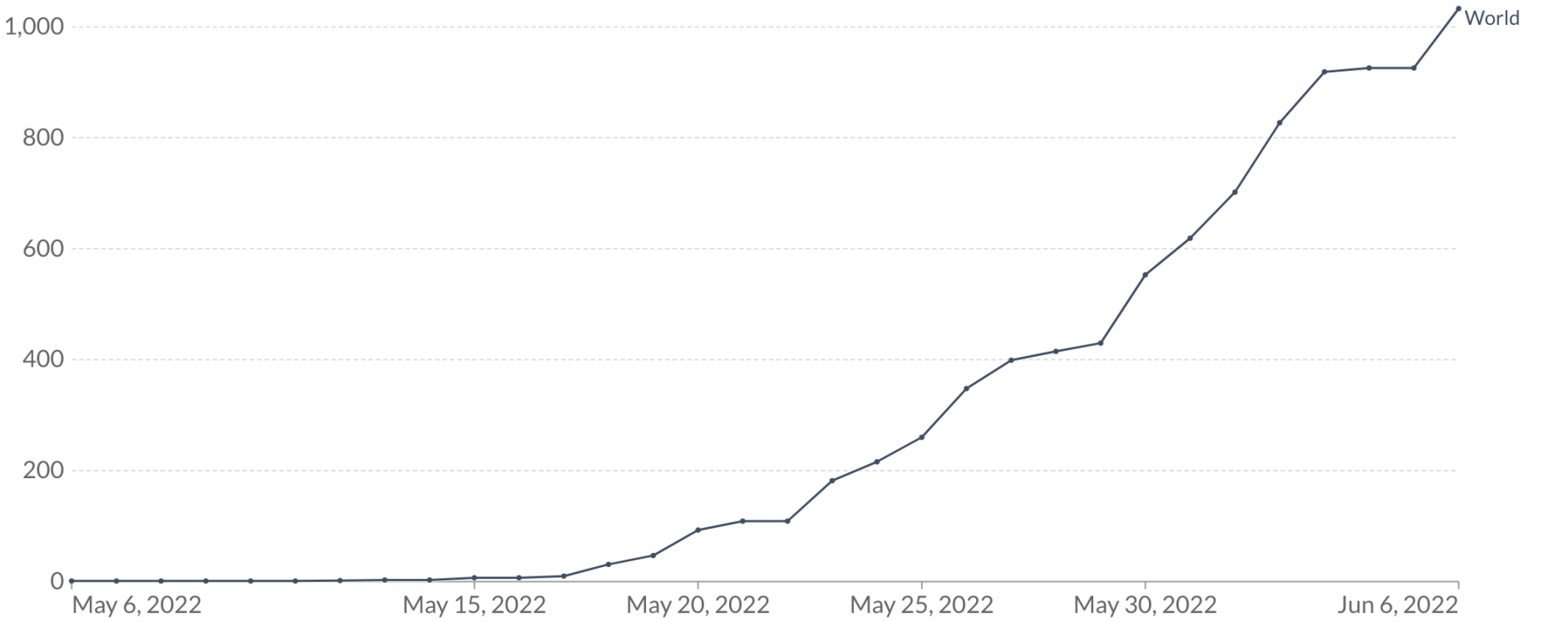
Monkeypox: Cumulative confirmed cases, by date of confirmation

Cases are shown by the date on which they were confirmed by a test.

