

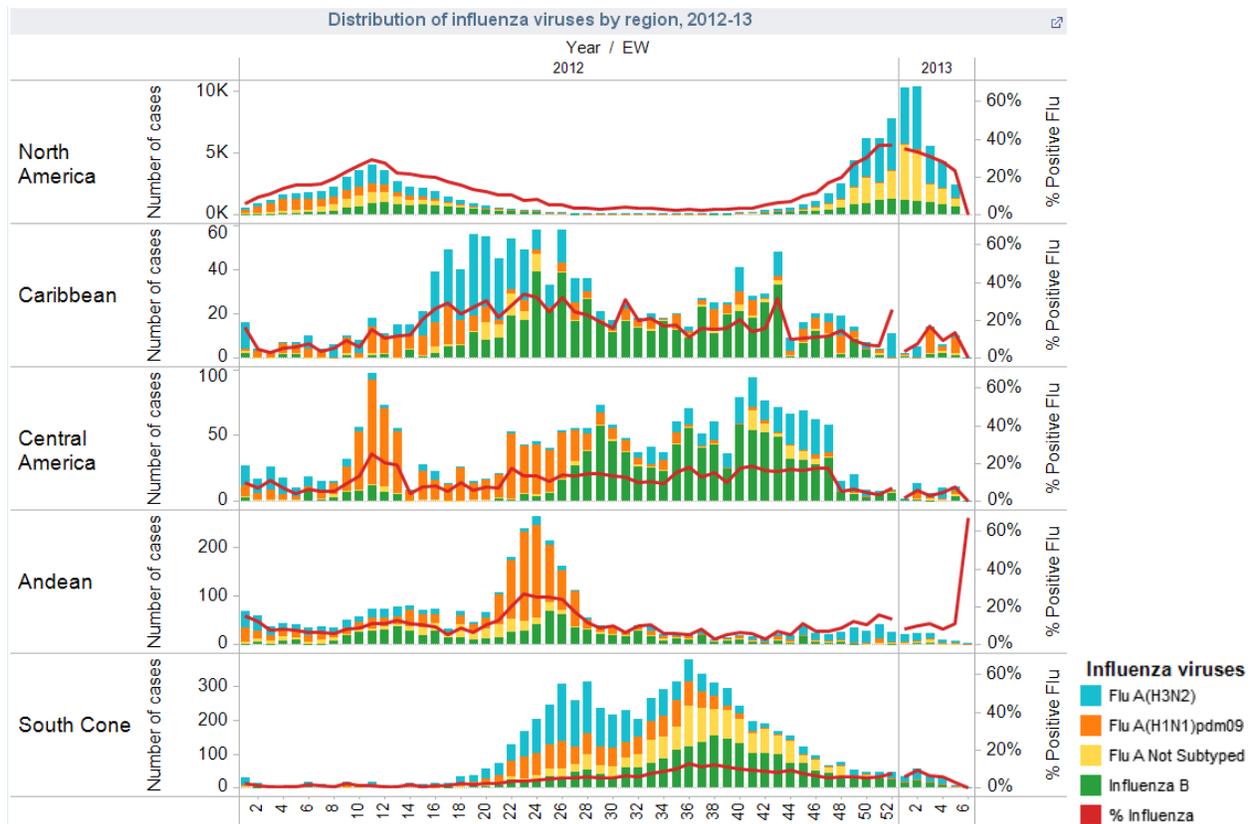


PAHO interactive influenza data: http://ais.paho.org/phis/viz/ed_flu.asp
 Influenza Regional Reports: www.paho.org/influenzareports

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.

1. WEEKLY SUMMARY

- **North America:** ILI activity increased in Canada (associated to an increase in RSV activity and stable levels of influenza) and decreased in the US. Those levels remained, however, above the epidemic threshold in both countries. In the US, the proportion of deaths attributed to pneumonia and influenza was lower than the previous week; however, remained above the expected level for this time of year. In Canada and the US, among all age groups, those 65 years and older had the highest influenza-associated hospitalization rates. Influenza A (H3N2) was the most commonly detected influenza virus in Canada, the US and Mexico, followed by influenza B. Among other respiratory viruses, RSV remained increasing in Canada and the US.
- **Central America and the Caribbean:** similar or decreased respiratory virus activity was reported in this sub-region as compared to previous weeks. In this sub-region, generally, co-circulation of influenza B, influenza A (H3N2) and influenza A (H1N1)pdm09 continued. Among other respiratory viruses, RSV was the predominant circulating virus in some countries.
- **South America:** In the Andean countries, the proportion of positive respiratory virus showed a slight increase. Influenza virus A (H3N2) was predominant in most of the cases. In the Southern Cone, respiratory virus activity was within the expected range for this time of year, with low overall viral circulation, except in the Paraguay where records indicated a slight increase in the , respiratory virus activity as compared with the previous years with a predominance of influenza A (H3N2) virus.

