

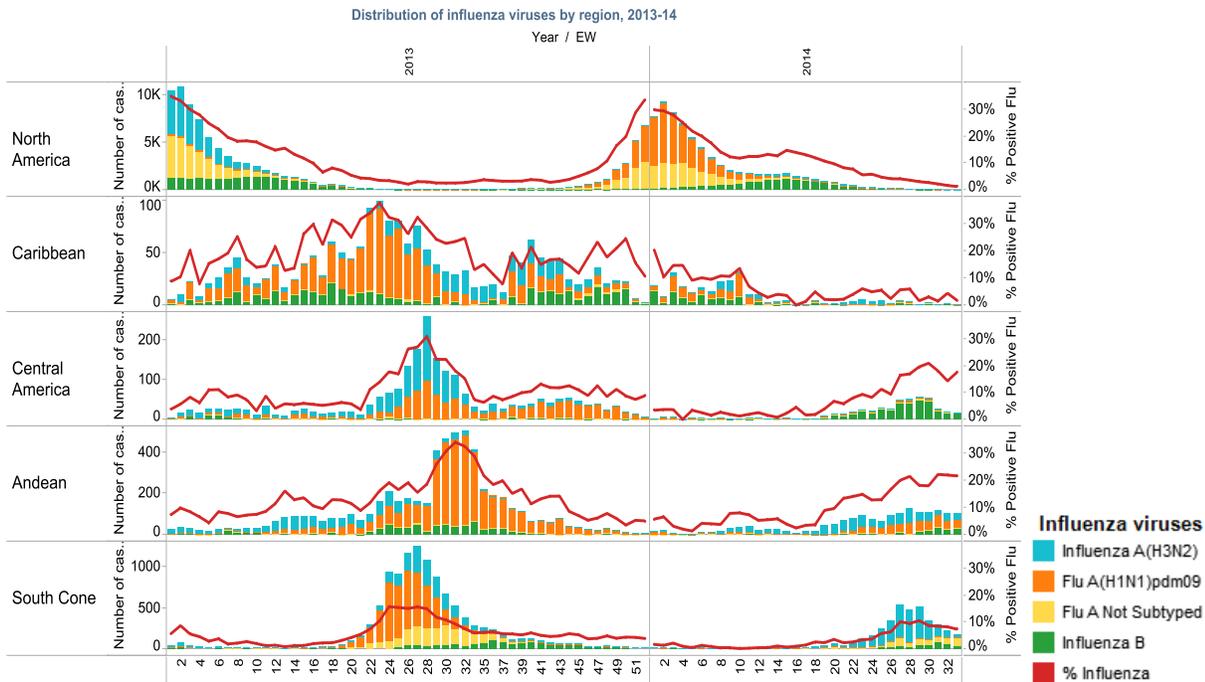
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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

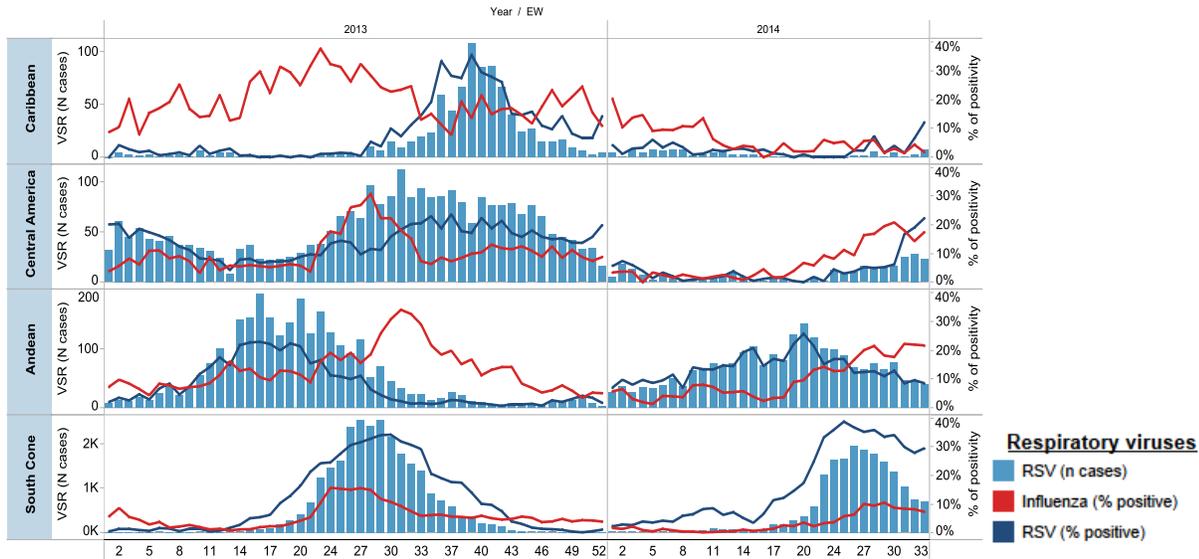
- **North America:** Influenza activity remained low in the sub-region with co-circulation of influenza B and A(H3N2). In the United States, one human infection with an influenza A(H3N2) variant (H3N2v) was reported by Ohio. The case was hospitalized and has completely recovered. The case reported close contact with swine in the week prior to illness. No ongoing human-to-human transmission has been identified.
- **The Caribbean and Central America:** Circulation of influenza B was observed in several countries of the sub-region (Cuba, Costa Rica, Jamaica, Guatemala, Honduras, Panama and Puerto Rico), and co-circulation with influenza A(H1N1)pdm09 was observed in Cuba, Guatemala 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 began 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 influenza and other respiratory viruses under surveillance by EW, region / country



ACRONYMS

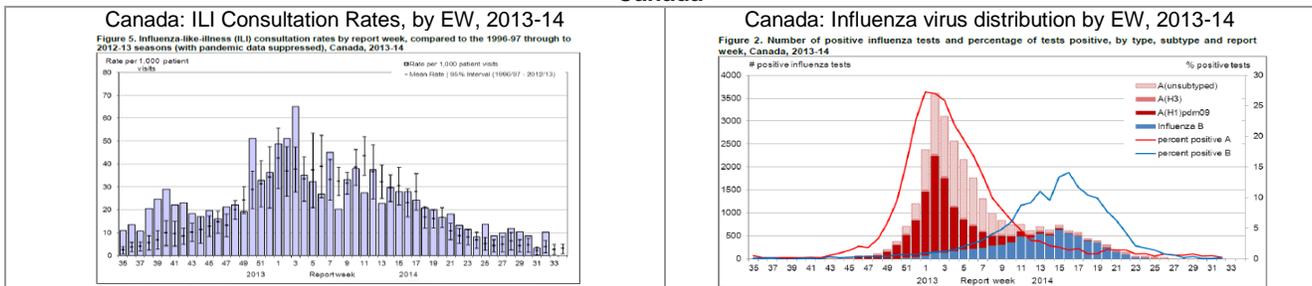
ARI	Acute respiratory infection
CARPHA	Caribbean Public Health Agency
CENETROP	Centro de Enfermedades Tropicales (Santa Cruz, Bolivia)
EW	Epidemiological Week
ILI	Influenza-like illness
INLASA	Instituto Nacional de Laboratorios de Salud (La Paz, Bolivia)
INS	Instituto Nacional de Salud
ORV	Other respiratory 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 32, influenza activity was low. The national ILI consultation rate was 10.2 per 1,000 patient visits, an increase compared to the previous week and slightly above expected levels. Since the beginning of the 2013-14 influenza season, 5,442 influenza-associated hospitalizations have been reported, of which 68.3% were associated with influenza A. During this same period, 342 deaths were reported, most of which were associated with influenza A (64.3%). The highest proportion of deaths (56.7%) has been among adults ≥ 65 years of age. Based on laboratory data for EW 32 the overall percentage of positive influenza tests was <1%. Among the positive tests during EW 31-32, 66.7% were influenza A (0% were influenza A(H1N1)pdm09, 75.0% were A(H3) and 25.0% were not subtyped) and 33.3% were influenza B. Among other circulating respiratory viruses, rhinovirus predominated.

