

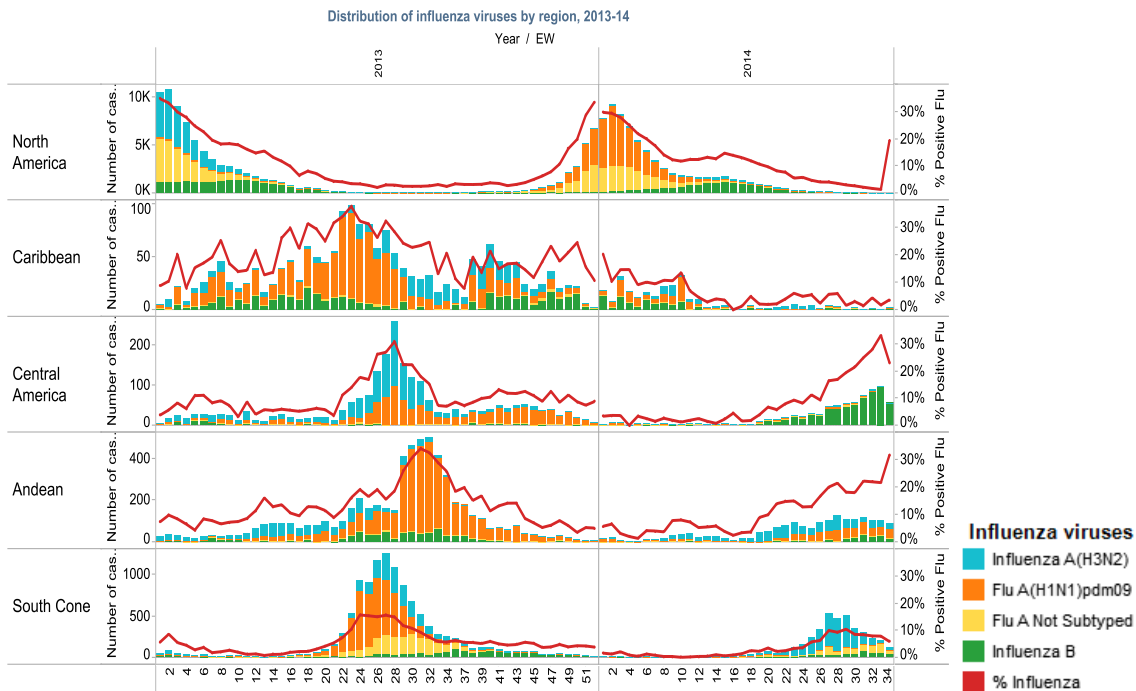
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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

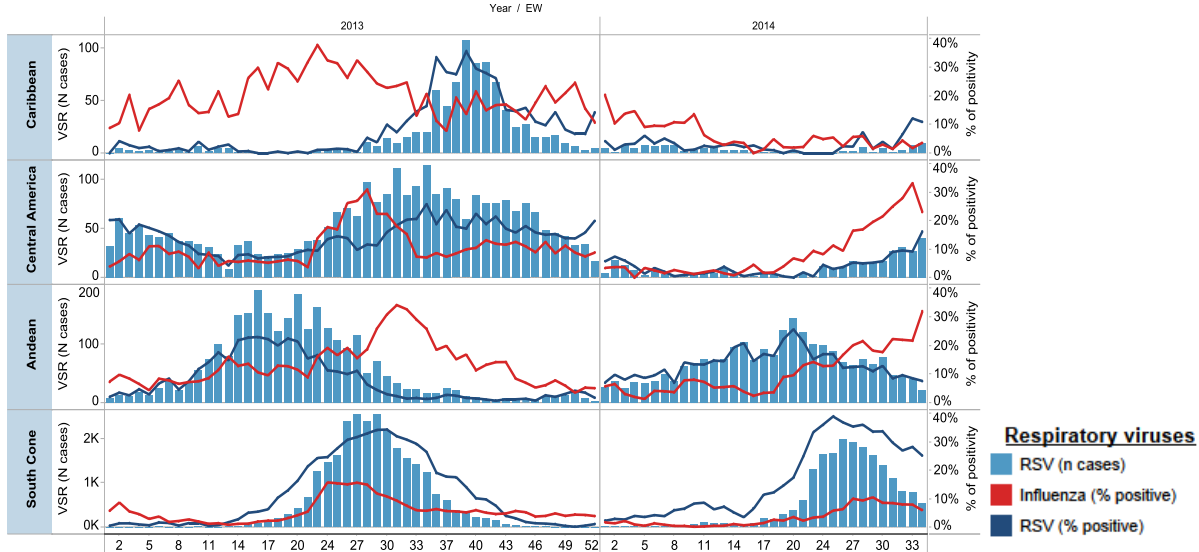
- **North America:** Influenza activity remained low in the sub-region with co-circulation of influenza A(H1N1)pdm09, A(H3N2) and influenza B. In the United States, one new human infection with an influenza A(H3N2) variant (H3N2v) was reported by Ohio. The case reported close contact with swine in the week prior to illness. No ongoing human-to-human transmission has been identified. 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 this sub-region. Co-circulation with influenza A(H1N1)pdm09 was observed in Guatemala and Panama while co-circulation with influenza A(H3N2) was observed in Dominican Republic, Honduras and Jamaica.
- **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 influenza and other respiratory viruses under surveillance by EW, region / country



ACRONYMS

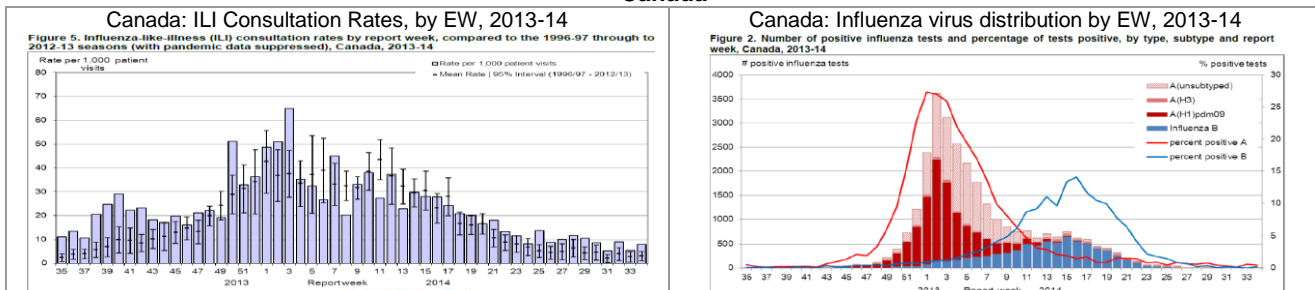
ARI	Acute respiratory infection
CARPHA	Caribbean Public Health Agency
CENETROP	Centro de Enfermedades Tropicales (Santa Cruz, Bolivia)
EW	Epidemiological Week
ILI	Influenza-like illness
INLASA	Instituto Nacional de Laboratorios de Salud (La Paz, Bolivia)
INS	Instituto Nacional de Salud
ORV	Other respiratory 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 34, influenza activity was low. The national ILI consultation rate was 7.9 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, 5,457 influenza-associated hospitalizations have been reported, of which 68.3% were associated with influenza A. During this same period, 344 deaths were reported, most of which were associated with influenza A (64.5%). The highest proportion of deaths (56.1%) has been among adults ≥ 65 years of age. Based on laboratory data for EW 34 the overall percentage of positive influenza tests was <1%. Among the positive tests during EW 33-34, 70.0% were influenza A (28.6% A(H1N1)pdm09, 28.6% A(H3) and 42.9% not subtyped) and 30.0% were influenza B. Among other circulating respiratory viruses, rhinovirus predominated.

