



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:** influenza activity continued to increase in Canada but shows some signs of having peaked in the United States. Influenza A(H3N2) is by far the most commonly detected influenza virus in Canada. In United States, the majority of influenza samples are A(H3N2), however influenza B accounts for a larger proportion of cases than in Canada. In Mexico, influenza activity has been gradually increasing since EW 41, with predominant detection of influenza type B. Among other respiratory viruses, RSV decreased in Canada.
- **Central America and the Caribbean:** similar or decreased respiratory virus activity was reported in this sub-region as compared to previous weeks. Among the influenza viruses, influenza B co-circulated with influenza A(H3N2) and influenza A(H1N1)pdm09 (Cuba). Among other respiratory viruses, RSV remained as the predominant circulating virus in some countries of the region (Costa Rica, and Panama).
- **South America:** acute respiratory disease activity remained low or unchanged in the region.

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

North America

In Canada¹, in epidemiological week (EW) 01, 2013, influenza activity increased. In EW 01, the influenza-like illness (ILI) consultation rate decreased (67.1/1,000 consultations) and was slightly above expected levels for this time of year. Fifteen regions (in British Columbia, Alberta, Manitoba, Ontario, Quebec, Newfoundland) reported widespread influenza activity and 20 regions reported localized influenza activity (in British Columbia, Alberta, Ontario, Saskatchewan, Quebec, Manitoba, Nova Scotia, and New Brunswick). In EW 01, among the total samples analyzed, the proportion of samples positive for influenza decreased (32.4%); of the influenza cases detected in EW 01, 98.1% were influenza A (25.7% influenza A(H3) and 73.2% influenza A untyped). Concerning other respiratory viruses, the RSV percent positivity decreased (10.2%). 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 84% of the influenza B cases).

In the United States², in EW 01, nationally the proportion of ILI consultations (4.3%) decreased as compared to the previous week but remained above the baseline (2.2%); and all ten Regions reported declines in the ILI proportion with only Region 9 (West) below its baseline. Twenty-four states and New York City experienced high ILI activity. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 01 (7.3%) was slightly above the epidemic threshold for this time of year (7.2%). In EW 01, two influenza-associated pediatric deaths were reported (one associated with influenza A/H3 and one with an untyped influenza A virus). From 1 October to 5 January, the influenza-associated hospitalization rate was 13.3/100,000 population, with the highest rates in those 65 years of age and older. Among all samples tested during EW 01 (n=12,876), the percentage of samples positive for influenza (32.8%) decreased as compared to the previous week. Nationally, among the positive samples, 79.8% were influenza A [among the subtyped influenza A viruses, 98% were influenza A(H3)]. No novel influenza A virus cases were reported during EW 01; since July 12, 2012, a total of 312 infections with influenza A variant viruses (308 H3N2v viruses, three H1N2v viruses, and one H1N1v) have been reported from 11 states. Among the characterized influenza viruses this season, the majority have been the vaccine strains (100% of the H1N1pdm09 cases, 99.4% of the H3N2 cases, and 66.7% of the influenza B cases).

In Mexico, influenza activity began to increase gradually in EW 41. As of EW 51, the percentage of health service visits for ILI and severe acute respiratory infection (SARI) remained below 1% at the national level. The percent positivity for influenza has been 20-40% between EW 44 and EW 51. In EW 52, there were no

influenza A(H1N1)pdm09 detections and the predominant virus at the national level was influenza type B followed by influenza A(H3).

Caribbean

The Caribbean Public Health Agency (CARPHA) received weekly SARI/ARI data from 5 countries for EW 1, 2013: Barbados, Dominica, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago. In EW 1, 2013, the proportion of severe acute respiratory infection (SARI) hospitalizations was 1.8%. The highest rate of SARI was among children under 6 months of age (9.1% of hospital medical admissions for children under 6 months were due to SARI). One SARI deaths was reported from the region in EW 1, 2013. In the last 4 weeks (EW 50, 2012 to EW 1, 2013) the following viruses have been laboratory confirmed in member countries: influenza A(H3N2) (Anguilla, Cayman Islands, Montserrat and Jamaica), influenza B (Barbados and Jamaica), parainfluenza 1 (Barbados) and rhinovirus (Barbados and Montserrat). For the year 2012, the overall percentage positivity for samples tested is 38.2%.

In Cuba, in the EW 1, 2013, according to the laboratory data, the percentage of positive samples for respiratory viruses was 31% and for virus of influenza was 6.9% between all the samples analyzed (n=29), being detected parainfluenza, rhinovirus, bocavirus and influenza B.

In the Dominican Republic, according to laboratory data, in the EW 52, among the samples analyzed (n=9), the percentage of positive samples for respiratory viruses was 22.2%. In EW 52, adenovirus was the only virus detected. In 2012, of all the samples analyzed (n=971), the average of positive samples for respiratory viruses was 27.5% and of these 13.8% were positive to influenza virus. The viruses that circulated predominantly in 2012 in the Dominican Republic were influenza A(H3N2) (60%), influenza A(H1N1) pdm09 (33.9%), RSV (8.9%), parainfluenza (7.8%) and influenza B (1.6%).

In Jamaica for EW 1, the proportion of consultations for ARI was 4.5% (1.4% lower than EW 52). The proportion of admissions due to SARI was 1.0 % (0.2% decrease when compared to the EW before). There was no SARI death reported for epidemiological week 1. According to Laboratory data no influenza viruses were detected among samples tested (n=5) in EW 1.

Central America

In Costa Rica, according to laboratory data, in EW 52, of all samples tested (n = 45), the percent positivity for respiratory viruses was 42%. RSV virus continued to predominate.

In El Salvador, according to laboratory data, in EWs 01-02, among the analyzed samples (n = 25), the percent positivity for respiratory viruses was 4%, with detection of RSV predominating. This week, there were no influenza viruses detected.

In Guatemala, in EW 01, 2013, among the total samples analyzed (n 10), the percent positivity for respiratory viruses was 40%.