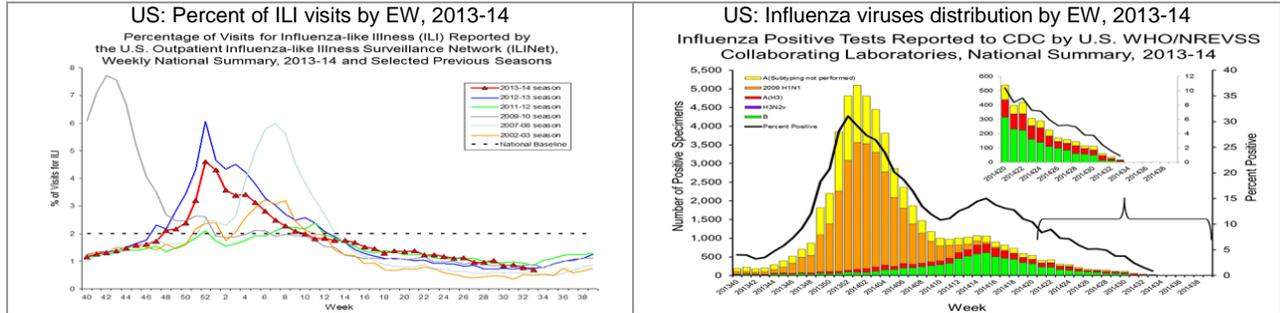
Canada



¹ Canada: FluWatch Report. EW 31-32. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

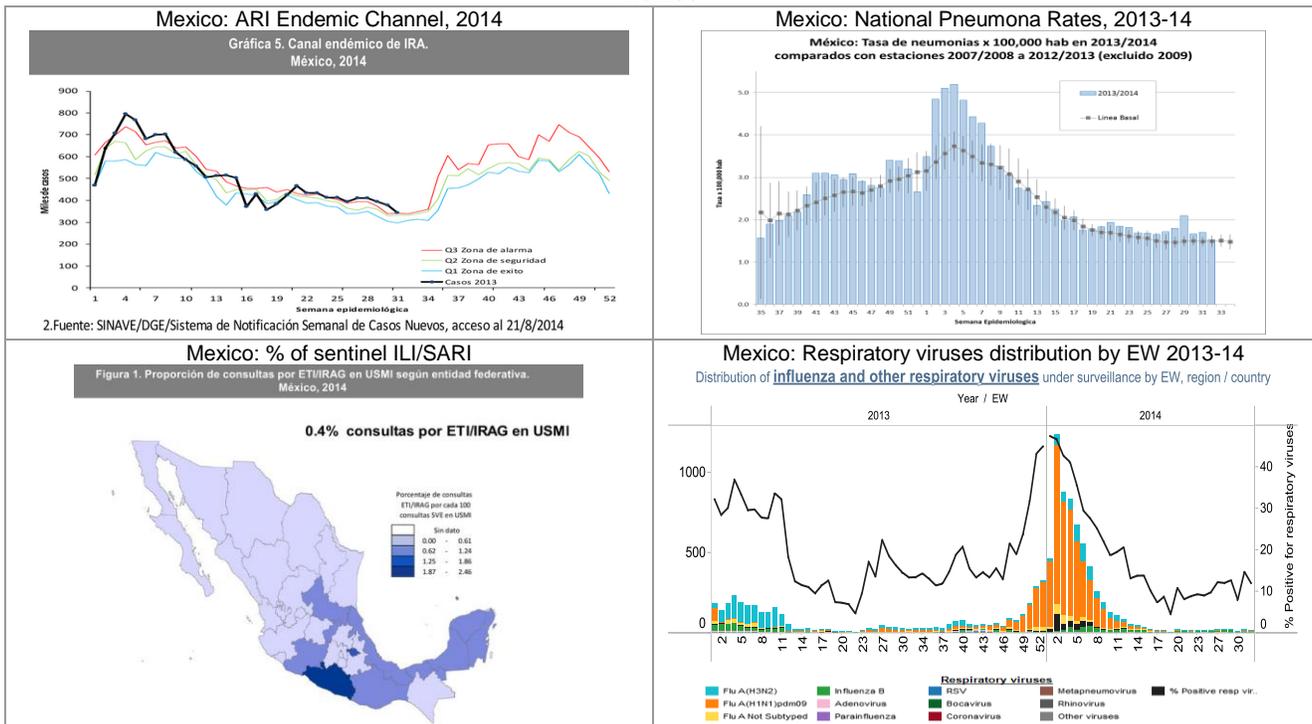
In the United States² during EW 33, influenza activity was low. The national proportion of ILI-associated outpatient visits (0.7%) was below the national baseline (2.0%). The proportion of deaths attributed to pneumonia and influenza (5.8%) was also below the epidemic threshold (6.0%). A total of 107 influenza-associated pediatric deaths have been reported this season (no deaths were reported during EW 33). According to laboratory data for EW 33, 1,788 samples were analyzed, of which 1.0% were positive for influenza. Among the positive samples, 72.2% were influenza A (7.7% A(H1N1)pdm09, 84.6% A(H3) and 7.7% not subtyped) and 27.8% were influenza B. During EW 33, one human infection with an influenza A(H3N2) variant (H3N2v) was reported by Ohio. The case was hospitalized and has completely recovered, and reported close contact with swine in the week prior to illness. No ongoing human-to-human transmission has been identified.

United States



In Mexico³ during EW 33, influenza activity remained low. ARI activity decreased from the previous week and was within the security zone of the alarm channel. Pneumonia activity also decreased compared to the previous week (rate: 1.5 per 100,000 inhabitants) and was within expected levels for this time of year. The highest levels of pneumonia activity were reported in Colima, Jalisco and Nuevo Leon. Nationally, through August 21, 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, Tlaxcala and Veracruz. During this same period, 764 influenza-associated deaths were reported, of which 90.1% were associated with influenza A(H1N1)pdm09. Based on laboratory data from EW 30-33, 548 samples were analyzed, of which 10.6% were positive for influenza. Among the positive samples, influenza B predominated (54.8%), followed by influenza A(H3N2) (35.5%).

