

MONKEYPOX (MPOX) INFECTION PREVENTION BASICS



AGENDA

- Welcome and Introductions
- Monkeypox virus infection prevention and control basics
 - What is monkeypox virus (Mpox)?
 - How does Mpox spread?
 - Case studies - What infection control lessons can we learn from these case studies?
 - Reflection - What infection control actions can I take to keep myself safe as a healthcare worker?
- Session feedback form and next steps

LEARNING OBJECTIVES

- Explain what monkeypox is and how it spreads.
- Understand your role with your facility's infection control and prevention.
- Explain one (1) primary way infection control actions play a role in keeping you safe from infectious disease exposures, like Mpox.
- Explain one (1) infection control lesson we can learn from our Mpox case studies.

INTRODUCTIONS

Please introduce yourself with:

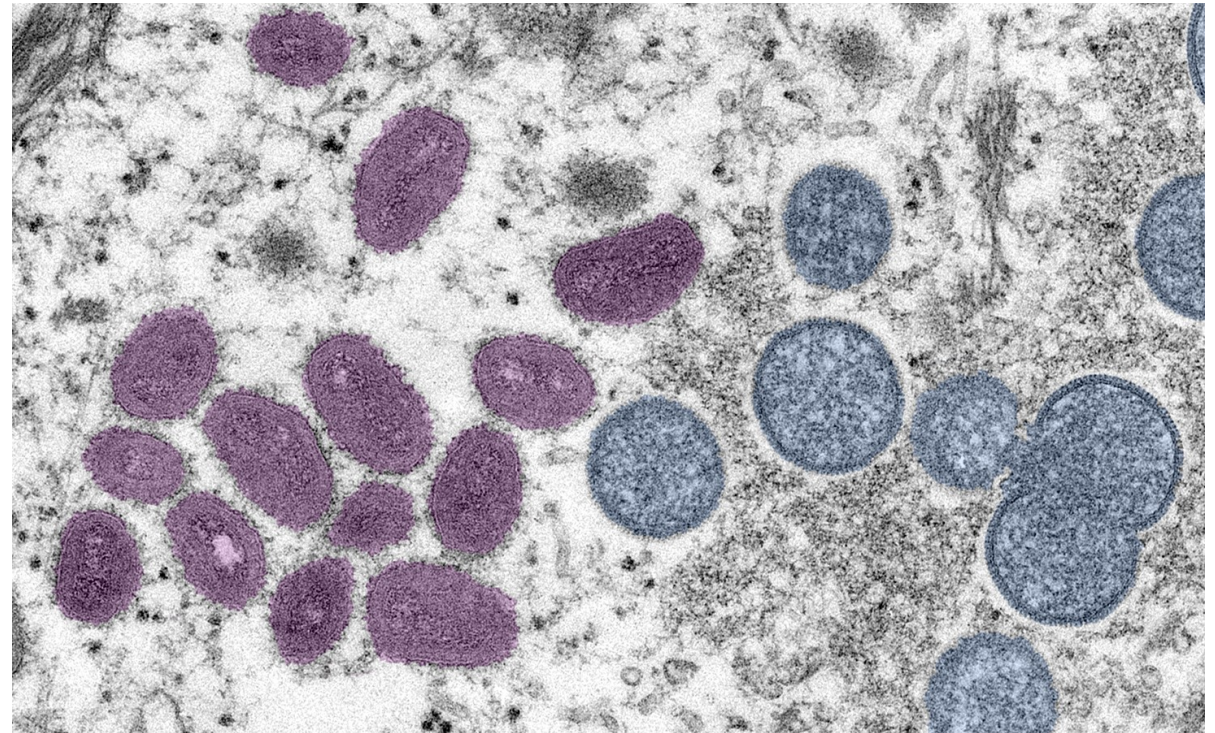
- Your name
- Your role (e.g., type of healthcare setting, job title)
- Whether direct patient care plays a big part, or a smaller part, in your work responsibilities.

BACKGROUND



WHAT IS MONKEYPOX?

- Monkeypox: a rare disease in the United States caused by infection with the monkeypox virus (Mpox).
 - Monkeypox is in the same virus family as smallpox and cowpox.
 - Scientists are tracking multiple cases of monkeypox in countries that normally don't report monkeypox, including the United States in 2022.

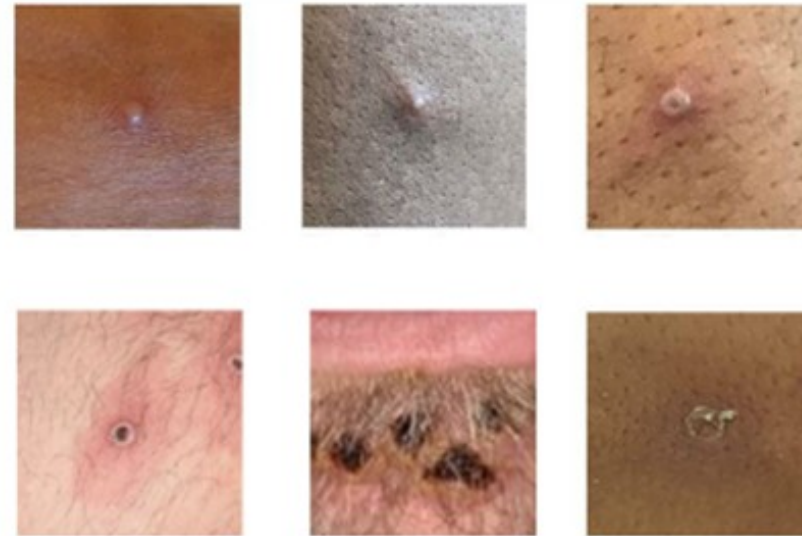


WHAT ARE THE SYMPTOMS OF MPOX?

