The Delaware Division of Public Health (DPH) is issuing this health update to inform providers of an update on the recommendations for testing, vaccine, and antiviral administration for individuals infected or exposed to monkeypox in the U.S.

## Summary

This Health Alert Network (HAN) Health Update **provides an update to the Delaware Health Update #479 June 16, 2022**, titled **"Case-finding guidance—Monkeypox."** In people with epidemiologic risk factors, rashes initially considered characteristic of more common infections (e.g., varicella zoster, herpes, syphilis) should be carefully evaluated for concurrent characteristic monkeypox rash (see images and links to below) and considered for testing.

Since May 2022, monkeypox cases, which have historically been rare in the United States, have been identified in 47 states and territories among both persons returning from international travel and their close contacts domestically. Globally, more than 15,378 cases have been reported from 71 countries; the case count continues to rise daily. In the United States, evidence of person-to-person disease transmission in multiple states and reports of clinical cases with some uncharacteristic features have raised concern that some cases are not being recognized and tested.

## Background

The current identification of West African monkeypox among countries that have historically not had endemic disease cases and the identification of cases that have no travel history to an endemic monkeypox area, suggests that person-to-person community spread is emerging. The first case of monkeypox in the United States was diagnosed on May 17, 2022, in a traveler who returned from Canada to Massachusetts. To date, 2,322 cases have been identified in 47 states and territories. More than 15,378 cases have been identified worldwide.

The case fatality rate for monkeypox associated with the West African clade of the monkeypox virus is 1% and possibly higher in immunocompromised individuals. No deaths have been reported globally from the current outbreak. Any person, irrespective of gender identity or sexual orientation, can acquire and spread monkeypox. In the current U.S. outbreak, many of the reported cases occur among gay, bisexual, or other groups in which men have sex with men (MSM). Close contact, sustained skin-to-skin contact, including sexual

contact, with an infected person or with contaminated fomites (e.g., shared linens) are the most significant risk factors associated with human-to-human transmission of the monkeypox virus.

**Case Definition**

On June 1, 2022, CDC updated and expanded its case definitions for monkeypox to ensure that anyone who is suspected of having monkeypox can be tested and appropriate steps can be taken to protect the individual and contacts.

**Clinical presentations of confirmed cases to date**

Classic monkeypox cases present with a prodrome that includes fever, lymphadenopathy, headache, and muscle aches followed by the development of a characteristic sharply raised, firm-feeling, and often round skin rash that evolves into firm, deep-seated, well-circumscribed, umbilicated lesions. The rash usually starts on the face or oral cavity and progresses through several synchronized stages on each affected area. Lesions concentrate on the face and extremities, including the palms and soles.

Thus far, in the U.S. outbreak, all patients diagnosed with monkeypox have experienced a rash or enanthem. Although the characteristic firm, deep-seated, well-circumscribed or umbilicated rash has been observed on the skin, it has also been observed to start in mucosal areas (e.g., genital, perianal, buccal). Among some patients, lesions are scattered or localized to a specific body area rather than being diffuse. These may also not involve the face or extremities. In instances, patients present with diverse symptoms such as anorectal pain, tenesmus, and rectal bleeding, which upon physical examination, are found to be associated with visible perianal vesicular, pustular, or ulcerative skin lesions and proctitis. The lesions have, at times, been in different yet concomitant stages of evolution on a specific anatomic area (e.g., vesicles and pustules existing side-by-side). In addition, the traditional prodromal symptoms - fever, malaise, headache, and lymphadenopathy - have not always been present before the rash.

The clinical presentation of monkeypox may be similar to some STIs, such as syphilis, herpes, lymphogranuloma venereum (LGV), or other etiologies of proctitis. Clinicians should perform a thorough skin and mucosal (e.g., anal, vaginal, oral) examination for the characteristic vesiculo-pustular rash of monkeypox. This allows for earlier detection of lesions even when a patient may be unaware. The search for lesions that are consistent with monkeypox

should be performed even if those lesions are also consistent with those in other, more common, infections (e.g., varicella zoster, syphilis, herpes). This is particularly important when evaluating patients who present with epidemiologic risk factors for monkeypox. Specimens should be obtained from lesions (including those inside the mouth, anus, or vagina) and tested for the monkeypox virus.

