CDC KEY MESSAGES

U.S. monkeypox outbreak 2022
Issue #12 – September 15, 2022

This document summarizes key messages about the monkeypox outbreak and CDC's response. It is distributed weekly. Updated content is in blue. For the most current information, visit http://www.cdc.gov/monkeypox.

TABLE OF CONTENTS

Outbreak Summary 1

What CDC Is Doing 4

About Monkeypox 6

Transmission 7

Symptoms 7

Testing 8

If You Feel Sick 9

Treatment 10

Vaccines 11

Prevention 16

Reducing Stigma and Misinformation 17

OUTBREAK SUMMARY

Since mid-May 2022, CDC and its partners have been working to prevent the spread of monkeypox in a global outbreak in the United States and many other countries without a history of monkeypox.

- As of September 12 there have been 21,985 confirmed cases of probable or confirmed monkeypox in all 50 U.S. states, the District of Columbia, and Puerto Rico.
- Worldwide, cases have been reported in 103 countries and territories across all continents except Antarctica. Nearly 99% of cases in this outbreak have occurred in countries that did not historically report monkeypox.
    - While this level of monkeypox activity is unexpected, the risk to the general U.S. population remains low.
- Data on the outbreak, including current U.S. and global maps and case counts, U.S. case trends, demographic information about monkeypox cases, and laboratory and testing data, are available in a revised outbreak summary page.

- In the 2022 global outbreak, the virus is spreading mostly through close, personal, often skin-to-skin contact, including from sexual encounters, with someone who has monkeypox.
- At this time, data suggest that gay, bisexual, and other men who have sex with men make up the majority of cases in the current monkeypox outbreak. However, anyone, regardless of sexual orientation or gender identity, who has been in close, personal contact, including sexual encounters, with someone who has monkeypox is at risk.
- Over the course of the outbreak, cases have shifted from predominantly non-Hispanic White men to a near equal distribution among Black, Latino or Hispanic, and non-Hispanic White men. This increases disparities among racial and ethnic minority men considering their proportion of the overall U.S. population.
- The CDC released two MMWRs on August 26 providing data that show gay, bisexual, and other men who have sex with men can make informed decisions to reduce their chance of getting monkeypox. A survey of this population found that the outbreak led to a reduction in the number of one-time sexual encounters. A modeling study of those findings estimated that a reduction of one-time sexual encounters between men could reduce the percentage of men who get monkeypox.
- On June 14, CDC published a Health Alert Network update (HAN) that highlighted that the pattern of symptoms in the global outbreak varies from patterns seen historically. The HAN also reported community cases, cases in people with no apparent link to international travel.
    - These two issues raised concerns that some monkeypox infections in the United States were not being recognized and tested. As a result, CDC updated and expanded its case definition to encourage testing for monkeypox in people with a rash and who may be at risk for developing monkeypox. On June 28, CDC activated its Emergency Operations Center to support the agency's monkeypox response.
- Also on June 28, the U.S. Government announced a strategy to vaccinate and protect people at risk for monkeypox, prioritize vaccines for areas with the highest numbers of cases, and provide guidance to state, tribal, local, and territorial health officials to aid their planning and response efforts.
    - Since then, CDC and HHS have been working closely with partners to ensure there are enough doses available to vaccinate all people for whom vaccination is recommended. CDC is working with state and local health officials to identify people who may have been in contact with people who have tested positive, so those contacts can monitor their health, be counseled on post-exposure vaccine prophylaxis, if indicated, and seek care if they develop symptoms.
    - Many people who have been diagnosed with monkeypox are reporting anonymous intimate contacts, or contacts with people who cannot be identified for contact monitoring and consideration for post-exposure prophylaxis (PEP). As a result, CDC and partner agencies have since expanded vaccine use to protect against virus transmission.
    - As of Sept. 12, 2022, the Administration for Strategic Preparedness and Response (ASPR) has shipped 776,953 vials of JYNNEOS vaccine from the Strategic National Stockpile to states and jurisdictions nationwide.
- On July 23, the World Health Organization (WHO) declared monkeypox a Public Health Emergency of International Concern (PHEIC). This is WHO's highest level of global alert, and the decision recognizes the potential threat this virus poses to countries around the world.
- In late July, CDC learned of the first cases of monkeypox among children during this outbreak. Infections in children can occur through normal activities of caregiving by an infected adult. Monkeypox may be more severe in children, particularly children under the age of 8 years, so it's vital to identify pediatric cases as quickly as possible and provide treatment if needed.
- On July 26, CDC published Clinical Considerations for Monkeypox in Children and Adolescents to help clinicians and health systems develop a plan for managing children and adolescents who may be affected by monkeypox.
- On July 27, CDC published Isolation and Prevention Practices for People with Monkeypox to help people affected by monkeypox protect others from getting it. The page has been since integrated into CDC's

recommendations for healthcare professionals, which now include more than 20 webpages, plus downloadable and printable files.

- Since July, CDC has published and regularly updated consumer pages with emphasis on user-friendliness and mobile accessibility to help people who are concerned about or affected by monkeypox, including:
    - About Monkeypox
    - Signs and Symptoms
    - How it Spreads
    - Prevention
    - If You Are Sick
- On Sept. 1, CDC published its second Technical Report on the outbreak. The purpose of the report is to share preliminary results of new analyses with a technical audience to improve understanding of the outbreak and inform further scientific inquiry. The first Technical Report published in August can be found here.
- Five major U.S. commercial laboratory companies -- Labcorp, Mayo Clinic Laboratories, Quest Diagnostics, Aegis Sciences, and Sonic Healthcare USA – are now participating in the U.S. government's expanded orthopoxvirus testing effort. Four of these commercial labs are performing the CDC non-variola orthopoxvirus test, while Quest is running a monkeypox lab developed test (LDT) that adds another 30,000 tests per week.
- Combined with testing within the Laboratory Response Network, total U.S. testing capacity is at 80,000+ per week.
- On August 9, 2022, CDC published Interim Clinical Considerations for Use of JYNNEOS and ACAM2000 Vaccines during the 2022 U.S. Monkeypox Outbreak. This CDC guidance includes information for clinicians about use of the alternative (intradermal) dosing regimen as well as the standard (subcutaneous) regimen for JYNNEOS vaccine.
- According to research, intradermal vaccination produces similar results to standard vaccination. This alternative route of administration uses much less vaccine and could help existing vaccine supplies reach more people.
- ASPR and CDC also simplified the process for U.S. healthcare providers to request the antiviral drug tecovirimat (TPOXX) to treat patients with monkeypox.
    - Healthcare providers can begin administering TPOXX as soon as they obtain informed consent from the patient. Copies of the Informed Consent Form are available in eight languages.
    - Forms requested under the EA-IND can be returned to CDC within 7 days after treatment begins. These include the
        - FDA Form 1572, Statement of Investigator, which must be signed by a clinician taking responsibility TPOXX treatments in a facility or of a single patient; and
        - The Patient Intake form
    - The Clinical Outcomes Form is optional but its return to CDC 3-14 days after the end of TPOXX treatment will help the CDC, FDA, and clinicians better understand this outbreak and how TPOXX treatment may help patients during this outbreak.
    - Earlier requirements to photograph lesions, collect specimens, and ship them to CDC are now optional.
- On August 10, 2022, human-to-animal transmission of monkeypox was reported, the first ever, when a dog was confirmed to have the virus.
- On August 12, 2022, WHO announced new names for monkeypox virus clades—or types—which replace regional names with Roman numerals. The formerly named Congo Basin, or Central African clade, was renamed Clade I. The former West African clade was renamed Clade II, which is made up of two sub-clades, IIa and IIb. Clade IIb is the clade in the 2022 global outbreak.
- On August 26, 2022, CDC published two articles in Morbidity and Mortality Weekly Report that provide data showing that gay, bisexual, and other men who have sex with men are taking charge of their health and making informed decisions to reduce their chances of getting monkeypox. These changes in behavior can slow the spread of monkeypox.

