

Considerations for Expanded Vaccination Strategies to Prevent Monkeypox Virus Infection

Prompt testing, case investigation, public education about prevention measures, and administration of medical countermeasures are key actions to prevent transmission of monkeypox, to ensure appropriate care for persons with infection, and to limit exposure or disease among their close contacts. There is currently a limited supply of JYNNEOS vaccine for monkeypox, and vaccine has primarily been available for persons with exposure to someone with known or suspected monkeypox infection, or exposure at events linked to monkeypox transmission. National partners are working to increase the supply of vaccine that is available. The purpose of this guidance is to provide considerations for the broader use of JYNNEOS vaccine for expanded post-exposure prophylaxis (PEP++) and monkeypox pre-exposure prophylaxis (PreP) strategies as additional supplies of vaccine become available.

Data on the effectiveness of JYNNEOS against monkeypox infection are limited. In addition to routine prevention measures for monkeypox, implementation of PEP++ and PreP strategies may be considered to:

1. Support control of outbreaks and slow the spread of disease.
2. Reduce the risk of severe disease among persons with certain risk factors for exposure.

Recognized challenges to implementation of PEP++ and PreP strategies include:

1. Limited supply of vaccine in relation to the population at risk.
2. Ensuring equitable distribution and access to vaccines for the population at risk.
3. A percentage of the population at risk will choose to not receive vaccination if offered.

Recommendations included in the tiered strategy are:

1. Driven by available scientific evidence and medical information,
2. Prohibitive of disparate treatment that is not based on evidence; and
3. Implemented without discrimination.

RECOMMENDED STRATEGY FOR USE OF JYNNEOS VACCINE:

Tier 1	
PreP for persons at routine risk for occupational exposure	<ul style="list-style-type: none">• Individuals at high risk of occupational exposure to monkeypox (e.g., clinical lab personnel performing diagnostic testing for monkeypox). <p><i>Note: Vaccination is not broadly currently recommended for personnel who handle and process routine clinical specimens (e.g., urine, blood, etc.) or for healthcare workers. Laboratories and healthcare workers should follow laboratory precautions and infection control guidance, including use of personal protective equipment. Healthcare workers who have cared for patient with monkeypox virus infection may need to be evaluated for degree of exposure and possible vaccination consideration.</i></p>

PEP for close contacts	<ul style="list-style-type: none"> Individuals identified as having exposure to monkeypox virus during case investigation and contact tracing activities. Recommendation for PEP based on degree of exposure (vaccination is recommended for high degrees of exposure and can be considered under shared clinical decision making for intermediate degrees of exposure).
Tier 2: Depending on vaccine supply (if enough vaccine is available to meet Tier 1 needs)	
PEP++ for persons with exposure at events/venues	<ul style="list-style-type: none"> Individuals with attendance at events/venues linked to known monkeypox transmission.
Tier 3: Depending on vaccine supply (if enough vaccine is available to meet Tier 2 needs)	
PrEP/PEP++ for persons that are more likely to have been recently exposed to monkeypox or are at high risk for monkeypox	<ul style="list-style-type: none"> Any individual who has or is likely to have prolonged intimate contact that would put them at higher risk of being exposed to monkeypox virus (e.g., men, transgender women, or non-binary persons who have or plan to have sexual encounters with men and have risk factors, such as: history of multiple or anonymous sex partners, participation in group sex, attendance at sex-on-premise venues or events, sex work). Given limited supplies of JYNNEOS, prioritize people who are at risk for severe adverse events from ACAM2000 or severe disease from monkeypox (e.g., people living with HIV or other immunocompromising conditions).
Tier 4: Depending on vaccine supply and outbreak characteristics	
PrEP for other persons at risk based on epidemiologic evidence	<ul style="list-style-type: none"> Nationally or locally identified groups with high risk of exposure.

References:

- [CDC Technical Report: Multi-National Monkeypox Outbreak, United States, 2022](#)
- [CDC Monkeypox and Smallpox Vaccine Guidance](#)
- [CDC Considerations for Monkeypox Vaccine](#)