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# Interim Guidance on the Infection Prevention and Control of Mpox in Healthcare Facilities

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## BACKGROUND

Mpox (formerly known as Monkeypox) is a zoonotic disease caused by the mpox virus, which is a double-stranded DNA virus belonging to the *Orthopoxvirus* genus. The genus also includes the smallpox and cowpox viruses. Two distinct clades of the mpox virus have been identified: Clade I (previously known as the Congo Basin (central African) clade) and Clade II (the former west African clade). The disease is usually present in Central and West African regions with sporadic travel-related cases reported internationally. On July 23, 2022, the World Health Organization (WHO) declared mpox a Public Health Emergency of International Concern (PHEIC). This declaration was made due to the rapid and widespread transmission of the virus across multiple countries and regions, indicating a need for a coordinated international response. On May 11, 2023, the WHO officially lifted the PHEIC status for Mpox. This decision was based on the significant decline in case numbers and the successful implementation of control measures. The lifting of the PHEIC reflected a reduced global emergency threat, though Mpox continued to be monitored as a health concern. On August 14, 2024, the WHO re-declared the ongoing outbreak of mpox a PHEIC. This decision underscores the global significance of the outbreak and the need for a coordinated international response. The declaration is made when an event is determined to constitute a public health risk to other countries and requires a coordinated international response. It highlights the seriousness of the situation and aims to mobilize resources, strengthen surveillance, and enhance preparedness and response measures worldwide.

Mpox primarily spreads from person to person through close contact with someone infected with the virus, including those within the same household. This close contact can involve skin-to-skin interactions, such as touching or sexual activity, as well as mouth-to-mouth or mouth-to-skin contact, such as kissing. It can also occur through face-to-face interactions where infectious respiratory particles might be exchanged, such as during conversation or close breathing. Individuals with multiple sexual partners are at an increased risk of contracting mpox. In addition to direct contact, mpox can be transmitted through contaminated objects, like clothing or bedding, and through needle injuries in healthcare settings or community environments such as tattoo parlors. Transmission can also occur during pregnancy or childbirth, posing risks to the baby, including pregnancy loss, stillbirth, or severe complications for both the infant and the parent. Animal-to-human transmission can happen through bites, scratches, or activities involving contact with infected animals.

Mpox typically manifests with signs and symptoms that begin within a week of exposure but can start anywhere from 1 to 21 days later. The symptoms generally persist for 2 to 4 weeks but may continue longer in individuals with compromised immune systems. Common symptoms of mpox include rash, fever, sore throat, headache, muscle aches, back pain, low energy, and swollen lymph nodes. In some cases, a rash may be the first symptom, while others might first experience fever, muscle aches, or a sore throat. The mpox rash often starts on the face and then spreads across the body, including the palms of the hands and the soles of the feet. It can also begin in other areas of contact, such as the genitals. The rash starts as flat sores that develop into liquid-filled blisters, which can be itchy or painful. As healing progresses, the lesions dry out, crust over, and eventually fall off. Some individuals may have just a few skin lesions, while others may develop hundreds. These lesions can appear on various parts of the body, including palms of hands and soles of feet, face, mouth, throat, groin and genital areas, or anus. Additionally, some people may experience painful rectal swelling (proctitis) or discomfort and difficulty with urination (dysuria) or



swallowing. Transmission of mpox can occur until all sores have healed and new skin has formed. There are cases where individuals may carry the virus without displaying symptoms. Although transmission from asymptomatic individuals has been reported, more research is needed to understand how frequently this occurs. Children, pregnant individuals, and those with weakened immune systems, such as those with uncontrolled HIV, face a higher risk of severe illness and complications from mpox. Severe cases of mpox can result in serious health issues, including bacterial infections of the skin leading to abscesses or severe damage, pneumonia, corneal infections with potential vision loss, difficulty swallowing, vomiting and diarrhea causing dehydration or malnutrition, and infections affecting the blood, brain, heart, rectum, genital organs, or urinary tract. In some instances, mpox can be fatal.

The guiding principles of care from the WHO recommend that patients with mpox should receive respectful, patient-centered care that maintains dignity, privacy, and confidentiality while ensuring appropriate and adequate protection of health care workers, visitors, and other patients.