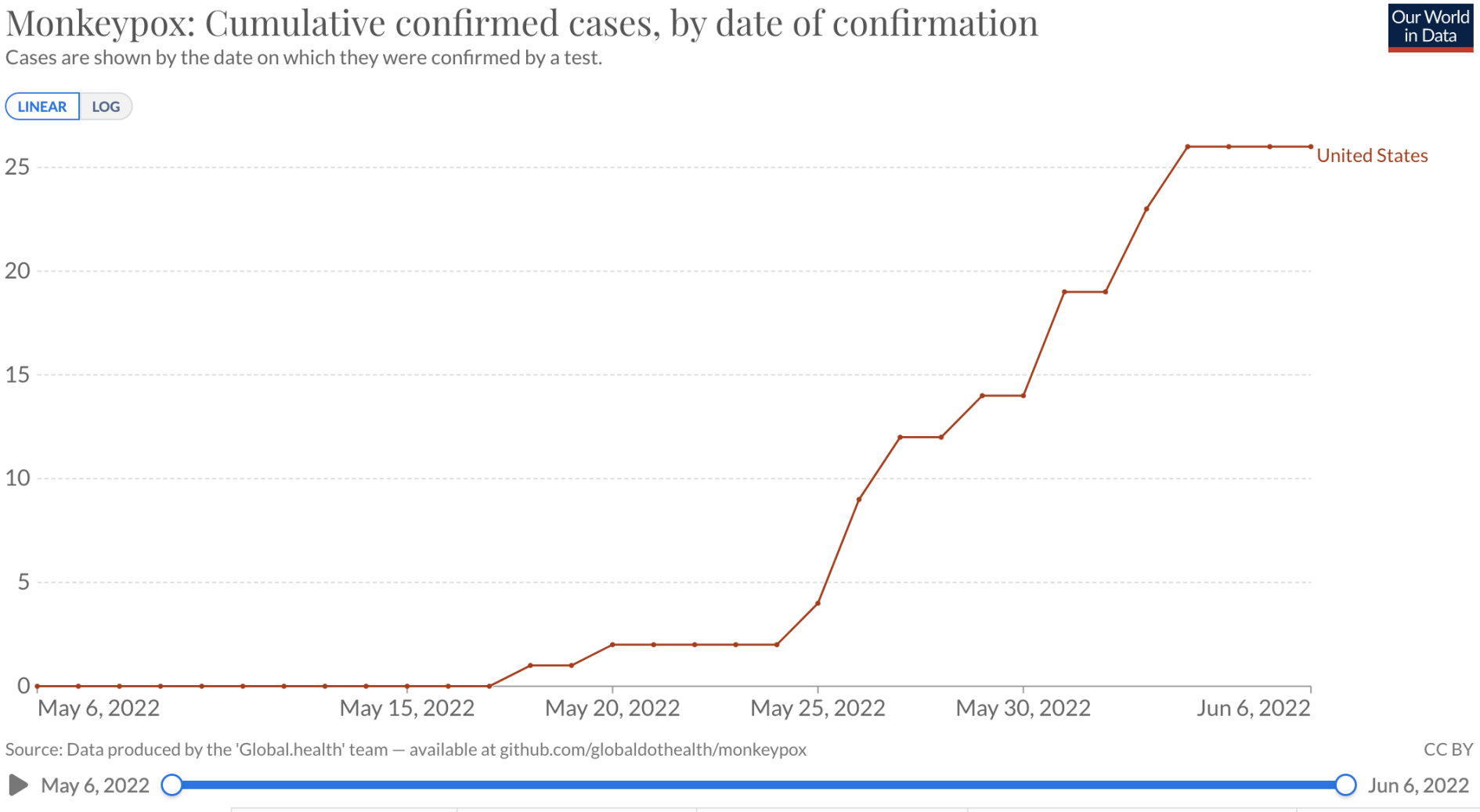
Our World in Data

LINEAR LOG



Source: Data produced by the 'Global.health' team — available at github.com/globaldothealth/monkeypox

May 6, 2022 Jun 6, 2022



At least 2 lineages circulating?

