

# Monkeypox Virus

## *Informational Meeting and Discussion for Community Partners*

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# Agenda

- Opening remarks
- Situational update
- Background information
- Testing
- Vaccination
- Q&A and Discussion

# Opening Remarks

# Goals of the Public Health Response

- Containment (responding to identified infection)
  - Testing to identify infection
  - Investigation and contact tracing
  - Isolation of infected persons
  - Monitor people who have been exposed (not quarantine)
  - Jynneos vaccine for post-exposure prophylaxis (PEP)
- Prevention
  - Awareness and risk reduction counselling
  - Jynneos vaccine to prevent disease (before exposure) for persons at risk for monkeypox – this requires sufficient vaccine supply

# Situational Update and Background Information

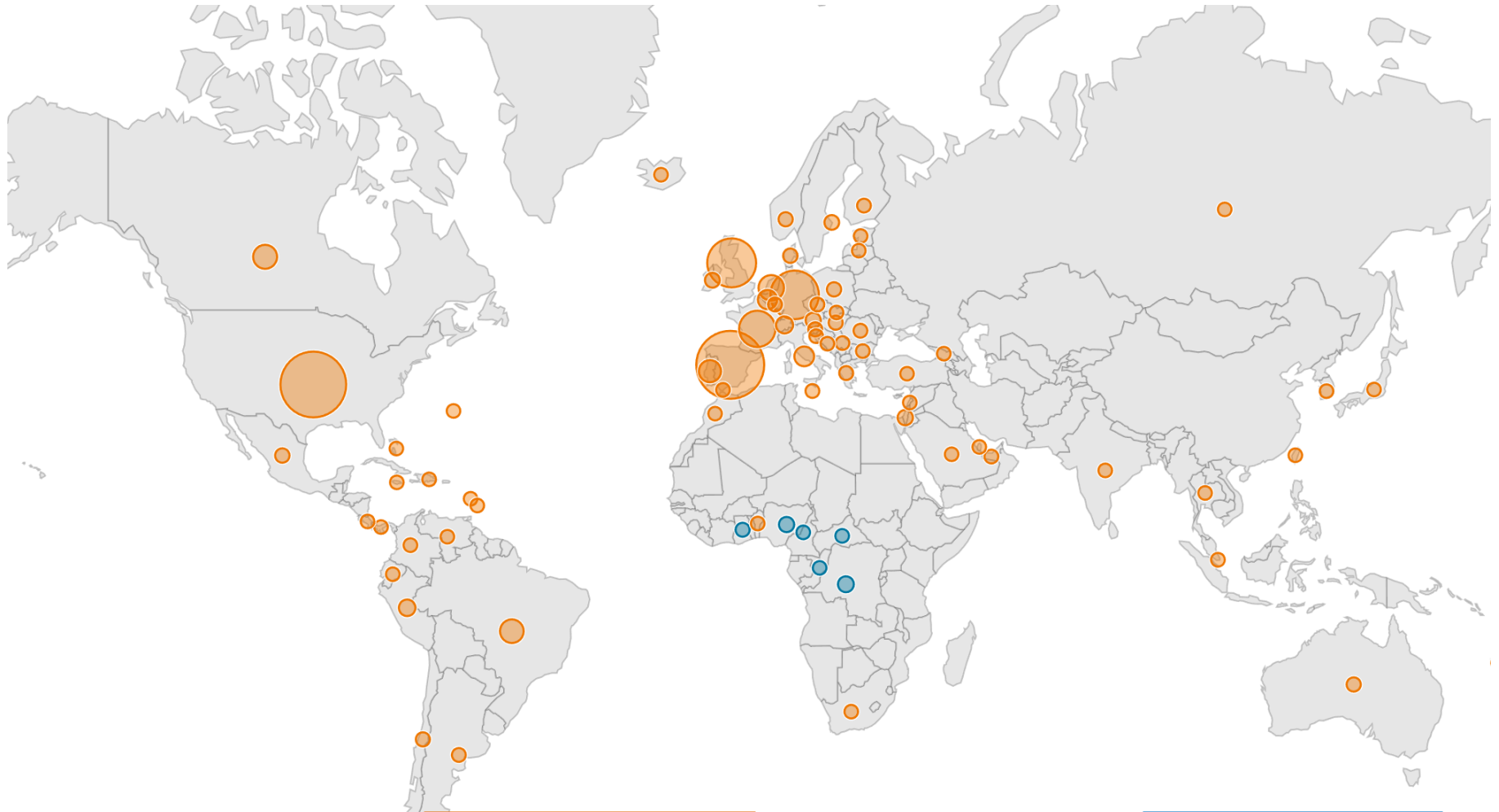
# Background

- Monkeypox virus is an *Orthopoxvirus* (a group of viruses that include the smallpox virus)
- First discovered in 1958 after two outbreaks in colonies of research monkeys (hence the name “monkeypox”)
- Naturally occurring (“endemic”) in parts of west Africa and the Democratic Republic of Congo – reservoir is believed to be rodents
- The WHO is working with experts to change the name of monkeypox to be less stigmatizing

# Situational Update and Overview

- Infections are increasing in the U.S. and globally
- Spread of this virus is occurring largely through sexual networks
- Primarily affecting men who have sex with other men (MSM)
- Mostly mild disease is being reported, but the monkeypox skin lesions can cause scarring, significant pain (e.g., proctitis, tonsillitis), and complications (secondary bacterial infections)
- There have been no deaths from monkeypox reported in non-endemic countries

