

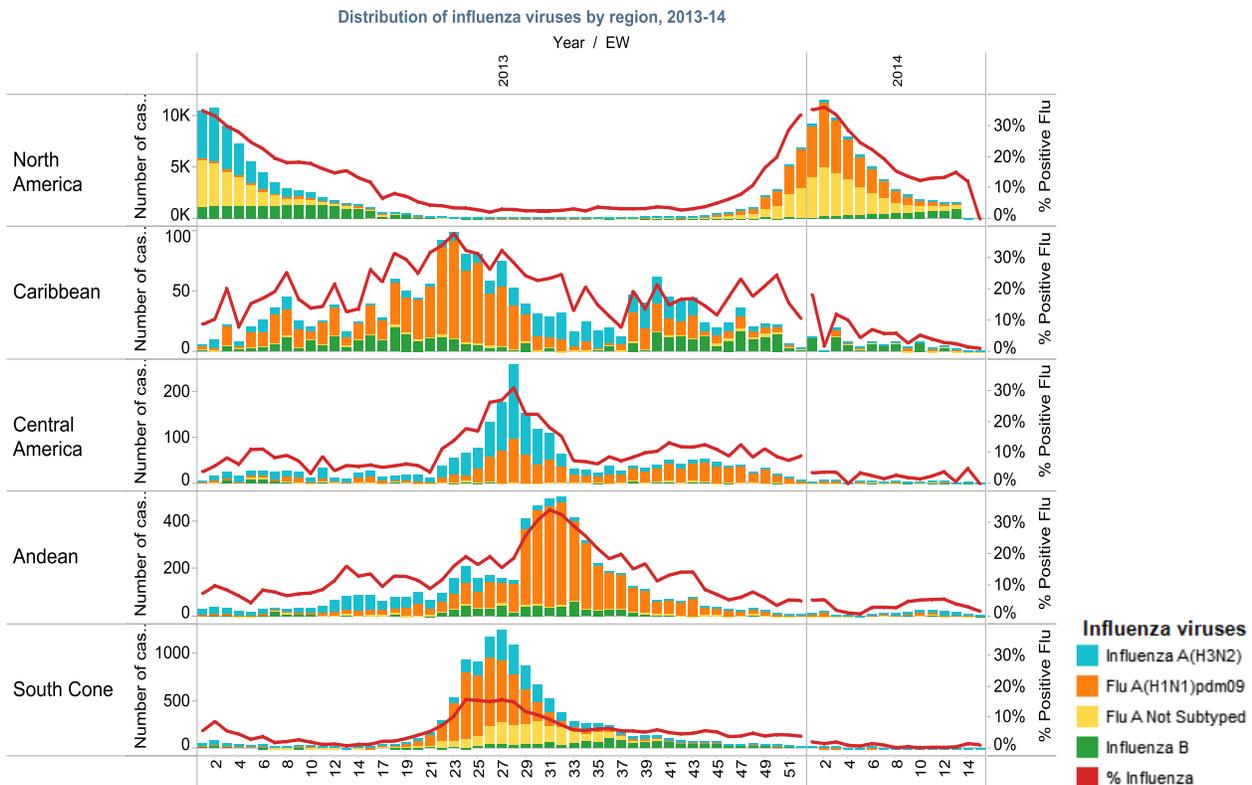
PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
Influenza Regional Reports: www.paho.org/influenzareports

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

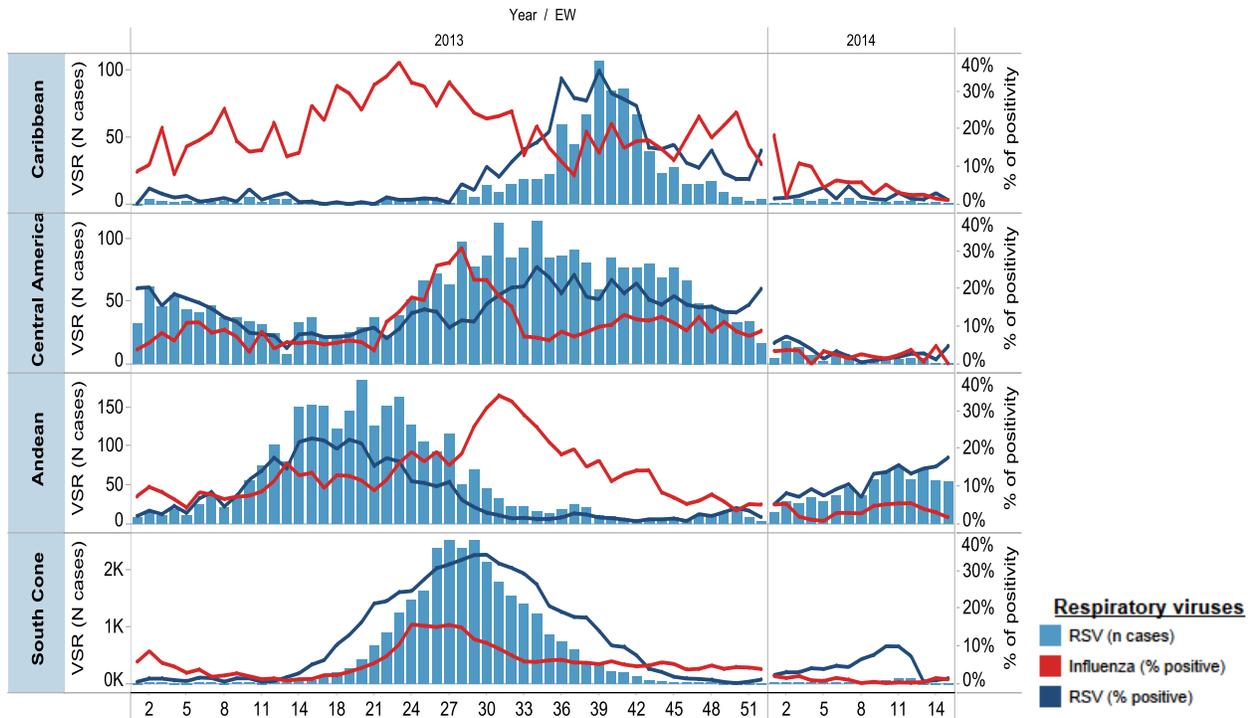
- **North America:** Influenza B continued to predominate in Canada and the United States and most affected adults ≥65 years of age. In Mexico, influenza activity was within expected levels for this time of year and involved co-circulation of A(H1N1)pdm09, A(H3N2) and influenza B.
- **The Caribbean and Central America:** Influenza and other respiratory virus activity remained low in the sub-region.
- **South America – Andean Countries:** Acute respiratory illness activity, and influenza and other respiratory virus activity remained low in the sub-region. However, active circulation of RSV was observed in Bolivia, Colombia, Ecuador and Peru.
- **South America - South Cone and Brazil:** Although acute respiratory illness activity associated with other respiratory viruses increased slightly in some countries of the sub-region, it remained low and within expected levels for this time of year. Influenza activity remained low.