In Nicaragua, between EWs 01-02, according to laboratory data, among all samples analyzed (n =85), the percent positivity for respiratory viruses was 6%. Influenza B, influenza A(H3) and RSV were the viruses detected in circulation.

In Panama, according to laboratory data, in EWs 01-02, of all samples tested (n = 29), 79% were positive for respiratory viruses and only 3% were positive for influenza virus. RSV has continued to predominate since EW 34, followed by rhinovirus.

South America – Andean

In Bolivia, in La Paz in EW 01, among the 12 samples analyzed, two were positive for influenza A/H3 (16.7%). The proportion of SARI hospitalizations for this Department was 3%, which was less than the previous EW. Since EW 50, there have been no reported SARI ICU admissions or deaths.

In Colombia, at the national level in EW 52, according to INS laboratory data including the Department of Antioquia, Nariño, and Bogotá, among samples and analyzed (n=28), the percent positivity for respiratory viruses was 43 % and was 14% for influenza virus; RSV (7/12) and influenza A (3/12) predominated.

In Peru³, nationally in EW 52, the ARI and pneumonia endemic channels in children under five years of age showed activity within expected levels for this time of year and slightly lower than the previous week. Regionally, the pneumonia endemic channel in children under five years of age showed activity that was higher than expected in the Departments of Moquegua, Pasco and Ucayali. According to laboratory data for EW 01, nationally, among the samples analyzed, (n = 25), the percentage positivity for respiratory viruses was 28% and was 16% for influenza, with influenza A (H3N2) and parainfluenza detected. The same patterns were observed in EW 52.

South America –Southern Cone & Brazil

In Argentina⁴, In Argentina [ii], nationally, in EW 52, the estimate of ILI cases was above expected levels for this time of year and the estimation of pneumonia cases was within expected levels. Nationally, the estimated number of SARI cases was similar to 2011 and 2010 for the same time period. According to reported laboratory data, between EWs 50-51, n=332 samples were analyzed, with a declining percent positivity for respiratory viruses (16% EW 50 and 8% EW 51). Influenza virus was the predominant virus.

In Brazil, among the total SARI cases in 2012, 19.5% (4.016/20.539) were influenza; within influenza-positive cases, 65% (2.614/4.016) were influenza A(H1N1)pdm09. In the EWs 51-52, the number of SARI cases and SARI related deaths was low compared to previous weeks from 2012, causal agent are yet to be identified. Also, in ILI surveillance, for EWs 51-52, the overall ILI levels were low and continued to decline. Some adenovirus and influenza B were detected in the last weeks.

In Chile, In Chile, nationally, in EW 52, ILI activity was < 3.0 cases per 100,000 population, with no significant changes from the previous EW and continuing in the endemic channel alert level. According to laboratory data, nationally in EW 52, among the analyzed samples (n = 349), the percentage positivity for respiratory viruses was 13.5%; and was 6.3% for influenza, which was unchanged from the previous week, with influenza B virus (30%) and adenovirus (25%) predominating. Influenza B virus and parainfluenza viruses predominated among the SARI cases in EW 52.

In Paraguay, in EW 1, the national ILI rate (59.5/100,000) increased 52% over the previous EW and activity was in the alert zone of the endemic channel; the proportion of ILI consultations (8.6%) in sentinel units also showed a significant increase as compared to the previous EW mainly due to the decrease in the total number of consultations. The SARI surveillance showed that in EW 01,12 cases were hospitalized primarily in the 5-19 years and over 60 years age groups. The proportion of hospitalized SARI cases (0.8%) was lower than the previous EW (2.8%). Eleven samples were processed from SARI cases, and influenza A(H3) and parainfluenza were identified.

In Uruguay⁵, nationally in EW 01, according to the SARI surveillance system, the proportions of SARI hospitalizations and SARI ICU admissions were low and no significant changes were observed as compared to previous weeks. No SARI-deaths were reported this week.

3. EPIDEMIOLOGICAL ALERT

In North America, especially in the United States, there has been an early and intense circulation of the influenza virus. In addition to increased outpatient visits and increased circulation intensity, the earlier occurrence of influenza activity might be causing an increase in hospital admissions, outbreaks in health care services, as well as an increase in antiviral prescriptions. At this time, as of EW 01, 2013, it appears that activity might be starting to decline.

In light of this situation, PAHO/WHO recommends that Member States which might face increased circulation of influenza viruses:

1. ensure adequate clinical management of patients
2. implement prevention and control measures, while enhancing the preparedness of their health services to cope with a potential influx of patients and
3. continue routine ambulatory and hospitalized surveillance for influenza.

PAHO/WHO does not recommend any travel restrictions including screening at points of entry and reiterates the recommendations made in the 13 March 2012 Epidemiological Alert. More detailed information is available in the attachment titled: 14-January-2013 Influenza.