Mexico



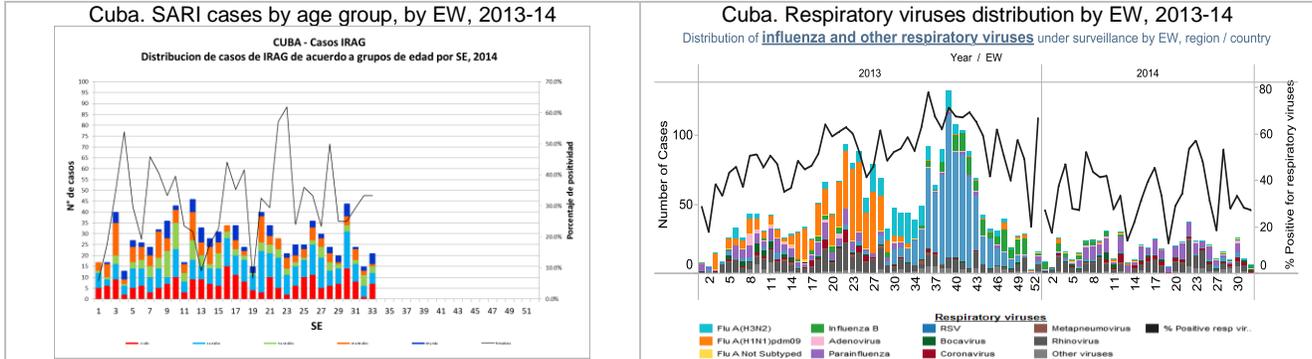
² USA: CDC FluView report. EW 33. Available at: <http://www.cdc.gov/flu/weekly/>

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

Caribbean

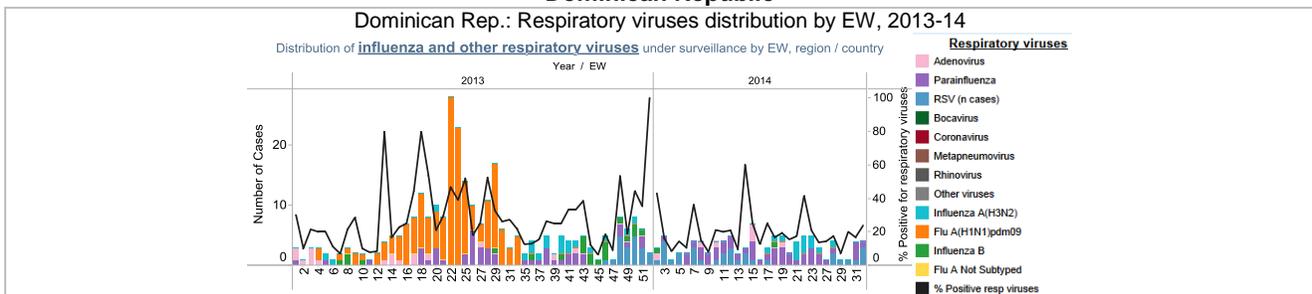
In Cuba during EW 33, the number of SARI-associated hospitalizations (n=21) increased from the previous week. Children ≤ 1 year of age comprised the largest proportion of these cases. One SARI-associated death was reported during this period and was negative for a respiratory virus. According to national laboratory data for EW 30-33, 173 samples were analyzed, of which 30.6% were positive for a respiratory virus and 2.3% for influenza. Among the positive samples, rhinovirus (18.9%) and parainfluenza (17.0%) predominated. Among the influenza viruses, influenza B (75%) and A(H1N1)pdm09 (25%) were detected.

Cuba



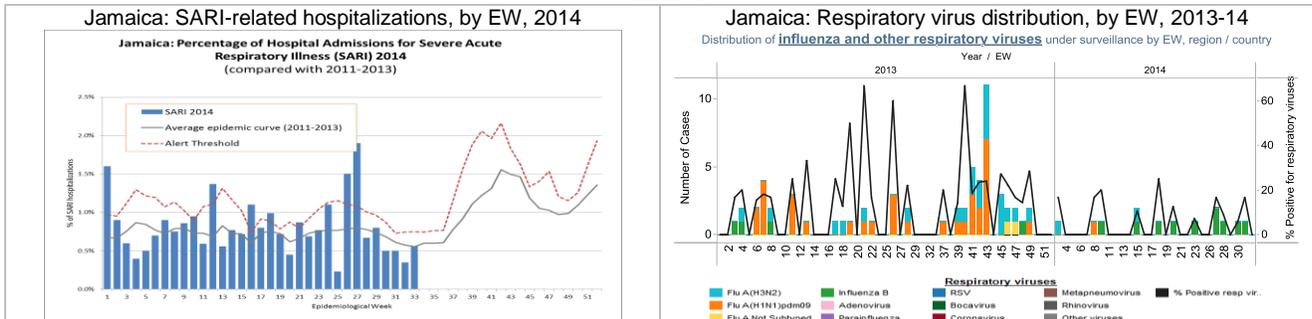
In the Dominican Republic, during EW 30-33, 61 samples were analyzed, of which 19.7% were positive for a respiratory virus and 1.6% were positive for influenza. Among the positive samples, RSV (58.3%), parainfluenza (33.3%) and influenza A(H3N2) (8.3%) were detected.

Dominican Republic



In Jamaica, based on sentinel surveillance data for EW 33, the proportions of ARI-associated consultations (2.4%) and SARI-associated hospitalizations (0.6%) increased compared to the previous week. No SARI-associated deaths were reported during this EW. Based on laboratory data for EW 30-33, 40 samples were analyzed, of which two (5.0%) were positive for influenza B.

Jamaica

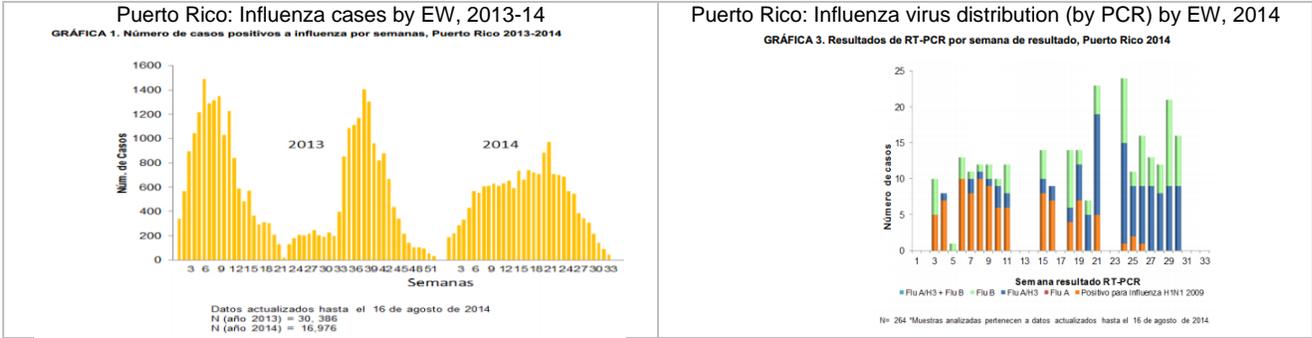


In Puerto Rico⁴ during EW 33, the number of influenza cases (n=40) decreased compared to the previous week. Of these, 19 cases were associated with influenza A and 21 with influenza B. Since the beginning of 2014, 16,976 influenza cases have been reported (44% influenza A, 55% influenza B and 1% influenza A

⁴ Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 33

and B) and persons aged 0-19 years accounted for 50% of those cases. During this same period, 802 influenza-associated hospitalizations and 13 influenza-associated deaths were reported.