- Symptoms of Mpox can include:
 - Fever
 - Headache
 - Muscle aches and backache
 - Swollen lymph nodes
 - Chills
 - Exhaustion
 - New onset rash
 - Can look like pimples or blisters
 - Can appear on the face, inside the mouth, and on other parts of the body, like the hands, feet, chest, genitals, or anus.

Examples of Monkeypox Rashes

Photo credit: UK Health Security Agency



HOW DOES MPOX SPREAD?

- Mpox spreads through:
 - Direct contact with infectious rash, scabs, or body fluids.
 - Respiratory droplets during prolonged face-to-face contact (more than 3 hours).
 - Touching objects, fabrics (such as clothing or linens) that previously touched the rash or body fluids of someone with monkeypox.



CAN I GET MPOX FROM A PATIENT?

- When conducting routine patient care with appropriate PPE, the risk to healthcare personnel (HCP) is very low.
 - By observing Standard Precautions, you can help prevent the spread of infections like Mpox.
- In Chicago, we have seen no HCP test positive for Mpox after a patient exposure.
 - Most healthcare exposures have been low risk, such as from lack of gowns in taking care of patients with suspect rashes.



Based on Mpox case information collected by the Chicago Department of Public Health during the Chicago 2022 Mpox outbreak: <https://www.chicagohan.org/monkeypox>; Last update 8/15/2022.

WHY IS IT IMPORTANT TO RECOGNIZE MPOX?

- CDC urges healthcare workers in the U.S. to be alert for patients who have rash illnesses [consistent with monkeypox](#).
- Infection control measures that keep frontline staff safe from germs like Mpox:
 - Wearing recommended PPE
 - Hand hygiene
 - Environmental cleaning
 - Proper handling of patient bedding/soiled linens



WHAT DO I DO IF I SEE A MPOX PATIENT?

- Follow any new guidance given by:
 - Your Infection Preventionist
 - Your Hospital Administrator/Director of Nursing
 - Federal, state, and local health departments
- Follow all signs posted with new instructions
 - Note any changes in PPE, cleaning and disinfection, or isolation precautions
- Follow other infection control actions and protocols.
- Ask management if any questions.

Discussion

How can infection control actions keep you safe from infectious disease exposures, like Mpox?



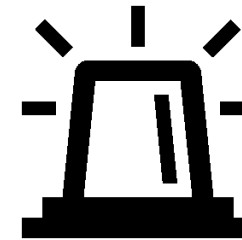
HOW TO KEEP MPOX FROM SPREADING

- Strict adherence to proper **hand hygiene**.
 - Know when to use soap and water vs. alcohol-based hand rubs.
 - Hand hygiene limits the spread of germs through touch.
- **Use PPE appropriately** and keep extra PPE in stock!
 - PPE prevents germs from spreading through splashes and sprays, by being breathed in, or through touch.
 - Ask your IP for specifics on which PPE to use for different settings.
- Frequently and effectively **clean all areas** in your facility.
 - Germs can spread from common reservoirs in healthcare, such as wet surfaces, dry surfaces, dirt and dust, and common medical devices.
 - Follow instructions on the disinfectant label (pay special attention to high-touch surfaces and the disinfectant contact time).



HOW CAN INFECTION CONTROL PREVENT OUTBREAKS?

- Recognizing infection risks throughout your workday can help you protect your patients, yourself and coworkers.
 - **If you see something, say something!**
 - Screen patients for Mpox symptoms *prior* to their appointment.
 - Notify your DON/IP if you notice a patient or a visitor with:
 - New fever
 - New rash
 - New swollen lymph nodes
- Strictly following posted signage and wearing listed PPE can prevent the spread of infections.
- Clean and disinfect areas where Mpox patients spent time.
 - Perform disinfection using an EPA-registered disinfectant with an [Emerging Viral Pathogens](#) claim, which may be found on EPA's [List Q](#).



KEY TAKEAWAYS

- When conducting routine Mpox patient care with appropriate PPE, the risk to healthcare personnel (HCP) is very low.
- Early recognition of an infectious disease, such as Mpox, can prevent staff or patient illness and prevent closures.
- Infection control actions like strict adherence to hand hygiene, proper PPE use, following instructions on posted signs, and frequently cleaning all areas in your facility help prevent the spread of Mpox.



Case Studies

Lessons learned from the
2022 Mpox outbreak.



