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**

### Office of Laboratory Emergency Preparedness and Response

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Contact Information</th>
</tr>
</thead>
</table>
| Monday – Friday | 8:00 a.m. - 4:30 p.m. | 443-681-3788 - Office phone  
410-925-3121 - Cell Phone  
443-681-3789 - Office phone  
410-408-7521 - Pager |
| AFTER HOURS | (Dial in order) | 410-925-3121 - Cell Phone  
410-408-7521 - Pager |

## Requested Specimens

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Collection Materials</th>
<th>Instructions</th>
<th>Storage Conditions</th>
</tr>
</thead>
</table>
| A minimum of 2* swabs of base of lesion (NO transport media) | 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 2-8°C. Deliver immediately to MDH. |
| 1 swab of base of a lesion (in viral transport media) | 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. | |

*Required by CDC

*Note: One dry swab may be tested at an LRN Reference laboratory for presumptive results. CDC can provide *Monkeypox virus*-specific testing on the second dry swab specimen if the first dry swab is presumptive positive at the LRN laboratory.
<table>
<thead>
<tr>
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<th>Storage Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crust, scab, or biopsy of lesion (If able to remove crust/roof during swab collection, send as additional specimen)</td>
<td>Sterile tube with O ring seal (As needed, sterile scalpel, 26 gauge needle, and forceps.)</td>
<td>1. Sanitize lesion with an alcohol wipe, allow to dry. 2. 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. 3. Place specimen in a 1.5 or 2 mL screw-capped tube with O-ring. DO NOT ADD ANY VIRAL TRANSPORT MEDIA. 4. Collect specimens from lesions at different anatomic locations if possible</td>
<td>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.</td>
</tr>
</tbody>
</table>

**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 **FEVERILE 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 (1st) receptacle, along with required absorbent and cushioning material, is placed inside a secondary (2nd) container. The 2nd container for diagnostic specimens should be a sealed biohazard or Ziploc bag. The 2nd container is then securely placed within an outer shipping container (tertiary 3rd container), generally a corrugated cardboard box with cushioning material inside to surround the 2nd 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 3rd and 2nd containers.

- 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

**MARYLAND Department of Health**

**FEBRILE RASH (Low and Moderate Risk)**

<table>
<thead>
<tr>
<th>Health Care Provider</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City</td>
</tr>
<tr>
<td></td>
<td>County</td>
</tr>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Zip Code</td>
</tr>
<tr>
<td>Contact Name</td>
<td>Phone#</td>
</tr>
<tr>
<td></td>
<td>Fax#</td>
</tr>
</tbody>
</table>

Test Request Authorized by:

**TYPE OR PRINT**

Patient’s SS# (last 4 digits) ____________ Case# ____________

<table>
<thead>
<tr>
<th>Patient</th>
<th>Lab No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name</td>
<td>First</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>___<strong><strong>/_____/</strong></strong></td>
</tr>
</tbody>
</table>

Address ______________________________________

<table>
<thead>
<tr>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Zip</th>
</tr>
</thead>
</table>

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**

<table>
<thead>
<tr>
<th>Tube</th>
<th>Collection Device</th>
<th>Specimen Type Needed</th>
<th>Body Site of Collection (arm, chest, face, etc.)</th>
<th>Description of Site (vesicle, pustule, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tube with transport media</td>
<td>Swab of base of lesion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Long tube with swab and no liquid</td>
<td>Swab of base of lesion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Small empty tube with O ring seal</td>
<td>Crust/scab of lesion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Crust/scab of lesion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Crust/scab of lesion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Crust/scab of lesion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Crust/scab of lesion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Crust/scab of lesion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Presumptive Clinical Diagnosis: Chickenpox Herpesvirus Smallpox

Smallpox vaccine (Vaccinia) Other: __________________________ (specify)

Date of Onset: _______/_____/____
(Month / Day / Year)

Date Specimen Collected: __________________________ Reported: __________________________

MDB4746-A