Update on Mpox and Preventing Future Outbreaks

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This activity is jointly provided by Physicians' Research Network and the Medical Society of the State of New York.

Epidemiology and Inequities



Risk of a resurgent mpox outbreak

- Is ongoing, should new infections enter from other areas or countries
- Will grow over time as new, never-vaccinated or never-infected people become sexually active, reducing overall population immunity
- Is more likely if the vaccine was not administered to those with higher sexual activity and thus greater likelihood of exposure in 2022
- Could increase due to waning immunity



Provider communications



April 12, 2023

Dear Colleague,

The New York City (NYC) Department of Health and Mental Hygiene (Health Department) is asking for your help to prevent another <u>mpox (monkeypox)</u> outbreak in NYC. Though only one case of mpox was reported in NYC in the last four weeks, the outbreak continues in other <u>US</u> jurisdictions and globally. The outbreak has spread primarily through sex and other intimate contact among social networks of gay, bisexual, and other men who have sex with men, and Latino and Black New Yorkers have been disproportionately affected. The possibility of increased local transmission remains a concern, especially as summer approaches. Please review the below steps your practice can take to help prevent the spread of mpox in NYC and ensure people who become infected get the care they need.

We invite you to join us for a webinar on mpox updates for NYC on April 19 from 1:00 to 2:00 p.m. The webinar will cover the latest information about mpox epidemiology, treatment, and vaccines and provide guidance for what you can do to help prevent another outbreak. Register <u>here</u>.

Have JYNNEOS vaccine on hand and offer it as part of routine sexual health services. If your facility is not yet enrolled, start the mpox vaccination program enrollment process by emailing poxvax@health.nyc.gov. We urge facilities not yet enrolled in the JYNNEOS vaccination program to do so now.



KATHY HOCHUL

Governor

Department of Health

JAMES V. McDONALD, M.D., M.P.H. Acting Commissioner MEGAN E. BALDWIN Acting Executive Deputy Commissioner

May 1, 2023

- TO: Healthcare Providers, Hospitals, Local Health Departments, Laboratories, Sexual Health Providers, Family Planning Providers, Emergency Rooms, Community Health Centers, College Health Centers, Community-Based Organizations, and Internal Medicine, Family Medicine, Pediatric, Adolescent Medicine, Dermatology, Infectious Disease, and Primary Care Providers
- FROM: New York State Department of Health (NYSDOH) AIDS Institute (AI), Bureaus of Communicable Disease Control (BCDC), Immunization (BI), and Healthcare Associated Infections (BHAI)

HEALTH ADVISORY: MPOX CASES ASSOCIATED WITH PERSON-TO-PERSON TRANSMISSION

SUMMARY:

- Since May 14, 2022, >86,000 cases of mpox have been reported in multiple countries worldwide where mpox virus is not endemic, including >30,000 cases in the United States.
- Data suggest that individuals who identify as gay, bisexual, and other men who have sex with men comprise the majority of reported cases in the current mpox outbreak.
- Regardless of gender identity, birth sex, sex of sex partner(s), travel, and/or specific or

Global impact of mpox



- WHO assesses global risk as moderate.
- Globally, this continues to be considered a public health emergency of international concern, though cases and reporting have declined significantly since the peak of the 2022 outbreak.



Source: World Health Organization, 8 May 2023. https://worldhealthorg.shinyapps.io/mpx_global/

Global impact of mpox

Top 5 Countries Most Affected by 2022-2023 Mpox Outbreak:

1. United States of America (n = 30,154)

- 2. Brazil (n = 10,915)
- 3. Spain (n = 7,549)
- 4. France (n = 4, 144)
- 5. Colombia (n = 4,090)
- 6. Mexico (n = 3,956)
- 7. Peru (n = 3,800)
- 8. The United Kingdom (n = 3,741)
- 9. Germany (n = 3,692)
- 10. Canada (n = 1,484)





Source: World Health Organization, 8 May 2023. https://worldhealthorg.shinyapps.io/mpx_global/

National impact of mpox

Total U.S. Cases: 30,361 Total U.S. Deaths: 42



Source: CDC, updated 26 April 2023, https://www.cdc.gov/poxvirus/mpox/response/2022/us-map.html

