



Regional Update EW 38

Influenza
(October 4, 2011 - 17 h GMT; 12 h EST)

PAHO interactive influenza data: http://ais.paho.org/hip/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.

- In North America, influenza activity remains low.
- In Central America and the Caribbean, the predominance of respiratory syncytial virus (RSV) continued (Cuba, CAREC, Costa Rica, Guatemala, Nicaragua, Panama, and also in the Dominican Republic, after weeks of influenza B predominance); concerning influenza viruses, influenza A/H3N2 predominated (Cuba, Honduras and Nicaragua) and influenza A/H1N1 2009 circulated in lower quantities (Panama).
- In the Southern Cone, RSV continues to show a circulation with a decreasing trend (Chile). Concerning influenza viruses, an increase in circulation of influenza A/H1N1 2009 was observed in Bolivia; variable co-circulation of influenza A/H1N1 2009 and influenza A/H3 (Bolivia, Colombia, and Chile) was reported.

Epidemiologic and virologic influenza update

North America

In Canada¹, in epidemiological weeks (EWs) 37 and 38, influenza activity continued at inter-seasonal levels. Influenza-like Illness (ILI) consultation rates were 7.7 (EW 37) and 11.0 (EW 38) per 1,000 consultations; remaining below and within the expected for this time of year, respectively. In both weeks, a higher ILI consultation rate was observed among children less than 5 years old compared to other age groups. Rhinovirus detections increased to similar levels to peak levels observed in July. Few influenza detections were reported in EW 37 and 38, and the percentage of samples positive for influenza was less than 1%, as was observed in previous EWs. The influenza viruses detected were untyped influenza A, influenza A/H3N2 and influenza B.

In the United States², in EW 38, at the national level, the proportion of ILI consultations (~1%) remained below the national baseline (2.5%). The proportion of deaths attributed to pneumonia and influenza for EW 38 (6.4%) was slightly higher than its epidemic threshold for this time of year. In EW 38 no pediatric death associated with influenza were reported. During EW 38, among all samples tested (n=928), the percentage of samples positive for influenza continued to remain low (<1%), with sporadic detections of untyped influenza A, influenza A/H3 and influenza B.

In Mexico, in EW 38, according to laboratory data, of total samples received (n=45), the percentage of samples positive for respiratory viruses was 8.2%. Since EW 17, influenza and other respiratory virus activity has remained low. In the EW 38, untyped influenza A was detected.

Caribbean

CAREC, in EW 38, received epidemiological information from Barbados, Dominica, Jamaica, and Tobago. The proportion of admissions for Severe Acute Respiratory Infection (SARI) among all hospitalizations was (3.0%) higher compared to the previous week (1.3%). This increase was due to patients in Barbados and Jamaica. Children aged 6-48 months had the highest rate of SARI hospitalizations (7.8%) followed by those under 6 months (6.4%). One SARI-related death was noted during EW 38. According to laboratory data, RSV and rhinovirus were the primary viruses identified in recent weeks, with sporadic detection of influenza viruses and adenovirus.

In Cuba, in EW 38, among all samples tested (n=125), ~75% were positive for respiratory viruses and 24% of all samples tested were positive for influenza. The co-circulation of influenza A/H3 and RSV persisted with a sustained increase between EWs 29-37, which stabilized in EW 38 as compared to the previous EW.

In the Dominican Republic, according to laboratory data, in EW 39, among all samples tested (n=24), the percentage of samples positive for respiratory viruses was ~20%, which was lower than the previous week. The primary virus in circulation was RSV, followed by parainfluenza. In EW 39 no samples positive for influenza virus were detected.

In Jamaica, in EW 38, the proportion of Acute Respiratory Infection (ARI) consultations was 5.2%, which was higher than that reported for the previous week, but remained below the expected levels for this time of year. The proportion of admissions due to SARI was <1% and increased slightly compared to the previous week. There was one SARI death reported for EW 38. According to laboratory data, no influenza viruses have been detected since EW 20.

Central America

In Costa Rica, in EW 39, among all samples tested (n=132), the percentage of samples positive for respiratory viruses (~50%) has continued to increase since ~EW 29 through EW 38. This week the percentage positivity for respiratory viruses decreased slightly compared to the previous EW. RSV has been the predominant virus since EW 28 followed by adenovirus. In EW 39, no positives for influenza virus were detected.

In Guatemala, in EW 38, according to laboratory data, of all samples tested (n=17), ~50% were positive for respiratory viruses; RSV has been the only virus detected since EW 38 and the predominant one since EW 26, with a decreasing trend since its peak in EW 32.

In Honduras³, in EW 38, at the national level, the proportion of ILI consultations (~6.5%) increased slightly compared to EW 37 (~6%) and was similar to that observed in 2010 at the same time of year. Since its peak in EW 34, the proportion of SARI hospitalizations increased compared to the previous EW and remains below 10%. This week, no deaths associated with SARI were reported. According to laboratory data, in EW 38, of all samples tested (n=53), the positivity percentage for respiratory viruses was ~50%, and influenza A/H3 has been predominating since EW 30, in co-circulation with RSV, followed by parainfluenza and influenza B.

In Nicaragua, in EW 38, of all samples tested (n=44), the percentage of samples positive for respiratory viruses was ~4.5%, which was lower than the previous EW. RSV has been the predominant virus since EW 33. Concerning influenza viruses, in EWs 37 and 38, influenza A/H3 was detected. No influenza viruses have been detected since EW 09.

In Panama, in EW 38, among samples tested (n=8), since peaking in EW 31, RSV circulation was been decreasing. Concerning influenza virus, influenza A/H1N1 2009 circulated at low levels.

