



Regional Update EW 21, 2013

Influenza and other respiratory viruses (June 4, 2013)

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:** most influenza activity indicators were within expected levels for this time of year. Influenza B remained as the dominant circulating influenza virus in Canada and the US. In Mexico, influenza A(H3N2) remained the most prevalent virus.
- **Central America and the Caribbean:** the activity of respiratory viruses remained low and/or similar as compared to previous weeks, except in Cuba and Dominican Republic, where maintained circulation of influenza A(H1N1)pdm09 was reported in the last weeks.
- **South America:** acute respiratory infection (ARI) activity showed an increasing trend in most countries but remained within expected levels for this time of the year. In the Andean countries, RSV continued as the predominant circulating virus, with co-circulation of influenza A(H3N2) (in Bolivia-Sta. Cruz, Ecuador and Peru) and influenza A(H1N1)pdm09 (in Colombia). In the Southern Cone, RSV also predominates in all countries; with steady increase of influenza A(H1N1)pdm09 in Argentina and Chile. In Brazil, SARI activity was higher than the observed last year, with circulation of A(H1N1)pdm09, followed by A(H3N2) in some states.

Highlights:

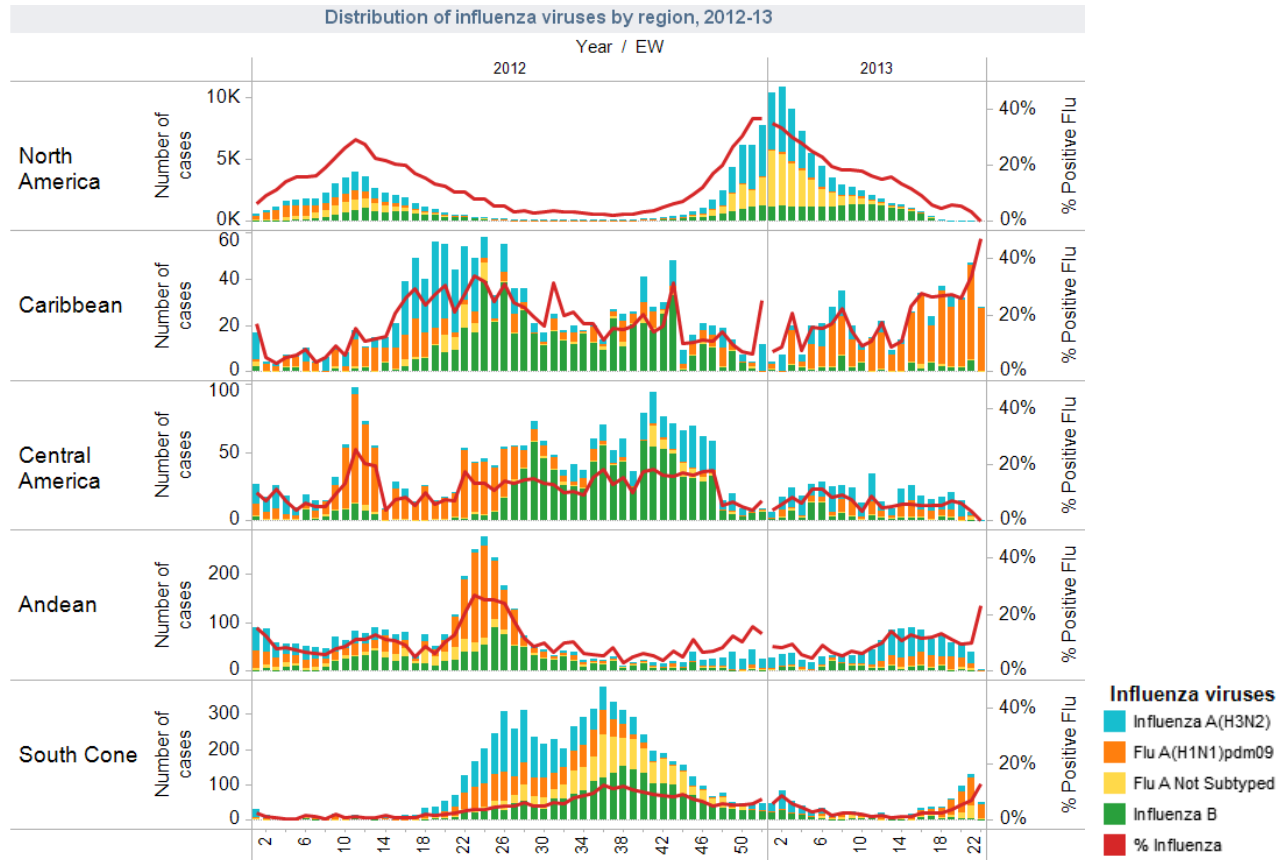
Novel coronavirus infection

- WHO. Middle East respiratory syndrome coronavirus – update (June 2nd, 2013)
http://www.who.int/csr/don/2013_06_02_ncov/en/index.html
- PAHO. Epidemiological alert: Human infection caused by novel coronavirus – update (May 17th, 2013)
http://new.paho.org/hq/index.php?option=com_content&view=article&id=8683%3A17-may-2013-middle-east-respiratory-syndrome-coronavirus-mers-cov-update-&catid=2103%3A--hsd0104d-most-recent-ea&Itemid=2291&lang=es

Avian influenza A(H7N9) virus

- Overview of the emergence and characteristics of the avian influenza A(H7N9) virus (May 31, 2013)
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/WHO_H7N9_review_31May13.pdf

Influenza circulation by region. 2012-2013



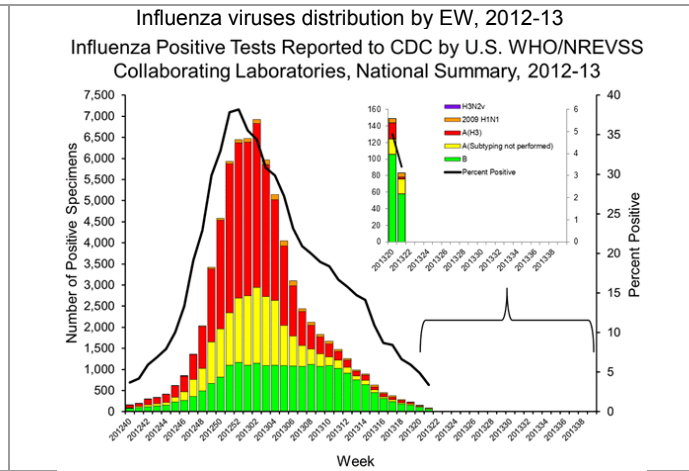
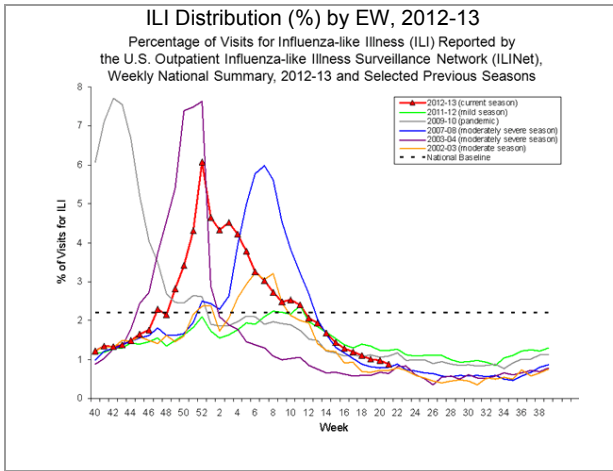
EPIDEMIOLOGIC AND VIROLOGIC UPDATE OF INFLUENZA & OTHER RESPIRATORY VIRUSES BY COUNTRY