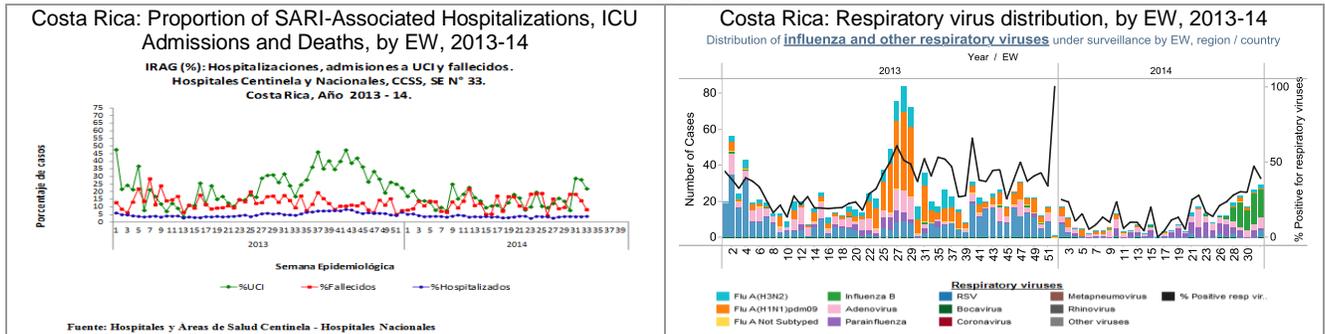
Puerto Rico



Central America

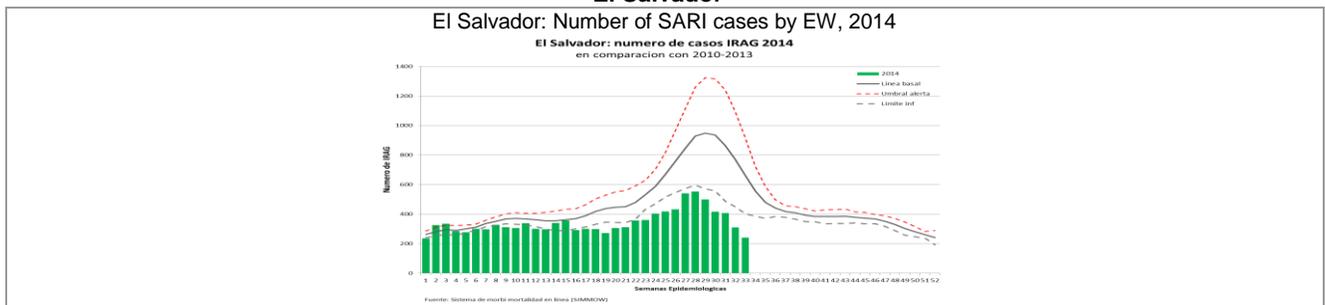
In Costa Rica, during EW 33, the proportions of SARI-associated hospitalizations (4.0%), ICU admissions (22.0%) and deaths (8.2%) decreased from the previous week. According to laboratory data from EW 30-33, 249 samples were analyzed of which 36.5% were positive for a respiratory virus and 27.3% were positive for influenza. Among the positive samples, influenza B (68.1%) and adenovirus (15.4%) predominated.

Costa Rica



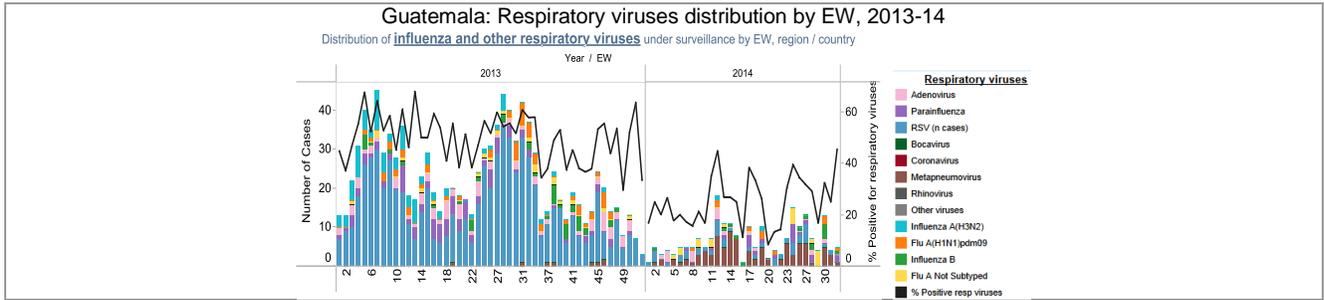
In El Salvador, during EW 34, the proportions of SARI-associated hospitalizations (5.0%) and deaths (6.5%) decreased compared to the previous week, while the proportion of SARI-associated ICU admissions (11.1%) increased.

El Salvador



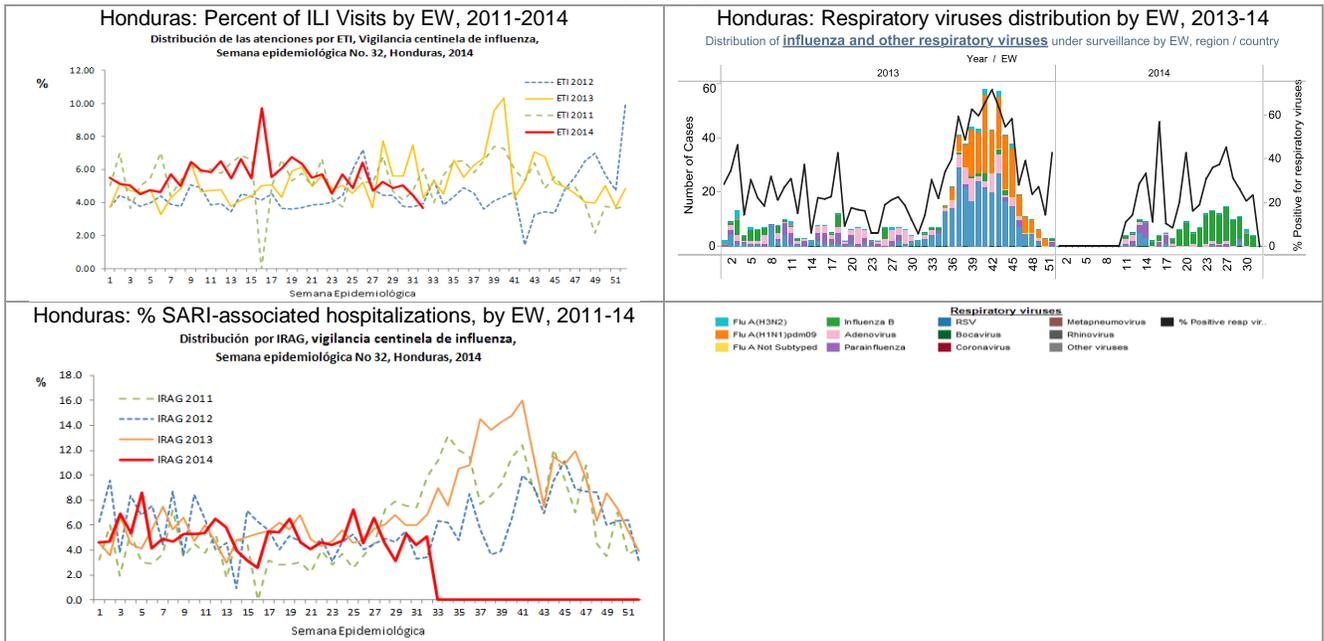
In Guatemala, based on laboratory data from EW 30-33, 67 samples were analyzed, of which 32.8% were positive for a respiratory virus and 11.9% were positive for influenza. Among the positive samples, human metapneumovirus (40.9%) predominated. Among the influenza positive samples, 37.5% were influenza A (100% A(H1N1)pdm09) and 62.5% were influenza B.