South America – Andean

In Bolivia, through EW 39, at the national level, 1,368 suspected cases and 397 confirmed cases confirmed cases of influenza A/H1N1 2009 were notified; 75% of these since EW 36 and most of them in Santa Cruz (east of the country). Regionally, a code red alert was declared in the department of Santa Cruz due to this A/H1N1 2009 outbreak, resulting in the suspension of educational activities in EW 40^{4,5}. The government has authorized the purchase of more than 50,000 vaccines for groups at risk. The most affected cities were Santa Cruz, Sucre, Chuquisaca and Tarija. According to Santa Cruz (CENETROP) laboratory data, since EW 33 a progressive increase of positive cases for influenza A/H1N1 2009 has been observed. In EW 37, of all samples tested (n=126), ~50% were positive for influenza virus, predominantly influenza A/H1N1 2009. According to SARI surveillance, in 2011 up to EW37, 166 SARI cases were reported, which were associated with influenza A/H1N1 2009; ~50% of them were between 15 and 54 years old and ~35% were between 5 and 14 years old. In La Paz (INLASA laboratory), in EW 38, of all samples tested (n=53), ~35% were positive for respiratory viruses, and both influenza A/H1N1 2009, influenza A/H3 and influenza B were detected.

In Colombia, according to the national laboratory⁶, in EWs 37 and 38, of all samples tested, the percent of positivity for respiratory viruses was <5%, and influenza A/H3 was the only detected virus in the last two EWs. During 2011, through EW 36, influenza A/H3 virus co-circulated with influenza A/H1N1 2009.

In Peru⁷, in EW 37, at the national level, ARI and pneumonia cases in children less than 5 years old increased and remained stable, respectively, compared to the previous EW, and remained below expected levels for this time of year. Through EW 31 of 2011, 271 pneumonia deaths were reported in children less than 5 years old (45% of which had between 2 and 11 months), which represents 19% less than the average reported in the last three years (2008-2010).

In Venezuela⁸, in EW 37, the ARI and pneumonia endemic channels showed a number of cases similar to the previous weeks and within the expected levels for this time of year; a higher incidence rate in those less than 1 year of age was observed. Concerning influenza viruses, in 2011 through September 23, of all samples tested (n=8,177), ~28% were positive for influenza A/H1N1 2009, ~4.5% for influenza A/H3 and <1% for influenza B.

South America – Southern Cone

In Chile⁹, in EW 38, ILI activity (3.9 consultations per 100,000 inhabitants) at the national level, was lower than the previous week (4.2 per 100,000 inhabitants), remaining within the expected levels for this time of year and decreasing since EW 35. In EW 38, the percentage of ICU admissions for respiratory causes in those less than 15 years old continued to decrease and was below the levels observed in 2010. In EW 38, no deaths associated with influenza A/H1N1 2009 were reported. According to laboratory data, in EW 38, among all samples tested at the national level, 9% were positive for respiratory viruses, 28% for parainfluenza, and 24% for RSV. Of these positives, RSV circulation has been decreasing since its peak in EW 22. In EW 37, influenza A represented 27% of detected viruses, and of these influenza A/H1N1 2009 has been the predominant virus, which has overall been decreasing since its peak in EW 32.

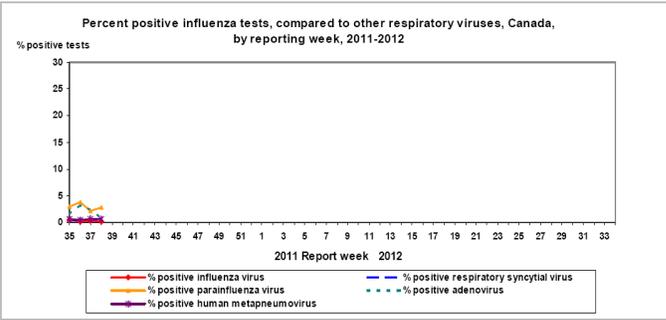
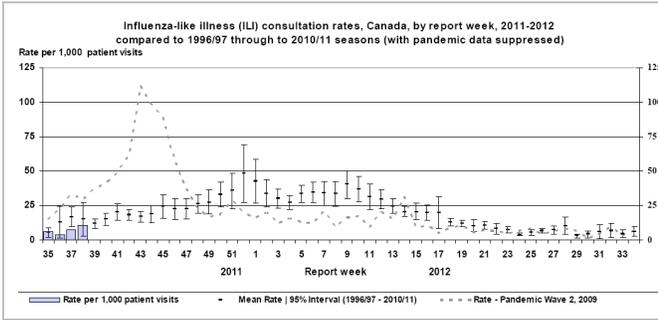
In Paraguay¹⁰, in EW 38, the proportion of ILI consultation was 9.2%, which was higher than the previous week. The proportion of SARI hospitalizations, ICU admissions and deaths remained below 10%. According to laboratory data, in EW 38, of all samples tested, no samples were positive for respiratory viruses.

In Uruguay¹¹, in EW 39, the proportion of SARI hospitalizations, ICU admissions and deaths remained <5%, and these proportions have been decreasing since peaking in EW 31.

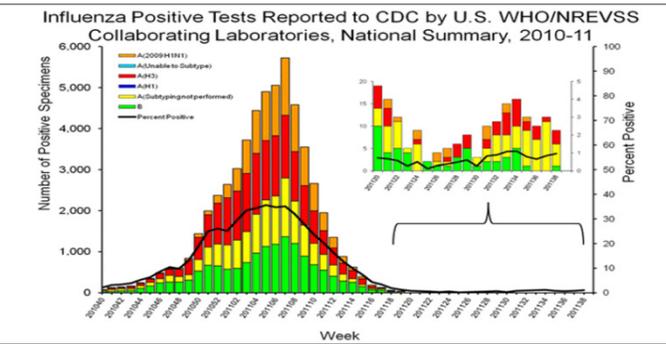
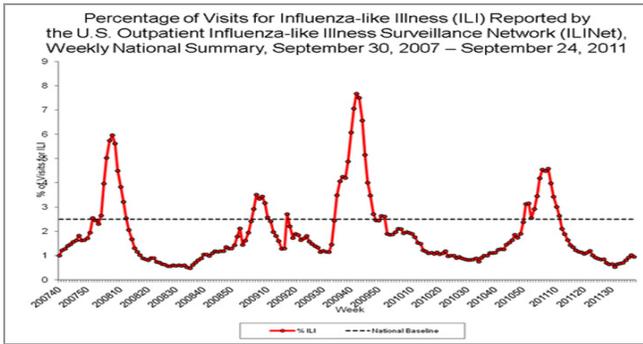
Graphs