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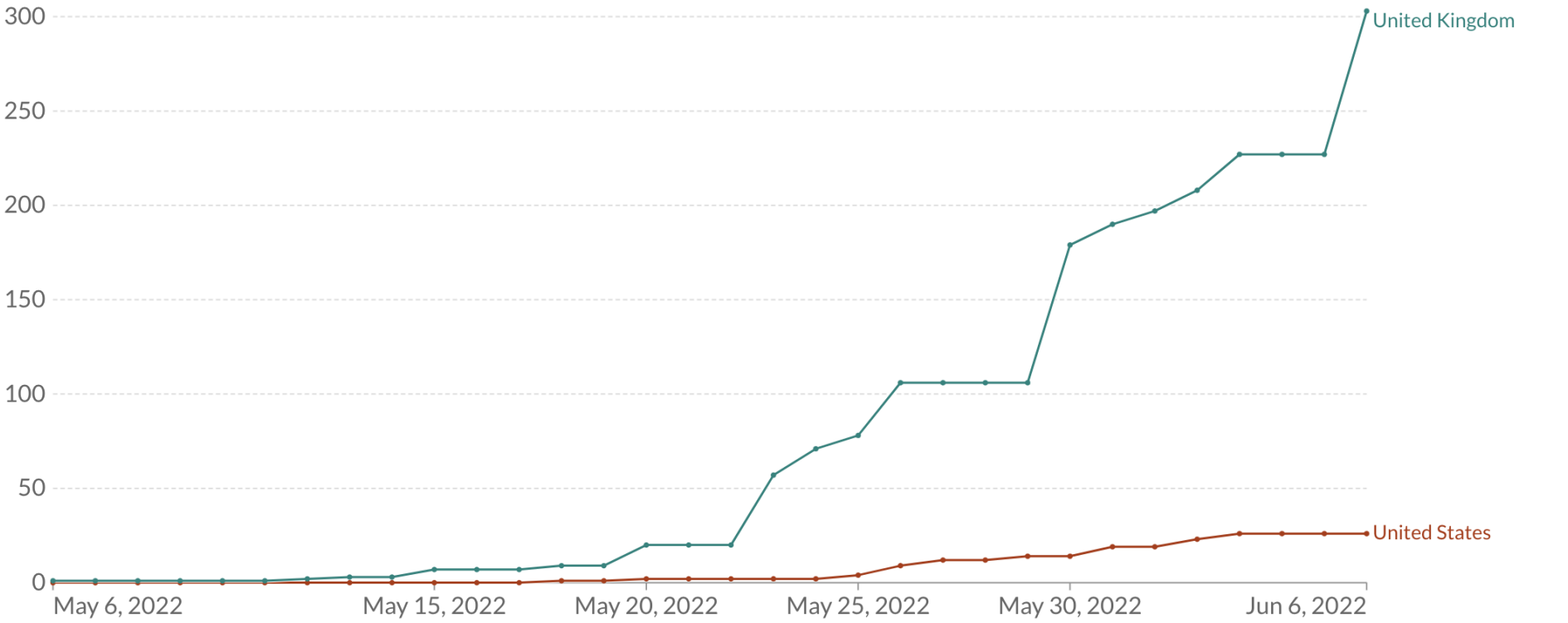

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May 6, 2022 Jun 6, 2022

Monkeypox Virus Infection in the United States and Other Non-endemic Countries—2022

HAN HEALTH ALERT NETWORK

NVH This is an official CDC HEALTH ADVISORY

Distributed via the CDC Health Alert Network
May 20, 2022, 11:30 AM ET
CDCHAN-00466

Monkeypox was first discovered in 1958 when two outbreaks of a pox-like disease occurred in colonies of monkeys kept for research, hence the name 'monkeypox.' The first human case of monkeypox was recorded in 1970 in the Democratic Republic of Congo during a period of intensified effort to eliminate smallpox. Since then monkeypox has been reported in humans in other central and western African countries.

Monkeypox is a rare disease that is caused by infection with monkeypox virus.