Mpox cases in US by age and gender

Mpox cases reported to CDC: Age and Gender



Health

Age in Years

Demographics of mpox cases in US

Distribution of mpox cases across racial ethnic groups, United States





70

Sources: CDC, updated 12 April 2023, <u>https://www.cdc.gov/poxvirus/mpox/response/2022/demographics.html</u>; US Census 2021 Quick Facts, Accessed 14 April 2023, <u>https://www.census.gov/quickfacts/fact/table/US/PST045221</u>

Overview of mpox cases in NYC



Sources: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-data-summary.pdf</u>; 18 April 2023, internal data.



Age distribution of NYC mpox cases, 2022



Source: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-data</u> summary.pdf

Gender distribution of NYC mpox cases, 2022



Source: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-data</u> summary.pdf

Health

Sexual orientation of NYC mpox cases, 2022



Source: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-data</u> summary.pdf

Borough residence of NYC mpox cases, 2022

Distribution of mpox cases across boroughs, NYC, 2022





Sources: NYC DOHMH, 15 January 2023, see previous PDF link; US Census Quick Facts, Accessed 19 April 2023, https://www.census.gov/quickfacts

Race/ethnicity of NYC mpox cases, 2022

Race/ethnicity of NYC mpox cases, 2022





Source: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-</u>data-summary.pdf

Cumulative Vaccination in NYC

With the invaluable support of providers like you, as of January 15, 2023:

- NYC had administered **154,557** mpox vaccinations
- About two thirds (102,183) were first dose vaccines



Data source: NYC DOHMH, 15 January 2023, see previous link.

Vaccine effectiveness

Preliminary JYNNEOS Vaccine Effectiveness Estimates Against Medically Attended Mpox Disease in the U.S., August 15, 2022 – October 29, 2022

Updated December 8, 2022 Print

JYNNEOS vaccine is effective at reducing the risk of mpox disease, with two doses providing the best protection, regardless of how the vaccine was administered.

Preliminary vaccine effectiveness (VE) estimates against medically attended mpox disease

ADJUSTED* VE % (95% CI) Full vaccination (2 doses) 69 (48, 81) Males only 67 (45, 80) Males only, 18-49 years, 60 (33, 77) no history of ACAM2000 vaccination 74 (52, 86) No immunocompromising conditions 2 doses administered subcutaneously 53 (-14, 81) 66 (-50, 92) 2 doses administered intradermally 2 doses administered heterologously 87 (64, 95) Partial vaccination (1 dose) 37 (23, 49) Males only 36 (21, 49) Males only, 18-49 years, 38 (21, 51) no history of ACAM2000 vaccination 38 (19, 52) No immunocompromising conditions 1 dose administered subcutaneously 33 (15, 47) 1 dose administered intradermally 38 (0, 62) -20

Vaccine Effectiveness (%)



Source: Preliminary JYNNEOS Vaccine Effectiveness Estimates Against Medically Attended Mpox Disease in the U.S., August 15, 2022 – October 29, 2022 | Mpox | Poxvirus | CDC

Vaccine coverage and outbreak probability

- Only 23% of the U.S. population at risk* has been fully vaccinated.
- Vaccine coverage varies widely between jurisdictions, and is relatively high for NYC: 89% (one dose) and 45% (two doses).
- While a modeling study predicts a relatively low outbreak probability for NYC, it remains important to increase vaccination levels, particularly for two-dose completion.

*Denominator is the population recommended to receive the vaccine, estimated using 2021 data for MSM with HIV PrEP indications and 2020 data on MSM living with HIV. These estimates are increased by 25% to account for additional vaccine eligible people not captured by these data sources





Inequities in Second Dose Vaccination Coverage Persist



Health

Source: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-</u>data-summary.pdf

Inequities in Second Dose Vaccination Coverage Persist

Gender



Health

Source: NYC DOHMH, 15 January 2023, <u>https://www.nyc.gov/assets/doh/downloads/pdf/monkeypox/mpox-response-</u> data-summary.pdf

Clinical Presentation



Classic Presentation





Siegrist EA, Sassine J. Clin Infect Dis. 2022 Jul 29:ciac622. doi: 10.1093/cid/ciac622