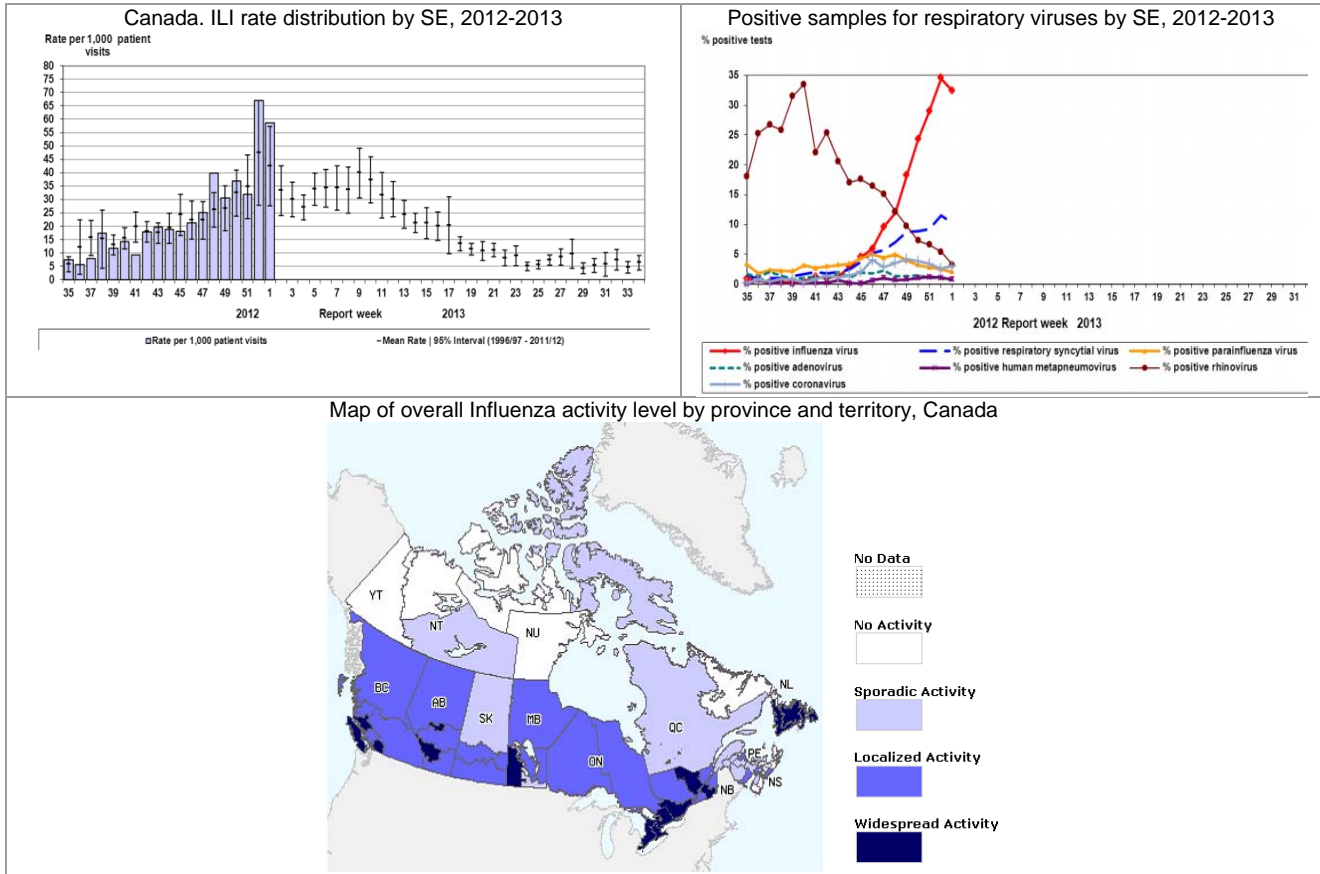
Available in:

http://new.paho.org/hq/index.php?option=com_content&view=article&id=8171%3A14-january-2013-increase-of-influenza-activity-in-north-america&catid=2103%3A--hsd0104d-most-recent-ea&Itemid=2291&lang=en

4. GRAPHS

North America

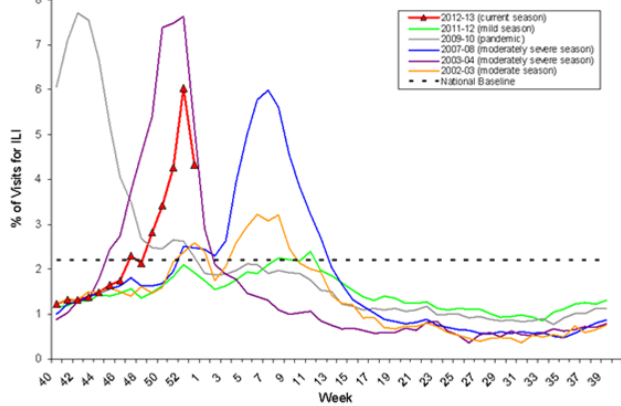
Canada



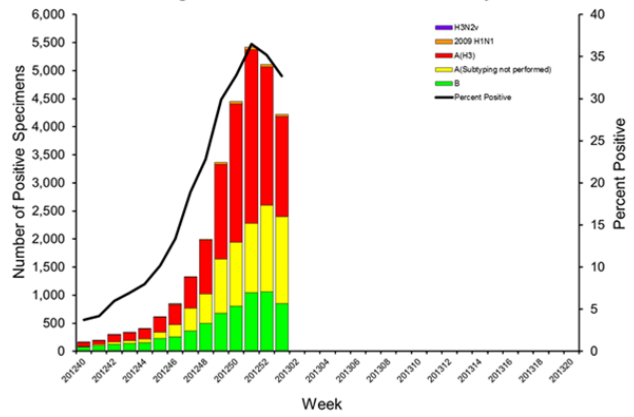
United States

E.E.U.U. ILI Distribution (%) by EW, 2012-13

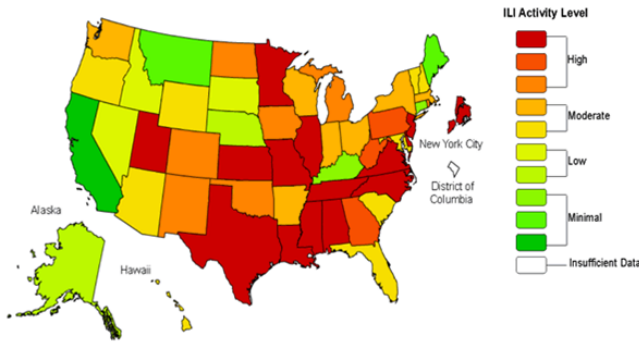
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2012-13 and Selected Previous Seasons



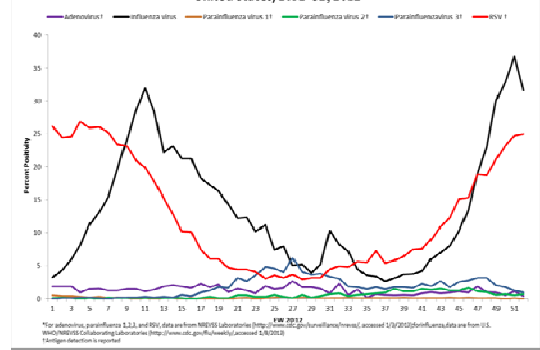
E.E.U.U. Influenza viruses distribution by EW, 2012-13
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2012-13



Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2012-13 Influenza Season Week 1 ending Jan 05, 2013



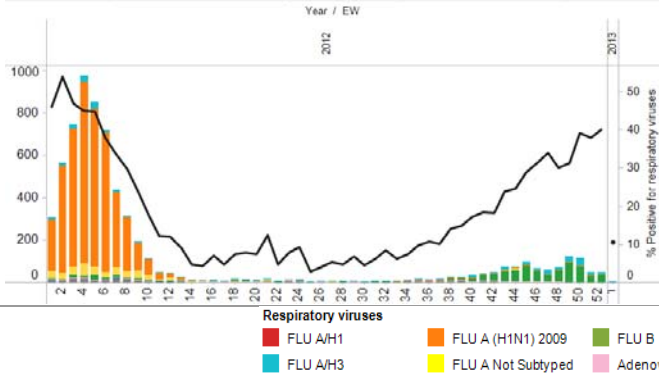
Percent Positivity for Respiratory Viruses Under Surveillance*—
United States, EW1–52, 2012



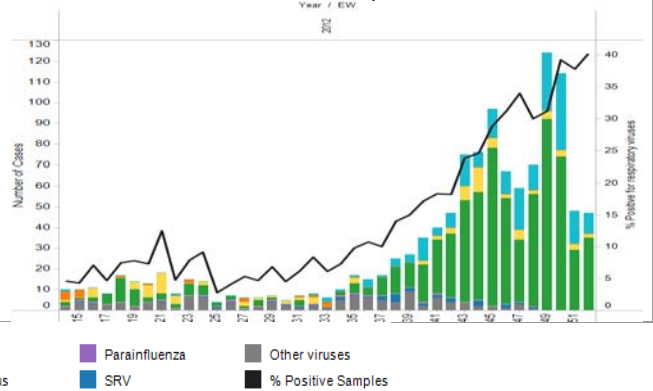
Mexico

Distribución de virus respiratorios por SE, 2012-13

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

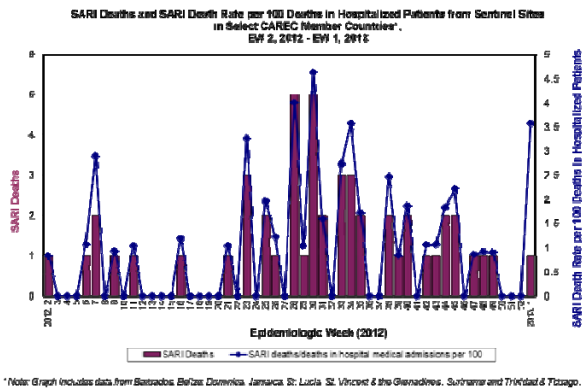


