Clinical Guide for Mpox

Indiana Department of Health

Who should be tested for mpox?

- Patients with a new characteristic rash typical of mpox (deep-seated and well-circumscribed lesions, often with central umbilication; and lesion progression through specific sequential stages—macules, papules, vesicles, pustules, and scabs) **OR**
- Patients for whom there is high clinical suspicion of mpox and who within 21 days of illness onset:
    - Had contact with someone who had a rash that looks like mpox or someone who was diagnosed with confirmed or probable mpox; OR
    - Had skin-to-skin contact with someone in a social network experiencing mpox activity; OR
    - Traveled outside the United States to a country with confirmed cases of mpox or where mpox activity has been ongoing; OR
    - Had contact with a dead or live wild animal or exotic pet that exists only in Africa or used a product derived from such animals (e.g., game meat, creams, lotions, powders, etc.).

How do I test for mpox?

Several commercial labs are now testing for orthopoxvirus, which detects mpox. **Please work with your lab staff to send specimens to these commercial labs: Aegis Science, ARUP, Labcorp, Mayo Clinic Laboratories, Quest Diagnostics and Sonic Healthcare**. Results will be transmitted to the IDOH. Prior IDOH authorization is not required to submit specimens to commercial laboratories.

If you do not have a contact with one of these five labs, specimens may be submitted through the IDOH Laboratories (IDOHL). Authorization is no longer required for specimens to be tested at IDOHL; however, the specimen information MUST be submitted via LimsNet, an online system that will make results available as PDF files the minute they are released at the lab. Most hospital labs already have access to LimsNet, but if LimsNet access is needed, contact the LimsNet help desk at (317) 921-5506 or email LimsAppSupport@isdh.in.gov.

What personal protective equipment should be used when evaluating patients with possible mpox?

All healthcare personnel who enter a patient's room should wear personal protective equipment (PPE) in accordance with CDC's recommendations for healthcare settings.

- gown
- gloves
- eye protection (i.e., goggles or a face shield that covers the front and sides of the face)
- NIOSH-approved particulate respirator equipped with N95 filters or higher.

A negative pressure room is not necessary.

How do I collect a test specimen?

1. Dry synthetic swabs must be used for collection. Larger swabs (such as those used for oropharyngeal specimens) are preferred, but swabs for COVID-19 or flu testing may be used if no other swabs are available. More detailed instructions are posted here.
2. Collect swabs from more than one lesion, preferably from different locations on the body and/or from lesions with differing appearances.
3. **Separate swabs must be used for each lesion, and two swabs in the same tube must be submitted for each lesion sampled (one for preliminary and one for characterization testing).**

4. **No more than two lesion sites (four swabs total) may be submitted for each patient.** Specimens must be clearly labeled with the body site where the specimen was collected, patient name, date of birth, and date of specimen collection. Swabs from the same lesion should be placed into the same 1.5-or 2-mL sterile, screw-capped tube with O-ring or 15-mL sterile, screw-capped tube.
5. If your facility does not have these tubes available, any sterile, screw-capped tube (such as a TB sputum cup or sterile urine cup) may be used. Swabs from the same lesion may be placed in the same container if additional containers cannot be found.
6. **Specimen must be a dry swab. Do not use any transport media.**
7. Specimens must be stored at refrigerated temperatures within 1 hour after specimen collection. Specimens may be frozen if longer storage is required.
8. Once collected, please refer to IDOH's specimen submission instructions for guidance on specimen packaging and shipping.

What advice should I give my patient while awaiting test results?

Patients should be advised to isolate while awaiting results of mpox testing. Patients who do not need to be hospitalized may isolate at home but should take precautions to avoid exposure to other people or animals in the household. Alternate isolation arrangements may be considered for people with household contacts who could be at increased risk for severe illness due to mpox. Please refer patients to CDC guidance for home isolation for detailed instructions on how to prevent spread within the household.

What next steps should be followed if a patient tests positive for orthopoxvirus/mpox?

Test results will be released to submitting facilities via LimsNet; it is the provider's responsibility to relay test results to the patient. If a patient tests positive, the provider should 1) notify the patient of the positive result; 2) advise the patient to continue to isolate; 3) assess the need for treatment; and 4) notify the patient that the local health department will be following up with them.

Hospital infection control and/or employee health staff should immediately be notified of any positive cases so that they can assess potential exposures that may have occurred within the healthcare setting. Local health departments will conduct contact tracing for close contacts within the community.

What treatment options are available for patients with probable or confirmed mpox?

