Nebraska Department of Health and Human Services

HEALTH ALERT NETWORK

Department of Health & Human Services
DHHS
NEBRASKA

TO: Nebraska Healthcare Providers & Laboratories

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RE: 2014-15 Influenza Vaccination and Testing Guidelines
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In the midst of all the concerns generated by Ebola in West Africa and its importation into the United States, we tend to overlook real and bigger threats to individual and public health here in Nebraska. Chief among these is the risk of influenza, a preventable disease. Health-care providers should be offering flu vaccination to all persons aged ≥6 months without contraindications. Flu shots are approved for use in pregnant women and people with chronic health conditions.

Influenza Vaccine Composition

For 2014–15, U.S.-licensed influenza vaccines will contain the same vaccine virus strains as those in the 2013–14 vaccine.

- Trivalent influenza vaccines will contain hemagglutinin (HA) derived from an A/California/7/2009 (H1N1)-like virus, an A/Texas/50/2012 (H3N2)-like virus, and a B/Massachusetts/2/2012-like (Yamagata lineage) virus.
- Quadrivalent influenza vaccines will contain these antigens, and also a B/Brisbane/60/2008-like (Victoria lineage) virus.

What are the new recommendations?

Because the virus composition of the 2014–15 seasonal influenza vaccine is the same as it was for the 2013–14 season, children aged 6 months through 8 years need only 1 dose of vaccine in 2014–15 if they received ≥1 dose of 2013–14 seasonal influenza vaccine, regardless of previous vaccination history. There are also new recommendations regarding the use of live attenuated influenza vaccine (LAIV) for healthy children aged 2 through 8 years. **If available, LAIV should be used for healthy children aged 2 years through 8 years** who have no contraindications or precautions. However, inactivated influenza vaccine (IIV) should be used if LAIV is not immediately available. Vaccination should not be delayed to get LAIV. Additional influenza vaccine recommendations are located here: (http://www.cdc.gov/flu/professionals/acip/index.htm)

Recommendations on Laboratory Testing

Once influenza activity and sustained spread has been documented in a community or geographic area, most ambulatory patients with an uncomplicated flu-like illness can be diagnosed clinically: they do not require influenza testing for clinical management, including antiviral treatment decisions. Influenza testing of patients who are not severely ill is a clinical decision.

When interpreting the test results, clinicians should consider the following factors:

- The patient's period of illness (influenza diagnostic tests are more likely to be positive when the specimen is obtained during the first three days of illness when virus levels are highest)
- State and local influenza surveillance information regarding circulating influenza and other respiratory viruses that can cause influenza-like illness
- The positive and negative predicted value of the influenza diagnostic test used during periods of high influenza activity. During periods of high influenza activity:
    - A negative test result does not rule out influenza virus infection. The rapid influenza diagnostic tests (RIDT) have a lower negative predictive value relative to rRT-PCR
    - A positive RIDT result, however, is informative because the positive predictive value is high.
    - RIDTs do not provide information on the influenza A subtype (e.g., 2009 H1N1 vs. H3N2), but if most circulating influenza A viruses have similar antiviral susceptibilities, influenza A subtype information may not be needed to inform clinical care.
    - A positive RIDT test result for influenza A virus can be assumed to be A/H3N2 influenza under conditions where the majority of circulating influenza viruses are seasonal A/H3N2.

If identification of the influenza virus type is recommended or requested by State or Local Public Health, testing with an RT-PCR assay should be performed.

- Laboratories (non-sentinel) using rapid antigen tests should send positive specimens to the Nebraska Public Health Laboratory (NPHL) until one positive test is confirmed by RT-PCR (or until otherwise instructed).
- Hospitals should send specimens from rapid test-positive **hospitalized patients** with influenza-like illness to NPHL for confirmatory testing.
- ILINet sentinel providers and sentinel laboratories should send specimens on patients with influenza-like illness according to DHHS guidelines.
- Contact DHHS or your Local Public Health Department for guidance in the event of an influenza outbreak.

For specific clinical laboratory questions please contact NPHL client services at 1-866-290-1406 or visit the NPHL website at http://www.nphl.org/. To submit an influenza specimen to NPHL, complete the Special Influenza Microbiology Requisition indicating that the specimen meets the criteria for public health testing, http://dhhs.ne.gov/publichealth/Documents/Influenza%20Requisition.pdf.

Specimens will only be tested in patients who meet the criteria noted above, and must be accompanied by the Special Influenza Microbiology Requisition.

Please be aware that you may receive an acknowledgement of receipt of your sample with the following comment: "Thank you for submitting this specimen. This specimen does not meet public health testing requirements or was not submitted on the proper requisition therefore will not be tested. You will not receive additional reports for this specimen."