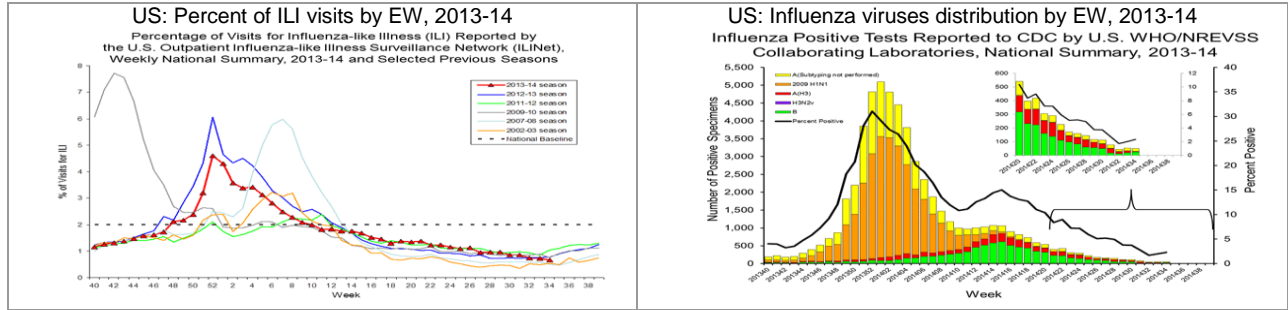
Canada



¹ Canada: FluWatch Report. EW 33-34. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

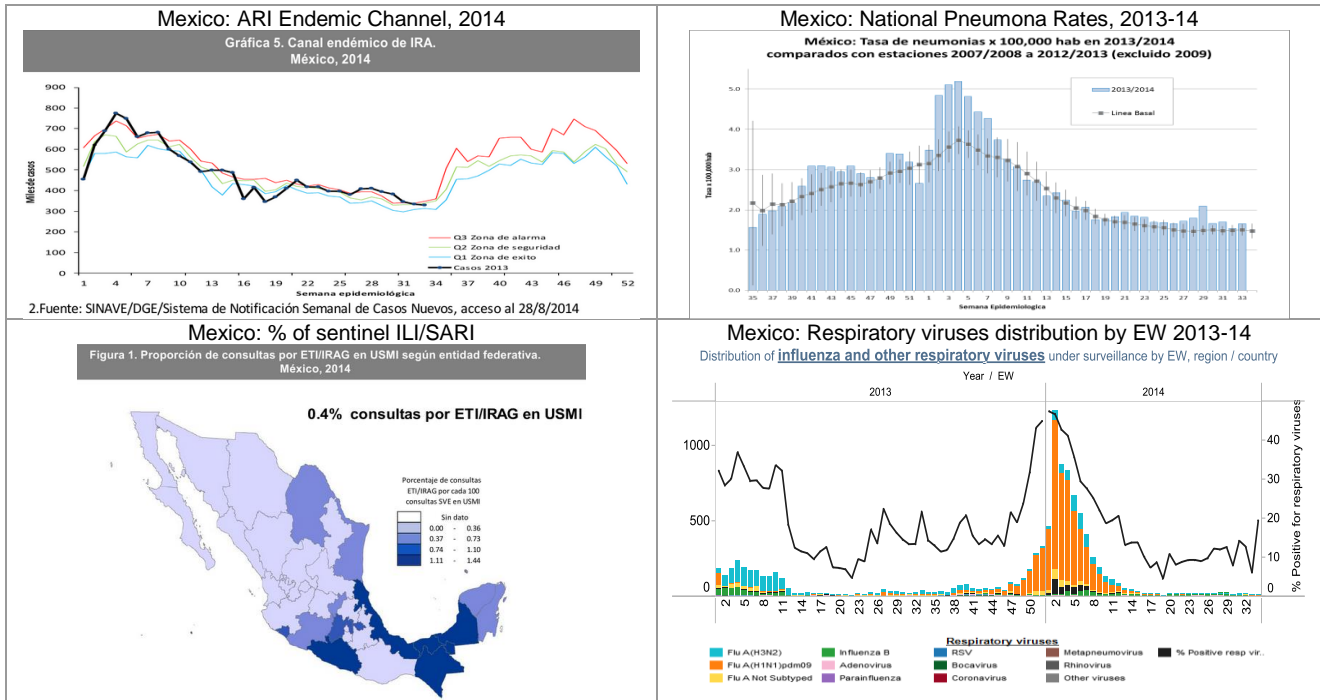
In the United States² during EW 34, influenza activity was low. The national proportion of ILI-associated outpatient visits (0.7%) was below the national baseline (2.0%). The proportion of deaths attributed to pneumonia and influenza (5.7%) was also below the epidemic threshold (6.0%). A total of 107 influenza-associated pediatric deaths have been reported this season (no deaths were reported during EW 34). According to laboratory data for EW 34, 2,110 samples were analyzed, of which 2.3% were positive for influenza. Among the positive samples, 49.0% were influenza A (8.3% A(H1N1)pdm09, 8.3% A(H3) and 83.3% not subtyped) and 51.0% were influenza B. During EW 34, one new human infection with an influenza A(H3N2) variant (H3N2v) was reported by Ohio. The case did not require hospitalization and reported close contact with swine in the week prior to illness. No ongoing human-to-human transmission has been identified. A total of two H3N2v cases have been reported in 2014 and are not epidemiologically linked.

United States



In Mexico³ during EW 34, influenza activity remained low. ARI activity decreased from the previous week and was within the security zone of the alarm channel. Pneumonia activity increased slightly compared to the previous week (rate: 1.7 per 100,000 inhabitants) and was within expected levels for this time of year. The highest levels of pneumonia activity were reported in Jalisco, Nuevo Leon and Colima. Nationally, through August 28, 2014, the proportion of ILI/SARI-associated medical visits was 0.4%. The highest proportions of ILI/SARI-associated medical visits were reported in Veracruz, Guerrero and Chiapas. During this same period, 767 influenza-associated deaths were reported, of which 90.0% were associated with influenza A(H1N1)pdm09. Based on laboratory data from EW 31-34, 616 samples were analyzed, of which 11.4% were positive for influenza. Among the positive samples, 48.6% were influenza A (2.9% A(H1N1)pdm09 and 97.1% A(H3N2)) and 51.4% were influenza B.

Mexico



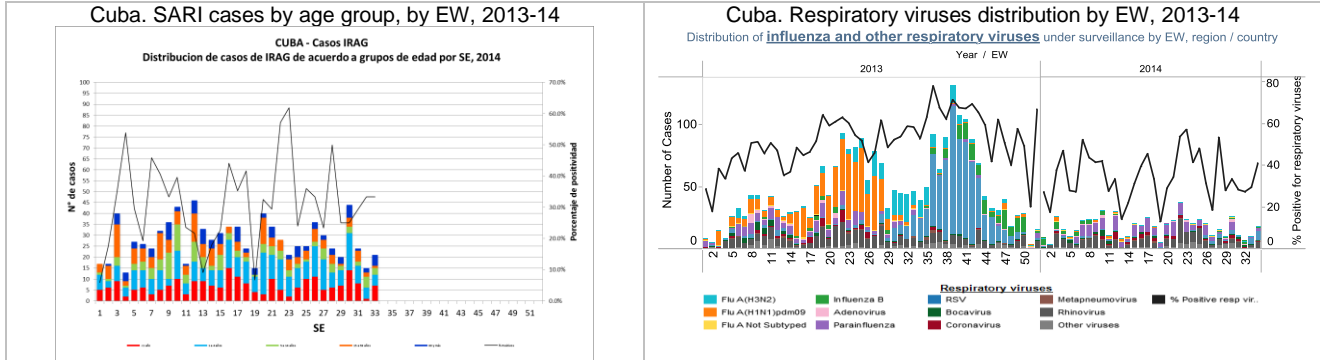
² USA: CDC FluView report. EW 34. Available at: <http://www.cdc.gov/flu/weekly/>