North America:

In the United States¹, during EW 21, influenza activity remained low. Nationally, the proportion of ILI consultations (0.9%) was below the national baseline of 2.2%. Nationally, the proportion of deaths attributed to pneumonia and influenza for EW 21 (6.3%) was below the epidemic threshold for this time of year. In EW 21, three influenza-associated pediatric deaths were reported (one associated with influenza A(H3N2), one with influenza A(H1N1)pdm09 and one with influenza B). Among all samples tested during EW 21 (n=2,444), the percentage of samples positive for influenza (3.4%) continued to decrease as compared to the previous week. Nationally, among the positive samples, 69.9% were influenza B and 30.1% were influenza A, with co-circulation of A(H3N2) and A(H1N1)pdm09.

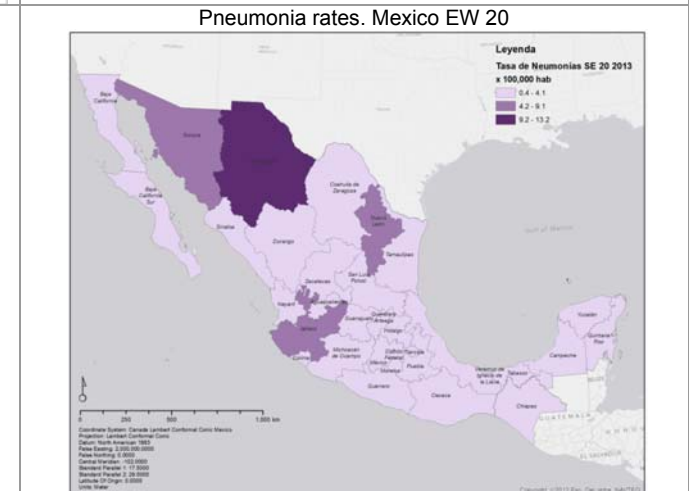
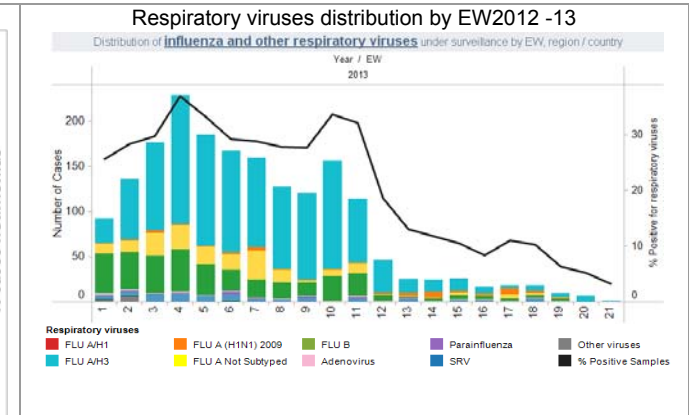
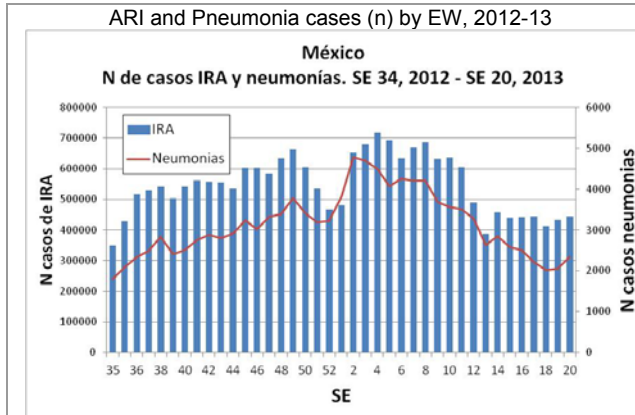
¹ USA: CDC FluView report. EW 21. Available at: <http://www.cdc.gov/flu/weekly/>

United States



In Mexico², nationally in EW 20, the number of ARI cases increased by 2.8% as compared to EW 19 and the number of pneumonia cases also increased 13.7%. Regionally, the states that reported the highest rates of pneumonia per 100,000 habitants in EW 19 were: Jalisco (5), Nuevo Leon (4.8), Colima (4.7) and Sonora (4.3). According to laboratory data, in 2013, percent positivity for influenza viruses continued decreasing from 33.4% (EW 10) to 3.1% (EW 21). Between EWs 18-21, among the positive influenza cases, 83% were influenza A (66.7% influenza A(H3N2), 16.7% A(H1N1)pdm09 and 16.7% influenza A unsubtype) and 17.2% were influenza B.

Mexico

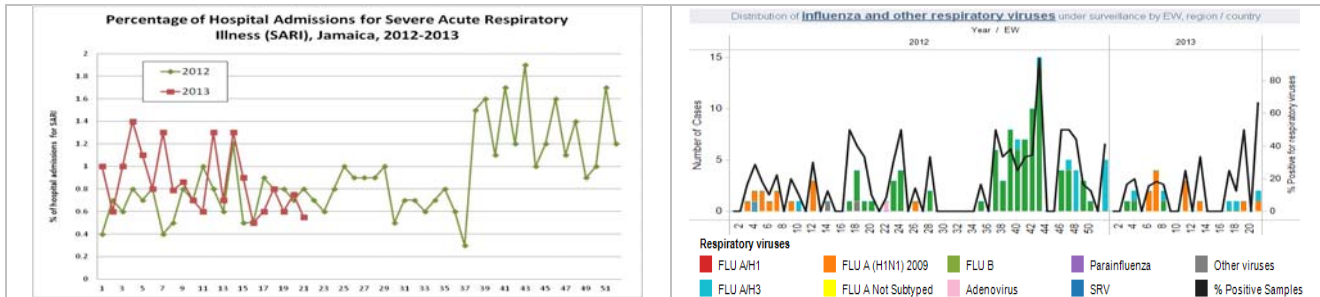


² México. Dirección General de Epidemiología. Información epidemiológica. SE 21.