- CDC urges health departments, clinicians, and the public to remain vigilant, institute appropriate infection prevention and control measures, and notify public health authorities of suspected cases to reduce disease spread.

WHAT CDC IS DOING

- CDC is working with state and local health officials to identify people who may have been in contact with the people who have tested positive, so those contacts can have the information they need to monitor their health and seek care if symptoms appear. CDC has distributed detailed information on identifying and testing for potential infections to clinicians.
    - CDC is providing guidance on risk assessment and public health management of monkeypox cases in travel settings.
- CDC has published a series of Health Alert Network updates to highlight emerging issues in the monkeypox response for healthcare providers.
- On July 28, a HAN Health Update shared recent information for clinicians about commercial testing, collecting clinical specimens for testing, and using the antiviral drug tecovirimat (TPOXX) for treating monkeypox.
- Another HAN Health Update on July 30 alerted clinicians to considerations for preventing, diagnosing, and managing monkeypox in people with HIV, children, adolescents, and people who are pregnant or breastfeeding.
- CDC is working with community health organizations, including multiple partners in the LGBTQ+ community, to raise awareness of the outbreak and share accurate information about what people can do to protect their health and the health of others.
- CDC is currently working to stop the spread of monkeypox by working with state, tribal, local, and territorial health departments and partners to understand the epidemiology of the outbreak and to also learn about the populations most affected. We are using guidance from our work in HIV and STIs to ensure that we are not furthering stigma toward gay, bisexual, and other men who have sex with men. One of the biggest lessons learned from HIV is that it is critical to have the community most affected involved and ideally leading response efforts. In this case, gay and bisexual men are at the forefront of this response due to the current epidemiology of the outbreak.
- Internally, response leadership is a mixture of subject matter experts in monkeypox, but also experts in HIV/STI Prevention and gay and bisexual male networks. Externally, CDC is conducting community listening sessions and working very closely with HIV, sexual health, and LGBTQ+ advocacy organizations to create

messaging that is sex-positive and not stigmatizing. CDC is strongly committed to combating stigma and discrimination and encourage feedback from the community both internal and external.

- In addition to this focused messaging, CDC is also providing information to a wider U.S. audience about symptoms and the behaviors that can lead to the spread of monkeypox.
- On August 29, 2022, CDC replaced an earlier monkeypox Travel Health Notice (THN) with travel guidance for people who have monkeypox or have been exposed to monkeypox.
    - Over the last few months, we have learned that travel does not increase a person's chances of getting monkeypox in the current outbreak, and a person can take the same steps to protect themselves from monkeypox in their community and during travel.
- CDC recommends you do not travel if you have monkeypox.
    - Isolate at home or in another location until your symptoms are gone and your rash has healed; this means all scabs have fallen off and a fresh layer of skin has formed.
    - If you have monkeypox and must travel:
        - Make sure that you do not have fever or respiratory symptoms such as sore throat, nasal congestion, or cough.
        - Cover your rash and wear a well-fitting mask.
        - Take additional steps to prevent spread to others.
- CDC is supporting diagnostic testing at Laboratory Response Network (LRN) labs and 5 commercial labs, which conduct tests for orthopoxviruses like monkeypox virus; and at CDC itself, which conducts viral characterization testing specifically for monkeypox.
- CDC also analyzes the genetic makeup of the virus and provides technical assistance for laboratories in the United States and internationally. Technical requests have included expert input on test results, positive control material for tests, biosafety considerations, and other laboratory-related questions.
- GeoSentinel, a collaboration between the CDC and the International Society of Travel Medicine, is a global clinical-care-based surveillance system that monitors infectious diseases and other adverse health events that may impact international travelers and migrants. GeoSentinel sites identified the first cases of monkeypox in Europe during the current outbreak.
    - GeoSentinel deployed a data collection tool from May to July to gather information on monkeypox cases to improve our understanding of monkeypox epidemiology and clinical manifestations. Data analysis is complete and a manuscript is pending final review with a journal.
- CDC has been communicating information more broadly to clinical and laboratory audiences through interactive partner calls, including:
    - Hosting Clinician Outreach and Communication Activity (COCA) calls that have shared information with more than 32,000 participants.
    - Sending news of new commercial laboratory testing options to more than 64,000 subscribers of its COCA Now email updates.
    - Distributing Health Alert Network notices to inform thousands of clinicians about updated and expanded case definitions, testing for monkeypox and specimen collection, how to obtain and provide TPOXX under the expanded access Investigational New Drug (EA-IND) protocol, as well as information on monkeypox in people with HIV, children or adolescents, and people who are pregnant or breastfeeding.
    - Sharing weekly updates with more than 90 partner organizations, including state, tribal, local, and territorial agencies, public health organizations, and clinical, community, and LGBTQ+ organizations that forward information to their members.
    - Conducting ongoing consultations through a Clinician Call Center that was quickly set up to respond to individual providers and state and local health officials.
    - Publishing more than 69 webpages to inform the public, healthcare providers, health departments, laboratories, and partners about monkeypox.