Any patient who meets the case definition should be counseled to implement precautions to prevent transmission. Probable and confirmed cases should remain in isolation for the duration of the infectious period - i.e., until all lesions are resolved; scabs have fallen off; and a fresh layer of intact skin has formed. Patients who do not require hospitalization and are potentially infectious should isolate at home. This includes abstaining from contact with other persons and pets and wearing appropriate personal protective equipment, such as clothing to cover lesions and face mask to prevent spread.

For images of monkeypox lesions,
visit https://emergency.cdc.gov/han/2022/han00468.asp.

**Recommendations for Clinicians**

**Assessment**

- Patients with a rash, even if it is considered to be characteristic of other common infections, such as varicella zoster or sexually transmitted infections, should be carefully evaluated for a characteristic monkeypox rash (see images and links) followed by the submission of specimens from lesions, especially if the person presents with at least one epidemiologic risk factor. These include:
    - Reports having contact with a person or people with a similar appearing rash or who received a diagnosis of confirmed or probable monkeypox **OR**
    - Had close or intimate in-person contact with individuals in a social network experiencing monkeypox activity, this includes men who have sex with men (MSM) who meet partners through an online website, digital application (“app”), or social event (e.g., a bar or party) **OR**
    - Traveled outside the US to a country with confirmed cases of monkeypox or where *Monkeypox virus* is endemic **OR**

    - Had contact with a dead or live wild animal or exotic pet that is an African endemic species or used a product derived from such animals (e.g., game meat, creams, lotions, powders, etc.)
- Evaluate any individual presenting with perianal or genital ulcers, diffuse rash, or proctitis syndrome for STIs per the 2021 CDC STI Treatment Guidelines. Testing for STIs should be performed. The diagnosis of an STI does not exclude monkeypox as a concurrent infection may be present. The clinical presentation of monkeypox may be similar to some STIs, such as syphilis, herpes, lymphogranuloma venereum (LGV), or other etiologies of proctitis.
- Clinicians should perform a thorough skin and mucosal (e.g., anal, vaginal, oral) examination for the characteristic vesiculo-pustular rash of monkeypox; this allows for detection of lesions the patient may not have been previously aware of.
- If a patient does not respond to STI treatment as expected, the patient should return for follow-up evaluation and monkeypox testing should be considered.
- Advise patients with prodromal symptoms (e.g., fever, malaise, headache) and one or more epidemiologic risk factors for monkeypox to self-quarantine. If a rash does not appear within 5 days, the illness is unlikely to be monkeypox and alternative etiologies should be sought.

**Testing**

- Clinicians should use appropriate infection prevention measures when collecting specimens for monkeypox evaluation. Information about infection prevention and control in health care settings is provided on the CDC website.

- DPH encourages providers to collect specimen following Lab Advisory: CDC Updates Specimen Collection Guidelines for Monkeypox Virus and send to approved CDC Monkeypox Commercial Laboratory Companies. Delaware currently has two laboratories in which results can be provided to DPH, they are identified as LabCorp and Quest Diagnostics. Health care facilities that require specimen collection kits can order through OEMS@delaware.gov using a SHOC Request form.

- In addition to dry swabs, CDC can now accept lesion swabs in viral transport media (VTM) and lesion crusts (currently these two specimens must be received by CDC within 7 days of collection).
- The DPH laboratory cannot run samples in VTM. Contact commercial labs to inquire on their ability to do so.