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:

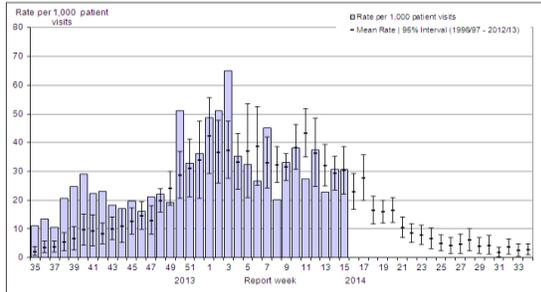
In Canada¹ during EW 15, influenza activity was sustained by continued circulation of influenza B but was within expected levels for this time of year. The national influenza-like illness (ILI) consultation rate was 30.7 per 1,000 patient visits, similar to the previous week and within expected levels. Since the beginning of the 2013-14 influenza season, 4,070 influenza-associated hospitalizations have been reported, of which 85.5% were associated with influenza A. Although influenza A(N1H1)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, 226 deaths have been reported, most of which were associated with influenza A. An equal proportion of deaths (46.0%) have been among adults 20-64 years of age and adults ≥ 65 years of age. Based on laboratory data for EW 15, the overall percentage of positive influenza tests was 15.3% (N=722), an increase compared to the previous week and indicating influenza B circulation has not yet peaked. Among the positive tests, 87.7% were influenza B and 12.3% were influenza A, of which 23.6% were influenza A(H1N1)pdm09, 24.7% A(H3) and 51.7% A, not subtyped. Among other circulating respiratory viruses, RSV continued to predominate, but at decreasing levels since early February.

¹ Canada: FluWatch Report. EW 15. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

Canada

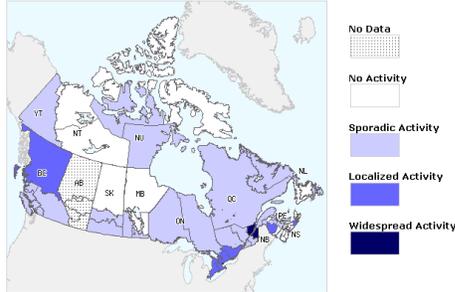
Canada: ILI Consultation Rates, by EW, 2013-14

Figure 5. Influenza-like illness (ILI) consultation rates by report week, compared to the 1996-97 through to 2012-13 seasons (with pandemic data suppressed), Canada, 2013-2014



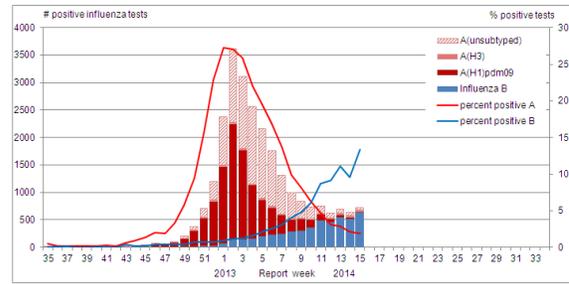
Canada: Influenza/ILI Activity by region, EW 15, 2014

Figure 1. Map of overall influenza/ILI activity level by province and territory, Canada, Week 15



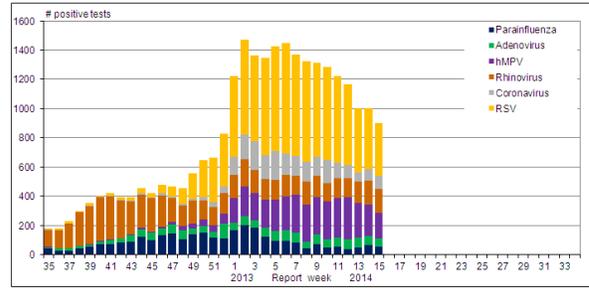
Canada: Influenza virus distribution by EW, 2013-14

Figure 2. Number of positive influenza tests and percentage of tests positive, by type, subtype and report week, Canada, 2013-14



Canada: Respiratory virus distribution by EW, 2013-14

Figure 3. Number of positive laboratory tests for other respiratory viruses by report week, Canada, 2013-14

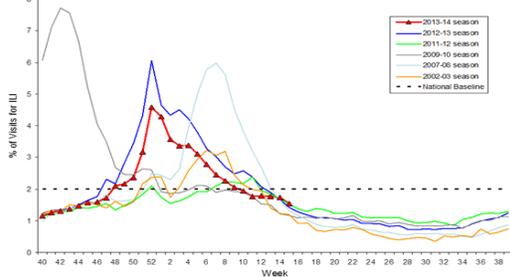


In the United States² during EW 15, influenza activity continued to decrease in most regions. The national proportion of outpatient visits for influenza-like illness (ILI) was 1.5%, a decreased compared to the previous week and below the national baseline (2.0%). Two of 10 regions reported ILI activity above their region-specific baseline levels. The proportion of deaths attributed to pneumonia and influenza for EW 15 (6.4%) decreased compared to the previous EW and was below the epidemic threshold (7.2%). A total of 86 influenza-associated pediatric deaths have been reported this season, of which one was reported during EW 15 and was associated with influenza B. Since October 1, 2013, 8,995 laboratory confirmed influenza-associated hospitalizations have been reported (rate: 33.2 per 100,000 population) and the majority (90.8%) have been associated with influenza A. The highest hospitalization rate was among adults ≥ 65 years and has been steadily increasing in the recent weeks. However, adults aged 18-64 years comprised approximately 60% of the reported hospitalizations. According to laboratory data for EW 15, 4,653 samples were analyzed, of which 15.5% were positive for influenza. Among the positive samples, 44.6% were influenza A (6.6% A(H1N1)pdm09, 45.8% A(H3) and 47.5% A, not subtyped) and 55.4% were influenza B. Based on antiviral resistance testing, 1.1% (56/4,899) of the influenza A(H1N1)pdm09 and influenza B samples tested were oseltamivir resistant.

United States

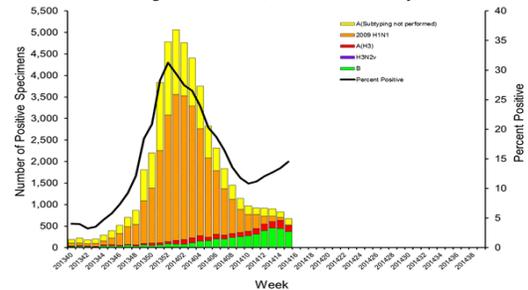
US: Percent of ILI visits by EW, 2013-14

Percentage of Visits for Influenza-like Illness Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2013-14 and Selected Previous Seasons

