



## Mpox Scenario-Based Human Health Clade II Risk Assessment for the United States

### Appendix: Additional Details on Process and Recommendations

#### Scenario 1: Baseline

##### Summary

- Viral group: clade IIb
- Current primary population impacted: MSM community

In this scenario, we considered the risk to human health if there is no change in the current epidemiology of mpox in the US. This involves steadily growing cases of only clade IIb mpox primarily affecting gay, bisexual, and other men who have sex with men (MSM community), particularly those who have not been previously infected, are not vaccinated, or are under vaccinated. This baseline scenario anticipates a continuation of this transmission level and disease severity, and no change in the demographic characteristics of individuals for whom mpox cases are reported.

For this scenario, we determined the health risk **in the United States** to the **MSM community** is **low-moderate**, the health risk to the **sex worker community** is **low-moderate**, the health risk to **healthcare workers** is **low**, the risk to children is **low**, and the health risk to the **general public** is **low**.

Our **confidence** in these risk scores is **high** given the current level of information for each of these factors, our understanding of transmission dynamics, and the availability of treatment resources.

To minimize the sporadic transmission of mpox clade IIb in the US, the CDC and WHO recommend the following:

- All individuals with an **increased risk of infection** should receive **2 doses of JYNNEOS** vaccine.
- Individuals can reduce their risk by talking with sexual partners about mpox and practicing safer sex and good hygiene.
- Those at increased risk are encouraged to check for symptoms such as a rash with blisters on any part of the body (often starting around the mouth, anus, or genitals), inflammation and pain in the rectum, swollen lymph nodes, and/or fever.
- Those with any mpox symptoms should seek medical advice from a healthcare professional. They should also get tested, take a break from sex, ask close contacts and sexual partners if they have similar symptoms, and avoid close physical contact.

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- [Clinicians should consider](#) mpox when lesions consistent with mpox are observed in a patient, even if an alternate etiology (eg, herpes simplex virus, syphilis) is considered more likely. Clinicians and other healthcare professionals should also [wear all recommended personal protective equipment](#) (PPE) when completing mpox testing.
- People who have been in contact with someone with mpox infection should seek medical advice even if they do not have symptoms. They may be eligible for vaccination, which can [reduce the risk of infection](#) and developing severe disease.

## Scenario 2: Autumn Clade II Surge Summary

- Viral group: clade IIB  
Projected primary population impacted: MSM community and sex workers

Multiple countries across Africa have experienced increased Mpox activity in July and August of 2024, with new detections of IIB in at [least 7 countries](#). This scenario anticipates an increase in clade IIB mpox transmission, with similar severity of disease.

For this scenario, we determined the health risk **in the United States** to the **MSM community** is [moderate](#), the health risk to **sex workers** is [moderate](#), the health risk to **healthcare workers** is [low](#), and the health risk to the **general public** is [low](#).

Our **confidence** in these risk scores is [moderate](#) given the current level of information for each of these factors; historical knowledge from the 2022 US mpox outbreak, including our understanding of the transmission dynamics; current reliability and consistency of data on global spread; and the availability of vaccination and treatment resources.

To minimize the potential for a surge in transmission of clade IIB mpox in the US, the CDC and WHO recommend:

- Mass and large gathering event planning and preparedness activities should foster [community-based actions](#) aimed at spreading precise and practical public health advice with a nondiscrimination approach across different media and incorporate educational and awareness-raising initiatives related to mpox and other diseases of concern.
- All individuals with an [increased risk of infection](#) should receive [2 doses of JYNNEOS](#) vaccine.
- Individuals can [reduce their risk](#) by talking with sexual partners about mpox and practicing safer sex and good hygiene.
- Those at increased risk are encouraged to check for symptoms such as a rash with blisters on any part of the body (often starting around the mouth, anus, or genitals), inflammation and pain in the rectum, swollen lymph nodes, and/or fever.

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- Those with any mpox symptoms should seek medical advice from a healthcare professional. They should also get tested, take a break from sex, ask close contacts and sexual partners if they have similar symptoms, and avoid close physical contact.
- Clinicians should consider mpox when lesions consistent with mpox are observed in a patient, even if an alternate etiology (eg, herpes simplex virus, syphilis) is considered more likely. Clinicians and other healthcare professionals should also wear all recommended personal protective equipment (PPE) when completing mpox testing.
- People who have been in contact with someone with mpox infection should seek medical advice even if they do not have symptoms. They may be eligible for vaccination, which can reduce the risk of infection and developing severe disease.

## Scenario 3: Autumn Clade IIb Case Decline

### Summary

- Viral group: clade IIB
- Current primary populations impacted: MSM community, sex workers

For this scenario, we determined the health risk in the United States to the MSM community is **moderate**, the health risk to sex workers is **moderate**, the health risk to healthcare workers is **low**, and the health risk to the general public is **low**.

Our **confidence** in these risk scores is **low** given the current level of information for each of these factors.

To maximize the possibility of a decline of clade II mpox outbreaks in the US, the CDC and WHO recommend:

- Clinicians and public health practitioners in the US and globally should be alert for possible cases in travelers from Africa and request clade-specific testing.

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