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

Caribbean

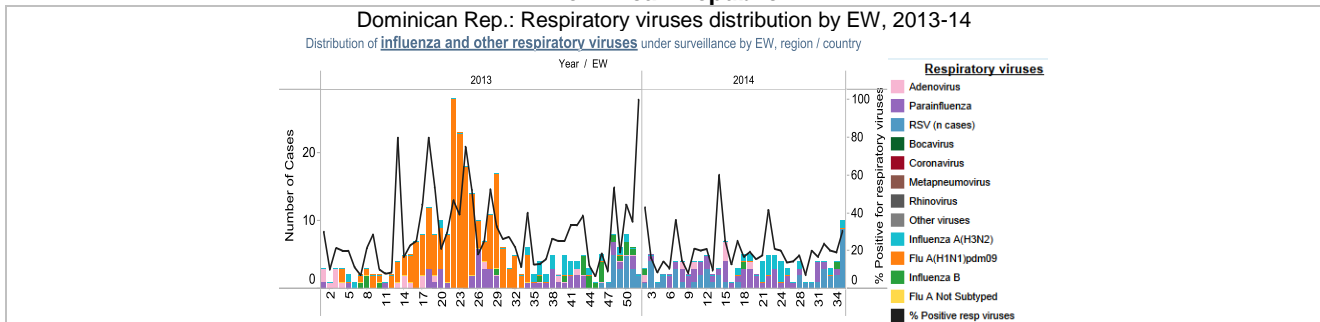
In Cuba during EW 33, the number of SARI-associated hospitalizations (n=21) increased from the previous week. Children ≤ 1 year of age comprised the largest proportion of these cases. One SARI-associated death was reported during this period and was negative for a respiratory virus. According to national laboratory data for EW 31-34, 139 samples were analyzed, of which 32.4% were positive for a respiratory virus and 2.2% for influenza. Among the positive samples, rhinovirus (26.7%) and parainfluenza (26.7%) predominated. Among the influenza viruses, influenza B (100%) was detected.

Cuba



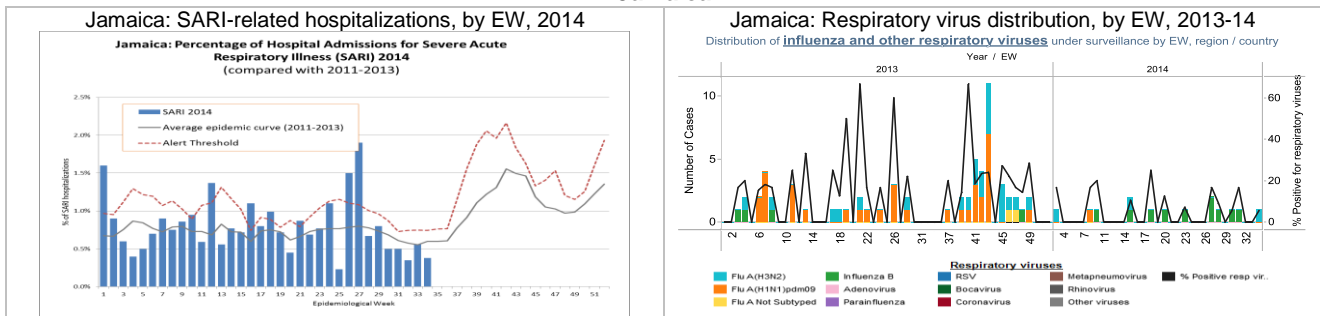
In the Dominican Republic, during EW 32-35, 86 samples were analyzed, of which 24.4% were positive for a respiratory virus and 3.5% were positive for influenza. Among the positive samples, RSV (76.2%) predominated. Among the influenza positive samples, 66.7% were influenza A (100% A(H3N2)) and 33.3% were influenza B.

Dominican Republic



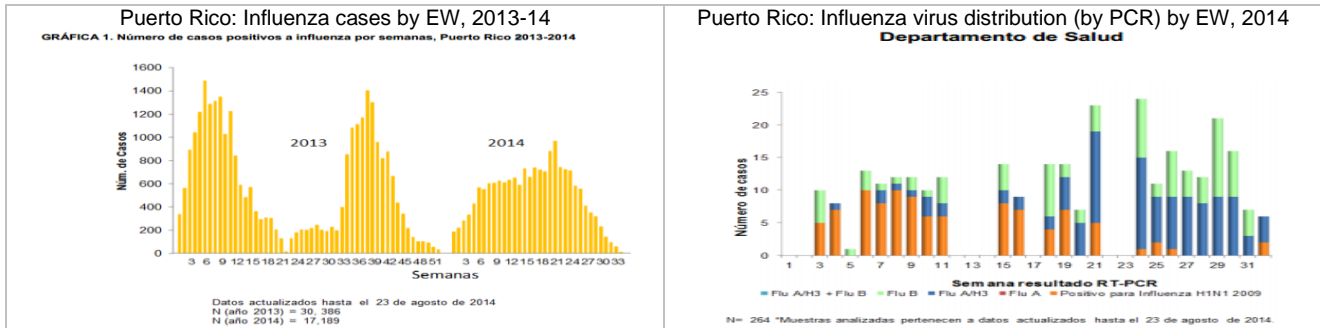
In Jamaica, based on sentinel surveillance data for EW 34, the proportion of ARI-associated consultations (2.5%) increased slightly from the previous week, while the proportion of SARI-associated hospitalizations decreased. No SARI-associated deaths were reported during this EW. Based on laboratory data for EW 31-34, 40 samples were analyzed, of which two (5.0%) were positive for influenza (influenza B and influenza A(H3N2)).

Jamaica



In Puerto Rico⁴ during EW 34, the number of influenza cases (n=11) decreased compared to the previous week. Of these, 4 cases were associated with influenza A and 7 with influenza B. Since the beginning of 2014, 17,189 influenza cases have been reported (44% influenza A, 55% influenza B and 1% influenza A and B) and persons aged 0-19 years accounted for 50% of those cases. During this same period, 804 influenza-associated hospitalizations and 13 influenza-associated deaths were reported.