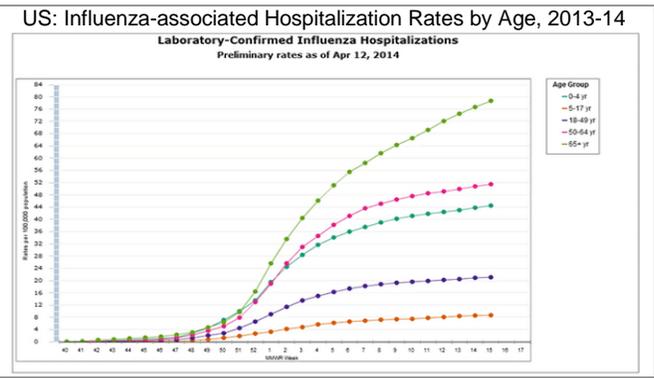
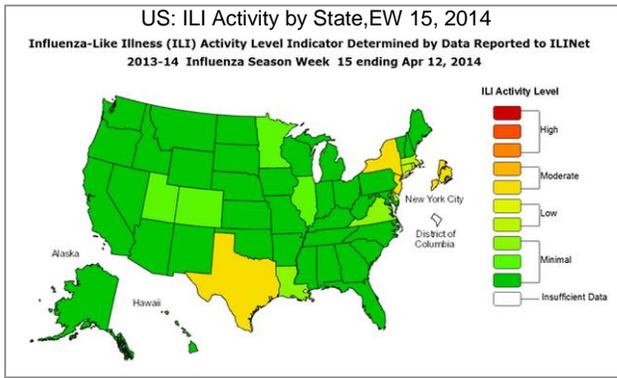


US: Influenza viruses distribution by EW, 2013-14

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2013-14

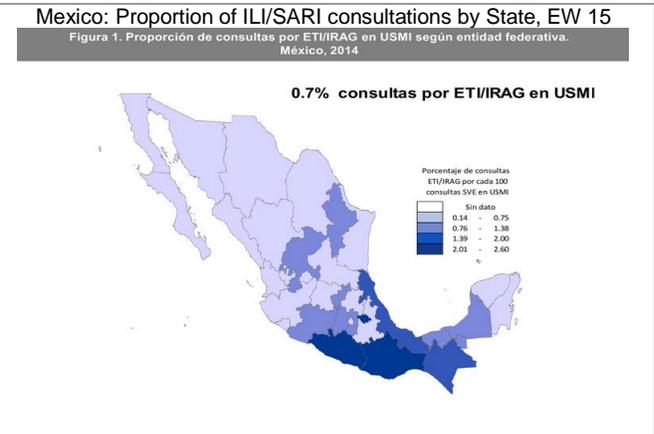
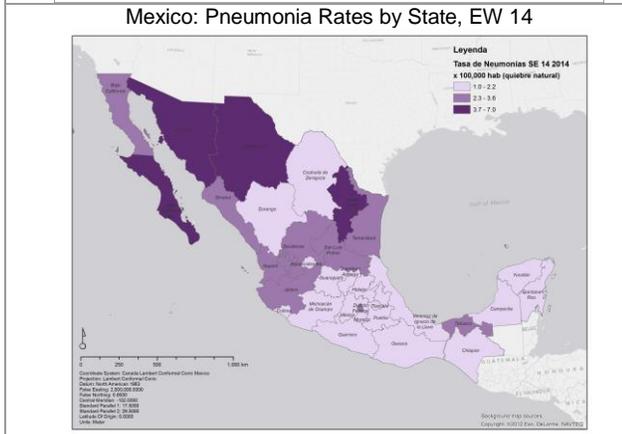
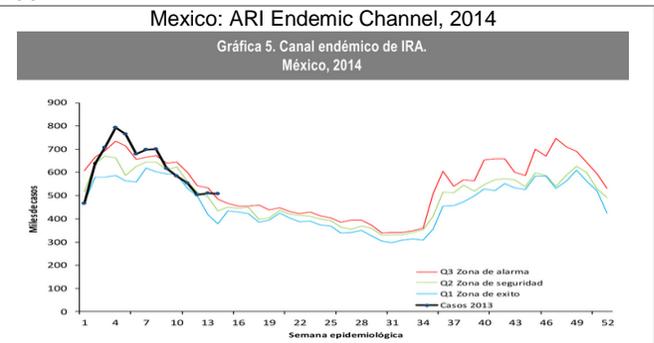
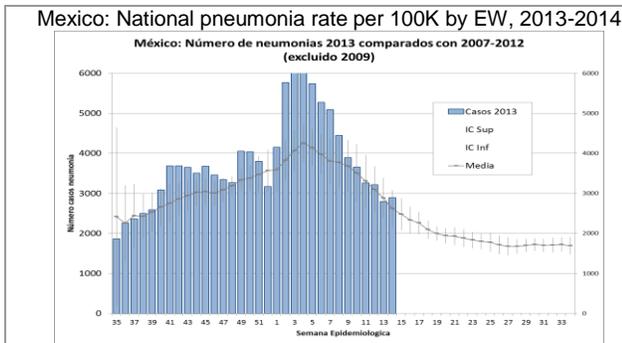


² USA: CDC FluView report. EW 15. Available at: <http://www.cdc.gov/flu/weekly/>

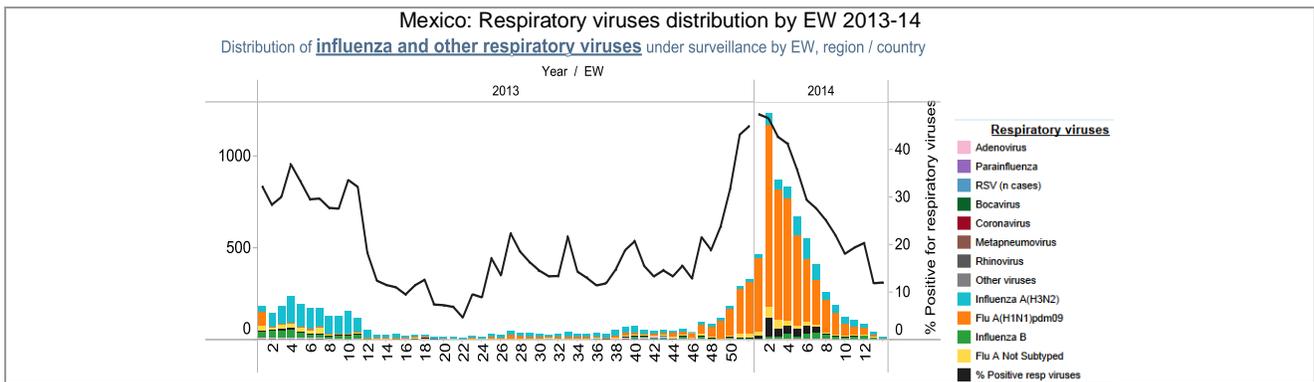


In Mexico³ during EW 15, influenza activity was similar to the previous week. The pneumonia rate (2.4 per 100,000 inhabitants in EW 14) increased slightly compared to previous week but was within the expected level for this time of year. ARI activity decreased slightly compared to the previous week and was within the epidemic zone of the endemic channel. Regionally, the highest levels of ARI activity were reported in Zacatecas, Aguascalientes and Sinaloa, while the highest levels of pneumonia activity were reported in Chihuahua, Nuevo Leon and Baja California Sur. Nationally, through April 17, 2014, the proportion of ILI/SARI-associated medical visits was 0.7%, similar to the previous EW. The highest proportions of ILI/SARI-associated medical visits were reported in Guerrero, Oaxaca and Tlaxcala. During this same period, 706 influenza-associated deaths were reported, of which 91.1% were associated with influenza A(H1N1)pdm09. Based on laboratory data from EW 13-14, 413 samples were processed, of which 11.9% were positive for influenza. Among the positive samples, 61.2% were influenza A (60.0% A(H1N1)pdm09, 36.7% A(H3N2) and 3.3% A not subtyped) and 38.8% with influenza B.