Clinical Presentation in 2022

Cases had atypical features

Rash was characteristic; but often start in *genital* and *perianal* areas or *orally*

- Depending on when the patient presented, progression of lesions might not have appeared characteristic, especially if lesions were in the early stages
- Sometimes didn't disseminate to other parts of body and lesions might have been in different stages
- Location was likely reflective of points of contact

Prodromal symptoms

- Mild, not present, not detected or appeared after rash
- Fever, headache, myalgia, lymphadenopathy, night sweats, chills



Clinical Presentation in 2022

Severe presentations could be debilitating with potential for long-term sequelae

- Proctitis (with or without ulcers) tenesmus, bleeding, severe pain
- Urethritis (urethral ulcers) dysuria, hematuria
- Oropharyngitis (pharyngeal ulcers) tonsilitis, dysphagia, odynophagia
- Balanitis/balanoposthitis phimosis, paraphimosis
- Perichondritis
- Bacterial superinfection scarring, strictures, disfigurement
 - Penile/testicular, pharyngeal, testicular lesions

STI Co-infections were common

• Gonorrhea, chlamydia, syphilis, herpes, acute HIV

Curran KG, et al. HIV and Sexually Transmitted Infections Among Persons with Monkeypox — Eight U.S. Jurisdictions, May 17–July 22, 2022. MMWR Morb Mortal Wkly Rep 2022;71:1141–1147. DOI: http://dx.doi.org/10.15585/mmwr.mm7136a1

HIV and Sexually Transmitted Infections Among Persons with Monkeypox — Eight U.S. Jurisdictions, May 17–July 22, 2022

In the U.S., HIV or recent sexually transmitted infections (STIs)* are common among people with monkeypox



Health

Curran KG, et al. HIV and Sexually Transmitted Infections Among Persons with Monkeypox — Eight U.S. Jurisdictions, May 17–July 22, 2022. MMWR Morb Mortal Wkly Rep 2022;71:1141–1147. DOI: <u>http://dx.doi.org/10.15585/mmwr.mm7136a1</u>

Evolution of Cutaneous Lesions





Thornhill 2022, N Engl J Med ; https://www.nejm.org/doi/full/10.1056/NEJMoa2207323

Penile Lesions





Thornhill 2022, N Engl J Med ; https://www.nejm.org/doi/full/10.1056/NEJMoa2207323

Perianal, Anal and Rectal Lesions



Health



Oral and Perioral Lesions





Thornhill 2022, N Engl J Med ; https://www.nejm.org/doi/full/10.1056/NEJMoa2207323

Differential Diagnosis

Мрох

•Deep, painful, umbilicated, but can progress through stages

•May not be localized

Primary syphilis

•Painless and more shallow

Not umbilicated

Localized

Varicella Zoster Virus

•Both painful and can be vesicular, dermatomal

Herpes Simplex Virus

•Shallow, localized

Molluscum

•Both umbilicated, localized, not painful

Ask about other symptoms (prodrome)

Ask a sexual history



Management and Treatment



Supportive Care

Most individuals have a disease course that will self-resolve and can be managed with supportive care

Some lesions can be extremely painful and can evolve quickly

- Recommend NSAIDS, acetominophen for systemic pain control
- Some patients may need opioids and/or hospitalization for pain control

All patients should be evaluated and treated for potential coinfections:

• Secondary bacterial infections are common

Complications can include:

- Strictures (anogenital)
- Sight-threatening keratitis

- pneumonitis
- encephalitis



Treatment

Skin lesions

- Keep clean and dry when not showering or bathing to prevent bacterial superinfection
- Pruritus managed with oral antihistamines and inert, anti-irritant topical agents such as calamine lotion or petroleum jelly

Oral lesions

- Compounds such "magic" or "miracle" mouthwashes (prescription solutions used to treat mucositis) to manage pain
- Oral antiseptics to keep lesions clean (e.g., chlorhexidine mouthwash)
- Topical benzocaine/lidocaine gels for temporary relief, especially to facilitate eating and drinking, but limit to recommended doses