- CDC researchers are working with our partners to learn how long the virus has been circulating; how the virus was introduced into some of the current clusters of cases; the clinical course of illness; other potential specimens for diagnostic testing; and whether the virus is being spread through contact with semen or vaginal fluids.
- CDC continues to provide technical assistance and respond to inquiries and information requests from state, tribal, local, and territorial health departments and partner organizations.
- On August 22, 2022, CDC updated its Interim Clinical Considerations for Use of JYNNEOS and ACAM2000 Vaccines during the 2022 U.S. Monkeypox Outbreak. This CDC guidance includes information for clinicians about use of the alternative (intradermal) dosing regimen as well as the standard (subcutaneous) regimen for JYNNEOS vaccine.
- The interim clinical considerations document includes
    - An overview of available vaccines, vaccination strategies and post-exposure prophylaxis, and planning considerations for health departments to address health equity.
    - Interim guidance for use of JYNNEOS or ACAM2000, including the schedule and dosing regimens that can be considered, dosing intervals, vaccine administration, pre- and post-vaccination counseling, and contraindications and precautions.
    - Related resources include vaccine information statements and EUA fact sheets in English and Spanish, template standing orders, preparation and administration summaries, and teaching tools for intradermal injection.
- CDC is developing a portfolio of vaccine effectiveness projects that will identify data from various locations, populations, and timepoints. The proposed projects include some new studies and leverage existing platforms and relationships.

ABOUT MONKEYPOX

- Monkeypox is caused by a virus that is in the same family as the virus that causes smallpox, but it typically results in a less severe infection.
- Before the 2022 outbreak, monkeypox was a rare but potentially serious disease that often began with a flu-like illness and swelling of the lymph nodes and progressed to include a widespread rash on the face and body.
- However, in the current global outbreak, patients have developed rashes without having flu-like symptoms first, and the rash may involve areas located on or near the genitals, anus or rectum, as well as other parts of the body.
- The type of monkeypox seen in this outbreak is rarely fatal, and more than 99% of people who get this form of the disease are likely to survive. However, some groups are likely at higher risk of severe illness, including children under 8 years of age, people who have weakened immune systems or are pregnant, and people with history of atopic dermatitis or eczema. People with unsuppressed or uncontrolled HIV, including some people who have stopped their HIV treatment or have not yet been diagnosed, have weakened immune systems so are at higher risk of severe illness.
- Symptoms of monkeypox may include intense pain, itching, or other debilitating issues that make simple things like walking or going to the bathroom difficult. The rash may also leave scars once it heals.
- CDC recommends that clinicians assess pain in all patients with monkeypox.
- Most infections last 2-4 weeks and resolve without specific treatment.
- Monkeypox is endemic in parts of Africa, with more than 1,000 cases reported annually in the Democratic Republic of the Congo in recent years. Nigeria has reported ongoing spread of monkeypox since 2017, when the virus re-emerged after nearly 40 years with no reported cases.
- Analysis by CDC experts has found that there are at least two genetically distinct variants of monkeypox virus circulating in the current outbreak, both of which share common ancestors of strains present in Nigeria

since 2017. This shows it's likely that there were at least two separate instances where the monkeypox virus spread from animals to people in Nigeria, then began to spread person-to-person through close contact.
- Prior to the current outbreak, there were at least eight reported monkeypox cases in travelers who visited Nigeria and returned home with monkeypox infections (including cases in the United States, United Kingdom, Israel, and Singapore). In the United Kingdom, several additional monkeypox cases occurred in people who had contact with travelers who had monkeypox.
- Experts have yet to identify where monkeypox virus is found in nature, but it's thought that small mammals in some parts of Africa play a role in spreading the virus to people and other forest animals, like monkeys.

TRANSMISSION

- Monkeypox is caused by a virus that can spread from animals to people. It can spread between people when a person has close contact with someone who is infected with monkeypox or touches materials that are contaminated with the virus.
- Monkeypox can spread to anyone through:
    - Direct contact with monkeypox rash or scabs on a person's skin or the body fluids of an infected person.
    - Contact with objects, fabrics (clothing, bedding, or towels), and surfaces that have been used by someone with monkeypox.
    - Contact with respiratory secretions during prolonged, face-to-face contact.
- Monkeypox can be spread during intimate contact, including:
    - Oral, anal, and vaginal sex, or touching the genitals or anus of a person with monkeypox.
    - Hugging, massage, kissing, or talking closely.
    - Touching fabrics, shared surfaces, and objects that were used by a person with monkeypox, such as bedding, towels, fetish gear and sex toys.
- The close contact does not have to be exclusively intimate or sexual. Any close, sustained skin-to-skin contact with someone who has monkeypox can spread the virus.
- The current outbreak has led to questions about whether monkeypox is a sexually transmitted infection (STI). Monkeypox can more accurately be described as "sexually transmissible."
- In the past, monkeypox outbreaks have been linked to direct exposure to infected animals and animal products, with limited person-to-person spread. In the current monkeypox outbreak, the virus is spreading primarily through close personal contact.
- This may include contact with infectious lesions or respiratory secretions via close, sustained skin-to-skin contact that occurs during sex. Monkeypox can be spread from the time symptoms start until all sores have healed and a fresh layer of skin has formed.
- It may spread to another person through non-sexual close contact, as might occur when someone infected with monkeypox provides normal caregiving.
- On August 10, 2022, a report in *The Lance*t described a monkeypox infection in a dog that had close contact with two people with monkeypox. This is the first report of human-to-animal transmission of monkeypox and the first confirmed dog with the virus.
- To learn more about how monkeypox can spread, visit CDC's How it Spreads page.

SYMPTOMS

People with monkeypox may first develop a flu-like illness with fever, headache, muscle aches, exhaustion, and enlarged lymph nodes. A characteristic rash, which can first appear like blisters or pimples, occurs a few days later. The monkeypox rash lesions or sores will progress, becoming firm or rubbery, well-defined and deep in the skin, and often develop umbilication (resembling a dot on the top of the lesion). However, in the 2022 global

outbreak, some patients have developed localized rashes, often around the genitals or anus, without having flu-like symptoms first.

- Early flu-like symptoms of monkeypox can include:
    - Fever
    - Headache
    - Muscle aches and backache
    - Swollen lymph nodes
    - Chills
    - Exhaustion
- The rash sometimes is located on or near the genitals or anus, but may be in other areas like the hands, feet, chest, neck or face.
    - At first, the sores can look like pimples or blisters and may be painful or itchy.
    - The sores typically go through several stages, including the firm or rubbery, sometimes umbilated sores (looks like a dot on top of the lesion), then forming scabs, before healing.
    - Sores may be inside the body, including the mouth, throat, vagina, or anus.
- The illness may last for up to 2–4 weeks and usually resolves without specific treatment.
- Visit CDC's monkeypox Signs and Symptoms page for more information.
- If you're a healthcare worker looking for more information on how to recognize monkeypox, please see CDC's Clinical Recogntion page.