Mexico



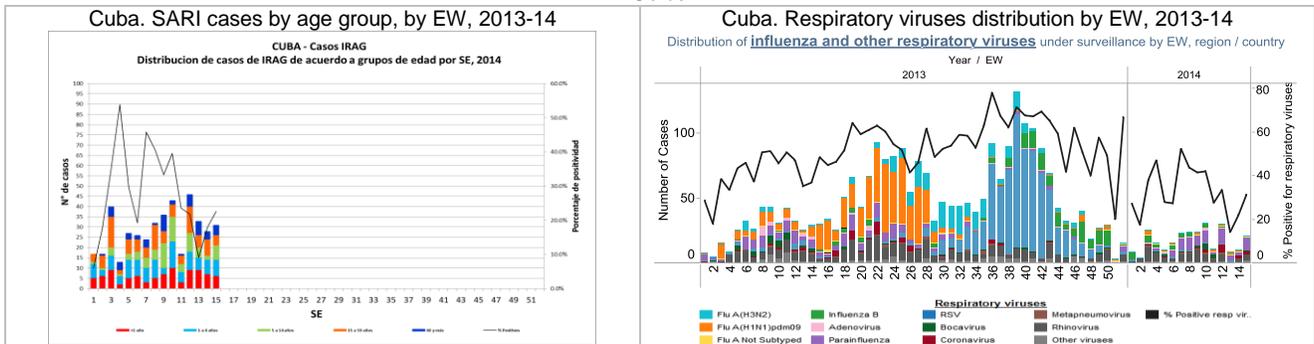
³ México. Dirección General de Epidemiología. Información epidemiológica. Informes Epidemiológicos Semanales 2014.



Caribbean

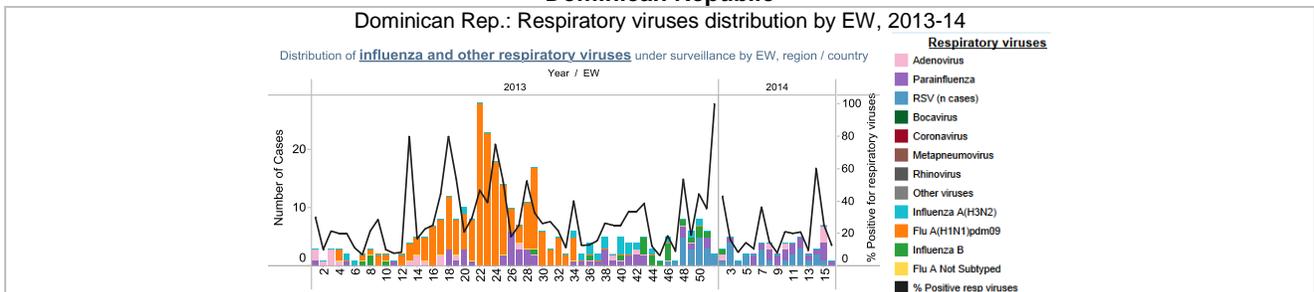
In Cuba during EW 15, the number of SARI-associated hospitalizations (n=31) increased slightly compared to the previous week. Children aged 1-4 years of age comprised the largest proportion of these cases. No SARI-associated deaths were reported during this period. According to national laboratory data for EW 12-15, 260 samples were analyzed, of which 26.5% were positive for a respiratory virus and 2.7% were positive for influenza. Among the positive samples, parainfluenza (42.0%) and rhinovirus (23.2%) predominated.

Cuba



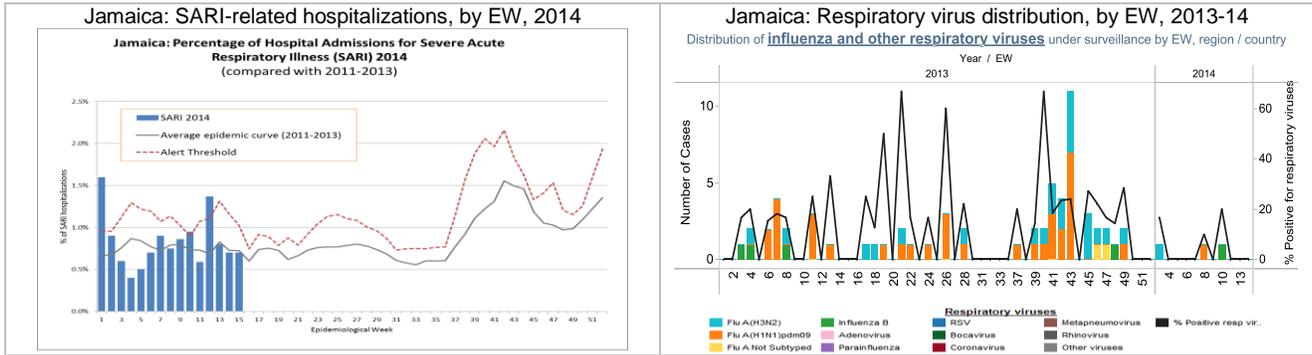
In the Dominican Republic, during EW 13-16, 62 samples were analyzed, of which 21.0% were positive for a respiratory virus. Among the positive samples, parainfluenza (46.2%), RSV (30.8%) and adenovirus (23.1%) were detected.

Dominican Republic



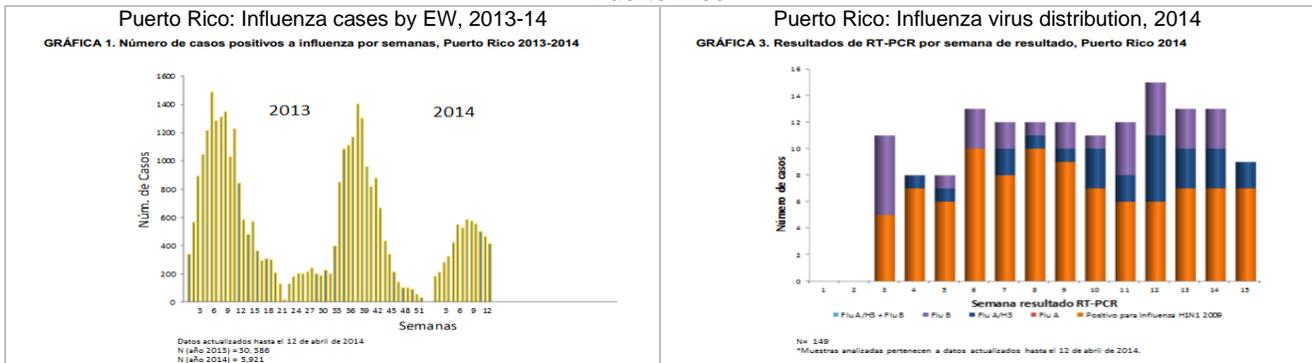
In Jamaica, based on sentinel surveillance data for EW 15, the proportions of ARI-associated consultations (3.9%) and SARI-associated hospitalizations (0.7%) were similar to the previous week and within the expected levels for this time of year. No SARI-associated deaths were reported during EW 14. Based on laboratory data for EW 11-14, 21 samples were analyzed and all were negative for respiratory viruses.