PUBLIC HEALTH INSIDER

OFFICIAL INSIGHTS FROM PUBLIC HEALTH – SEATTLE & KING COUNTY STAFF

CASE OF MONKEYPOX VIRUS IN KING COUNTY

Public Health – Seattle & King County, with support from Washington State Department of Health, is investigating a case of monkeypox virus infection reported to Public Health yesterday. The case is in an adult male with international travel in the past month to a country that has also reported monkeypox cases recently. Initial testing confirming an orthopoxviral infection was completed on Monday, May 23, 2022, at the Washington State Public Health Laboratory. Confirmatory testing was done at the U.S. Centers for Disease Control and Prevention (CDC) and announced on 5/27/22.

Public Health is working with the patient and the patient's health care providers to identify individuals who may have been in contact with the patient while he was infectious. The individual is isolating and does not pose a risk to others at this time. We have not identified any high-risk exposures in King County, and we are following up with people who had potential low risk exposures.

The individual was not hospitalized and is recovering at home.

Transmission

Transmission of monkeypox virus occurs when a person comes into contact with the virus from an animal, human, or materials contaminated with the virus. The virus enters the body through broken skin (even if not visible), respiratory tract, or the mucous membranes (eyes, nose, or mouth). Animal-to-human transmission may occur by bite or scratch, bush meat preparation, direct contact with body fluids or lesion material, or indirect contact with lesion material, such as through contaminated bedding. Human-to-human transmission is thought to occur primarily through large respiratory droplets. Respiratory droplets generally cannot travel more than a few feet, so prolonged face-to-face contact is required. Other human-to-human methods of transmission include direct contact with body fluids or lesion material, and indirect contact with lesion material, such as through contaminated clothing or linens.

- Broken skin
- Respiratory tract (large respiratory droplets)
- Mucous membranes

✓ Incubation period: 7-14 days

The illness begins with:

- Fever
- Headache
- Muscle aches
- Backache
- Swollen lymph nodes*
- Chills
- Exhaustion

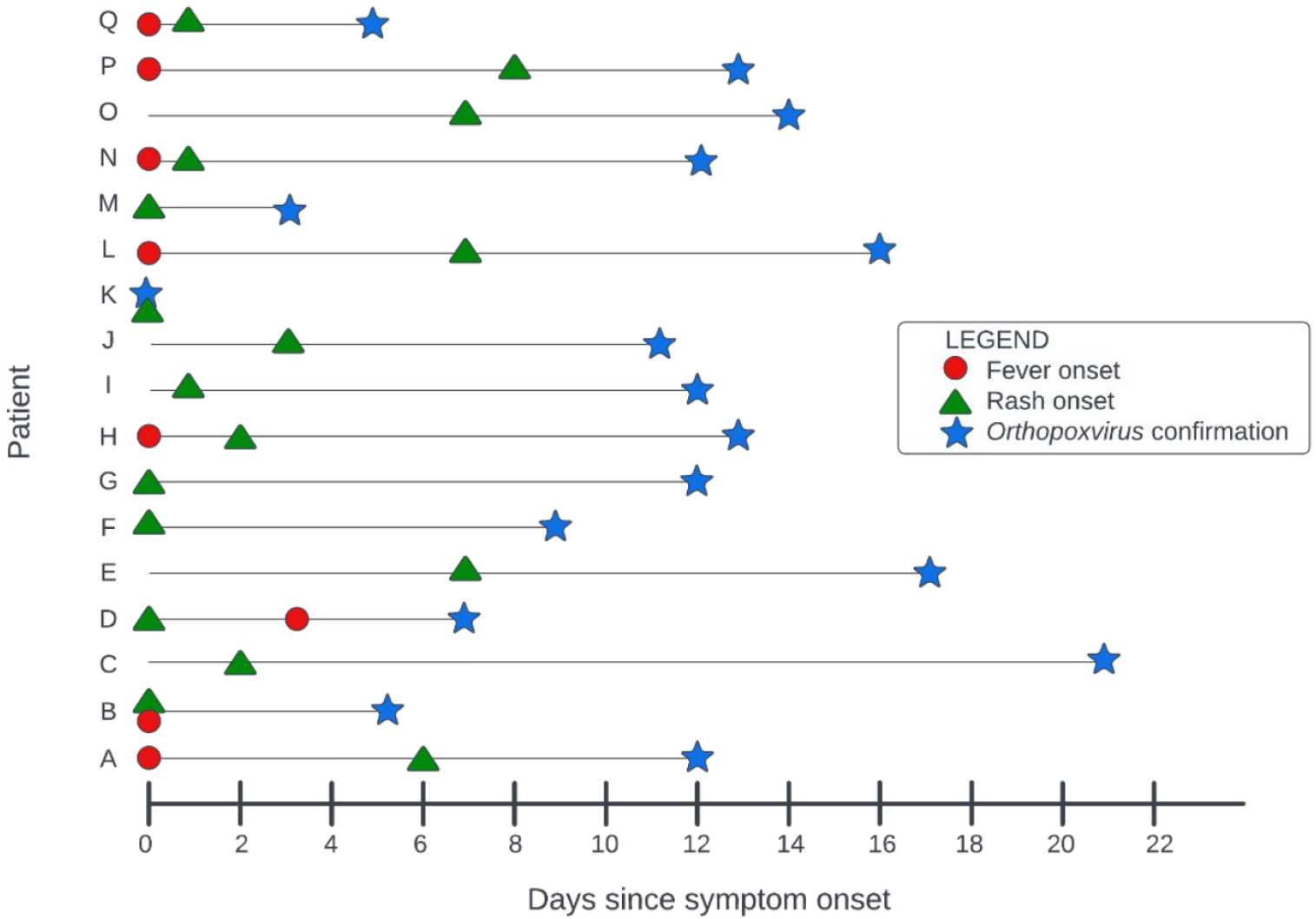
Within 1 to 3 days (sometimes longer) after the appearance of fever, the patient develops a rash, often beginning on the face then spreading to other parts of the body.

