Mpox in detention settings in the WHO European Region
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Abstract

In November 2022, WHO extended the HIPP surveillance system, designed for voluntary online reporting of coronavirus disease, to include notification of probable and confirmed cases of mpox in prisons and other places of detention. This report presents data obtained over 6 months. The indicators of infection are prison occupancy, the number of tests performed, the number of detainees screened for signs and symptoms, the numbers of probable and confirmed cases, the demographics of confirmed cases and vaccination coverage.

Keywords

PUBLIC HEALTH SURVEILLANCE
EPIDEMIOLOGICAL MONITORING
EPIDEMIC PREPAREDNESS
PRISONS
MPOX (MONKEYPOX)
Overview of impact in the WHO European Region

In May 2022, an unusual, atypical, multi-country outbreak of mpox virus was declared a public health emergency of international concern by WHO (1). As of December 2023, a total of 92,783 confirmed cases and 171 deaths had been reported (2). In the WHO European Region, as of 11 January 2023, 26,703 cases of mpox in 45 countries and areas had been identified through Internal Health Regulations (2005) mechanisms, official public sources and The European Surveillance System (TESSy) (3).

Symptoms of mpox include an unexplained acute skin rash, mucosal lesions (single or multiple oral, conjunctival, urethral, penile, vaginal or ano-rectal) or lymphadenopathy (swollen lymph nodes) and single or multiple lesions in the ano-genital region or elsewhere on the body. Ano-rectal lesions can also manifest as inflammation (proctitis), pain and/or bleeding. Symptoms may begin 2–21 days after exposure. Illness is usually mild, and most patients recover within weeks without treatment.

The 2022–2023 global mpox outbreak affected primarily adult men aged 18–44 years who self-identified as gay or bisexual or reported same-sex behaviour. Mpox can be spread by close person-to-person contact, including sexual contact (4), and can cause outbreaks in prisons and other closed or congregate settings due to the confined conditions and close proximity, where consensual and coerced sexual relations occur, often without access to condoms or other health protection materials. Suboptimal access to health care, poor nutritional status and comorbid conditions or co-infections such as HIV, viral hepatitis and tuberculosis in prison populations increase their vulnerability to mpox.

While information about the risk of mpox virus transmission in congregate facilities is limited, cases have been reported in prisons. In March 2022, the Ministry of Health of Adamawa State, Nigeria, was notified of inmates in Yola prison presenting with rash. After an outbreak investigation, 29 suspected cases were found to have occurred in the preceding 18 weeks, indicating that the outbreak had been uncontrolled for some time and that additional work was necessary to ensure early detection and response to mitigate mpox outbreaks in prisons in Nigeria (5). In June 2022, an individual in Porto prison, Portugal, who presented symptoms was immediately transferred to the prison hospital, and eight contacts were placed in isolation (6).

In July 2022, a confirmed case of mpox was identified in a correctional facility, Cook County jail in Chicago (IL), USA. Intermediate-risk exposure to the patient with mpox was reported for 57 residents; however, no secondary cases were identified in a subset of 62%. Response measures were immediately put in place to prevent transmission, including offering vaccination for post-exposure prophylaxis (7).

In October 2022, researchers called attention to limited awareness of the risks of mpox virus transmission in prisons (8). In January 2023, the WHO Regional Office for Europe Health in Prisons Programme (HIPP) prepared information material on mpox for people deprived of liberty, including fact sheets for people living in prisons (9), visitors (10), service providers and health-care professionals (11). Recently, WHO issued public health guidance for congregate settings to reduce the risk, spread and impact of mpox in settings in which people live in close proximity (12). Guidance specific to detention facilities has also been issued, including Interim Guidance for Infection Prevention and Control for the Management of Mpox in People in Situations of Vulnerability such as Prisons and Other Custodial Facilities, by the WHO Regional Office for the Americas (13).
Data collection and reporting strategies for mpox surveillance in detention facilities

In the WHO European Region, Member States are requested to report data on all cases that meet the WHO definition stated in the technical guidance *Surveillance, case investigation and contact tracing for mpox (monkeypox): Interim guidance, 22 December 2022* (14) via TESSy. In addition, WHO has extended the HIPP surveillance system, designed for voluntary notification of coronavirus disease (COVID-19) (15), with an online reporting system to include notification of probable (clinical assessment and exposure history) and confirmed (laboratory-confirmed) mpox cases, to ensure timely information on mpox epidemiology in prisons and other places of detention. Reports are submitted by focal points nominated by ministries of health in the context of regular HIPP monitoring. The focal points are usually representatives of departments of health but are also from other ministries, such as justice or the interior or based in academic centres with access to data.