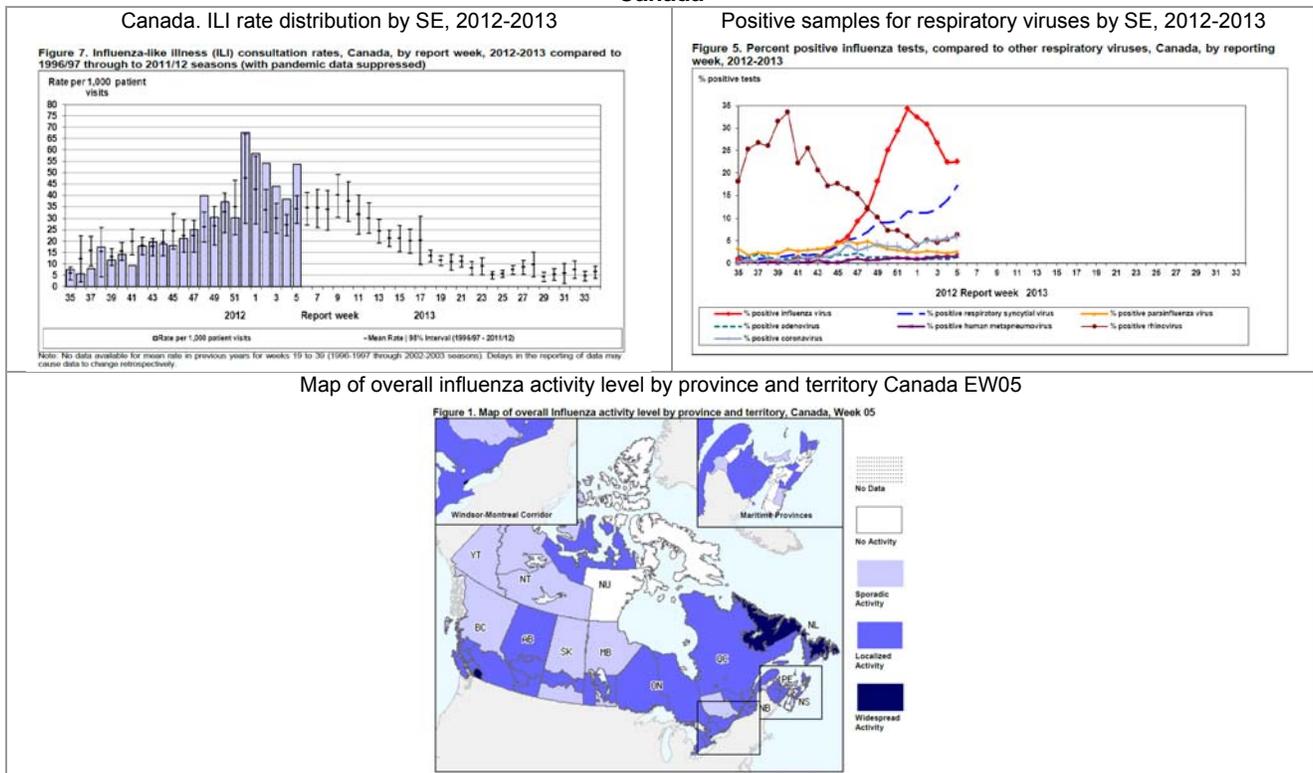


2. EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America

In Canada¹, in epidemiological week (EW) 05, the influenza-like illness (ILI) rate increased from 36.6 ILI consultations per 1,000 patient visits in EW 04 to 53.7 in EW 05 and was above expected levels for this time of year. Five regions (in British Columbia, Quebec, Newfoundland) reported widespread influenza activity and 32 regions reported localized influenza activity (in British Columbia, Alberta, Ontario, Saskatchewan, Quebec, Manitoba, Nova Scotia, New Brunswick, Newfoundland & Nunavut). In EW 05, most of the new influenza outbreaks were reported in schools (41) and long-term-care facilities (30). According to the Provincial/Territorial Influenza Hospitalizations Surveillance System, to date this season, 3,010 influenza-associated hospitalizations have been reported, with those ≥65 years being the most affected age group (57.9%). In EW 05, among the total samples analyzed, the proportion of samples positive for influenza was stable at 22.4%; of the influenza cases detected in EW 05, 94.6% were influenza A (24% influenza A(H3), 6% were A(H1N1)pdm09 and 70% influenza A untyped) and 5.4% were influenza B. Concerning other respiratory viruses, the RSV percent positivity increased sharply from 14% in EW 04 to 17.2% in EW 05. Among the characterized influenza viruses this season, the majority have been the vaccine strains (100% of the H1N1pdm09 cases, 100% of the H3N2 cases, and 80.5% of the influenza B cases).

Canada



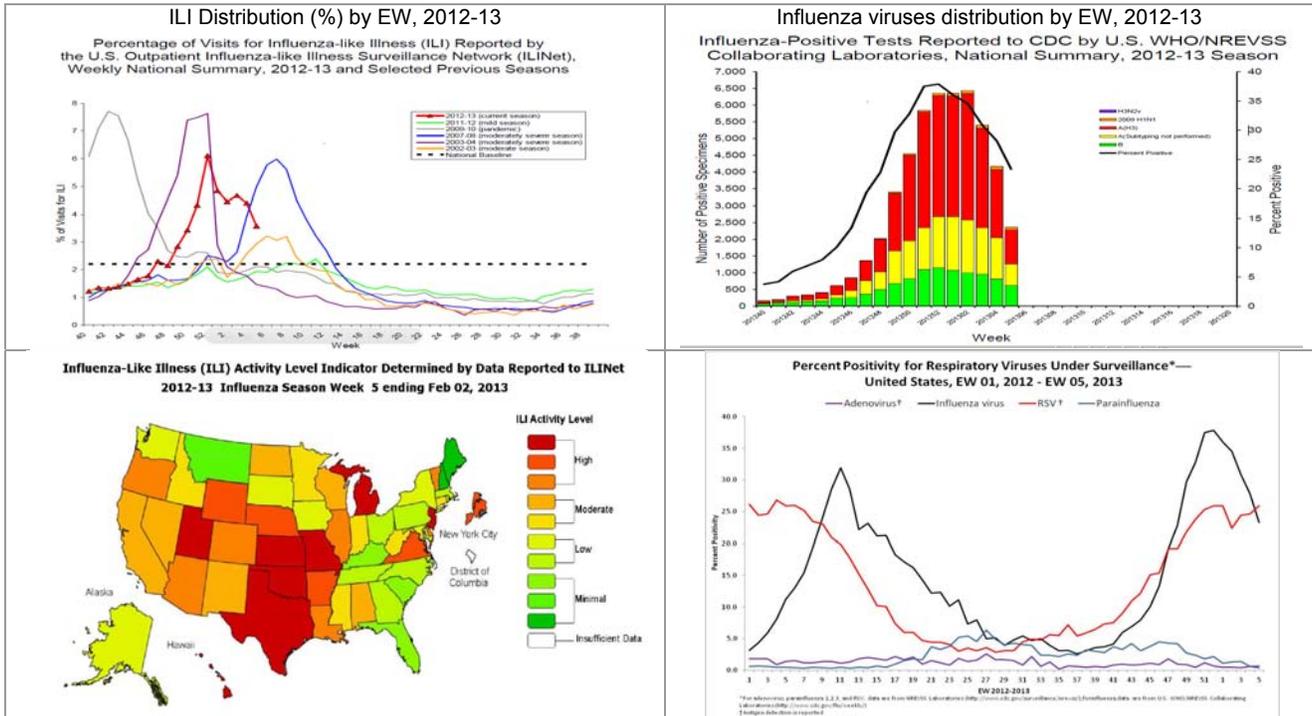
In the United States² in EW 05, all the influenza indicators continued to decrease as compared to last week, but remained above the epidemic threshold. Nationally the proportion of ILI consultations (3.6%) decreased as compared to the previous week but remained above the baseline (2.2%); even though most of the Regions reported declines in the ILI proportion, all ten were above their region-specific baselines. Nineteen states and New York City experienced high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 05 (9.0%) was above the epidemic threshold for this time of year (7.4%), but slightly decreased as compared to the previous week. In EW 05, fourteen influenza-associated pediatric deaths were reported (three associated with influenza A/H3, four with an untyped influenza A virus, seven with influenza B). From October 1, 2012 to February 2, 2013 the influenza-associated hospitalization

¹ FluWatch Report. EW 05. Available at <http://www.phac-aspc.gc.ca/fluwatch/>

² USA: CDC FluView report. EW 05. Available at: <http://www.cdc.gov/flu/weekly/>

rate was 29.8/100,000 population, with the highest rates in those 65 years of age and older. Among all samples tested during EW 05 (n=10,132), the percentage of samples positive for influenza (23.3%) decreased for the fifth consecutive week. Nationally, among the positive samples, 73.7% were influenza A [59% A (H3N2), 36.8% influenza A untyped and 4.3% A (H1N1) pdm09]. Among the characterized influenza viruses this season, the majority have been the vaccine strains (100% of the H1N1pdm09 cases, 99.6% of the H3N2 cases, and 70.8% of the influenza B cases). Since October 1, 2012, n=184 influenza A(H1N1)pdm09 samples have been tested for resistance to oseltamivir and thus far, only one resistant virus (0.5%) has been detected; this virus was sensitive to zanamivir. Among other respiratory viruses, RSV activity was high, the percentage of positive samples for RSV, increased from 24.6% (EW 04) to 25.9% (EW 05).

