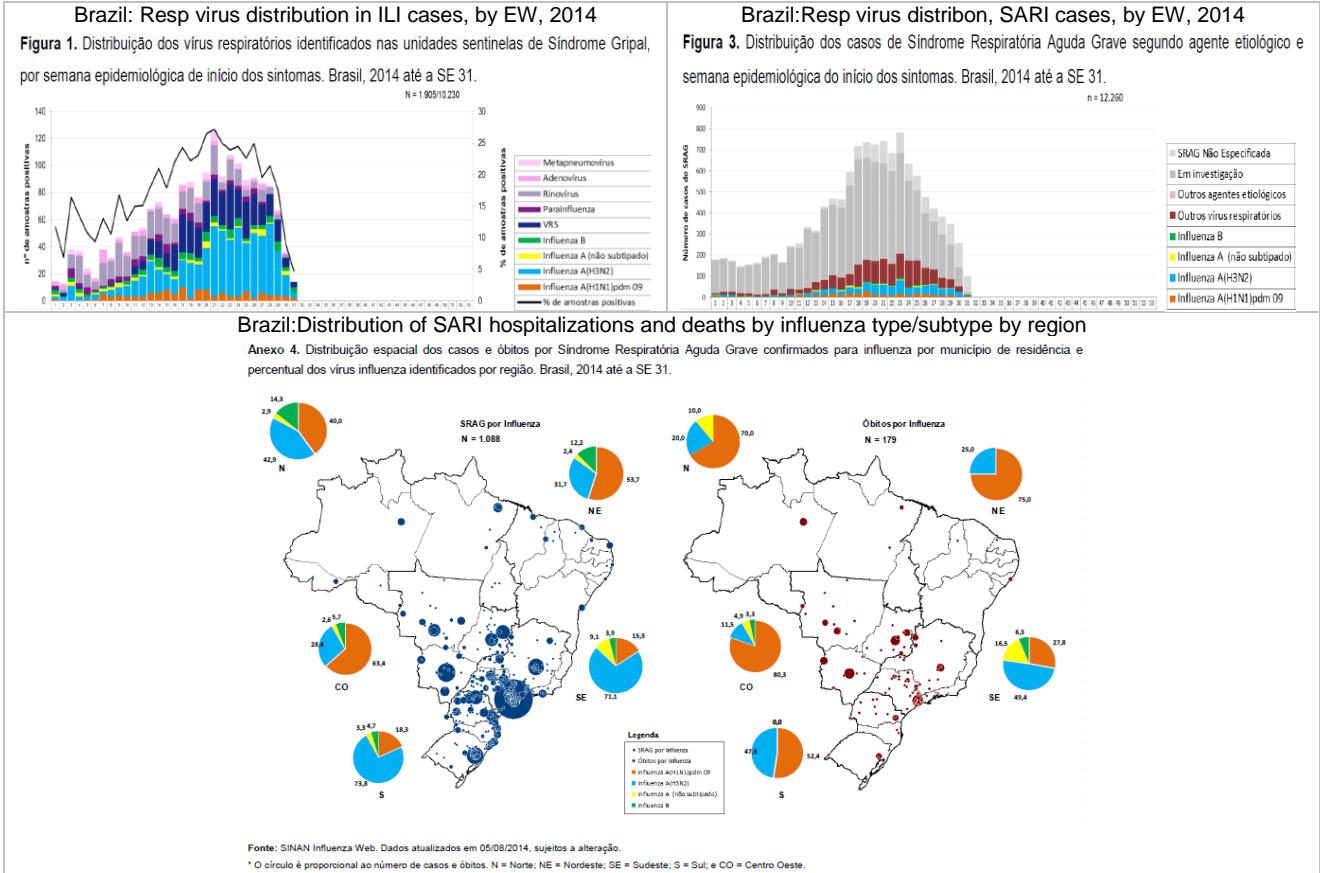
⁶ Venezuela. Boletín epidemiológico, EW 31.

⁷ Argentina. Boletín integrado de vigilancia. SE 30.

⁸ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 31, 2014.

