

Epidemiological Update

Increase of influenza activity in the Northern Hemisphere

5 December 2014

With the beginning of the influenza season in the Northern Hemisphere, the Pan American Health Organization /World Health Organization (PAHO/WHO) recommends Member States ensure appropriate clinical management of patients, strict implementation of infection prevention and control measures in health care services and access to adequate supplies of antivirals. Member States should continue vaccinations against influenza to reduce hospitalizations and avoid deaths.

Situation summary on influenza in North America

In **Canada**, the Public Health Agency of Canada (PHAC) reported that in epidemiological week (EW) 47 of 2014, influenza activity increased at the national level compared to the numbers registered in previous weeks. This increase has been recorded since EW 37. The predominant virus is influenza A(H3N2). During the 2014-2015 influenza season, the National Microbiology Laboratory (NML) characterized 10 A(H3N2) influenza A viruses of which two were antigenically similar to A/Texas/50/2012 (vaccine component), and eight showed reduced titers to antisera produced against strains recommended for the seasonal influenza A/H3 vaccine component.

In **Mexico**, influenza activity is within the endemic channel and the proportion of consultations for influenza-like-illness (ILI) and severe acute respiratory infection (SARI) remains lower than 2%.

In the **United States**, although influenza activity is low nationwide, some areas in the south of the country began to record moderate and high activity and further increase is expected in the coming weeks. The proportion of outpatients with ILI during EW 48 of 2014 reached 2.6%, above the national baseline of 2%. As of EW 48, pneumonia and influenza caused deaths remained below the epidemic threshold. The predominant virus is influenza A(H3N2).

The United States Centers for Disease Control and Prevention (US CDC) reported in a Health Advisory issued on 3 December 2014, that 48% of influenza A(H3N2) collected and analyzed in the United States between 1 October and 22 November 2014 (n = 85) were antigenically similar to the influenza A(H3N2), A/Texas/50/2012, virus that composes the influenza 2014-2015 vaccine in the Northern Hemisphere.

This signifies that there is a 52% difference (antigenic *drift*) between the influenza A(H3N2) circulating and the 2014-2015 vaccine component for the Northern Hemisphere. Even with this difference, the vaccine will protect against strains covered in the vaccine (non-drifted) and will have some effectiveness against the drifted strain, thus reducing severe cases and deaths associated with influenza.

More detailed information on the status of influenza and other respiratory viruses can be obtained in the [Regional Update on Influenza](#) published weekly on the website of the Pan American Health Organization / World Health Organization (PAHO/WHO).

Note: The recommendations for the 2015 Southern Hemisphere influenza vaccine include A/Switzerland/9715293/2013 (H3N2)-like virus— the drifted H3 virus which is circulating in Canada and the United States.

Recommendations

With the beginning of the influenza season in the Northern Hemisphere, PAHO/WHO re-emphasizes the following recommendations to Member States related to clinical management of patients, the implementation of prevention and control measures in health care settings, and public awareness on the preventative measures.

Case Management

Influenza should be suspected in all patients with fever and respiratory symptoms consulting health care services.

Some population groups are at greater risk to developing complications from influenza infection, and require special attention. Such groups include children less than 2 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 not wait for laboratory confirmation of influenza. 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.¹

Public Awareness

The public should be made aware that influenza is mainly transmitted through interpersonal contact. Accordingly, the following recommendations should be highlighted:

- Hand washing is the most effective way of reducing transmission.

¹ http://www.who.int/csr/resources/publications/infection_control/en/index.html

- Disseminating knowledge of “respiratory etiquette” can also help prevent transmission of the virus.
- Request individuals with fever to 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 in receiving the influenza vaccination, due to their vulnerability to complications from this illness. Additional risk groups to be considered for priority vaccination are children who are 6–59 months (with emphasis on 6-23 months), individuals with specific chronic medical conditions, and health-care workers.

References

1. CDC Health Advisory Regarding the potential for circulation of drifted Influenza A(H3N2) viruses. U.S. Centers for Disease Control and Prevention. Available at: <http://emergency.cdc.gov/han/han00374.asp>
2. FluView, Weekly U.S. Influenza Surveillance Report, prepared by the Influenza Division. U.S. Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/flu/weekly/>
3. Weekly Report, Public Health Agency of Canada. FluWatch. Available at: <http://www.phac-aspc.gc.ca/fluwatch/>
4. Mexico, Secretaria de Salud. Informes epidemiológicos de influenza de la Dirección General de Epidemiología. Available at: <http://www.epidemiologia.salud.gob.mx/informes/2014/influenza/influenzasemanas.html>

Related links

- Influenza Update. World Health Organization. Available at: http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/index.html
- Regional surveillance of influenza and other respiratory viruses. Pan American Health Organization. Available at: http://www.paho.org/hq/index.php?option=com_content&view=article&id=3352&Itemid=2469&to=2246&lang=en