Guatemala



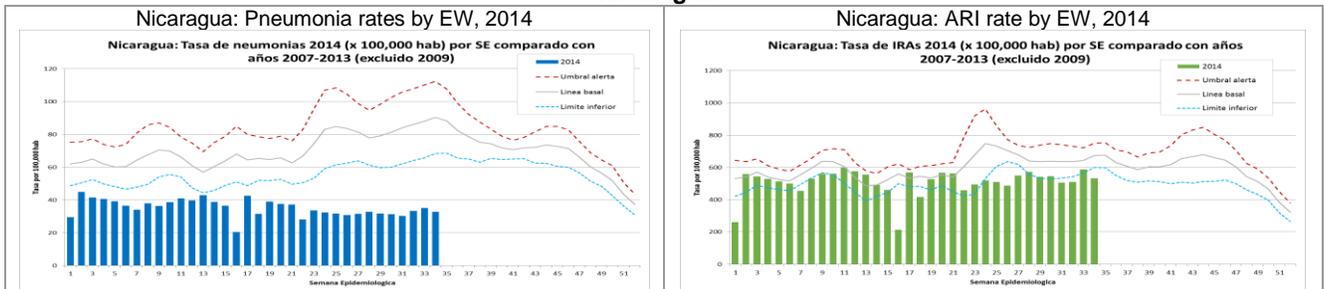
In Honduras, during EW 32, the proportion of ILI-associated medical visits (3.7%) decreased from previous week, while the proportion of SARI-associated hospitalizations (5.0%) increased. Both remained within expected levels for this time of year. Three SARI-associated deaths were reported during EW 32. According to laboratory data from EW 29-32, 96 samples were analyzed, of which 21.9% were positive for a respiratory virus and 18.8% were positive for influenza. Among positive samples, influenza B predominated (81.0%).

Honduras



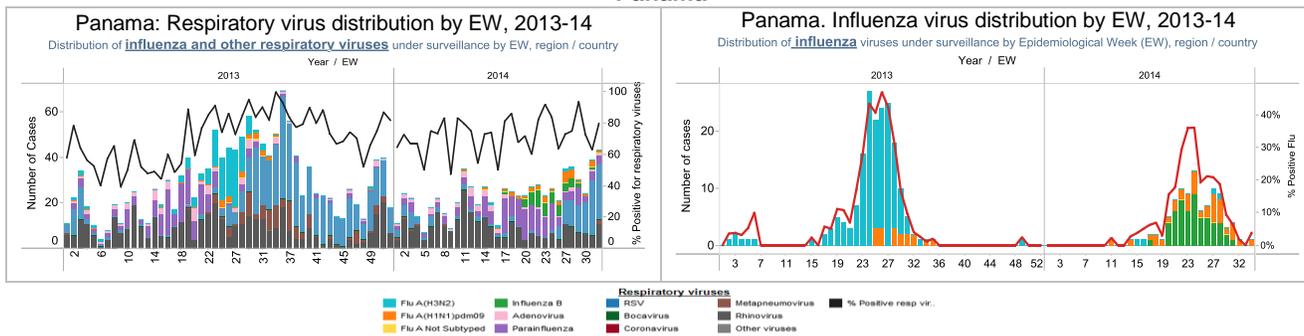
In Nicaragua, during EW 34, the national rates of pneumonia (32.7 per 100,000 population) and ARI (532.9 per 100,000 population) were within expected levels for this time of year.

Nicaragua



In Panama, based on national laboratory data from EW 31-34, 182 samples were analyzed, of which 68.1% were positive for a respiratory virus and 3.3% were positive for influenza. Among the positive samples, RSV (65.3%) and rhinovirus (18.5%) predominated. Among the influenza positive samples, 83.3% were influenza A (100% A(H1N1)pdm09) and 16.7% were influenza B.

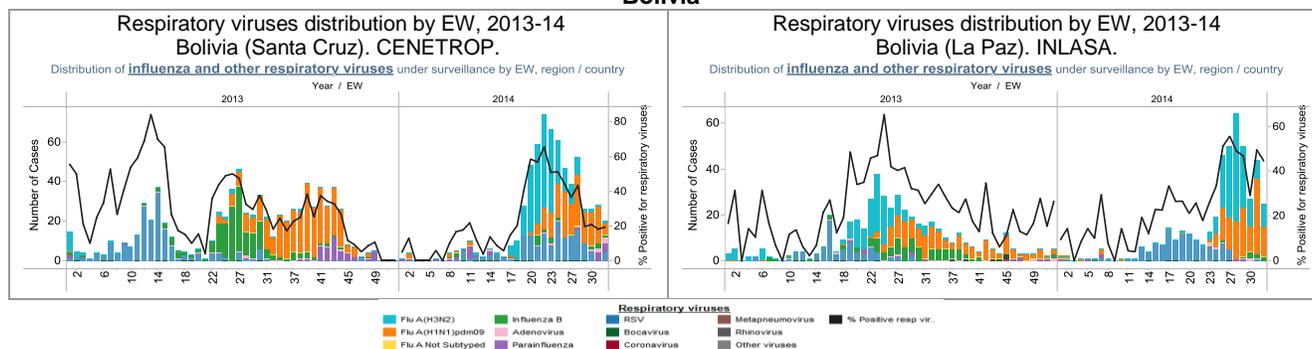
Panama



South America – Andean countries

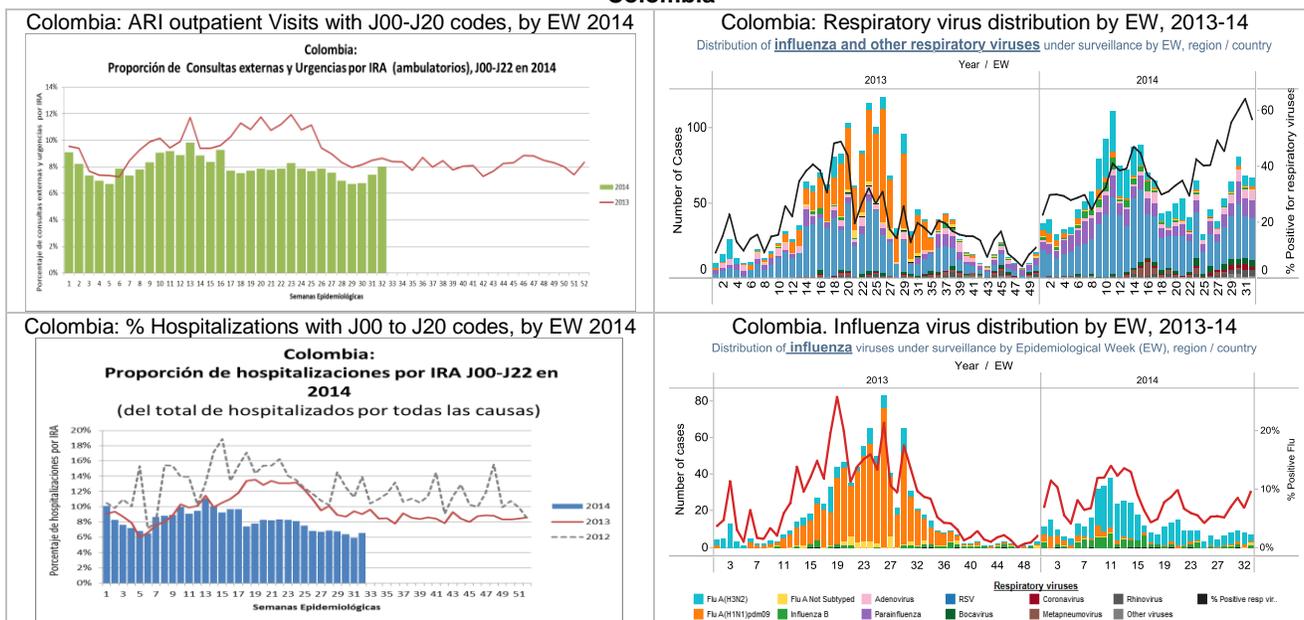
In Bolivia, according to laboratory data from Santa Cruz (CENETROP) from EW 31-34, 373 samples were analyzed, of which 22.8% were positive for a respiratory virus and 13.1% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (45.9%), parainfluenza (17.6%) and adenovirus (15.3%) predominated. Based on data from the National Laboratory in La Paz (INLASA) from EW 30-33, 316 samples were analyzed, of which 36.4% were positive for a respiratory virus and 35.8% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (62.6%), A(H3N2) (28.7%) and influenza B (7.0%) predominated.