North America

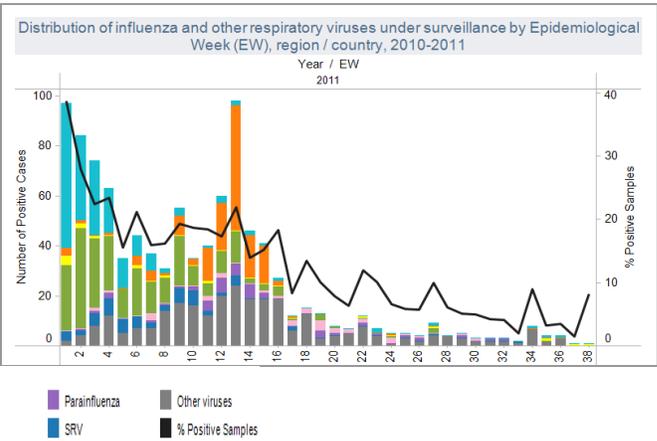
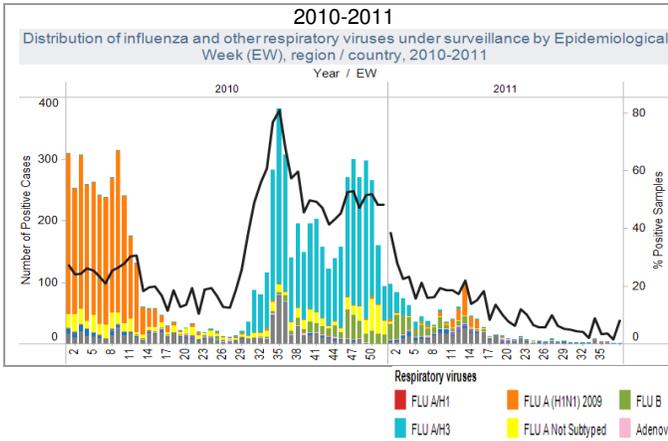
Canada



United States

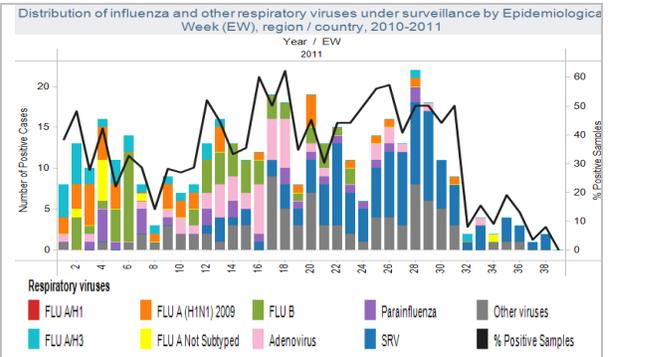
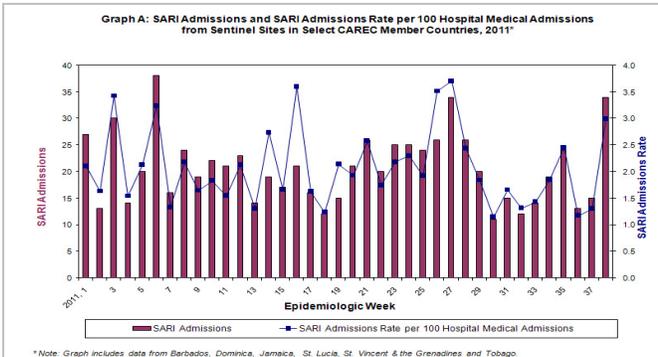


México



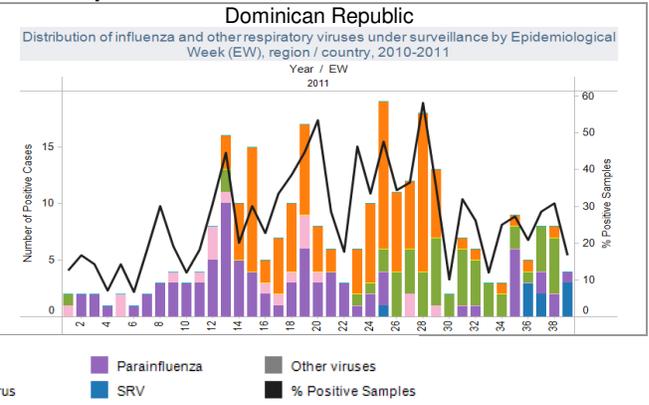
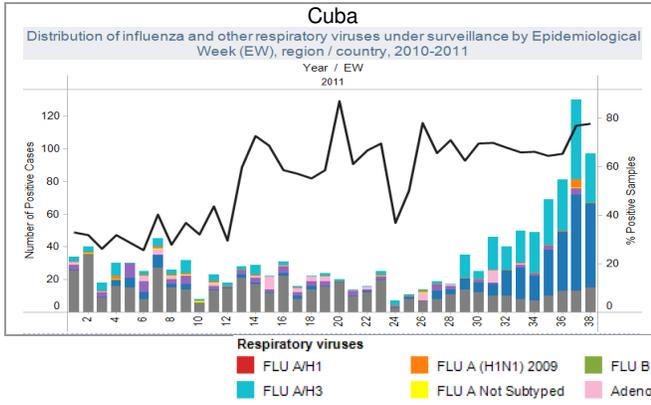
Caribbean

