

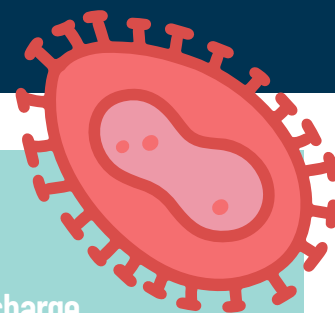
# MPOX

## PREVENTION AND CONTROL

Key recommendations for protecting people living and working in prison  
(directed at prison officers and healthcare staff)



People in prison should have access to quality health care that is at least equivalent to that available in the community and necessary health-care services free of charge without discrimination on the grounds of their sexual orientation or gender identity/expression, or legal status.



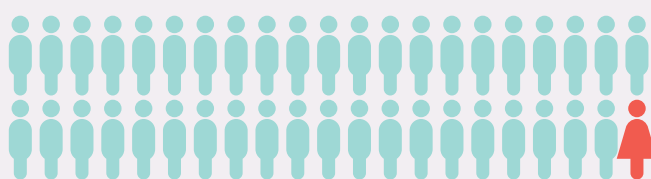
**Mpox is an infectious disease caused by monkeypox virus. It is not a new disease, but until 2022, has mostly circulated in areas in Africa where the disease is endemic. Outbreaks outside of Africa were very rare. In May 2022, an unusual and atypical multi-country outbreak led to the WHO declaration of a Public Health Emergency of International Concern. The outbreak has affected all WHO regions, including the European Region, and as of 10th of November 2022, it has resulted in over 79 134 reported mpox cases worldwide.**

As of 8th November 2022, in the WHO European Region, 25 376 confirmed cases and 4 deaths in 43 State Parties and 2 territories have been reported to WHO. In the European Region, 74% of cases are reported from four countries (Spain, France, UK, Germany). As of 6 of November, cases of mpox have continued to decline in the European Region.

In the WHO European Region, the ongoing outbreak continues to primarily affect young men, with 98.4% of cases with available data being men. Among cases with sexual orientation reported, 96.0% identified as men who have sex with men. Of all reported types of transmission, a sexual encounter was reported most commonly in 94.0% of all reported transmission events. Globally, of all settings in which cases reported their likely exposure setting, the most commonly reported was in a party setting with sexual contact.<sup>1</sup>

Mpox has the potential to cause outbreaks in prisons and other closed or congregate settings, because of the confined condition where people live in close proximity for a prolonged period of time, sharing common spaces and personal items such as bedding, dishware and other utensils. Sex may be traded for protection and commodities,

and in many cases prisoners in laundry facilities wash each other's clothing and bedding. In addition, cases of mpox have been linked to needle-stick exposures in health or laboratory workers, and an outbreak linked to a tattoo parlour in Spain has also been documented.<sup>2</sup>



# 98.4%

OF CASES WITH AVAILABLE  
DATA BEING MEN

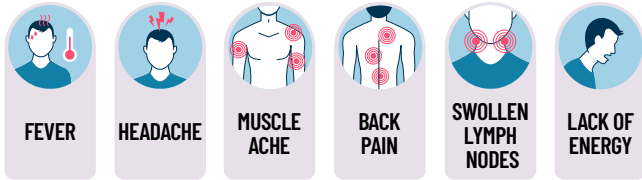
<sup>1</sup> 2022 Monkeypox Outbreak: Global Trends World Health Organization Produced on 27 October 2022. Geneva: World Health Organization ([https://worldhealthorg.shinyapps.io/mpox\\_global/](https://worldhealthorg.shinyapps.io/mpox_global/), accessed 25 November 2022)

<sup>2</sup> Del Río García V, Palacios JG, Morcillo AM, Duran-Pla E, Rodríguez BS, Lorusso N. Monkeypox outbreak in a piercing and tattoo establishment in Spain. *Lancet Infect Dis.* 2022 Nov;22(11):1526-1528. [https://doi.org/10.1016/S1473-3099\(22\)00652-1](https://doi.org/10.1016/S1473-3099(22)00652-1). Accessed 25 November 2022.