Caribbean

In Jamaica, in EW 21, sentinel data showed that the proportion of consultations for ARI was 4.0% which was a 0.2% decrease as compared to that which was reported for the previous week. The proportion of admissions due to SARI was less than 1% and stable compared to the previous week. There were no SARI deaths reported for EW 21. According to laboratory data, among samples tested in EW 21 (n=3), the percent positivity for respiratory viruses was 66.6%.

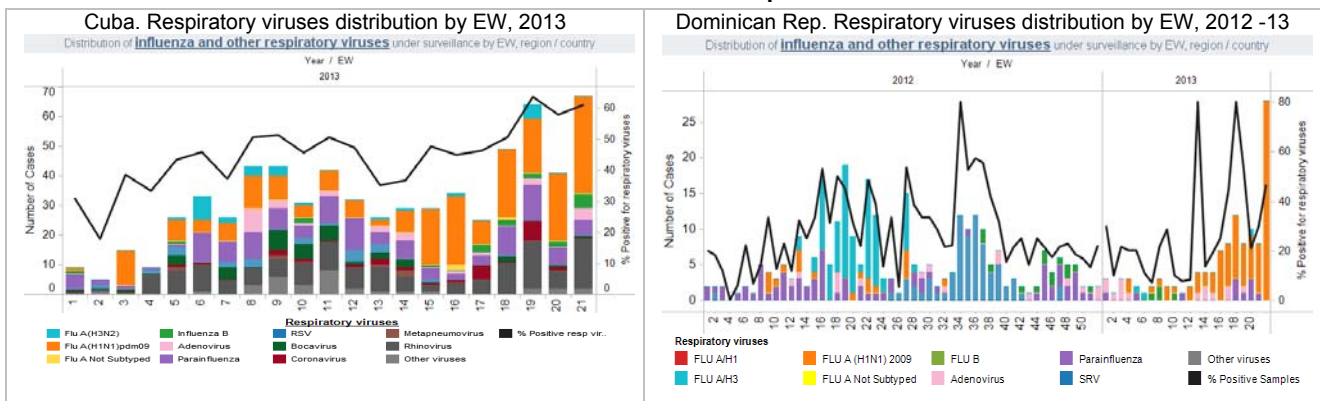
Jamaica



In Cuba, according to national laboratory data, among all samples analyzed (n=379) between EW 18 to 21, the average percent positivity for respiratory viruses was 58.1% and 30.3% for influenza viruses. Influenza A(H1N1)pdm09, the predominant virus detected, has had sustained circulation in the last week, followed by rhinovirus and parainfluenza. Among the SARI cases, 153 samples were analyzed between EW 18 to 21, with influenza A (H1N1)pdm09, parainfluenza and rhinovirus detected mainly during the same period.

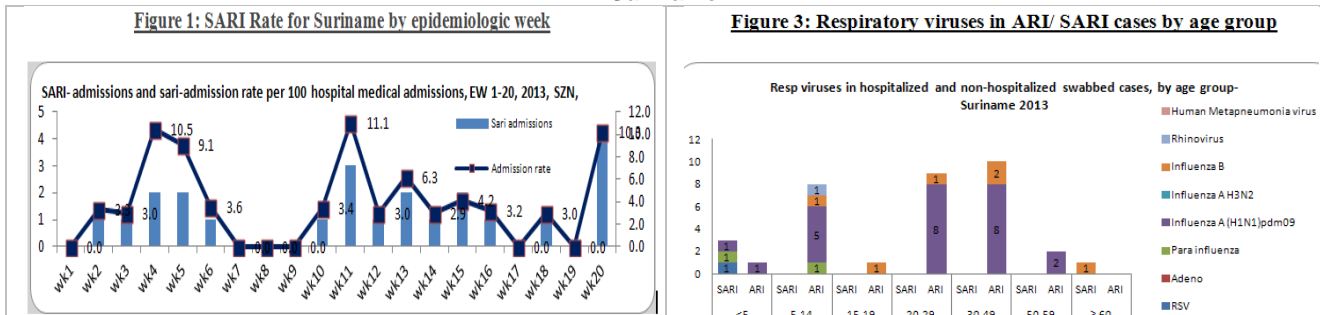
In the Dominican Republic, according to laboratory data, from EWs 19 to 22, among samples analyzed (n=145), the average percentage positive for respiratory viruses was 38.2% and 32.2% for influenza viruses. Influenza A(H1N1)pdm09, the predominant virus detected, has had sustained circulation in the last weeks, followed by parainfluenza.

Cuba and Dominican Republic



In Suriname, through EW 20, 2013, the proportion of SARI hospitalizations varied from 0 up to 11.1% and has increased compared to previous weeks; the SARI admission rate was 10.2% in EW 20. The highest SARI rates were among the age groups 6 mnths-4yrs, 50-64 and ≥ 65 years of age (50%, 33% and 40% respectively). Influenza A(H1N1)pdm09 and influenza B were identified between EW 17-20.

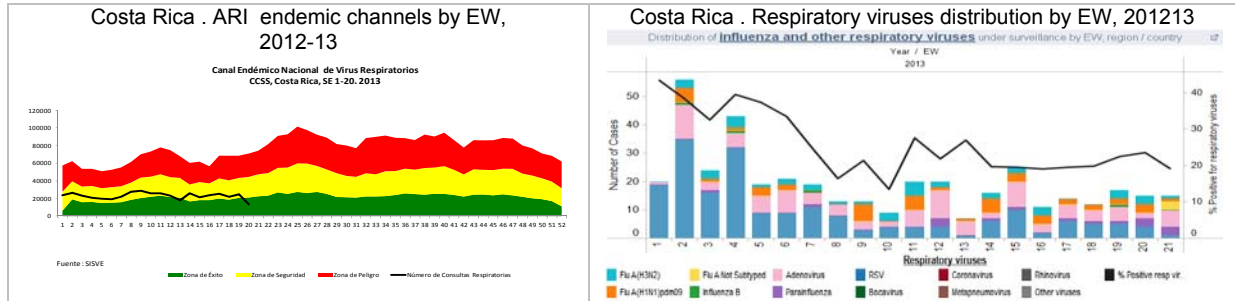
Suriname



Central America

In Costa Rica³, according to laboratory data between EW 18-21, among all samples tested (n =280), the percent positivity for respiratory viruses was 21.1% and for influenza viruses was 6.7%. During the period between EW 18-21, among influenza viruses, influenza A predominated (95%) (co-circulation of influenza A(H1N1)pdm09 and A(H3N2)). Among other respiratory viruses, adenovirus (5,4% of positivity) and RSV (5,4% of positivity) were the most prevalent viruses.