Treatment

Ocular complications

- Trifluridine, a topical antiviral, can be used in addition to tecovirimat
- Stop using contact lenses, avoid touching the eyes

Nausea and vomiting

• Anti-emetics as appropriate

Diarrhea

- Managed with appropriate hydration and electrolyte replacement
- Anti-motility agents not generally recommended given the potential for ileus



Clinical Considerations for Pain Management of Mpox: <u>https://www.cdc.gov/poxvirus/mpox/clinicians/pain-management.html</u> Interim Clinical Considerations for Management of Ocular Mpox Virus Infection: <u>https://www.cdc.gov/poxvirus/mpox/clinicians/ocular-infection.html</u>

Treatment

Proctitis can occur with or without internal or external lesions

- May be manageable with appropriate supportive care
- Can progress to become severe and debilitating
 - Stool softeners such as docusate should be initiated early
 - Sitz baths may calm inflammation
 - Over the counter pain medications such as acetaminophen or NSAIDs

Pain from proctitis may require prescription medications

• Balance use with the possibility of side effects, like constipation

Proctitis may be accompanied by rectal bleeding

• Observed to be self-limited but should be evaluated by a healthcare provider



Tecovirimat for Treatment

Tecovirimat (TPOXX) is an antiviral medication approved by the FDA to treat smallpox disease

- Oral capsule and IV formulations
- Can be given on outpatient basis
- Must be taken with a fatty meal





https://emergency.cdc.gov/coca/ppt/2022/052422_slides.pdf https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/208627s000lbl.pdf

Tecovirimat for Treatment – When to Treat

Patients with severe disease

Patients with involvement of anatomic areas which might result in serious sequelae that include scarring or strictures

Patients at high risk for severe disease

- Severe immunocompromising conditions
 - People living with HIV with CD4<350 or not virally suppressed
- < 8 years old</p>
- Pregnant or chest/breastfeeding patients
- Patients with a condition affecting skin integrity

Guidance for Tecovirimat Use: <u>https://www.cdc.gov/poxvirus/mpox/clinicians/Tecovirimat.html</u> Clinical Considerations for Treatment and Prophylaxis of Mpox Infection in People Who are Immunocompromised: <u>https://www.cdc.gov/poxvirus/mpox/clinicians/people-with-HIV.html</u>





Obtaining Tecovirimat

Inform patients about the <u>Study of Tecovirimat for Human Mpox</u> <u>Virus (STOMP)</u>

- <u>https://www.stomptpoxx.org/stompsites</u>
- Participation is voluntary
- Telemedicine option

Tecovirimat can also be accessed through CDC Expanded Access Investigational New Drug Process:

https://www.cdc.gov/poxvirus/mpox/clinicians/Tecovirimat.html

https://www.nyc.gov/site/doh/providers/health-topics/monkeypox.page





Severe Manifestations of Mpox Disease



Severe Manifestations of Monkeypox among People who are Immunocompromised Due to HIV or Other Conditions





Distributed via the CDC Health Alert Network September 29, 2022 02:15 PM ET CDCHAN-00475 Morbidity and Mortality Weekly Report (MMWR)

Morbidity and Mortality Weekly Report (MMWR) Home

Interim Clinical Treatment Considerations for Severe Manifestations of Mpox — United States, February 2023

Weekly / March 3, 2023 / 72(9);232-243



https://emergency.cdc.gov/han/2022/han00475.asp https://www.cdc.gov/mmwr/volumes/72/wr/mm7209a4.htm

Severe Disease – NYC Experience

Mpox cases among people with HIV requiring prolonged tecovirimat from CDC clinical consult line and NYC Provider Access Line (n=11)

- Mostly Black non-Hispanic young men
- Many in unstable housing in the previous year

Clinical Features

- All had high viral loads
- CD4<200, most with CD4<50
- All hospitalized, some for months
- 54% died (6/11)



Garcia EA, et al. Conference on Retroviruses and Opportunistic Infections 2023, Poster 735

Severe Disease – Management

If mpox suspected, immediately start tecovirimat if CD4<200, new HIV diagnosis, or people living with HIV with unknown immune status. Do not wait for labs to return.

