

# **Epidemiological Alert**

Increase of influenza activity in North America 14 January 2013

## Influenza Status in North America

In North America, there has been an increase in influenza circulation starting in the latter part of 2012 and extending into 2013. According to historical data, this increase in influenza activity in the United States of America has come earlier than expected.

In addition to increased outpatient visits and circulation intensity, the earlier occurrence of influenza activity may be causing an increase in hospital admissions, outbreaks in health care services, as well as an increase in antiviral prescriptions.

In the **United States of America**, the proportion of consultations for influenza-like illness (ILI) began to increase above the national baseline in epidemiological week (EW) 49 of 2012. Mortality due to pneumonia and influenza remained within what was expected for the last two weeks of 2012, but in EW 1, 2013 the epidemic threshold was surpassed. With regard to influenza-associated hospital admissions, the most affected age group is persons of  $\geq$  65 years, followed by the 0-4 year age group.

The predominant virus in this season has been influenza A(H3N2) (characterized as A/Victoria/361/2011-like), followed by influenza B (Yamagata and Victoria lineages) and influenza A(H1N1)pdm09) (A/California/7/2009-like). Three of these four strains are included in the 2012-2013 influenza vaccine of the northern hemisphere. With regards to antiviral resistance, of the subset of influenza cases analyzed this season, all are susceptible to oseltamivir and zanamivir.

In **Canada**, as in the United States of America, influenza activity began to increase starting in EW 48 of 2012, but in EW 1 of 2013, the ILI rate was slightly above what is expected for this time of year. During EW 1, the ILI rates were the highest among persons within 5-19 years of age.

The predominant virus circulating in this season in Canada is influenza A(H3N2) (A/Victoria/361/2011), followed by influenza B (Yamagata and Victoria lineages) and influenza A(H1N1)pdm09 (A/California/07/09). Three of these four strains are included in the 2012-2013 influenza vaccine of the northern hemisphere. With regards to antiviral resistance, of the subset of influenza cases analyzed this season, all are susceptible to oseltamivir and zanamivir.

In **Mexico**, influenza activity began in EW 41, and has gradually increased. Up to EW 51 of 2012, the percentage of health service visits for ILI and severe acute respiratory infection (SARI) had remained below 1% at a national level. However, positive rates for influenza have been between 20% and 40% since EW 44 to EW 51. At the national level, the endemic channel for SARI remains just above the 50th percentile.

In EW 52, 2012, there were no infections with influenza A(H1N1)pdm09 and the predominant virus at the national level was influenza B (Victoria and Yamagata lineage), followed by influenza A(H3N2). Three of these four strains are included in the 2012-2013 influenza vaccine of the northern hemisphere. The types and subtypes of influenza strains identified are susceptible to oseltamivir.

As with North America, several countries in Europe, North Africa, and the Eastern Mediterranean have reported an increase in influenza activity in recent weeks.

## Recommendations

In light of this situation, PAHO/WHO recommends to Member States that might face increased circulation of influenza viruses to ensure adequate clinical management of patients, the implementation of prevention and control measures, while enhancing the preparedness of their health services to cope with a potential influx of patients. PAHO/WHO does not recommend any travel restrictions including screening at points of entry.

PAHO/WHO reiterates the recommendations made in the 13 March 2012 Epidemiological Alert.

# **Epidemiological and Laboratory Surveillance**

Routine influenza surveillance activities should be continued, and should include both epidemiologic and laboratory surveillance. Epidemiological surveillance should include outpatient ILI and hospital admissions for SARI. In the latter cases, samples of clinical and epidemiological significance should be taken and analyzed within 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.

## **Health Services Response and Organization**

Health services have to prepare for a possible increase in the number of patients with respiratory symptoms. PAHO/WHO prepared detailed guidelines to assist countries in preparing for the 2009 influenza pandemic, which are available at: <a href="http://new.paho.org/hq/index.php?option=com\_content&view=article&id=3353&ltemid=2470&to=2256&lang=en">http://new.paho.org/hq/index.php?option=com\_content&view=article&id=3353&ltemid=2470&to=2256&lang=en</a>.

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.

# **Patient 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 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.<sup>1</sup>

#### 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

For countries considering initiating or expanding seasonal influenza vaccination programs, WHO recommends that pregnant women be given the highest priority.

Additional risk groups to be considered for vaccination, in no particular order of priority, are children aged 6–59 months, the elderly, 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.

<sup>1</sup> http://www.who.int/csr/resources/publications/infection\_control/en/index.html

## References

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