TESTING

- In June, CDC began distributing its FDA-cleared non-variola orthopoxvirus test to five commercial laboratory companies – Labcorp, Mayo Clinic Laboratories, Quest Diagnostics, Aegis Sciences, and Sonic Healthcare USA – to increase monkeypox testing capacity and access.
- As of July 18, all five commercial laboratory companies taking part in the U.S. government's expanded orthopoxvirus testing effort – Labcorp, Mayo Clinic Laboratories, Quest Diagnostics, Aegis Sciences, and Sonic Healthcare USA – have begun testing. Four of these commercial labs are performing the CDC non-variola orthopoxvirus test, while Quest is running a monkeypox lab-developed test (LDT) that adds another 30,000 tests per week.
- Combined with the existing capability of the facilities in the Laboratory Response Network, this has brought the total U.S. testing capacity to at least 80,000 per week.
- Healthcare providers can order the orthopoxvirus test from these companies just as they normally would order other tests.
- The American Medical Association (AMA) created new Current Procedural Terminology (CPT) codes that streamline the reporting of orthopoxvirus and monkeypox testing and immunizations currently available on the United States market. Refer to the AMA orthopoxvirus and monkeypox coding & guidance page and the *CPT Assistant guide* for more detailed information.
- The companies will use electronic laboratory reporting (ELR) to report results to jurisdictions, as outlined in CDC reporting guidance. Test results will be reported to the health department in the patient's state or territory of residence.
- The addition of these commercial laboratories has greatly expanded the current capacity provided through CDC's Laboratory Response Network (LRN), which has the capacity to test about 10,000 specimens per week.
- Previously, all initial testing for monkeypox was being performed at LRN labs, located at most state health departments.
- If samples are positive for orthopoxvirus (the genus of viruses that includes monkeypox virus), the labs send some of the samples to CDC to perform viral characterization testing, including a PCR assay and potential

sequencing. Since there are no other circulating orthopoxviruses within the United States detected with the non-variola orthopoxvirus test, a positive test is probable for monkeypox infection.

- As of Aug. 2, Laboratory Response Network (LRN) laboratories that conduct the CDC non-variola orthopoxvirus test are no longer required to send all positive specimens to CDC for monkeypox characterization testing. Laboratories may choose to only send 10% of their positive specimens each month.
- All orthopoxvirus positive specimens submitted to CDC have been characterized as monkeypox Clade II, formerly known as the West African clade. However, collecting the genetic sequences and related data from a selection of positive specimens can help CDC track any changes to the virus and identify potential variants that might be spread more easily or respond differently to treatments.
- Routine testing of specimens will also ensure that CDC's orthopoxvirus test remains effective.
- A similar change for the commercial labs running the CDC non-variola orthopoxvirus test was implemented on August 15, once they meet certain criteria.
- A positive orthopoxvirus test result is enough for public health authorities to take the actions necessary to care for the patient and help prevent additional spread – the same actions they would take for a positive monkeypox test result. They can start treatment if needed, begin contact tracing, and offer post-exposure vaccination to contacts.
- The LRN consists of approximately 120 laboratories, including state and local public health laboratories, and 84% of the U.S. population live within 100 miles of one of these laboratories. Currently, 73 of these laboratories can test for orthopoxvirus.

IF YOU FEEL SICK

If you have a new or unexplained rash or other symptoms, see your healthcare provider for medical attention and evaluation.

- If you do not have a provider or health insurance, you can visit a public health clinic.
- If you seek medical evaluation for possible monkeypox, cover all parts of the rash with clothing, gloves or bandages, wear a well-fitting mask, and remind the healthcare provider that this virus is circulating.
- Avoid close contact, including sexual or intimate contact, skin-to-skin contact, and close face-to-face contact with anyone until you have been evaluated by a healthcare provider.
- See CDC's Social Gatherings, Safer Sex, and Monkeypox page for additional information on how to reduce your risk of monkeypox.

If you have received a monkeypox diagnosis, avoid having close contact with others until your symptoms have gone away and the rash has completely healed.

- Avoid sex or being intimate with anyone until all your sores have healed and you have a fresh layer of skin formed.
- Isolate until your rash has fully healed and a fresh layer of skin has formed. People with monkeypox can spread the illness to others from the beginning of symptoms until the rash has formed a fresh layer of skin.
    - Under some circumstances, if you have monkeypox but have to leave isolation before you have fully healed,you should cover the rash and wear a well-fitting mask to protect others from getting monkeypox.
    - It is very important to isolate if you have a fever or respiratory symptoms, including sore throat, nasal congestion, or cough. When experiencing these symptoms, you should leave isolation only to see a healthcare provider or for an emergency.

    - If you have an active rash or other symptoms, stay in a separate room or area away from people or pets you live with, when possible.
- Avoid contact with animals including pets, domestic animals, and wildlife. For more information, see CDC's Pets in the Home page.
- Cover rashes on the body with clothing, gloves, or bandages.
- Wash your hands often with soap and water. Use alcohol-based hand sanitizer if soap and water aren't available.
- Clean and disinfect surfaces and materials that you have touched while you have symptoms, including bedding, towels, clothing, sex toys, and surfaces such as door handles or counter tops.
    - Standard household cleaning/disinfectants may be used in accordance with the manufacturer's instructions.
- For more details, see CDC's If You Are Sick page.

TREATMENT

There is no treatment specifically for monkeypox. However, because the monkeypox and smallpox viruses are closely related, vaccines and drugs developed to protect against smallpox may be used, and are believed to be helpful to prevent and treat monkeypox virus infections, respectively.

- Treatment will depend on how sick someone gets or whether they're likely to get severely ill, such as if they have a weakened immune system. Most people with monkeypox recover fully within 2 to 4 weeks without the need for treatment.
- Antiviral drugs used to treat smallpox and monkeypox require a prescription and must be released from the U.S. Strategic National Stockpile at the request of a patient's local or state health department.
- The antiviral drug tecovirimat (also known as TPOXX) was developed to fight smallpox, one type of orthopoxvirus, but the U.S. Food and Drug Administration (FDA) allows CDC to use it to treat monkeypox during an outbreak. Data are not available on the effectiveness of tecovirimat in treating monkeypox infections in people, but animal studies showed tecovirimat is effective in treating disease caused by orthopoxviruses. Clinical trials showed the drug was safe when given to healthy people who did not have smallpox or monkeypox.
- In addition, other drugs may be useful against monkeypox, but have not yet been tested:
    - Vaccinia Immune Globulin Intravenous (VIGIV) is licensed by the FDA for treating complications from smallpox vaccination. CDC has permission to use of VIGIV for the treatment of orthopoxviruses, including monkeypox, during an outbreak.
    - Cidofovir (also known as Vistide) is an antiviral medication approved by the FDA for the treatment of cytomegalovirus (CMV) retinitis in patients with Acquired Immunodeficiency Syndrome (AIDS).
    - Brincidofovir (also known as Tembexa) is an antiviral medication that was approved by the FDA in 2021 for the treatment of human smallpox disease.
- State and territorial health authorities should request oral TPOXX through the electronic Health Partner Portal (HPOP) operated by the U.S. Administration for Strategic Preparedness and Response (ASPR). Certain states, U.S. territories, large local health departments, including those of the District of Columbia and New York City, may request oral TPOXX for their jurisdictions through the same mechanism.
- For tribal nations, federally funded tribal healthcare facilities (Indian Health Service-operated facilities, Tribal Health Programs, and Urban Indian Organizations) may request TPOXX from the Indian Health Service National Supply Service Center. Individual facilities have the option to work with the state health

department. Non-federally recognized tribal nations should continue to request monkeypox medical countermeasures directly through their state health department.