CAREC

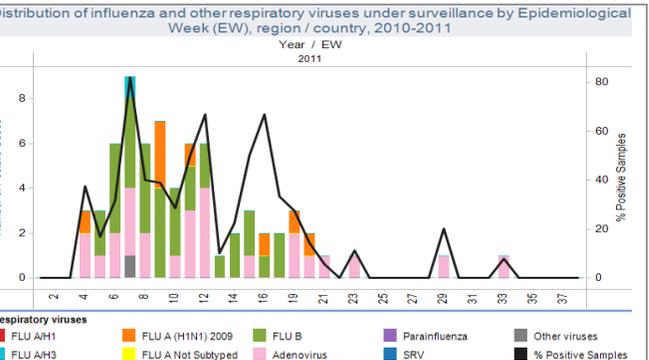
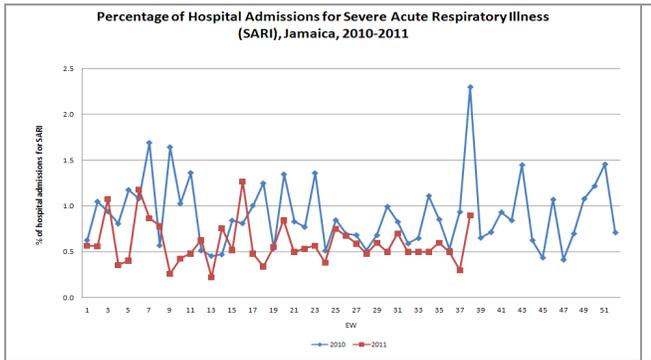


* Note: Graph includes data from Barbados, Dominica, Jamaica, St. Lucia, St. Vincent & the Grenadines and Tobago.

Cuba and Dominican Republic

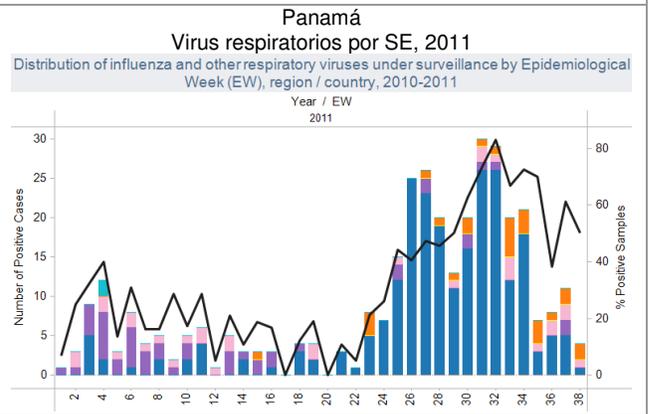
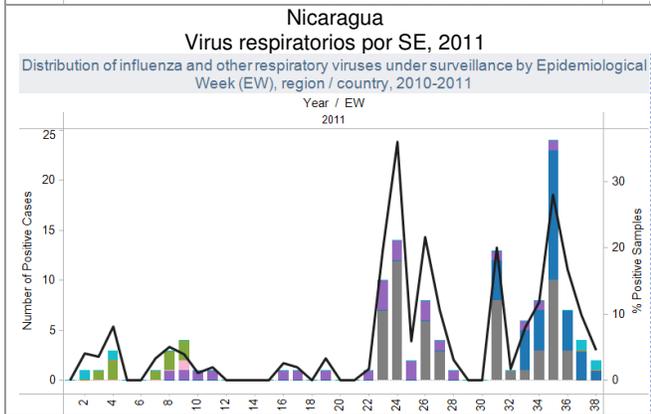
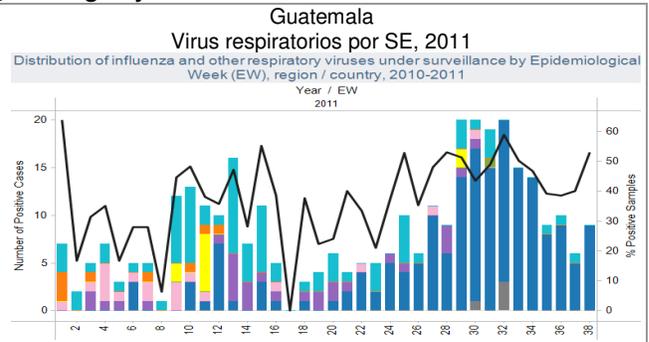
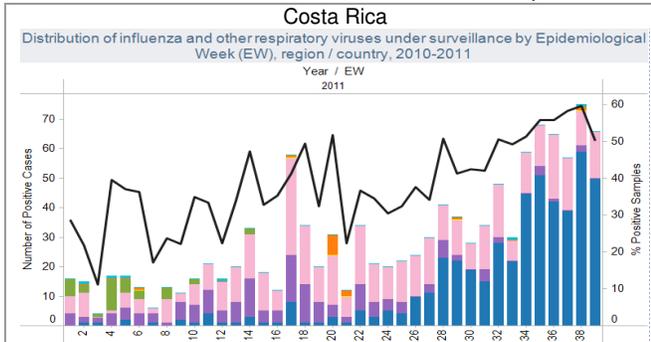