Distribución de virus influenza por SE 14-52, 2012

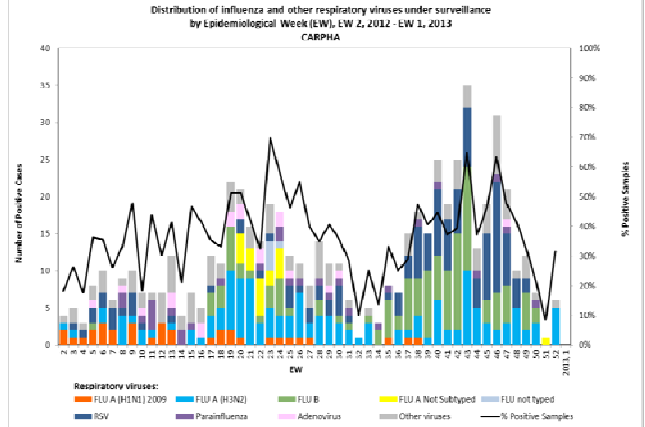


CARPHA

CARPHA. % SARI Hospitalizations by EW, 2012-13

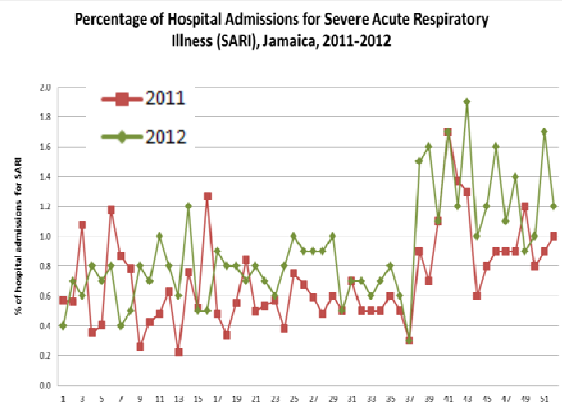


CARPHA. Respiratory viruses distribution by EW, 2012-13

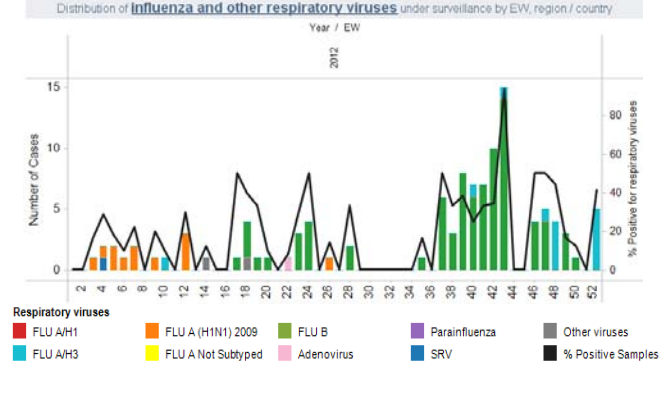


Jamaica

Jamaica. % SARI Hospitalizations by EW, 2012

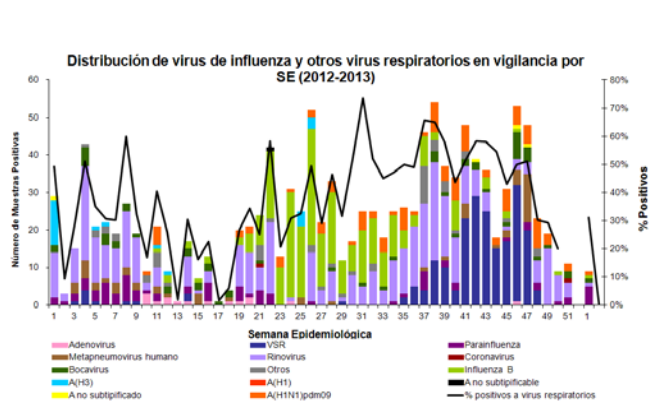


Jamaica. Respiratory viruses distribution by EW, 2012-13

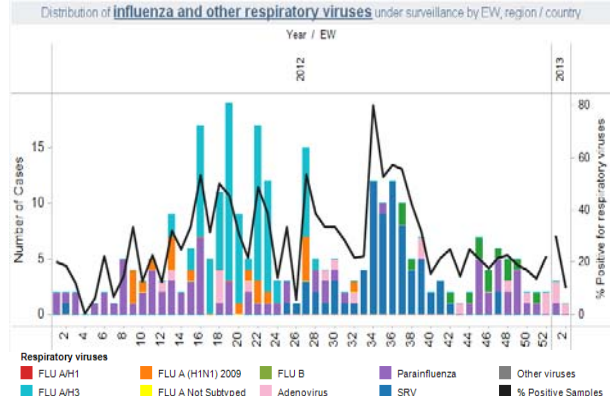