Jamaica



In Puerto Rico⁴ during EW 15, the number of influenza cases (n=106) remained low. Of these, 51 cases were associated with influenza A, 51 with influenza B, and 4 with an influenza A and B co-infection. Since the beginning of 2014, 5,921 influenza cases have been reported (60.8% influenza A and 38.4% influenza B) and persons aged 0-19 years accounted for 49% of those cases. During this same period, 303 influenza-associated hospitalizations and 5 influenza-associated deaths were reported.

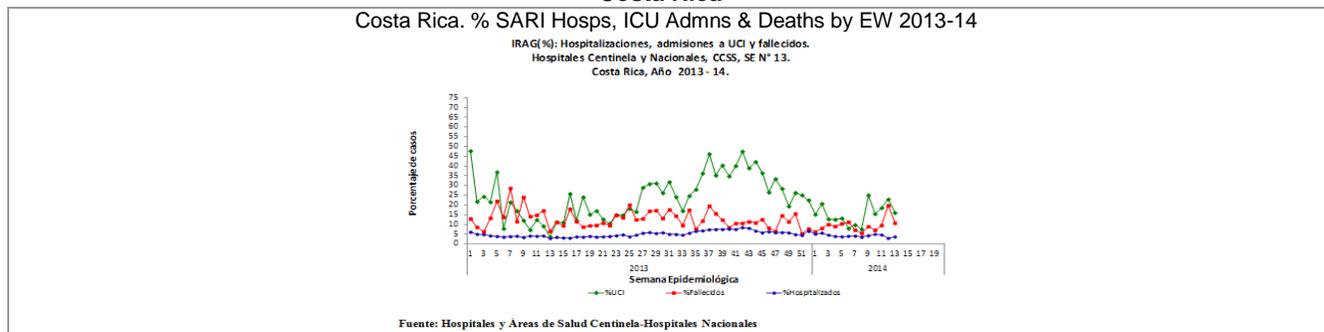
Puerto Rico



Central America

In Costa Rica, during EW 14, the percentage of SARI hospitalizations (4%) increased slightly compared to the previous week, while the proportions of SARI-associated ICU admissions (16%) and deaths (11%) decreased.

Costa Rica

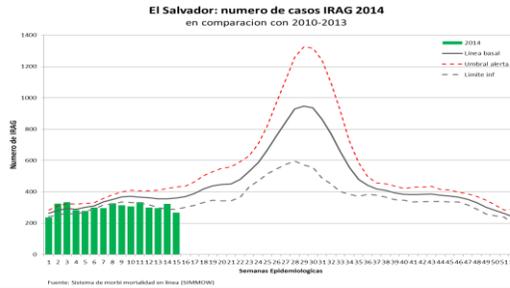


In El Salvador, during EW 15, the proportions of hospitalizations (5.3%) and deaths (5.7%) associated with SARI increased compared to the previous week while the proportions of SARI-associated ICU admissions (0.0%) remained the same.

⁴ Puerto Rico. Departamento de Salud. Vigilancia de influenza de Puerto Rico SE 15

El Salvador

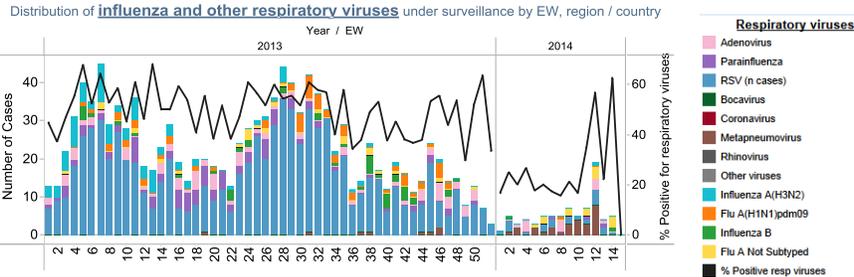
El Salvador: Number of SARI cases by EW, 2014



In Guatemala, based on laboratory data from EW 12-15, 66 samples were analyzed, of which 45.5% were positive for a respiratory virus and 15.2% were positive for influenza. Among the positive influenza samples, 90.0% were influenza A (22.2% A(H1), 11.1% A(H3N2) and 66.7% not subtyped) and 10.0% were influenza B. Among other respiratory viruses, human metapneumovirus (26.7% of positive samples), RSV (23.3%) and adenovirus (13.3%) predominated.

Guatemala

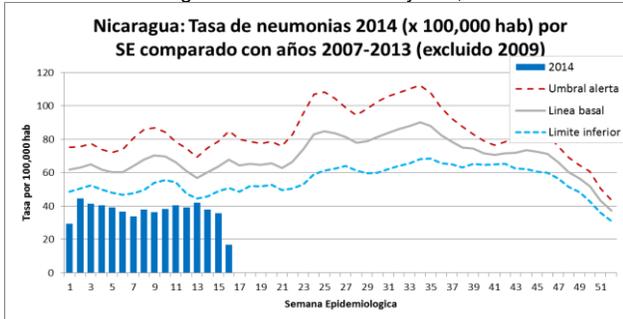
Guatemala: Respiratory viruses distribution by EW, 2013-14



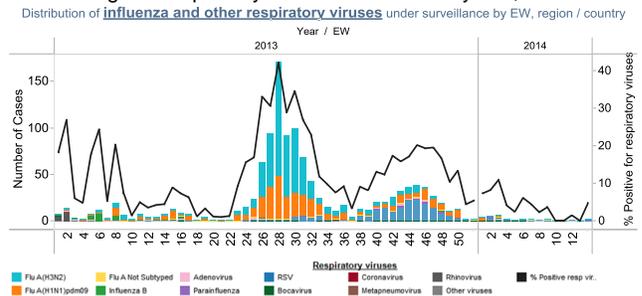
In Nicaragua, during EW 15, the national rates of pneumonia and ARI were low and within the expected levels for this time of year. According to national laboratory data from EW 11-14, 227 samples were analyzed of which 1.3% were positive for a respiratory virus. Among the positive samples, influenza B and parainfluenza were detected.