- The quickest way to obtain oral TPOXX may be through supplies of those medications that the state, territory or jurisdiction health department has pre-positioned within the jurisdiction. Most intravenous TPOXX will need to be requested from CDC with the assistance of the state, territorial, or other jurisdictional health departments; however, a few states may have a small amount of intravenous TPOXX located in their area.
- Requests for IV TPOXX and ACAM2000 should also be made through the relevant state, territory, or jurisdiction health department. Those jurisdiction health departments can submit a request for IV TPOXX or ACAM2000 to CDC via e-mail (eocevent477@cdc.gov or eocevent482@cdc.gov).
- To request a clinical consult with CDC clinicians, state, territorial, and jurisdictional health departments may email the specific request with a description of the situation to CDC at eocevent482@cdc.gov.
- After hours and in urgent situations, state, territorial, and jurisdictional health departments may call the CDC Emergency Operations Center (770-488-7100) to request a clinical consult and talk with a clinician about the medical countermeasures.
- Indian Health Service-operated facilities, tribal health programs (THPs), and Urban Indian Organizations (UIOs) can order oral TPOXX through IHS's National Supply Service Center or through the state(s) health departments. Details are found at NPTC-ETU-Current-Therapeutic-Guidance-on-Monkeypox.pdf (ihs.gov)
- For more information, see CDC's monkeypox treatment page. Healthcare providers may also want to consult CDC's guidance for TPOXX and revised instructions on how to obtain TPOXX.

VACCINES

Vaccination is an important tool in preventing the spread of monkeypox. On June 28, 2022, the federal government announced an enhanced nationwide strategy to vaccinate and protect people at risk for monkeypox, prioritize vaccines for areas with the highest numbers of cases, and provide guidance to state, tribal, local, and territorial health officials to aid their planning and response efforts. Two vaccines may be used for the prevention of monkeypox diseases in the U.S., JYNNEOS and ACAM2000.

- In addition to CDC, multiple federal agencies, including ASPR, FDA, and National Institutes of Health (NIH), are coordinating to implement this enhanced vaccination strategy, and working closely with partners to ensure enough vaccine doses are available to vaccinate all people for whom vaccination is recommended.
- The Enhanced National Vaccination Strategy has several phases.
    - In Phase 1 (June 2022), vaccine was distributed to jurisdictions using a tiered allocation system based on case rates, to give to people who have had close contact with people known to have monkeypox, and to people who may have had high-risk exposures in venues or areas where monkeypox is actively spreading. This approach is called post-exposure prophylaxis (PEP).
    - In Phase 2a and 2b (July 2022), additional vaccine was distributed based on a weighted algorithm to determine an equitable threshold based on population sizes, to continue to support PEP and to administer to more people as expanded post-exposure prophylaxis (PEP++).
    - In Phase 3a and 3b/c (July-August 2022), additional vaccine vials were allocated based on a weighted algorithm using population at risk and cases reported to establish thresholds for jurisdictions that would continue to support prioritizing PEP and PEP++.
    - Phase 4 began on August 22, with an additional 360,000 vials allocated to jurisdictions. Allocations for phase 4 are based on a revised strategy using cases reported (50% weight) to CDC as of August

18, and the estimated size of the underlying population in the jurisdiction that might benefit from expanded vaccination at this point in the outbreak (50% weight). This underlying population currently includes gay, bisexual, and other men who have sex with men, people with HIV or who are eligible for HIV pre-exposure prophylaxis (HIV PrEP).

- A pilot program was announced on August 18, 2022, to provide additional vaccine allocations to state and local health departments in jurisdictions that are hosting large events where the attendees are primarily gay, bisexual, and other men who have sex with men.
- On August 30, 2022, the White House announced a new pilot program to reach populations who are at elevated risk of contracting monkeypox, but may face barriers in accessing the vaccine. These barriers may include lack of access to online appointment scheduling or stigma that may be associated with attending public vaccine events that may require disclosure of sexual identity, gender identity, or level of sexual activity.

Available vaccines

- This plan allocates the two-dose JYNNEOS vaccine, which the FDA approved for prevention of smallpox and monkeypox in people ages 18 years and older who are at high risk for monkeypox infection.
- On August 9, 2022, FDA announced an emergency use authorization (or EUA) for JYNNEOS vaccine to allow healthcare providers to use the vaccine by intradermal injection for people ages 18 years and older who are determined to be at high risk for monkeypox infection. This action enables providers to receive up to five times the number of doses out of a single vial.
  - The FDA-licensed standard regimen for JYNNEOS vaccine is for subcutaneous administration (in the fatty layer under the skin). The alternative regimen allows for intradermal administration (directly into the skin's top layer). The intradermal route of administration requires a smaller amount of vaccine to produce a similar effect.
  - Because the dermis layer houses a large amount of immune cells, vaccinating in that area of the skin can create a robust response to protect against infection.
- Also on August 9, CDC published Interim Clinical Considerations for Use of JYNNEOS and ACAM2000 Vaccines during the 2022 U.S. Monkeypox Outbreak, which provides guidance for use of JYNNEOS vaccine including the intradermal regimen. Linked related resources for health departments and healthcare providers include vaccine information statements (VIS), as well as EUA fact sheets in multiple languages, template standing orders, preparation and administration summaries, and teaching tools about intradermal injections, including a video.
- The August 9 EUA also allows people under age 18 years to receive JYNNEOS vaccine using the standard (subcutaneous) route. It also allows use of the standard subcutaneous regimen (injection of a whole 0.5mL vial) in people of any age with a history of keloids.
- Intradermal vaccination has been studied for other vaccines, including rabies, influenza, and hepatitis B vaccines.
- Interdermal vaccination is used globally for the tuberculosis vaccine.
- A randomized, independent study published in the peer-reviewed journal *Vaccine* in 2015 found that JYNNEOS vaccine administered intradermally produced a similar antibody level (immunogenicity) as the vaccine administered into the subcutaneous tissue (the fatty layer just under the skin).
- Overall, there was no difference in the proportion of people with adverse events who received the vaccine into the skin (intradermally) or under the skin (subcutaneously). However, the reaction around the injection site may be last longer than when administered under the skin.