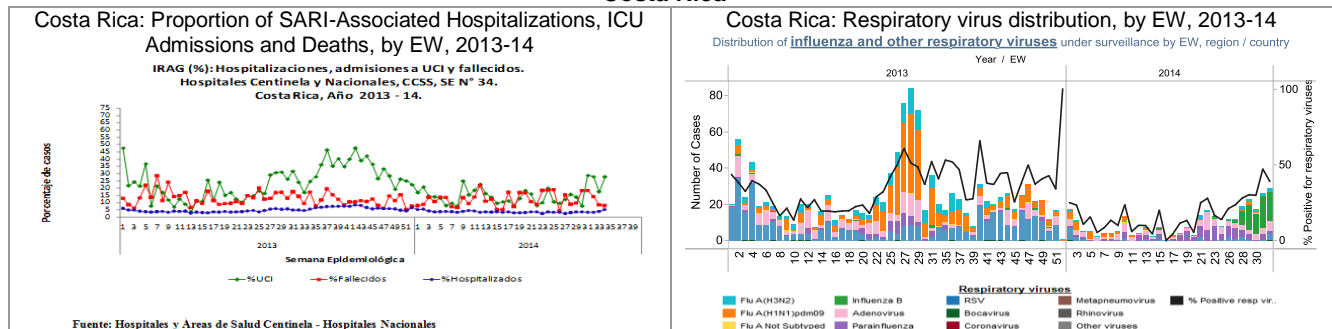
Puerto Rico



Central America

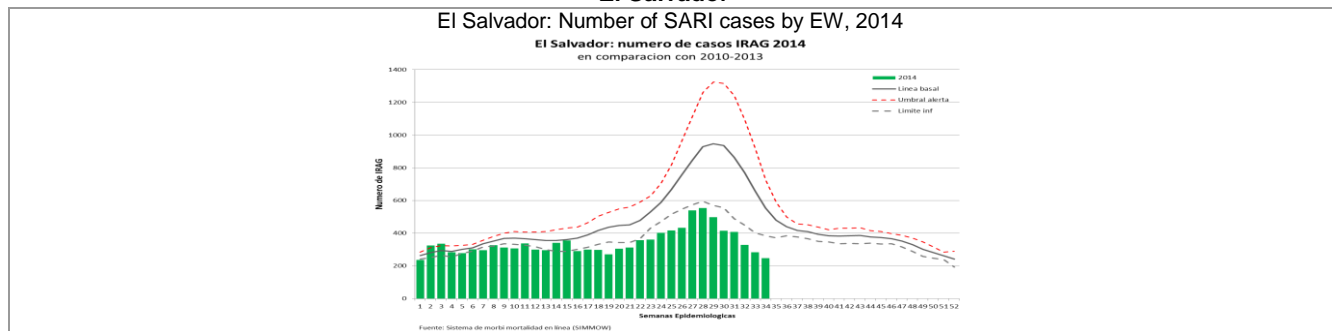
In Costa Rica, during EW 34, the proportions of SARI-associated hospitalizations (5.2%) and ICU admissions (28.0%) increased from the previous week, while the proportion of SARI-associated deaths (8.0%) decreased. According to laboratory data from EW 30-33, 249 samples were analyzed of which 36.5% were 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 (5.5%) and deaths (6.1%) increased compared to the previous week, while the proportion of SARI-associated ICU admissions (0%) decreased.

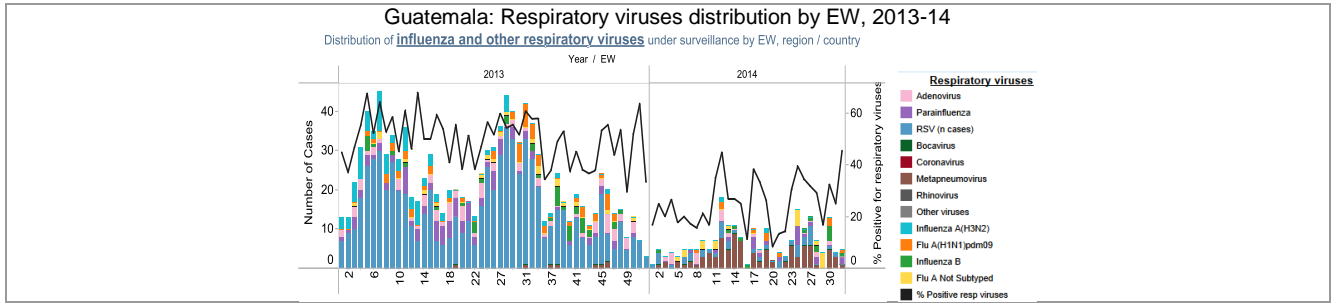
El Salvador



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.

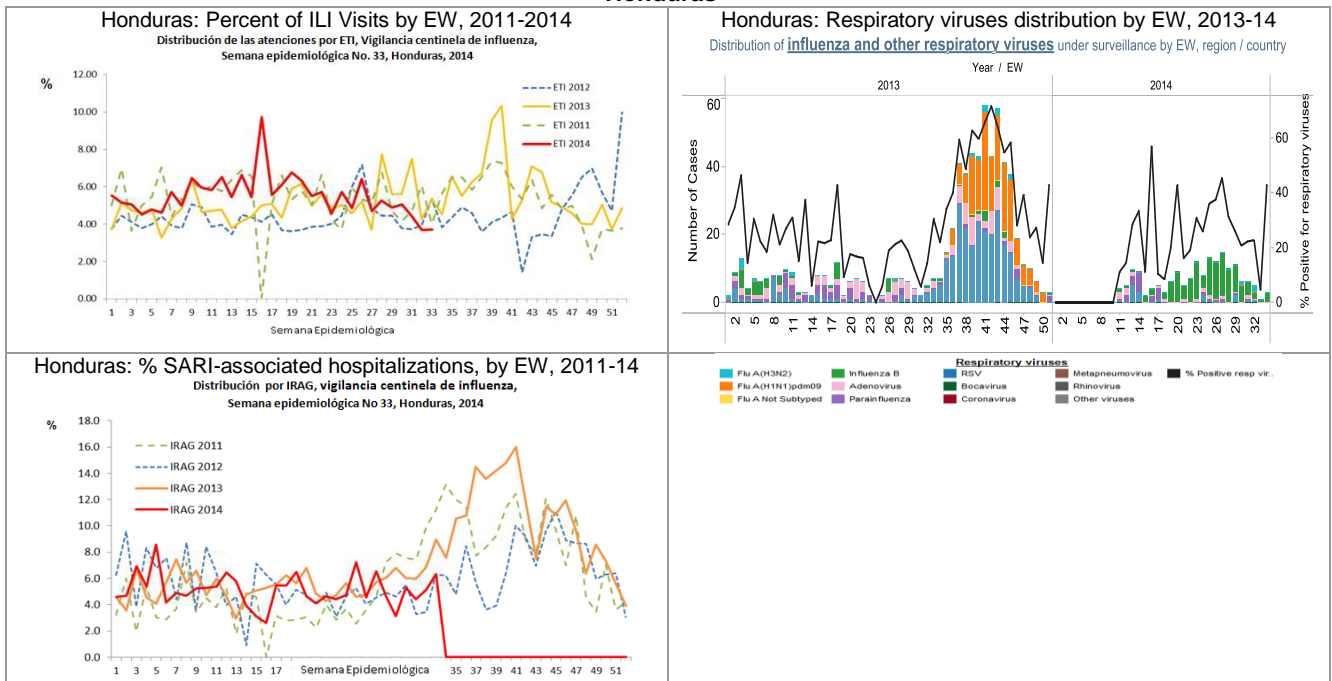
⁴ Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 34

Guatemala



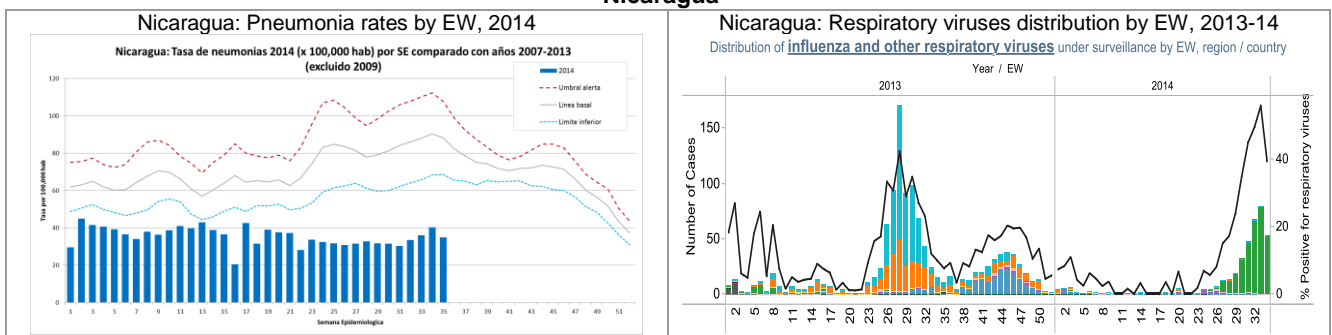
In Honduras, during EW 33, the proportion of ILI-associated medical visits (3.7%) was similar to the previous week, while the proportion of SARI-associated hospitalizations (6.0%) increased. Both remained within expected levels for this time of year. Two SARI-associated deaths were reported during EW 33. According to laboratory data from EW 31-34, 78 samples were analyzed, of which 19.2% were positive for a respiratory virus and 15.4% were positive for influenza. Among positive samples, influenza B (66.7%), influenza A(H3N2) (13.3%), RSV (13.3%) and adenovirus (6.7%) were detected.