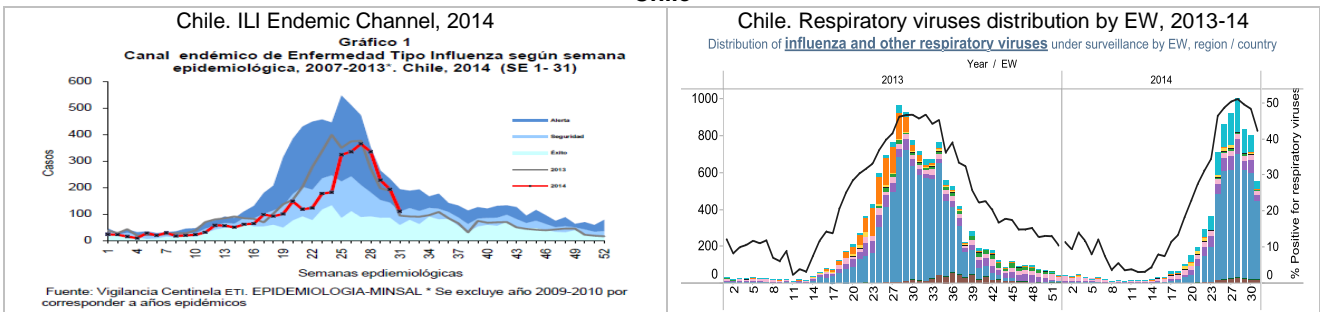
SARI-associated deaths were reported, of which 13.4% were positive for influenza (53.1% A(H1N1)pdm09 and 33.5% A(H3N2)).

Brazil

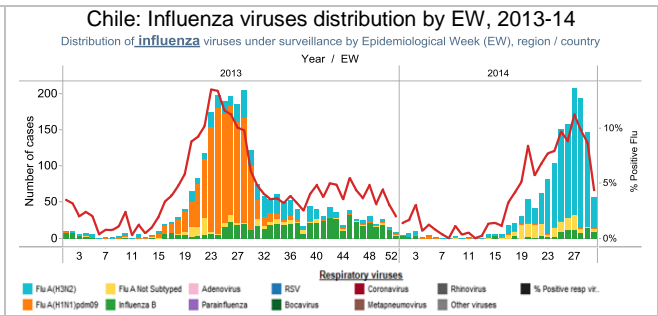
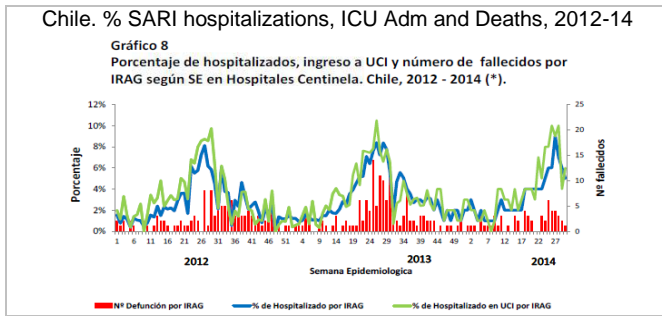


In Chile⁹, during EW 31, ILI activity (rate: 7.3 per 100,000 inhabitants) decreased compared to the previous EW and was within the alert zone of the endemic channel. Through EW 31, 2,089 SARI cases were reported through sentinel surveillance and of these, 48.4% were positive for respiratory virus. Among the positive SARI cases, RSV predominated (60%), followed by influenza A(H3N2) (19%). During this same period, 58 SARI-associated deaths were reported. Based on laboratory data from EW 30-31, 2,978 samples were analyzed, of which 45.6% were positive for a respiratory virus and 5.6% were positive for influenza. Among the positive samples, RSV predominated (73.7%). Among the influenza samples, 89.3% were influenza A (88.0% A(H3N2) and 11.3% not subtyped) and 10.7% were influenza B.