Cuba and Dominican Republic

Cuba. Respiratory viruses distribution by EW, 2012-13

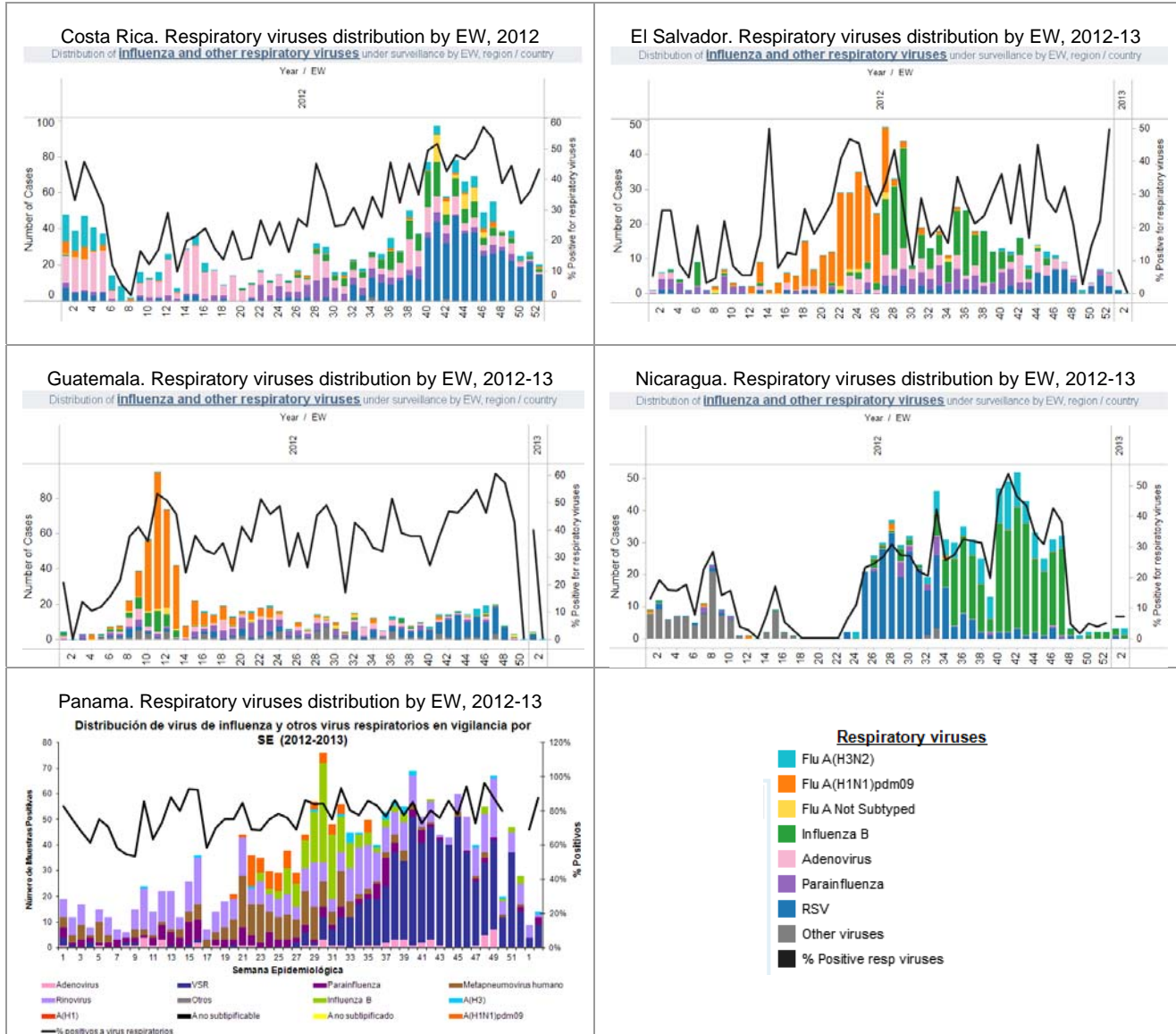


Dominican Republic. Respiratory viruses distribution by EW, 2012-13



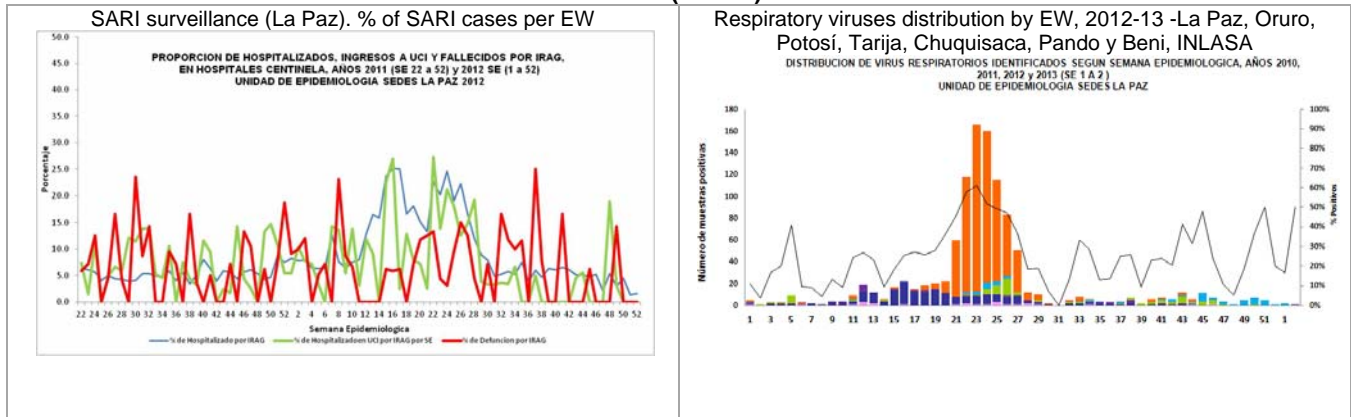
Central America

Costa Rica, El Salvador, Guatemala, Nicaragua and Panama

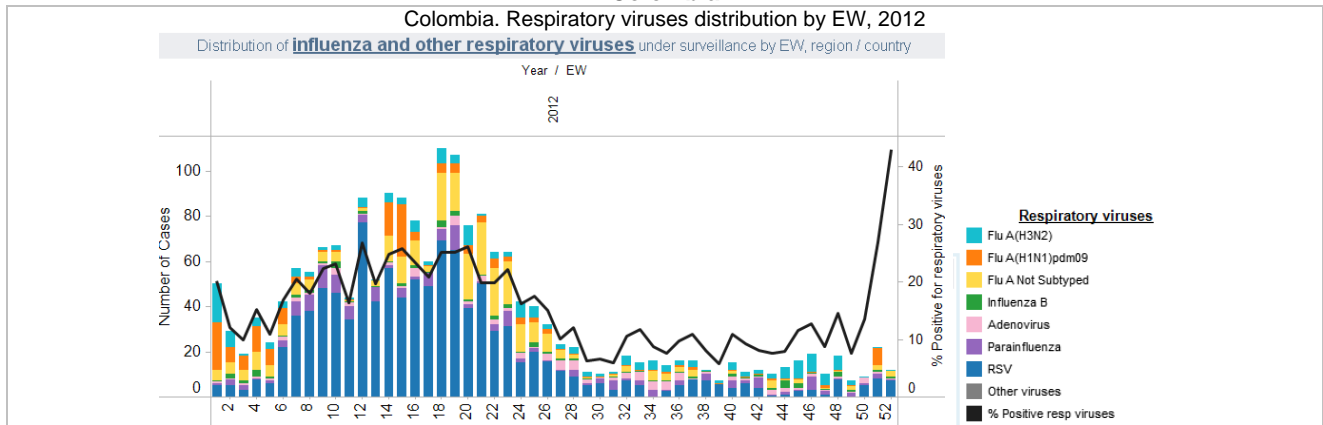


South America - Andean

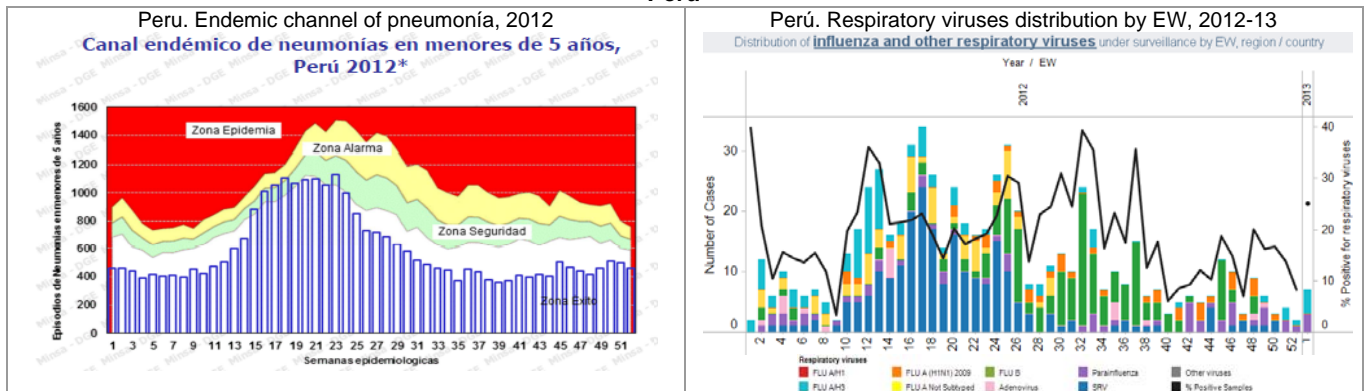
Bolivia (La Paz)