Bolivia



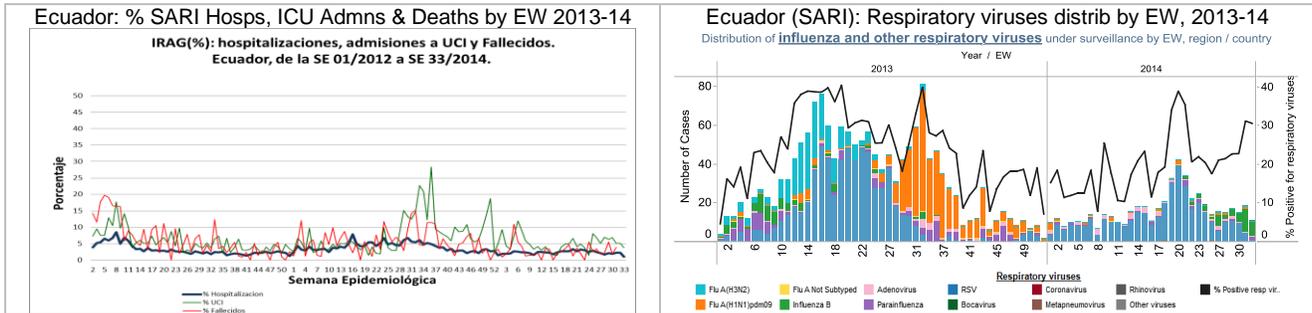
In Colombia, during EW 32 the proportions of outpatient and urgent visits (8.0%), hospitalizations (5.9%) and ICU admissions (6.5%) with ARI/SARI-associated ICD-10 codes (J00 to J22) were within the expected levels for this time of year. Based on INS laboratory data from EW 30-33, 432 samples were analyzed, of which 59.0% were positive for a respiratory virus and 7.6% were positive for influenza. Among the positive samples, RSV (41.2%) predominated. Among the influenza viruses, influenza A(H3N2) predominated (66.7% of influenza samples).

Colombia



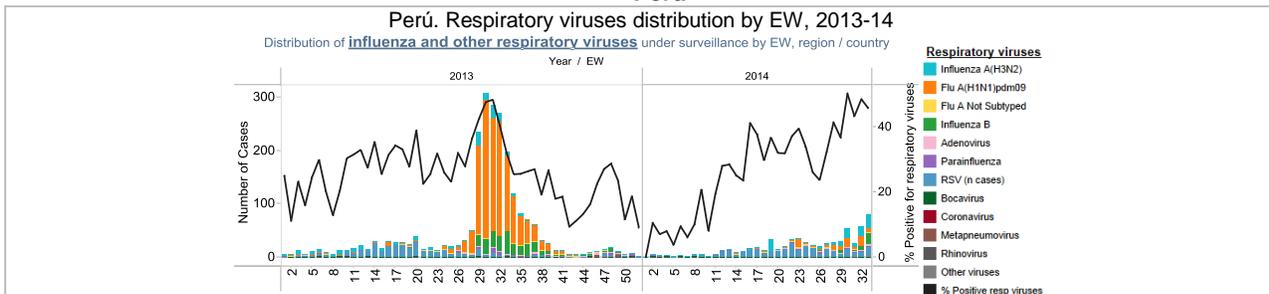
In Ecuador during EW 33, the proportions of SARI-associated hospitalizations (1.0%) and ICU admissions (3.8%) decreased compared to the previous week, while the proportion of SARI-associated deaths (3.8%) increased. Based on national reference laboratory data from EW 30-33, 193 SARI samples were analyzed, of which 26.4% were positive for a respiratory virus and 16.1% were positive for influenza. Among the positive samples, influenza B (56.9%) and RSV (35.3%) predominated.

Ecuador



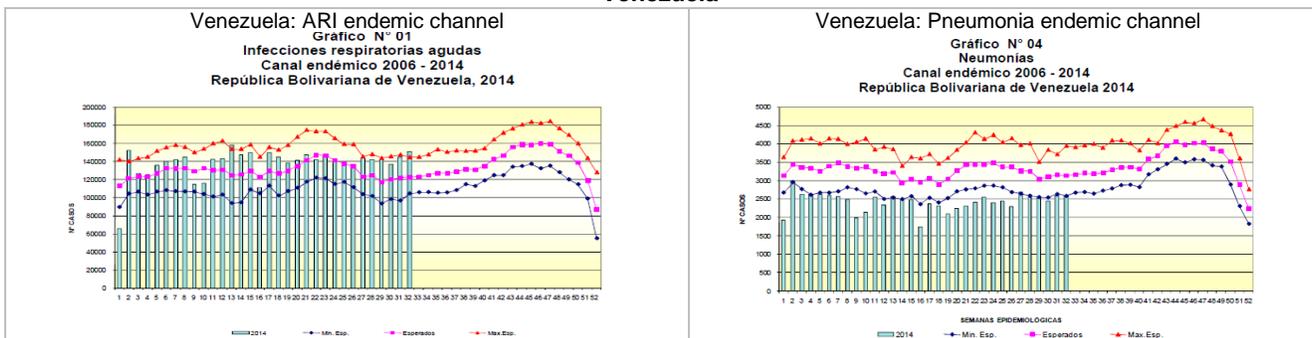
In Peru, based on national laboratory data from EW 30-33, 462 samples were analyzed, of which 47.0% were positive for a respiratory virus and 32.5% were positive for influenza. Among the positive samples, influenza A(H3N2) (32.7%), RSV (24.9%) and influenza A(H1N1)pdm09 (20.3%) predominated.