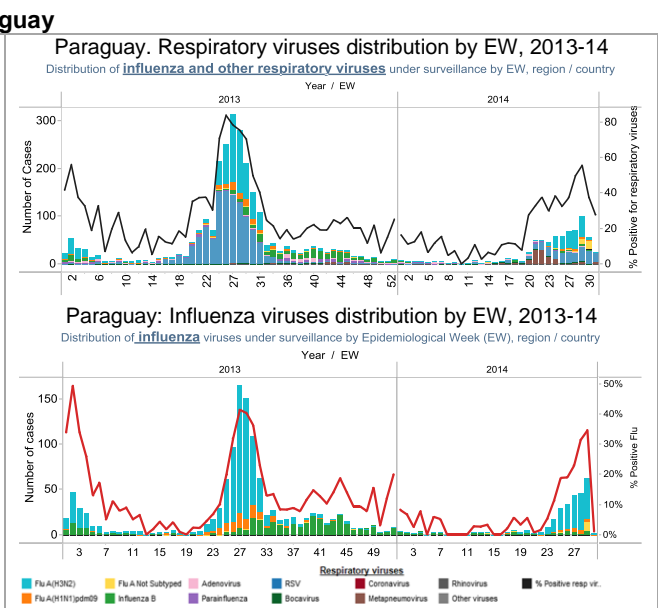
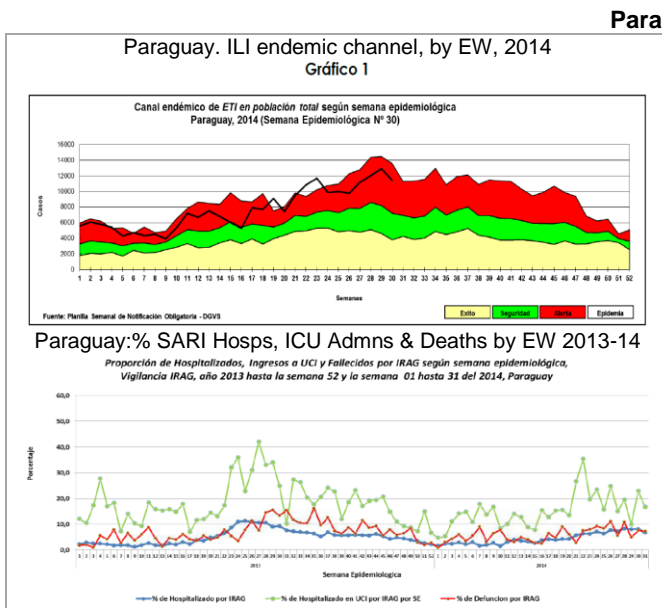
Chile



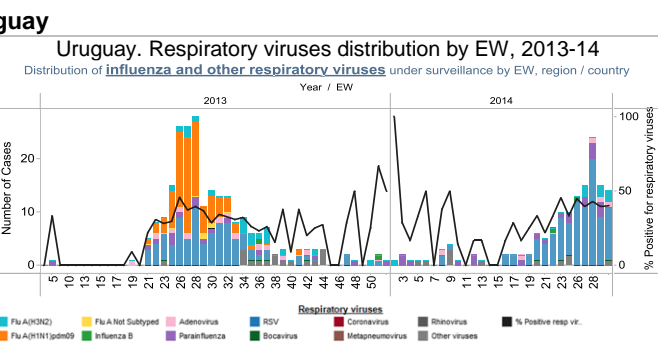
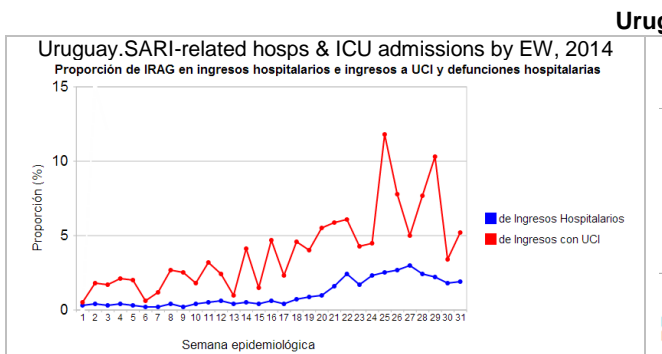
⁹ Chile. Informe de situación. EW 31. Available at: <http://epi.minsal.cl/>



In Paraguay¹⁰ during EW 31, the ILI consultation rate (166.8 per 100,000 inhabitants) decreased compared to the previous EW and was within the alert zone of the endemic channel. The proportion of SARI-associated hospitalizations (6.6%) decreased compared to the previous week. The most affected age group was children <5 years of age (55.2% of reported cases). From EW 1-31, 192 SARI-associated deaths were reported and 18 (9.4%) were positive for a respiratory virus. Based on laboratory data from EW 28-31, 565 samples were analyzed, of which 44.8% were positive for a respiratory virus and 24.1% were positive for influenza. Among the positive samples, RSV (37.5%) and influenza A(H3N2) predominated (36.4%).



In Uruguay¹¹ during EW 31, the proportions of SARI-associated hospitalizations and ICU admissions increased compared to the previous week. There were no SARI-associated deaths reported during EW 31. Based on laboratory data from EW 27-30, 167 samples were analyzed, of which 40.7% were positive for a respiratory virus and 3.6% were positive for influenza. Among the positive samples, RSV predominated (73.5%). Among the positive influenza samples, 100% were influenza A(H3N2).



¹⁰ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 31.

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