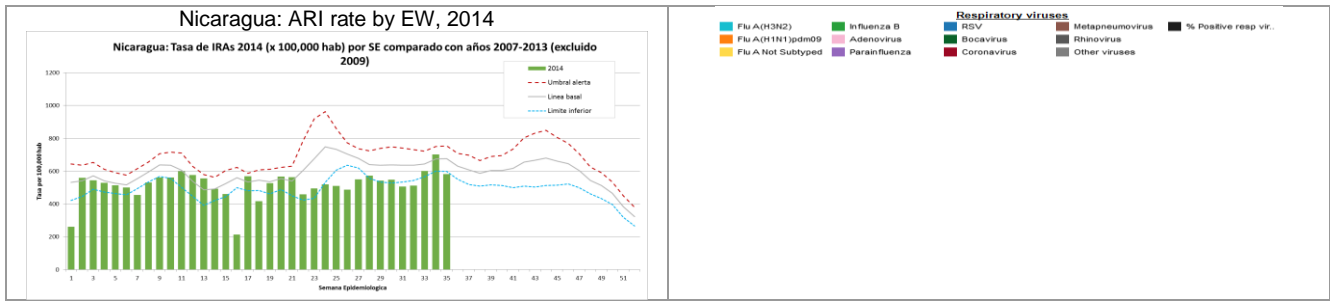
Honduras



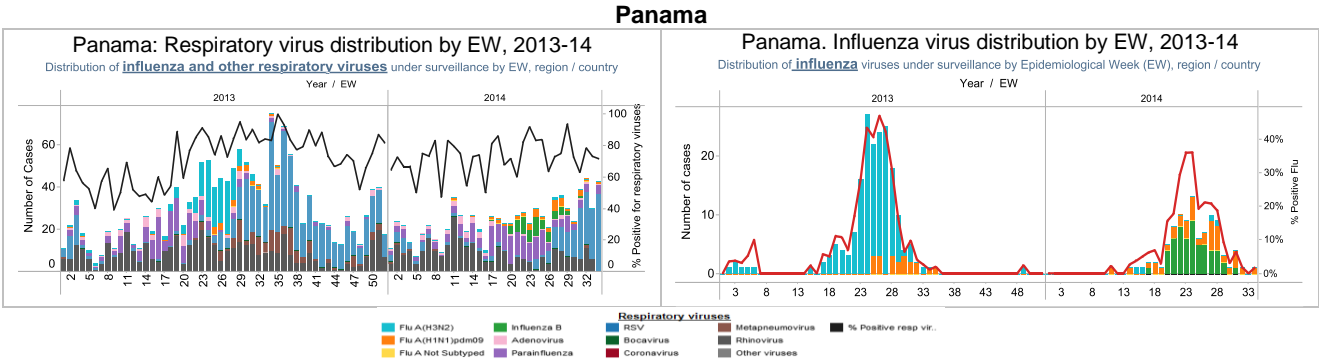
In Nicaragua, during EW 35, the national rates of pneumonia (34.8 per 100,000 population) and ARI (582.3 per 100,000 population) were within expected levels for this time of year. According to laboratory data from EW 31-34, 518 samples were analyzed, of which 47.5% were positive for a respiratory virus and 46.9% were positive for influenza. Among positive samples, influenza B predominated (98.8%).

Nicaragua



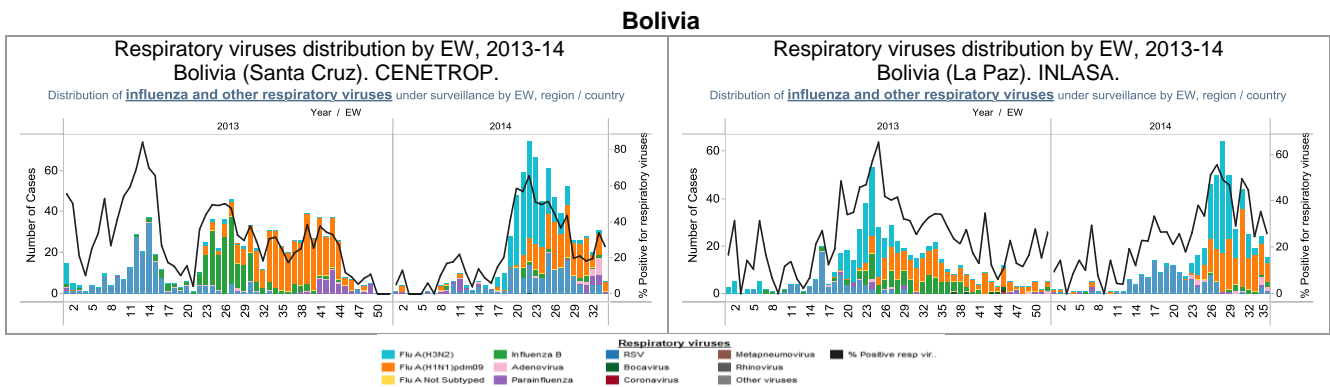


In Panama, based on national laboratory data from EW 31-34, 219 samples were analyzed, of which 71.2% were positive for a respiratory virus and 2.7% were positive for influenza. Among the positive samples, RSV (70.5%) predominated. Among the influenza positive samples, 83.3% were influenza A (100% A(H1N1)pdm09) and 16.7% were influenza B.