Colombia

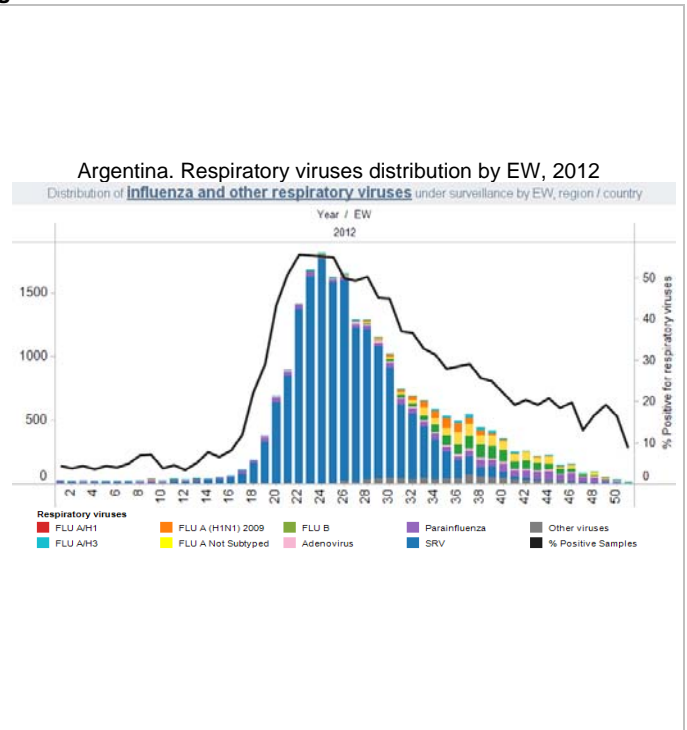
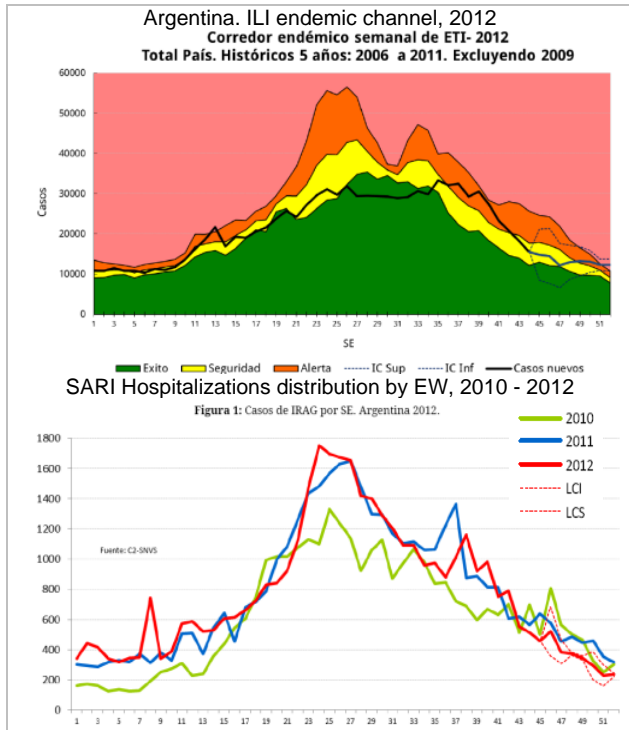


Peru

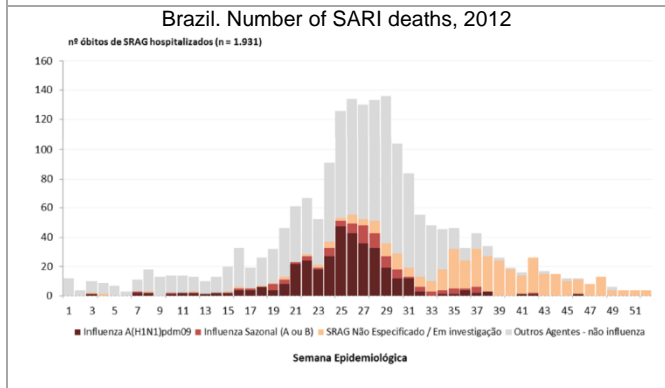
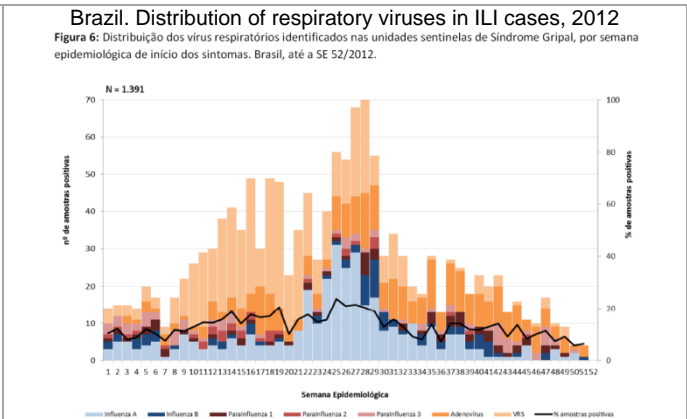
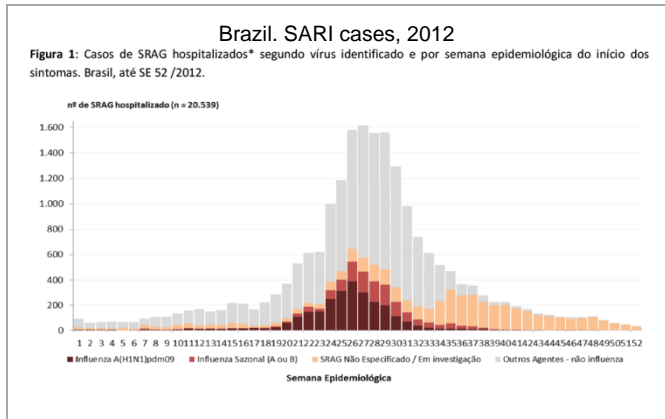