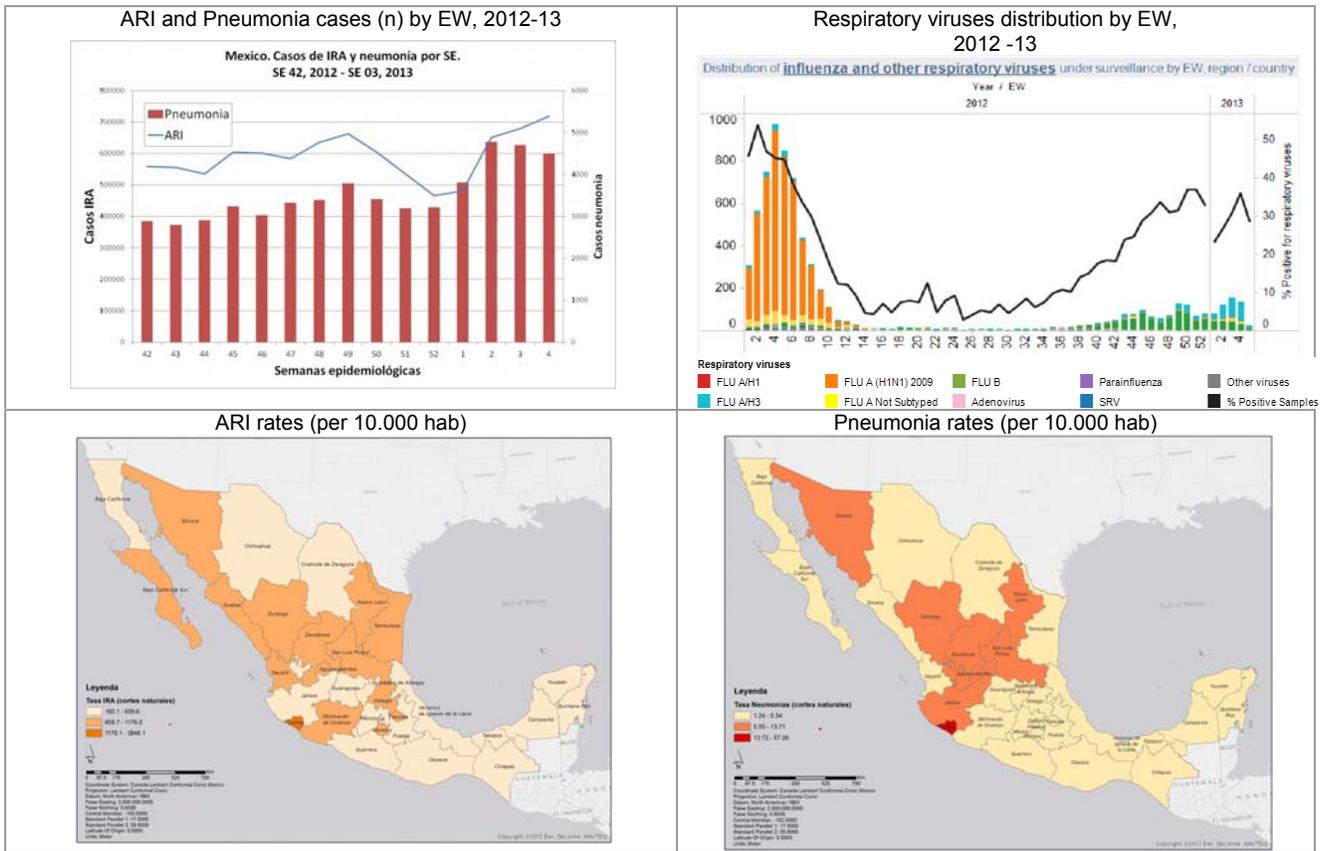
United States



In Mexico³, nationally in EW 04, the number of ARI cases increased 5.8% as compared to EW 03; while the number of pneumonia cases decreased by 4.3% from EW 03. Regionally, the states that reported the highest rates per 10,000 habitants of pneumonia cases were: Colima (52.5), Sonora (11.3), Nueva Leon (10.6), San Luis de Potosí (9.4) and Aguascalientes (8.3). According to laboratory data, in 2013, between EW 01-05, among the samples tested (n=1795) the percent positivity for respiratory viruses was 29.1%, and for influenza viruses was 28.9%. In EW 01-05, among the positive influenza cases, 55.2% were A(H3N2) and 31.9% were influenza B.

³ México. Dirección General de Epidemiología. Información epidemiológica. SE 05.

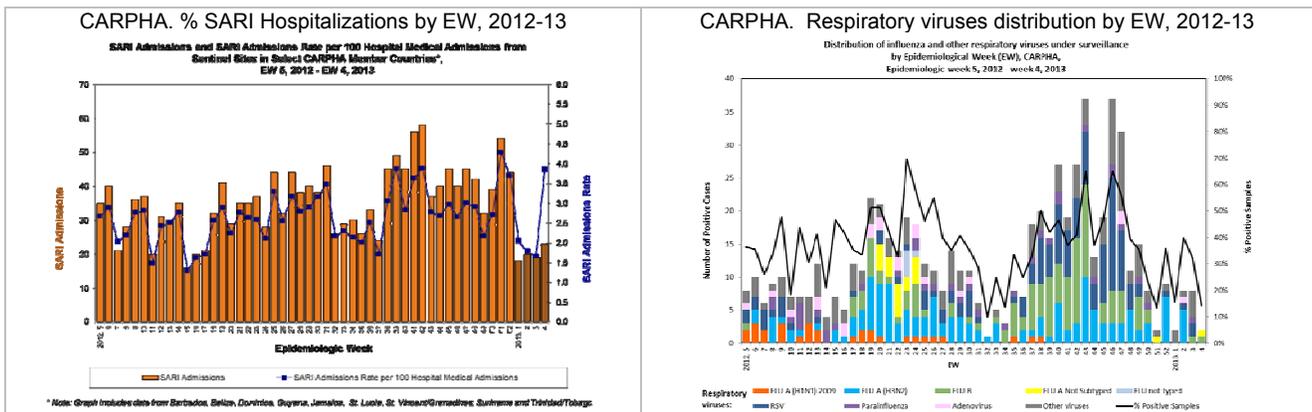
Mexico



Caribbean

CARPHA received weekly SARI and ARI data from 4 countries for EW 04, 2013: Barbados, Jamaica, St. Lucia and St. Vincent & the Grenadines. In EW 04, 2013, the proportion of severe acute respiratory infection (SARI) hospitalizations was 3.9%. The highest rate of SARI was among children between 6 months and 4 years of age (7.9% of hospital medical admissions for children between the age of 6 months and 4 years were due to SARI). No SARI-related deaths were reported in EW 04, 2013 throughout the region. Thus far this year up to EW 04 the following viruses have been laboratory confirmed in member countries: seasonal influenza A(H3N2) (Anguilla, Barbados, St. Lucia); parainfluenza type 3 (St. Lucia); RSV (Cayman Islands, Trinidad & Tobago); adenovirus (St. Lucia); human metapneumovirus (St. Vincent & the Grenadines); rhinovirus (Cayman Islands, St. Lucia, Trinidad & Tobago); influenza B (Jamaica); influenza A, unsubtype (Jamaica). Between EW 05, 2012 to EW 04, 2013, the overall percentage positivity for all samples tested was 39.3%.

