




DEPARTMENT OF HEALTH

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Dennis R. Schrader, Secretary

Laboratories Administration

Robert A. Myers, Ph.D., Director
1770 Ashland Avenue
Baltimore, Maryland 21205

DATE: June 17, 2022
TO: Medical Lab Directors, Local Health Departments, and Healthcare Providers
FROM: Robert A. Myers, Ph.D. 
Director, Laboratories Administration
RE: Monkeypox Specimen Collection/Submission Guidance

The Maryland Department of Health Laboratories Administration is issuing the following guidance in response to the ongoing investigation of monkeypox cases throughout the United States.

Febrile Rash Low to Moderate Risk Specimen Collection kits have been distributed to the Local Health Departments that can be used to collect specimens for monkeypox testing. Please contact your Local Health Departments for information regarding specimen collection kits. **All specimens sent to the Laboratories Administration for orthopox (monkeypox) testing MUST have prior approval from the State Epidemiologists.** Specimens sent without proper approval will not be tested. Please contact the State Epidemiologists at 410-767-6700 (during normal business hours) or 410-795-7365 (after hours) for consultation.

Additionally we are providing the attached specimen collection guidance in the event that a health care provider is unable to obtain a specimen collection kit from their Local Health Department.

Please contact your Local Health Department or the State Epidemiologists with any other questions or concerns.

Guidelines for Orthopox Rule-Out Specimen Submission

MDH Infectious Disease Epidemiology (Consult Prior to specimen submission)	
MDH Epi Line (Business Hours) 410-767-6700 MDH Epi/Physician After Hours On-Call at 410-795-7365	
MDH Laboratories Administration	
Office of Laboratory Emergency Preparedness and Response	
Monday – Friday 8:00 a.m. - 4:30 p.m. (Dial in order)	AFTER HOURS (Dial in order)
443-681-3788 - Office phone 410-925-3121 - Cell Phone 443-681-3789 - Office phone 410-408-7521 - Pager	410-925-3121 - Cell Phone 410-408-7521 - Pager

Requested Specimens

Specimen Type	Collection Materials	Instructions	Storage Conditions
A minimum of 2* swabs of base of lesion (NO transport media) <u>Required by CDC</u> *Note: One dry swab may be tested at an LRN Reference laboratory for presumptive results. CDC can provide <i>Monkeypox virus</i> -specific testing on the second dry swab specimen if the first dry swab is presumptive positive at the LRN laboratory.	Sterile nylon, polyester, or Dacron swab with a plastic, wood, or thin aluminum shaft. Place in a sterile container with NO transport media. Use 2* swabs per lesion. Place each swab in dry, sterile container and label appropriately. (i.e. body site, description, etc.)	** Prior to specimen collection, sanitize area with alcohol and let dry.** 1. Use a disposable scalpel (or a sterile 26 Gauge needle) to open and remove the top of the vesicle or pustule (do not send the scalpel or needle). Retain lesion roof for testing. (See below) 2. Swab the base of the lesion with a sterile polyester or Dacron swab. 3. Place swabs in individual sterile containers. DO NOT ADD ANY VIRAL OR UNIVERSAL TRANSPORT MEDIA. 4. Collect specimens from lesions at different anatomic locations if possible	Refrigerate after collection at 2-8C. Deliver immediately to MDH.
1 swab of base of a lesion (in viral transport media) Required by MDH (Used for reflex testing if no orthopox viruses found)	Sterile nylon, polyester, or Dacron swab with a plastic, shaft. Tube of viral transport media. Use multiple containers when collecting specimens from multiple lesions.	Same as above EXCEPT place swab in viral transport media in order to allow testing for other viral pathogens if the above specimens test negative for orthopox viruses.	

Specimen Type	Collection Materials	Instructions	Storage Conditions
Crust, scab, or biopsy of lesion (If able to remove crust/roof during swab collection, send as additional specimen)	Sterile tube with O ring seal (As needed, sterile scalpel, 26 gauge needle, and forceps.)	<ol style="list-style-type: none"> Sanitize lesion with an alcohol wipe, allow to dry. Use a disposable scalpel (or a sterile 26 Gauge needle) to open and remove the top of the vesicle or pustule (do not send the scalpel or needle). Retain lesion roof for testing. Place specimen in a 1.5 or 2 mL screw-capped tube with O-ring. DO NOT ADD ANY VIRAL TRANSPORT MEDIA. Collect specimens from lesions at different anatomic locations if possible 	Refrigerate after collection at 2-8C. Deliver immediately to MDH. Specimens may be kept at 2-8C for up to 7 days, after which point they must be frozen at minimum -20C. They may stay frozen for up to two months.