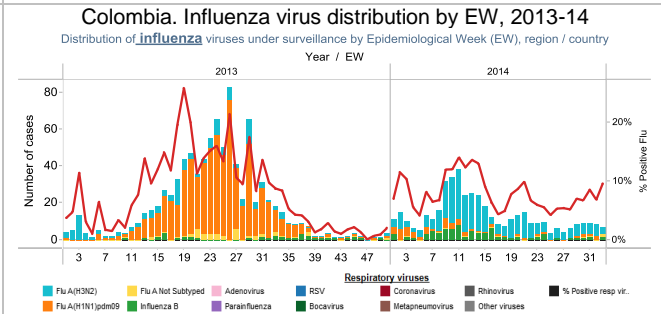
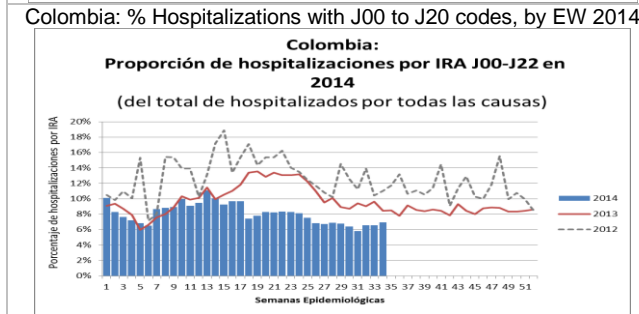
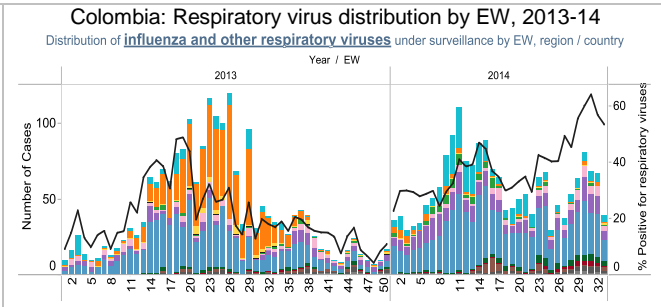
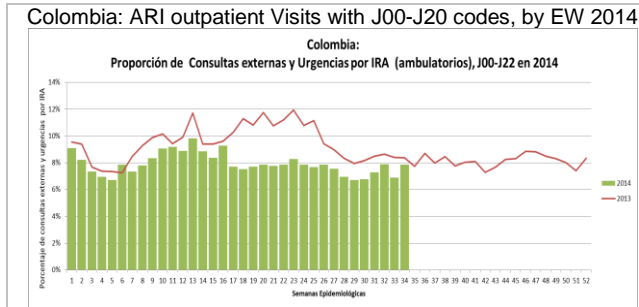
South America – Andean countries

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 32-35, 260 samples were analyzed, of which 31.9% were positive for a respiratory virus and 28.1% were positive for influenza. Among the positive samples, influenza A(H1N1)pdm09 (59.0%), A(H3N2) (21.7%) and influenza B (7.2%) predominated.



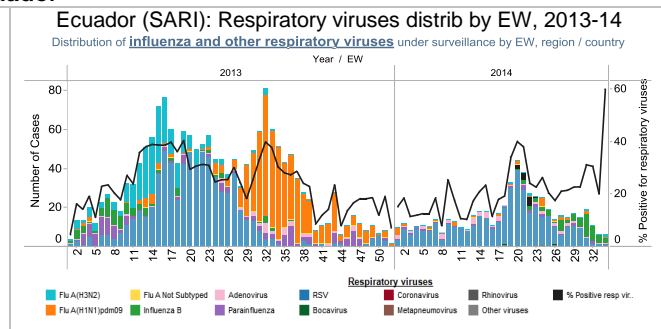
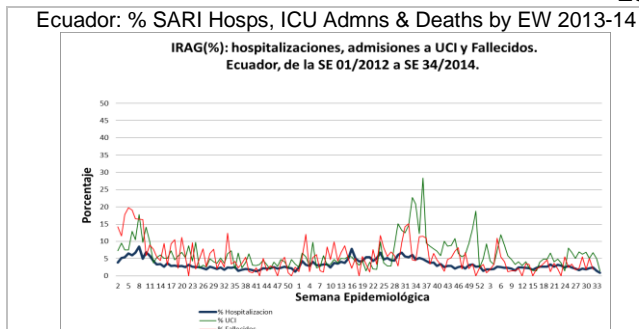
In Colombia, during EW 34 the proportions of outpatient and urgent visits (7.9%), hospitalizations (6.9%) and ICU admissions (6.7%) with ARI/SARI-associated ICD-10 codes (J00 to J22) were within the expected levels for this time of year. Based on INS laboratory data from EW 30-33, 432 samples were analyzed, 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



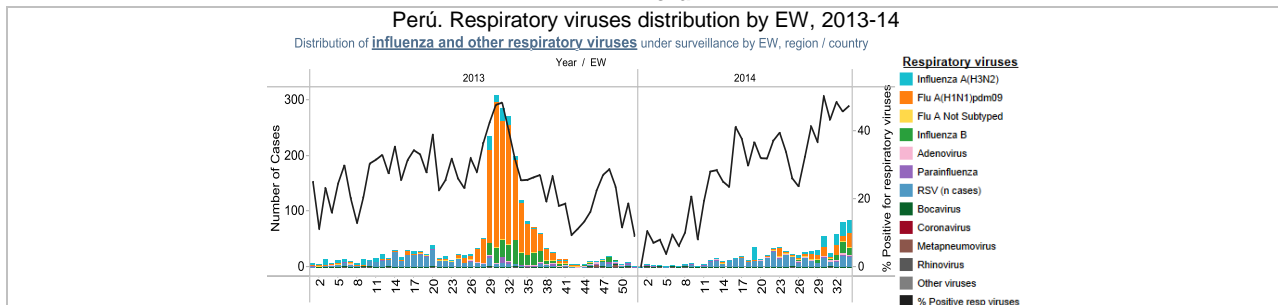
In Ecuador during EW 34, the proportions of SARI-associated hospitalizations (0.9%), ICU admissions (1.4%) and deaths (1.9%) decreased compared to the previous week. Based on national reference laboratory data from EW 31-34, 137 SARI samples were analyzed, of which 30.7% were positive for a respiratory virus and 21.9% were positive for influenza. Among the positive samples, influenza B (64.3%) and RSV (21.4%) predominated.

Ecuador



In Peru, based on national laboratory data from EW 31-34, 530 samples were analyzed, of which 46.4% were positive for a respiratory virus and 33.2% were positive for influenza. Among the influenza positive samples, 73.3% were influenza A (42.6% A(H1N1)pdm09 and 57.4% A(H3N2)) and 26.7% were influenza B. Among the other respiratory viruses, RSV predominated (22.4% of positive samples).

Peru

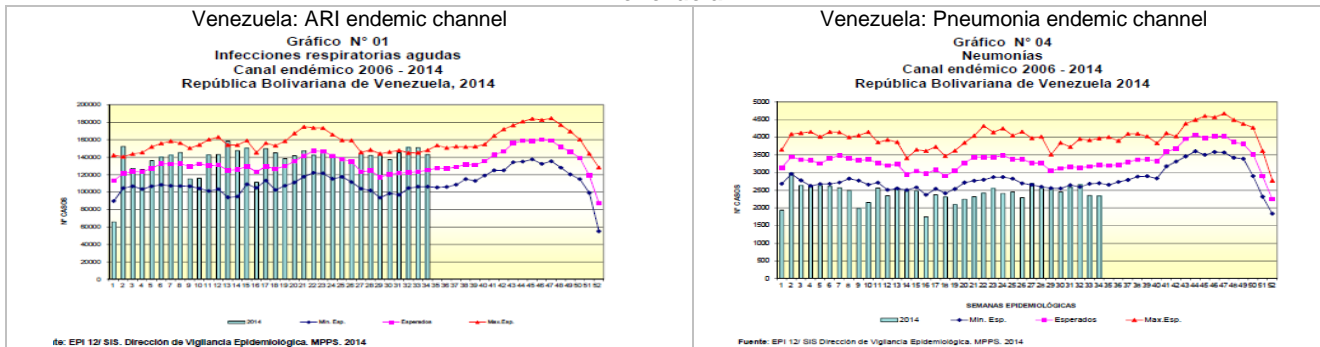


In Venezuela⁵ during EW 34, the numbers of ARI and pneumonia cases decreased by 5.1% and 0.4%, respectively, compared to the previous week. Both were within expected levels for this time of year. During

⁵ Venezuela. Boletín epidemiológico, EW 34.

EW 34, 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 1-34, 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%).