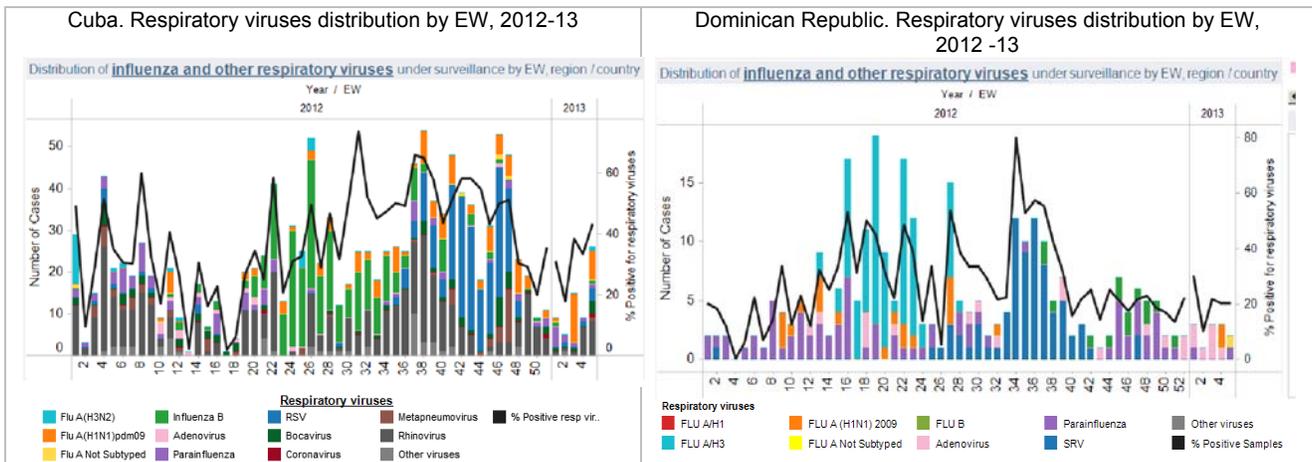
CARPHA



In Cuba, for EW 05, according to the laboratory data, among the samples analyzed (n=60), the percentage of positive samples for respiratory viruses was 43.3% and for influenza viruses was 15%. Rhinovirus was mainly detected, followed by influenza A (H1N1) pdm09, RSV, influenza A (H3N2), influenza B, parainfluenza and metapneumovirus.

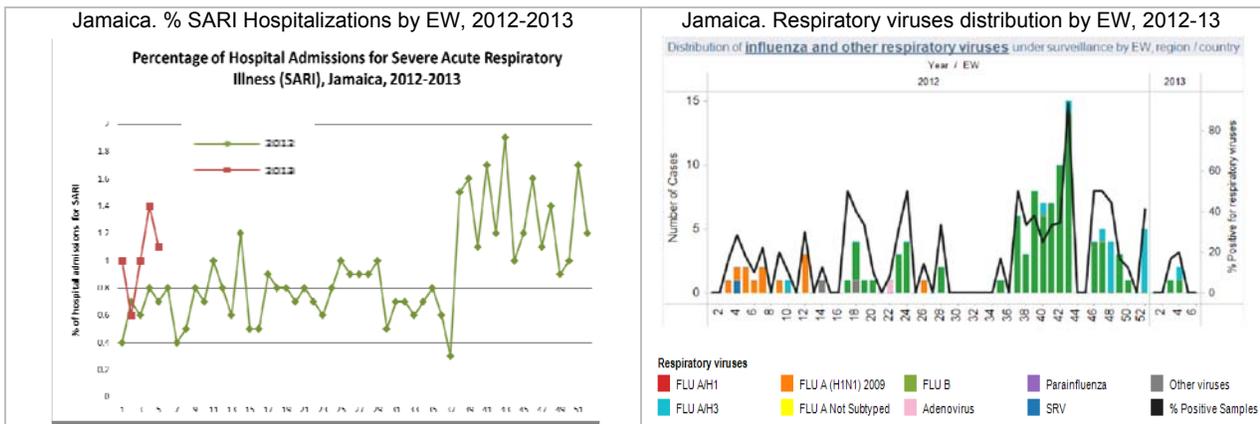
In the Dominican Republic, according to laboratory data, among the 10 samples analyzed, in EW 06, the percentage positive for respiratory viruses was 20%. For influenza viruses the percentage positive was also 20%. Influenza A (H3N2) was mainly detected.

Cuba and Dominican Republic



In Jamaica for EW 05, the proportion of consultations for ARI was 5.5% (0.5% higher than EW 04). The proportion of admissions due to SARI was 1.1% (0.3% decrease as compared to EW 04). There were no SARI-related deaths reported for EW 05. No respiratory viruses were detected in EW 05.

Jamaica



In French Territories:

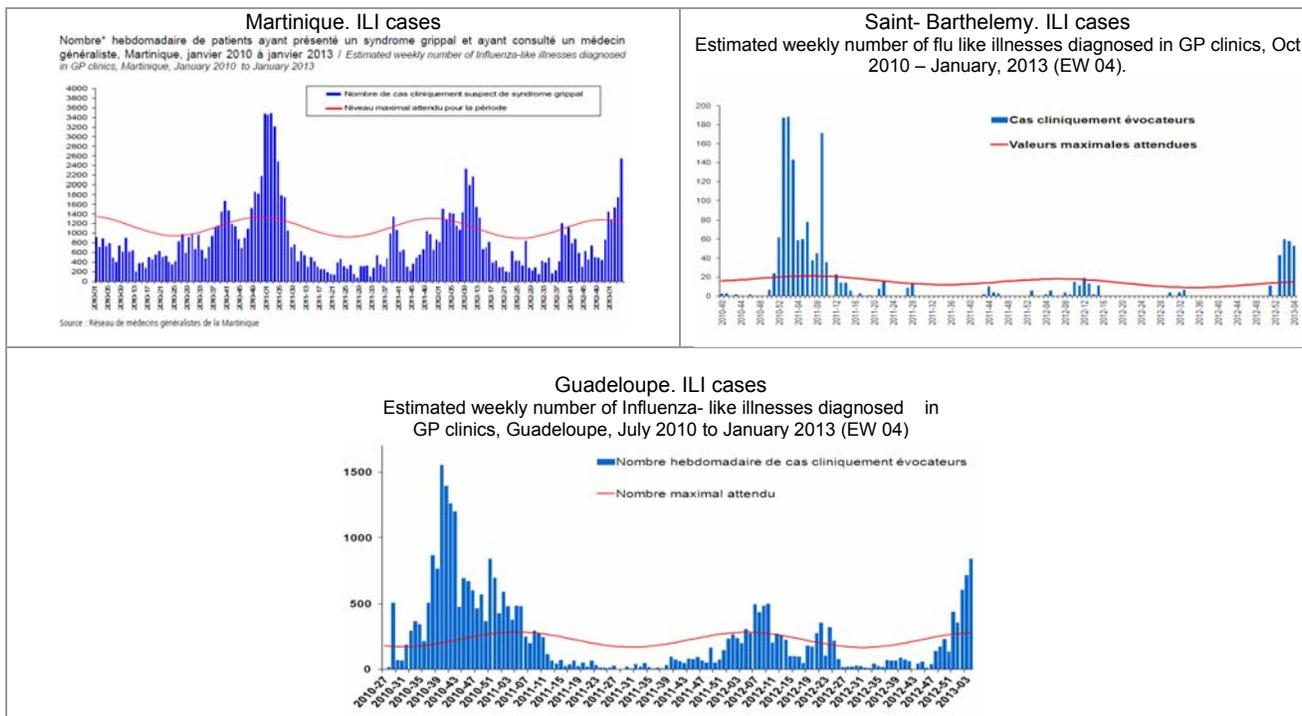
In Guadeloupe⁴, the weekly number of consultations for ILI has increased steadily since EW 48 of 2012, exceeding the maximum expected values for this season. During EWs 03 and 04, 2013, the increase in ILI consultations continued; the number of consultations were estimated to be approximately 710 to 840 consultations over the course of these two weeks. Influenza A (H1N1) pdm09 virus was identified.

⁴ Guadeloupe. Le point épidémiologique — N° 02 / 2013. CIRE Antilles Guyana.