## ► SIGNS AND SYMPTOMS OF MPOX<sup>1</sup>

Mpox is rarely fatal. Infection with mpox may be asymptomatic or can include a range of clinical signs and symptoms, which may appear sequentially:

**Initial phase (prodromal)**, typically lasts 1 to 5 days



**Second phase (typically occurs 1 to 3 days after the fever subsides with the appearance of a rash)**

- Mpox rash classically presents in sequential stages – macules, papules, vesicles, pustules, umbilication before crusting over and desquamating over a period of 2 to 3 weeks. The eruption tends to be centrifugal, starting on the face and extending towards the palms and soles of the hands and feet, and can involve the oral mucous membranes, conjunctiva, cornea and/or genitalia. Even though these rashes, spots, ulcers, or blisters can appear anywhere, when spread during sex they often appear in the genital area if. Observation from the current outbreak suggests lesions more frequently start in the genital or perineal/perianal

area, which might include single or multiple lesions. The lesions range in size from 0.5 to 1 cm in diameter and from a few to several thousand in number.

Symptoms develop 5 to 21 days (average 6 to 13 days) after exposure to monkeypox virus.

The disease is usually self-limiting; however patients may require supportive pain management or treatment of secondary bacterial infections.

Severe cases can occur, in some cases leading to severe medical complications and death. Four deaths have been reported in the WHO European Region to date, severe cases have been reported in immunocompromised patients and in those who have been previously healthy. Based on evidence from previous and the current mpox outbreaks, new-born babies, children and individuals with underlying immune deficiencies (in particular, patients with poorly managed HIV infection) are at higher risk of severe mpox disease.

Some people may develop more serious illness and need care in a health facility, either in the prison if it includes a hospital or through being transferred to external providers.

Individuals experiencing symptoms and who suspect they have mpox should self-isolate and seek advice from a health professional.

SYMPTOMS DEVELOP **5 TO 21 DAYS AFTER EXPOSURE** TO MONKEYPOX VIRUS.

## ► MAIN ROUTES OF TRANSMISSION<sup>1</sup>

Monkeypox virus spreads from person-to-person through close contact with the other people who have a mpox rash. Close contact can mean being face-to-face (such as talking, breathing or singing close to one another which can generate droplets or short-range aerosols); skin-to-skin (such as touching or vaginal/anal sex); mouth-to-mouth (such as kissing); or mouth-to-skin contact (such as oral sex or kissing the skin). In the European region, transmission during sexual contact has been the primary mode of spread, with smaller numbers of transmission episodes also reported in household settings.

The infectious period can vary, but lesions are considered infectious until they have crusted, the scabs have fallen off and a fresh layer of skin has formed underneath.

Environments can become contaminated with the monkeypox virus: for example, when an infectious person touches clothing, bedding, towels, objects, electronics and surfaces. Someone else who touches these items may become infected if they have any cuts or abrasions or they accidentally touch their eyes, nose mouth or other mucous

membranes. This is known as fomite transmission. Cleaning your hands after touching objects that may be contaminated can help prevent this type of transmission. It is also possible to become infected from breathing in skin flakes or virus from clothing, bedding or towels. In the current outbreak, experts are still trying to understand whether this mode of transmission plays a major role via contaminated materials such as clothing, towels, bedding, surfaces and objects.

The virus can also spread during pregnancy to the fetus, during or after birth through skin-to-skin contact, or from a parent with mpox to an infant or child during close contact. Although asymptomatic infection has been reported, it is not clear whether people without any symptoms can spread the disease or whether it can spread through other bodily fluids.

People remain infectious until all of the sores have crusted over, the scabs have fallen off and a new layer of skin has formed underneath. The illness usually goes away on its own after 2-4 weeks.

## ► GENERAL PREVENTIVE MEASURES

As provided under the Nelson Mandela Rules<sup>2</sup>, a physician or other qualified health-care professionals, whether or not they are required to report to the physician, shall see, talk with and examine every prisoner as soon as possible following his or her admission and thereafter as necessary. Therefore, screening at entry and ongoing health assessments should take place.

A simplified questionnaire and screening protocol based on the WHO case definition adapted to local epidemiology can be implemented at the point of entry to health care (or during contact tracing) to screen new admissions, transfers, visitors and service providers.



REGULARLY CLEAN YOUR HANDS WITH SOAP AND WATER (FOR 40-60 SECONDS)

### **New admissions and prison transfers:**

Mpox should be considered as part of regular screening for newly admitted or transferred individuals. Screening should include assessment of signs and symptoms of mpox, including rashes or lesions, and asking about known close contact with a suspected or confirmed mpox cases within the last 21 days.