This document provides Infection Prevention and Control guidance on the management and prevention of the transmission of pox in healthcare facilities.



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## I. STANDARD PRECAUTIONS

### A. Early Recognition, Triage, Screening, and Source Control

Effective management of mpox hinges on early recognition, precise triaging, comprehensive screening, and robust source control measures to promptly identify and mitigate the spread of the virus.

1. A designated triage and screening area shall be established to screen patients.
2. The triage officer shall be trained in identifying cases using a triage or screening checklist.
3. A triaging or screening form shall be utilized to identify patients who fulfill the case definition of a suspect, probable, and confirmed case of mpox.
4. Isolate a patient who fulfills the case definition of mpox immediately in a well-ventilated private room with a dedicated toilet and bathroom.
5. Precautions should be taken to minimize exposure of patients to surrounding persons. These precautions may include placing a surgical mask over the patient's nose and mouth if tolerable to the patient and covering any of the patient's exposed skin lesions with a sheet or gown.
6. The patient and his/her companion should stay in the designated waiting area at least 1 meter apart.
7. Everyone including patients should always observe respiratory hygiene or cough etiquette.

### Case Definitions for Surveillance of Mpox based on the latest Department of Health issuances:

<b>Suspect Case</b>	<ol style="list-style-type: none"> <li>1. A person who is a close contact with a probable or confirmed mpox case in the 21 days before the onset of signs or symptoms, and who presents with any of the following: acute onset of fever (&gt;38.5°C), headache, myalgia (muscle pain/body aches), back pain, profound weakness, or fatigue;</li> <li>2. A person presenting with an unexplained acute skin rash, mucosal lesions, or lymphadenopathy (swollen lymph nodes). The skin rash may include single or multiple lesions in the ano-genital region or elsewhere on the body. Mucosal lesions may include single or multiple oral, conjunctival, urethral, penile, vaginal, or anorectal lesions. Anorectal lesions can also manifest as anorectal inflammation (proctitis), pain, and/or bleeding.</li> </ol> <p style="text-align: center;"><b>AND</b></p> <ol style="list-style-type: none"> <li>3. For which the common causes of acute rash (i.e. varicella zoster, herpes zoster, measles, herpes simplex, bacterial skin infections, disseminated gonococcal infection, primary or secondary syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, molluscum contagiosum, allergic reaction (e.g., to plants) and any other locally relevant common causes of papular or vesicular rash) do not explain the clinical picture</li> </ol> <p><i>As per WHO, it is <u>not necessary</u> to obtain negative laboratory results for listed common causes of rash illness to classify a case as suspected. Further, if suspicion of mpox or mpox virus infection is high due to either history and/or clinical presentation</i></p>
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	<i>or possible exposure to a case, the identification of an alternate pathogen that causes rash illness should not preclude testing for mpox virus, as co-infections have been identified.</i>
<b>Probable Case</b>	<p>1. A person presenting with an unexplained acute skin rash, mucosal lesions, or lymphadenopathy (swollen lymph nodes). The skin rash may include single or multiple lesions in the anogenital region or elsewhere on the body. Mucosal lesions may include single or multiple oral, conjunctival, urethral, penile, vaginal, or anorectal lesions. Anorectal lesions can also manifest as anorectal inflammation (proctitis), pain, and/or bleeding.</p> <p><i>AND</i></p> <p>2. One or more of the following:</p> <ul style="list-style-type: none"> <li>● Has an epidemiological link (face-to-face exposure, including health care workers without respiratory protection; direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils) to a <b>probable</b> or <b>confirmed</b> case of mpox in the 21 days before symptom onset; or</li> <li>● Has had multiple sexual partners (2 or more) in the 21 days before symptom onset.</li> </ul>
<b>Confirmed Case</b>	A person with <b>laboratory-confirmed</b> mpox virus infection by detection of unique sequences of viral DNA by real-time polymerase chain reaction (PCR) and/or sequencing.
<b>Close Contact</b>	<p>A close contact is defined as a person who, in the period beginning with the onset of the source case's first symptoms, and ending when all scabs have fallen off and a fresh layer of skin has formed underneath, has had one or more of the following exposures:</p> <ul style="list-style-type: none"> <li>● Face-to-face exposure (including health care workers without appropriate PPE);</li> <li>● Direct physical contact, including sexual contact;</li> <li>● Contact with contaminated materials such as clothing or bedding.</li> </ul>
<b>Discarded Case</b>	A suspect or probable case but tested negative for mpox virus through RT-PCR or sequencing.