- Because JYNNEOS is licensed as a two-dose series, CDC continues to recommend two doses of JYNNEOS vaccine to prevent monkeypox disease, regardless of how it is administered. The two doses should be given 28 days apart.
- See CDC's Interim Clinical Considerations for Use of JYNNEOS and ACAM2000 Vaccines during the 2022 U.S. Monkeypox Outbreak for detailed recommendations, including how healthcare providers should handle dosing or administration errors and what to do if the vaccine is given in the wrong site, route, dose, or interval.
- To supplement the supply of JYNNEOS, state and local jurisdictions, tribal nations, and territories may also request ACAM2000 vaccine. ACAM2000 is given as a single dose. However, ACAM2000 carries greater risk of certain serious side effects than JYNNEOS and should not be given to some people, including people with weakened immune systems, certain skin conditions such as eczema, heart disease, or who are pregnant or lactating.

CDC will work with state, territorial, tribal, and local health departments requesting ACAM2000 vaccine to ensure that people who are considering getting the vaccine are fully informed on the benefits and the risks before they receive it.

What is CDC doing to study the effectiveness of monkeypox vaccines?

- Real-world effectiveness of modern vaccines is unknown in the context of the current monkeypox outbreak. Initial licensure was supported by animal studies and clinical studies demonstrating immune responses (development of antibodies) following vaccination.
- CDC is developing a portfolio of vaccine effectiveness projects that will identify data from various locales, populations, and timepoints. The proposed projects include some new studies and leverage existing platforms and relationships.
- Initial estimates of vaccine effectiveness will take some time. However, some initial projects are underway. For example, a CDC field team is currently supporting an investigation in Washington, D.C., to prospectively evaluate infections among persons seeking vaccination. Additionally, CDC is assessing population-level vaccination trends in high-burden jurisdictions.
- Because there are limitations in our knowledge about the effectiveness of these vaccines in the current outbreak, CDC is recommending that people who get vaccinated continue to take steps to protect themselves from infection by avoiding close skin-to-skin contact, including intimate contact, with someone who has monkeypox.

Who should get vaccinated?

- People can be vaccinated after known or presumed exposure to someone with monkeypox as post-exposure prophylaxis (PEP).
- In the context of this outbreak the following people can be vaccinated under the strategy of PEP:
    - People who are known contacts to someone with monkeypox who are identified by public health authorities, for example via case investigation, contact tracing or risk exposure assessment
- In addition to those who can be vaccinated under the PEP strategy, people with certain risk factors and recent experiences that might make them more likely to have been exposed to monkeypox can be considered for vaccination in a strategy known as expanded post-exposure prophylaxis (PEP++). This includes:

    - People who are aware that a recent sex partner within the past 14 days was diagnosed with monkeypox
    - Certain gay, bisexual, other men who have sex with men, transgender, and gender-diverse people who have sex with men who report any of the following in the past 14 days:
        - Group sex or sex with multiple partners
        - Sex at a commercial sex venue or in association with an event, venue, or defined geographic area where monkeypox transmission is occurring
- Vaccination of people before exposure to monkeypox, or pre-exposure prophylaxis (PrEP) with JYNNEOS vaccine is recommended for people in certain occupational risk groups (such as, research laboratory workers performing diagnostic testing for orthopoxviruses, and members of healthcare worker response teams designated by appropriate public health and antiterror authorities) based on long-standing recommendations from the Advisory Commitee of Immunization Practices (ACIP) that predate the outbreak.
- Currently, CDC is not encouraging mass vaccination for the general public or for all sexually active people while JYNNEOS vaccine supplies remain limited.
- JYNNEOS doses should be prioritized for people who are at risk for severe adverse events with ACAM2000 or severe disease from monkeypox, such as people living with HIV infection or other immunocompromising conditions, or those who are taking medications that weaken the immune system.

Distribution

- States and other jurisdictions are being offered equitable allocations of JYNNEOS vaccine doses based on current cases as well as the estimated size of the underlying population in the jurisdiction that might benefit from vaccination. The federal government is partnering with state, tribal, local, and territorial governments in deploying the vaccines.
    - Indian Health Service-operated facilities, tribal health programs (THPs), and Urban Indian Organizations (UIOs) can order JYNNEOS vaccine through IHS's National Supply Service Center or through the state(s) health departments. Details are found at NPTC-ETU-Current-Therapeutic-Guidance-on-Monkeypox.pdf (ihs.gov)
- On July 1, 2022, the Biomedical Advanced Research and Development Agency (BARDA) ordered an additional 2.5 million vials of JYNNEOS for use in responding to current or future monkeypox outbreaks and as part of U.S. smallpox preparedness. Deliveries from this latest order will begin arriving at the SNS later this year and will continue through early 2023. Altogether, HHS anticipates making approximately 1.9 million vials of JYNNEOS available in 2022, with an additional 2.2 million available during the first half of 2023.
- In some areas, there may be more people with known or presumed exposures than supplies of JYNNEOS. States are encouraged to prioritize JYNNEOS for use in people who are at risk for severe adverse events with ACAM2000 (see below).
- When states have considered the complexities and elect to use ACAM2000 as part of their strategy, it can be offered to people who have been adequately screened and counseled.
- This may include ensuring vaccinees clearly understand possible health risks, have signed informed consent, have ensured they are not HIV positive through rapid testing, and are able to avoid close contact with people – including household members – at risk of severe disease until the vaccine site is fully healed.

What approaches to vaccination can states or other jurisdictions take?

- In the context of this outbreak vaccine strategies include:
  - **Monkeypox vaccine post-exposure prophylaxis (PEP)** refers to vaccination of a person following known exposure to monkeypox. These are known contacts to someone with monkeypox who are identified by public health authorities, for example via case investigation, contact tracing or risk exposure assessment. This is intended to help prevent illness from the monkeypox virus.
  - **Monkeypox vaccine expanded post-exposure prophylaxis (PEP++)** refers to vaccination of people with certain risk factors that might make them more likely to have been recently exposed to monkeypox. The PEP++ approach aims to reach these individuals for vaccination even if they have not had a known exposure to monkeypox.
  - **Monkeypox vaccine pre-exposure prophylaxis (PrEP)** refers to vaccination given to people at high risk for monkeypox, and is currently recommended only for people in certain occupational risk groups (e.g. research laboratory workers performing diagnostic testing for Monkeypox virus, and members of healthcare worker response teams designated by appropriate public health and antiterror authorities). These are long-standing recommendations from the Advisory Commitee of Immunization Practices that predate the outbreak.
- Monkeypox vaccine PEP and PEP++ should be primarily employed, with monkeypox vaccine PEP being prioritized before other vaccination strategies.
- Currently, CDC is not encouraging mass vaccination for the general public or for all sexually active people (monkeypox vaccine PrEP) while JYNNEOS vaccine supplies remain limited.
- To better understand the protective benefits and the risks associated with these vaccines in the current outbreak, CDC will collect data on any side effects, infections of vaccinated people, and whether the way the person was infected makes any difference in how well the vaccine protects them.