In Saint Bartholomew⁵, weekly reports showed the number of consultations to be zero for several months. These numbers increased, however, during EW 01 of 2013, to a level well above the maximum values expected for this time of the year. No influenza viruses were identified in the last 2 months.

In Martinique⁶, the ILI activity over the last five weeks remained above the expected level for this time of the year. The ILI incidence in EW 04 was 637 cases per 100 000 inhabitants (this value is close to that which was observed in metropolitan France). Since the last week of December 2012 (EW 52), the numbers of ILI cases exceeded the maximum levels expected for the season. During the EW 04, the estimated number of ILI consultations was 2500, an increase of 45% as compared to the previous week's estimate. An influenza virus (unsubtyped) was identified at the Laboratory of Virology in the CHU Fort de France in a hospitalized patient. Other samples are under analysis at the Pasteur Institute Cayenne.

French Territories



Central America

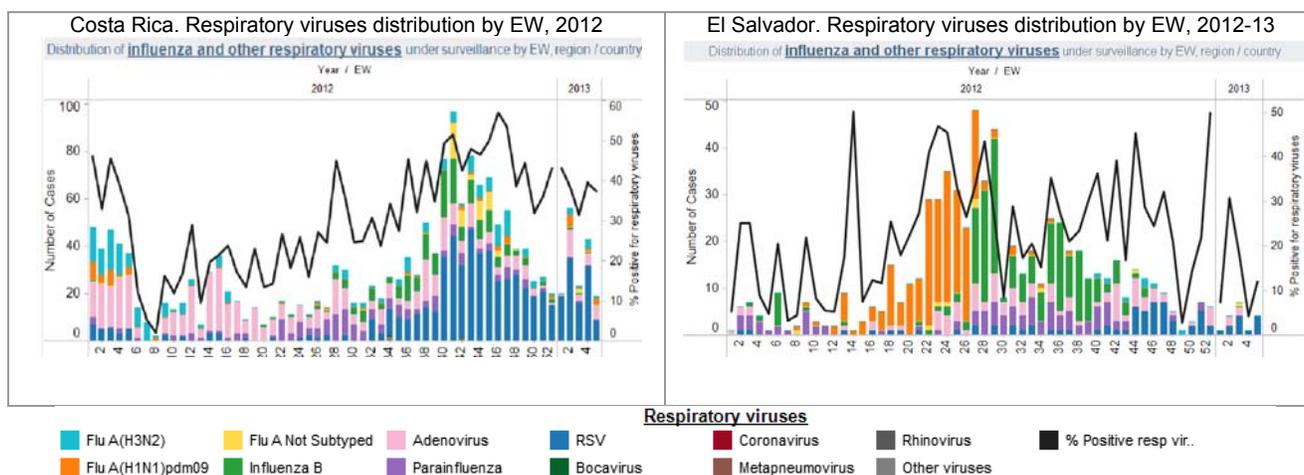
In Costa Rica, according to laboratory data between EW 01-05, 2013, among all samples tested (n = 425), the percent positivity for respiratory viruses remained almost the same between EW 01-05 (~38%). However, the percent positivity for influenza viruses has increased from 4% in EW 03 to 8% in EW 05. RSV virus continued to be the most prevalent virus (26% of the samples tested in 2013). Among influenza viruses, influenza A (91%) predominated over influenza B (9%). Among the influenza A subtypes, influenza A(H3N2) and A(H1N1)pdm09 co-circulated.

In El Salvador, according to laboratory data from EWs 01-05, among the 123 samples analyzed, the percent positivity for respiratory viruses was ~14%. RSV was the predominant virus. No influenza viruses were detected this week.

⁵ Saint-Barthelemy. Le point épidémiologique — N° 01/2013. CIRE Antilles Guyana

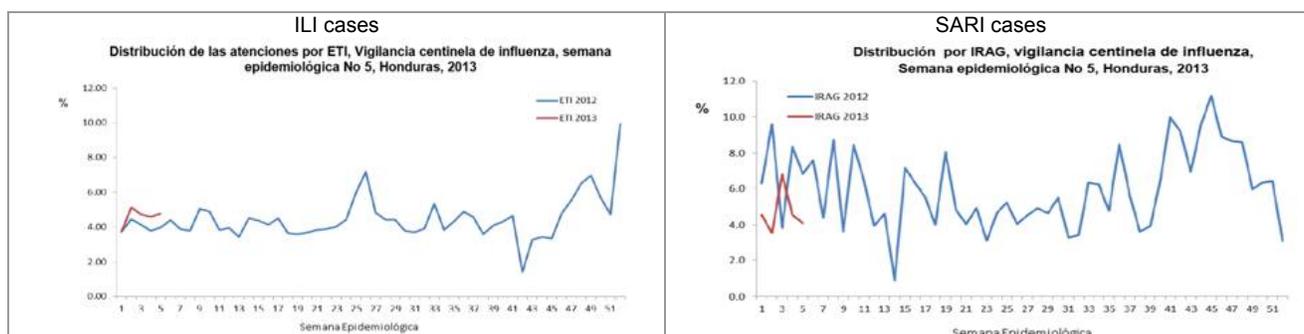
⁶ Martinique. Le point épidémiologique — N° 02 / 2013. CIRE Antilles Guyana

Costa Rica and El Salvador



In Honduras⁷, nationally in EW 45, there were no significant changes in the proportion of ILI consultations (~5%) from that of the previous EW. This proportion remained within the same levels as the ones recorded during the same period last year. However, the proportion of SARI hospitalizations (4%) declined in the past two weeks and was lower than that observed in 2012 for the same period. No reported laboratory data.

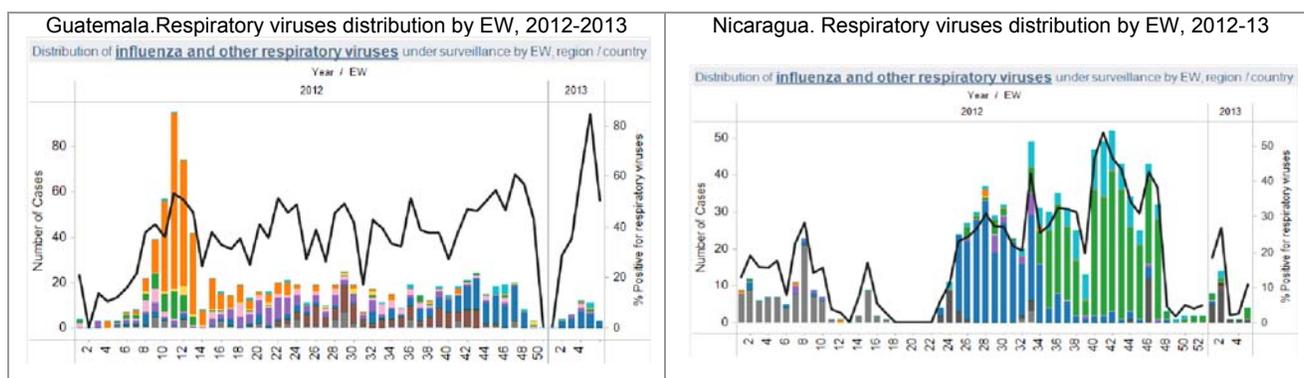
Honduras



In Guatemala, according to national laboratory data, in EW01-EW 06, of all samples tested (n=82); the percent positivity for respiratory viruses was ~43%. RSV predominated followed by parainfluenza and influenza A (H3N2).