• Close follow up to monitor for progression if outpatient

Immediately start antiretrovirals

Mpox will not resolve until patient has had immune reconstitution



Severe Disease – Management

Extend tecovirimat until lesions have healed and patient has had immune reconstitution

- Tecovirimat inhibits viral replication and is virostatic, not virucidal
- Have a low threshold to switch to IV tecovirimat if any concern for absorption or ability to consume fatty meals
- Clearance of mpox requires having an immune system.
- This may take months



Severe Disease – Management

For hospitalized patients consider combination therapy:

- IV tecovirimat + one or more of the following
- Vaccinia immune globulin intravenous
- Brincidofovir
- Cidofovir
- Trifluridine (if eye involvement)

Multidisciplinary consultation

For consultation call the CDC Clinical Escalations Team

- 770-488-7100 or email <u>eocevent482@cdc.gov</u>
- NYC Provider Access Line: 866-692-3641

Interim Clinical Treatment Considerations for Severe Manifestations of Mpox <u>https://www.cdc.gov/mmwr/volumes/72/wr/mm7209a4.htm</u>



Examples of Severe Manifestations



Necrotic Facial Lesions

"Burn-like" lesions

• Obliteration of recognizable facial features



Photo courtesy of Ann Ostrovsky, MD and Steven Carrubba, MD, NYU Langone Medical Center (published)



Photo courtesy of Anusha Govind, MD, University of Texas Southwestern Medical Center (published)



Carrubba S, et al. Lancet Infect Dis. 2023 ; Govind A, et al. CID 2023

Ophthalmologic Complications

- Eyelid eschar
- Orbital Globe Collapse
- Corneal Melt



Confluent/restrictive eyelid eschar, CT scan orbital globe collapse (published)



Progressive keratouveitis with corneal melt (Unpublished)



Photos courtesy of Ann Ostrovsky, MD and Steven Carrubba, MD; NYU Langone Medical Center, NYCHHC-Bellevue; Carrubba S, et al. Lancet Infect Dis. 2023

Gastrointestinal Complications

Uncontrollable large volume gastrointestinal bleeding and hemorrhagic shock due to severe mpox

- Esophageal: Necrotic, hemorrhagic, friable masses that were raised and ulcerated
- Rectal: Deep ulcers with extensive necrosis
- Viral cytopathic changes on histology

lleus

Obstruction

In Conclusion

Take a sexual history and test for all other STIs and HIV

Treat symptoms and consider tecovirimat

Refer patient to the STOMP Trial

Severe manifestations have been seen, primarily among people who are immunocompromised due to HIV

- Start treatment immediately, prolonged treatment may be needed
- Initiate antiretrovirals
- Call CDC Clinical Consult

Offer vaccine to all eligible people



Mpox Prevention



Prevention messages

- Get vaccinated against mpox
- During sex or other intimate contact, the following can help reduce risk:
 - Reduced number of partners, especially those that or anonymous or whose recent sexual history is unknown
 - If partners have mpox symptoms or feel sick, do not have sex or close physical contact
 - Avoid sex parties, circuit parties and other spaces where people are having sex and other intimate contact with multiple people
 - If someone does have sex or other intimate contact while sick, they should cover all rashes and sores with clothing or sealed bandages
 - This might reduce spread from contact with the rash or sores, but other methods of transmission might still be possible
 - Since the virus may be transmitted through semen, use latex condoms during sex
 - Do not share towels, clothing, fetish gear, sex toys or toothbrushes
 - Wash sex toys after each use or sex act



Strategies Adopted to Prevent Monkeypox

- The American Men's Internet Survey (AMIS) is an annual online survey of cisgender gay, bisexual, same gender loving, and other men who have sex with men in the United States.
- In August 2022, Emory University conducted a special one-time survey with AMIS participants to explore knowledge, attitudes and practices related to the US mpox outbreak.



Source: American Men's Internet Survey, 2022 Monkeypox Supplemental Survey. <u>https://emoryamis.org/</u> Morb Mortal Wkly Rep. August 2022.



