



## Mpox Scenario-Based Human Health Risk Assessment for the United States as of 6 February 2025 – Clade I

**Currently,\* the Center for Outbreak Response Innovation (CORI) judges the mpox clade I Risk to the United States to be in Scenario 2, meaning the clade I virus that is circulating in some parts of Africa and Europe has only been introduced to the United States via sporadic, travel-based cases and there has been no sustained local transmission:**

	Risk to MSM community	Risk to sex workers	Risk to healthcare workers	Risk to Children	Risk to general public
<b>Scenario 2 – Sporadic Importation of Clade I Cases</b>	Moderate	Moderate	Low	Low-Moderate	Low

Our confidence in these risk scores is **low** given the current available information globally.

See the detailed risk assessment beginning on the next page for further information. Appendices and regularly updated situation report including an epi curve available [here](#).

This judgment is based on available data from ongoing mpox case reporting to the US Centers for Disease Control and Prevention (CDC), Africa CDC, WHO, and wastewater surveillance.

For all scenarios and to minimize the risk of imported transmission of clade I, CDC and WHO recommend:

- All individuals with an [increased risk of infection](#) should receive 2 doses of JYNNEOS vaccine.
- [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.
- Healthcare professionals should [wear all recommended personal protective equipment](#) (PPE) when completing mpox testing.

*\*This document will be updated only when new information becomes available that could change our assessment.*



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

Center for Outbreak Response Innovation (CORI)

Updated as of 7 February 2025

### Epidemiological updates of notes since the last report on January 8, 2025:

- The [US CDC](#) reports that the US detected their second case of travel-related clade I mpox on January 14, 2025.
- The [UK continues to detect cases](#) of clade I mpox (9 in 2025 thus far) and has [launched a vaccination campaign](#) to curb the outbreak.
- [China](#) reported 5 cases of clade Ib mpox on January 9, 2025. The source of the outbreak was an individual with a recent travel history to the DRC.
- [France](#) detected their first case of clade Ib mpox on January 6, 2025. The infected individual did not have a recent travel history to West Africa.
- [Belgium](#) reported their first case of clade Ib mpox in an individual with a recent travel history and known exposure to mpox.
- Increases in clade I cases continue to be documented across the African Continent (see details on country-specific case and death counts in the CORI mpox Situation Update, available [here](#)).

### Scenarios:

CORI identified 3 key scenarios that may shape the risk of mpox in the US for the upcoming year. These scenarios consider the health risks of clade I, taking into account the differing impacts to various population groups should clade I begin to circulate within the US.

Features that would characterize each scenario include:

- **Scenario 1** – Clade I Surge in Africa: While Clade IIb cases continue to be the only cases detected in the US, clades I and Ib are detected in more countries in Africa and outbreaks surge, thus increasing risk of importing clade I to the US.
- **Scenario 2** – Clade I introduced to US: Clade I is detected in the US, though cases are travel related and there are no large clusters or sustained transmission in the US. Clade IIb continues to be the dominant strain of the virus in the US, continuing to impact the MSM and sex worker populations and healthcare systems are not overwhelmed. Children are at moderate risk because the likelihood of a child coming into contact with mpox has increased with imported cases.
- **Scenario 3** – Clade I Sustained Transmission in US: Clade I is spreading locally and displaying similar transmission and severity characteristics as seen in DRC, including infecting younger children at higher rates, and a higher case fatality risk (CFR), particularly in children. Hospital



systems are now seeing higher numbers of severe cases in multiple age groups. Transmission is still limited to households and intimate contact between sexual partners.

**\*Please note:** We are evaluating the risks to human health should each scenario occur, **not** the relative risk of any one scenario occurring. This risk assessment will be updated regularly.

**Currently, \* the Center for Outbreak Response Innovation (CORI) judges the mpox clade I Risk to the United States to be in Scenario 2,** meaning the clade I virus that is circulating in some parts of Africa and Europe has only been introduced to the United States via sporadic, travel-based cases and there has been no sustained local transmission.

This judgment is based on available data from ongoing mpox case reporting to the US Centers for Disease Control and Prevention (CDC), Africa CDC, WHO, and wastewater surveillance.

## Mpox Human Health Risk Assessment Scenario Table for the US Population

**Table 1. Clade I**

Risk Score (**this is risk level to human health NOT of scenario occurring**)					
	Risk to MSM community	Risk to sex workers	Risk to healthcare workers	Risk to Children	Risk to general public
Scenario 1 – Clade I Surge in Africa	Moderate	Moderate	Low	Low	Low
Scenario 2- Clade I introduced to the US	Moderate	Moderate	Low	Moderate	Low
Scenario 3 – Clade I Sustained Transmission in US	Moderate-High	Moderate-High	Low	Moderate-High	Low-Moderate

Our **confidence** in these risk scores is **low** given the current level and availability of information for each of these factors; historical knowledge from past outbreaks on transmission dynamics; the availability of vaccination and treatment resources; and the federally mandated CDC reporting freeze and recent administration changes at the federal, state, and local level. We have chosen to reduce our confidence score primarily due to our low confidence in the comprehensiveness of the surveillance measures and reporting at this time. Confidence levels in risk scores may return to high once CDC reporting resumes

**Methods:** The purpose of this document is to consider possible future developments in this outbreak and describe corresponding risks to human populations should a given scenario occur. In each



scenario, we consider the risk to 4 distinct populations: the community of men who have sex with men (MSM), sex workers, healthcare workers, and the general public.

In determining the risks to the health of each population, we considered several factors such as primary transmission pathways, current morbidity and mortality, and the primary demographics and geographies currently affected. We also assessed the extent of the current outbreak to determine if cases are sporadic, in clusters, or if there is low or high ongoing community transmission. Other factors considered include events that could increase human-to-human transmission (eg, mass gatherings, seasonal trends, school terms, etc.); the availability and effectiveness of treatments and vaccines; nonpharmaceutical measures to lower the risk of human-to-human transmission, such as personal protective equipment (PPE) for healthcare workers; the potential impact of animal reservoirs; and ongoing public health preparedness and response operations to address outbreaks. We use a five-tiered system to identify risk levels including: low; low-moderate; moderate; moderate-high; and high.

## Recommendations

While the US is not yet in Scenario 2 (introduction of clade I in the US), recent reports of clade I mpox cases outside of the Democratic Republic of Congo (DRC) and now in Europe indicate the potential for global spread of clade I if measures are not taken to adequately control transmission. The US should be on heightened alert for clade I introduction through travel over the coming weeks and months and should be supporting targeted studies to better understand routes of transmission and disease progression in children.

For all scenarios and to minimize the risk of imported transmission of clade I, CDC and WHO recommend:

- All individuals with an [increased risk of infection](#) should receive 2 doses of JYNNEOS vaccine.
- [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.
- Healthcare professionals should [wear all recommended personal protective equipment](#) (PPE) when completing mpox testing.

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