- Be alert to people in prison with a rash, lesions, fever, or other symptoms consistent with mpox – for people on admission/transfer and during stay in prison settings.
- Medically isolate and provide supportive care to individuals that have suspected or confirmed mpox in single occupancy accommodation for the duration of the infectious period (until skin lesions have crusted, the scabs have fallen off and a fresh layer of skin has formed underneath, or mucosal lesions have disappeared).
- If the use of individual occupancy is not possible, consider cohorting.
- Laboratory confirmation of suspected cases is important but should not delay treatment or implementation of preventive and control measures

### Visitors

- Visitors should be made aware of signs and symptoms of mpox, and refrain from visiting (including intimate visits).
- All people visiting prisons (visitors, staff, service providers) should be informed about the need to isolate if they have mpox and follow medical advice.

### Service providers:

- Service providers should be made aware of signs and symptoms of mpox, get tested if recommended, and be informed about the need to isolate if they have mpox and follow medical advice.

### **Routine Infection, Prevention and Control (IPC) for health, care and prisoner workers**

- Regularly clean your hands with soap and water (for 40-60 seconds) or use an alcohol-based rub (at least 60% alcohol for 20-30 seconds), if available.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- Strictly observe hand hygiene and respiratory etiquette.
- Detainees with mpox should handle and launder their own bedding and laundry. Where that is not possible, provide staff with personal protective equipment – PPE (gloves, medical mask or respirator (if feasible), gown and eye protection) for handling of bedding and laundry. Linen and bedding should be washed in hot water (>60C) and detergent.
- Provide for utensils and commodities for individual use.
- Use PPE – disposable gloves, medical mask, gown and eye protection – as part of standard precautions. Training for health and care and prison workers on appropriate use of PPE is advised.
- Respirators are advised for the care of confirmed cases<sup>1</sup>. If not feasible, medical mask is recommended.
- Follow preventive hygiene measures by keeping all areas of the prison clean and ventilated, under the overall guidance of the health service. This includes regular environmental cleaning and disinfection of rooms for intimate visits (conjugal rooms) and having all bedding washed after each use. Routine disinfectants are effective.
- Overcrowding may facilitate transmission and thus measures to facilitate physical distancing should be implemented.<sup>3</sup>

### **Communication**

- Communicate mpox prevention and control measures to all people in prison, including visitors, as part of existing procedures and ensuring they understand and address any fears and concerns they may have.
- Do not stigmatize or discriminate against mpox patients, suspected cases or people who have had contact with suspected/confirmed cases. This may be achieved by promoting an environment of non-stigmatization, acting on cases of stigmatization, and creating communication channels for people to discretely seek health information and care and ask questions anonymously.
- If you notice an unusual rash/lesions or become unwell, stay at home, contact a physician and follow medical advice.
- Ensure all people in prisons understand who they can contact in case they suspect monkeypox virus infection.

<sup>3</sup> It is still unclear if infected people with no symptoms can transmit the monkeypox virus, making it important for anyone attending gatherings to exert additional care.

## ► SPECIFIC MEASURES FOR HEALTH AND CARE WORKERS

- Strictly follow infection prevention and control measures.
- Use PPE when attending to a suspected case of mpox: disposable gloves, gown, respirator and eye protection. Remove PPE and perform hand hygiene after each patient.
- Frequently clean and disinfect objects and surfaces that are touched regularly. Request a functioning and consistent supply chain for PPE and essential medications.
- Follow national guidelines for sampling and submitting for diagnostic testing. If national guidelines are not in place, WHO guidance should be followed<sup>3</sup>. The recommended specimen type for laboratory confirmation of mpox is skin lesion material, including swabs of lesion surface and/or exudate, roofs from more than one lesion, or lesion crusts. WHO guidance on laboratory testing for the monkeypox virus and website on mpox can provide good reference with updated information and knowledge.
- Clinicians should report suspected cases immediately to local and national public health authorities. Probable and confirmed cases should be reported as early as possible, to WHO through IHR national focal points (NFPs).
- Adhere to safe injection practices and sharps management.
- Waste generated from caring for persons with mpox should be segregated (general waste, infectious waste, sharps) as infectious waste, placed in appropriate bins at point of use and disposed of according to local regulations.
- Counsel patients with suspect/confirmed mpox to refrain from conjugal visits until symptoms resolve. Also ensure that upon recovery, they are advised to use condoms, and these are made available free of charge.
- For patients who require admission to hospital, follow the guidance of local prison and health authorities about whether to transfer to the community or manage in prison.
- Ensure uninterrupted health services for prevention, treatment and care services for HIV/AIDS, TB, HCV and other health conditions.
- Screen people for symptoms of mpox pre-release.
- Ensure linkages with health facilities when people are released from prison.



