

Health Advisory: Seasonal Influenza A(H3N2) Activity and Antiviral Treatment Recommendations

Minnesota Department of Health Thursday, December 28, 2017

Action Steps:

Local and tribal health departments: Please forward to hospitals, urgent care clinics, and primary care providers, including pediatricians in your jurisdiction.

Hospitals and clinics: Please distribute to healthcare providers.

Healthcare providers:

- Consider influenza high on the list of possible diagnoses for ill patients because influenza activity is increasing in Minnesota and nationwide.
- Treat all hospitalized patients and all high-risk patients (either hospitalized or outpatient) with suspected influenza with a neuraminidase inhibitor antiviral (e.g. Tamiflu®), zanamivir (Relenza®), and peramivir (Rapivab®). While antiviral drugs work best when treatment is started within 2 days of illness onset, clinical benefit has been observed even when treatment is initiated later.
- Promote other prevention strategies: hand washing with soap and water, covering your cough, and staying home when sick.
- Encourage patients to receive an annual influenza vaccination.

Background

In the United States (U.S.), influenza activity has increased significantly over recent weeks with influenza A(H3N2) viruses predominating so far this season. (See MDH's Weekly Influenza and Respiratory Disease Report for current influenza activity in Minnesota:

http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/index.html) In the past, A(H3N2) virus-predominant influenza seasons have been associated with more hospitalizations and deaths in persons aged 65 years and older and young children compared to other age groups. In addition, influenza vaccine effectiveness (VE) in general has been lower against A(H3N2) viruses than against influenza A(H1N1)pdm09 or influenza B viruses. Last season, VE against circulating influenza A(H3N2) viruses was estimated to be 32% in the U.S. CDC expects that VE could be similar this season, should the same A(H3N2) viruses continue to predominate. For this reason, in addition to influenza vaccination for prevention of influenza, the use of antiviral medications for treatment of influenza becomes even more important than usual.

CDC issued a Health Advisory on December 27 that includes: 1) a notice about increased influenza A(H3N2) activity and its clinical implications; 2) a summary of influenza antiviral drug treatment recommendations; 3) an update about approved treatment drugs and supply this season; 4) information on influenza testing; and 5) background information for patients about influenza treatment. CDC HAN: Seasonal Influenza A(H3N2) Activity and Antiviral Treatment of Patients with Influenza (https://emergency.cdc.gov/han/han00409.asp). We include a condensed summary of the antiviral recommendations below.

All Hospitalized, Severely III, and High-Risk Patients with Suspected or Confirmed Influenza Should Be Treated with Antivirals

Any patient with suspected or confirmed influenza in the following categories should be treated as soon as possible with a neuraminidase inhibitor:

- 1) Any patient who is hospitalized—treatment is recommended for all hospitalized patients;
- 2) Any patient who has severe, complicated, or progressive illness—this may include outpatients with severe or prolonged progressive symptoms or who develop complications such as pneumonia but who are not hospitalized;
- 3) Any patient who is at higher risk for influenza complications but not hospitalized. Patients in this group include:
 - children younger than 2 years (although all children younger than 5 years are considered at higher risk for complications from influenza, the highest risk is for those younger than 2 years)
 - adults aged 65 years and older
 - persons with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), and metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopment conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury)
 - people with immunosuppression, including that caused by medications or by HIV infection
 - women who are pregnant or postpartum (within 2 weeks after delivery)
 - people aged younger than 19 years who are receiving long-term aspirin therapy
 - American Indians/Alaska Natives
 - people with extreme obesity (i.e., body-mass index is equal to or greater than 40)
 - residents of nursing homes and other chronic-care facilities

Timing of Treatment and Implications for Patient Evaluation, Treatment, and Testing

Clinical benefit is greatest when antiviral treatment is administered as early as possible after illness onset. Therefore, antiviral treatment should be started as soon as possible after illness onset and should not be delayed even for a few hours to wait for the results of testing. Ideally, treatment should be initiated within 48 hours of symptom onset. However, antiviral treatment initiated later than 48 hours after illness onset can still be beneficial for some patients.

Antivirals in Non-High Risk Patients with Uncomplicated Influenza

Neuraminidase inhibitors can benefit other individuals with influenza. While current guidance focuses on antiviral treatment of those with severe illness or at high risk of complications from influenza, antiviral treatment may be prescribed on the basis of clinical judgment for any previously healthy (non-high risk) outpatient with suspected or confirmed influenza who presents within 2 days after illness onset.

Assess need for antibiotics and pneumococcal vaccination

Because certain bacterial infections can produce symptoms similar to influenza and bacterial infections can occur as a complication of influenza, bacterial infections should be considered and appropriately treated, if suspected. In addition, because pneumococcal infections are a serious complication of influenza infection, current pneumococcal vaccine recommendations for adults 65 years of age or older, as well as adults and children at increased risk for invasive pneumococcal disease due to chronic

underlying medical conditions, should be followed (see Pneumococcal Vaccination: Information for Healthcare Professionals [http://www.cdc.gov/vaccines/vpd-vac/pneumo/vac-PCV13-adults.htm] and Pneumococcal Vaccination: What Everyone Should Know [http://www.cdc.gov/vaccines/vpd-vac/pneumo/vacc-in-short.htm] for further information).

For more information visit MDH's Influenza (Flu) website at www.mdhflu.com.

For questions, please call 651-201-5414.

A copy of this HAN is available at www.health.state.mn.us/han/.

The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.