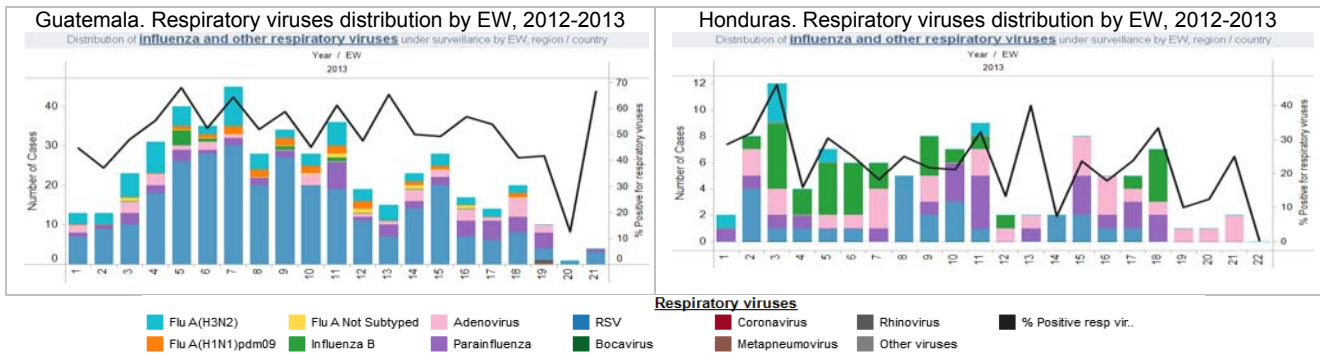
Costa Rica



In Guatemala, according to national laboratory data from EWs 18-21, of all samples tested (n =87), 40.4% were positive for respiratory viruses and 1.5% for influenza viruses. Regarding other respiratory viruses, among the total samples tested, RSV was the predominant virus (17.2% of positivity) followed by parainfluenza (10.3% of positivity).

In Honduras, according to national laboratory data from EWs 19-22, of all samples tested (n =27), 11.9% were positive for respiratory viruses with no influenza viruses were detected. Adenovirus was the only virus detected.

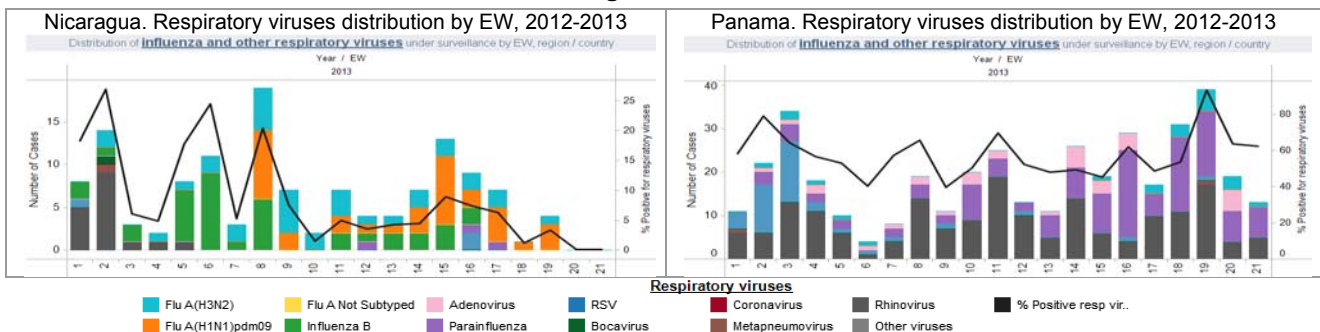
Guatemala and Honduras



In Nicaragua, according to national laboratory data from EWs 18-21, of all samples tested (n =355), 1.1% were positive for influenza viruses. Influenza A(H1N1)pdm09 was the predominant respiratory virus detected.

In Panama, according to national laboratory data from EWs 18-21, of all samples tested (n =151), 67.9% were positive for respiratory viruses and only 8.0% were positive for influenza viruses. Among the total samples tested, in EWs 18-21, parainfluenza was the predominant virus (30.5% of positivity), followed by rhinovirus (25% of positivity). Among positive influenza viruses, influenza A(H3N2) was the only virus detected.

Nicaragua and Panama

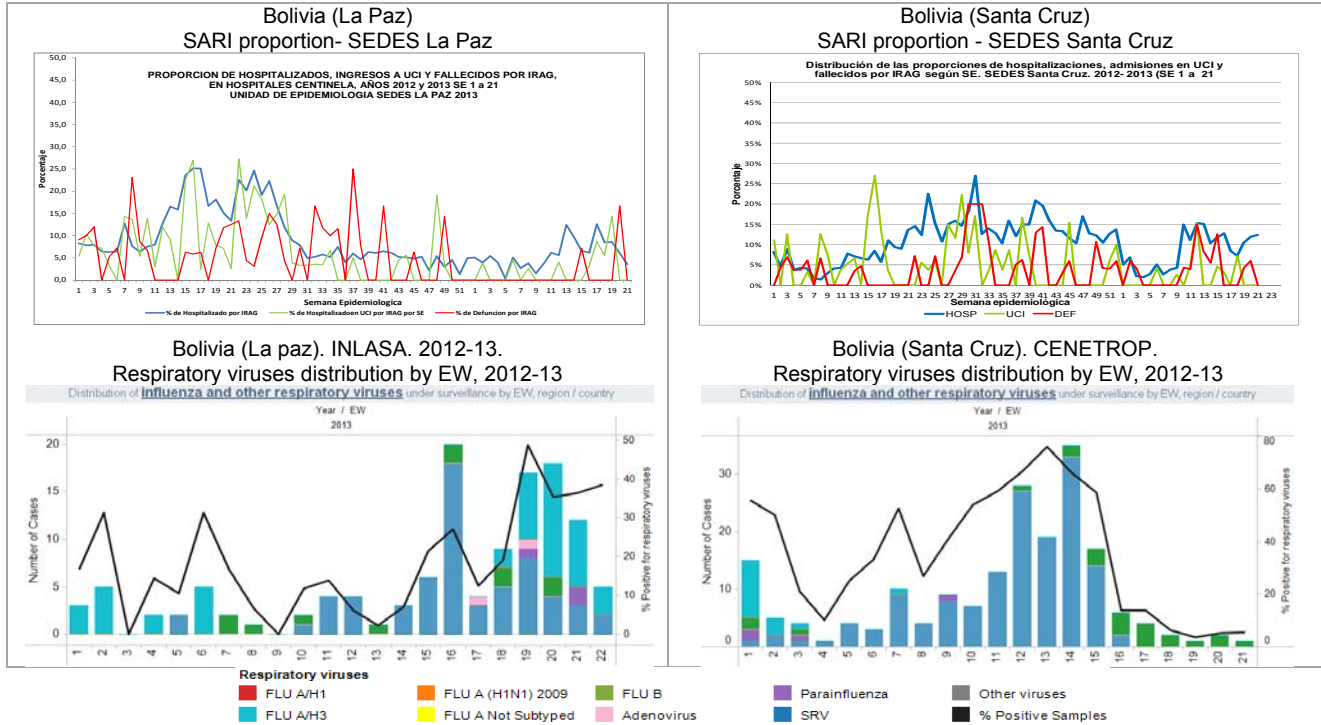


³ Costa Rica. Caja Costarricense de Seguro Social, INCIENSA. Influenza y otras virosis respiratorias. SE 20.