Jamaica



Central America

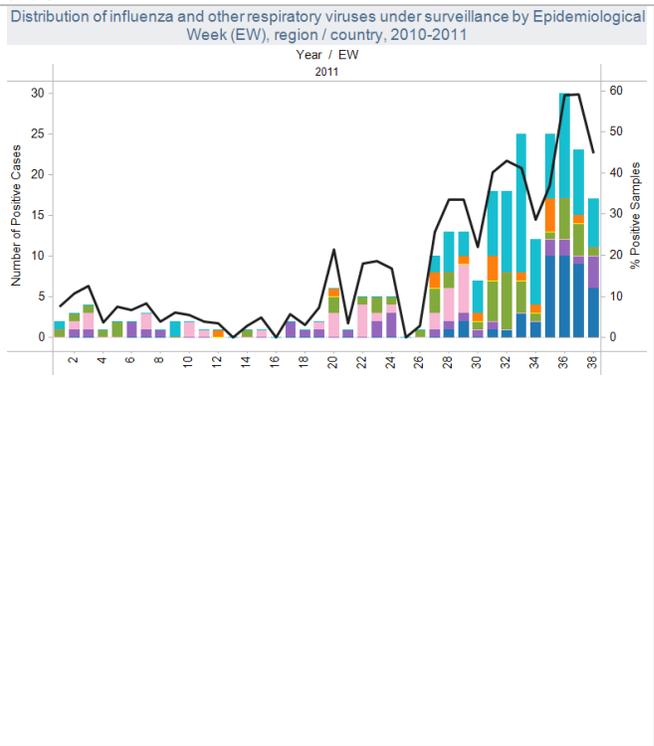
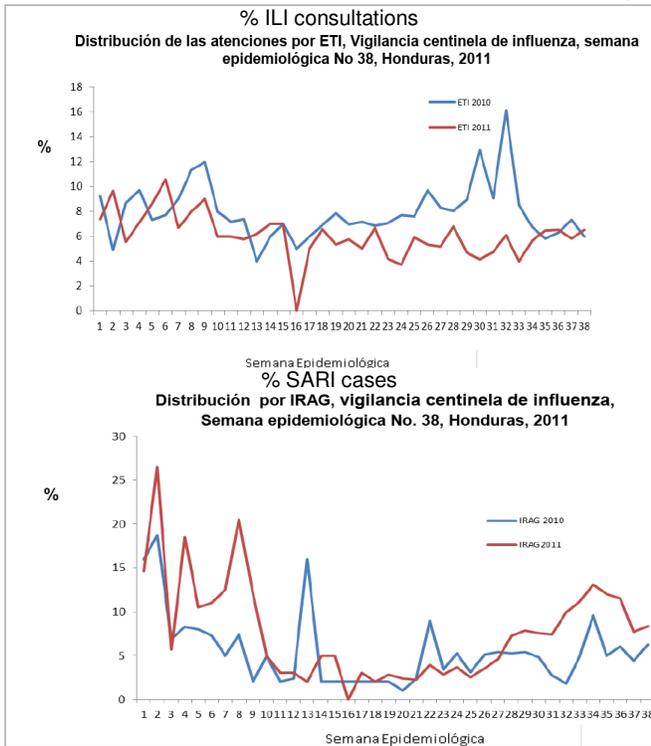
Costa Rica, Guatemala, Nicaragua y Panamá



Respiratory viruses

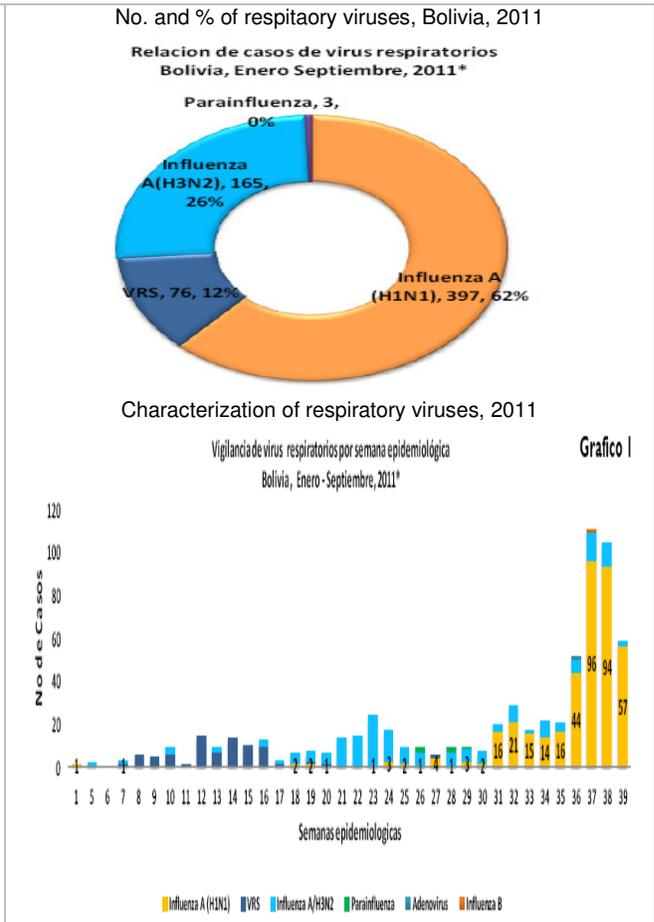
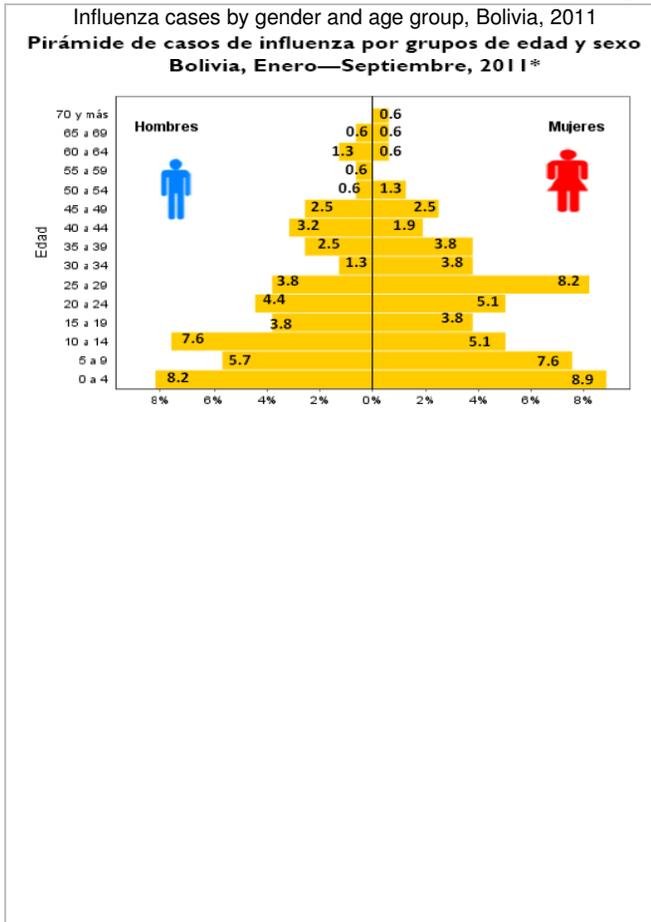
FLU A/H1	FLU A (H1N1) 2009	FLU B	Parainfluenza
FLU A/H3	FLU A Not Subtyped	Adenovirus	SRV
		Other viruses	% Positive Samples