If a provider is unable to collect specimen or if a person is under/uninsured or does not have access to a health care provider, DPH/OIDE will coordinate specimen collection with one of the Delaware Public Health Clinics, Delaware Public Health Laboratory (DPHL) and the CDC, if a patient meets the criteria for a suspected
case https://www.cdc.gov/poxvirus/monkeypox/clinicians/case-definition.html

**Vaccine and Antivirals**

- Refer to the CDC Considerations for Monkeypox Vaccination for the recommended use of vaccine in the U.S. The current vaccine supply in Delaware will be prioritized for post-exposure prophylaxis only. As more doses are available, other strategies, such as Pre-exposure prophylaxis of high-risk groups will be considered.
- Antivirals should be considered for patients who may be at high risk of severe disease (refer to Interim Clinical Guidance for the Treatment of Monkeypox):

o People with severe disease (e.g., hemorrhagic disease, confluent lesions, sepsis, encephalitis, or other conditions requiring hospitalization)

o People with immunocompromise (e.g., human immunodeficiency virus/acquired immune deficiency syndrome infection, leukemia, lymphoma, generalized malignancy, solid organ transplantation, therapy with alkylating agents, antimetabolites, radiation, tumor necrosis factor inhibitors, high-dose corticosteroids, being a recipient with hematopoietic stem cell transplant

o Pediatric populations, particularly patients younger than 8 years of age

o People with a history or presence of atopic dermatitis, persons with other active exfoliative skin conditions (e.g., eczema, burns, impetigo, varicella zoster virus infection, herpes simplex virus infection, severe acne, severe diaper dermatitis with extensive areas of denuded skin, psoriasis, or Darier disease [keratosis follicularis])

o Pregnant or breastfeeding women

o People with one or more complications (e.g., secondary bacterial skin infection; gastroenteritis with severe nausea/vomiting, diarrhea, or dehydration; bronchopneumonia; concurrent disease or other comorbidities)

o People with monkeypox virus aberrant infections that include accidental implantation in eyes, mouth, or other anatomical areas where monkeypox virus infection might constitute a special hazard (e.g., the genitals or anus)

- All requests for vaccines and antivirals should be sent to DPH Office of Infectious Disease Epidemiology (OIDE), at 302-744-4990 (business hours) or 1-888-295-5156 (24/7).

o Once DPH OIDE, is notified of suspected/confirmed monkeypox case, OIDE will help to facilitate obtaining vaccine and antiviral supply through Centers for Disease Control (CDC) and the Investigational New Drug (IND) application process.

**Public health guidance**

- Patients with prodromal symptoms (e.g., fever, malaise, headache) and one or more epidemiologic risk factors for monkeypox should self-isolate. If a rash does not appear within 5 days, the illness is unlikely to be monkeypox and alternative etiologies should be sought.
- Persons under investigation for monkeypox infection should isolate until test results are available. Presumptive positive and laboratory-confirmed cases should remain isolated until all lesions have resolved, the scabs have fallen off, and a fresh layer of intact skin has formed.
- Public health will be conducting case investigations and contact tracing of individuals with laboratory-confirmed monkeypox infection.

**Reporting**

MPX is a reportable disease in Delaware. Clinicians in Delaware who identify a patient with a suspected monkeypox rash should immediately contact DPH Office of Infectious Disease Epidemiology (OIDE), at 302-744-4990 (business hours) or 1-888-295-5156 (after hours).

**Recommendations for the Public**

- CDC is closely monitoring worldwide case counts and working to understand the cause of the current cases. Based on limited information available at this time, overall risk to the U.S. public is currently low.
- People who may have symptoms of monkeypox, such as unknown rashes or lesions, should contact their health care provider for assessment. This includes anyone who:

    - Reports contact with a person who has a similar rash or received a diagnosis of confirmed or suspected monkeypox.
    - Had close or intimate in-person contact with individuals in a social network experiencing monkeypox infections, this includes MSM who meet partners through an online website, digital application (app), or social event (e.g., a bar or party).
    - Traveled to countries where monkeypox cases have been reported.

**More Information**

- de.gov/monkeypox
- https://www.cdc.gov/poxvirus/monkeypox/index.html