

NPHL Lab Alert – Monkeypox Updates

August 11, 2022

This Nebraska Public Health Lab Alert is to notify your facility that Nebraska Health & Human Services/NPHL **approval is no longer required for monkeypox submission**. The attached NPHL Collect & Transport Monkeypox Specimen Procedure is updated to reflect the changes and will be added to the NPHL website.

Monkeypox tests can be ordered in NUIirt under the Outbreak drop down menu. See attached instructions, including process to obtain a NUIirt account.

Out-of-state providers seeing patients whose address is Nebraska, to ship potential monkeypox specimens to the Nebraska Public Health Laboratory and not the state lab where the providers are located. Follow the NUIirt quickstart guide to create a NUIirt account and order FedEx supplies.

CDC provides excellent guidance on Laboratory Procedures and Biosafety. NPHL encourages all laboratorians to take the time to review these guidelines. These are found at <https://www.cdc.gov/poxvirus/monkeypox/lab-personnel/lab-procedures.html>

. CDC documents include:

- Routine Chemistry, Hematology, and Urinalysis in Hospitals or Clinical Laboratories
- Clinical Pathology, Molecular Testing, and Analysis of Bacterial or Mycotic Cultures
- Manipulating Diagnostic Specimens Suspected to Contain Monkeypox Virus
- Disposal of Waste
- Monitoring Healthcare Workers Exposed to Monkeypox Virus

Most importantly, **laboratory safety should be evaluated in each facility to determine if PPE and current practices truly reduce the risk of exposures:**

- Use of a certified Class II Biological Safety Cabinet (BSC) or other containment device that provides a barrier between the specimen and personnel is recommended for manipulations of monkeypox specimens.
- Sealed centrifuge rotors or sample cups for centrifugation are recommended for use. Ideally, these rotors or cups are loaded and unloaded in a BSC. If a BSC or other containment device cannot be used, the risk of exposure to an inadvertent sample release should be reduced by the appropriate combinations of personal protective equipment (e.g., respirators, face shields) and physical containment devices (e.g., centrifuge safety cups or sealed rotors).
- For laboratories with personnel vaccinated within the past 3 years:

- Diagnostic specimens may be handled in Biosafety Level 2 (BSL-2) facilities, using BSL-2 practices.
- Diagnostic specimen manipulations should be carried out in a certified Class II BSC or other containment device, especially if there is a potential to generate aerosols (e.g., vortexing or sonication of specimens in an open tube).
- Directional air flow (negative air pressure with respect to the surrounding area) is recommended, but not required for BSL-2 laboratory facilities.
- For laboratories without vaccinated personnel:
 - Routine specimen processing may be handled in BSL-2 facilities, but with more stringent BSL-3 work practices*. (*BSL-3 practices include conducting procedures that involve the manipulation of infectious materials within a Class II BSC. Work with open vessels should not be conducted on the bench top. If a procedure cannot be performed within a BSC, use a combination of personal protective equipment and other containment devices (glove box, centrifuge safety cups or sealed rotor) designed to create a barrier between the specimen and the laboratorian.)
 - Additional examples of BSL-3 practices include, but are not limited to:
 - a solid-front gown with cuffed sleeves,
 - double gloves,
 - eye protection (safety glasses, snugly fitting goggles) or face protection (face-shield),
 - N-95 respirator,
 - limiting the number of laboratory personnel who work during specimen manipulation,
 - including the correct biohazard warning signage outside of the laboratory, and
 - using a laboratory with directional air flow
 - Protective clothing should not be worn outside of the laboratory.
 - Protective clothing should not be worn outside of the laboratory.