Nebraska Department of Health and Human Services

Health Alert Network

Update

June 7, 2024

Summertime Respiratory Disease Updates: Monitoring for MERS-CoV & Influenza

Even though respiratory infections resulting in hospitalization and death continue to decline at this time, other respiratory diseases like MERS-CoV infection and novel influenza should be kept in mind this summer.

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infection & Hajj 2024

The annual Hajj or pilgrimage to Mecca, Saudi Arabia will take place in 2024 from approximately June 14 to June 19. In previous years, state and local health departments saw an increase in patients under investigation (PUIs) for MERS-CoV infection 2-3 weeks following the completion of Hajj as travelers return to the US. Healthcare providers should ask patients for their travel history and evaluate for MERS-CoV infection based on clinical features and epidemiologic risk. Providers should immediately contact their state or local health department (www.dhhs.ne.gov/lhd) if evaluating a patient who meets one of the two MERS-CoV PUI criteria below:

1. Patient has fever and pneumonia OR fever and acute respiratory distress syndrome with no other alternative diagnosis AND meets at least one of the following epidemiologic risk factors:
   - Within 14 days before symptom onset and a history of:
     - travel from countries in or near the Arabian Peninsula, OR
     - close contact with a person who developed fever and acute respiratory illness within 14 days of residing in or traveling to countries in or near the Arabian Peninsula, OR
     - direct physical contact with camels in North, West, or East Africa, OR
   - Is a member of a cluster of patients with severe acute respiratory illness of unknown etiology, OR
   - High-risk occupational exposure to MERS-CoV, such as laboratory or research personnel
2. Patient has fever or symptoms of respiratory illness (e.g., cough and/or shortness of breath) with no other alternative diagnosis AND meets at least one of the following epidemiologic risk factors:
   - Within 14 days of symptom onset and a history of:
     - being in a health care facility (as a patient, worker, or visitor) in a country or territory in or near the Arabian Peninsula where recent health care–associated cases of MERS have been identified, OR
     - direct physical camel contact in or near the Arabian Peninsula, OR
     - close contact with a person with confirmed MERS-CoV infection while that person was ill, OR
   - High risk occupational exposure to MERS-CoV, such as laboratory or research personnel

CDC's reporting guidelines for a MERS-CoV PUI can be viewed here. Additional information for travelers can be obtained from CDC – Travelers' Health https://wwwnc.cdc.gov/travel/yellowbook/2020/popular-itineraries/saudi-arabia-hajjumrah-pilgrimage.

Summertime Influenza Recommendations

Despite observing a decrease in lab-confirmed influenza in Nebraska over the past few months, summertime influenza transmission at agricultural fairs and exhibitions remains a possibility

(https://www.cdc.gov/flu/swineflu/interim-guidance-variant-flu.htm). Pigs can be infected with human, swine, and avian origin influenza A viruses. While uncommon, influenza A viruses can spread from pigs to people and from people to pigs. This usually requires close contact between pigs and people. The infection in people with a swine-origin influenza A virus is termed a “variant” virus infection and denoted with a “v” after the subtype (e.g., H3N2v). For educational resources, visit: https://www.unmc.edu/publichealth/yia/index.html.

An additional concern surrounding summertime influenza is viral transmission from birds, livestock, or other animals to humans. Since 2022, there have been four detections of influenza A(H5N1) in humans in the US. All four human cases had reported exposure to animals infected with the Highly Pathogenic Avian Influenza (HPAI) virus A(H5N1). However, this current HPAI outbreak still poses a low risk to the public. If a patient tests positive for influenza A (especially patients in inpatient settings) from 5/26-9/28, whether by a rapid diagnostic test or PCR, please collect a second nasopharyngeal swab/washing for influenza subtyping. Viral subtyping can be done either at your local hospital laboratory if subtyping capabilities exist, or at the Nebraska Public Health Laboratory (NPHL)-see further details below. If your local hospital laboratory performs the influenza subtyping and receives a result of “influenza A - no subtype,” please contact DHHS or your local health department (LHD) immediately and forward the specimen to NPHL for further testing. If a patient presents with acute respiratory illness and reports exposure to potentially HPAI infected sick or dead birds, livestock, or other animals, or had an exposure to potentially contaminated surfaces from such animals (i.e., handling, slaughtering, defeathering, butchering, culling, preparing or consuming uncooked or undercooked food or related uncooked food products, including unpasteurized [raw] milk or other unpasteurized dairy products), collect a nasopharyngeal, a nasal and an oropharyngeal swab and place all three into one viral transport media. Subsequently, send this to the NPHL for testing. If the patient has conjunctivitis, a conjunctival swab should also be collected, placed in a separate viral transport media, and sent with the three swabs. For more information on HPAI, including epidemiological criteria and testing recommendations, please visit: https://www.cdc.gov/flu/avianflu/hpai/hpai-interim-recommendations.html.

The medical community is advised to consider influenza in persons with influenza-like illness (ILI) which is defined as a fever of 100°F (37.8°C) or greater plus a cough and/or a sore throat. Antiviral medication is indicated for those who present with ILI and who test positive or patients who show clinical illness compatible with influenza in the presence of an outbreak where other patients have been lab-confirmed. Recommended infection control measures include handwashing, home isolation when ill (self-isolation), covering the mouth and nose when coughing, and self-monitoring for symptoms for 10 days if exposed to potentially HPAI infected animals.

If a rapid antigen influenza test is performed on a patient presenting with ILI and the test is positive for influenza A or for influenza B (it is important to monitor for this virus in the off-season as well) or the patient is highly suspect of influenza but tests negative, a second nasopharyngeal swab/washing should be obtained for PCR at the NPHL. During the summer months, any Nebraska laboratory can send respiratory specimens to the NPHL for testing. Again, please notify your LHD (https://dhhs.ne.gov/lhd) or NE DHHS Epidemiology Unit (https://dhhs.ne.gov/Pages/Epidemiology.aspx#) of any suspect cases of influenza to arrange for submission of specimens to the NPHL. Epidemiologic data is important to collect on these cases to include travel history, exposure to animals (e.g., birds or swine), occupation, and vaccination status. To submit an influenza specimen to NPHL for testing at public health expense, specimens must be ordered in NUlirt (https://nulirt.nebraskamed.com/login) using the test code FLUPCR. For individuals who need access to NUlirt, please visit the before-mentioned link to register. For specimen collection guidance: https://www.nphl.org/sites/default/assets/Infectious_Disease/Influenza_Surveillance_collection_transport_2024_final.pdf.

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