The objectives of mpox surveillance are rapid identification of cases and clusters of infections and of the source of infection in order to provide optimal clinical care; isolate cases to prevent further transmission; identify, manage and follow-up contacts to recognize early signs of infection; identify risk groups for infection and for severe disease; protect prison workers; and ensure tailored, effective control and prevention measures. According to the WHO guidance, any individual who meets the definition of a suspected case should be offered polymerase chain reaction (PCR) testing for mpox, when resources allow (16).

Indicators in the HIPP surveillance system include the number of tests performed, the number of detainees screened for signs and symptoms, the numbers of probable and confirmed cases, the demographics of confirmed cases (sex at birth, sexual orientation, prior occupation and medical history) and vaccination coverage (Annex). Prison occupancy (number of people incarcerated within the official total capacity) is also reported.
Data were collected between 25 November 2022 and 31 May 2023. During this period, 57 voluntary notifications with aggregate data were submitted by focal points in 15 Member States in the WHO European Region: Austria, Belgium, Czechia, Denmark, Finland, Georgia, Lithuania, Luxembourg, Malta, Portugal, Republic of Moldova, Slovakia, Slovenia, Spain and the United Kingdom. Some Member States reported every month (Lithuania, Republic of Moldova and Spain), while others provided one or two notifications during the period.

Only four countries reported cases of mpox in prisons. Four confirmed cases were reported: one in Austria, one in Portugal and two in the United Kingdom (England and Wales). Austria reported a probable case.

The two confirmed cases in Austria and Portugal were both male at birth, who were reported to be men who had sex with men and were HIV positive. The case in Austria had not been vaccinated, and the vaccination status of the case in Portugal was unknown. No additional information was available on the two confirmed cases in United Kingdom (England and Wales).

The three countries that reported cases had a prison occupancy level at the time of reporting of 100%, 97.8% and 98.6%, respectively, for Austria, Portugal and United Kingdom (England and Wales). Of the 15 Member States that reported, five had a > 100% occupancy rate and another three had rates > 90%, considered by the Council of Europe to indicate “imminent prison overcrowding, a high-risk situation against which authorities should feel concerned and should take measures to avoid further congestion” (17).
Effectiveness and current challenges of mpox surveillance in places of detention

In order to provide an overview of the performance of prison surveillance for mpox, HIPP’s surveillance system was extended to enable notification of mpox cases. A secondary objective was to use the notified data to rapidly identify cases and clusters of infections arising in places of detention.

The data presented suggest that the surveillance system is still not mature, and further work must be done to ensure that notification becomes part of standard practice. The reporting system was open to all 53 Member States of the WHO European Region; however, only 15 reported via the system, including some that reported zero cases. One benefit of the extension of the system was that Member States that were aware of the value of surveillance could develop mechanisms to report cases to the HIPP.

An important limitation of this short survey was that, while the aim was to provide an overview of the performance of prison surveillance for mpox in the WHO European Region, only 15 of 53 Member States responded. Thus, the data should be interpreted cautiously, as some of the countries that did not participate, particularly in eastern Europe and Central Asia, are large, and some may have limited data transparency, as suggested by previous reports (18). The quality of the data provided was often suboptimal, as many countries were unable to provide data for all variables (only 21 reports were complete), including on the preventive measures adopted, such as screening, testing and vaccination. The five countries that provided information on vaccination coverage indicated none (including Austria), suggesting that this option is not being used as post-exposure or preventive prophylaxis (to prevent outbreaks).

WHO considers that mass vaccination of incarcerated populations is neither required nor recommended at this time; however, primary preventive (pre-exposure) vaccination is recommended for individuals at high-risk of exposure: gay, bisexual and other men who have sex with men with multiple sexual partners; individuals with multiple casual sexual partners; sex workers; health workers at risk of repeated exposure, laboratory personnel working with orthopoxviruses; clinical laboratory and health-care personnel who perform diagnostic testing for mpox; and outbreak response team members. Post-exposure preventive vaccination is recommended for contacts of cases, ideally within 4 days of first exposure and for up to 14 days in the absence of symptoms. Decisions on use of smallpox or mpox vaccines should be based on a full assessment of the risks and benefits, case by case (19).

The notifications made and the limited data presented suggest that recommendations for routine screening of signs and symptoms in places of detention have not been adopted, although four cases were identified.

WHO recommends that medical screening on entry include comprehensive screening to determine primary health care needs, including sexually transmitted or blood-borne diseases, before admission (20). Active case finding is a key preventive measure for early diagnosis, treatment and prevention of further disease transmission. In prison settings, however, active case finding is frequently conducted.
for only a limited list of communicable diseases, such as hepatitis A, B and C, HIV, sexually transmitted infections (chlamydia, gonorrhoea, syphilis and trichomoniasis) and tuberculosis (21). Diagnosis and surveillance for mpox in correctional facilities should be increased (22), and mpox should be included in regular screening of newly admitted or transferred individuals. Early detection is crucial to ensure a rapid response, including case investigation and management, contact tracing, infection prevention and control measures to mitigate the risk of an outbreak.

On the principle of equivalence, access to pre-exposure or post-exposure preventive vaccination is recommended, as appropriate and according to WHO guidance (19,23). Countries should decide to vaccinate target risk groups against mpox and prioritize those groups for effective use of vaccines, in consultation with the national immunization technical advisory group, the national regulatory agency and all relevant stakeholders. It should be noted, however, that sexual behaviour is commonly stigmatized in prisons; education of people living in prison should focus on how mpox spreads, safe sex and reporting of symptoms.

Although people living in prison represent a small proportion of the population, the average turnover is estimated to be 44.1%, indicating that most of these people return to the community (24). Moreover, people working in prisons, including lawyers, volunteers and visitors, move in and out of the premises every day. Thus, any case that emerges within prison walls could rapidly spread to the community and be amplified by prison transmission of infectious diseases. Notification of cases identified in places of detention must be coordinated with national surveillance mechanisms and should be fostered by competent bodies in all countries in the Region.


## Annex

### Updated Minimum Dataset for Health in Prisons

#### Subsection on mpox reporting

This subsection of the reporting system refers only to mpox. The numbering used follows from the previous section referring to COVID-19 (10 items).

Only answer this question if the following conditions are met: Answer was ‘Prisons’ at question [Setting] [For which setting are you submitting your answers?]

Please enter a number in all rows or click “Do not know”

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<tbody>
<tr>
<td>11.</td>
<td>What is the total number of mpox tests <strong>ever</strong> performed?</td>
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<td>12.</td>
<td>How many detainees have <strong>ever</strong> been screened for signs and symptoms of mpox?</td>
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<td>13.</td>
<td>How many detainees have <strong>ever</strong> been classified as probable case (see definition at <a href="https://iris.who.int/handle/10665/376306">https://iris.who.int/handle/10665/376306</a>) of mpox?</td>
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<td>14.</td>
<td>How many detainees have ever been classified as a confirmed case of mpox?</td>
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Considering only the confirmed cases among detainees, how many of those are:

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<tbody>
<tr>
<td>14.1</td>
<td><strong>Sex at birth:</strong></td>
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<tr>
<td>14.1.1</td>
<td>Male</td>
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<td>14.1.2</td>
<td>Female</td>
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<td>14.1.3</td>
<td>Other</td>
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<td>14.2</td>
<td><strong>Sexual orientation:</strong></td>
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<td>14.2.1</td>
<td>Heterosexual</td>
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<td>14.2.2</td>
<td>Men who have sex with men/homosexual or bisexual male</td>
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<td>14.2.3</td>
<td>Women who have sex with women</td>
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<td>14.2.4</td>
<td>Bisexual</td>
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<td>14.2.5</td>
<td>Other</td>
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<td>14.3</td>
<td><strong>Prior occupation:</strong></td>
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<tr>
<td>14.3.1</td>
<td>Sex workers</td>
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<td>14.3.2</td>
<td>Health workers</td>
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<td>14.4</td>
<td><strong>Medical history:</strong></td>
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<tr>
<td>14.4.1</td>
<td>HIV positive</td>
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<td>14.4.2</td>
<td>Immunocompromised</td>
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<td>15.</td>
<td>How many detainees are currently vaccinated against smallpox/mpox?</td>
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The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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