South America – Andean countries

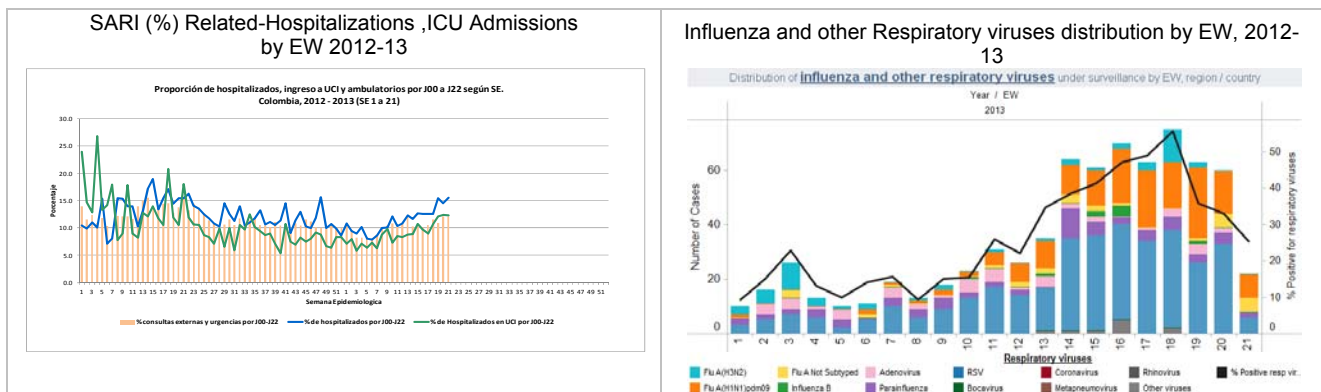
In Bolivia, according to data from Santa Cruz, during EW 21 the proportion of SARI hospitalizations (12%) remained similar to the previous week. According to laboratory data from CENETROP (Santa Cruz), among 58 samples analyzed between EWs 20-21 of 2013, the percent positivity for all respiratory viruses was 5.2%. Influenza B continued to be the most prevalent respiratory virus. In La Paz, in EW 21, the proportion of SARI hospitalizations decreased as compared to the previous week. According to laboratory data from INLASA (La Paz), among 54 samples processed in EWs 20-21 of 2013, the percent positivity for all respiratory viruses was 36%, and for influenza viruses was 25%. RSV and influenza A(H3N2) were the predominant respiratory viruses identified.

Bolivia



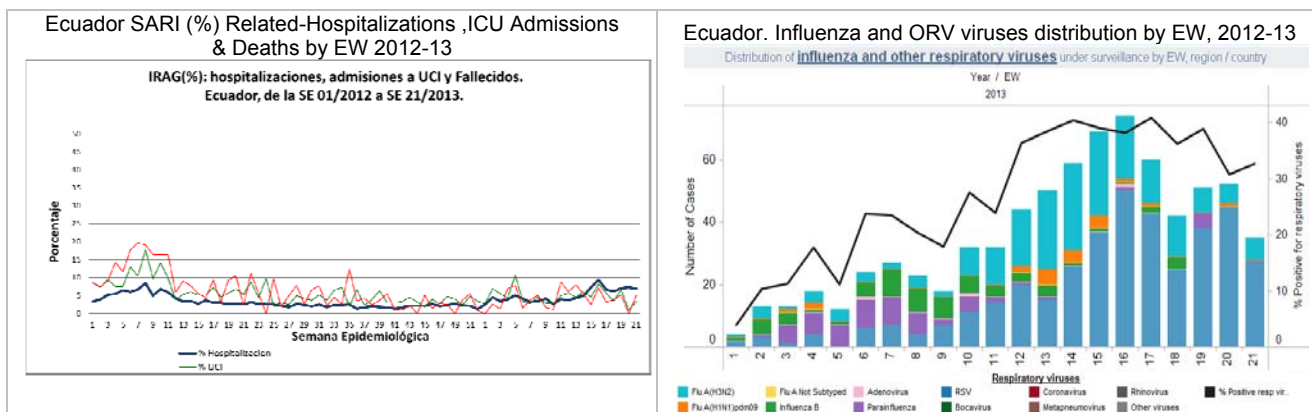
In Colombia, nationally, in EW 21, the proportion of ARI outpatients-J codes (12%), the proportion of SARI hospitalizations (15%) and the proportion of SARI ICU admissions (12%) continued showing an upward trend, but, within the expected level for this time of year. According to the national laboratory data (INS) including statistics from the Departments of Bogotá, Antioquia and Nariño, between samples and viruses analyzed (n=270) in EW 20-21, the positivity was 30% for all respiratory viruses and 13% for influenza viruses. These proportions were lower than the previous weeks and the peak was reported in EW 18. Among the positive samples, RSV remained as the predominant virus (47%), followed by influenza A(H1N1)pdm09 (30%) which was detected mainly in Bogotá).