Lesions progress through the following stages before falling off:

- Macules
- Papules
- Vesicles
- Pustules
- Scabs

Stage	Stage Duration
Enanthem	
Macules	1–2 days
Papules	1–2 days
Vesicles	1–2 days
Pustules	5–7 days
Scabs	7–14 days

SUPPLEMENTARY FIGURE 2. Interval from rash and fever onset to diagnosis of an *orthopoxvirus* infection among confirmed orthopoxvirus and monkeypox patients (N = 17)* — United States, May 2022



https://www.cdc.gov/mmwr/volumes/71/wr/mm7123e1.htm

Case Definitions† For Use: Monkeypox 2022

Clinical Criteria

- **New rash (any of the following)**
  - Macular
  - Papular
  - Vesicular
  - Pustular
  - Generalized or localized
  - Discrete or confluent
- **Fever (either of the following)**
  - Subjective
  - Measured temperature of ≥100.4° F [>38° C]
- **Other signs and symptoms:**
  - Chills and/or sweats
  - New lymphadenopathy (periauricular, axillary, cervical, or inguinal)

Case Definitions† For Use: Monkeypox 2022

Epidemiologic Criteria

Within 21 days of illness onset:

- Report having had contact with a person or people who have a similar appearing rash or received a diagnosis of confirmed or probable monkeypox **OR**
- Is a man who regularly has close or intimate in-person contact with other men, including through an online website, digital application ("app"), or social event (e.g., a bar or party) **OR**
- Traveled to a country with confirmed cases of monkeypox **AND** at least one of the above criteria **OR**
- Traveled to country where MPXV is endemic **OR**
- Contact with a dead or live wild animal or exotic pet that is an African endemic species or used a product derived such animals (e.g., game meat, creams, lotions, powders, etc.)

