

Regional Update EW 07, 2013

Influenza and other respiratory viruses (February 26, 2013)

PAHO interactive influenza data: http://ais.paho.org/phip/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: in Canada and the US, influenza activity continued decreasing. The ILI activity was within the expected levels in Canada, and it decreased in the US, but remained above its national baseline. In the US, the proportion of deaths attributed to pneumonia and influenza was 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, the percentage RSV positive cases decrease 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: the respiratory viruses' activity was within the expected range for this time of year, with the exception of Brazil and Ecuador whose records slightly exceeded that observed in previous years. In the Andean countries, RSV was the predominant virus detected with the exception of La Paz (Bolivia) where an increase in influenza A(H3N2) virus activity was reported. In the Southern Cone and Brazil, influenza A (H3N2) virus was predominantly detected during the last two weeks with the exception of Chile where adenovirus and parainfluenza viruses continued to prevail.

Recommended composition of influenza virus vaccines for use in the 2013-14 northern hemisphere influenza season

On 21 February 2013, WHO recommended that trivalent vaccines for use in the 2013-14 influenza season (northern hemisphere winter) contain the following:

- an A/California/7/2009 (H1N1)pdm09-like virus;
- an A(H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011b*;
- a B/Massachusetts/2/2012-like virus.

More information:

http://www.who.int/influenza/vaccines/virus/recommendations/2013 14 north/en/index.html

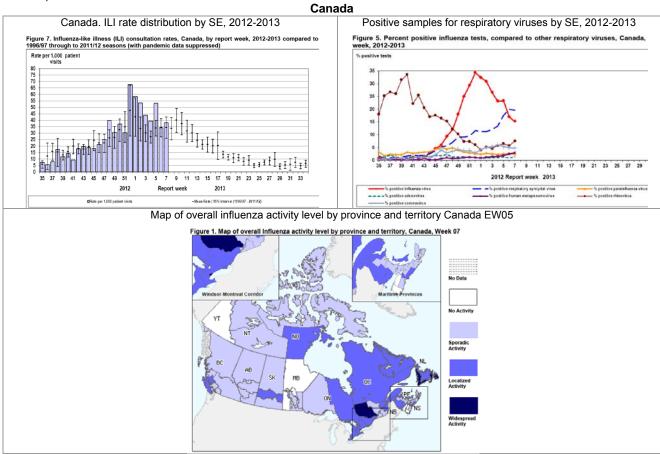
2. EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES **BY COUNTRY**

North America

In Canada¹, in epidemiological week (EW) 07, several indicators of influenza circulation continued to decrease, including: the percentage of laboratory detections positive for influenza, the number of regions reporting widespread and localized activity, the number of new influenza/influenza like illness (ILI) outbreaks, and the number of influenza-associated hospitalizations reported by the IMPACT network and by participating provinces and territories. The ILI consultation rate (34.2 ILI consultations per 1,000 patients) increased slightly but was within the expected range for this time of year. Among influenza-associated hospitalizations, the age group ≥ 65 years was the most affected age group (53.2%). Among the total

¹ FluWatch Report. EW 07. Available at http://www.phac-aspc.gc.ca/fluwatch/

samples analyzed, the proportion of samples positive for influenza decreased from 17% in EW 06 to 15.2% in EW 07. Of the influenza cases detected in EW 07, 86.8% were influenza A (28.6% influenza A(H3), 8% were A(H1N1)pdm09 and 63.4% influenza A unsubtyped) and 13.2% were influenza B (that has increased over the past 4 weeks from 2.1% in EW 03). Concerning other respiratory viruses, the RSV percent positivity in EW 07 (19.6%) was similar to EW 06. The percentage of tests positive for rhinovirus increased from 5.7% in EW 06 to 7.6% in week 07.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 83% of the influenza B cases).

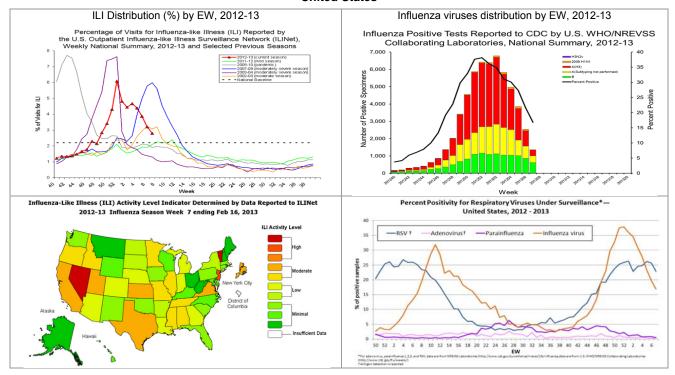


In the United States², in EW 07, influenza activity remained elevated, but decreased in most areas. Nationally the proportion of ILI consultations (2.8%) decreased as compared to the previous week but remained above the baseline (2.2%); and all 10 regions reported a proportion of outpatient visits for ILI at or above their region-specific baseline levels. Three states experienced high ILI activity (Nevada, New Jersey, and Vermont). Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 07 (8.6%) was above the epidemic threshold for this time of year (7.5%). In EW 07, fourteen influenza-associated pediatric deaths were reported (three associated with influenza A(H3N2), two with influenza A(H1N1)pdm09, two with an unsubtyped influenza A virus, six with influenza B and one with both influenza A and B). From October 1, 2012 to February 16, 2013 the influenza-associated hospitalization rate was 34.2/100,000 population, with the highest rates in those 65 years of age and older. Among all samples tested during EW 07 (n=8,144), the percentage of samples positive for influenza (16.8%) continued decreasing. Nationally, among the positive samples, 54.9% were influenza A [43.6% A(H3N2), 4.3% A(H1N1)pdm09 and 52.1% influenza A unsubtyped]. Among the characterized influenza viruses this season, the majority have been the vaccine strains (100% of the A(H1N1)pdm09 cases, 99.5% of the A(H3N2) cases, and 70.7% of the influenza B cases). Since October 1, 2012, n=274 influenza A(H1N1)pdm09 samples have been tested for resistance to oseltamivir and thus far, only two resistant virus (0.9%) have been detected; these viruses were sensitive to zanamivir. Among other respiratory viruses, the percentage of positive samples for RSV decreased from its peak (26% in EW 05) to 22.8% in EW 07.

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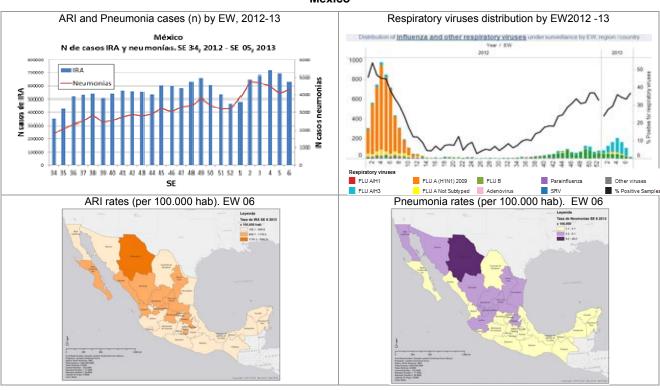
² USA: CDC FluView report. EW 07. Available at: http://www.cdc.gov/flu/weekly/

United States



In Mexico, nationally, in EW 06, the number of acute respiratory infection (ARI) cases decreased by 8 % as compared to EW 05; while the number of pneumonia cases increased 5.2% from EW 06. Regionally, the states that reported the highest rates of pneumonia per 100,000 habitants were: Chiapas (1.1), Mexico (1.4), Puebla (1.2) and Yucatan (1.5). According to laboratory data, in 2013, in EW 07, among the samples tested (n=49) the percent positivity for influenza viruses increased from 33.2% (EW 06) to 36.7%. Among the positive influenza cases during EW 07, 89% were influenza A (H3N2).

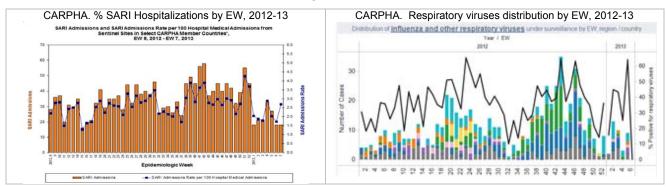
Mexico



Caribbean

CARPHA³ received weekly severe acute respiratory infection (SARI) and ARI data from 5 countries for EWs 06 and 07 of 2013: Barbados, Jamaica, St. Lucia, St. Vincent & the Grenadines and Trinidad & Tobago. During EW 07, 2013, the proportion SARI hospitalizations was 1.5%. The highest rate of SARI was among children under 6 months of age (1.5%) and children between 6 months to 4 years of age(4.5%),There were no reports of SARI-related deaths from this sub- region during this time. So far in 2013, laboratory reports confirmed the detection of the following viruses: influenza A(H1N1)pdm09 (Anguilla, Jamaica, Trinidad & Tobago), influenza A(H3N2) (Anguilla, Barbados, Bermuda, Cayman Islands, Dominica, Jamaica, St. Lucia), influenza B (Dominica, Jamaica), RSV (Belize, Cayman Islands, Trinidad & Tobago), adenovirus (Cayman Islands, St. Lucia), human metapneumovirus (St. Vincent & the Grenadines), parainfluenza type 1 (Barbados), parainfluenza type 3 (Cayman Islands, St. Lucia), rhinovirus (Anguilla, Belize, Cayman Islands, Dominica, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago). Up to date this year, the overall percentage positivity for all samples tested was 26.5% for this sub-region.

CARPHA



In Cuba, for EW 07, according to the laboratory data, among the samples analyzed (n=70), the percentage of positive samples for respiratory viruses was 37.1% and for influenza viruses was 11.4%. Parainfluenza was mainly detected, followed by influenza A (H1N1)pdm09 and bocavirus.

In the Dominican Republic, according to laboratory data, among the 13 samples analyzed, in EW 09, the percentage positive for influenza viruses was 15.4%. Influenza B was the predominant virus during EW 09.

Cuba and Dominican Republic

Cuba. Respiratory viruses distribution by EW, 2012-13 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Verw / EW 2013 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Verw / EW 2013 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Verw / EW 2013 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Verw / EW 2013 Respiratory viruses Dominican Republic. Respiratory viruses distribution by EW, 2012-13 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Year / EW 2013 Respiratory viruses Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Year / EW 2013 Respiratory viruses Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Year / EW 2013 Respiratory viruses Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Year / EW 2013 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Year / EW 2014 2015 Distribution of influenza and other respiratory viruses under surveillance by EW, region / country Year / EW 2016 PROPER OF THE STATE OF TH

In Jamaica for EW 07, the proportion of consultations for ARI was 5.5% (0.4% lower than EW 06). The proportion of SARI-related admissions was 1.3% (0.5% increase as compared to the EW before). There were no SARI-related deaths reported for EW 07. According to laboratory data the percentage of positive for influenza viruses in EW 07 was 19.0% among all samples tested (n= 21). Influenza A(H1N1) pdm09 was the only virus identified.

FLU A/H3

FLU A Not Subtyped

SRV

Metapneumovirus % Positive resp vir.

Other viruses

Influenza B

Flu A Not Subtyped Parainfluenza

RSV

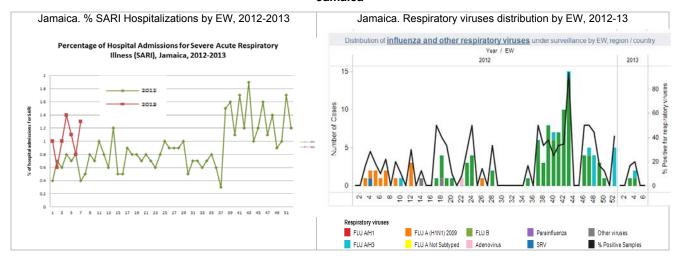
Flu A(H3N2)

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% Positive Samples

³ Caribbean Public Health Agency (CARPHA)

Jamaica



In French Territories:

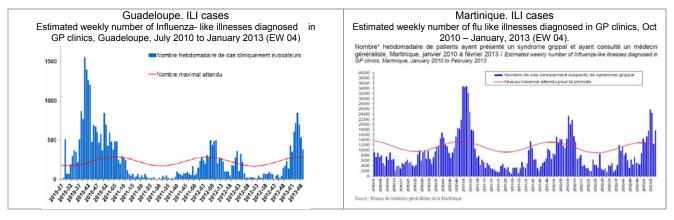
Guadalupe⁴ declared an influenza epidemic 8 weeks ago, which is ongoing. After the number of ILI consultations peaked in EW 04, it continued decreasing through EW 07; however, activity remains above the maximum expected values for this season. Influenza A(H1N1)pdm09 virus was the virus associated with this epidemic.

Martinique⁵ declared an influenza epidemic 8 weeks ago. After the number of ILI consultations peaked in EW 04, it has been decreasing. However, in the last available report (EW 07), activity remains above the maximum expected values for this season. Influenza A and B have been detected and associated to this epidemic.

Saint Bartholome declared an influenza epidemic since EW 01, 2013.

In Saint-Martin and Guyana no influenza epidemics were reported.

French Territories



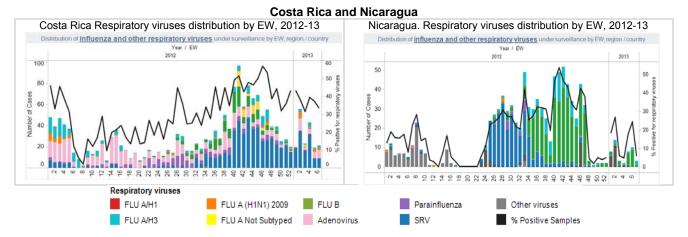
Central America

In Costa Rica, according to laboratory data between EW 05-08, 2013, among all samples tested (n = 270), the percent positivity for respiratory viruses decreased from 24% in EW 07 to 16% in EW 08 . The percent positivity influenza viruses (\sim 1%)remained low. During the period between EW 05 – 08, RSV continued to be the most prevalent virus (14% of the samples tested) followed by adenovirus (8%). 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.

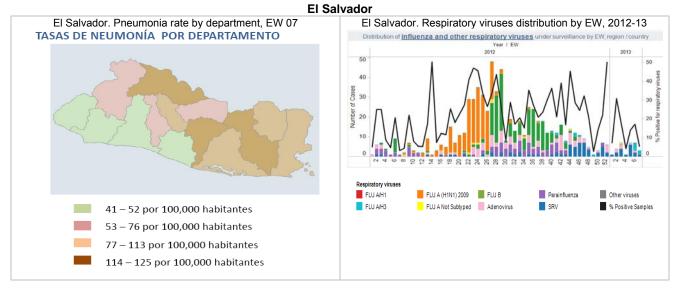
 $^{^{\}rm 4}$ Guadaloupe. Le point épidémiologique — 07 / 2013. CIRE Antilles Guyana.

Martinique. Le point épidémiologique — 07 / 2013. CIRE Antilles Guyana

In Nicaragua, in EWs 04-07, among 180 samples analyzed, ~13% were positive for respiratory viruses and ~12% for influenza viruses. Among the total positive samples, influenza B was the most prevalent influenza virus, followed by influenza A (H3N2) virus.



In El Salvador⁶, according to national data, the number of cases of ARI increased 1.3% during EW 07 as compared to the previous week. Regionally, the states that reported the highest ARI rates per 100,000 habitants were: Chalatenango, San Salvador and San Vicente. During EW 07, the number of pneumonia cases decreased 7% as compared to the previous EW, and was less than that observed during the same time last year. The states that reported the highest rates of pneumonia per 100,000 habitants were: San Vicente, San Miguel and Chalatenango. According to national laboratory data, 171 samples were analyzed between EWs 04-07. The percentage of positive samples for respiratory viruses decreased from 17% (EW 06) to 5.4% (EW 07). RSV continued as the predominant virus (6% of positivity in EWs 04-07). Among the influenza viruses, influenza A(H3N2) was the only virus detected (4% of positivity in EWs 04-07 among total samples tested).

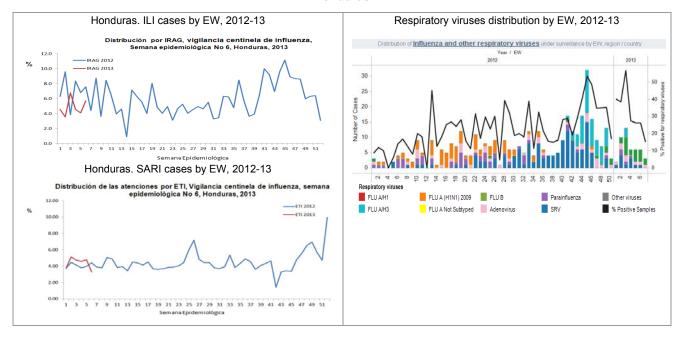


In Honduras⁷, in EW 06, nationally, the proportion of ILI consultations (~4 %) and SARI-related hospitalizations (~12 %) were slightly lower than the previous weeks and than those observed during the same period last year. According to laboratory data between EW 04-07, 2013, among all samples tested (n=88), the percent positivity for respiratory viruses was 23% and for influenza viruses was 13%. During the period between EWs 04–07, among influenza viruses, influenza B predominated. Among other respiratory viruses, RSV continued to be the most frequent detected.

⁶ El Salvador. Boletín epidemiológico 07, 2013. Ministerio de Salud

⁷ Honduras. Boletín de la vigilancia de influenza y otros virus respiratorios en Honduras SE 07. Dir. General de Vigilancia de la Salud

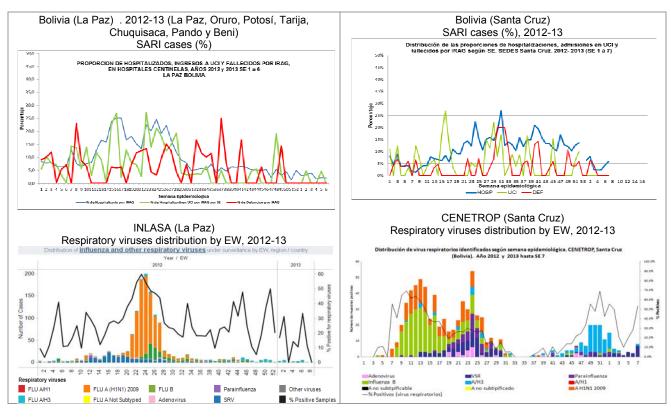
Honduras



South America - Andean countries

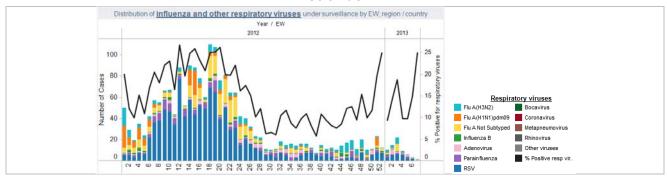
In Bolivia, according to SEDES Santa Cruz, the proportion of SARI hospitalizations (6% - 7/119) in EW 07 was higher than last week. No SARI-related ICU admission or SARI-related deaths were reported. According to data from CENETROP (Santa Cruz), between EW 06-07, 22 samples were tested, being RSV (9/10) the predominant virus. According to SEDES La Paz, the proportion of SARI hospitalizations in EW 06 was low (2.1% - 6/290) and similar to past weeks. No SARI-related ICU admission or SARI-related deaths were reported. According to data from INLASA (La Paz), among 24 samples were processed in EWs 06-07, the percent positivity for respiratory viruses was 25%. Influenza A(H3N2) was the predominant virus.

Bolivia



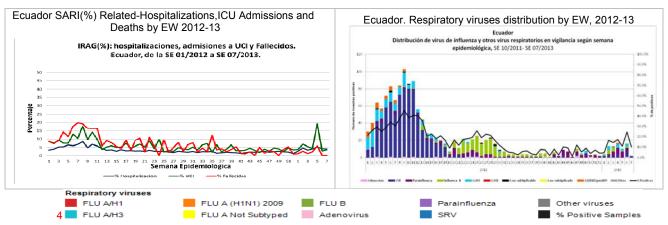
In Colombia according to national INS laboratory data, including statistics from the Departments of Antioquia and Bogotá, among 60 samples analyzed during EW 06 and EW 07 of 2013 the percent positivity was 13.3% for all respiratory viruses, and 1.7 % for influenza viruses. RSV was predominant among all the positives (4/8). Nationally the proportion of outpatient visits and hospitalizations for ARI showed no significant changes during the first weeks of 2013 (remained around 10%).

Colombia



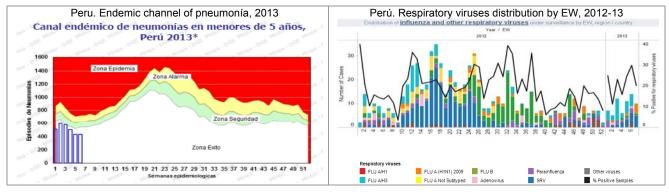
In Ecuador according to national laboratory data, among 85 samples analyzed during EWs 06-07 of 2013, the percent positivity was 21% for all respiratory viruses, and 6% for influenza viruses .Among all the positives, RSV was the most prevalent virus (8/18) followed by parainfluenza virus(4/18). In the SARI surveillance system, the proportion of SARI hospitalizations showed a slight increase since the beginning of the year but remained around 4% (95/2.357) in EW 07, 2013. There were no reports of SARI-related deaths.

Ecuador



In Peru⁸, nationally, in EW 07 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 .According to national laboratory data for EW 07, 2013, among the 50 samples analyzed, the percentage positivity was 20% for all respiratory viruses and 10% for influenza. RSV (5/10) and influenza A (H1N1) (4/10) were the most prevalent viruses.

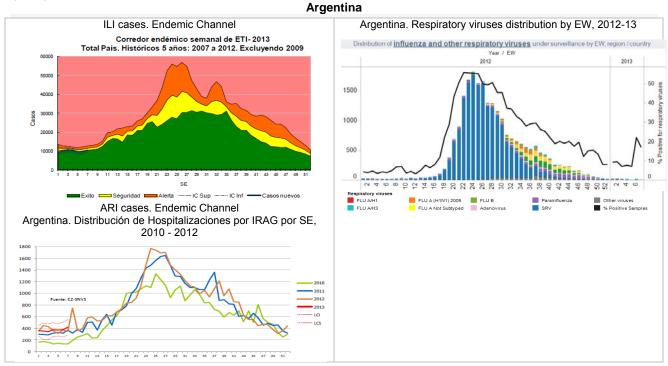




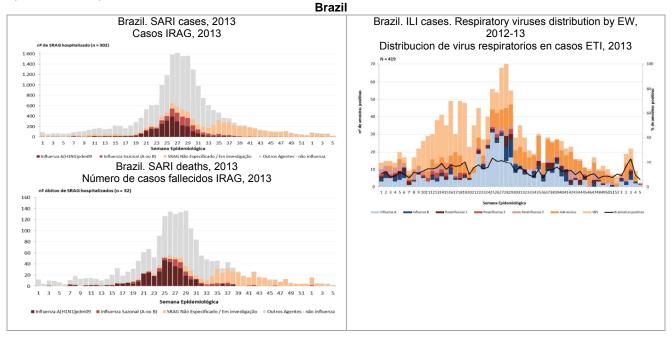
⁸ Perú. Sala de Situación de Salud. SE 06, 2013. Ministerio de Salud. Dirección General de Epidemiología

South America - Southern Cone

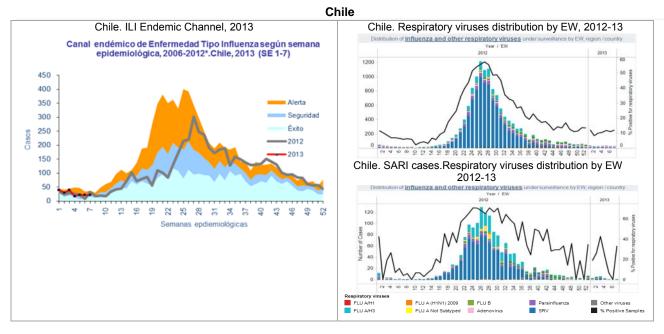
In Argentina, national data from EW 07 of 2013 indicated that the notification of ILI was between the endemic channels zones of safety and success. The data obtained by monitoring of ARI hospitalizations during EW 07 showed no significant changes as compare to the previous EWs of 2013. According to laboratory data recorded between EW 06-07 of 2013, 132 samples were analyzed nationally, and the percent positivity for all respiratory viruses was 20% and 13% for influenza viruses. Influenza A (H3N2) was the most prevalent (22%) virus.



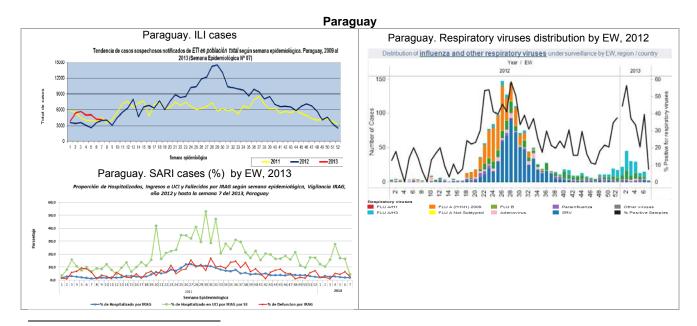
In Brazil, during EWs 01-05, 2013 among all SARI cases, influenza was detected in 2.3% (7/302). The South and the Southeast regions reported the highest number of SARI cases and SARI-related deaths. 32 SARI related deaths were reported so far this year, of which 6% were due to influenza (2 cases). In the ILI surveillance system, for EWs 01-05, 2013 among all samples analyzed (n=419) the percent positivity was14.3%. The percent positivity was lower in EW 05 as compare to the previous EWs. Influenza A and parainfluenza predominated.



In Chile⁹, nationally for EW 07 of 2013, ILI activity (rate: 1.3 /100,000 pop.), remained low, at the margin between the endemic channel success and safety zone. According to laboratory data in EW 07, 260 samples were analyzed, 12% of which were positive for respiratory viruses. Adenovirus was the most prevalent virus (64%). In the SARI surveillance system, 17 samples were processed in EWs 06-07 for respiratory viruses, only one of which was positive (parainfluenza virus).



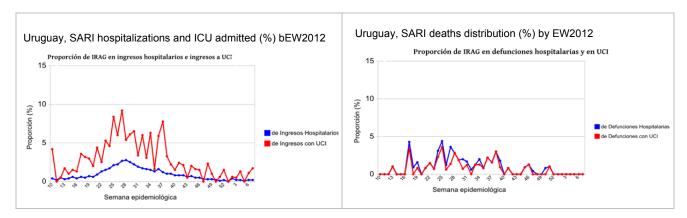
In Paraguay, in EW 07, 2013, nationally, the ILI rate (63.4/100,000 population) declined and was within the same level seen during the same time in previous years. Nationally, the proportion of ILI consultations was 42% (196/5.312) during EW 07. The SARI surveillance for EW 07 showed that the proportion of SARI-related hospitalizations (2% -40/2.319-), remained without significant changes from the previous week. So far this year, 20 SARI-related deaths have been reported, and in one, adenovirus was detected. According to the national laboratory data, among 66 samples processed between EW 06 - 07, 2013, 26% were positive for all respiratory viruses and 17% for influenza viruses. Among the positive samples, influenza A (H3N2) was the most prevalent virus (9/17). Among the SARI cases, 43 samples were processed in the same period and influenza A (H3N2) and influenza B were the most dominant viruses detected.



⁹ Chile. Informe de situación. SE 07. Disponible en: <u>www.pandemia.cl</u>

In Uruguay¹⁰, according to the national SARI surveillance system in EWs 01-07, 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



Novel coronavirus infection- update

Please be informed that WHO The Global Outbreak Alert and Response Network (GOARN) published on 21 February 2013, an update of the Novel Coronavirus infection on the web:

http://www.who.int/csr/don/2013 02 21/en/index.html

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