South America, Southern cone

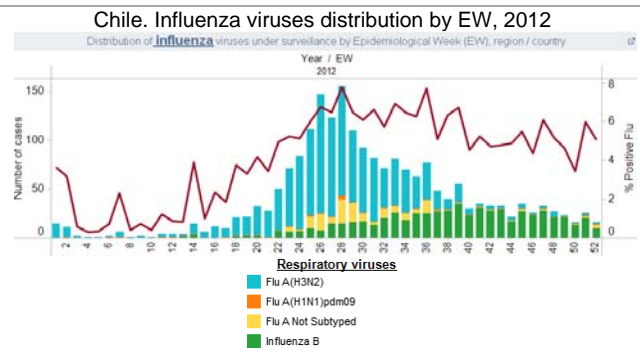
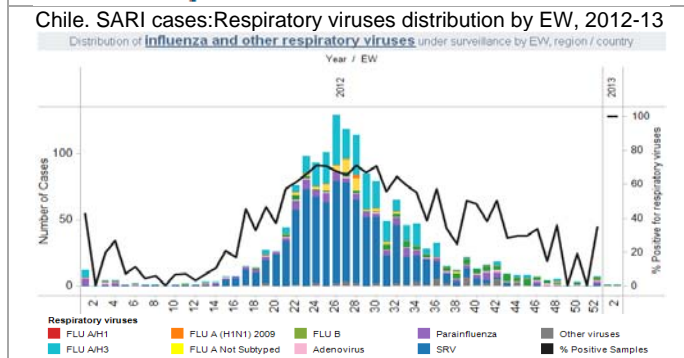
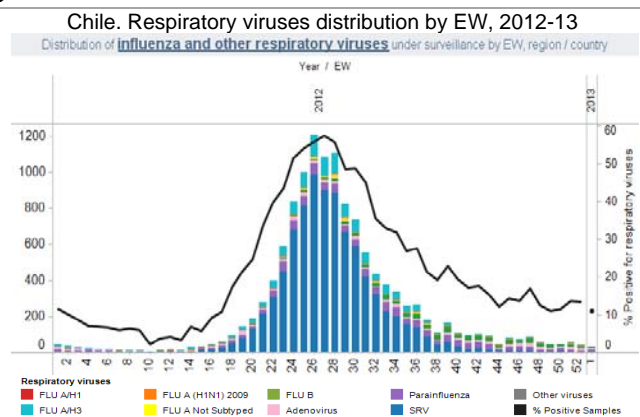
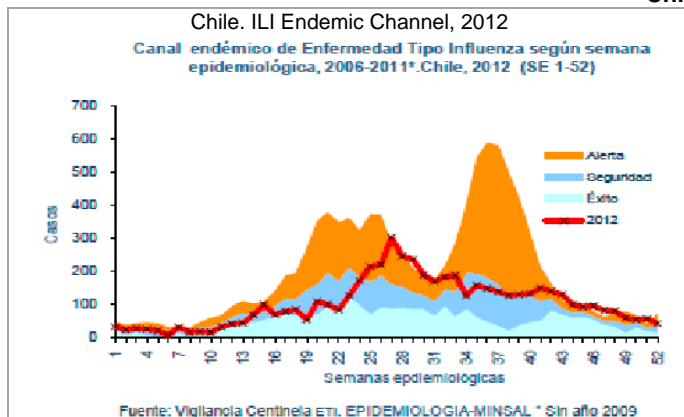
Argentina



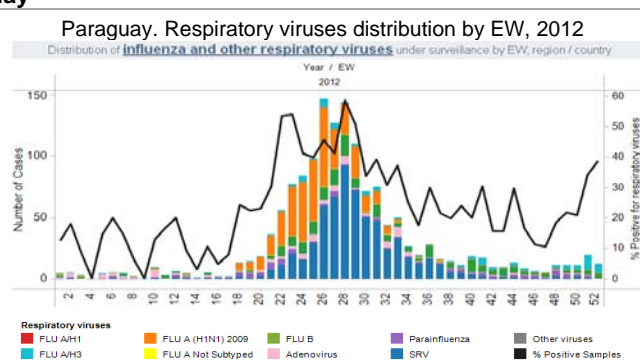
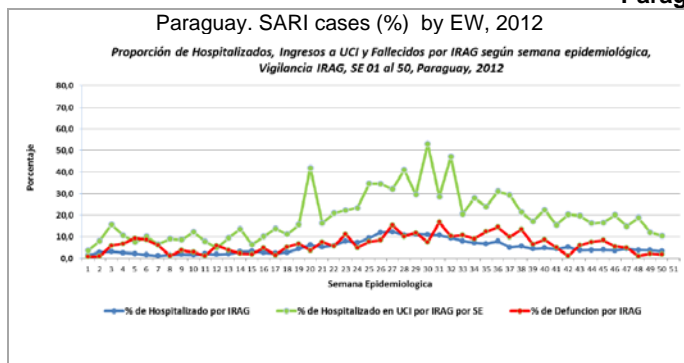
Brazil



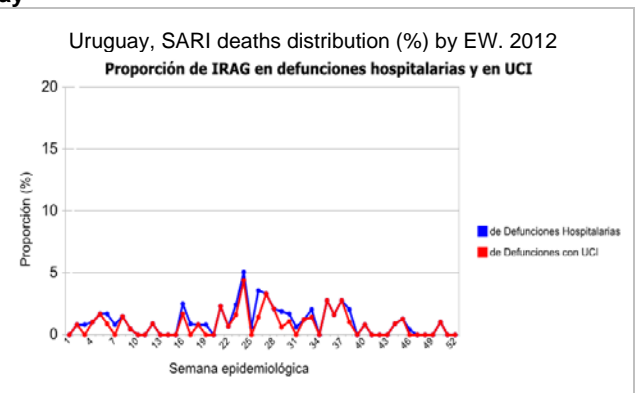
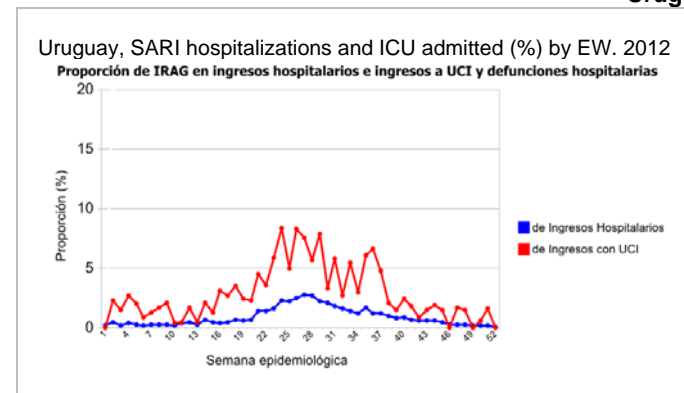
Chile



Paraguay



Uruguay



- 1 FluWatch Report. EW 01. Available at <http://www.phac-aspc.gc.ca/fluwatch/>
- 2 US Surveillance Summary. EW 01. Centers for Disease Control and Prevention
- 3 Perú. Ministerio de Salud. Dirección general de Epidemiología. Boletín Epidemiológico SE 52.
- 4 Argentina. Actualización situación de enfermedades respiratorias 2012. SE 52.
- 5 Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública