



## **Provider Health & Safety Alert The Potential for Circulation of Drifted Influenza A (H3N2) Viruses December 4, 2014**

Although very early in the Influenza Season, sentinel monitoring from the CDC has indicated the potential for the circulation of a Drifted Strain of the Influenza A H3N2 Virus. Antigenic drift is an accumulation of mutations to the Influenza virus that results in a decreased ability of seasonal Influenza vaccine to protect against the drifted virus. Influenza viral characterization data indicates that 48% of the influenza A (H3N2) viruses collected and analyzed in the United States from October 1 through November 22, 2014 were antigenically "like" the 2014-2015 influenza A (H3N2) vaccine component, but that 52% were antigenically different (drifted) from the H3N2 vaccine virus. In past seasons during which predominant circulating influenza viruses have been antigenically drifted, decreased vaccine effectiveness has been observed.

During past seasons **when influenza A (H3N2) viruses have predominated, higher overall and age-specific hospitalization rates and more mortality have been observed, especially among older people, very young children, and persons with certain chronic medical conditions** compared with seasons during which influenza A (H1N1) or influenza B viruses have predominated.

This advisory is issued to increase attention to the potential for interaction with individuals who experience a more severe case of influenza, especially those at higher risk for influenza complications. This list includes but not limited to:

- children aged younger than 2 years;
- adults aged 65 years and older;
- persons with chronic pulmonary (including asthma), cardiovascular, renal, hepatic, hematological, and metabolic disorders (including diabetes mellitus), or neurologic and neurodevelopment conditions
- persons with immunosuppression, including that caused by medications or by HIV infection;
- women who are pregnant or postpartum (within 2 weeks after delivery);
- persons aged younger than 19 years who are receiving long-term aspirin therapy;
- persons who are morbidly obese (i.e., body-mass index is equal to or greater than 40); and
- residents of nursing homes and other chronic-care facilities

The CDC is encouraging clinicians to consider implementing antiviral treatment with confirmed or suspected influenza, if treatment can be initiated within 48 hours of illness onset. System providers should attempt to assist in determining the onset of symptoms so such patients can be identified as early as possible for consideration for such pharmacological intervention.

The influenza vaccine available to providers covers three or four influenza viruses depending on the influenza vaccine—an influenza A (H1N1) virus, an influenza A (H3N2) virus, and one or two influenza B viruses. Therefore, even if vaccine effectiveness is reduced against drifted circulating viruses, the vaccine will protect against non-drifted circulating vaccine viruses. Further, there is evidence to suggest that vaccination may make illness milder and prevent influenza-related complications. Such protection is possible because antibodies created through vaccination with one strain of influenza viruses will often “cross-protect” against different but related strains of influenza viruses. Providers are still encouraged to obtain a current seasonal influenza vaccine.

Finally, even with a potential increase in influenza activity and viral drift, the current isolation precautions outlined in the System COGs and Seasonal Influenza Health and Safety Alert are effective in providing protection to patients, providers, and the community. **These Precautions offer practical and effective measures for isolating the disease organism whatever it is.**

When confronted by any patient presenting with an acute febrile respiratory illness, which may **include fever plus one or more** of the following: **nasal congestion/ rhinorrhea, sore throat or cough.**

PPE: Requires the use of **Droplet Precautions** which includes:

If you will be within 6 feet of the patient:

A **Surgical Mask** should be worn by the **provider**

A **Surgical Mask** should be placed on the **patient**

**Continue to use precautions to manage patients until it is determined the cause of symptoms is not an infectious agent that requires precautions beyond standard precautions.**

**All providers should be attentive to; minimizing the transfer of any potentially infectious materials acquired during patient contact to medical equipment, stretchers, and other ancillary tools so as to lessen the chances of cross contamination and infection. Ensure proper hand hygiene after patient care.**

It is vital that any control measures are implemented quickly and sustained in order to prevent additional transmission. For additional guidance on implementing control measures and to report unusual incidents occurring during any of your agency’s responses, contact the System Infection Preventionist.

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