Many people infected with mpox virus have a mild, self-limiting disease course in the absence of specific therapy. However, the prognosis for mpox depends on multiple factors, such as previous vaccination status, initial health status, concurrent illnesses, and comorbidities, among others. Please refer to CDC guidance regarding indications for mpox treatment.

Tecovirimat (also known as TPOXX, ST-246) is available for the treatment of mpox under an investigational new drug (IND) protocol sponsored by the CDC. Other treatment options are less commonly used but may include Vaccinia Immune Globulin Intravenous (VIGIV), Cidofovir (also known as Vistide), or Brincidofovir (also known as CMX001 or Tembexa). More information on treatment options is available here.

How do I request JYNNEOS vaccine for post-exposure prophylaxis (PEP)?

The Centers for Disease Control and Prevention (CDC) recommends post-exposure prophylaxis for high or intermediate risk contacts of mpox cases.

JYNNEOS (also known as Imvamune or Imvanex) is licensed by the U.S. Food and Drug Administration (FDA) for preventing mpox infection. The sooner an exposed person gets the vaccine, the better. CDC recommends that the vaccine be given within 4 days from the date of exposure to prevent onset of the disease. If given 4–14 days after the date of exposure, vaccination may reduce the symptoms of disease but may not prevent the disease.

There is a limited supply of JYNNEOS, although more is expected in coming weeks and months. **Please submit a PEP request form to order JYNNEOS for patients who have been exposed to a confirmed case.**

In the context of the current national Public Health Emergency (PHE), an **alternative regimen** may be used for people age ≥18 years under an Emergency Use Authorization beginning August 9, 2022. The authorized alternative regimen involves an intradermal (ID) route of administration with an injection volume of 0.1mL. This approach could increase the number of available JYNNEOS vaccine doses by up to five-fold. Results from a clinical study showed that the lower intradermal dose was immunologically non-inferior to the standard subcutaneous dose (Frey SE et al, Vaccine, 2015; 33(39):5z225-5234.

How do I report an adverse vaccine event?

Healthcare professionals should report vaccine adverse events (possible side effects) to the Vaccine Adverse Event Reporting System (VAERS). Report adverse events following vaccination that, in your professional judgment, are medically important or clinically significant, even if you are not sure if the vaccine caused the event. You can read the VAERS FAQs, email questions to info@VAERS.org, or call 1-800-822-7967 from Monday through Friday between 9 a.m. to 5 p.m. Eastern time.

How do I request TPOXX (tecovirimat) for patients with probable or confirmed mpox?

Tecovirimat (also known as TPOXX or ST-246) is FDA-approved for the treatment of human smallpox disease caused by *Variola virus* in adults and children. However, its use for other orthopoxvirus infections, including mpox, is not approved by the FDA. Therefore, CDC holds a non-research expanded access Investigational New Drug (EA-IND) protocol that allows for the use of tecovirimat for primary or early empiric treatment of non-variola orthopoxvirus infections, including mpox, in adults and children of all ages.

This request form is to be utilized by providers or local health departments (LHDs) only. Patients should contact their providers to inquire about obtaining TPOXX for treatment.

A unique survey entry must be completed for each individual TPOXX request.

Information for Healthcare Providers on Obtaining and Using TPOXX (Tecovirimat) for Treatment of Mpox from the CDC.

At this time, it is reserved for people at risk for disease; immunocompromised, pregnant patients, children, people with skin conditions, people who are severely ill

How long is someone with mpox considered contagious?

Patients with mpox are considered contagious from the onset of **any** symptoms (including prodromal symptoms before appearance of rash) until all lesions have crusted, the crusts have separated, and a new layer of skin has formed underneath. This usually takes 2-4 weeks but may take longer in some individuals.

Who should be vaccinated against mpox?

People who have had a high- or intermediate-risk exposure to someone with mpox may be vaccinated. ACAM2000 and JYNNEOS are the two licensed vaccines in the United States to prevent smallpox and may be given as post-exposure prophylaxis for mpox. CDC guidance indicates that if given within 4 days of exposure, these vaccines may prevent mpox. If given 4-14 days after exposure, the vaccines may reduce symptoms, but may not prevent mpox. For questions regarding administration of post-exposure prophylaxis to patients exposed to mpox, please contact the Indiana Department of Health at 317-233-7125 (Monday-Friday, 8:15 a.m. - 4:45 p.m.) or 317-233-1325 after hours.

CDC does **not** currently recommend routine pre-exposure vaccination for most U.S. healthcare workers. Recommendations for routine pre-exposure vaccination are generally limited to clinical laboratory personnel who routinely handle orthopoxviruses and individuals designated by public health authorities to be vaccinated for preparedness purposes.