In Nicaragua, according to national laboratory data from EWs 01-05, 2013, among all 219 samples analyzed, the percent positivity for respiratory viruses was ~12%. Rhinovirus was the most prevalent virus, followed by influenza B and influenza A (H3N2).

Guatemala and Nicaragua

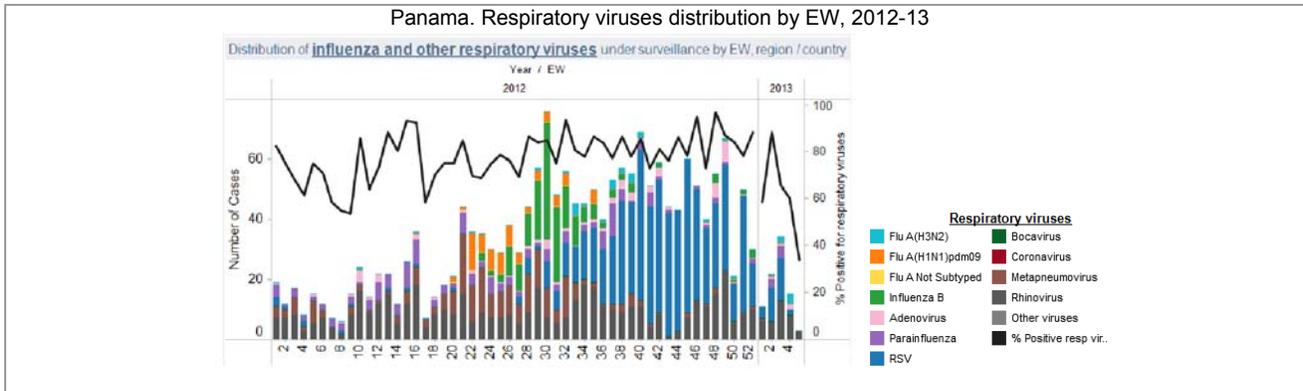


⁷ Honduras. Boletín de la vigilancia de influenza y otros virus respiratorios en Honduras SE 05. Dir. General de Vigilancia de la Salud



In Panama, according to laboratory data from EWs 01-05, 2013, of all samples tested (n = 130), 61% were positive for respiratory viruses and only 4% were positive for influenza virus. Rhinovirus and RSV were the most prevalent viruses, followed by parainfluenza and influenza A (H3N2).

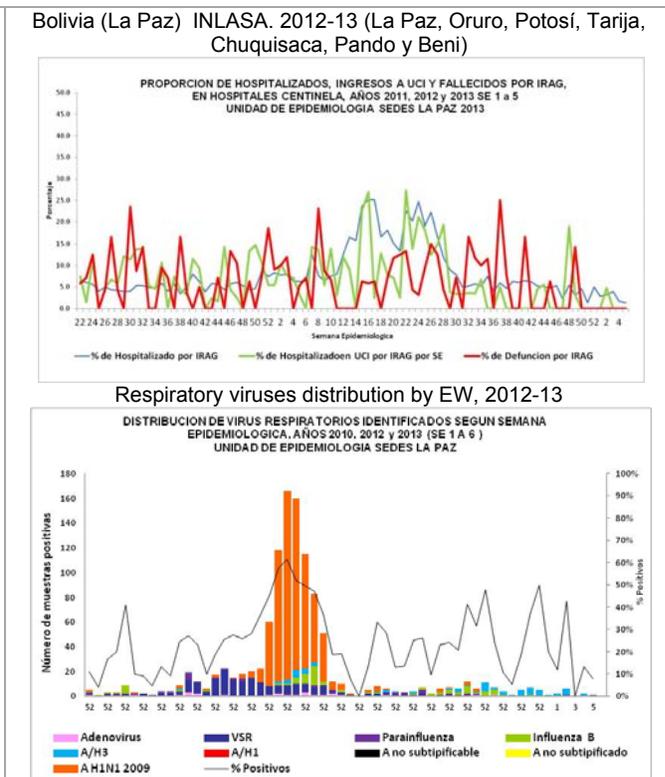
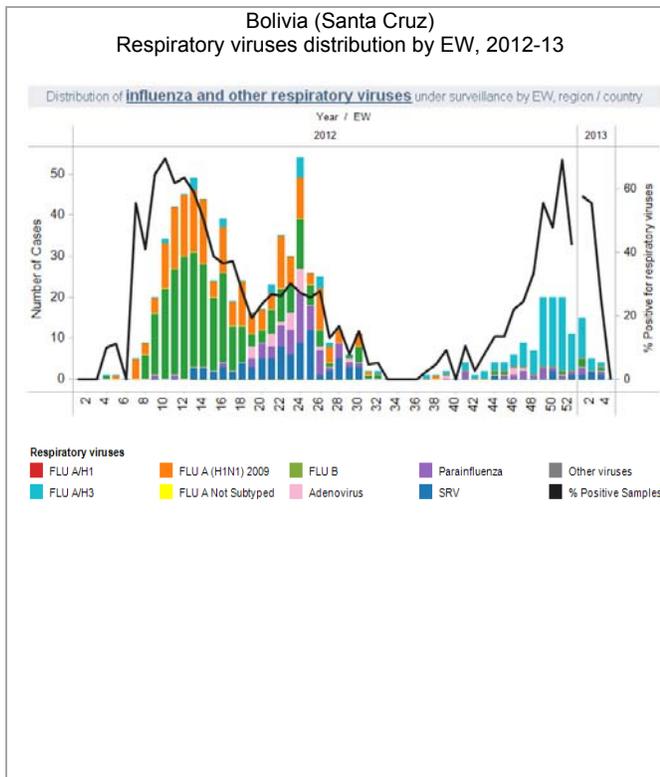
Panama



South America – Andean countries

In Bolivia, according to data from CENETROP (Santa Cruz), among 59 samples processed thus far in 2013, there was a 41% positivity for all respiratory viruses and 29% positivity for influenza viruses (predominantly influenza A (H3N2) (58%)).According to the data from La Paz, among 89 samples processed in the first 5 EWs of 2013, 18% were positive for all respiratory viruses and 15% for influenza viruses .Influenza A (H3N2)was the most prevalent virus(14/16)

Bolivia

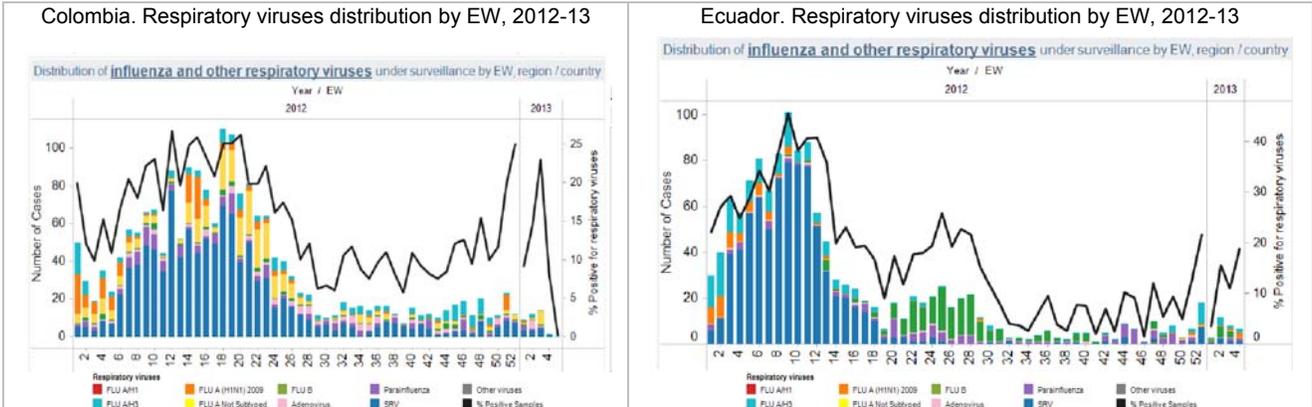


In Colombia according to national INS laboratory data, including statistics from the Departments of Antioquia and Bogotá, among all 340 samples analyzed thus far in 2013 the percent positivity was 13% for all respiratory viruses, and 4.4% for influenza viruses. Influenza A (H3N2) was the most prevalent among

influenza viruses. RSV was predominant among all the positives (40%) followed by influenza untyped (31% of the cases). The proportion of outpatient visits and hospitalizations for ARI nationally showed no significant changes during the first four weeks of 2013 (remained around 10%).