Colombia



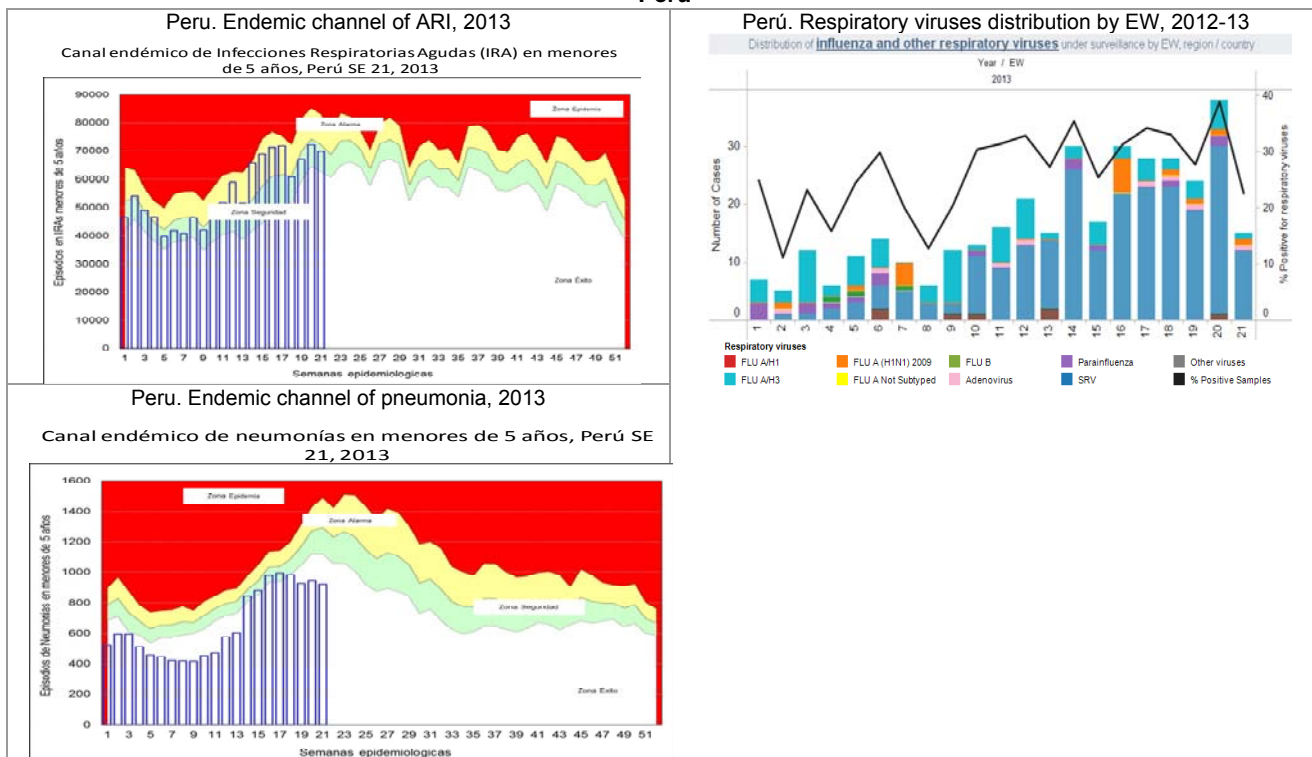
In Ecuador, the proportion of SARI hospitalizations during EW 21 (7%) remained similar to the previous week. According to national laboratory data from the national laboratory (NIH), among 276 SARI samples tested between EWs 20-21, the percent positivity was 31% for respiratory viruses and 5% for influenza viruses. Among all the positive samples, RSV (84%) and influenza A(H3N2) (15%) were the most dominant viruses.

Ecuador



In Peru⁴, nationally, in EW 21, the number of ARI cases in children less than 5 years of age remained similar as compared to the previous week and was below the epidemic threshold. The number of pneumonia cases in children less than 5 years of age remained similar as compared to the last week and below the epidemic threshold. According to national laboratory data, during EWs 20-21, among the 165 samples analyzed, the percentage positivity was 32% for all respiratory viruses and 5% for influenza viruses. Among all the positive viruses, RSV (77%) and influenza A(H3N2) (11%) were the predominant viruses.

Peru

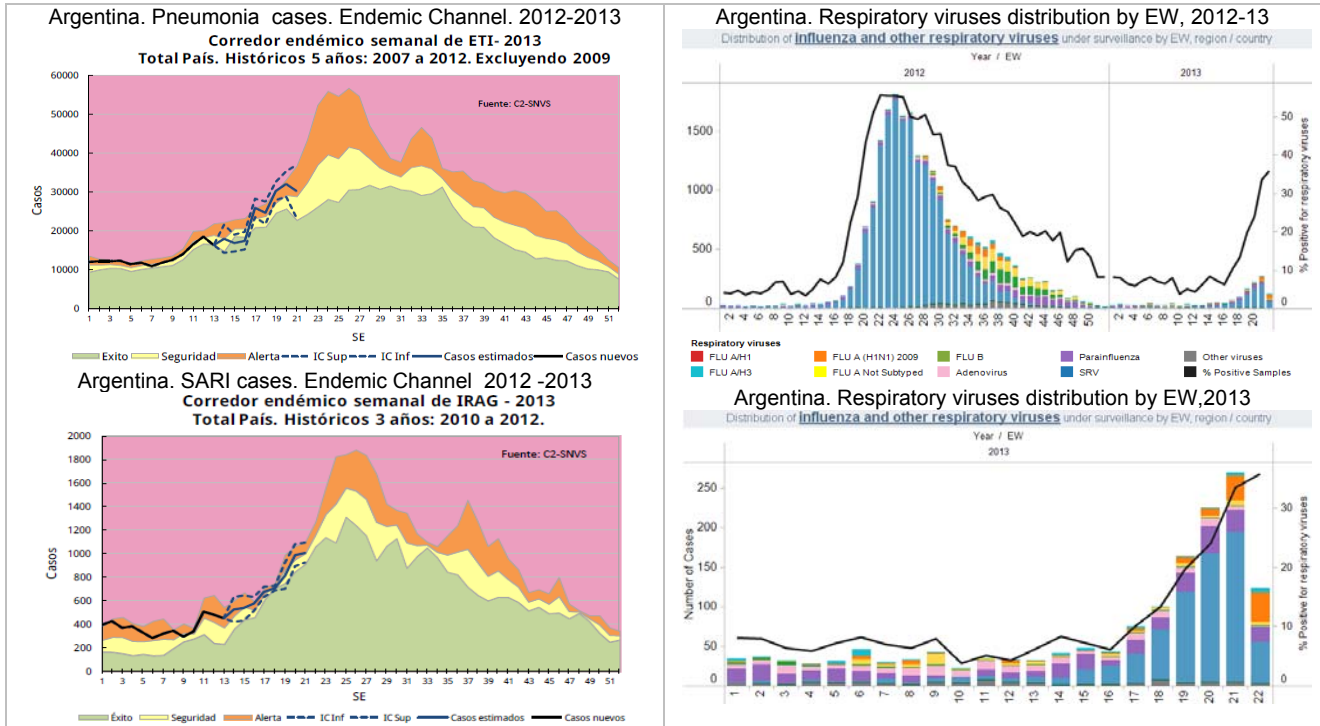


⁴ Perú. Sala de Situación de Salud. EW 21, 2013. Ministerio de Salud. Dirección General de Epidemiología