SCENARIO 1

Case Details

- A patient walks into an ambulatory clinic. They are asked COVID-related questions for respiratory illness and do not disclose any unusual symptoms in screening.
- The MA takes vitals on the patient with a surgical mask and no gloves.
 - While placing the BP cuff, the MA notices there is a lesion on the patient's wrist and continues taking vitals.
 - The patient has their mask down for 5 minutes following temperature check.
 - The MA assumes the provider will see the lesion and ask the patient about it.

Infection Control Actions

- Recommend adding new onset rash to patient screening questions in ambulatory care settings.
- Generally, patients should wear well-fitting source control during appointments (e.g., medical mask).
- Healthcare workers that notice concerning symptoms should alert providers so appropriate precautions can be taken.
- **Observe Standard Precautions** - wear gloves when potentially infectious skin lesions are noted.
- Frontline workers must wear all required PPE – gown, gloves, eye protection, and a NOISH-approved N95 (or higher) for suspect Mpox patients.
- Healthcare workers exposed to Mpox should be monitored for 21 days for symptoms
 - Notify infection control, occupational health, and the health department to be guided about a medical evaluation.

SCENARIO 2

Case Details

- A patient is admitted for drug overdose to the ED and is noted to have a rash on her legs.
 - Patient resuscitation is performed with a resuscitation bag.
 - Healthcare workers were wearing gloves and surgical masks during resuscitation.
- Upon admission, patient is noted to have lesions and tests positive for Mpox.
- ED staff were not concerned about exposure because they had on gloves and surgical masks.

Infection Control Actions

- Always try to use appropriate PPE.
 - Intubation and extubation, and any procedures likely to spread oral secretions, should be performed in an airborne infection isolation room (negative pressure room).
 - Full PPE should have been worn, including a gown, gloves, eye protection, and a NIOSH-approved N95 (or higher) respirator.
- When appropriate PPE is not worn, always notify employee health or infection prevention of possible exposures and follow their instructions.
- Healthcare workers exposed to Mpox should be monitored for 21 days for symptoms.

SCENARIO 3

Case Details

- A patient is admitted to a hospital with diffuse rash on their trunk and limbs.
 - The patient is transferred to a different floor for treatment and placed on contact and droplet precautions with an N95 respirator.
- An EVS worker comes to clean the room, wearing a surgical mask and gloves.
 - Contact is made with the soiled bedding.
 - Soiled bedding is shaken prior to transferring to the laundry bag.
 - EVS worker removes gloves and performs hand hygiene upon leaving the room.
- What infection control actions could the HCW have performed differently?

Infection Control Actions

- Use appropriate PPE and obey posted signs.
 - The EVS worker should have been wearing gloves, gown, a face shield and an N95 respirator.
- Soiled laundry (e.g., bedding, towels, personal clothing) should be handled in accordance with [recommended \[PDF – 241 pages\]](#) standard practices, avoiding contact with lesion material that may be present on the laundry.
- Activities such as dry dusting, sweeping, or vacuuming should be avoided.
 - Wet cleaning methods are preferred.
- Clean and disinfect areas where patients with monkeypox spent time.
 - Perform disinfection using an EPA-registered disinfectant with an [Emerging Viral Pathogens](#) claim, which may be found on EPA's [List Q](#).

Reflection

What infection control actions can you take to prevent Mpox exposures in your facility?



RESOURCES AND FUTURE TRAINING SESSIONS

Project Firstline Resources

Project Firstline on CDC:

<https://www.cdc.gov/infection-control/projectfirstline/index.html>

Project Firstline on Facebook:

<https://www.facebook.com/CDCProjectFirstline/>

Twitter:

https://twitter.com/CDC_Firstline

YouTube:

<https://www.youtube.com/playlist?list=PLvrp9iOILTQZQGtDnSDGViKDdRtlc13VX>

To sign up for Project Firstline e-mails, click here:

<https://www.cdc.gov/infectioncontrol/projectfirstline/index.html>

Other Resources

- Recognize Infection Risks in Health Care: <https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/recognize-risks.html>
- CDC's Environmental Cleaning Evaluation Tools: https://www.cdc.gov/hai/prevent/prevention_tools.html#anchor_1561577385
- CDC's Reduce Risk from Surfaces: <https://www.cdc.gov/hai/prevent/environment/surfaces.html>
- EPA's Six Steps for Safe & Effective Disinfectant Use: <https://www.epa.gov/sites/production/files/2020-04/documents/disinfectants-onepager.pdf>
- Selected EPA-Registered Disinfectants: <https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>
- CDC's Monkeypox Resource: <https://www.cdc.gov/poxvirus/monkeypox/index.html>
- Disinfectants for Emerging Viral Pathogens (EVPs): List Q: <https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-q>



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PFL-Chicago

- The [Chicago Department of Public Health](#) is proud to be a partner of Project Firstline, the [CDC's National Training Collaborative for Healthcare Infection Control](#).
- Together, we are providing engaging and effective [infection prevention and control](#) (IPC) training for the frontline healthcare workforce.
- Our PFL-Chicago Team is available to answer your IPC questions, schedule onsite trainings (earn CEU credits), direct you to free CDC educational materials, and more!
- Visit our HAN page or contact us at projectfirstline@cityofchicago.org to learn more.