Required Personal Protective Equipment (PPE) to collect specimens

- Disposable Gown
- Gloves
- Fit tested N95 or PAPR *Surgical mask if not available
- Eye protection- face shield or goggles (note that eye-glasses are not eye protection)

Alcohol based hand sanitizer or sink with soap and water for hand hygiene

Required Data Elements on Specimens and Requisition Forms

- All specimens may be listed out on the **FEBRILE RASH (LOW TO MODERATE RISK) form (Appendix 2)**. Use **one Tube ID for each body site/specimen type**.
- Each individual specimen must be labeled with the following:
 - Patient name
 - DOB
 - Collection date
 - Specimen site
- Unlabeled specimens will be **AUTOMATICALLY REJECTED**.
- Under Presumptive Clinical Diagnosis, specify Other: Monkeypox
- Test Request Authorized By is your ordering provider. Please only list an MD, DO, PA-C, or CRNP.
- Health Care Provider is the submitting facility name.
- All patient demographic elements are required.
- Consult with MDH Epidemiology to determine risk category.

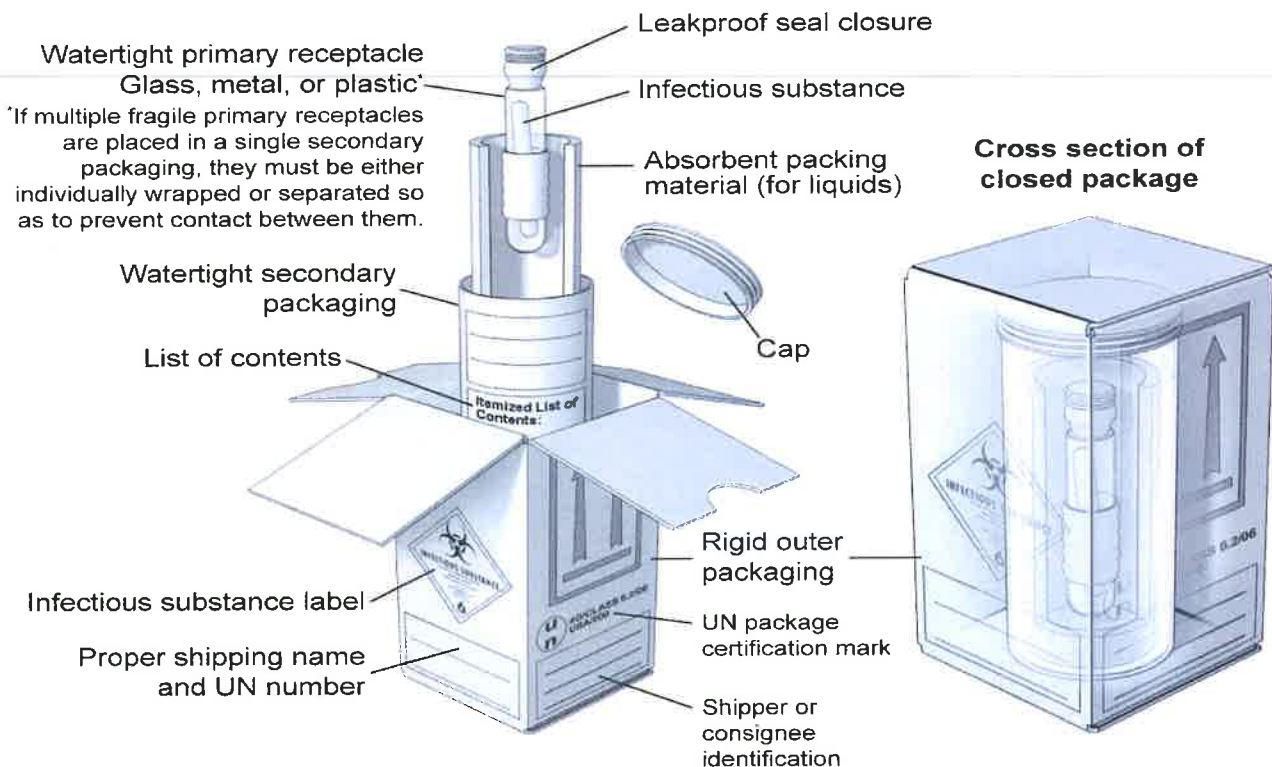
Appendix 1: Packaging and Shipping

Specimens must be shipped using Category B shipping requirements.

Refer to the attached document (**Basic Triple Packaging**) for packaging and shipping guidelines. If necessary, the MDH Laboratories Administration will arrange for an emergency courier, but will only do so after consultation with the patient's physician and MDH Physician-On-Call or Epidemiologist.

BASIC TRIPLE PACKAGING

Basic triple packaging systems include a primary receptacle such as a tube with adhesive tape around the screw cap or a plate with parafilm around the edges. The primary (1°) receptacle, along with required absorbent and cushioning material, is placed inside a secondary (2°) container. The 2° container for diagnostic specimens should be a sealed biohazard or Ziploc bag. The 2° container is then securely placed within an outer shipping container (tertiary (3°) container), generally a corrugated cardboard box with cushioning material inside to surround the 2° container. This outermost container bears the name, address, and telephone number of shipper, name of person responsible with 24/7 telephone number, and **the complete name**, shipping address, and telephone number of the recipient, plus all the required markings. Include an itemized list of contents in a sealed plastic bag, placed between the 3° and 2° containers.



BASIC TRIPLE PACKAGING:

- A watertight primary receptacle.
- A watertight secondary receptacle.
- An outer packaging of adequate strength for its capacity, mass and intended use.

Note: For a liquid specimen, absorbent material must be placed between the primary and secondary containers and be capable of absorbing the entire contents of the primary receptacle(s).

Certified packaging systems are designed to withstand specific pressure changes and drop tests. Packaging systems that meet the

packing instruction standards are currently available from vendors specializing in products certified to meet the IATA, USPS, and other carriers' requirements. Packaging systems using fiberboard or aluminum canisters, zip-lock bags, or other uncertified components may not be in compliance.

IT IS THE RESPONSIBILITY OF THE SHIPPER TO COMPLY WITH ALL LAWS AND REGULATIONS REGARDING THE SHIPPING OF INFECTIOUS SUBSTANCES.

Appendix 2: Febrile Rash (Low and Moderate Risk) Form



Laboratories Administration
1770 Ashland Ave
Baltimore, Maryland 21205

Robert A. Myers, Ph.D., Director

FEBRILE RASH (Low and Moderate Risk)

Health Care Provider	
Address	
City	County
State	Zip Code
Contact Name	
Phone#	Fax#
Test Request Authorized by:	

TYPE OR PRINT

Patient's SS# (last 4 digits) _____ Case# _____

Patient _____ Lab No. _____

Last Name _____ First _____ Middle _____

Date of Birth ___/___/___ Sex M F

Address _____

City _____ County _____ State _____ Zip _____

Risk Category: Low Risk Moderate Risk

For Low Risk and Moderate Risk testing, collect the following specimens:

REMEMBER TO PLACE ONLY ONE LESION PER TUBE

<i>tube id</i>	<i>collection device</i>	<i>specimen type needed</i>	<i>body site of collection (arm, chest, face, etc.)</i>	<i>description of site (vesicle, pustule, etc.)</i>
1	tube with transport media	swab of base of lesion		
2		swab of base of lesion		
3	long tube with swab and no liquid	swab of base of lesion		
4		swab of base of lesion		
5	small empty tube with O ring seal	crusUscab of lesion		
6		crusUscab of lesion		
7		crusUscab of lesion		
8		crusUscab of lesion		

Presumptive Clinical Diagnosis: Chickenpox Herpesvirus Smallpox

Smallpox vaccine (Vaccinia) Other: _____
(specify)

Date of Onset: ___/___/___
(Month / Day / Year)

Date Specimen Collected _____ Reported _____