South America – Southern Cone

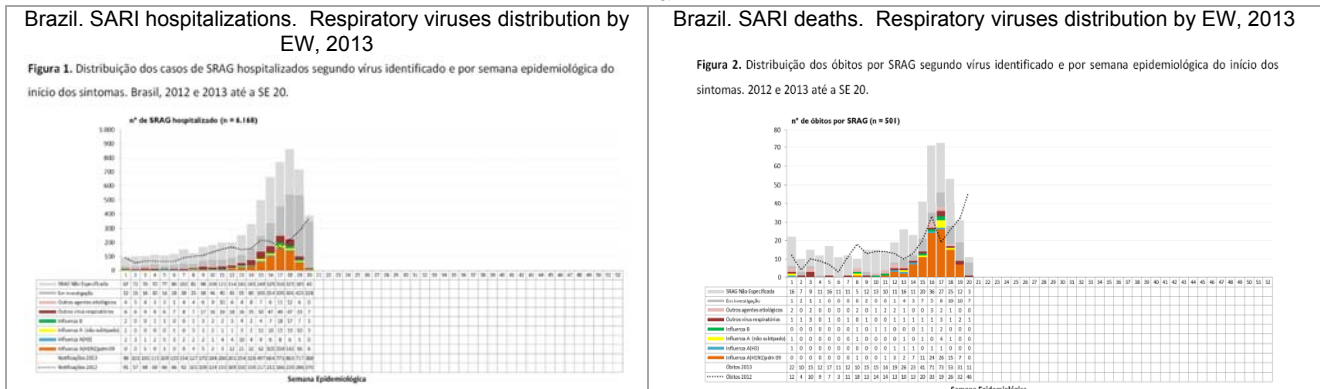
In Argentina⁵, according to national estimates, the activity of ILI and SARI during EW 21 were in the alert zone and below the epidemic threshold with increasing trends. According to national laboratory data, 1,748 samples were processed between EWs 20-21, of which 28% were positive for all respiratory viruses and 3% for influenza viruses. Among the positive samples, 71% were RSV (the predominant virus).

Argentina



In Brazil⁶, in the last weeks the number of SARI cases was above the level seen last year, and showed an increasing trend since EW 15, with predominance of influenza A(H1N1)pdm09. In the Southeastern and North regions, influenza A(H1N1)pdm09 predominated, while in the rest of the Regions, a co-circulation with A(H3N2) was reported. Among SARI deaths, similar characteristics were observed.

Brazil



In Chile⁷, nationally, in EW 21, 2013, the ILI activity (rate: 13.4/ 100,000 pop.) increased from the previous EW and remained in the alert zone of the endemic channel. The percentages of urgent visits for ILI in the children <15 years old and the 15-64 years old group were higher with respect to the previous years during this time of the year. According to national laboratory data, in EWs 20-21, 1,614 samples were analyzed, of which 30% were positive for respiratory viruses and 9% for influenza viruses. Among the positive samples,

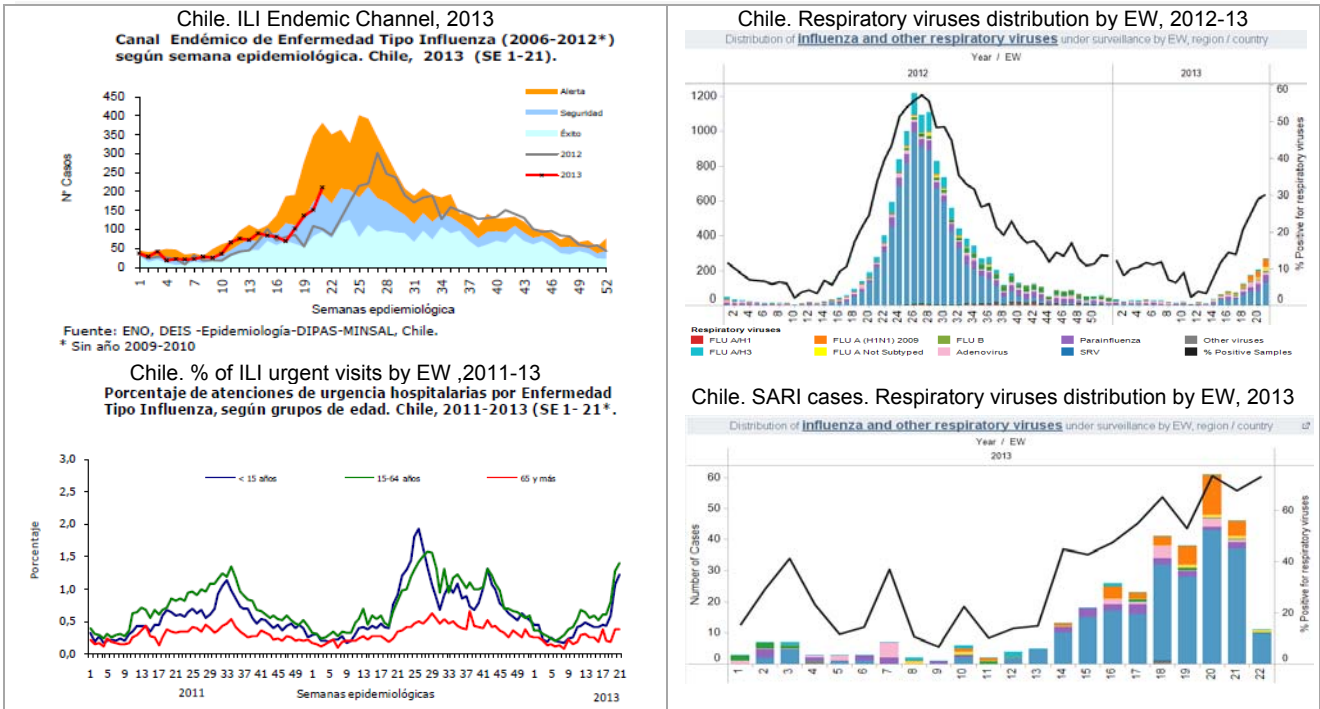
⁵ Argentina. Boletín integrado de vigilancia. SE 21.

⁶ Brasil. Boletim informativo. Secretaria de Vigilância em Saúde. SE 21, 2013.