Nicaragua

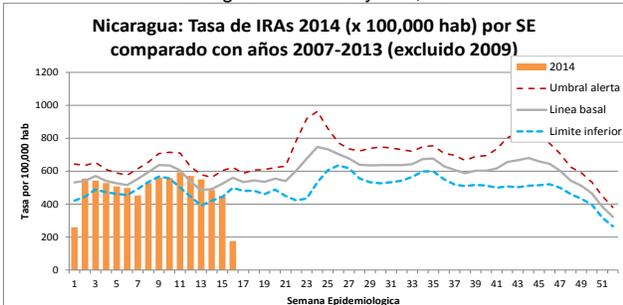
Nicaragua: Pneumonia rates by EW, 2014



Nicaragua: Respiratory viruses distribution by EW, 2013-14

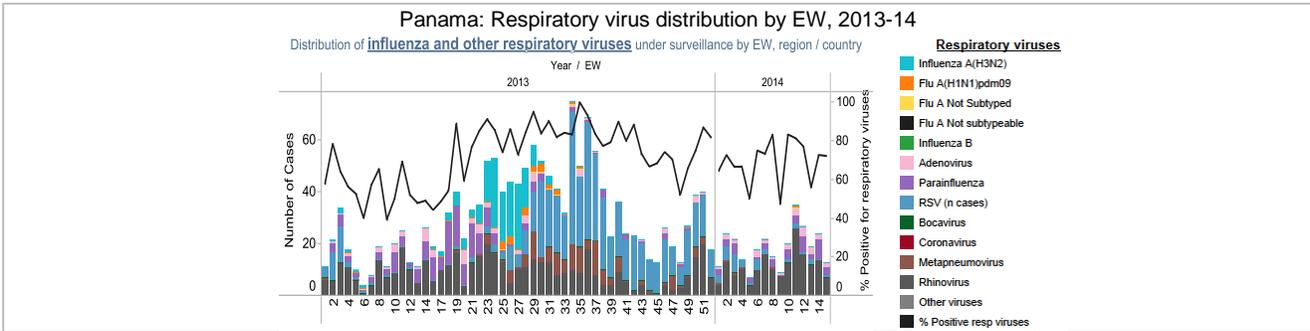


Nicaragua: ARI rate by EW, 2014



In Panama, based on national laboratory data from EW 12-15, 120 samples were analyzed, of which 69.2% were positive for a respiratory virus. Among the positive samples, rhinovirus (59.0%) and parainfluenza (22.9%) predominated.

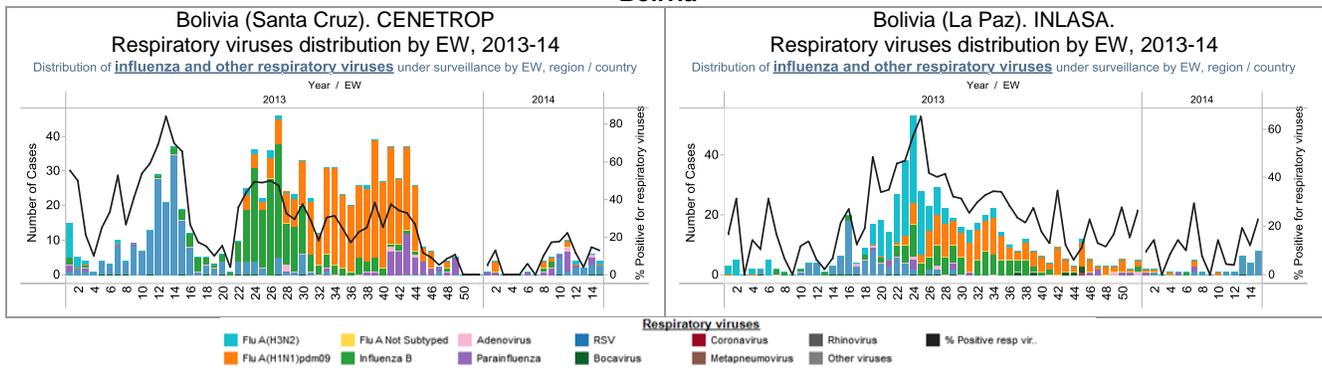
Panama



South America – Andean countries

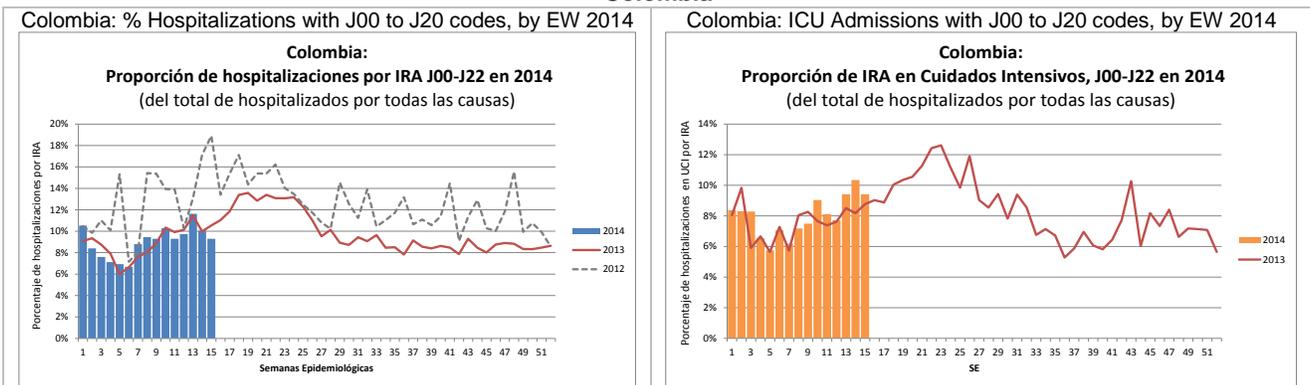
In Bolivia, according to laboratory data from CENETROP (Santa Cruz) from EW 12-15, 157 samples were analyzed, of which 10.2% were positive for a respiratory virus and 1.3% were positive for influenza. Among the positive samples, RSV (62.5%), parainfluenza (18.8%) and influenza A(H3N2) (12.4%) predominated. According to the National Laboratory in La Paz (INLASA) from EW 12-15, 124 samples were analyzed, of which 15.3% were positive for respiratory viruses. Among the positive samples, 100% were RSV.

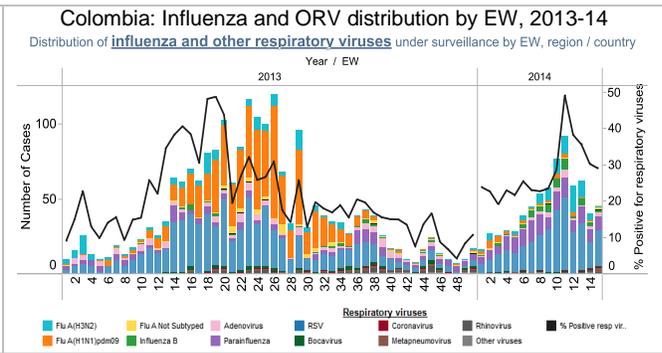
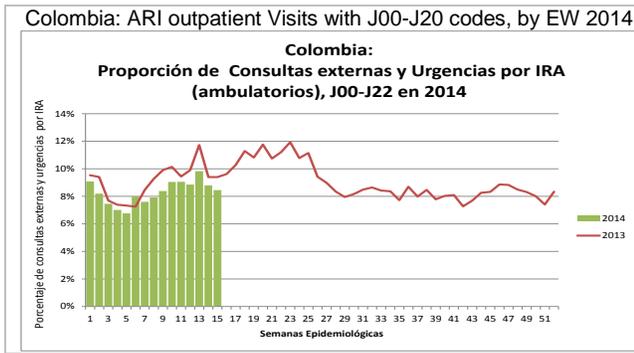
Bolivia



In Colombia, nationally during EW 15, the proportions of hospitalizations (9.3%), ICU admissions (9.4%), and outpatient and urgent visits (8.5%) with SARI and ARI-associated ICD-10 codes (J00 to J22) decreased compared to the previous week. Based on INS laboratory data from EW 12-15, 615 samples were analyzed, of which 33.5% were positive for a respiratory virus and 8.1% were positive for influenza. Among the positive influenza samples, 76.0% were influenza A (7.9% A(H1N1)pdm09 and 86.8% A(H3N2)) and 24.0% were influenza B. Among other respiratory viruses, RSV (49.0% of positive samples) predominated.