**B. Hand Hygiene**

Hand hygiene is the single most important means of preventing the spread of infection. An alcohol-based hand rub (ABHR) is the preferred method of hand hygiene unless hands are visibly soiled, then plain soap and water are recommended. Perform hand hygiene after the removal of gloves.

**The WHO five moments of hand hygiene:**

1. Before Patient Contact
2. Before Aseptic Procedures
3. After Body Fluid Exposure
4. After Patient Care
5. After Environment Contact



### C. Respiratory hygiene and cough etiquette

Respiratory hygiene and cough etiquette infection prevention measures are instructed to patients with symptoms of respiratory infection.

1. Ask patients to cover their nose and mouth with a mask, tissue, or elbow when coughing or sneezing.
2. Dispose of used tissues and masks in the wastebasket.
3. Clean hands after contact with respiratory secretions.
4. Wear a medical mask.
5. Stay at least one to two meters (3 to 6 feet) away from the patient whenever possible.

**D. Patient Placement** – See under Transmission-based precautions

**E. Personal Protective Equipment (PPE)** – see under Transmission-based precautions

### F. Patient Transport

If a patient who is clinically suspected or confirmed to have mpox requires transportation, the patient must not use public transportation, instead use inpatient transportation within a facility. If for transport to other medical departments, the patient must:

1. Clean their hands
2. Be provided with and wear a medical mask if tolerated, and shown how to put it on so that it fully covers their nose and mouth.
3. Have their lesions covered as much as possible (e.g., with a clean patient gown, clean sheet, or dry dressing)

Ensure that the receiving department/facility and transporting healthcare workers are informed of the need for airborne, droplet, and contact precautions before the patient's arrival.

### G. Safe injection practices

Safe injection practices are intended to prevent the transmission of infectious diseases between one patient and another, or between a patient and the HCW during the preparation and administration of parenteral (e.g., intravenous or intramuscular injection) medications. The seven steps for safe injection are:

1. Ensure a clean workplace
2. Clean hands and wear gloves
3. Use sterile injection equipment
4. Use each vial once for one patient
5. Properly disinfect the skin before injection
6. Ensure sharps disposal
7. Ensure proper waste management

### H. Cleaning and Disinfection Procedures

In general, large enveloped viruses have less intrinsic resistance to inactivation by either physical or chemical methods of disinfection compared to nonenveloped viruses and many types of bacteria or fungi. The envelope surrounding the core particle of a large virus (e.g., variola virus) contains lipids, and



this biochemical property renders this and other enveloped viruses particularly sensitive to chemical disinfection.

### Equipment and Environmental Surfaces

1. Dedicated patient care equipment to a single patient.
2. Standard cleaning and disinfection procedures shall be performed using hospital-grade disinfectants that have a **Drug Identification Number (DIN)** for equipment and environmental cleaning and disinfection.
3. Follow standard health authority and organizational procedures and manufacturer’s recommendations for concentration, contact time, safe use, and the compatibility of materials being cleaned and disinfected.
  - a. All reusable medical instruments should be cleaned and then be either sterilized or subjected to high-level disinfection depending on their intended use as per the Spaulding classification.
  - b. There is no need to pre-soak the instruments unless the instruments cannot be cleaned and reprocessed immediately after use. In this situation, water or saline with or without detergents are adequate soaking agents.
4. Clean and disinfect all surfaces that were in contact with the patient including chairs, exam tables, and washroom used by the patient. Attention should be paid to frequently touched surfaces, such as doorknobs, call bell pulls, faucet handles, and wall surfaces that may have been frequently touched by the patient.

**Note:** The EPA publishes a list — List Q: Products with Emerging Viral Pathogens Claims — for which manufacturers have submitted data showing the effectiveness of disinfectants against difficult-to-inactivate viruses. A June 2022 literature review found studies evaluating the inactivation of orthopoxviruses (including mpox) by different disinfecting agents and found some to be effective.

### Chemicals Used on Environmental Surfaces for Low- or Intermediate-Level Disinfection

Chemical Disinfectant	Concentration to Achieve Inactivation	Contact Time
Ethyl alcohol	50-95%	1 minute
Isopropyl alcohol	40-75%	1 minute
Glutaraldehyde	0.05-0.5%	5 minutes
Sodium hypochlorite	0.25-2.5%	1 minute
Hydrogen peroxide	14.4%	30 seconds
Peracetic acid	0.005-0.2%	1 minute
Quaternary ammonium compound	0.1%	30 minutes

### Decontamination of air space in rooms or vehicles

There is no evidence to support air space decontamination of rooms, facilities, or vehicles (eg. fumigation). By the time cases appear in the community following an aerosol release, the presumption is that no viable virus would be remaining in the environment from that release due to certain factors affecting viral inactivation, such as **temperature** (a high temperature inactivates the virus), **humidity** (increasing levels of humidity have little effect), and **exposure to ultraviolet irradiation**.



It is also unlikely that the poxvirus embedded in the fibrin material from scabs will be easily released from this material and dispersed into the air.

**For discharge environmental cleaning and disinfection:**

1. Healthcare workers (HCWs) must wear a gown, gloves, fit-tested and seal-check N95 respirator or equivalent, and eye protection during cleaning and disinfection.
2. Use standard environmental services/housekeeping discharge cleaning and disinfection protocols (as per Additional Precautions).
3. All disposable items in the patient's room must be discarded.
4. Privacy curtains must be changed.
5. Equipment/supplies that cannot be disinfected must be discarded.

**I. Handling Linen and Laundry**

All used linen should be managed as potentially infectious (standard precautions) and appropriate PPE should be worn including facial protection to prevent inhalation of skin squames from linen and gowns for environmental contact.

The laundry materials should carefully be placed in a clearly labeled, leak-proof bag, sealed, or tied, and placed inside an impermeable bag for transport to the laundry area (double bagging is appropriate).

In ambulatory care settings, standard medical laundry facilities should be used. If not available, the items may be washed in a standard washing machine using hot water (> 60 degrees Celsius) with detergent followed by hot air drying. The use of chlorine bleach during hot-water washing can provide additional measures for safety. If hot water is not available, soak in 0.05% chlorine for 30 minutes. Rinse with water and let dry in the sunlight.

When handling soiled laundry, care should be taken to avoid contact with the worker's skin and clothing.

Do not shake laundry, as it disperses contaminated infectious particles into the air and onto the surrounding surfaces.

**J. Containment and Disposal of Contaminated Waste**

Waste should be segregated (general waste, infectious waste, and sharps) and placed in appropriate bins at the point of use. Biomedical waste should be contained in impervious waste-holding bags or double-bagged.

Management and disposal of waste (including PPE) should be done following local regulations for infectious waste. Healthcare wastes generated from the care of suspected, probable, and confirmed mpox patients can be mixed with other infectious wastes.

Ensure health workers wear appropriate PPE (e.g. gloves, gown, respirator [e.g. N95, FFP2], eye protection) during handling of waste.



## II. TRANSMISSION-BASED PRECAUTIONS

- A. **Contact and droplet** precautions are used at a minimum in all suspected, probable, and confirmed mpox cases.
- B. **Airborne** precautions are initiated if an aerosol-generating medical procedure (AGMP) is being performed or other airborne infections are being considered as tuberculosis (pulmonary and laryngeal involvement), measles, and varicella (chickenpox).

### C. Duration of Precautions

Patients should remain in isolation until they meet specific criteria indicating that they are no longer infectious. This typically includes:

1. **Resolution of Symptoms:** The patient should have resolved all symptoms of mpox, including fever, rash, and lesions.
2. **Lesion Healing:** All mpox lesions should have crusted over, and the scabs should be dry. The duration of this phase can vary but typically takes several weeks from the onset of symptoms.
3. **No New Lesions:** There should be no new lesions developing.
4. **Criteria for Discontinuation:**
  - a. Symptomatic Patients: Isolation can generally be discontinued when symptoms have improved, and all lesions have crusted over and healed.
  - b. Asymptomatic Contacts: For individuals who had contact with a confirmed case but do not show symptoms, quarantine might not be necessary unless they develop symptoms, they undergo isolation.
  - c. Healthcare Settings Precautions: Even after isolation is discontinued, strict hygiene practices and PPE usage should be maintained until all lesions are resolved and the risk of transmission is deemed minimal.

### D. Patient Placement

Additional precautions signage for droplet, contact, and airborne precautions can be placed outside the patient's room.

1. For patients placed on contact and droplet precautions:
  - a. Place patients in a single or private room with a dedicated bathroom and sink, and dedicated equipment for each patient. A commode can be used if a dedicated bathroom is not available.
  - a. Maintain the door closed.
  - b. Keep a distance of **1 meter or 3 feet** away from the patient.
2. For patients requiring additional airborne precautions:
  - a. Place patients in an airborne infection isolation room (AIIR), when available. If an AIIR is not available, place patients in a single or private room **with a dedicated bathroom and sink. The door is closed**, blocking any gaps to help create a seal. In isolation rooms in more open areas, a heavy plastic curtain can block air circulation.



- b. Windows are opened to the outdoors for **natural ventilation**, but unstable ventilation can be created due to weather changes. Consider **recirculation** instead as the right approach (use a portable HEPA filter or ceiling-mounted HEPA-UV air filter).
- c. Avoid using **portable fans** as they can disperse dried materials from lesions.

#### E. Visitation

Visitation policies for patients with suspected or confirmed mpox virus infection in healthcare settings are designed to protect both the patients and visitors from the potential transmission.

1. Restrict access
2. Access to patients with mpox is usually restricted to essential healthcare workers only. This may include healthcare providers and those directly involved in the patient's care.
3. Visitors should be restricted to those necessary for care or compassionate grounds. The care team in consultation with the infection control makes decisions regarding visitation. In some cases, visitors might need to be pre-approved by the healthcare facility, and only a limited number of visitors may be allowed at a time.

#### F. Transport of Patient Suspected, Probable or Confirmed Case — see above Standard Precautions

#### G. Personal Protective Equipment

Healthcare workers should wear the following PPE when providing care to, and before entering the room of a patient suspected or confirmed of having mpox.

The group decided to put a matrix for PPE used depending on activity.

##### Patient:

1. Patients must perform hand hygiene.
2. Patients must wear a medical mask if tolerated (upon entry to the facility and outside the patient room).
3. Skin lesions must be kept covered with a gown, clothes, sheet, or bandage, except during examination.

**Healthcare worker - Personal Protective Equipment (PPE):** Healthcare workers should be trained on procedures for safe donning and doffing of PPE.

1. Fit-tested and seal-check N95 respirator mask or equivalent
2. Impermeable Gown
3. Disposable Gloves
4. Eye protection (e.g., face shield or goggles)
5. Dedicated footwear that can be decontaminated

### III. MANAGEMENT OF DECEASED MPOX PATIENT

A patient who died of mpox is classified as Category 1 risk for transmission of infection. In addition to standard precautions, additional precautions are necessary.



**A. Before handling dead bodies, healthcare workers should make sure that the following immunizations are complete:**

- a. Hepatitis A
- b. Hepatitis B
- c. Tetanus

**B. Hygienic measures upon body preparation inside healthcare facilities**

Hygienic preparation of the deceased (such as cleaning the body, tidying of hair, trimming of nails, and shaving), as part of post-mortem care within health care facilities, is not advisable. If hygienic preparation is to be done, all the necessary precautions such as wearing gloves or protective clothing should be strictly adhered to.

- a. The HCW should cover one's cuts or lesions with waterproof dressings.
- b. Do not touch the face, eyes, nose, and mouth during the handling of dead bodies to prevent exposing the mucous membranes.
- c. Do not touch environmental surfaces unnecessarily during the handling of dead bodies, to reduce contamination of environmental surfaces.
- d. Do not eat, drink, or smoke while handling the deceased.
- e. Perform hand hygiene after handling dead bodies and after removing and disposing of PPE.

**C. Category 1 dead bodies are handled to a minimum. The following PPE are required during body preparation:**

- a. Cap
- b. Face and eye protection: Face shield or goggles
- c. Surgical mask
- d. Impermeable gown or disposable plastic apron over water-repellent gown
- e. Gloves
- f. Protective boots

Enhanced PPE may be chosen depending on perceived risk.

**D. Packing of the dead body**

Place the dead body inside a leak-proof plastic or cadaver bag which should be zippered or closed tightly with tapes and bandage strips. Disinfect the outer packaging with 1,000 ppm sodium hypochlorite solution, and let it air dry. Avoid using polyvinyl chloride body bags if the body is to be cremated, due to the risk of dioxin emissions.

**E. Transport to the storage site**

- a. No special transport is required as long as it is clean, road-worthy, and compartmentalized.
- b. Decontaminate the vehicle and minimize contact with human remains.
- c. If moving to another place, check restrictions.

**F. Storage site**

- a. It should remain clean and disinfected.
- b. Ensure a properly ventilated facility and illuminated.



- c. Temperature of cold chambers should be kept at 4 °C (1-8 °C).
- d. Ensure safe waste disposal.
- e. Minimize direct contact with human remains. Aerosol-generating procedures are not allowed.

#### G. Viewing

Viewing in the funeral parlor and hygienic preparation are not allowed. The remains shall not be taken to any place of public assembly.

#### H. Embalming

Embalming is not allowed.

#### I. Burial

Sealed metal coffin burial is allowed. The deceased must be buried **within 12 hours after death**. However, the burial of remains should follow the person's religion and culturally-acceptable norms, to the most possible extent (e.g. in Islamic rites, cremation is forbidden or "haram").

#### J. Cremation

Cremation is advisable. Relatives can view the dust.

## IV. MPOX AND SURGERY

### A. Screening and Elective Surgery Considerations:

1. **Preoperative Identification:** Identify patients with mpox or exposure before surgery.
2. **Delay Elective Surgery:** To prevent transmission, elective surgeries should be postponed for at least 21 days from exposure or until lesions have healed and the rash has resolved. If surgery cannot be postponed, the surgery should be scheduled when a minimum number of perioperative healthcare workers are present and at the end of the day when possible.
3. **Screening Process:** During preoperative exams, if mpox is suspected, use PPE and avoid stigmatizing patients. Integrate screening tools into health records to aid in identifying at-risk patients.
4. **Clinical Questions:** Assess for fever, rash, recent contact with mpox cases, and relevant epidemiological data.

### B. Mpox Testing:

Routine testing is not advised. Detection is via PCR from lesion samples; blood tests are not effective. If mpox is suspected during surgery, consult infection control experts. Post-exposure vaccination (if available) is most effective within 4 days, but still possible up to 14 days.

### C. Operating Room Considerations:

Mpox virus can remain infectious on surfaces. Use AIIR for aerosol-generating procedures, and ensure full PPE, including N95 respirators and protective eyewear. Minimize OR traffic, limit equipment, and follow rigorous disinfection protocols with EPA-approved products.



#### **D. Postoperative Care:**

Reduce patient and staff movement to prevent further exposure. Ensure full PPE and isolation for postoperative care and transport.

## **V. MPOX AND IPC STRATEGIES FOR SPECIAL POPULATION-BASED**

### **A. Patients who are Pregnant and Breastfeeding**

Data on mpox infection during pregnancy are limited. It is unclear whether pregnant individuals are more susceptible to mpox or if the infection is more severe during pregnancy. Mpox can be transmitted to the fetus in utero or to the newborn through close contact during and after birth. Adverse pregnancy outcomes, such as spontaneous pregnancy loss and stillbirth, have been reported in confirmed cases of mpox during pregnancy. Preterm delivery and neonatal mpox have also been observed. The frequency of these outcomes and the risk factors associated with severe cases or adverse pregnancy outcomes remain unknown.

The benefits of skin-to-skin contact and rooming-in for breastfeeding and infant health are well established. However, due to the risk of mpox transmission through close contact and the potential severity of neonatal mpox infection, breastfeeding should be postponed until isolation criteria are met (i.e., all lesions have healed, scabs have fallen off, and a new layer of intact skin has formed). However, if contact during the infectious period is chosen, strict precautions are necessary:

1. Avoid direct skin-to-skin contact.
2. Ensure the newborn is fully clothed or swaddled, with clothing or blankets replaced after contact.
3. The patient should wear gloves, and a fresh gown, and cover all exposed skin below the neck.
4. Soiled linens should be promptly removed.
5. The patient should wear a well-fitting mask during visits.

It is also unclear whether mpox is present in breast milk. Breast milk expressed by a symptomatic or isolated patient should be discarded during the period when breastfeeding is delayed. To prevent accidental exposure to mpox, the infant with pasteurized donor human milk or infant formula can be explored.

### **B. Patients undergoing Hemodialysis**

The guidelines outlined above, which adhere to standard and transmission-based precautions, must be strictly followed for patients with mpox who are undergoing dialysis. This includes implementing enhanced infection control measures to prevent the spread of the virus during the dialysis process. Staff should use appropriate personal protective equipment (PPE) and follow protocols for cleaning and disinfecting surfaces and equipment to minimize the risk of transmission.

Dialysis in an isolation room is the best option, especially when respiratory or systemic symptoms are present. If an isolation room is not available, a temporary solution could be to schedule the patient with



mpox for dialysis at the end of the day on a separate shift. If dialysis must occur while other patients are present, ensure the patient is kept as far from others as possible. One option is to place the patient in an empty chair at the end of a row, which is farthest from the nursing station and other patients. If available, screens that can be cleaned and disinfected may be placed around the chair, and the adjacent chair should remain empty. The patient's skin lesions should be fully covered, and they should wear a surgical mask at all times while in the facility. Healthcare personnel must wear all recommended PPE and dispose of it properly after leaving the patient's care area; PPE should not be reused.

No special internal disinfection is required for dialysis machines used for a patient with mpox; standard cleaning practices are sufficient.

Based on the available information, there are no specific guidelines addressing the reuse of dialyzers for mpox patients. However, general infection control practices in healthcare settings, especially for patients with mpox, emphasize the importance of strict precautions to prevent transmission, given the disease's transmission through direct contact with infectious lesions or body fluids. Therefore, dialysis supplies intended for single use should not be reused.

## VI. RISK MANAGEMENT OF HEALTHCARE WORKERS WITH MPOX VIRUS EXPOSURES AND RECOMMENDATIONS FOR POSTEXPOSURE PROPHYLAXIS

The risk levels outlined in the table are intended to guide the monitoring of healthcare personnel (HCP) or patients who have been exposed to the mpox virus in healthcare settings and to help determine the need for postexposure prophylaxis (PEP). Occupational health, infection prevention, or the Department of Health may modify the risk level for any exposure incident based on specific circumstances. The categories listed represent situations that are known or theoretically associated with transmission. However, the absence of a specific exposure does not mean there is no risk; it indicates a lower risk based on current evidence. Using personal protective equipment (PPE) properly and consistently when treating patients with mpox effectively prevents transmission to HCP. Nevertheless, errors in PPE use, such as self-contamination during removal, can elevate the risk of transmission. Therefore, even with the recommended PPE, HCP should remain vigilant for signs and symptoms of mpox and seek an occupational health evaluation if symptoms arise, refraining from work until they have been assessed.

Risk of Exposure	Exposure Characteristics	Monitoring	PEP*
High Risk	<b>Unprotected contact</b> between an exposed individual's broken skin or mucous membranes and the skin lesions or bodily fluids from a person with suspect, probable, or confirmed mpox case (e.g., inadvertent splashes of infected person's saliva to the eyes or mouth of a person, sharps injury with contaminated sharp), or their materials (e.g., linens, clothing) visibly contaminated with body fluids, dried lesion exudate, or crusts	Yes	Yes



Risk of Exposure	Exposure Characteristics	Monitoring	PEP*
Intermediate Risk	Absence of exposures above AND any of the following: <ul style="list-style-type: none"> <li>● Unprotected contact between an exposed individual’s intact skin or clothing and the skin lesions or bodily fluids from a person with suspect, probable, or confirmed mpox case or their materials (e.g., linens, clothing) visibly contaminated with body fluids, dried lesion exudate, or crusts -OR-</li> <li>● Being inside the person with suspect, probable, or confirmed mpox case’s room without wearing all recommended PPE while the patient is receiving any medical procedures that may create aerosols from oral secretions (e.g., cardiopulmonary resuscitation, intubation) or during activities that may resuspend dried lesion exudates or crusts (e.g., shaking of soiled linens) -OR-</li> <li>● Examining the oral cavity of a person with suspect, probable, or confirmed mpox case with oral or laryngeal lesions while not wearing all recommended PPE</li> </ul>	Yes	Informed clinical decision-making is recommended on an individual basis to determine whether the benefits of PEP outweigh the risks
Uncertain to Minimal Risk	Absence of exposures above AND <ul style="list-style-type: none"> <li>● Unprotected contact with a suspect, probable, or confirmed mpox case who has completely covered lesions (e.g., bandaged, covered with clothing), AND no contact with their skin lesions, bodily fluids, or any materials (e.g., linens or clothing) visibly contaminated with body fluids, dried lesion exudate, or crusts</li> </ul>	At the discretion of the facility and public health authority	No
No identifiable Risk	Absence of exposures above AND <ul style="list-style-type: none"> <li>● No contact with a suspect, probable, or confirmed mpox case, their potentially contaminated surfaces or materials, and at most only transient time spent around the person with mpox</li> </ul>	No	No

*\*If available*

1. Exposed healthcare workers during unprotected contact should be monitored, or should self-monitor, daily for the onset of signs or symptoms for **21 days** from the last contact with the suspect, probable, or confirmed case or their contaminated materials.



- a. Regularly practice hand hygiene and respiratory etiquette.
  - b. Avoid physical contact with persons who are immunocompromised or pregnant.
  - c. Minimize contact with children.
  - d. Avoid contact with animals, including pets where feasible.
  - e. Asymptomatic contacts who adequately and regularly monitor their status can continue routine daily activities such as working and attending school.
2. Any individual with signs and symptoms compatible with mpox infection; and/or anyone being considered as a suspect, probable, or confirmed case of mpox shall isolate until they are determined to no longer constitute a public health risk for others.
3. Suspect, probable, or confirmed mpox cases with mild, uncomplicated disease and not at high risk for complications can be isolated **at home**, for the **duration of the infectious period** (at least **21 days from onset of symptoms** until lesions have healed and scabs fall off, **whichever is longer**), if home assessment confirms that infection prevention and control measures are in place. Otherwise, consider isolation in a health facility.
- a. Decisions to isolate and monitor at home should be made on a case-by-case basis based on the patient's clinical severity, presence of complications, care needs, risk factors for severe disease, and access to referral for hospitalization if the condition deteriorates.
  - b. Isolating at home should be ambulatory, have access to food and water, and require minimal to no assistance from a caregiver. The isolation area should be separate from other household members and away from shared areas of the home (i.e. a separate room, or area with a curtain or screen). Isolation should be done alone and away from any close contact until resolution of all symptoms or monitoring is done.
  - c. Items such as eating utensils, linens, towels, electronic devices, or beds should be dedicated to the person with mpox. Avoid sharing personal items.
  - d. The following infection control measures shall be observed while in isolation, such as but not limited to:
    - i. Avoid skin manipulation (e.g. peeling off scabs) or scratching and keep the lesions dry and clean to avoid further transmission and superinfection;
    - ii. In case of presence of weeping wounds (wounds with pus-like or clear fluid), cover with a sterile gauze or bandage
    - iii. Wear a surgical mask, especially for those who have respiratory symptoms
    - iv. Isolate in a room or area separate from other family members to limit or minimize contact



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## ANNEXES

**Table 1.**  
Appropriate IPC Measures and Personal Protective Equipment (PPE)s per Area/Activity

Areas/ Activities	Hand Hygiene	Face Shield/ Goggles	Medical/ Surgical Mask	Respirator Mask	Impermeable Gown	Gloves	Head Cover	Shoe Cover
<b>Entrance Guard</b>	Yes	No	Yes	No	No	No	No	No
<b>Triaging/ Screening Area</b>	Yes	No	Yes	No	No	No	No	No
<b>With closed- contact, with or without AGPs</b>	Yes	Yes	No	Yes	Yes	Yes	No	No*
<b>Surgical Procedure</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

*\*Dedicated shoes that can be decontaminated is recommended*