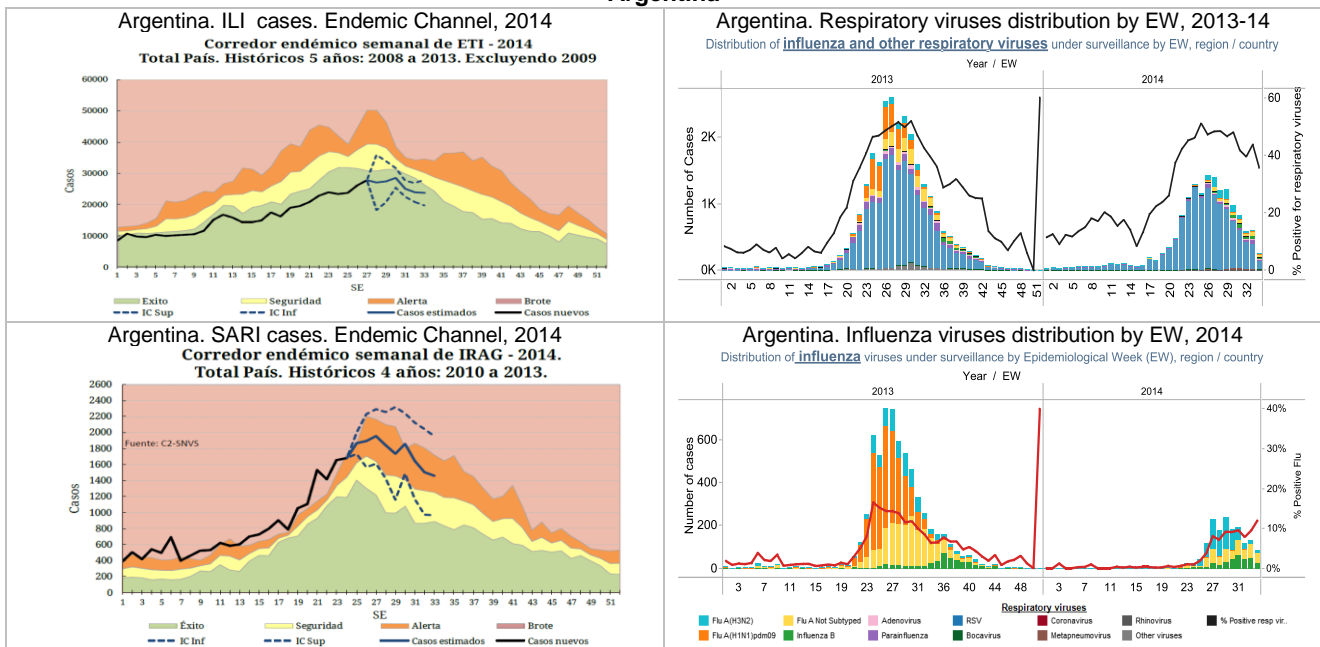
Venezuela



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 33-34, 2,098 samples were processed, of which 41.0% were positive for a respiratory virus and 10.3% were positive for influenza. Among the positive samples, RSV (58.0%) predominated. Among the influenza viruses, 66.2% were influenza A (0% A(H1N1)pdm09, 18.2% A(H3N2) and 81.8% not subtyped) and 33.8% were influenza B.

Argentina



In Brazil⁷, according to ILI sentinel surveillance data through EW 34, 11,551 samples were analyzed, and of these, 19.6% 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, 13,520 SARI cases were reported and 9.3% of these were positive for influenza. Among the positive samples, influenza A(H3N2) (62.7%) predominated, followed by influenza A(H1N1)pdm09 (26.0%). The largest number of SARI cases was reported in the southeast region, primarily in Sao Paulo. Through EW 34, 1,523 SARI-associated deaths were reported, of which 13.5% were positive for influenza (51.7% A(H1N1)pdm09 and 35.1% A(H3N2)).

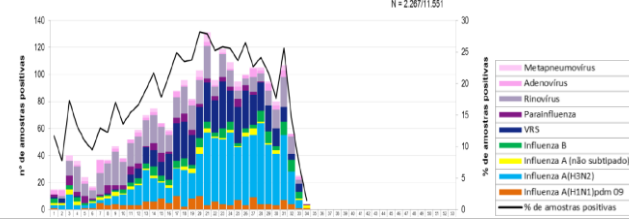
⁶ Argentina. Boletín integrado de vigilancia. SE 33.

⁷ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 34, 2014.

Brazil

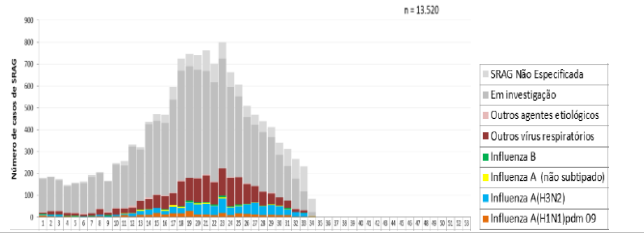
Brazil: Resp virus distribution in ILI cases, by EW, 2014

Figura 1. Distribuição dos vírus respiratórios identificados nas unidades sentinelas de Síndrome Gripal, por semana epidemiológica de início dos sintomas. Brasil, 2014 até a SE 34. N = 2.207/11.551



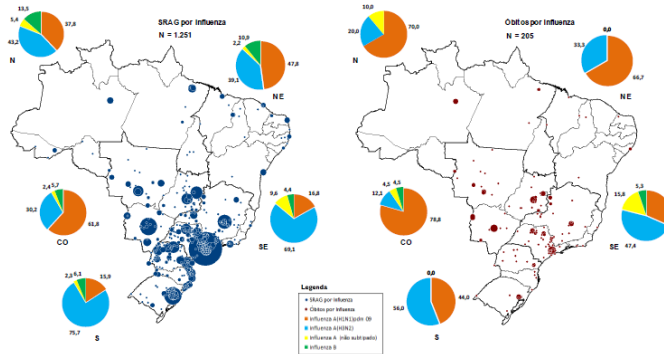
Brazil: Resp virus distribion, SARI cases, by EW, 2014

Figura 3. Distribuição dos casos de Síndrome Respiratória Aguda Grave segundo agente etiológico e semana epidemiológica do início dos sintomas. Brasil, 2014 até a SE 34. n = 13.520



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 34.



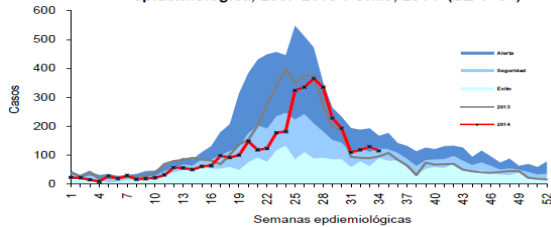
Fonte: SINANI Influenza Web. Dados atualizados em 26/09/2014, sujeitos a alteração.
* O círculo é proporcional ao número de casos e óbitos. N = Norte; NE = Nordeste; SE = Sudeste; S = Sul; e CO = Centro Oeste.

In Chile⁸, during EW 34, ILI activity (rate: 7.6 per 100,000 inhabitants) decreased compared to the previous EW and was within the security 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 33-34, 2,438 samples were analyzed, of which 38.4% were positive for a respiratory virus and 2.7% were positive for influenza. Among the positive samples, RSV predominated (75.4%). Among the influenza samples, 65.7% were influenza A (2.3% A(H1N1)pdm09, 75.0% A(H3N2) and 22.7% not subtyped) and 34.3% were influenza B.