Monkeypox Vaccine Pre-Exposure Prophylaxis (PrEP) and protection from previous vaccination:

- ACIP recommends that people whose jobs may expose them to orthopoxviruses, such as monkeypox, should be vaccinated with either ACAM2000 or JYNNEOS to protect them if they are exposed to one of these viruses.
- Most people in this category work in laboratories that handle monkeypox and other related viruses.
- Other people, such as healthcare workers who may be caring for people with monkeypox, also may be vaccinated.
- CDC does not currently recommend pre-exposure vaccination for most U.S. healthcare workers. Monkeypox primarily spreads through close contact and does not spread as easily as diseases like COVID-19. Proper use of personal protective equipment and infection prevention and control practices are effective at reducing the risk of spread of the monkeypox virus when examining a patient or handling contaminated materials.
- Previous smallpox vaccination does provide protection, but it may not be lifelong. During the 2003 monkeypox outbreak and during the current outbreak, several people who were infected with monkeypox had previously been vaccinated against smallpox decades prior.
- In response to an outbreak, vaccines and other medical measures would also be given to eligible people who were previously vaccinated against smallpox. To date, ACIP has only considered vaccine recommendations for people at risk of exposure to orthopoxviruses, including monkeypox virus, as part of their jobs. As such, booster vaccination recommendations are also only applicable to these populations.

Vaccine safety:

- Vaccination providers who are administering JYNNEOS under the EUA are required to report certain adverse events that occur after JYNNEOS vaccination.
- The Vaccine Adverse Reporting System (VAERS) is the nation's passive vaccine safety surveillance program that serves as a national early warning system by helping to detect unusual or unexpected reporting patterns of adverse events for vaccines.

- VAERS is co-managed by CDC and the U.S. Food and Drug Administration (FDA). It can receive reports from anyone, including patients, parents, caregivers, and healthcare providers. Healthcare providers are required to report certain adverse events that occur after vaccination. VAERS is not designed to identify cause and effect. If an adverse event is reported to VAERS, that doesn't mean that the vaccine caused the adverse event. Instead, the system allows detection of potential safety concerns that might need further investigation.
- These adverse event reports are studied by vaccine safety experts who look for previously unobserved adverse events, or changes in patterns of reporting of adverse events after people receive a particular vaccine.
- When VAERS staff members investigate a report of a serious adverse event, they ask for the patient's medical records related to the serious adverse event to learn more about what happened.
- If vaccine safety experts find an association between a serious adverse event and a vaccine, FDA and the vaccine manufacturer will work to find an appropriate solution to address the specific safety concern, and the public will be alerted.
- VAERS reports are available to the public but do not include any information that could identify the person.

PREVENTION

There are a number of measures that can be taken to prevent infection with monkeypox virus:

- Avoid close contact with people who have symptoms consistent with monkeypox and items (such as clothing, towels or bedding/linens) with which they have been in contact.
- Avoid contact with animals that could harbor the virus, including animals that are sick or that have been found dead in areas where monkeypox occurs.
- Avoid contact with any materials, such as bedding, that has been in contact with an animal that has been infected with monkeypox.
- Wash your hands with soap and water or use an alcohol-based hand sanitizer after contact with animals or people known or suspected to have monkeypox infection or items they handled or used while ill.
- CDC has posted additional considerations for infection prevention and control in non-healthcare settings, including:
    - Homes
    - Congregate living settings, such as dormitories, homeless shelters, or correctional facilities
    - Disinfection instructions for non-healthcare settings, such as homes and cars
- People should consult their local public health department for help implementing the recommended steps.
- Employers should provide information about spreading and preventing monkeypox to workers who may have close physical contact with others or handle potentially contaminated objects or materials. Employers should take steps to prevent the spread of monkeypox and can apply considerations for congregate settings to the workplace.
- Employers should ensure that workers infected with Monkeypox virus follow isolation and prevention practices and should offer telework and flexible, non-punitive sick leave. Healthcare providers should use standard and recommended isolation precautions when caring for patients with suspected or confirmed monkeypox infection.
- Healthcare facilities should understand recommendations for preventing transmission of Monkeypox virus to healthcare personnel (HCP), including how to monitor exposed HCP and when to apply work restrictions.
- We don't know whether condoms prevent the transmission of monkeypox. If rashes are confined to the genitals or anus, condoms may help. However, since infectious respiratory secretions may be present, condoms alone are probably not enough to prevent monkeypox.

- Condoms are effective at preventing the transmission of some infections, such as chlamydia, gonorrhea, and HIV.
- Condoms may help to prevent transmission of monkeypox by preventing contact with infectious rash where covered by the condom and potentially infectious fluids. However, condom use for prevention of monkeypox has not been evaluated.
- Be aware that not all monkeypox rashes occur in areas that a condom can cover. Even when condoms are used, direct skin-to-skin contact with infectious rash, scabs, or body fluids not covered by a condom can lead to monkeypox transmission.
- Face-to-face contact also can lead to monkeypox transmission.Having multiple or anonymous sex partners may increase your chances of getting monkeypox. Limiting your number of sex partners may reduce the possibility of exposure.
- As public health experts learn more about monkeypox transmission, this information will be updated.

REDUCING STIGMA AND MISINFORMATION

Reducing Stigma in Monkeypox Communication and Community Engagement: How CDC is Framing Communication Around Monkeypox

- Helping people make the best-informed decisions to protect their health and the health of their community from monkeypox requires a combination of providing key prevention information to the public and working with partners and trusted messengers to ensure information reaches affected communities.
- Anyone can get monkeypox, and CDC is carefully monitoring for monkeypox in the United States. We are working to provide frontline healthcare providers and public health officials with information about what monkeypox looks like and how to manage the illness. Many—though not all—of the reported cases have been among gay, bisexual, or other men who have sex with men. Given this, we have put added emphasis on identifying and using specific channels that will directly reach gay and bisexual men - across racial, ethnic, socioeconomic, and geographic backgrounds - with messages. In addition to these focused messaging activities, we are also messaging to a wider audience using broad language that focuses on the symptoms and the behaviors that can lead to transmission of monkeypox.
- How Partners can Help Message about Monkeypox
    - Partners can help by messaging to different communities and channels to increase awareness of monkeypox, while reducing the chances of stigmatizing those who may have contact with the virus or marginalizing groups who may be assumed to be at increased risk for monkeypox. Keeping messages fact-based can help reduce stigmatizing disproportionately affected populations.
    - As you're developing resources and messages, use CDC's Health Equity Guiding Principles for Inclusive Communication.