## ► SURVEILLANCE, CASE INVESTIGATION AND CONTACT TRACING FOR MPOX

Human-to-human spread of monkeypox virus can be controlled using public health measures including strong risk communication and community engagement, surveillance, early case-finding, diagnosis and care, isolation and contact tracing, and self-monitoring by contacts.

The following definitions should be considered for surveillance purposes<sup>4,5</sup>:

### **Suspected case**

- i) A person who is a contact of 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 ( $>38.5^{\circ}\text{C}$ ), headache, myalgia (muscle pain/body aches), back pain, profound weakness or fatigue.

OR

- ii) A person presenting since 01 January 2022 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 ano-rectal lesions. Ano-rectal lesions can also manifest as ano-rectal inflammation (proctitis), pain and/or bleeding.

AND

for which the following common causes of acute rash or skin lesions do not fully explain the clinical picture: varicella zoster, herpes zoster, measles, herpes simplex, bacterial skin infections, disseminated gonococcus 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.

### **Probable case**

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 ano-rectal lesions. Ano-rectal lesions can also manifest as ano-rectal inflammation (proctitis), pain and/or bleeding.

AND one or more of the following:

- has an epidemiological link to a probable or confirmed case of mpox in the 21 days before symptom onset

- identifies as gay, bisexual or other man who has sex with men
- has had multiple and/or casual sexual partners in the 21 days before symptom onset
- has detectable levels of anti-orthopoxvirus (OPXV) IgM antibody<sup>2</sup> (during the period of 4 to 56 days after rash onset); or a four-fold rise in IgG antibody titer based on acute (up to day 5-7) and convalescent (day 21 onwards) samples; in the absence of a recent smallpox/monkeypox vaccination or other known exposure to OPXV
- has a positive test result for orthopoxviral infection (e.g., OPXV-specific PCR without MPXV-specific PCR or sequencing)

### Confirmed case

A person with laboratory confirmed monkeypox virus infection by detection of unique sequences of viral DNA by real-time polymerase chain reaction (PCR)<sup>c</sup> and/or sequencing.

### Discarded case

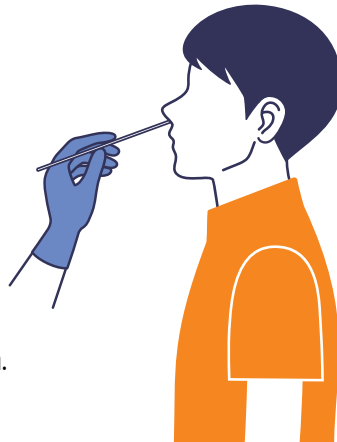
A suspected or probable case for which laboratory testing of lesion fluid, skin specimens or crusts by PCR and/or sequencing is negative for MPXV. Conversely, a retrospectively detected probable case for which lesion testing can no longer be adequately performed (i.e., after the crusts fall off) and no other specimen is found PCR-positive, would remain classified as a probable case. A suspected or probable case should not be discarded based on a negative result from an oropharyngeal, anal or rectal swab. These case definitions were developed with a view to balance the importance of detecting cases and interrupting chains of transmission, while avoiding an overly sensitive definition that would overburden public health, diagnostic and treatment resources. Public health authorities may adapt these case definitions to suit local circumstances. All efforts should be made to avoid unnecessary stigmatization of individuals and communities potentially affected by mpox.

ANY INDIVIDUAL MEETING THE DEFINITION FOR A **SUSPECTED CASE** SHOULD BE OFFERED MPOX TESTING.

SUSPECTED CASES SHOULD BE **MEDICALLY ISOLATED** DURING PERIOD OF ILLNESS.

### TESTING<sup>3</sup>

In the absence of skin or mucosal lesions, PCR can be done on an oropharyngeal swab for diagnostic testing purposes, with cautious interpretation of negative results; while a positive result is indicative of mpox infection, a negative result is not enough to exclude the infection.



### TREATMENT

Treatment of mpox patients is supportive depending on the symptoms and may include antipyretics to deal with fever or pain. Various compounds that may be effective against monkeypox virus infection are being developed and tested.

### VACCINATION<sup>6</sup>

First-generation smallpox vaccines are not recommended for mpox prevention.