Early Release / Vol. 71

Morbidity and Mortality Weekly Report

August 26, 2022

Modeling the Impact of Sexual Networks in the Transmission of *Monkeypox virus* Among Gay, Bisexual, and Other Men Who Have Sex With Men — United States, 2022

Ian H. Spicknall, PhD¹; Emily D. Pollock PhD¹; Patrick A. Clay, PhD¹; Alexandra M. Oster, MD¹; Kelly Charniga, PhD¹; Nina Masters, PhD¹; Yoshinori J. Nakazawa, PhD¹; Gabriel Rainisch, PhD¹; Adi V. Gundlapalli, MD¹; Thomas L. Gift, PhD¹



https://www.cdc.gov/mmwr/volumes/71/wr/mm7135e2.htm?s_cid=mm7135e2_w



Morbidity and Mortality Weekly Report August 26, 2022

Modeling the Impact of Sexual Networks in the Transmission of Monkeypox virus Among Gay, Bisexual, and Other Men Who Have Sex With Men — United States, 2022



2 Transmission Scenarios

Lower (60% probability of infection after exposure) Higher (90% probability of infection after exposure)

10 Infection Introductions

to a population of 10,000 MSM





Morbidity and Mortality Weekly Report August 26, 2022

Modeling the Impact of Sexual Networks in the Transmission of *Monkeypox virus* Among Gay, Bisexual, and Other Men Who Have Sex With Men — United States, 2022

Study Design

2 Transmission Scenarios

Lower (60% probability of infection after exposure) Higher (90% probability of infection after exposure)

10 Infection Introductions

to a population of 10,000 MSM

Outcomes

Risk of Infection

among 6 sexual activity strata

Transmission Proportion

by partnership type

Impact of One-time Partner Decrease

on total infected



https://www.cdc.gov/mmwr/volumes/71/wr/mm7135e2.htm?s_cid=mm7135e2_w

Modeled mean number of partners, population size, and risk ratio for acquiring monkeypox among gay, bisexual, and other men who have sex with men, by level of sexual activity

_	Mean no. and	types [§] of partners du	ring time interval			
_	Past yr	Past 3 wks			RR (by transmission scenario)	
- Sexual activity stratum [†]	All types	All types	One-time only	% of population	Lower	Higher
1 (lowest)	1.8	0.8	0.0	19	0.6	0.5
2	1.8	0.8	0.0	19	0.7	0.5
3	4.0	0.9	0.1	19	0.9	0.9
4	4.0	1.0	0.2	19	1.0 [¶]	1.0 [¶]
5	14.7	1.5	0.7	19	1.8	2.3
6 (highest)	124.7	6.6	5.8	5	3.6	6.9

Abbreviation: RR = risk ratio.

* Contact data sources: https://doi.org/10.1016/j.epidem.2020.100386; https://doi.org/10.1093/infdis/jiw223; https://doi.org/10.1093/infdis/jiw223

⁺ Based on rate of one-time partnership formation. MSM in stratum 1 have a 0.000 probability of having a one-time sexual partner on any given day, and MSM in stratum 6 have a 0.286 probability of having a one time-time sexual partner on any given day. Strata 2–5 have one-time partnership probabilities between these two endpoints on any given day.

[§] Partnerships include main (assumed to last an average of 477 days), casual (assumed to last an average of 166 days), and one-time (assumed to last 1 day).
[¶] Comparison group for RR calculation.



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NYC Mpox Vaccine Updates



Recommendations and authorizations for use of JYNNEOS vaccine

- ACIP recommends the 2-dose JYNNEOS vaccine for persons aged 18 years and older at risk of mpox during an mpox outbreak
 - Dose 2 administered one month after Dose 1
 - Public health authorities determine whether there is an mpox outbreak
- Vaccination of individuals younger than age 18 authorized under FDA emergency use authorization
- Providers should administer mpox vaccine as part of routine sexual health services
 - To participate in NYC, contact <u>poxvax@health.nyc.gov</u>



JYNNEOS eligibility

- People of any sexual orientation or gender identity who have or may have multiple or anonymous sex partners, or participate or may participate in group sex
- People of any sexual orientation or gender identity whose sex partners are eligible per the criteria above
- People who know or suspect they have been exposed to mpox in the last 14 days
- Anyone else who considers themselves to be at risk for mpox through sex or other intimate contact