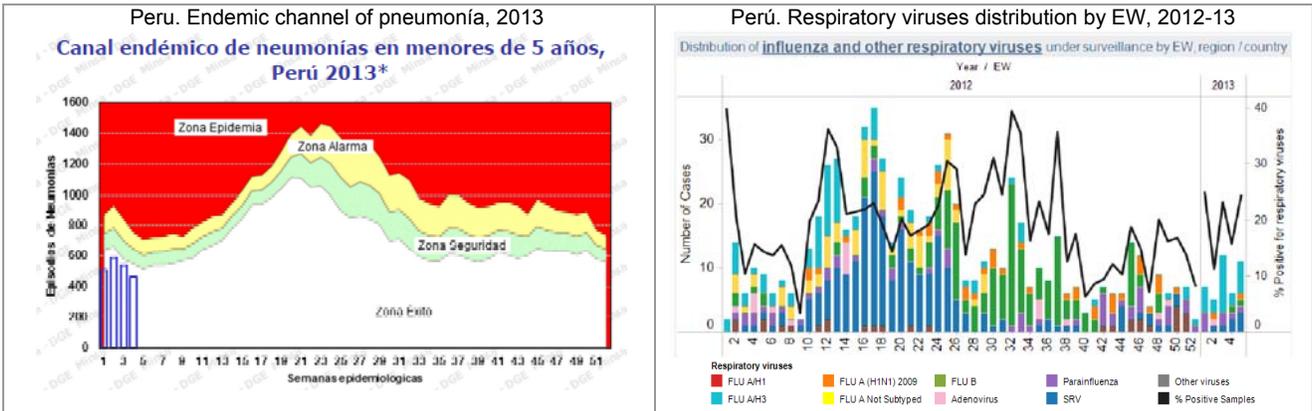
In Ecuador according to national laboratory data, among the 276 samples analyzed thus far in 2013 (EW 01-04), there was 11% positivity for all respiratory viruses and 7% positivity was for influenza viruses. Among the positive influenza viruses, 45% were influenza B, 40% were influenza A (H3N2) and 15% influenza A (H1N1) pdm09. In the SARI surveillance system, the proportions of SARI hospitalizations showed a slight increase since the beginning of the year reaching 4% in EW 04, 2013. There were no reports of SARI-related deaths.

Colombia and Ecuador



In Peru⁸, nationally, in EW 04 and EW 05 of 2013, data from the endemic channels for ARIs and pneumonias in children under 5 years of age were within expected levels for this time of year with the exception of the areas of Pasco, Tumbes, and Moquegua where an epidemic of pneumonia in children under 5 years was reported. According to national laboratory data for EW 05, 2013, among the 45 samples analyzed, the percentage positivity was 24% for respiratory viruses and 16% for influenza. Influenza A (H3N2) and RSV were the most prevalent.

Peru



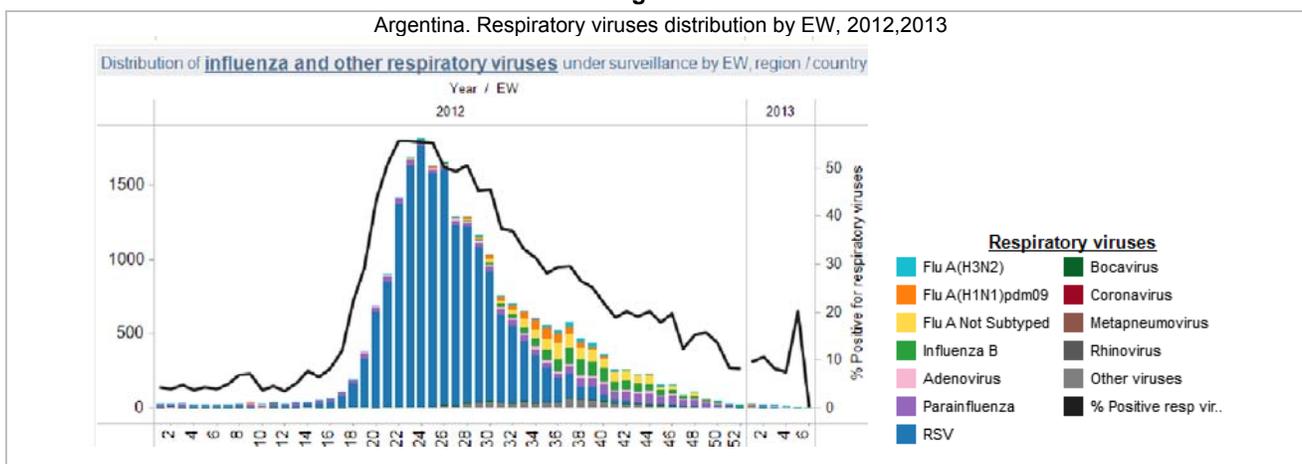
South America – Southern Cone

In Argentina nationally, according to the numbers reported, notification of ILI was still within the warning zone during the first weeks of 2013 a trend which began during the last 6 EWs of 2012. The information obtained by monitoring of ARI hospitalizations showed that in the first EWs of 2013, reports were below that observed during the same time in 2011 and 2012. According to laboratory data from EW 04 and EW 05 of 2013, 195 samples were processed nationally, and the percent positivity for all respiratory viruses was 8.7%. Parainfluenza was the most prevalent (6/17).

⁸ Perú. Sala de Situación de Salud. SE 04, 2013. Ministerio de Salud. Dirección General de Epidemiología

Argentina

Argentina. Respiratory viruses distribution by EW, 2012,2013

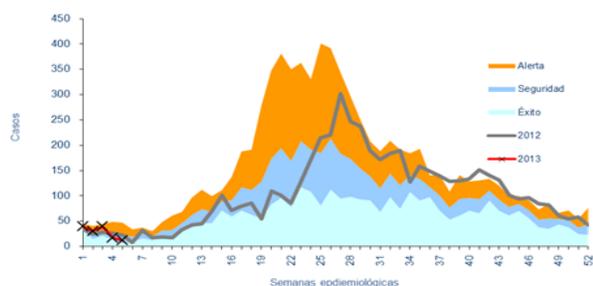


In Chile⁹, nationally for EW 05 of 2013, ILI activity declined since the previous EW, remaining close to the endemic channel threshold. According to laboratory data in EW 05, 286 samples were analyzed, 12% of which were positive for respiratory viruses. Adenovirus was the most prevalent virus (46%). In the SARI surveillance system, 10 samples were processed for respiratory viruses, and only one was positive (for adenovirus).