Honduras

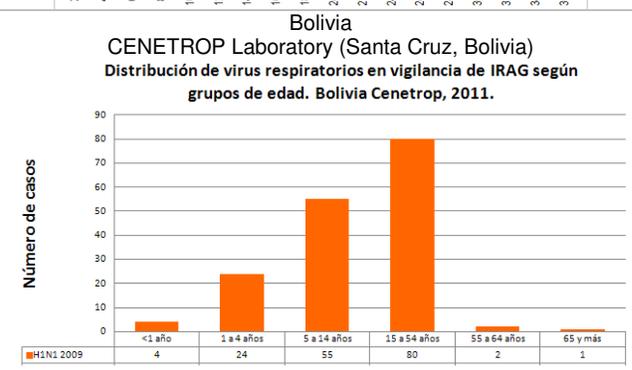
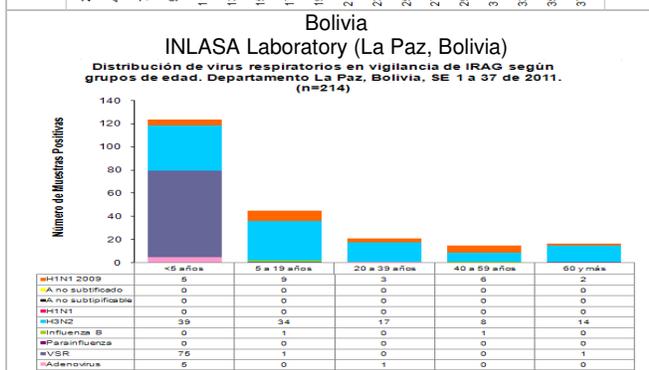
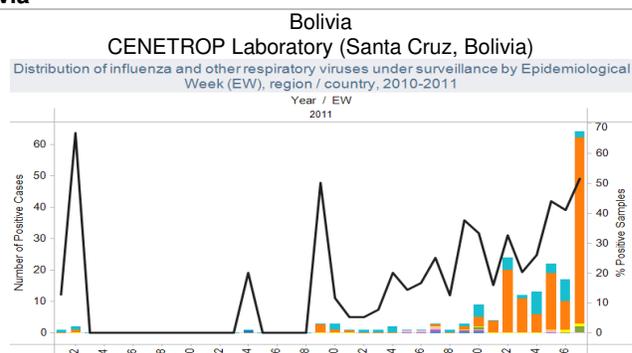
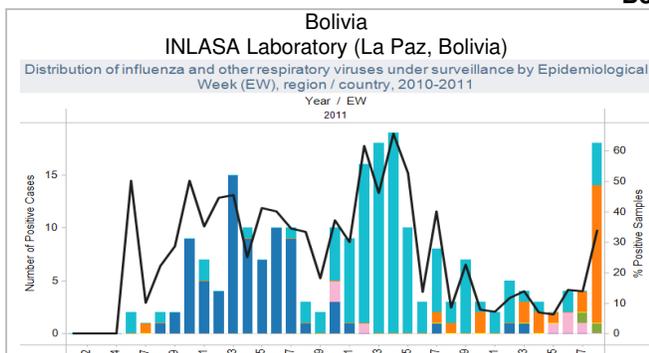


South America - Andean

Bolivia



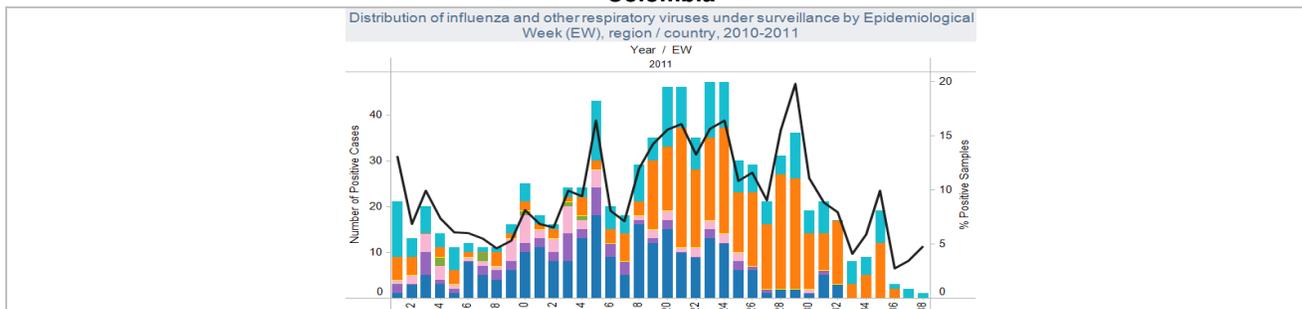
Bolivia



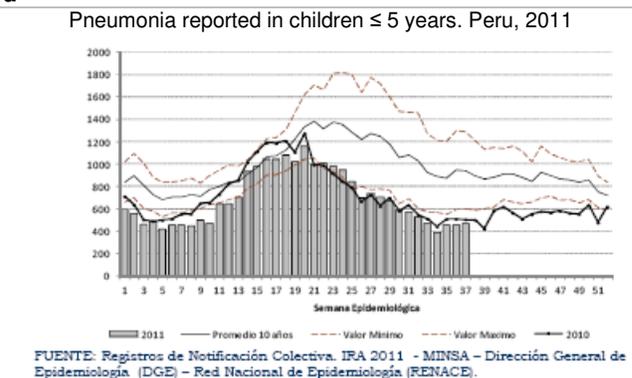
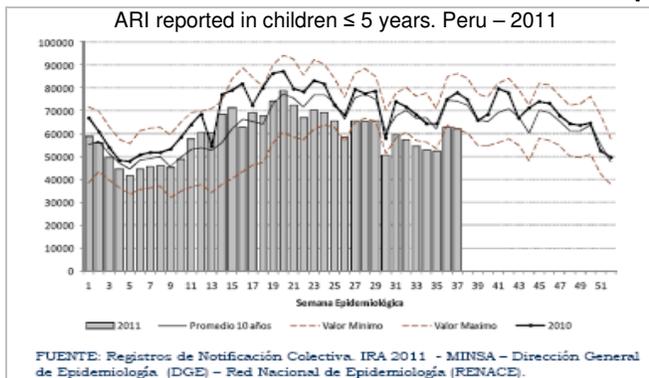
Respiratory viruses

- FLU A/H1 (Red)
- FLU A (H1N1) 2009 (Orange)
- FLU B (Green)
- Parainfluenza (Purple)
- Other viruses (Grey)
- FLU A/H3 (Cyan)
- FLU A Not Subtyped (Yellow)
- Adenovirus (Pink)
- SRV (Blue)
- % Positive Samples (Black line)

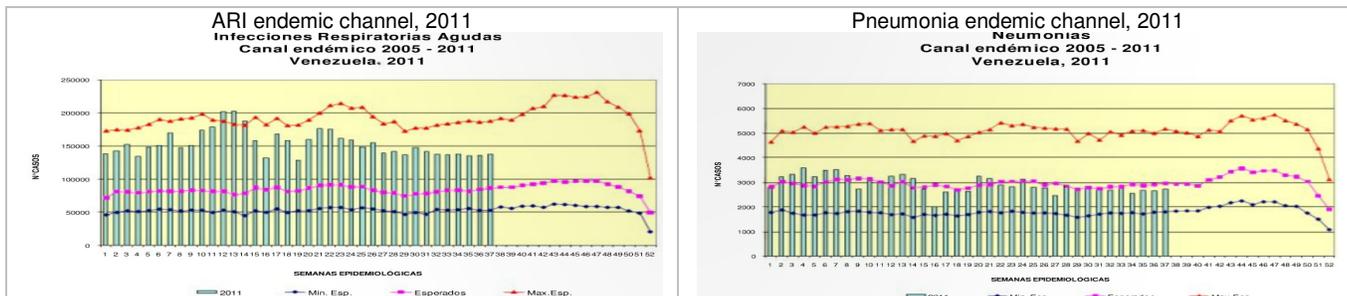
Colombia



Peru

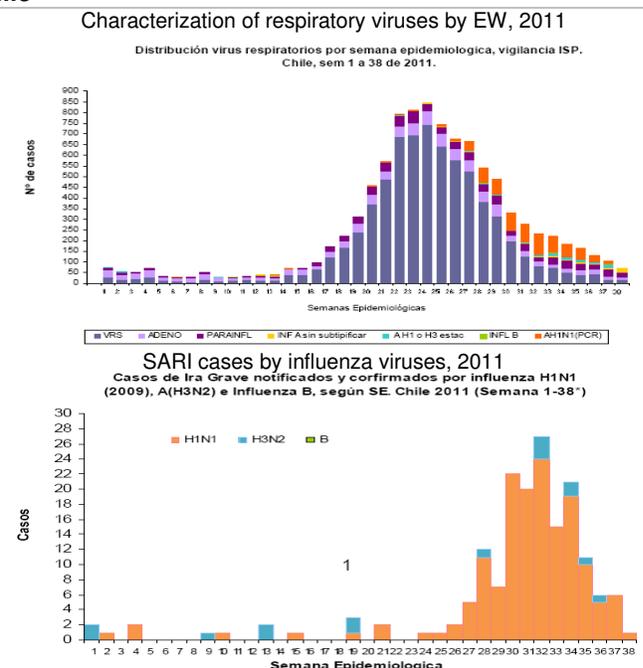
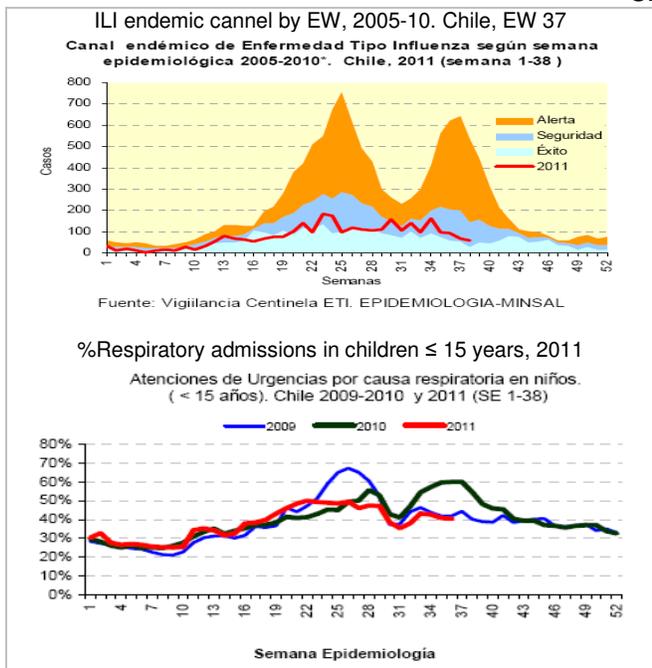


Venezuela

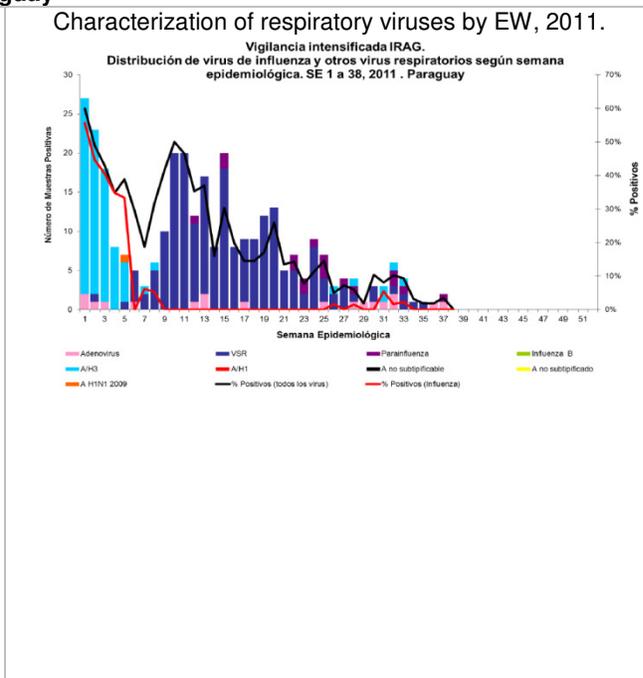
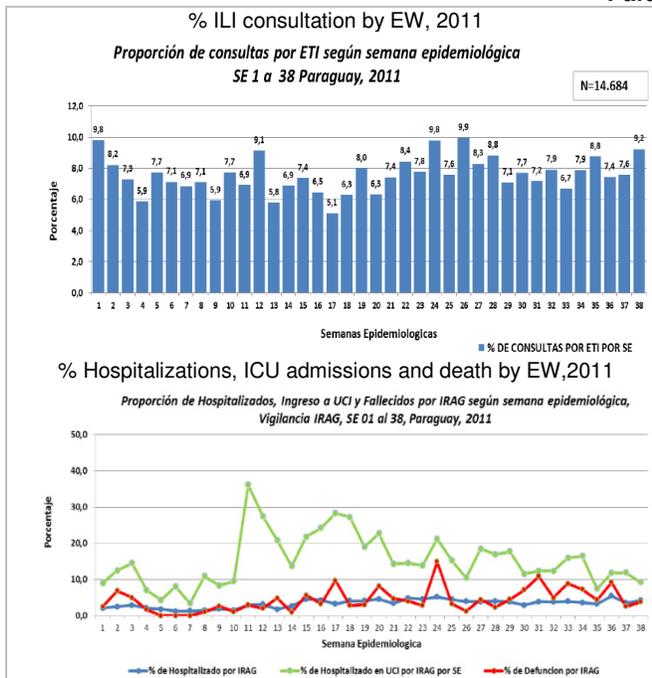


South America – Southern Cone

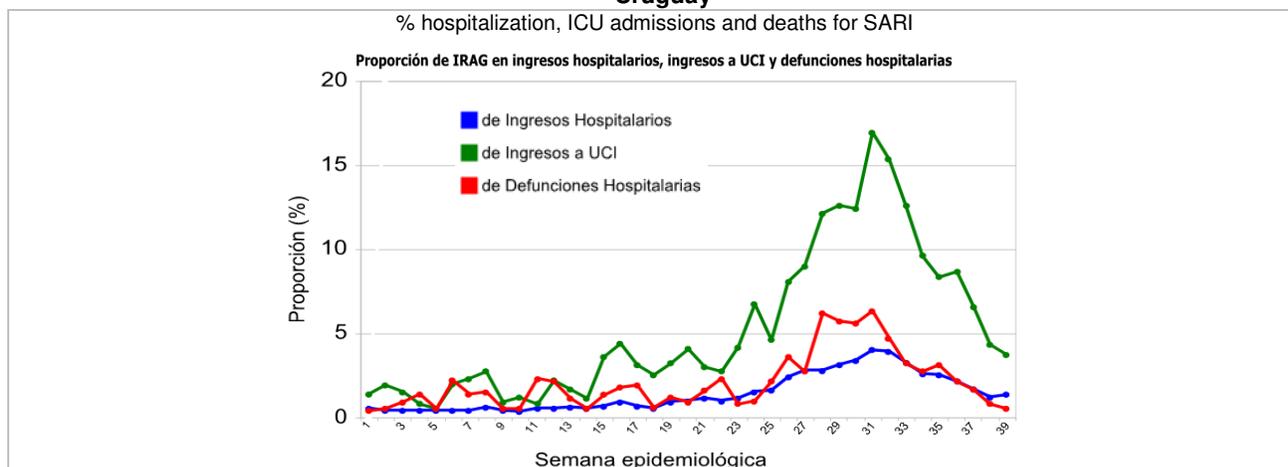
Chile



Paraguay



Uruguay



¹ FluWatch Report. EWs 37-38. <http://www.phac-aspc.gc.ca/fluwatch/>

² US Surveillance Summary. Week 38. Centers for Disease Control and Prevention

³ Honduras. Vigilancia centinela de Tegucigalpa y San Pedro Sula. SE 38

⁴ Bolivia. El correo del Orinoco. Disponible en: <http://www.correodelorinoco.gob.ve/multipolaridad/bolivia-declaran-alerta-roja-departamento-santa-cruz-por-brote-ah1n1/>

⁵ Bolivia. El deber. Disponible en: <http://www.eldeber.com.bo/vernotasantacruz.php?id=111001212544>

⁶ Colombia. Instituto Nacional de Salud.

⁷ Perú. Sala de Situación de Salud. SE 37. Ministerio de Salud. Dirección General de Epidemiología.

⁸ Venezuela. Boletín epidemiológico - SE 37. Ministerio del Poder Popular para la Salud. Disponible en: http://www.mpps.gob.ve/index.php?option=com_content&view=article&id=549&Itemid=915

⁹ Chile. Informe de situación. SE 38. www.pandemia.cl

¹⁰ Paraguay. Boletín epidemiológico semanal. SE 39. Ministerio de Salud Pública y Bienestar Social

¹¹ Uruguay. Dirección General de la Salud. División Epidemiología. SE 39. Disponible en: <https://trantor.msp.gub.uy/epidemiologia/servlet/iraggrafmenu>