Chile

Chile. ILI Endemic Channel, 2014

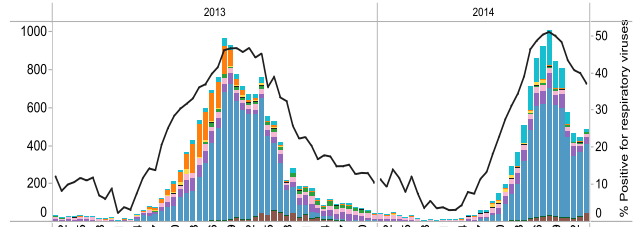
Gráfico 1
Canal endêmico de Enfermedad Tipo Influenza según semana epidemiológica, 2007-2013*. Chile, 2014 (SE 1- 34)



Fonte: Vigilancia Centinela ETI. EPIDEMIOLOGIA-MINSAL * Se excluye año 2009-2010 por corresponder a años epidémicos

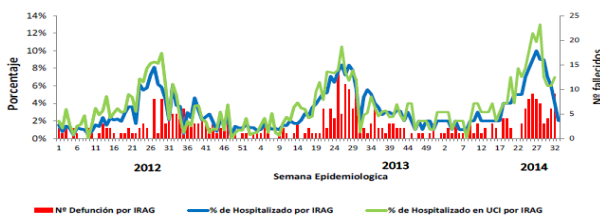
Chile. Respiratory viruses distribution by EW, 2013-14

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



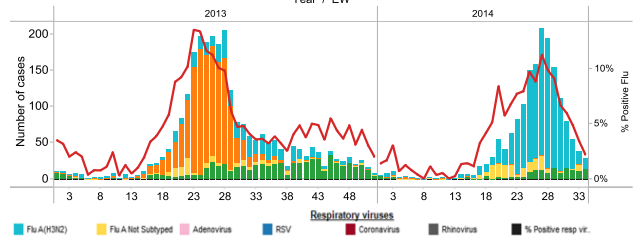
Chile. % SARI hospitalizations, ICU Adm and Deaths, 2012-14

Gráfico 8
Porcentaje de hospitalizados, ingreso a UCI y número de fallecidos por IRAG según SE en Hospitales Centinela. Chile, 2012 - 2014 (*).



Chile: Influenza viruses distribution by EW, 2013-14

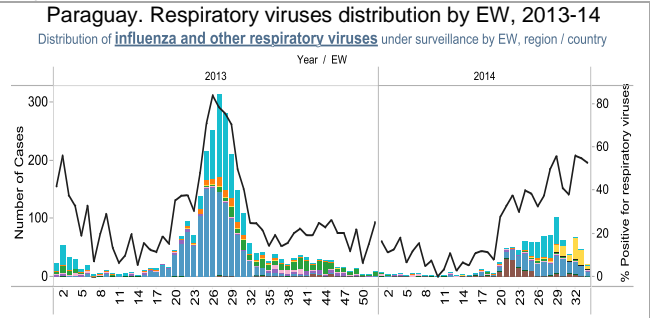
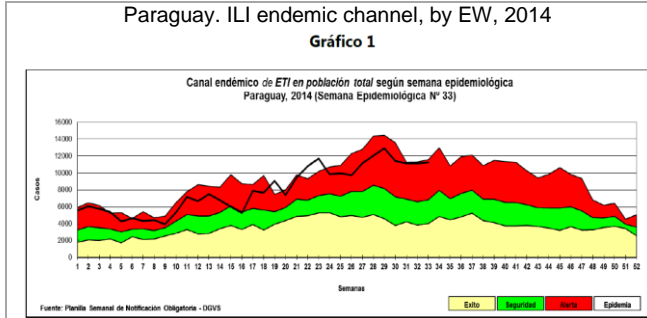
Distribution of influenza viruses under surveillance by Epidemiological Week (EW), region / country



⁸ Chile. Informe de situación. EW 33-34. Available at: <http://epi.minsal.cl/>

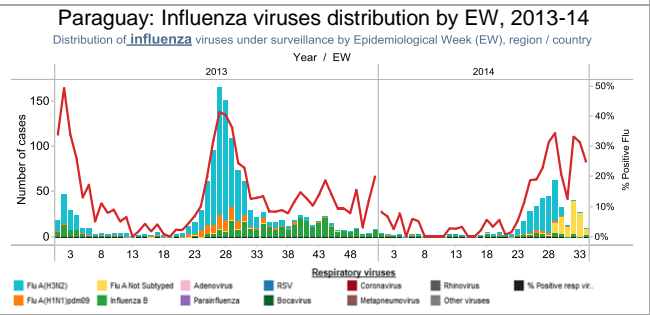
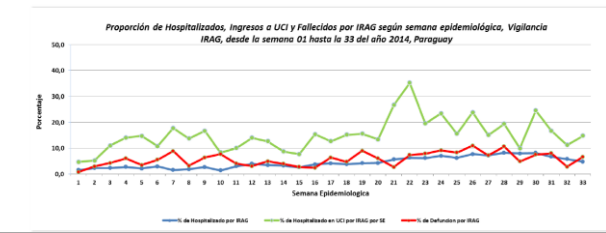
In Paraguay⁹ during EW 33, the ILI consultation rate (168.3 per 100,000 inhabitants) increased slightly from the previous EW and was within the alert zone of the endemic channel. The proportion of SARI-associated hospitalizations (4.7%) decreased compared to the previous week. The most affected age group 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.

Paraguay



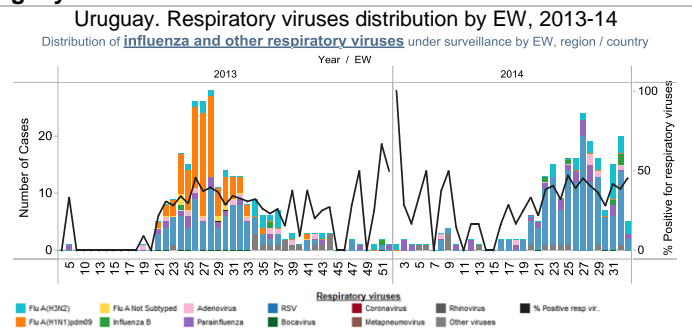
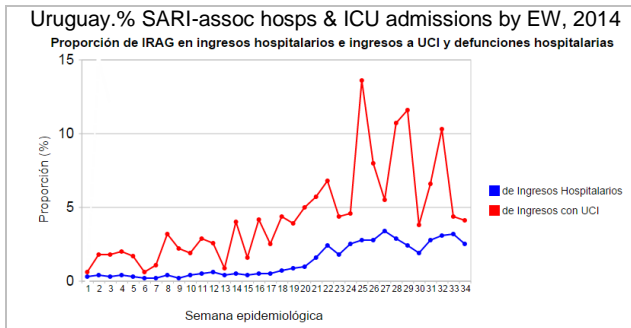
Paraguay: % SARI Hosps, ICU Adms & Deaths by EW 2013-14

Gráfico 5: Proporción de Hospitalizados, ingresos a UCI y fallecidos por IRAG según semana epidemiológica, SE 1 a 33, Vigilancia Centinela, Paraguay, 2.014.



In Uruguay¹⁰ during EW 34, the proportions of SARI-associated hospitalizations and ICU admissions decreased compared to the previous week. There were no SARI-associated deaths reported during EW 34. Based on laboratory data from EW 31-34, 99 samples were analyzed, of which 40.4% were positive for a respiratory virus and 14.1% were positive for influenza. Among the positive samples, RSV predominated (52.5%). Among the positive influenza samples, 78.6% were influenza A (100% A(H3N2)) and 21.4% were influenza B.

Uruguay



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

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