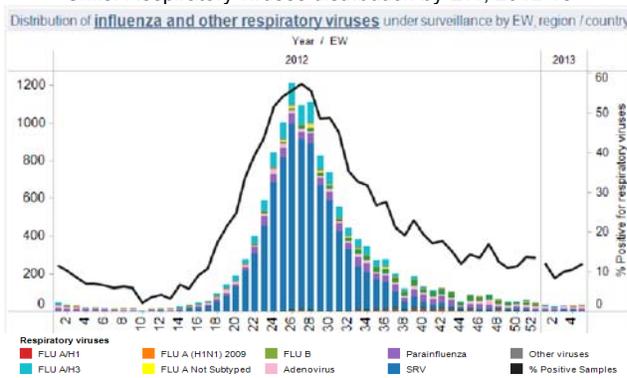
Chile

Chile. ILI Endemic Channel, 2013

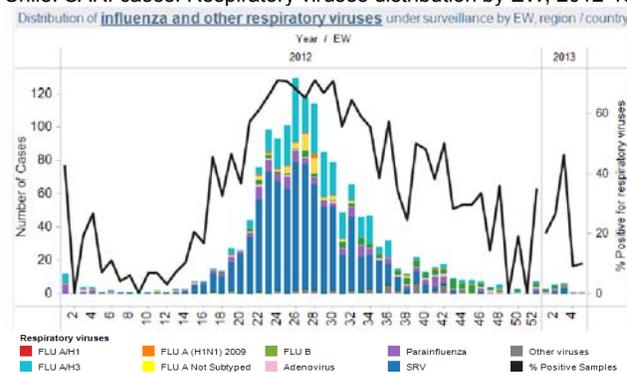
Canal endémico de Enfermedad Tipo Influenza según semana epidemiológica, 2006-2012*. Chile, 2013 (SE 1-5)



Chile. Respiratory viruses distribution by EW, 2012-13



Chile. SARI cases. Respiratory viruses distribution by EW, 2012-13

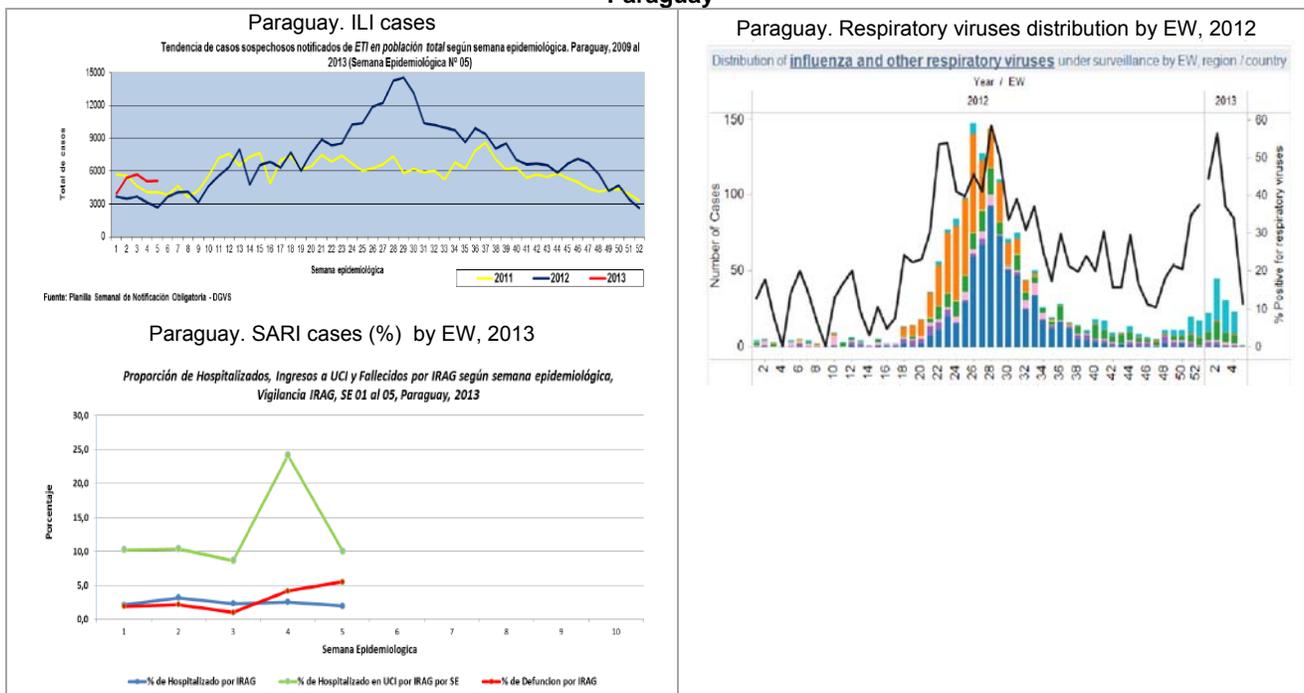


In Paraguay, in EW 05, 2013, nationally, the ILI rate (76/100,000 population) remained within the endemic channel threshold. There was no significant change in the proportion of ILI consultations (5.5% 301/5440) nationally during EW 05. The SARI surveillance for EW 05 showed that the proportion of SARI-related hospitalizations, (1.9% 36/1888), remained without significant changes from the previous week. So far this year, 12 SARI-related deaths have been reported, and in one, adenovirus was detected. According to the national laboratory data, among 288 samples processed in EW 05, 2013, 42% were positive for any respiratory viruses and 37% for influenza. Among the positive samples, influenza A (H3N2) was the most

⁹ Chile. Informe de situación. SE 05. Disponible en: www.pandemia.cl

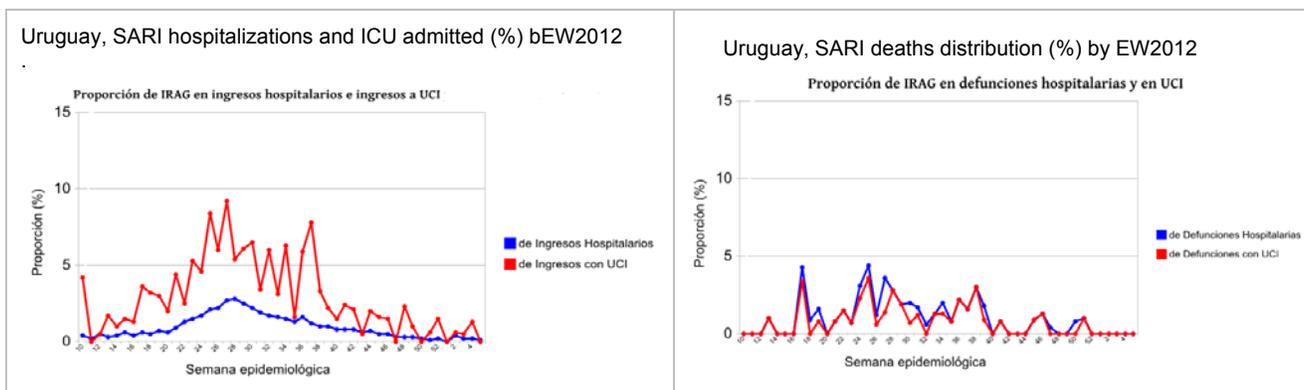
prevalent (63%). Among the SARI cases, 103 samples were processed thus far in 2013, with influenza A (H3N2) being the predominant virus (61%).

Paraguay



In Uruguay¹⁰, according to the national SARI surveillance system in EWs 01-05, 2013, the proportions of SARI-related hospitalizations and SARI-related ICU admissions were at low levels, without significant changes as compared to previous weeks. No SARI-related deaths were reported.

Uruguay



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