

# Interim Guidelines for Mpox (Monkeypox)

V2.2

October 2025



The guidelines for Mpox were developed with the best available data and evidence. These guidelines will be updated as more information becomes available. On the official Public Health Authority website:

[www.pha.gov.sa](http://www.pha.gov.sa)



## Versions Update

### Version 1.0

- Was written and published on May 22, 2022

### Version 1.1

- Updated the surveillance case definitions and reporting
- Updated the reporting and investigation forms
- Added the discontinued isolation and transmission precautions
- Added the public health measures at ports of entry
- Added the contact tracing

### Version 1.2

- Updated the discontinued isolation and transmission precautions
- Added the handling of dead bodies

### Version 1.3

- Updated the introduction and the causative agent and natural host
- Updated modes of transmission.
- Updated the surveillance definitions of human cases of Mpox
- Updated the infection prevention and control
- Updated Mpox investigation form
- Added the vaccination

### Version 1.4

- Updated the introduction and the causative agent and natural host
- Updated modes of transmission.
- Updated signs and symptoms.
- Updated the surveillance definitions of human cases of Mpox
- Updated the infection prevention and control.
- Updated discontinued isolation and transmission precautions.
- Updated handling of dead bodies
- Updated the vaccination
- Updated the immediate notifiable form for a suspected case of Mpox
- Updated Mpox investigation form

### Version 2.0

- Updated the introduction
- Updated the causative agent and natural host
- Updated infection prevention and control
- Updated the vaccination
- Updated infection prevention and control posters

### Version 2.1

- Updated discontinued isolation and transmission precautions.
- Updated notification form and investigation form
- Added educational posters

### Version 2.2

- Updated the introduction
- Updated reporting and coordinating authorities



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## Introduction

Mpox, a viral illness first discovered in 1958 during two outbreaks of a pox-like disease in colonies of monkeys, holds a significant place in history. The first human case of Mpox was recorded in 1970 in the Democratic Republic of the Congo (DRC), marking a pivotal moment in the understanding of this disease. Since then, Mpox has become endemic in parts of Central and West Africa, with the DRC being the most concentrated area.

While Mpox was initially confined to Africa, the first outbreak outside the continent occurred in the United States of America in 2003, with over 70 cases linked to contact with infected pet prairie dogs. This global spread of Mpox was further highlighted by sporadic cases reported in travelers from Nigeria to Israel and the United Kingdom between 2018 and 2022. These instances underscore the need for international cooperation in managing and preventing the spread of the disease.

On 14 May 2022, a cluster of Mpox cases was reported in the United Kingdom, and these cases have no history of travel or travel-related cases. Since the UK's reporting of cases, several other countries have reported cases of Mpox worldwide, mainly in Europe and North America. All infections characterized so far among the recent clusters have been due to Clade II b. This is the first time that chains of transmission are reported outside Africa without known epidemiological links to West or Central Africa. On 23 July 2022, the Director General of the World Health Organization (WHO) declared this multi-country outbreak of Mpox a Public Health Emergency of International Concern (PHEIC). This multi-country outbreak in 2022 was related mainly to Clade II b of the virus, and the infection was transmitted human-to-human, mainly by sexual contact. By May 2023, Mpox cases declined by nearly 90%. Therefore, the Director General of the WHO declared that the outbreak no longer constituted a PHEIC.

In the Democratic Republic of Congo (DRC), Mpox has been a recognized disease for decades; however, the number of reported cases began to increase significantly in late 2023. Additionally, notifications from the eastern part of the DRC and neighboring countries indicate that Clade I of the virus, referred to as Clade I b, has been spreading through human-to-human transmission, predominantly via sexual contact. As a result, on 14 August 2024, the Director-General of the World Health Organization (WHO) declared that the increase in Mpox cases in the DRC, along with the growing number of African countries reporting cases, constituted a Public Health Emergency of International Concern (PHEIC) due to need for international coordination response is to stop these outbreak. On September 5, 2025, the WHO ended the international public health emergency declaration for Mpox while extending the existing recommendations for its prevention and control.

Coincident immunity to the Monkeypox virus was previously achieved with vaccinia vaccination; however, eradicating smallpox and subsequent lack of vaccination efforts paved the way for Mpox to gain clinical relevance.



## The Causative Agent and Natural Host

Monkeypox virus is an enveloped double-stranded DNA virus that belongs to the Orthopoxvirus genus of the Poxviridae family, the same family of the virus that causes smallpox (eradicated in 1980). It should be noted that Mpox is not related to chickenpox, which is caused by the varicella virus, a virus that is not an Orthopoxvirus. Currently, two phylogenetically distinct Clades have been identified: Clade I (formerly known as Central African (Congo Basin)) and Clade II (formerly known as West African Clade).

Clade I consists of two subclades: Clade Ia and Clade Ib. Clade Ia continues to pose a risk primarily in certain African countries where Mpox is endemic. Clade Ib is found in the eastern part of the Democratic Republic of Congo (DRC) and neighboring countries. It can be transmitted through sexual contact. Also, Clade Ib has been detected in countries outside Africa, primarily imported by travelers returning from Africa.

Clade II also comprises two subclades: Clade II a and Clade II b. The global Mpox outbreak between 2022 and 2024 was mainly driven by Clade II b, which spreads through human-to-human transmission, primarily via sexual contact.

Mpox can infect various animal species, but the natural host is unknown. These animal species include rope squirrels, tree squirrels, Gambian pouched rats, sooty mangabey, and other species.

## Modes of Transmission

Transmission of the Monkeypox virus occurs when a person comes into contact with the virus through an infected human, contaminated materials, or infected animal.

### Human-to-human transmission

Human-to-human transmission occurs mainly through physical contact with a person having Mpox symptoms or contact with contaminated surfaces or personal belongings. In 2022-2024, a global outbreak of Mpox, most cases have been transmitted through close, intimate contact with symptomatic people, primarily during sexual contact. Additionally, Mpox can be transmitted through the placenta in infected pregnant women to their fetus and through percutaneous injury, which has also been documented in health workers during specimen collection as well as in the community setting, in particular, tattoo parlors.

### Animal-to-human (zoonotic) transmission

It is less likely in Saudi Arabia, and it may occur through bite or scratch, direct contact or indirect contact with body fluids, or cutaneous or mucosal lesion material of infected animals.



## Signs and Symptoms

### The Incubation Period

- The incubation period can range from 3 to 21 days. A person is not contagious during this period.

After the incubation period, the illness typically lasts for 2–4 weeks of infection, and it can be divided into two stages:

### The Febrile Stage

- Usually, it lasts between 1-3 days.
- Characterized by fever, intense headache, lymphadenopathy, back pain, myalgia, and intense asthenia (lack of energy).
- However, prodromal symptoms can be absent or follow rash onset.
- Lymphadenopathy is a distinctive feature of Mpox compared to other diseases that may initially appear similar (chickenpox, measles, smallpox).

### The Skin Eruption Stage

- The febrile stage is followed by the skin eruption stage, lasting for 2 to 4 weeks.
- Pattern: scattered or localized to a body site rather than diffuse
- The rash often starts in mucosal areas (e.g., genital, perianal, oral mucosa) and may not develop simultaneously in all body areas.
- The rash evolves through the following stages sequentially: macules (lesions with a flat base), papules (slightly raised firm lesions), vesicles (lesions filled with clear fluid), pustules (lesions filled with yellowish fluid), and crusts, which dry up and fall off.
- A person is considered contagious until after all the crusts on the skin have fallen off and a fresh layer of intact skin has formed underneath.
- Other symptoms include:
  - Genital lesions: included penile edema, paraphimosis, or phimosis
  - Proctitis: anorectal pain, tenesmus, and rectal bleeding; associated with visible perianal vesicular, pustular, or ulcerative skin lesions and proctitis
  - Oropharyngitis: complicated by tonsillar swelling, abscess, dysphagia.



## Surveillance Definitions of Human Cases of Mpox

### A suspected case is defined as:

A case that has met clinical criteria

### A confirmed case is defined as:

A person who meets the suspected case definition with laboratory confirmation of Monkeypox PCR positive **OR** Isolation of Monkeypox virus in culture.