Recommendations for Clinicians

- If clinicians identify patients with a rash that could be consistent with monkeypox, especially those with a recent travel history to central or west African countries, parts of Europe where monkeypox has been reported, or other areas reporting monkeypox cases, monkeypox should be considered as a possible diagnosis.
- The rash associated with monkeypox involves vesicles or pustules that are deep-seated, firm or hard, and well-circumscribed; the lesions may umbilicate or become confluent and progress over time to scabs.
- Presenting symptoms typically include fever, chills, the distinctive rash, or new lymphadenopathy; however, onset of perianal or genital lesions in the absence of subjective fever has been reported.
- The rash associated with monkeypox can be confused with other diseases that are encountered in clinical practice (e.g., secondary syphilis, herpes, chancroid, and varicella zoster). However, a high index of suspicion for monkeypox is warranted when evaluating people with a characteristic rash, particularly for men who report sexual contact with other men and who present with lesions in the genital/perianal area or for individuals reporting a significant travel history in the month before illness onset or contact with a suspected or confirmed case of monkeypox.
- Information on infection prevention and control in healthcare settings is provided on the CDC website Infection Control: Hospital | Monkeypox | Poxvirus | CDC. CDC is currently reviewing this information to consider the need for updates.
- Clinicians should first consult their state health department (State Contacts) or CDC through the CDC Emergency Operations Center (770-488-7100) as soon as monkeypox is suspected.

All specimens should be sent through the state/territorial public health department, unless authorized to send them directly to CDC.

Collection of specimens for monkeypox diagnosis

Possible human cases of monkeypox should be reported to your local hospital epidemiologist and/or infection control personnel, who will contact your state health department. If appropriate, the state health department will contact the Centers for Disease Control and Prevention (CDC). Consultation with the state epidemiologist, state health laboratory, and CDC is necessary before sending specimens to CDC.

Personnel who collect specimens should use personal protective equipment (PPE) in accordance with recommendations for standard, contact, and droplet precautions [PDF – 226 pages]. Specimens should be collected in the manner outlined below. When possible, use plastic rather than glass materials for specimen collection.

Real-time PCR may be used on lesion material to diagnose a potential infection with monkeypox virus. Consultation with the state health department and CDC should be performed prior to collecting specimens.

More than one lesion should be sampled, preferably from different locations on the body and/or from lesions with differing appearances. Refer to the Poxvirus Molecular Detection and Poxvirus Serology tests on the CDC Test Directory for specimen storage, packaging, and shipping instructions.

For more information, visit: https://www.cdc.gov/laboratory/specimen-submission/

- Use of disposable gown and gloves for patient contact.
- Use of NIOSH-certified N95 (or comparable) filtering disposable respirator that has been fit-tested for the healthcare worker using it, especially for extended contact in the inpatient setting.
    - Visit The National Personal Protective Technology Laboratory (NPPTL) for frequently asked questions and answers about wearing respirators versus surgical masks.
- Use of eye protection (e.g., face shields or goggles), as recommended under standard precautions, if medical procedures may lead to splashing or spraying of a patient's body fluids.

Post Exposure Prophylaxis

- For high risk exposed individuals with known contact
  - JYNNEOS vaccine (approved for smallpox & monkeypox. Highly attenuated, not replication competent) - Optimally within 4 days but up to 2 weeks
  - ACAM2000 (approved for smallpox, replication competent)
  - Vaccinia immunoglobulin (immunosuppressed)

Treatment

Currently there is no specific treatment approved for monkeypox virus infections. However, antivirals developed for use in patients with smallpox may prove beneficial. The following medical countermeasures are currently available from the Strategic National Stockpile (SNS) as options for the treatment of monkeypox:

- Tecovirimat - Expanded Access Investigational New Drug Protocol
- Cidofovir
- Vaccinia immune globulin IV

https://www.cdc.gov/poxvirus/monkeypox/treatment.html

References

- https://www.cdc.gov/mmwr/volumes/71/wr/mm7123e1.htm