



Epidemiological Update

Increase of influenza activity

31 May 2013

With the start of the influenza season in the southern hemisphere, several countries are experiencing an increase in patient visits for Influenza-like Illness (ILI), as well as hospitalizations associated with influenza, a situation that is expected for this time of year.

At the beginning of the flu season in the southern hemisphere, the Pan American Health Organization /World Health Organization (PAHO/WHO) recommend Member States to ensure the adequate clinical management of the patients, the strict implementation of prevention and control measures in health care settings, while at the same time strengthen preparedness of their health services to cope with a potential influx of patients and reinforce communication to the public on the preventative measures.

Current Situation

In **Argentina**, as of epidemiological week (EW)18 of 2013 the number of patient visits for ILI at the national level declined compared to what was registered in previous years, however, in some provinces like Buenos Aires, San Luis, Corrientes, Formosa, Catamarca, Jujuy and Tucumán the rates of patient visits for ILI are higher than what was previously registered. The hospitalizations by severe acute respiratory infection (SARI) in Santa Fe, La Rioja San Luis, Chaco, Salta, Santiago del Estero and Río Negro present higher rates than the previous year, in some provinces such as in Misiones, Santiago del Estero, Catamarca, Chaco and Río Negro the registered rates double the total rate of the country (18.4 x 100,000 people).

With regards to the laboratory data, influenza A(H1N1)pdm09¹ predominates among the viruses of influenza, followed by influenza A(H3), which corresponded with the components of the vaccine that were used during 2013 in the southern hemisphere.

In **Brazil**², based on the EW15, a greater activity of influenza was recorded in comparison to what was registered in previous weeks, which is expected at the beginning of the flu season in the southern hemisphere. Indeed, based on the (EW) 15 an increase of SARI as well as influenza-associated deaths have been recorded. The southern regions registered the greatest number of SARI and deaths associated with influenza. About 52.9% of the registered deaths from SARI presented at least one underlying clinical condition. Influenza A(H1N1)pdm09¹ predominates among the viruses of influenza .

¹ Notably, since the end of the influenza A(H1N1)pdm09 pandemic was declared in August 2010, the virus has been considered a seasonal strain, which signifies that it will circulate like other viruses and the clinical management and outbreak response is the same as for any other seasonal influenza virus.

² epidemiological Bulletin Boletim Epidemiológico – Influenza. Available at:
<http://portalsaude.saude.gov.br/portalsaude/texto/4471/787/Boletim-Epidemiologico.html>

In **Colombia**³, since the EW 6 of 2013, there was an increase in patient visits for ILI, hospitalizations and admission to Intensive Care Unit associated with influenza. Regarding hospitalizations associated with influenza, the most affected age group is 0 to 5 years old. According to the available historical data, this situation is within the expected.

With regards to the respiratory viruses circulating, from January to May, the respiratory syncytial virus (RSV) is predominant, followed by influenza A (H1N1)pdm09⁴ and adenovirus.

In **Cuba**⁵, as of EW 17 of 2013, 27 acute respiratory infection outbreaks were recorded, six more than what was reported in 2012, although the number of acute respiratory infections fluctuates around what was registered in the previous year. Among the circulating viruses, influenza A(H1N1)pdm09⁴ and rhinovirus predominates.

In **the Dominican Republic**, the influenza activity remains about the same throughout the year. The number of SARI recorded is below than expected although the number of deaths has been a mild increase.

With regard to the laboratory data, the proportion of positive samples of influenza surpassed 20% in the EW 3 of 2013 and increased up to 80% in the EW19. Among the influenza viruses, the predominant influenza virus is A(H1N1)pdm09⁴, followed by influenza A(H3N2).

In **Venezuela**⁶, an increase in acute respiratory infections from EW 1 to EW 13 of 2013 was recorded; from which the number of cases presented a decreasing trend although stayed within the expected maximum. The incidence rate was highest in the departments of Zulia, Miranda, Carabobo, Lara, Distrito Capital, Anzoategui, Aragua and Bolívar, which account for 60% of the recorded cases.

The predominant virus that circulates during this season is influenza A(H1N1)pdm09⁴, followed by influenza A(H3N2), rhinovirus, RSV and adenovirus. In children under the age of one the predominant viruses are: rhinovirus, RSV, and adenovirus. In adults over 60 years the predominant viruses are adenovirus and influenza A(H3N2).

More detailed information on the status of influenza and other respiratory viruses can be obtained in the weekly [Regional Update Influenza](#) published in the PAHO web page.

Recommendations

As per previous PAHO/WHO recommendations at the beginning of the flu season, Member States are reminded about the importance of an adequate case management, the implementation of prevention and control measures in health care settings, the strengthening of the health services and the communication to the public on the preventative measures.

³ Informe y Boletín Epidemiológico publicado por el Instituto nacional de Salud, disponible en <http://www.ins.gov.co/Noticias/Paginas/existe-circulacion-estacional-del-virus-de-influenza-A-H1N1.aspx>

⁴ Notably, since the end of the influenza A(H1N1)pdm09 pandemic was declared in August 2010, the virus has been considered a seasonal strain, which signifies that it will circulate like other viruses and the clinical management and outbreak response is the same as for any other seasonal influenza virus.

⁵ Boletín Epidemiología del Instituto Pedro Kouri disponible en <http://boletines.sld.cu/ipk/>

⁶ Boletín Epidemiológico publicado por el Ministerio del Poder Popular para la Salud http://www.mpps.gob.ve/index.php?option=com_phocadownload&view=sections&Itemid=949

PAHO/WHO does not recommend any travel restrictions including screening at points of entry related to the seasonal influenza activity.

Epidemiological and Laboratory Surveillance

Routine influenza surveillance activities should be continued, and should include both epidemiological and laboratory surveillance. Epidemiological surveillance should include out-patient cases of ILI and the hospitalizations by SARI. Clinical and epidemiological samples should be obtained for these cases and analyze them depending on the capacity of the national laboratory system.

To understand, identify and characterize influenza virus circulation, PAHO/WHO recommends following SARI surveillance guidelines, as indicated in the SARI Surveillance Protocol.

All specimens that cannot be subtyped and those with inconclusive or unexpected subtyping results should be forwarded, as soon as possible, to the WHO Collaborating Center for influenza, the United States Centers for Disease Control and Prevention for additional testing.

Response and Organization of Health Services

Health services have to prepare for a possible increase in the number of patients with respiratory symptoms. For this, detailed guidelines to assist countries in their preparation were elaborated by PAHO/WHO in 2009 and are available at:

http://new.paho.org/hq/index.php?option=com_content&view=article&id=3353&Itemid=2470&to=2256&lang=en.

One element of utmost impact on health services organization is the availability of a proper triage system. Its objective is to identify suspected cases in a timely manner in order to reduce the risk of viral transmission in outpatient and clinical care services (patients and health workers).

General measures for triage in primary care are: a) to identify a space that is adequate for dealing with cases of respiratory infection; b) to make available personal protection equipment to health personnel, according to the complexity of care, and c) to rigorously implement standard and droplet precautions in clinical care.

Case Management

Influenza should be suspected in any febrile patient, hospitalized with respiratory symptoms.

Some population groups are more susceptible to developing complications from influenza infection, and require special attention. Such groups include children less than 5 years of age, adults over 65 years of age, pregnant women, and individuals with underlying clinical conditions. In these cases antiviral treatment (e.g. oseltamivir) at the onset of symptoms should be considered.

Treatment should be initiated even in the absence of influenza laboratory confirmation. Treatment success rates are highest when treatment is administered early. For additional information, refer to:

http://new.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=8223&Itemid=

Infection prevention and control

Adequate measures must be implemented to prevent and control infections in all situations (standard and droplet precautions). When implementing aerosol generating procedures (such as bronchoscopy or any other procedure that produces respiratory tract aspiration), it is necessary for health care personnel to utilize particulate- filtering face piece respirators (N95, FFP2 or equivalent), eye protection, gown and gloves. Also, the procedure should take place in room that can be naturally or mechanically ventilated, according to WHO Guidelines.⁷

Information for the Public

The public should be made aware of the fact that the primary form of influenza transmission is through interpersonal contact. The following should be highlighted:

- Hand washing hands is the most effective way of reducing transmission.
- Disseminating knowledge of “respiratory etiquette” can also help prevent transmission of the virus.
- Individuals with fever should avoid leaving their homes to go to work or to other public places until the fever has subsided.

Vaccination

PAHO/WHO recommends that pregnant women be given the highest priority due to vulnerable complications. Additional risk groups to be considered for vaccination are children who are 6–59 months (with emphasis on 6-23 months), individuals with specific chronic medical conditions, and health-care workers.

Countries with existing influenza vaccination programs targeting any of these additional groups should continue to do so and should incorporate immunization of pregnant women into such programs.

References

1. Vaccines against influenza WHO position paper -Weekly Epidemiological Record. No. 47, 2012, 87, 461–476. 23 November 2012. Available at: <http://www.who.int/wer>
2. Operational guidelines for national surveillance intensified of severe acute respiratory infection (SARI) PAHO, 2011. Available in: http://new.paho.org/hq/index.php?option=com_content&view=article&id=3353&Itemid=2470&to=2256&lang=en

⁷ http://www.who.int/csr/resources/publications/infection_control/en/index.html