    - For Messages to General Audiences:
        - Promote messaging that provides information on what monkeypox is and how it is spread and that encourages seeking health care if experiencing symptoms related to monkeypox.
        - Emphasize that *anyone* can get it and promote it as a public health concern for all. Focusing on cases among gay, bisexual, or other men who have sex with men when messaging to a broader audience may inadvertently stigmatize this population and create a false sense of safety among those who are not gay and bisexual men.
        - When using imagery, show realistic images when depicting symptoms, not extreme cases. Include pictures of people from diverse backgrounds and racial/ethnic groups.

    - For Messages to Gay & Bisexual Men:

        - It's important to reach the gay and bisexual community, or any disproportionately affected community, with non-alarmist, fact-based messaging about monkeypox that provides people with tools they can use to protect themselves and others.
        - Help gay, bisexual, and other men who have sex with men understand that taking steps to protect themselves and their partners from monkeypox can lower their chances of getting monkeypox and can slow its spread.
        - When focusing messages to gay, bisexual, and other men who have sex with men, use targeted channels that directly reach these audiences such as specific websites, dating apps or media programs.
        - If trying to increase perceived relevance among specific groups, use relatable/personal stories that depict people "like me" (intended audience).
        - Messaging and dissemination tactics may need to be adapted to reach the communities who need the information as we learn more about the current monkeypox outbreak.
        - On August 26, 2022, CDC released two MMWRs that provide data showing that gay, bisexual, and other men who have sex with men are taking charge of their health and making informed decisions to reduce their chance of getting monkeypox, and that those changes could slow the spread of monkeypox.
            - In the first report, a survey of gay, bisexual, and other men who have sex with men found that many reduced their number of one-time sexual encounters because of the monkeypox outbreak.
            - In the second report, a modeling study estimated that a reduction of one-time sexual encounters between men can reduce the percentage of men who get monkeypox.

- How Partners Can Disseminate Messages to Events
    - We encourage partners to reach out to organizers of upcoming local events to provide a situational awareness of monkeypox and offer information and messages to share. The following are some tips:
        - Conduct an environmental scan of upcoming, large-scale events in your community. Consider festivals where there may be spin-off or side events like dances and gatherings where people may have close, skin-to-skin contact with others.
        - Take an inventory of other venues where close, skin-to-skin contact can occur, such as massage parlors, spas, saunas, and sex clubs.
        - Engage trusted community-based organizations, community leaders, and community healthcare workers to connect with event organizers and affected communities.
        - Have a clear call to action. This can include raising awareness by sharing information, asking people to seek healthcare if they experience a rash, or directing community members to local healthcare providers who can coordinate testing.
        - Provide event organizers with information and materials such as:
            - Messages that can be used on websites and social media sites
            - Talking points that event organizers can use when talking with their customers or attendees
            - This letter, which organizers can download, adapt, and send to their attendees/customers
                - Download Event Organizer Letter Template
            - Printed materials that can be passed out at events and in venues
            - A point of contact if they have more questions or need information

- It will take partnerships between healthcare providers, affected individuals, and public health officials to ensure people who need care can access it and know how to protect their loved ones.

- For further information on communicating prevention information while reducing stigma, see CDC's Reducing Stigma in Monkeypox Communication and Community Engagement page.

Harm reduction approaches to prevent spread through intimate contact:

- When thinking about what to do, seek information from trusted sources like the local health department. Second, consider how much close, personal, skin-to-skin contact is likely to occur at the event you plan to attend. If you feel sick or have any rashes or sores, do not attend any gathering, and see a healthcare provider.
- Festivals, events, and concerts where attendees are fully clothed and unlikely to share skin-to-skin contact are safer. However, attendees should be mindful of activities (like kissing) that might spread monkeypox.
- A circuit party, private party, or club where there is minimal clothing and where there is direct, personal, often skin-to-skin contact has some risk. Avoid any rashes or sores you see on others and consider minimizing skin-to-skin contact when possible.
- Enclosed spaces, such as back rooms, saunas, or sex clubs, where there is minimal or no clothing and where intimate, often anonymous sexual contact occurs have a higher likelihood of spreading monkeypox.
- Vaccination is an important tool in prevent the spread of monkeypox. But given the current limited supply of vaccine, consider temporarily changing some behaviors that may increase your risk of being exposed. These temporary changes will help slow the spread of monkeypox until vaccine supply is adequate.
- Reducing or avoiding behaviors that increase risk of monkeypox exposure is also important when you are between your first and second shots of vaccine. Your protection will be highest two weeks after your second dose of vaccine.
- Make a habit of exchanging contact information with any new partner to allow for sexual health follow-up, if needed.
- Talk with your partner about any monkeypox symptoms and be aware of any new or unexplained rash or lesion on either of your bodies, including the mouth, genitals (penis, testicles, vulva, or vagina), or anus (butthole). If you or your partner has or recently had monkeypox symptoms, or you have a new or unexplained rash anywhere on your body, do not have sex and see a healthcare provider. In some cases, symptoms may be mild, and some people may not even know they have monkeypox.
- If you or a partner has monkeypox or think you may have monkeypox, the best way to protect yourself and others is to avoid sex of any kind (oral, anal, vaginal) and kissing or touching each other's bodies—while you are sick. Especially avoid touching any rash**.** Do not share things like towels, fetish gear, sex toys, and toothbrushes.
- Even if you feel well, here are some ways to reduce your chances of being exposed to monkeypox if you are sexually active:
    - Take a temporary break from activities that increase exposure to monkeypox until you are two weeks after your second dose. This will greatly reduce your risk.
    - Limit your number of sex partners to reduce your likelihood of exposure.
    - Spaces like back rooms, saunas, sex clubs, or private and public sex parties, where intimate, often anonymous sexual contact with multiple partners occurs—are more likely to spread monkeypox.
    - Condoms (latex or polyurethane) may protect your anus (butthole), mouth, penis, or vagina from exposure to monkeypox. However, condoms alone may not prevent all exposures to monkeypox since the rash can occur on other parts of the body.

- Gloves (latex, polyurethane, or nitrile) might also reduce the possibility of exposure if inserting fingers or hands into the vagina or the anus. The gloves must cover all exposed skin and be removed carefully to avoid touching the outer surface.
- Avoid kissing or exchanging spit since monkeypox can spread this way.
- Masturbate together at a distance without touching each other and without touching any rash.
- Have virtual sex with no in-person contact.
- Consider having sex with your clothes on or covering areas where rash is present, reducing as much skin-to-skin contact as possible. Leather or latex gear also provides a barrier to skin-to-skin contact; just be sure to change or clean clothes/gear between partners and after use.
- Be aware that monkeypox can also spread through respiratory secretions with close, face-to-face contact.
- Remember to wash your hands, fetish gear, sex toys, and any fabrics (bedding, towels, clothes) after having sex.