Non-COVID-19 Summertime Respiratory Disease Updates: Monitoring for MERS-CoV & Influenza

While respiratory infections in Nebraska resulting in hospitalization and death continue to decline at this time, other respiratory infections such as MERS-CoV and variant influenza viruses should still be on the radar throughout the summer.

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) & Hajj 2023
The annual Hajj or pilgrimage to Mecca, Saudi Arabia will take place in 2023 from approximately June 26 to July 1. In previous years, state and local health departments have seen an increase in patients under investigation (PUIs) for MERS-CoV 2-3 weeks following the completion of Hajj as travelers return to the US. Healthcare providers should routinely ask patients about their travel history and evaluate patients for MERS-CoV infection if they have both clinical features and an epidemiologic risk. Providers should immediately contact their state or local health department (www.dhhs.ne.gov/lhd) if evaluating a patient who meets PUI criteria (https://www.cdc.gov/coronavirus/mers/interim-guidance.html). COVID-19 should be ruled out AND the patient must meet one of the three criteria listed below to be considered a MERS-CoV PUI:

A. Fever AND pneumonia or acute respiratory distress syndrome (based on clinical or radiologic evidence) AND EITHER:
   • History of travel from countries in or near the Arabian Peninsula within 14 days before symptom onset, OR
   • Close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from countries in or near the Arabian Peninsula, OR
   • A member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology in which MERS-CoV is being evaluated, in consultation with state and local health departments

OR

B. Fever AND symptoms of respiratory illness (not necessarily pneumonia, e.g., cough, shortness of breath) AND a history of being in a healthcare facility (as a patient, worker, or visitor) within 14 days before symptom onset in a country or territory in or near the Arabian Peninsula in which recent healthcare-associated cases of MERS-CoV have been identified.

OR

C. Fever OR symptoms of respiratory illness (not necessarily pneumonia, e.g., cough, shortness of breath) AND close contact with a confirmed MERS-CoV case while the case was ill.

Summertime Influenza Recommendations

Despite observing a decrease of lab-confirmed influenza over the past few months in Nebraska, summertime influenza transmission at agricultural fairs and swine exhibitions remains a concern (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. When people are infected with swine-origin influenza A viruses, it is termed a “variant” virus infection and denoted with a “v” after the subtype (e.g., H3N2v). For educational resources, please visit: https://www.unmc.edu/publichealth/yia/index.html

An additional concern surrounding summertime influenza is influenza transmission from birds to humans. With the current Highly Pathogenic Avian Influenza (HPAI) outbreak (H5N1), there has been one detection of H5N1 in humans in the US since 2022. However, this HPAI outbreak still poses a low risk to the public. If a patient tests positive for influenza A (especially patients in inpatient settings), whether by rapid diagnostic test or PCR, please collect a second nasopharyngeal swab/washing for influenza subtyping. Specimen subtyping can be done either at your local hospital laboratory (if subtyping capabilities exist) or sent to NPHL for subtyping (further details below). For additional educational information on HPAI, please visit: https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm

We continue to advise the medical community to consider influenza in persons with influenza-like illness (ILI), defined as fever (temperature of 100.4°F [38.0°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 including handwashing, staying home when ill (self-isolation), and covering the mouth and nose when coughing.

Rapid antigen influenza testing should be performed in patients who present with ILI and no other known cause of illness. If the test is positive for influenza A or the patient is highly suspected of influenza but tests negative, a second nasopharyngeal swab/washing should be obtained for PCR at the Nebraska Public Health Laboratory (NPHL). During the summer months, any Nebraska laboratory can send respiratory specimens to the NPHL. Please notify your local public health department (https://dhhs.ne.gov/lhd) or NE DHHS Office of Epidemiology (https://dhhs.ne.gov/Pages/Epidemiology.aspx#) of any suspect cases of influenza to arrange for submission of specimens to the NPHL. It is important to collect epidemiologic data on these cases including 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). For individuals who need access to become users of NULirt, please visit http://www.nphl.org/phlip.cfm for instructions on how to obtain credentials to become a user of the NULirt system. Specimen collection guidance is located here: https://dhhs.ne.gov/Flu%20Documents/Influenza%20Surveillance%20Collection%20and%20Transport%20Requirements.pdf.

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