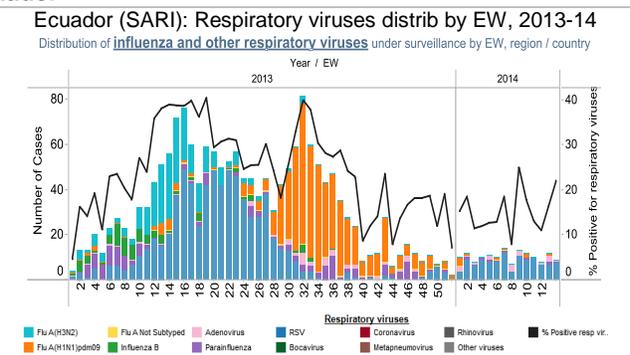
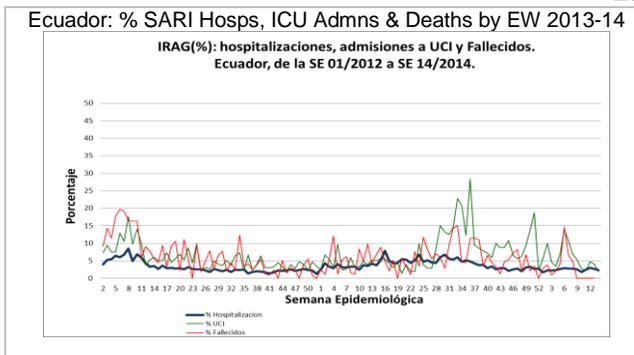
Colombia





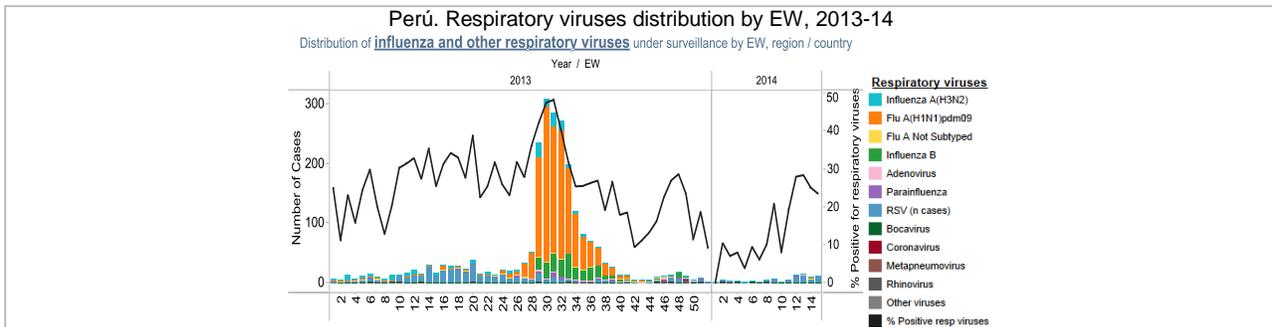
In Ecuador during EW 14, the proportions of SARI-associated hospitalizations (2.3%) and ICU admissions (1.9%) decreased compared to the previous week. No SARI-associated deaths were reported during this period. Based on national reference laboratory data from EW 11-14, 264 SARI samples were analyzed, of which 14.8% were positive for a respiratory virus and 0.4% were positive for influenza. Among the positive samples, RSV predominated (82.1%).

Ecuador



In Peru, based on national laboratory data from EW 12-15, 179 samples were analyzed, of which 26.3% were positive for a respiratory virus and 1.7% were positive for influenza. Among the positive samples, RSV (80.9%) predominated.

Peru

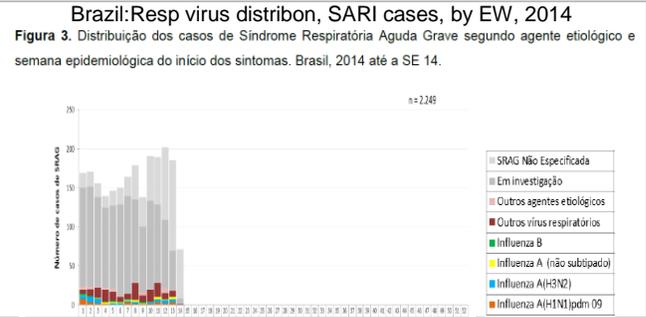
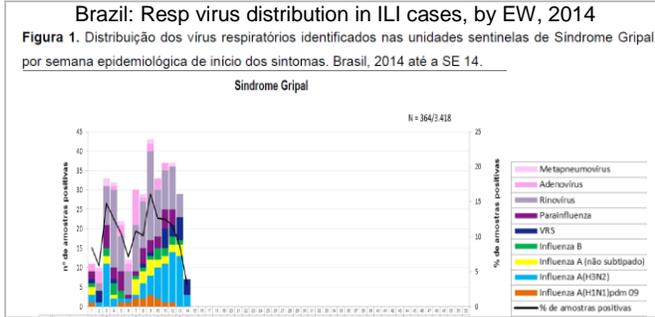


South America – South Cone and Brazil

In Brazil⁵, according to ILI sentinel surveillance data through EW 14, 3,418 samples were analyzed, of which 10.6% were positive for influenza or another respiratory virus. During EW 14, 3.1% of samples were positive for a respiratory virus, and among these RSV and influenza A(H3N2) were detected. Based on universal SARI surveillance data during this same period, 2,249 SARI cases were reported and 4.2% of these were positive for influenza. Among the positive samples, influenza A(H3N2) and A(H1N1)pdm09 predominated. Through EW 14, 237 SARI-associated deaths were reported, of which 3.4% were positive for influenza.