Peru



In Venezuela⁵ during EW 32, the numbers of ARI and pneumonia cases increased by 4.3% and 2.8%, respectively, compared to the previous week. The number of ARI cases was slightly above expected levels for this time of year. During EW 32, 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 1-32, 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

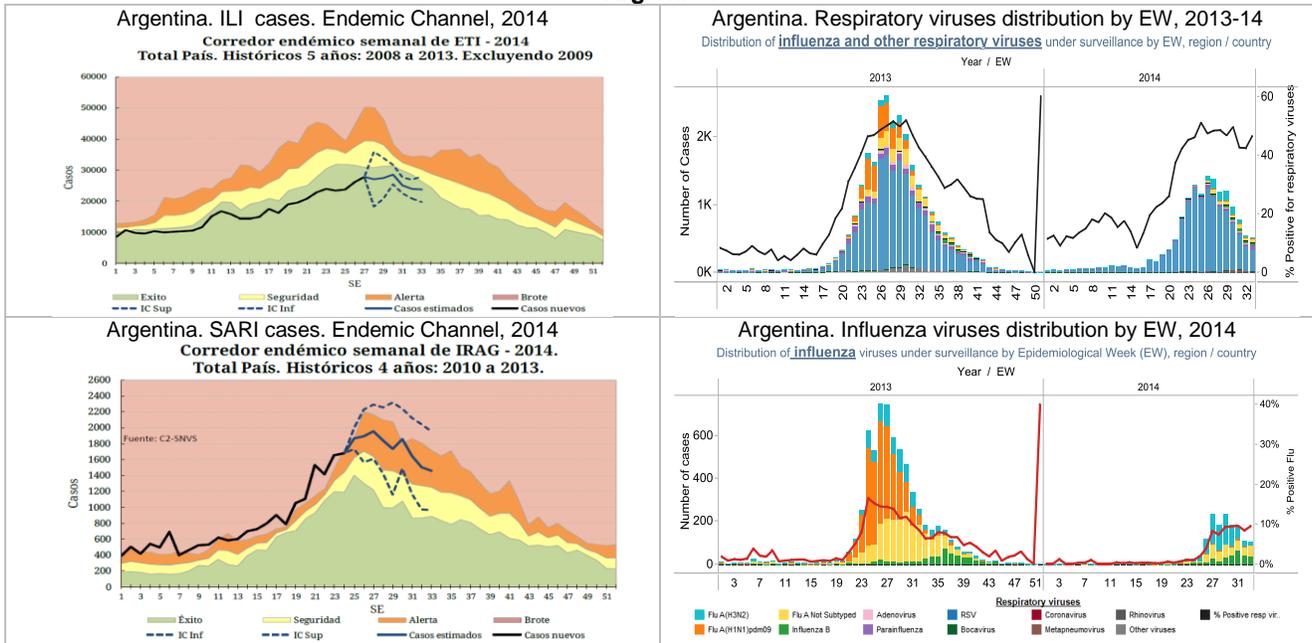
In Argentina⁶, according to reports and estimations calculated for EW 33, ILI activity was within the success zone of the endemic channel while the estimated number of SARI cases was within the alert zone of the endemic channel. Based on laboratory data from EW 32-33, 2,357 samples were processed, of which

⁵ Venezuela. Boletín epidemiológico, EW 32.

⁶ Argentina. Boletín integrado de vigilancia. SE 33.

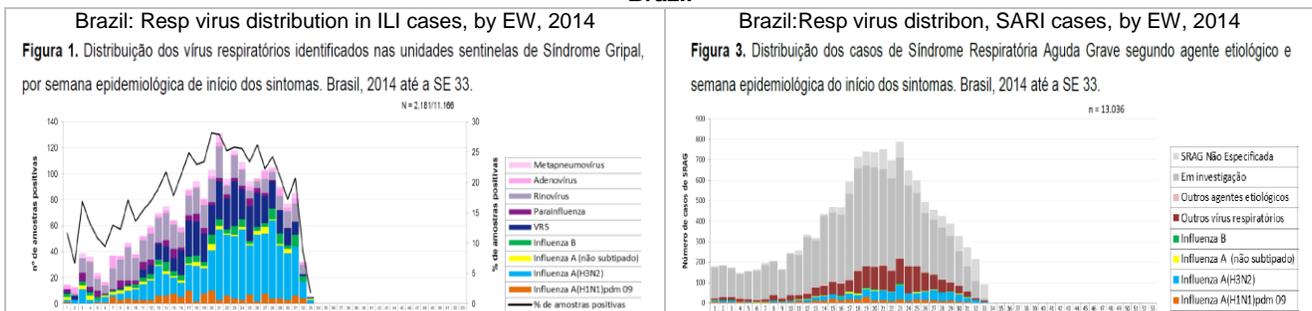
44.3% were positive for a respiratory virus and 8.9% were positive for influenza. Among the positive samples, RSV (64.3%) predominated. Among the influenza viruses, 62.7% were influenza A (0% A(H1N1)pdm09, 31.3% A(H3N2) and 68.7% not subtyped) and 37.3% were influenza B.

Argentina



In Brazil⁷, according to ILI sentinel surveillance data through EW 33, 11,166 samples were analyzed, and of these, 19.5% 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, 13,036 SARI cases were reported and 9.2% of these were positive for influenza. Among the positive samples, influenza A(H3N2) (62.8%) predominated, followed by influenza A(H1N1)pdm09 (26.3%). The largest number of SARI cases was reported in the southeast region, primarily in Sao Paulo. Through EW 33, 1,453 SARI-associated deaths were reported, of which 13.6% were positive for influenza (52.3% A(H1N1)pdm09 and 34.5% A(H3N2)).

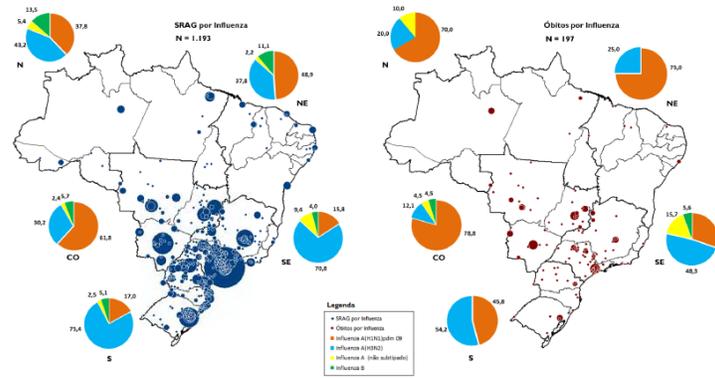
Brazil



⁷ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 33, 2014.

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

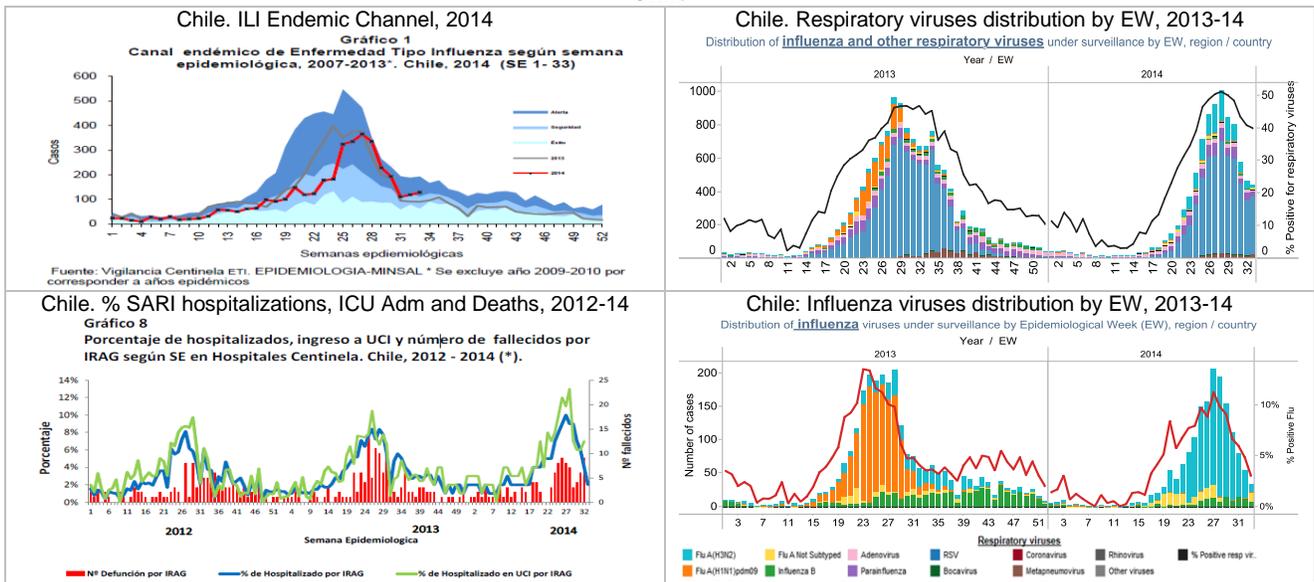
Anexo 4. Distribuição espacial dos casos e óbitos por Síndrome Respiratória Aguda Grave confirmados para influenza por município de residência e percentual dos vírus influenza identificados por região. Brasil, 2014 até a SE 33.