Some second- and in particular third-generation vaccines for smallpox may be useful for monkeypox. Two vaccines (MVA-BN and LC16) have been approved for prevention of mpox. The supply of these, especially third-generation, vaccines is limited at this time and approaches for enhancing vaccine access are under discussion.

Based on currently assessed risks and benefits and regardless of vaccine supply, **mass vaccination of the general population is not required nor recommended for mpox at this time.**

**MASS VACCINATION** OF THE GENERAL POPULATION **IS NOT REQUIRED** NOR RECOMMENDED FOR MPOX AT THIS TIME.

Countries should make national decisions on vaccination of target risk groups against mpox and prioritize these groups for effective use of vaccines, in consultation with national immunization technical advisory groups (NITAGs) and their national regulatory agencies and include all relevant stakeholders.

## Post-exposure preventive vaccination (PEPV)

If it is feasible to effectively identify contacts of mpox cases, timely post-exposure vaccination may prevent or reduce severity of disease. For close contacts of cases, PEPV with an appropriate second- or third-generation vaccine is recommended, ideally within four days of first exposure (and up to 14 days in the absence of symptoms), to prevent onset of disease or mitigate disease severity. Considerations for risk assessment of contacts of mpox cases are provided in WHO Interim Guidance on Vaccines and Immunization for Monkeypox.<sup>6</sup>

## Primary preventive (pre-exposure) vaccination (PPV)

PPV is recommended for persons at high-risk of exposure including, but not limited to men who have sex with men (MSM) with multiple sexual partners. Self-reported risk factors<sup>7</sup> may be useful to help identify individuals at the highest risk of exposure. Additionally, healthcare staff at high risk of exposure through caring for people with suspected or confirmed mpox or through administering replication-competent smallpox vaccines, and laboratory personnel working with orthopoxviruses including performing diagnostic testing for monkeypox should be protected from possible occupational risk of infection.

## Special populations

Children, pregnant women and immunocompromised persons, especially patients with poorly managed HIV infection, may be at risk of more severe disease with mpox and/or a worse outcome than other persons.

- Vaccination against mpox as PPV is not currently recommended for these population groups solely on the basis of their higher risk of severe disease. For persons in these groups who may be at increased risk of exposure, PPV may be warranted.
- PEPV may be considered for special population groups, i.e., during pregnancy, for children, or for persons with immune suppression, including people living with HIV (PLWH), if a vaccine appropriate for these groups is available, following a careful evaluation of risks and benefits.

Vaccination programmes must be backed by thorough surveillance and contact-tracing, and accompanied by a strong information campaign, robust pharmacovigilance, ideally in the context of collaborative vaccine effectiveness studies with standardized protocols and data collection tools.



## REFERENCES

1. Clinical management and infection prevention and control for monkeypox. Interim rapid response guidance. WHO, Geneva: 22 June 2022 (<https://www.who.int/publications/i/item/WHO-MPX-Clinical-and-IPC-2022.1>, accessed 25 November 2022).
2. The United Nations Standard Minimum Rules for the Treatment of Prisoners ([https://www.unodc.org/documents/justice-and-prison-reform/Nelson\\_Mandela\\_Rules-E-ebook.pdf](https://www.unodc.org/documents/justice-and-prison-reform/Nelson_Mandela_Rules-E-ebook.pdf), accessed 25 November 2022).
3. Laboratory testing for the monkeypox virus. Interim Guidance. WHO, Geneva: 23 May 2022 (<https://www.who.int/publications/i/item/WHO-MPX-laboratory-2022.1>, accessed 25 November 2022).
4. Surveillance, case investigation and contact tracing for monkeypox. Interim guidance. WHO, Geneva: 25 August 2022 (<https://www.who.int/publications-detail-redirect/WHO-MPX-Surveillance-2022.3>, accessed 25 November 2022).
5. Monkeypox outbreak toolbox. WHO, Geneva: 22 September 2022 (<https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolboxes/monkeypox-outbreak-toolbox>, accessed 25 November 2022).
6. Vaccines and immunization for monkeypox. Interim Guidance. WHO, Geneva: 24 August 2022 (<https://www.who.int/publications/i/item/WHO-MPX-Immunization-2022.2-eng>, accessed 25 November 2022).
7. Policy brief on vaccination against monkeypox in the WHO European Region: policy brief No.2, 26 August 2022 (<https://www.who.int/europe/publications/i/item/WHO-EURO-2022-5988-45753-65829>, accessed 25 November 2022).