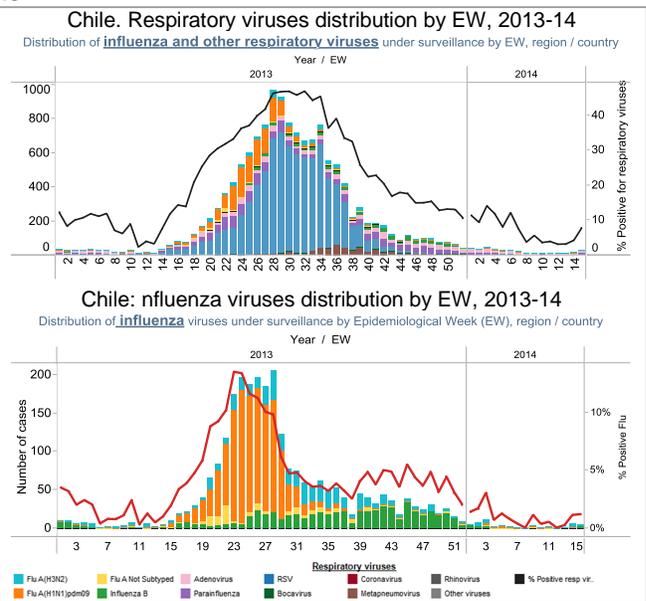
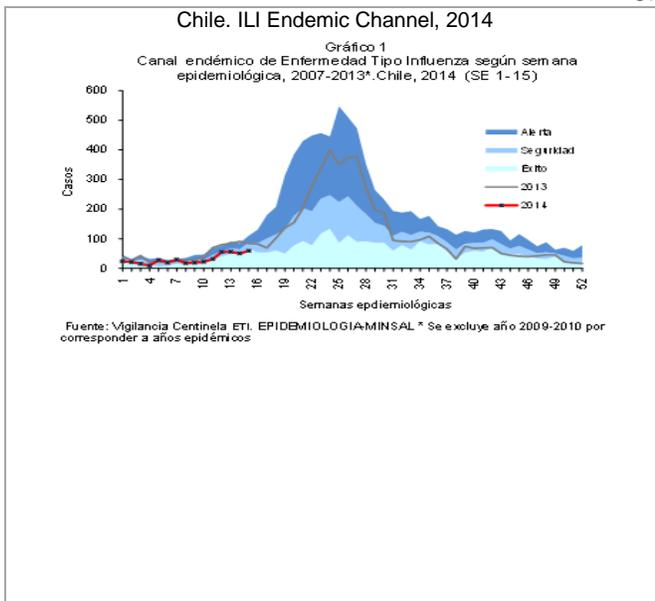
⁵ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 14, 2014.

Brazil



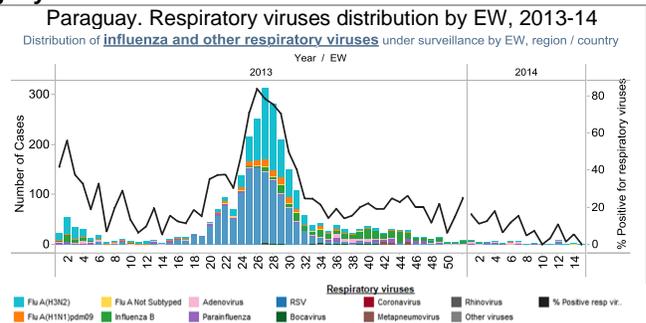
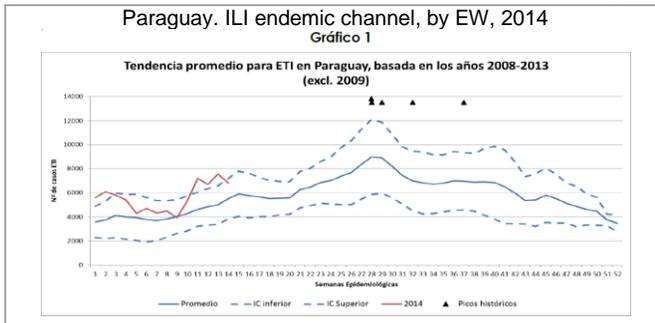
In Chile⁶, ILI activity increased slightly in recent weeks (rate 3.8 per 100,000 inhabitants during EW 15) and was within the security zone of the endemic channel. Through EW 15, 2014, 328 SARI cases were reported through sentinel surveillance. Based on laboratory data from EW 14-15, 880 samples were analyzed, of which 5.9% were positive for a respiratory virus and 1.1% were positive for influenza. Among the positive samples, adenovirus (44.2%), RSV (19.2%) and parainfluenza (15.4%) predominated.

Chile



In Paraguay⁷ during EW 14, the ILI consultation rate (101.8 per 100,000 inhabitants) increased from the previous EW and was within the alert zone of the endemic channel. The proportion of SARI-associated hospitalizations (2.9%) decreased and 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 12-15, 214 samples were analyzed, of which 5.5% were positive for a respiratory virus. Among the positive samples, influenza B (33.3%) and RSV (25.0%) predominated.

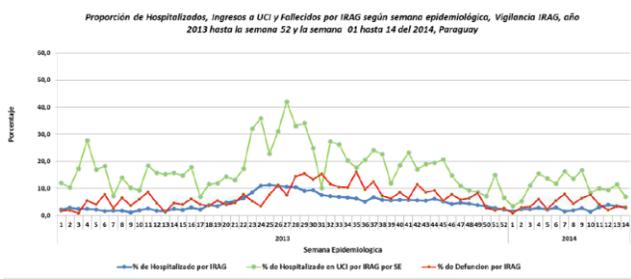
Paraguay



⁶ Chile. Informe de situación. EW 15. Available at: <http://epi.minsal.cl/>

⁷ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 14.

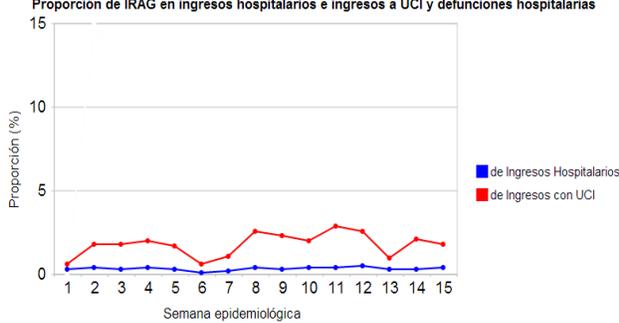
Paraguay:% SARI Hosps, ICU Adms & Deaths by EW 2013-14



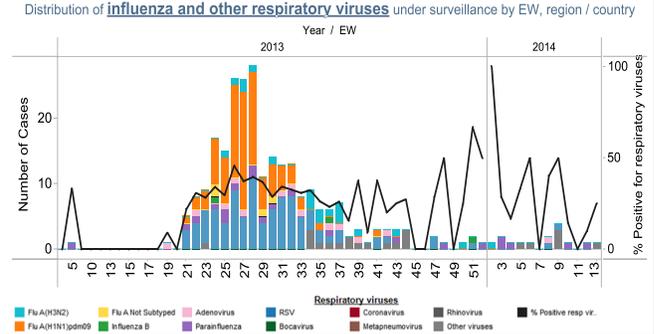
In Uruguay⁸ during EW 15, the proportions of SARI-associated hospitalizations, ICU admissions and deaths remained at low levels. Based on laboratory data from EW 12-15, 14 samples were analyzed and of these, 2 (14.3%) were positive for a respiratory virus.

Uruguay

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



Uruguay. Respiratory viruses distribution by EW, 2013-14



⁸ Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública