

Epidemiological Update

Seasonal influenza in North America 2 January 2014

The 2013-2014 circulation of seasonal influenza in the northern hemisphere began officially in epidemiological week (EW) 40 of 2013, with an increase in the number of influenza-like illness (ILI) and hospitalizations reported starting in EW 50 of 2013. This is within expected levels for this time of year.

Every year, an increase in influenza is reported primarily during the autumn and winter months in the northern hemisphere. Currently, the predominant virus is influenza A(H1N1)pdm09, which is considered a seasonal virus, signifying that it will continue to circulate like other influenza viruses. Clinical management and outbreak response is the same as for other seasonal influenza viruses.

The Pan American Health Organization (PAHO) / World Health Organization (WHO) recommends that Member States continue their surveillance efforts to detect any unusual behavior of the influenza virus and to identify if any new subtypes emerge. In addition, Member States are encouraged to continue activities of seasonal vaccination to avert influenza hospitalizations and deaths.

Situation summary of influenza in North America

In **Canada**, the Public Health Agency of Canada (PHAC) continues to report an increase in influenza activity. Up to EW 50 of 2013, 8 of the 10 Canadian regions reported sporadic¹ or localized² influenza activity. The number of pediatric hospitalizations for influenza continues to increase while the number of adults hospitalized has decreased slightly. In sentinel hospitals, 98% of adult and 81% of pediatric influenza cases have been influenza A infections, predominantly influenza A(H1N1)pdm09.

In **Mexico**, influenza activity has also been increasing this season. The percentage of visits for ILI and severe acute respiratory infection (SARI) has remained below 1% of the total national consultations. Among samples tested in the laboratory for influenza virus, the positivity rate for influenza has been about 20%. The SARI endemic channel shows that SARI activity remains below the 50th percentile. Of the influenza viruses circulating in Mexico, influenza A(H1N1)pdm09 is predominant.

In the **United States**, the proportion of ILI consultations began to increase from in EW 50 of 2013. As of EW 51 of 2013, the mortality from pneumonia and influenza was below the epidemic threshold. Although national influenza activity is low, some Southern areas of the country began reporting increasing influenza activity and further increases are expected in the coming weeks.

¹ Sporadic activity (definition of the Public Health Agency of Canada): Sporadic ILI Occurrence and detection of cases of laboratory-confirmed influenza, with no occurrence of outbreaks.

² Localized activity (definition of the Public Health Agency of Canada): (1) evidence of increased ILI, (2) detection of laboratory-confirmed cases of influenza, (3) outbreaks in schools, hospitals, nursing homes, and / or other establishments, occurring in 50% or more of the influenza surveillance regions.

The US Centers for Disease Control and Prevention (CDC) reported in its Health Alert of 24 December 2013 that between November and December 2013 there had been several reports of serious respiratory disease among young and middle-aged adults, with many of them having influenza A(H1N1)pdm09. To date, the spectrum of the disease has been moderate to severe with no difference observed as compared to previous seasons. The CDC alert notes that no significant changes have been noted to suggest greater virulence or transmissibility of the virus. CDC continues to monitor for antigenic and genetic changes in the circulating viruses, as well as any changes in morbidity and mortality that could indicate a greater severity of infection.

Recommendations

PAHO/WHO recommends that Member States continue their surveillance efforts to detect any unusual behavior of the influenza virus and to identify if any new virus subtypes emerge.

In light of the commencing influenza season in the northern hemisphere, PAHO/WHO reminds Member States to continue to follow the recommendations provided in the 31 May 2013 Epidemiological Update on Influenza, available at:

http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=21763&Itemid=

References

- 1. Notice to Clinicians: Early reports of pH1N1-Associated Illnesses for the 2013-14 Influenza Season. Available at: http://emergency.cdc.gov/HAN/han00359.asp
- 2. Flu View Weekly Influenza Surveillance Report. 2013-2014 Influenza Season Week 51 ending December 21, 2013. Available at: http://www.cdc.gov/flu/weekly/
- 3. Public Health Agency of Canada Report. FluWatch. Available at: http://www.phac-aspc.gc.ca/fluwatch/

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. Available at:
 http://www.paho.org/hq/index.php?option=com_content&view=article&id=3352&Itemid=2469&to=2246&lang=en