⁷ Chile. Informe de situación. EW 21. Disponible en: www.pandemia.cl

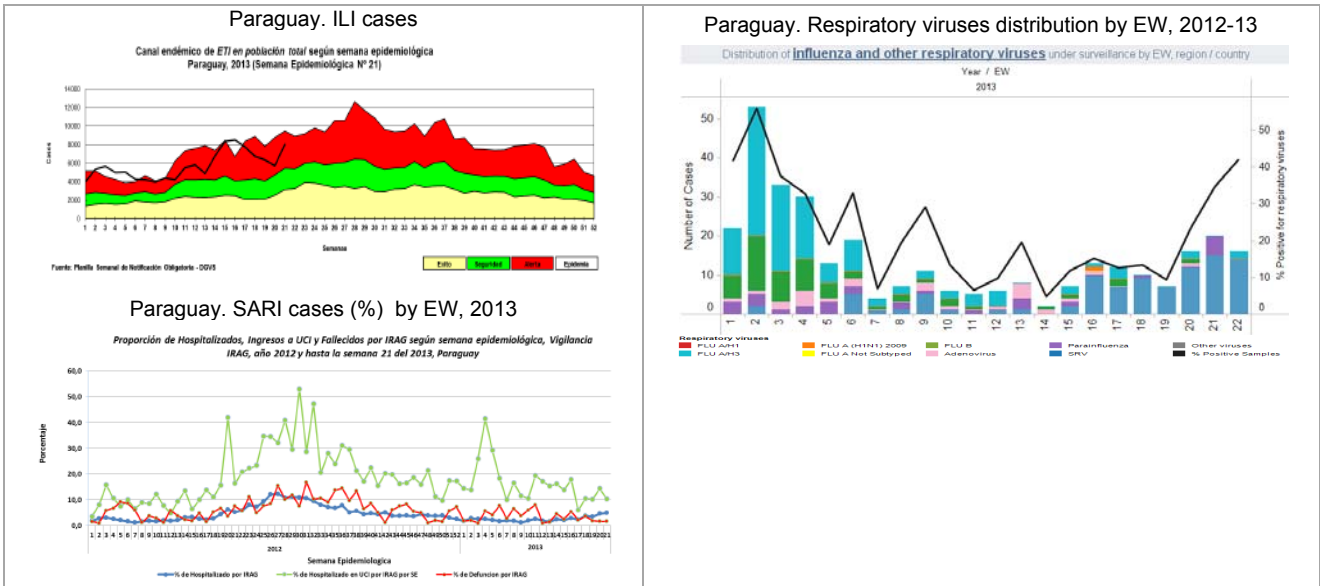
43% were RSV, which was the most prevalent virus, followed by influenza A(H1N1)pdm09 and parainfluenza. Among SARI cases, RSV was also the most prevalent virus detected.

Chile



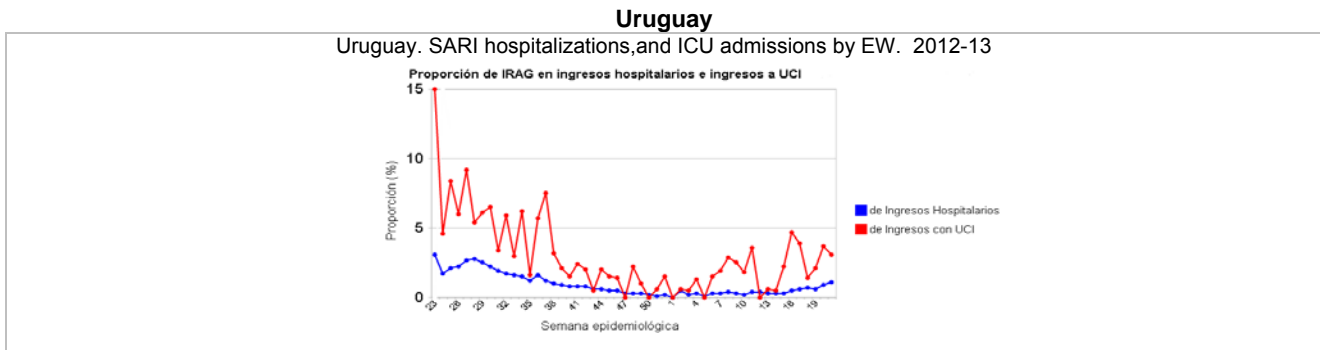
In Paraguay⁸, nationally in EW 21, the ILI consultation rate (121/100,000 hab) increased as compared to the one observed last week. The proportion of SARI-related hospitalizations (4.9%) increased as compared to the previous week. According to data from the national laboratory, among 126 samples processed between EWs 20-21, 29% were positive for respiratory viruses and 2.4% for influenza viruses. RSV was the most predominant virus. Among the 72 samples from SARI cases, in EWs 19-20, RSV predominated.

Paraguay



⁸ Paraguay. Informe de situación. Vigilancia de ETI e IRAG. SE 21, 2013

In Uruguay⁹, at the national level, the proportion of SARI hospitalizations in EW 21, increased as compared to the previous week; showing an increasing trend since EW 15. The occupation of hospital beds associated to ARI between EW 19-22, sampled the same increasing trend.



Special Topics:

Novel coronavirus infection

- WHO. Global Alert and Response: Novel coronavirus infection – update (May 29th, 2013)
http://www.who.int/csr/don/2013_05_29_ncov/en/index.html
- PAHO. Epidemiological alert: Human infection caused by novel coronavirus – update (May 17th, 2013)
http://new.paho.org/hq/index.php?option=com_content&view=article&id=8683%3A17-may-2013-middle-east-respiratory-syndrome-coronavirus-mers-cov-update-&catid=2103%3A--hsd0104d-most-recent-ea&Itemid=2291&lang=en

Avian influenza A(H7N9) virus

- Overview of the emergence and characteristics of the avian influenza A(H7N9) virus
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/WHO_H7N9_review_31May13.pdf
- PAHO. Epidemiological alert: Human infection caused by influenza A(H7N9) in China – update (May 8th, 2013)
http://new.paho.org/hq/index.php?option=com_content&view=article&id=8632%3A8-may-2013-human-infection-caused-by-avian-influenza-ah7n9-in-china-update&catid=2103%3A--hsd0104d-most-recent-ea&Itemid=2291&lang=en

Other links:

- WHO provisional recommendation on influenza A(H7N9) vaccine virus. 31 May 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/ProvisionalRecommendation_H7N9_31May13.pdf
- Interim WHO surveillance recommendations for human infection with avian influenza A(H7N9) virus. 10 May 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/InterimSurveillanceRecH7N9_10May13.pdf
- WHO Risk Assessment. Human infections with influenza A(H7N9) virus. 10 May 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/RiskAssessment_H7N9_13Apr13.pdf
- Laboratory biorisk management for laboratories handling human specimens suspected or confirmed to contain avian influenza A(H7N9) virus causing human disease. Interim recommendations. 10 May 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/InterimRecLaboratoryBioriskManagementH7N9_10May13.pdf
- Standardization of the influenza A(H7N9) virus terminology. 16 April 2013
http://www.who.int/influenza/human_animal_interface/influenza_h7n9/H7N9VirusNaming_16Apr13.pdf

⁹ Uruguay. Generador de gráficos de la división de epidemiología, Dirección General de Salud – Ministerio de Salud Pública