# Global Monkeypox Outbreak Cases, 2022



## Legend

● Has not historically reported monkeypox



**18,861 cases from  
70 countries**

● Has historically reported monkeypox

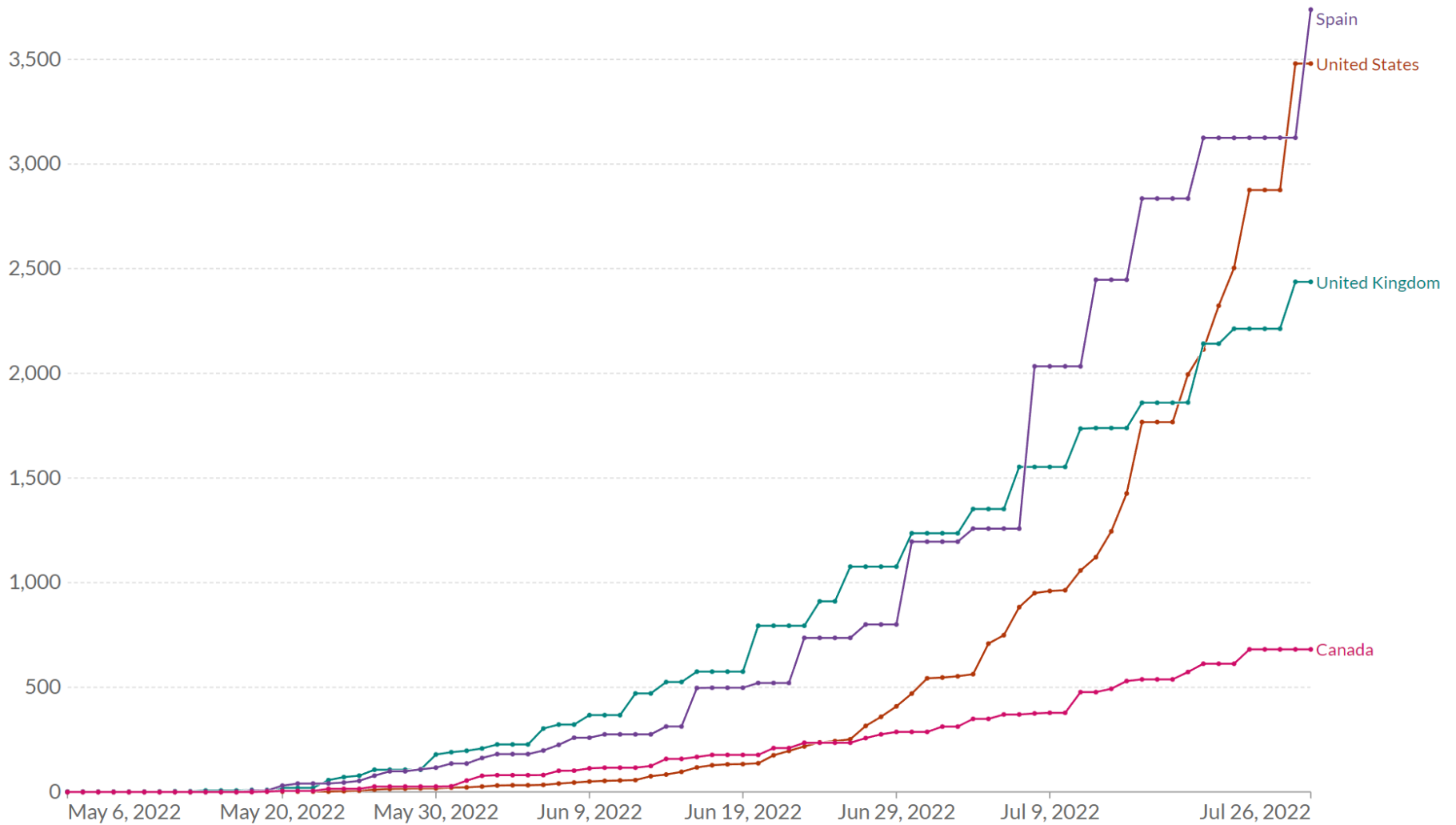


**327 cases from  
6 countries**



# Monkeypox: Cumulative confirmed cases

LINEAR LOG

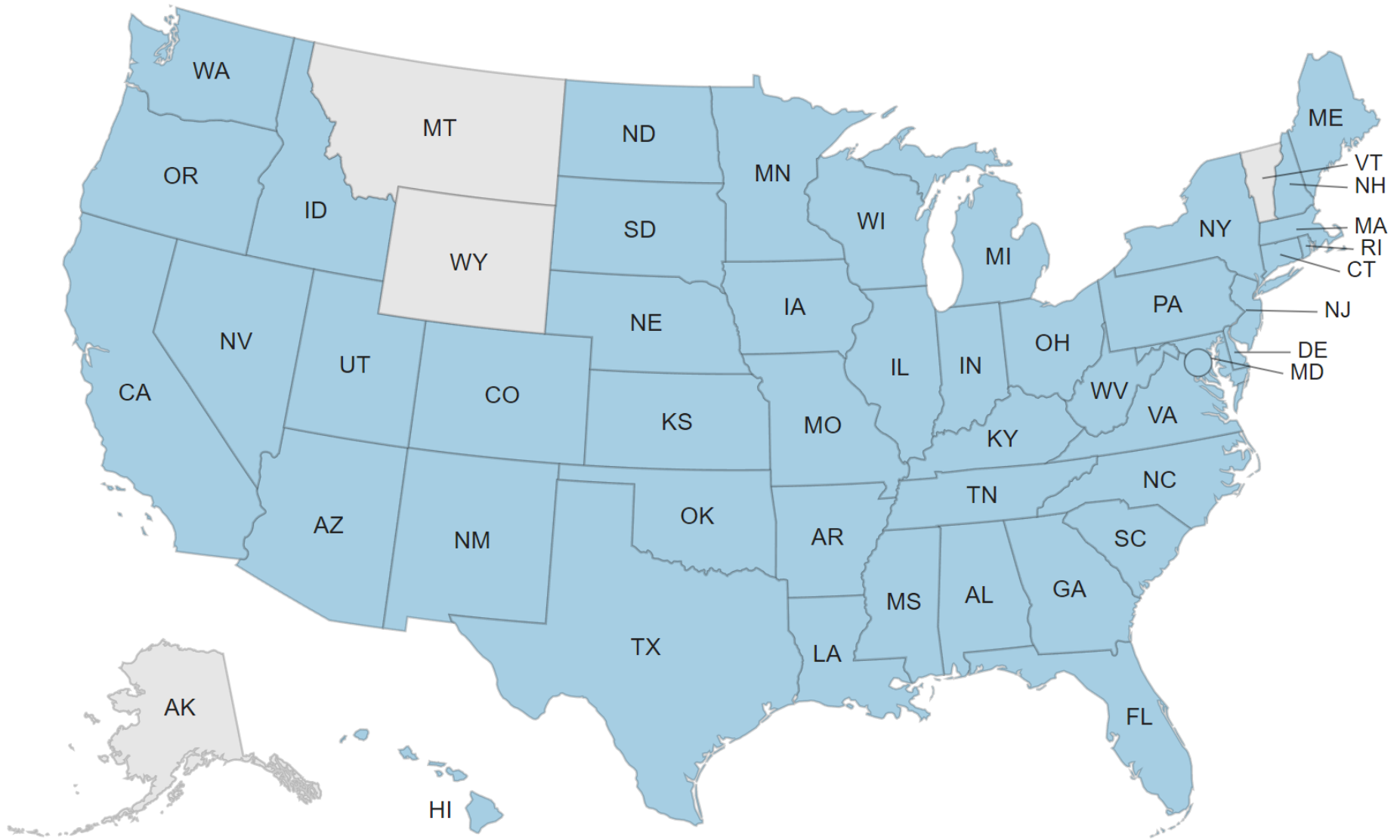


Source: Data produced by the 'Global.health' team – available at [github.com/globaldothealth/monkeypox](https://github.com/globaldothealth/monkeypox)

CC BY

▶ May 6, 2022 ○ Jul 26, 2022

<https://ourworldindata.org/monkeypox>



<https://www.cdc.gov/poxvirus/monkeypox/response/2022/us-map.html>

# Symptoms

- **Exposure to onset of symptoms:** average is ~7 days (up to 21 days)
  - A person is NOT contagious during this asymptomatic period after exposure
- **General symptoms:** fever/chills, malaise, headache, sore throat, cough, and swollen lymph nodes
  - A person MAY be contagious once these general symptoms develop, but not everybody develops these symptoms before the rash
- **Rash** progresses through 4 stages: flat >> small raised bumps >> fluid filled bumps >> pus-filled bumps
  - A person IS contagious once they develop skin lesions
  - Historically spreads from mouth/face > arms/legs > hands/feet (including palms/soles)
  - **2022 outbreaks:** more atypical presentation, often with limited distribution, skin lesions occurring in the genital and perianal areas, and skin lesions occurring as the first symptom (~35% of persons)