Fonte: SINAN Influenza Web. Dados atualizados em 19/08/2014, 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 33, ILI activity (rate: 8.6 per 100,000 inhabitants) increased slightly compared to the previous EW and was within the alert zone of the endemic channel. Through EW 33, 2,299 SARI cases were reported through sentinel surveillance and of these, 48.8% were positive for respiratory virus. Among the positive SARI cases, RSV predominated (60%), followed by influenza A(H3N2) (19%). During this same period, 66 SARI-associated deaths were reported. Based on laboratory data from EW 32-33, 2,245 samples were analyzed, of which 40.3% were positive for a respiratory virus and 3.9% were positive for influenza. Among the positive samples, RSV predominated (73.9%). Among the influenza samples, 78.4% were influenza A (0% A(H1N1)pdm09, 78.3% A(H3N2) and 21.7% not subtyped) and 21.6% were influenza B.

Chile



In Paraguay⁹ during EW 33, the ILI consultation rate (168.3 per 100,000 inhabitants) increased slightly from the previous EW and was within the alert zone of the endemic channel. The proportion of SARI-associated hospitalizations (4.7%) decreased compared to the previous week. The most affected age group was children <5 years of age (56.0% of reported cases). From EW 1-33, 206 SARI-associated deaths were reported and 22 (10.7%) were positive for a respiratory virus. Based on laboratory data from EW 31-34, 349 samples were analyzed, of which 49.9% were positive for a respiratory virus and 25.8% were positive for influenza. Among the positive samples, RSV (40.2%) predominated. Among the influenza samples, 94.4% were influenza A (1.2% A(H3N2) and 98.8% A, not subtyped) and 5.6% were influenza B.

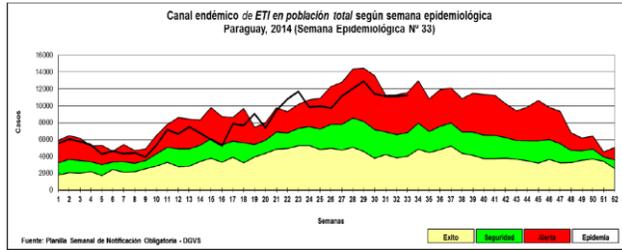
⁸ Chile. Informe de situación. EW 31-33. Available at: <http://epi.minsal.cl/>

⁹ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 33.

Paraguay

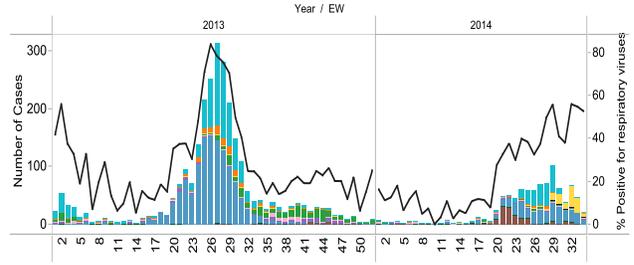
Paraguay. ILI endemic channel, by EW, 2014

Gráfico 1



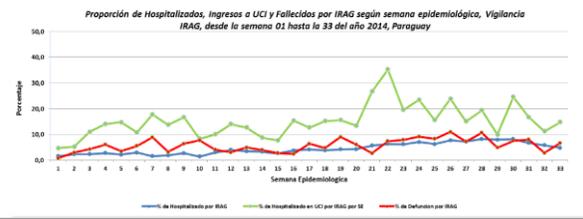
Paraguay. Respiratory viruses distribution by EW, 2013-14

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



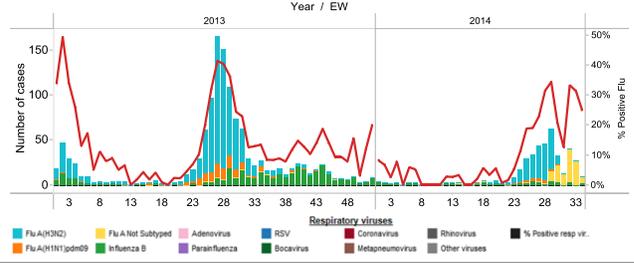
Paraguay: % SARI Hosps, ICU Adms & Deaths by EW 2013-14

Gráfico 5: Proporción de Hospitalizados, ingresos a UCI y fallecidos por IRAG según semana epidemiológica, SE 1 a 33, Vigilancia Centinela, Paraguay, 2014.



Paraguay: Influenza viruses distribution by EW, 2013-14

Distribution of influenza viruses under surveillance by Epidemiological Week (EW), region / country

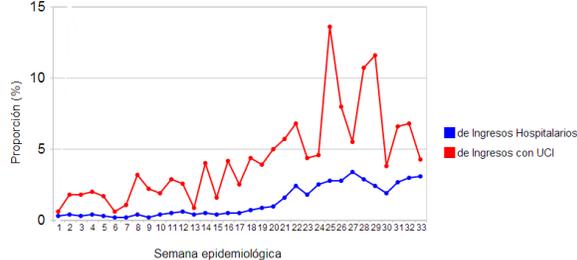


In Uruguay¹⁰ during EW 33, the proportion of SARI-associated hospitalizations increased compared to the previous week, while the proportion of SARI-associated ICU admissions decreased. There were no SARI-associated deaths reported during EW 33. Based on laboratory data from EW 30-33, 98 samples were analyzed, of which 37.8% were positive for a respiratory virus and 11.2% were positive for influenza. Among the positive samples, RSV predominated (59.5%). Among the positive influenza samples, 81.8% were influenza A (100% A(H3N2)) and 18.2% were influenza B.

Uruguay

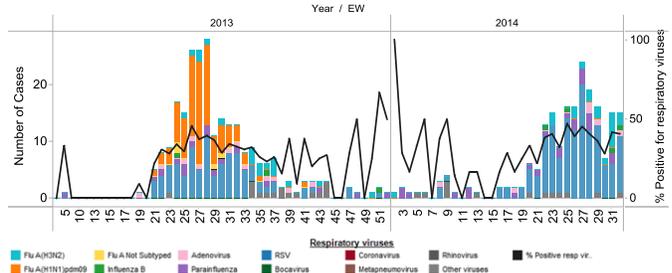
Uruguay. % SARI-assoc hosps & ICU admissions by EW, 2014

Proporción de IRAG en ingresos hospitalarios e ingresos a UCI y defunciones hospitalarias



Uruguay. Respiratory viruses distribution by EW, 2013-14

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



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