#### Clinical criteria:

Unexplained rash\* (macular, papular, vesicular, pustular) **AND** one or more of the following:

1. high-grade fever ( $>38.2^{\circ}\text{C}$ )
2. lymphadenopathy
3. intense headache
4. back pain/myalgia
5. intense asthenia (fatigue and lack of energy)

\***Unexplained rash** is a rash for which the following common causes of acute rash do not explain the clinical picture: drug eruption, food allergy, varicella-zoster, herpes zoster, measles, herpes simplex, bacterial skin infections, primary or secondary syphilis; and any other locally relevant common causes of papular or vesicular rash.

**In addition, An Unexplained rash includes Unexplained genital, ano-genital, or oral lesion(s)** (for example, ulcers, nodules) or proctitis (for example, anorectal pain, bleeding)

**Note: All suspected cases should have blood samples drawn for evaluation of HIV and other STIs (including Hep B & C), As per current guidelines.**

## Reporting

### Reporting of suspected cases

The Mpox is an emerging incident, and suspected cases must be reported by all healthcare facilities using the notification form **immediately** to:

- Health Electronic Surveillance Network (HESN).
- Email the notification form immediately to:
  - Communicable diseases program at Clusters and /or Public Health Authority (PHA) branches/offices.
  - Coordinators at the PHA branches/offices report to the Communicable Disease Department at PHA.

**Note:** Failure to report reportable infectious diseases by healthcare organizations and/or professionals is punishable by law.



## Infection Prevention and Control

Mpox is believed to be transmitted between humans mainly via physical contact with a person having Mpox symptoms or contact with contaminated surfaces or personal belongings. Transmission through respiratory droplets might occur when face-to-face contact with a person having Mpox symptoms happens.

### Early recognition and source control.

- Healthcare workers should be aware of the signs and symptoms of Mpox and are encouraged to apply them to hospital visitors for early detection and source control.
- Use of signage to remind healthcare workers (HCWs) of the signs and symptoms.
- Respiratory hygiene is another important measure that should be applied to all HCWs, patients, and visitors.
- Whenever possible, patients identified as suspected Mpox cases should be placed in a separate area from other care areas.
- If a patient seeking care is suspected to have Mpox, infection prevention and control personnel should be notified immediately.

### Precautions for suspected and confirmed patients with Mpox

Strict adherence to standard, contact and droplet precautions should be followed when handling patients suspected or confirmed for Mpox. These include:

- Proper hand hygiene.
- Use of Personal Protective Equipment (PPE) in a correct sequence (gowns, masks, goggles if splashes are expected, and gloves).
- Safe usage and disposal of sharps.
- Aseptic technique.
- Environmental cleaning and disinfection.
- Medical waste management.

### Patient placement:

- Suspected or confirmed patients with Mpox should be isolated in a single room with a dedicated bathroom under contact and droplet precautions.
- Avoid performing aerosol-generating procedures inside the room.
- Any aerosol-generating procedures (AGPs) should be performed in a single-bed negative pressure room. If the negative pressure room is not available, the case should be placed in a single room with the use of a portable high-efficiency particulate air (HEPA) filter.
- Healthcare workers must adhere to fit-tested N95 or PAPR during AGPs in addition to other precautions.
- Cohorting of cases should be considered only when there is a significant shortage in single rooms and based on the infection prevention & control recommendations with the following considerations:
  - Cohorting only for confirmed cases.
  - Place the patients with distance between beds.



- Place physical separations between the beds.
- Use proper signage indicating the care of cases.
- Disallow any visitors or caregivers.

### Personal Protective Equipment PPEs:

- PPEs should be donned and doffed in the correct sequence whenever handling suspected or confirmed cases.
- PPEs should be donned prior to entry to the isolation room and doffed prior to exit from the patient room.
- In the case of AGPs, all PPEs should be donned prior to entry to the negative pressure room or single room with a portable HEPA filter and doffed prior to the exit from the patient room except for the high particulate respirator, which should be removed after exit or in the ante room if available.
- Disposable gowns: use disposable gowns whenever care is provided to patients.
- Surgical mask: This is a loose-fitting, disposable device that creates a physical barrier between the wearer's mouth and nose and potential contaminants in the immediate environment.
- High-efficiency particulate respirators: Use fit-checked sealed masks whenever performing AGP. If the mask doesn't match the size of the healthcare provider or the non-fitted healthcare provider, a powered Air Purifying Respirator (PAPR) should be used.
- Goggles and eye protection: whenever splashes are expected, use goggles and eye protection to minimize the risk of exposure.
- Gloves: use gloves whenever in contact with the patient, examining and contact with the patient's surroundings.

### Transportation of suspected and confirmed Mpox patients:

- Patients' movements should be restricted as much as possible unless indicated.
- Use portable machines such as portable X-ray machines whenever investigations are required. If not available, transport the patient in a designated pathway that avoids crowded areas.
- Notify the receiving designation about the case to allow them to take the proper precautions prior to receiving the patient.
- Those who are transferring the patient should adhere to isolation precautions and wear proper PPEs. They should also place an isolation transportation card and ask the patient to wear a surgical mask.
- Cover any of the patient's exposed skin lesions with a sheet or gown.

### Environmental infection prevention & control measures:

- Housekeepers and workers responsible for cleaning and disinfection should wear appropriate PPEs when cleaning rooms housing patients.
- In-patient rooms should be cleaned and disinfected at least daily and at the time of patient transfer or discharge or when required.
- More frequent cleaning and disinfection may be indicated for high-touch surfaces and following aerosol-producing procedures (e.g., tables, hard-backed chairs, doorknobs, light switches, remotes, handles, desks, toilets, sinks)
- Standard cleaning and disinfection procedures are adequate if nationally approved disinfecting products are used. Suitable options include hypochlorous acid, chlorine dioxide, sodium chlorite, isopropanol (isopropyl alcohol), quaternary ammonium



compounds, or hydrogen peroxide. Ensure that adherence to the manufacturer's instructions for contact time have been followed to achieve effective disinfection.

- Activities such as dry dusting, sweeping, or vacuuming should be avoided. Wet cleaning methods are preferred.
- Care should be taken when handling used patient-care equipment in a manner that prevents contamination of skin and clothing.
- Ensure that used reusable equipment has been cleaned and reprocessed appropriately.
- Linens and clothing should be collected and put in bags inside the room before the cleaning process begins.
- Soiled laundry should be placed in a laundry bag and handled carefully to reduce the risk of spreading infectious materials.
- Adherence to standard precautions when handling contaminated laundry generated from Mpox cases and minimizing agitation of the contaminated items are considered sufficient to prevent the dispersal of potentially infectious aerosols.
- Transportation of food trays to the patients should be delivered from the food server' to the nurse, and accordingly, the nurse delivers it to the patient.
- Generated wastes from patients' rooms should be handled as infectious waste and discarded accordingly.

### Visitation

Visitors should be avoided when patients have Mpox to minimize the risk of exposure and prevent transmission of the infection. If visits are necessary, they should be limited in number and conducted under the observation of healthcare workers. Comprehensive education and training about required isolation precautions, as well as infection prevention and control recommendations, should be provided.



## Discontinue Isolation and Transmission Precautions

### Confirmed Cases:

- All confirmed cases should be isolated in a healthcare facility. Based on bed capacity and if the confirmed case is clinically stable, home isolation may be considered based on the assessment of the public health team and the treating physician and after getting the approval of the regional public health department within the PHA branch/office. Additionally, the patient must be provided with appropriate education regarding isolation measures.
- Healthcare facility isolation should be continued for confirmed cases if the case has recent travel history to Angola, Burundi, Cameroon, the Central African Republic, the Democratic Republic of Congo, Gabon, Kenya, the Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda, Zambia, or has contact with a confirmed case infected with the Clade I strain of the virus until genomic sequencing is available and infection with the Clade I strain of the virus is excluded
- Discontinuity of isolation should be done in consultation with the treating physician.
- Patients should remain under isolation and transmission precautions until the symptoms are resolved, the lesions have crusted, those crusts have separated, and the skin has started to form a new layer underneath.

### Suspected Cases:

- All suspected cases must be tested and isolated in a healthcare facility. Based on bed capacity and if the suspected case is clinically stable, home isolation may be considered based on the assessment of the public health team and the treating physician and after getting the approval of the regional public health department within the PHA branch/office. Additionally, the suspected case must be provided with appropriate education regarding isolation measures, and the isolation must continue until the result becomes available.
- Healthcare facility isolation should be continued for suspected cases if the case has recent travel history to Angola, Burundi, Cameroon, the Central African Republic, the Democratic Republic of Congo, Gabon, Kenya, the Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda, Zambia, or has contact with a confirmed case infected with the Clade I strain of the virus until the result is available.
- If clinically unstable, the suspected case must be isolated in a healthcare facility until the result becomes available, and he/she will be managed accordingly.
- If the case is clinically stable, he/she may be discharged to home if a negative result appears.
- If the result is positive, the suspected case is considered a confirmed case and managed accordingly.



## Laboratory Diagnosis

Nucleic acid testing (NAT) is the primary diagnostic tool for Mpox. Clinical and epidemiological data should be considered, and the collection of appropriate and sufficient specimens is important. Infection is confirmed by the detection of the Monkeypox virus using PCR.

### Specimen collection

The best source of specimens for laboratory diagnosis of Mpox infections is skin lesions. Specimens should be collected by trained staff wearing full PPE, including gowns, gloves, and masks.

### Specimen Type for NAT testing

Lesion material is required for persons with active lesions or rash. Lesion material, scrapings, biopsy tissue (non-formalin fixed), and lesion fluid can be collected. Collect specimens from at least 3 lesions and preferably from different sites on the body.

### Collection of specimens and Storage

Collect the appropriate sample type in a sealed sterile container. Sample each lesion separately. For swabs, use sterile nylon, polyester, or Dacron swabs. Swabs are intended for bacterial preservation and cotton swabs should not be used. The use of liquid transport media might cause dilution of the specimen. Label the specimen with all the essential information. If multiple specimens are collected, please indicate the site of the collection for each one. Store refrigerated at (2-8°C) within an hour after collection (for up to 7 days). Freeze specimens at (-20°C or lower) for longer storage (up to 1 month).

### Collection of specimens for nucleic acid testing

Appropriate equipment for specimen collection:

- Personal protective equipment
- A small scalpel blade or 25G needle
- Leak-proof sealed tubes
- Dry swabs
- A waterproof sharps container for needles, syringes, scalpels
- Waterproof plasters
- A sealable plastic specimen bag. Absorbent packaging material and a strong metal outer container plus biohazard tape to seal it and appropriate disinfectant solution to clean the outside before transport to the laboratory.

### Procedure for collection of specimens for nucleic acid testing

- Wear appropriate personal protective equipment
- Gently derroof a vesicle using a syringe.
- Rub the base of the lesion firmly using a dry swab while rotating the swab to absorb fluid from the lesion onto the swab and to get the cellular material from the lesion base.
- Sample at least 3 lesions from different locations on the body or from lesions which differ in appearance.



- Place the swab into a sterile, leak-proof container.
- Label the tubes with patient information and site of collection, place them in the zip-lock plastic specimen bag, and seal them.
- Use waterproof dressing(s) to cover the derroofed lesions.
- After specimen collection, all protective materials (gloves, mask, gown, etc.) and all used collection materials must be placed in biohazard bags and autoclaved or incinerated prior to disposal. Use an appropriate sharps container to dispose of Needles and immediately autoclave.

### Referral of samples to the Public Health Laboratory:

1. In **HESN Plus**, you can register the case and request the test Monkeypox (Mpox) PCR, select the type of samples and collection sites, and for the distention, select Public Health Laboratory (PHL).
2. Label each specimen container with the patient's ID number, HESN requisition ID, and the date the sample was collected.
3. Store the samples at 2-8°C and ship them to PHL on an ice pack.
4. Lab Results will be reported to HESN Plus
5. The average Turnaround time (TAT) for the lab results is 48 Hours

### Specimens Packaging and Shipment to the PHL laboratory:

All materials transported within and between laboratories should be placed in a secondary container to minimize the potential for breakage or a spill.

- Patient specimens from suspected or confirmed cases should be transported as UN3373, "Biological. Substance, Category B. All specimens being transported as UN3373 should have appropriate packaging, labeling, and documentation.
- Specimens should be put in a sterile, leak-proof container screwed properly then sealed with Para film tape and placed in waterproof secondary container e.g., ziplock bags after which they should be put in a third container. Cooling agent should be outside the secondary container.
- Paper sheets should be sealed in waterproof bags and kept separated from the specimens
- Samples can be shipped free of charge via SMSA courier to the Public Health Laboratory (PHL) as per regulations. Notify the PHL of the dispatch of the specimen and courier or airway bill number as appropriate.
- Shipment addressed to:

Public Health Laboratory,

Public Health Authority,

Al Aarid, Riyadh.

[phl@pha.gov.sa](mailto:phl@pha.gov.sa)

The courier service is available for sample transportation and pickup locations throughout the country for the collection of samples from MOH and non-MOH hospitals and other healthcare facilities. Courier services are provided 24 hours / 7 days a week.



## Public Health Measures at Ports of Entry (PoE)

In response to recent outbreaks of Mpox disease in multiple countries, the Kingdom of Saudi Arabia has implemented procedures for all travelers arriving (refer to the public health measures at ports of entry guideline).

## Contact Tracing

Contact tracing is considered one of the most important public health measures to control the spread of communicable diseases. A **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, has had one or more of the following exposures with a confirmed case of mpox:

- Direct skin-to-skin and skin-to-mucosal physical contact (such as touching, hugging, kissing, intimate or sexual contact).
- Contact with contaminated materials such as clothing or bedding, including material dislodged from bedding or surfaces during laundry handling or cleaning of contaminated rooms.
- Prolonged face-to-face respiratory exposure in close proximity.
- Respiratory exposure (i.e., possible inhalation of) or eye mucosal exposure to lesion material (e.g., scabs/crusts) from an infected person.

As soon as a suspected case is identified, contact identification and contact tracing should be initiated, and fill out the **List of Patient's Contacts** form. Contacts should be notified within 24 hours of identification. Contacts should be monitored at least daily for the onset of signs/symptoms for a period of 21 days from the last contact with a patient in the infectious period. The public health team at the regional health directorate is responsible for listing, tracing, and following up, as well as looking for symptoms of household and other contacts of patients with Mpox infection in the community. Regional public health teams should keep all lists of contacts in an excellent professional format.

**Note:** Healthcare contacts should follow the management of exposed healthcare workers (HCWs) to a Mpox case in healthcare facilities.



## Vaccination

Vaccination is one of the public health response measures to control the further spread of Mpox infection, along with other public health measures, including surveillance, contact tracing, isolation, and patient care. As Mpox is the same family of the virus that causes smallpox, the vaccines designed for smallpox will likely provide a degree of cross-protection. Previously, the vaccine used against smallpox in Africa proved to provide up to 85% effectiveness in preventing Mpox infection. There are three generations of smallpox vaccines. Historically, the first and second generations are live smallpox vaccines (replication-competent) that have been used for the population level. The first-generation vaccines are not recommended for Mpox at this time, as they do not meet current safety and manufacturing standards. The second generation of smallpox vaccine (ACAM2000) and the third generation of smallpox vaccine name JYNNEOS (also known as Imvamune or Imvanex) are both can be used to prevent Mpox infection, and the JYNNEOS vaccine has been approved for the prevention of Mpox.

### Use of JYNNEOS vaccine (Live, Non-replicating)

In the meantime, mass vaccination for the general population is not recommended for Mpox disease outbreak control. However, it is recommended for a specific group of people with a high risk of Mpox infection. In order to implement vaccination strategies, the JYNNEOS vaccine is used in the Kingdom of Saudi Arabia as the following:

## Indications and Usage of Vaccines

### Pre-exposure prophylaxis (Prep) – for the certain targeted at-risk group

- A vaccine is administered to people at high risk of Mpox (for example, laboratory workers who handle monkeypox-contaminated specimens in laboratories dedicated to Mpox diagnosis or healthcare personnel who deal with Mpox cases for performing diagnostic testing). Currently, **most clinicians and laboratories are not advised** to receive Mpox vaccines as preventative measures because they do not perform the Orthopoxvirus generic test.
- An individual with a new diagnosis of one or more sexually transmitted illnesses (after consulting the treating physician)
- An individual with more than one sexual partner.

### Post-exposure prophylaxis (PEP) – for close contact with a confirmed case

- It is appropriate to consider this approach to be the "standard PEP" for Mpox during the current outbreak. In order to prevent Mpox virus infections, vaccination is available following exposure to Mpox. Identifying contacts of confirmed Mpox cases is crucial for offering PEP vaccines and monitoring early symptoms.
- For the public: The vaccine is given to anyone who has been exposed to high-risk direct contact of a confirmed case (according to the assessment of public health), including contact with skin lesions, exposure to body fluids, and sexual intercourse.
- For healthcare workers: The vaccine is given to anyone exposed to medium or high-risk unprotected contact of a confirmed or probable case (according to the assessment of infection control in the facility).
- The vaccine should be given as soon as possible, and for the best chance of preventing the onset of the disease, the vaccine should be given within four days of exposure.
- The vaccination may reduce symptoms of the disease when administered within 4 to 14 days of exposure, but it may not prevent it.

**PEP is a useful tool for controlling Mpox outbreaks and preventing further transmission when used in conjunction with self-isolation and other prevention procedures.**



## Vaccine Dosage and Administration

### Dose and Schedule

- **Standard JYNNEOS regimen:** administer two doses by **subcutaneous route (0.5 mL each)** 4 weeks apart (28 days).
- The use of fractured dose JYNNEOS regimen by intradermal route is **no longer recommended**.

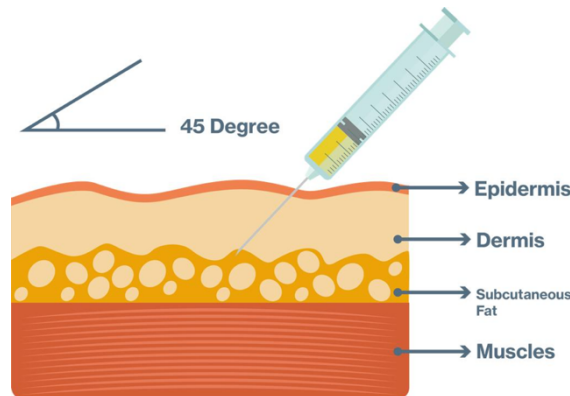
### Preparation and Administration

Allow the frozen vaccine to thaw and reach room temperature before use. Which usually takes 10-15 minutes

- JYNNEOS is a **milky, light yellow to pale white colored** suspension when thawed.
- Inspect each vial visually for **particulate matter and discoloration** before administration; if either of these conditions exists, the vaccine **should not be administered**.
- Swirl the vial gently for at least 30 seconds and clean the vial stopper with a single-use antiseptic swab before each use.

### Subcutaneous injection (Standard dose)

- Withdraw a dose of 0.5 mL into a sterile (23–25 gauge, 5/8" needle) syringe for injection.
- Administer by subcutaneous injection, preferably into the anterolateral thigh for infants less than one year of age or into the upper arm (deltoid) for individuals older than 1 year of age.



## Vaccine Contraindication and Precautions

### Contraindications

Based on the limited available data on the emergency uses of JYNNEOS, the vaccine should not be given to individuals who are known to have a severe (life-threatening) allergic reaction to a previous dose of JYNNEOS. Vaccine providers must know how to recognize and handle immediate allergic reactions, such as anaphylaxis, when administering the vaccine.

### Precautions

- History of a severe allergic reaction (e.g., anaphylaxis) to gentamicin, ciprofloxacin, chicken, or egg protein. The vaccine can be given if the benefits outweigh the potential risk of anaphylaxis. Vaccinated individuals should be monitored for 30 minutes post-vaccination.
- If an individual is suffering from a severe acute systemic illness, immunization may be postponed until they have fully recovered.

## Vaccine Special Considerations

### Pregnancy

Limited available data, which include animal studies, suggests the probable safety of the vaccine for the fetus and mother. However, **it's not routinely recommended** to vaccinate pregnant women unless the potential benefits outweigh the theoretical risk.

### Lactations

It is not known whether JYNNEOS is excreted in human milk, but this is unlikely as the vaccine virus does not replicate effectively in humans. Individuals who are breastfeeding and have significant exposure to Mpox should therefore be offered vaccination after discussing the risks of Mpox to themselves and the breastfed child.

### Individuals with underlying medical conditions

Individuals with **atopic dermatitis** are known to have developed more site-associated reactions and generalized symptoms following Mpox vaccination. Individuals in this group, therefore, need to have a risk assessment before being offered vaccination.

### Immunosuppression

JYNNEOS is a replication-defective virus and should pose no risk to those who are immunosuppressed. The safety and immunogenicity have been demonstrated in immunocompromised. However, the immune response to the vaccine could be reduced in severely immunosuppressed individuals. Vaccination should proceed using **a 0.5mL subcutaneous dose** in individuals with immunosuppression.



## Vaccine Adverse Reactions

In smallpox vaccine-naïve healthy adults who received JYNNEOS subcutaneously, the most common (>10%) solicited injection site reactions were pain (84.9%), redness (60.8%), swelling (51.6%), induration (45.4%), and itching (43.1%); the most common solicited systemic adverse reactions were muscle pain (42.8%), headache (34.8%), fatigue (30.4%), nausea (17.3%) and chills (10.4%).

## Storage and Handling of Vaccine

If the vaccine is received **frozen** and requires storage before use, it can be stored in two ways:

- **Freezer storage:** between -25°C and -15°C can be stored in the freezer up to the expiration date.
- **Refrigerator storage:** between 2°C and 8°C: after 10 minutes, it becomes thawed vaccine and must be used within **eight weeks** from thawing. **Do NOT refreeze.**

If the vaccine is received **refrigerated** and requires storage before use:

- Maintain refrigerated between 2°C and 8°C.
- Refrigerated vaccine is thawed vaccine and must be used within **eight weeks** from thawing.
- **DO NOT refreeze.**

### General Consideration.

- Store in **the original package** to protect from light.
- **Do not refreeze** a vial once it has been thawed.
- **Once thawed**, the vaccine may be kept at +2°C to +8°C for up to **eight weeks**.

## Registration and Reporting of Vaccine Adverse Events

Constant data and updates are being generated regarding the vaccine's efficacy, safety, and usability. Therefore, it's important that **all vaccine recipients be registered in the National Vaccination Registry (NVR)** to allow for continuous monitoring and direct contact if necessary. All adverse events related to the vaccine should be reported to the Vaccine Adverse Events Reporting System (VAERS) system under the Saudi Food and Drug Administration (SFDA). Refer to the SFDA guidelines for more details.



## Handling of Dead Bodies

Strict compliance with standard precautions, including appropriate use of personal protective equipment and safety features, is considered a significant measure in all post-mortem procedures.

If it is applicable, healthcare workers (HCWs) with an up-to-date smallpox vaccination (within three years) should participate in autopsy or mortuary care for patients with confirmed or suspected Mpox.

### Dealing with Dead Bodies

- Dead bodies of Mpox confirmed or suspected patients could pose a risk of infection transmission.
- Personnel who perform post-mortem care of remains should wear PPE as recommended for Standard and Contact transmission-based Precautions.
- Isolation precautions should be continued for the deceased Mpox confirmed or suspected case.
- Cadaver bags that fulfill MOH-approved specifications should be used for the transport of dead bodies of deceased Mpox patients, and those handling the body at this point should use PPE (for only AGPs; fit-tested seal checked respirator or powered air-purifying respirators (PAPR) [for personnel who cannot wear respirators because of facial hair or other fit-limitations], clean gloves, surgical mask, and isolation gown).
- The trolley carrying the body must be disinfected post-transportation.
- Only experienced morgue staff deal with the bodies of deceased Mpox patients. The morgue's staff should be well trained and familiar with standard precautions and transmission-based precautions while handling dead bodies, especially hand hygiene and the safe and proper use of PPE.
- The morgue's staff should be informed about the infectious status of the deceased, the risk of infection, and appropriate precautions required through the use of the morgue's transportation card attached to the dead body or the bag about the disease and transmission-based precautions required.
- Prevents relatives from direct surface contact with the body, such as touching or kissing it. However, it is acceptable to open the body bag for family viewing while wearing PPE (surgical mask, isolation gown, and clean gloves)
- Limit the number of morgue's personnel dealing with the dead body to the minimum number required.
- All persons performing or attending the body washing and preparation should wear PPE (fit-tested seal checked respirator or powered air-purifying respirators (PAPR) [for personnel who cannot wear respirators because of facial hair or other fit-limitations], isolation gown, and clean gloves, plastic apron and eye protection) and should perform hand hygiene after removal of the gloves and when required.
- Body Washing of Mpox confirmed or suspected dead bodies should be done at hospitals and is not allowed to be transferred to home or public washing authorities.



## Appendixes:

نموذج الإبلاغ الفوري لحالة مشتبهة بمرض جدري القردة في المملكة العربية السعودية  
Immediate Notifiable Form for a Suspected Case of Mpox in Saudi Arabia

Date of notification: dd/mm/yyyy Time:		وقت الإبلاغ: يوم/شهر/سنة	تاريخ الإبلاغ: يوم/شهر/سنة
Epidemiological week:		الأسبوع الوبائي رقم:	الأسبوع الوبائي رقم:
Reporting person: Reporting facility:		الجهة المبلغة:	اسم المبلغ:
Reporting address: Reporting contact number:		رقم التواصل للمبلغ/للجهة:	عنوان المبلغ/الجهة:
Suspected case information		معلومات الحالة المشتبهة	
Name: Date of birth: dd/mm/yyyy Age:		الاسم:	تاريخ الميلاد: يوم/شهر/سنة
Nationality: Sex:		الجنسية:	الجنس:
ID type: (specify) ID number:		رقم الهوية/الجواز:	نوع الهوية: (الرجاء التحديد)
Contact number(s):		رقم التواصل:	
Address: city ..... Dist&St. ....block .....		العنوان: المدينة: الحي والشارع: رقم المنزل: .....	
PHC in patient's resident area		المركز الصحي في منطقة سكن المريض:	
Healthcare worker: <input type="checkbox"/> Yes <input type="checkbox"/> No (specify occupation).....		عامل في الرعاية الصحية: <input type="checkbox"/> نعم <input type="checkbox"/> لا (الرجاء تحديد المهنة).....	
Workplace/ study		مكان العمل / الدراسة:	
Clinical Data Signs and Symptoms		البيانات الاكلينيكية الاعراض والعلامات	
Rash? <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		طفح جلدي؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
Description of rash (Please provide types): <input type="checkbox"/> Macular <input type="checkbox"/> Papular <input type="checkbox"/> Vesicular <input type="checkbox"/> Pustular <input type="checkbox"/> Maculopapular <input type="checkbox"/> Vesiculopustular		وصف الطفح الجلدي (الرجاء تحديد نوعه) <input type="checkbox"/> حطاطي <input type="checkbox"/> بقعي <input type="checkbox"/> حويصلي <input type="checkbox"/> صديدي <input type="checkbox"/> بقعي حطاطي <input type="checkbox"/> حويصلي صديدي	
(Please provide location) <input type="checkbox"/> Face <input type="checkbox"/> Head <input type="checkbox"/> Mouth <input type="checkbox"/> Neck <input type="checkbox"/> Trunk <input type="checkbox"/> Arms <input type="checkbox"/> Legs <input type="checkbox"/> Genitals <input type="checkbox"/> Others.....		(الرجاء تحديد موقعه): <input type="checkbox"/> الوجه <input type="checkbox"/> الرأس <input type="checkbox"/> الفم <input type="checkbox"/> الرقبة <input type="checkbox"/> الجذع <input type="checkbox"/> الأطراف العلوية <input type="checkbox"/> الأطراف السفلية <input type="checkbox"/> المناطق التناسلية <input type="checkbox"/> أخرى.....	
Fever? <input type="checkbox"/> Yes, onset: dd/mm/yyyy Temperature ..... c° <input type="checkbox"/> No		حمى؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة درجة الحرارة: ..... <input type="checkbox"/> لا	
Headache ? <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		صداع؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
Back pain? <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		الم في الظهر؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
Myalgia? <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		آلام في العضلات؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
Exhaustion? <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		التعب والارهاق؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
lymphadenopathy? <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		انتفاخ في الغدد اللمفاوية؟ <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
Other (Specify)?..... <input type="checkbox"/> Yes, onset: dd/mm/yyyy <input type="checkbox"/> No		أخرى (حدد)؟..... <input type="checkbox"/> نعم، ابتداءً من: يوم/شهر/سنة <input type="checkbox"/> لا	
History of Contact with a confirmed or suspected case? <input type="checkbox"/> Yes, last date: / / <input type="checkbox"/> No		مخالطة مع حالة مؤكدة أو مشتبهة بمرض جدري القردة خلال 21 يوم السابقة؟ <input type="checkbox"/> نعم، التاريخ: / / <input type="checkbox"/> لا	
History of international travel in the last 21 days? <input type="checkbox"/> Yes, last date: / / From: <input type="checkbox"/> No		تاريخ القدوم من خارج المملكة خلال 21 يوم السابقة؟ <input type="checkbox"/> نعم، التاريخ: / / دولة القدوم: <input type="checkbox"/> لا	
History of any activities that contain direct physical contact, such as sexual activity/ massage/ tattoo/ laser therapy/ barbershops/ fitness club in the last 21 days? <input type="checkbox"/> Yes, last date: / / Type (place):..... <input type="checkbox"/> No		هل تمت ممارسة أنشطة كان بها ملامسة جسدية مباشرة مثل الأنشطة الجنسية/ مساج/ وشم/ الليزر الطبي أو التجميلي/ الحلاقة/ أندية اللياقة خلال 21 يوم السابقة؟ <input type="checkbox"/> نعم، التاريخ: / / ما هو النشاط وموقعه:..... <input type="checkbox"/> لا	
Is the case immunosuppressed <input type="checkbox"/> Yes, Reason:(specify due to diseases or medication or unknown) <input type="checkbox"/> No		هل الحالة تعاني من نقص المناعة؟ <input type="checkbox"/> نعم، السبب:(الرجاء التحديد بسبب مرض او ادوية، او غير معروف) <input type="checkbox"/> لا	
History of STI Disease <input type="checkbox"/> Yes :(Please, specify) <input type="checkbox"/> No <input type="checkbox"/> Unknown		هل يوجد أي إصابة سابقة ب أحد الأمراض المنقولة جنسياً؟ <input type="checkbox"/> نعم:(الرجاء تحديد نوع المرض) <input type="checkbox"/> لا <input type="checkbox"/> غير معروف	
Do you currently have an STI? <input type="checkbox"/> Yes :(Please, specify) <input type="checkbox"/> No <input type="checkbox"/> Unknown		هل يعاني المصاب من أحد الأمراض المنقولة جنسياً حالياً؟ <input type="checkbox"/> نعم:(الرجاء تحديد نوع المرض) <input type="checkbox"/> لا <input type="checkbox"/> غير معروف	
Has the case been isolated? <input type="checkbox"/> Yes, place of isolation:(specify location) <input type="checkbox"/> No		هل تم عزل الحالة؟ <input type="checkbox"/> نعم، مكان العزل: (الرجاء التحديد المكان) <input type="checkbox"/> لا	
Was a sample taken? <input type="checkbox"/> Yes, name of a receiving lab: <input type="checkbox"/> No		هل تم أخذ عينة؟ <input type="checkbox"/> نعم، اسم المختبر المرسل له: <input type="checkbox"/> لا	

نموذج تقصي حالة بشرية من جدري القردة  
Mpox Investigation Form

Notification		بيانات المبلغ	
اسم من قام بتعبئة النموذج Name of who completed the form		الهاتف Contact number	
التاريخ Date		الايمل Email	
المنشأة الصحية Hospital Name		المدينة City	
وصف الحالة وقت تعبئة هذا النموذج At the time of this report, is the case?		<input type="checkbox"/> Confirmed مؤكدة	<input type="checkbox"/> Suspected مشتبها
		<input type="checkbox"/> Case under investigation تحت الدراسة	<input type="checkbox"/> Not a case مستبعدة
Patient Information		بيانات المريض	
الاسم الكامل Full name		رقم الهوية Identification number:	
العمر Age		تاريخ الميلاد Date of Birth	سنة yyyy / شهر mm / يوم dd
الجنسية Nationality		الحالة الاجتماعية Marital status	
الجنس Sex	<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female انثى	إذا انثى، حالة الحمل If a female, pregnancy status?	<input type="checkbox"/> Positive إيجابية <input type="checkbox"/> Negative سلبية <input type="checkbox"/> Unknown غير معروف
المهنة Occupation	<input type="checkbox"/> HCW ممارس صحي <input type="checkbox"/> Specify نوع الوظيفة : _____	مكان العمل / الدراسة Workplace / study	
الهاتف Phone Number		هاتف إضافي Additional No.	
المرحلة التعليمية Education			
العنوان Address	House No. رقم المنزل: _____ Street name اسم الشارع: _____ District الحي _____ City المدينة: _____ Province/Region المحافظة/المنطقة: _____		
Clinical Information		البيانات السريرية	
تاريخ بداية الاعراض Date of symptoms onset		سنة yyyy / شهر mm / يوم dd	
الاعراض Symptoms	Yes	No	الاعراض Symptoms
حمى أكثر من 38.2° Fever >38.2°	<input type="checkbox"/>	<input type="checkbox"/>	الم في الحلق Sore throat
صداع Headache	<input type="checkbox"/>	<input type="checkbox"/>	طفح جلدي (مسطح وغير نائز) Macular Rash (lesions with a flat base)
تضخم الغدد اللمفاوية Lymphadenopathy	<input type="checkbox"/>	<input type="checkbox"/>	صفح جلدي (نائز عن سطح الجلد) Papular Rash (slightly raised firm lesions)
الم في الظهر back pain	<input type="checkbox"/>	<input type="checkbox"/>	بثور مع سوائل صافية Vesicular Rash (lesions filled with clear fluid)
آلام العضلات myalgia	<input type="checkbox"/>	<input type="checkbox"/>	بثور مع سوائل صفراء Pustules Rash (lesions filled with yellowish fluid)
اجهاد Exhaustion	<input type="checkbox"/>	<input type="checkbox"/>	قشور جافة Crusts which dry up and fall off.
اعراض أخرى (حدد) Other (specify) _____			
Comorbid conditions (check all that apply)		الأمراض المصاحبة (اختر كل ما ينطبق)	
<input type="checkbox"/> None لا يوجد		<input type="checkbox"/> HIV (CD4 count _____) ضعف مناعة المكتسب	
<input type="checkbox"/> Unknown غير معروف		<input type="checkbox"/> Cardiac disease أمراض قلب	
<input type="checkbox"/> Diabetes سكري		<input type="checkbox"/> Chronic kidney disease أمراض كلية المزمنة	
<input type="checkbox"/> Chronic pulmonary disease أمراض رئوية المزمنة		<input type="checkbox"/> Chronic liver disease أمراض كبد المزمنة	
<input type="checkbox"/> Hypertension ضغط دم		<input type="checkbox"/> Obesity السمنة	
<input type="checkbox"/> Smoking (any type) تدخين من أي نوع			
Other أخرى : _____			

Hospitalization Information		بيانات التنويم	
هل تنوم المريض في المستشفى؟ Is/was the patient hospitalized?	<input type="checkbox"/> لا <input type="checkbox"/> بتاريخ ___/___/___ <input type="checkbox"/> Yes, Date of admission ___/___/___ <input type="checkbox"/> No		
سبب التنويم في المستشفى؟ Reason for hospitalized?	<input type="checkbox"/> العزل Isolation <input type="checkbox"/> الحالة الصحية للمريض Patient's medical condition		
هل لا يزال المريض منوم في المستشفى؟ Still admitted in the hospital?	خروج؟ Discharged ?	منوم في العناية المركزة؟ Admitted to ICU?	متوفي؟ Patient died?
<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا
Epidemiological Information		البيانات الوبائية	
تاريخ السفر Visiting and Travel History:			
هل سافر المريض خارج المملكة خلال 21 يوم السابقة لبدء الاعراض؟ Did the patient travel in the 21 days prior to illness onset?		<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف	
ان كان نعم، If yes, نعم، Trip1 : رحلة : Dates of travel تاريخ من : ___/___/___ الى ___/___/___ Country الدولة ___ City المدينة ___ Trip2 : رحلة : Dates of travel تاريخ من : ___/___/___ الى ___/___/___ Country الدولة ___ City المدينة ___ Trip3 : رحلة : Dates of travel تاريخ من : ___/___/___ الى ___/___/___ Country الدولة ___ City المدينة ___			
خلال السفر هل تمت ممارسة أنشطة كان بها ملامسة جسدية مباشرة كالمساج أو أنشطة جنسية أو وضع الوشم؟ During travel, is the case did any activities that contain direct physical contact such as massage sessions, sexual activity, or tattoos?			
<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا		date التاريخ : / / Type (place) (الموقع) : _____	
هل خالط المريض خلال 21 يوم قبل بداية الاعراض أي شخص سافر خارج المملكة؟ In the 21 days prior to illness onset, did the patient have close contact with someone who travelled outside the Country?			
<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف		التفصيل (including travel location) التفصيل	
إذا كان المريض سائح، اكمل ما يلي If the patient was tourist, please complete information bellow			
وسيلة القيدوم للمملكة Did the patient travel with?		<input type="checkbox"/> Airline الجو <input type="checkbox"/> Ship البحر <input type="checkbox"/> Bus باص <input type="checkbox"/> Car سيارة <input type="checkbox"/> Other اخرى _____	
معلومات الناقل Airline Information			
Airline Name اسم الناقل _____		Flight Number رقم الرحلة _____	
Date of arrival تاريخ الوصول الى المملكة : ___/___/___		Date of departure تاريخ المغادرة الى المملكة : ___/___/___	
Transit destination محطات عبور : _____			
Other Trans Information بيانات أخرى عن محطات العبور ..... _____			
Type of transportation وسيلة النقل _____		Date of arrival تاريخ الوصول : ___/___/___	
Port of entry منفذ الدخول : _____		Origin محطة المغادرة : _____	
Resident Information after arrival بيانات المسافر بعد الوصول للمملكة			
Name of resident (hotel, , ..etc.) اسم مقر السكن (فندق، ...) : _____			
where موقع مقر السكن : _____			
Date of check in تاريخ الدخول : ___/___/___		Date of check out تاريخ المغادرة : ___/___/___	
Note: (Describe the timeline of contact movement) وصف الإقامة			



Contact Exposure and Social History	بيانات المخالطة والتاريخ الاجتماعي
هل حصل المريض علي لقاح الجدري؟ Did the patient receive vaccination against Smallpox?	<input type="checkbox"/> Yes, Date (Year) — (سنة) — <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
هل خالط المريض أي حالة مشتبهاة أو مؤكدة خلال 21 يوم التي سبقت ظهور الاعراض؟ Did the patient have contact with a known or suspect case, or with any sick person before becoming ill (21 days prior to illness onset)?	<input type="checkbox"/> Yes نعم Date بتاريخ: — — — <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
هل هو/هي نشط جنسيا خلال 21 يوم التي سبقت ظهور الاعراض؟ Sexually active within ≤ 21 days prior to symptom onset?	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
إذا كان نعم فالرجاء تحديد نوع الجنس If yes, select sex of sexual partner(s)	
هل تمت ممارسة أنشطة كان بها ملامسة جسدية مباشرة مثل الأنشطة الجنسية/ مساج/ وشم/ الليزر الطبي أو التجميل/ الحلاقة/ أندية اللياقة خلال 21 يوم السابقة؟ History of any activities that contain direct physical contact, such as sexual activity/ massage/ tattoo/ laser therapy/ barbershops/ fitness club in the last 21 days?	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف Type (place) (الموقع): _____ date التاريخ: / /
هل كان هناك أي مخالطة بمصدر حيواني محتمل خلال 21 يوم التي سبقت ظهور الاعراض؟ Contact with possible animal source within ≤ 21 days prior to symptom onset?	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
إذا كان نعم فالرجاء الوصف If yes, please describe	
هل خالط المريض اشخاص آخرين بعد ظهور الاعراض عليه؟ Did the patient have contact with anyone during illness period?	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
إذا كان نعم فيتم اكمال قائمة المخالطين في الصفحة الاخيرة If yes, please complete the list of patient contact in the end of report	
هل تواجد المريض في أي تجمعات عامة خلال 21 يوم قبل ظهور الاعراض او بعد ظهور الاعراض (مثل احداث رياضية، اعراس، احتفالات) In the 21 days before or after becoming ill, did the patient attend a public event where a large number of people were present (i.e., a sporting event, wedding, concert)?	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
إذا كان نعم فما هو وصف هذا التواجد If yes, please describe the event (include date and location)	
هل تواجد المريض في أي منشأة صحية خلال 21 يوم قبل ظهور الاعراض او بعد ظهور الاعراض In the 21 days before or after becoming ill, did the patient visited any healthcare facility or setting?	<input type="checkbox"/> Yes نعم <input type="checkbox"/> No لا <input type="checkbox"/> Unknown غير معروف
إذا كان نعم فما هو وصف هذا التواجد If yes, please describe the event (include date and location)	



List of Patient's Contacts					قائمة المخالطين	
الاسم Name of contact	صلة القرابة Relation to patient	تاريخ آخر مخالطة Last contact date	المدينة City	الجنس Sex	الهاتف Phone	حالة التطعيم Vaccination status
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		
		___ / ___ / ___		<input type="checkbox"/> Male ذكر <input type="checkbox"/> Female أنثى		



## References:

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## SAMPLE COLLECTION GUIDE IN MONKEYPOX PATIENTS



### METHODS OF SAMPLE COLLECTION

There are different methods of sample collection depending on the stage of the disease. The best samples are those taken from the lesions

**1- Oropharyngeal swabs:**

they can be of beneficial in the early stage of the disease or the febrile stage but negative results should be interpreted carefully.

**2- Lesion fluid and roof sample:**

are considered the best methods during the formation of vesicular or pustular rash.

**3- Crust sample:**

are considered the best method during the formation of crust.



FEBRILE STAGE

1 - 4 days

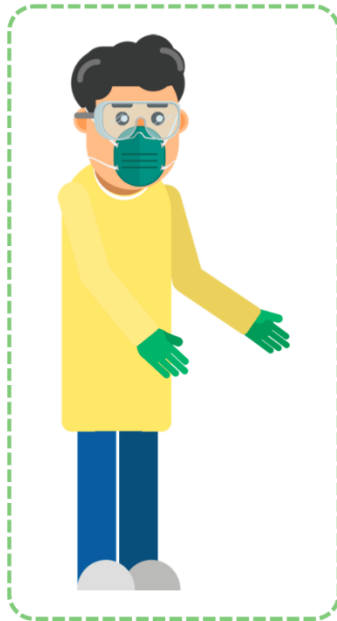


VESICULAR OR CRUST

2-4 weeks



## PROPER PPEs



Adherence to proper personal protective equipment in addition to proper hand hygiene are necessary to protect health workers assigned to collect the sample.

**1- GOWNS**

Long sleeved gowns should be donned to protect clothing from any splashes generated.

**2- N95 or PAPR:**

Should be used duo to the possibility of airborne transmission of the virus.

**3- GOGGLES:**

Should be used to protect the eyes from any splashes that can be generated.

**4-GLOVES:**

Gloves should be donned when collecting the sample to prevent any contact with the patient's lesions.



## IMPORTANT POINTS

- Always remember to label tubes or container properly with patient information prior to the collection of the sample.
- Discard generated wastes (e.g. used PPEs and used alcohol pads) as medical wastes.



## MATERIALS NEEDED



Dry polyester  
swab



ALCOHOL PAD



SCALPEL



O-RING  
SCREWED CAP  
CONTAINER



## OROPHARYNGEAL SWAB



**Step 1:** Perform Hand Hygiene  
Wear Proper PPEs



**Step 2:** prepare your material (dry polyester swab or dry swab)



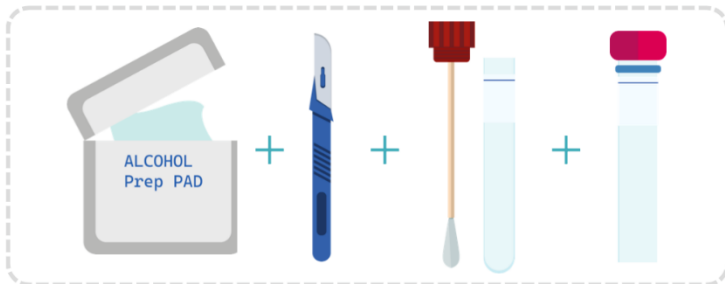
**Step 3:** Swab Throat and place the swab inside the container



## LESION ROOFS AND FLUID SWAB



**Step 1:** Perform Hand Hygiene  
Wear Proper PPEs



**Step 2:** prepare your material (alcohol wipe, scalpel dry polyester swab, screw capped plastic tube with O-ring)



## LESION ROOFS AND FLUID SWAB



**Step 3:** Sanitize the lesions



**Step 4:** Remove the roof of the lesion



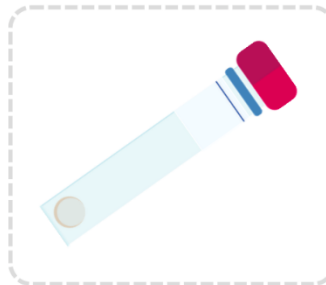
**Step 5:** Brush the base of the lesion vigorously



## LESION ROOFS AND FLUID SWAB



**Step 6:** Place the swab inside the container.



**Step 7:** Put the Roof of the lesion inside the O-ring container if needed for testing



## LESION CRUSTS



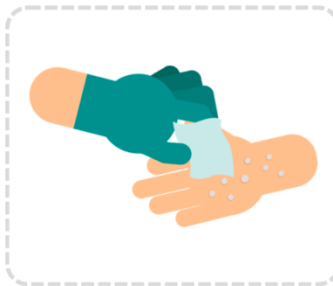
**Step 1:** Perform Hand Hygiene Wear Proper PPEs



**Step 2:** prepare your material (alcohol wipe, scalpel , screw capped plastic tube with O-ring )



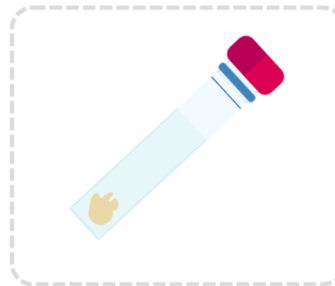
## LESION CRUST



**Step 3:** Sanitize the lesions



**Step 4:** Remove the crust of the lesion

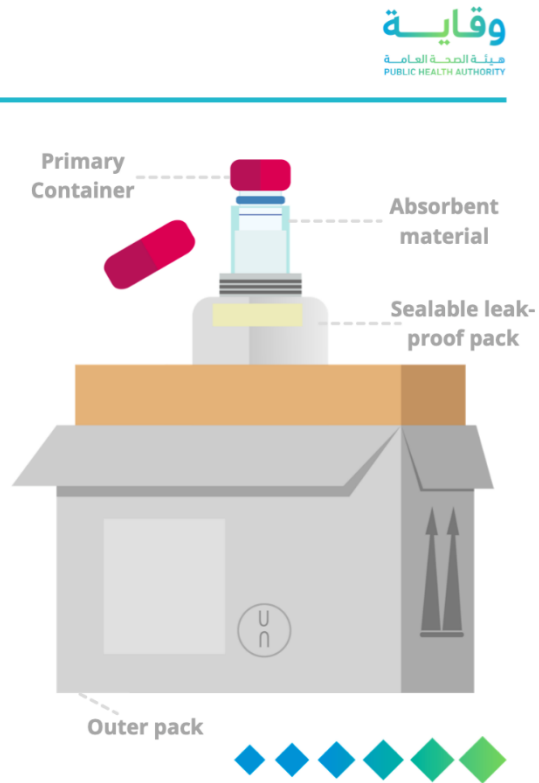


**Step 5:** Place the crust inside the O-ring container



## PACKAGING AND TRANSPORT

- Samples should be identified as Infectious Substances (Monkeypox sample).
- Place the specimens in a tightly sealed, watertight primary container, such as a leak-proof screw-cap plastic tube, and seal the cap with Parafilm/tape.
- Place the wrapped, sealed primary container into a watertight, screw-cap mailing tube or metal can.
- On the outside of the secondary container, attach the specimen labels and other relevant information.
- Place the second container in a secure box for shipment in a cold container (2-8°C) with an ice pack or dry ice if the sample is frozen.
- Arrange shipping with the courier.



## HAND HYGIENE

### ALCOHOL RUB

Apply palmful amount of alcohol handrub.

Run hands palm to palm in circular motion

Right palm over left dorsum with interlaced fingers and vice versa

Place hands palm to palm with fingers interlaced.

Backs of fingers to opposing palms with fingers interlocked

Rub the left thumb with palm of right hand and vice versa.

Rub the left thumb with palm of right hand and vice versa.

Wait until hands are dry

Important points when performing hand hygiene

Remove any personal items before performing hand hygiene

Wearing gloves don't substitute hand hygiene

Avoid wearing artificial nails and nail polish, and always keep nails short



## HAND HYGIENE

### HAND WASH

**Wet hands with water**

**Apply enough soap to cover hands**

**Run hands palm to palm in circular motion**

**Right palm over left dorsum with interlaced fingers and vice versa**

**Place hands palm to palm with fingers interlaced.**

**Backs of fingers to opposing palms with fingers interlocked**

**Rub the left thumb with palm of right hand and vice versa.**

**Rub the left thumb with palm of right hand and vice versa.**

**Rinse hands with water**

**Dry hands with towel**

**Turn off water with towel**

**Important points when performing hand hygiene**

- Remove any personal items before performing hand hygiene
- Wearing gloves don't substitute hand hygiene
- Avoid wearing artificial nails and nail polish, and always keep nails short

## وقاية

هيئة الصحة العامة  
PUBLIC HEALTH AUTHORITY



## للممارسين الصحيين: للحظات الخمس لغسل اليدين وتعقيمهما

استخدم الماء والصابون أو المعقم الكحولي لتطهير وتعقيم يديك



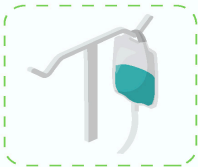
1 قبل ملامسة المريض  
(لحماية المريض من الجراثيم الموجودة على يديك)

2 قبل القيام بإجراء تنظيقي أو تطهيري  
(لحماية المريض من دخول الجراثيم الضارة إلى جسده بما  
في ذلك الجراثيم التي يحملها هو نفسه)

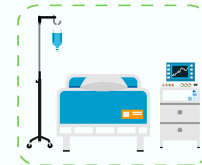


4 بعد ملامسة المريض  
(لحماية نفسك وبيئة تقديم الرعاية الصحية من جراثيم  
المريض)

3 بعد التعرض أو احتمال خطر التعرض  
لملامسة سوائل المريض  
(لحماية نفسك وبيئة تقديم الرعاية الطبية  
من جراثيم المريض)



5 بعد ملامسة الأشياء الموجودة حول المريض  
(لحماية نفسك وبيئة تقديم الرعاية الصحية من جراثيم  
المريض)





## For Healthcare Workers: My 5 Moments for Hand Hygiene

Use alcohol-based hand rub or wash hands with soap and water



**2** Before clean/aseptic procedure  
(To protect the patient against germs including the patient's own, from entering his/her body )

**1** Before touching the patient  
(To protect the patient against germs carried on your hands )

**4** After touching the patient  
(To protect yourself and the healthcare environment from the patient's harmful germs )

**3** After body fluid exposure risk  
(To protect yourself and the healthcare environment from the patient's harmful germs)

**5** After touching the patient's surroundings  
(To protect yourself and the healthcare environment from the patient's harmful germs )



## PERSONAL PROTECTIVE EQUIPMENT

## DONNING OF PPEs

## 1 Perform hand hygiene prior to donning PPEs



Either by using alcohol hand rub or plain soap and water

## 2 Put on medical gown



Start by inserting arms in sleeves & Fasten the ties to ensure coverage of skin and clothing

## 3 Put on medical or N95 mask



## 4 Put on face protection



face shield OR eye goggles

## 5 Put on gloves



ensure gloves are placed above cuff of the gown



## PERSONAL PROTECTIVE EQUIPMENT

## DOFFING OF PPEs

## 1 Start by removing gloves

- Outside of the gloves are contaminated.
- Perform HH if bare hands touch outside of the gloves.
- Using the gloved hand, grasp the palm of the other hand and peel off the glove.
- Hold removed glove in gloved hand.
- Slide fingers of the ungloved hand under remaining glove at wrist and peel off second glove over first glove.
- Discard gloves in waste a container.



## 2 Remove face shield or goggles

- Outside of the goggles or face shield are contaminated.
- Perform HH if bare hands touch outside of face shield or goggles.
- Remove from the back by lifting the head band.
- Discard the item in a waste container.



## 3 Remove gown

- Gowns front and sleeves are contaminated.
- Perform HH if bare hand touch front or sleeves of the gown.
- Unfasten the ties, taking care that sleeves don't touch your body.
- Pull the gown away from you, touching the inside of the gown only.
- Turn the gown inside out.
- Fold or roll the gown and discard it in waste.



## 4 Remove Mask or N95

- Front of the mask is contaminated.
- Perform HH if bare hand touch front of the mask.
- Grasp bottom ties of the mask or N95, then the top, and remove without touching the front.
- Discard in waste container.



## 5 Perform Hand Hygiene



## What is Mpox?

It is a contagious disease that usually causes a rash and fever. It is different from chickenpox.

### Symptoms for Mpox often include:

Rash accompanied by one or more of the following.



Fever



Back Pain/Muscle pain



Swollen lymph nodes



Fatigue and lack of energy



Headaches

## How is Mpox transmitted?



Close contact with an infected person  
(like sexual intercourse)



Touching the rash of an infected person  
or exposure to his secretions



Sitting face to face with an infected  
person for a long time



Contact with the infected person's  
personal tools



Through infected animals

### Protect yourself and others from Mpox by:



Avoiding contact with anyone who shows symptoms.



Maintain personal hygiene such as washing hands with soap or using hand sanitizer.



Avoid sharing clothes and personal tools with an infected person.



Limit contact with wild or unfamiliar animals.



Clean and disinfect surfaces regularly, especially if they are suspected of being exposed to the virus.



## وقاية

هيئة الصحة العامة  
PUBLIC HEALTH AUTHORITY

## ما هو جدري القردة؟

هو مرض معدٍ يسبب في العادة طفح جلدي وحمى. وهو مختلف عن مرض الجدري المائي (العنقز).

تشمل أعراض جدري القردة في غالب الأحيان ما يلي:  
طفح جلدي مصحوب بعرض أو أكثر من الأعراض التالية:

آلام العضلات وآلام الظهر



الحمى



إعياء عام والشعور بالتعب



تورم الغدد الليمفاوية



الصداع



## وقاية

هيئة الصحة العامة  
PUBLIC HEALTH AUTHORITY

### ينتشر جدري القردة عن طريق:

المخالطة الوثيقة للشخص المصاب  
(مثل الممارسات الجنسية)



ملامسة الطفح الجلدي أو التعرض  
لإفرازات الشخص المصاب



الجلوس مع الشخص المصاب وجها لوجه  
لفترة طويلة



ملامسة الأدوات الشخصية للمصاب



عن طريق الحيوانات المصابة



## وقاية

هيئة الصحة العامة  
PUBLIC HEALTH AUTHORITY

### يمكنكم حماية أنفسكم من جدري القردة عن طريق:

تجنب مخالطة أي شخص تظهر عليه الأعراض.



المحافظة على النظافة الشخصية كغسل اليدين بالصابون  
أو استخدام معقم اليدين.



تجنب مشاركة الملابس والأدوات الشخصية للمصاب.



عدم ملامسة الحيوانات البرية أو غير المألوفة.



تنظيف الأسطح وتطهيرها باستمرار، خاصة عند اشتباه  
تعرضها للفيروس.