- A person is no longer considered contagious once all skin lesions have scab over, scabs have fallen off, and there is a fresh layer of new skin (which can take 2-4 weeks)

# Monkeypox Skin Lesions



<https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html>

[https://emergency.cdc.gov/coca/ppt/2022/052422\\_slides.pdf](https://emergency.cdc.gov/coca/ppt/2022/052422_slides.pdf)

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200421>

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200411>

# Human-to-Human Transmission

- Exposure occurs through broken skin, the respiratory tract, or mucous membranes, after:
  - Close prolonged face-to-face contact through spread of large respiratory droplets
  - Direct physical contact with infectious body fluids or lesion material
  - Indirect physical contact with infectious lesion material/fluids (e.g., clothing or linens)
- Monkeypox is not considered a sexually transmitted infection
  - Spread occurs between sex partners through physical contact
  - It remains possible that the monkeypox virus could be found to be sexually transmitted, but this needs further study

# Monkeypox Virus Found in Various Specimens

- Monkeypox virus has been detected by PCR in multiple different body fluids or specimen types, including:
  - Blood
  - Mouth and nose swabs
  - Saliva
  - Semen
  - Urine
  - Rectal swabs
  - Feces
- Risk of transmission through these routes is unclear because PCR detection does not necessarily mean infectious
  - E.g., Two German patients had monkeypox virus detected in semen by PCR, but they were unable to grow live virus on culture

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200421>

<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.28.2200503>

<https://www.researchsquare.com/article/rs-1725831/v1>

# Testing

# Testing for Monkeypox Virus

- Testing is conducted on swabs of skin lesions (even lesions in the mouth)
- Any healthcare provider can collect the necessary swabs for monkeypox virus testing (e.g., primary care, urgent care centers, sexual health clinics)
- Once the necessary swabs are collected, they are sent to a laboratory for PCR testing to detect the monkeypox virus
  - Testing is currently conducted at our NH Public Health Laboratories and 5 other national commercial reference laboratories
- Anybody with skin lesions should call ahead before going in for testing so the provider knows to use the right PPE when evaluating the patient
- People who test positive for monkeypox virus infection will get a call from our public health team to conduct an investigation so we can identify people at risk in order to connect them with vaccine to prevent infection