Discuss JYNNEOS vaccination with patients

- Assess patients for JYNNEOS vaccination as a part of broader discussions around sexual health
- Provide a strong recommendation for vaccination to individuals at risk for mpox exposure
- Administer vaccine or refer for vaccination
- Document doses administered in the Citywide Immunization Registry



Strongly recommend vaccination for people at higher risk for mpox exposure

- Men whose sex partners include any individuals other than cisgender women
- People who have been diagnosed with a sexually transmitted infection (STI) in the last six months
- People living with HIV or taking HIV pre-exposure prophylaxis (PrEP)



Strongly recommend completion of the 2dose series

- Recommend and encourage individuals complete the 2-dose series
- Dose 2 should be given at least 28 days after Dose 1
- Administer Dose 2 no matter how much time has elapsed since Dose 1
 - Do not restart the series



Recommend and provide post-exposure prophylaxis

- Post-exposure prophylaxis (PEP) with JYNNEOS vaccine should be initiated as soon as possible after exposure, ideally within 4 days
 - PEP administered between days 4 and 14 after exposure has been shown to be effective and should be offered
 - If a person is at on-going risk for mpox, recommend vaccination even if more than 14 days since last exposure
- Encourage individuals with mpox to disclose names of close contacts the Health Department so that their contacts can be referred for PEP
 - If a person is comfortable doing so, the individual with mpox could notify their close contacts - guiding them to seek evaluation



Order and administer JYNNEOS vaccine

- To enroll in NYC Mpox Vaccination Program, email poxvax@health.nyc.gov
- JYNNEOS vaccine is provided by the federal government for free
 - Once enrolled, place orders through the NYC Health Department
- Vaccine is delivered frozen and can be stored in a regular freezer until expiration (often more than one year)
 - Vaccine can be stored at refrigerated temperatures up to 8 weeks
- Subcutaneous administration is now recommended for all patients
- Vaccine comes in single dose vials and providers can place orders for as few as 20 vials



Report JYNNEOS doses administered to the Citywide Immunization Registry

- Individuals < 19 years old:
 - Doses administered must be reported to the Citywide Immunization Registry (CIR) as required by NYS Public Health Law and NYC Health Code
- Individuals 19 years and older:
 - Doses administered should be reported to the CIR with patient consent (oral or written)



Coadministration

Coadminister with other recommended vaccines

• Hepatitis A, Hepatitis B, Human papillomavirus, Meningococcal

COVID-19 vaccines

- People who previously received COVID-19 vaccination may be given JYNNEOS without a minimum interval between vaccinations
- Those who previously received JYNNEOS, particularly adolescent or young adult males, might consider waiting 4 weeks before receiving a COVID-19 vaccine



Referral for JYNNEOS vaccine

NYC Mpox Vaccine Finder at <u>vaccinefinder.nyc.gov</u>





May 9, 2023

Summary and Action Items

- Chicago Department of Public Health (CDPH) has identified a resurgence of cases of mpox (formerly monkeypox).
- From April 17th-May 5th 2023, 12 confirmed and one probable case of mpox were reported to CDPH. All cases were among symptomatic men. Nine (69%) of 13 cases were among men who were fully vaccinated for mpox.
- Transmission of mpox continues locally and disproportionately affects the same populations affected by Sexually Transmitted Infections (STIs) and human immunodeficiency virus (HIV).
- Healthcare providers are urged to remain diligent in screening and vaccinating at risk populations.
- Vaccination is an important tool in stopping the spread of mpox, although vaccine-induced immunity is not complete. People who are vaccinated should <u>continue to avoid close, skin-to-skin contact</u> with someone who has mpox.
- JYNNEOS is a 2-dose vaccine approved for the prevention of mpox and smallpox. All eligible Chicagoans should
 receive both doses of the vaccine for the best protection against mpox. The second dose should be given 4 weeks



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We would like to acknowledge the inspiring care, compassion, and strength of our NYC provider community, who confronted a multitude of challenges during this outbreak; and the patients and their families who even in the face of incredible suffering still sought to contribute to our knowledge amidst the uncertainty of a re-emerging disease.



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