State Health Advisory
Monkeypox Vaccine and Testing Update
Wyoming Department of Health
July 8, 2022

Summary
As of July 7, 2022, there have been over 600 cases of monkeypox diagnosed in the U.S. from 36 jurisdictions. Globally, over 7,000 cases have been reported across 54 countries. Community transmission of monkeypox is occurring in the United States, as many patients have no relevant travel history and no known contact with an individual with monkeypox. Reported cases primarily are in men who report sexual contact with other men (MSM). At this time, no monkeypox cases have been reported in Wyoming.

Major commercial laboratories have or will soon have the capability to perform clinical testing for monkeypox infection. Testing for monkeypox infection is currently available through Labcorp.

The U.S. Department of Health and Human Services (HHS) has begun distributing Jynneos vaccine, which is licensed for both pre-exposure and post-exposure prophylaxis against monkeypox infection, to jurisdictions. Wyoming will receive doses of Jynneos vaccine as early as the week of July 11, 2022, to be used for post-exposure prophylaxis of exposed individuals. At this time, Jynneos vaccine is only available through public health offices.

Clinician guidance, including guidance on identifying monkeypox infection, specimen collection, vaccines, and treatment options can be found from the CDC at the following link: https://www.cdc.gov/poxvirus/monkeypox/clinicians/index.html

Monkeypox Testing
Diagnostic testing for monkeypox infection is currently available at Labcorp and through the Wyoming Public Health Laboratory (WPHL). Several other major commercial laboratories will begin to offer monkeypox testing in the coming weeks.

Providers who suspect monkeypox infection in a patient based on clinical presentation and/or epidemiologic risk factors may submit samples to Labcorp and other commercial
laboratories without contacting the Wyoming Department of Health (WDH) prior to submission. However, WDH requests that providers notify WDH of any patients for whom they have a high suspicion for monkeypox based on clinical presentation and epidemiologic risk factors. WDH also requests that providers notify WDH immediately on receiving positive monkeypox test results. Notifications can be made by calling the 24/7 public health emergency line at 888-996-9104.

Providers wishing to submit samples through the WPHL should continue to call the 24/7 public health emergency line at 888-996-9104.

Providers should instruct patients to self-isolate pending test results, taking particular care to avoid contact with individuals at higher risk for infection from monkeypox, including immunocompromised individuals, pregnant women, children <8 years of age, and individuals with a history or eczema or atopic dermatitis.

Epidemiologic risk factors associated with the current outbreak include:
- Contact with a person or persons with a similar appearing rash or with a person who has received a diagnosis of confirmed or probable monkeypox OR
- Close or intimate in-person contact with persons 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., bar or party) OR
- Travel, within 21 days of illness onset outside the United States to a country with confirmed cases of monkeypox (https://www.cdc.gov/poxvirus/monkeypox/response/2022/world-map.html) or where Monkeypox Virus is endemic (https://www.cdc.gov/poxvirus/monkeypox/about.html) OR
- 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…)

Please see the Health Advisory dated June 16, 2022, for detailed information on clinical presentation of monkeypox associated with this outbreak and specimen collection and shipping instructions for submission through WPHL. Providers submitting to commercial laboratories should follow the specimen collection and shipping instructions provided by the commercial laboratory.

**Monkeypox Vaccines**

Jynneos is an FDA-approved vaccine for the prevention of monkeypox infection in individuals aged 18 and older. Jynneos is a live but non-replicating virus vaccine that is administered by subcutaneous injection as two doses spaced 28 days apart. Jynneos can be used for both pre-exposure and post-exposure prophylaxis. The current U.S. supply of Jynneos is limited.

ACAM-2000 is an FDA-approved vaccine for the prevention of smallpox in individuals aged 12 months and older. ACAM-2000 can be used under an expanded access investigational new drug protocol for pre-exposure and post-exposure prophylaxis against monkeypox infection. ACAM-2000 consists of live, replication-competent, Vaccinia virus and is administered as one dose through percutaneous injection. As a live, replicating virus vaccine, ACAM-2000 can cause serious adverse events in the vaccinated individual and can be transmitted to close contacts.
Contraindications to receiving ACAM-2000 include cardiac disease; eye disease treated with topical steroids; congenital or acquired immune deficiency disorders, including those taking immunosuppressive medications and people living with HIV (regardless of immune status); atopic dermatitis/eczema and persons with a history of atopic dermatitis/eczema or other acute or exfoliative skin conditions; infants less than 12 months of age; and pregnancy.

HHS is currently distributing Jynneos to jurisdictions to be used as post-exposure prophylaxis (PEP) among individuals with known high- or intermediate-risk contact to an individual with monkeypox infection. PEP with Jynneos can also be considered for individuals who are likely to have been recently exposed to monkeypox through association with an event or location with known monkeypox transmission. PEP is most effective when given within 4 days of exposure; however, PEP given between 4-14 days after exposure may reduce symptoms if it does not prevent disease.

Starting as early as the week of July 11, 2022, Wyoming will receive Jynneos vaccine at several public health nursing offices across the state. In the event of monkeypox occurrence in Wyoming, WDH will work with providers to identify individuals eligible for Jynneos PEP and provide access to vaccine.

At this time, pre-exposure prophylaxis (PrEP) against monkeypox is indicated for the following:
- Clinical laboratory personnel who perform testing to diagnose orthopoxviruses, including those who use polymerase chain reaction (PCR) assays for diagnosis of orthopoxviruses, including Monkeypox virus
- Research laboratory workers who directly handle cultures or animals contaminated or infected with orthopoxviruses that infect humans, including Monkeypox virus, replication-competent Vaccinia virus, or recombinant Vaccinia viruses derived from replication-competent Vaccinia virus strains
- Certain healthcare and public health response team members designated by public health authorities to be vaccinated for preparedness purposes

People who can get PrEP if they want to receive it include healthcare personnel who administer ACAM2000 or anticipate caring for many patients with monkeypox.

At this time, most clinicians in the United States and laboratorians not performing the orthopoxvirus generic test to diagnose orthopoxviruses, including monkeypox, are not advised to receive orthopoxvirus PrEP.

**Monkeypox Treatment**
Many people infected with monkeypox virus have a mild, self-limiting disease course in the absence of specific therapy. However, the prognosis for monkeypox depends on multiple factors, such as previous vaccination status, initial health status, concurrent illnesses, and comorbidities, among others. Patients who should be considered for treatment following consultation with CDC might include:
- People with severe disease (e.g., hemorrhagic disease, confluent lesions, sepsis, encephalitis, or other conditions requiring hospitalization)
○ People who may be at high risk of severe disease:
  ■ 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 \(<24\) months post-transplant or \(\geq 24\) months but with graft-versus-host disease or disease relapse, or having autoimmune disease with immunodeficiency as a clinical component)
  ■ Pediatric populations, particularly patients younger than \(8\) years of age
  ■ 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])
  ■ Pregnant or breastfeeding women
  ■ 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)
  ○ 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)

Currently there is no treatment approved specifically for monkeypox virus infections. However, antivirals developed for use in patients with smallpox may prove beneficial against monkeypox. These medical countermeasures are currently available from the Strategic National Stockpile (SNS) as options for the treatment of monkeypox. Specific information about the available antiviral therapies can be found here: [https://www.cdc.gov/poxvirus/monkeypox/clinicians/treatment.html](https://www.cdc.gov/poxvirus/monkeypox/clinicians/treatment.html)

Providers treating patients who may benefit from antiviral therapies should contact WDH by calling the 24/7 public health emergency line at 888-996-9104.