# What To Do If You Test Positive

- See CDC's guidance for [Home Isolation and Infection Control](#):
  - Stay home and away from other people
  - Use a separate bathroom
  - Limit contamination within the household
  - Follow household [cleaning and disinfection](#) guidance
  - Be careful how cloths and linens are laundered
  - Stay away from animals in the home
  - Keep skin lesions covered, whenever possible
  - Wear a well-fitting face mask if you need to be around others in the household
- Isolation period can be lengthy, so CDC is updating guidance for how to minimize exposure to others in the event that someone cannot stay completely isolated during their infectious period (we want to work with the person to minimize exposures to others)

# Vaccination

# Monkeypox Vaccination

- Jynneos vaccine: Primary vaccine used to prevent monkeypox
  - Non-replicating live-virus vaccine
  - Only FDA-approved vaccine for monkeypox
  - Approved for use in adults 18 years of age or older
  - 2-dose series given subcutaneously 4 weeks apart
  - Very few contraindications to vaccination
  - Can be administered for post-exposure prophylaxis (**PEP**) or for pre-exposure prophylaxis (**PrEP**) to prevent disease in at-risk persons
- No data are available yet on the effectiveness of Jynneos in the current outbreak, but based on historical smallpox vaccine data, the Jynneos vaccine may be at least 85% effective at preventing monkeypox
- People who get vaccinated should continue to take steps to protect themselves (see CDC's [prevention guidance](#))

# Vaccination after Exposure (PEP)

- People who should receive Jynneos vaccine PEP:
  - Any person with close prolonged contact or any direct physical/intimate contact to another person with monkeypox
  - Any person that came into physical contact with items (e.g., clothing or linens) that previously touched the infectious rash or body fluids of a person with monkeypox
- Timing of vaccination: the sooner the better
  - CDC recommendations vaccination within **4 days** from date of exposure in order to prevent onset of disease
  - If given between 4-14 days after the date of exposure, the vaccine may reduce the symptoms, but not fully prevent disease

# People at High Risk Who Should be Vaccinated When Vaccine Supply Increases (PrEP)

- Men who have sex with other men (including persons assigned male sex at birth and transgender men) who engage in high-risk sexual activity:
  - Have multiple sex partners
  - Engage in group or anonymous sex
  - Engage in sex with others at sex-on-site venues or events
  - Exchange sex for money, drugs, or services
  - Are currently prescribed medications for HIV prevention (i.e., HIV PrEP)
- As supply increases, community access to Jynneos vaccine will increase
- We will announce vaccination clinics once they are confirmed and we have vaccine to administer for PrEP (hopefully in “Phase 3” of federal government vaccine allocation)

# Additional Resources

# Important Resources to Share

- Graphics of Monkeypox skin lesions:  
<https://www.cdc.gov/poxvirus/monkeypox/resources/graphics.html>
- Fact Sheets about preventing monkeypox for people who are sexually active and attending social gatherings:  
<https://www.cdc.gov/poxvirus/monkeypox/resources/print.html>
- Video of Dr. Daskalakis (Director of CDC's Division of HIV Prevention) discussing "5 Things You Need to Know About Monkeypox":  
<https://www.youtube.com/watch?v=9GziSwQTo4A&t=2s>

# Q&A

# Discussion



# Discussion Questions

- What are you hearing from the MSM and LGBTQIA community?
- What concerns do people have about engaging with the healthcare system or public health?
- How can we better engage this community?
- Are there additional resources or information that are needed?

# Thank You!

Please Send Follow-Up Questions or Feedback to:

[monkeypox@dhhs.nh.gov](mailto:monkeypox@dhhs.nh.gov)

Check out our NH monkeypox website:

<https://www.dhhs.nh.gov/programs-services/disease-prevention/infectious-disease-control/monkeypox>