

# Monkeypox Strategic Preparedness, Readiness, and Response Plan

## **OPERATIONAL PLANNING GUIDELINES**



World Health  
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## Monkeypox Strategic Preparedness, Readiness, and Response Plan: Operational Planning Guidelines

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In a Biosafety Level 3 (BSL-3) laboratory, a laboratory technician works on monkeypox samples prior to the diagnosis process.  
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# Acronyms

<b>AAR</b>	after action reviews
<b>AEFI</b>	adverse events following immunization
<b>EOC</b>	emergency operations centre
<b>EPI</b>	Expanded Programme on Immunization
<b>EQA</b>	external quality assessment
<b>HIV</b>	human immunodeficiency virus
<b>IDSR</b>	Integrated Disease Surveillance and Response
<b>IHR (2005)</b>	international health regulations
<b>IMS</b>	incident management system
<b>IMT</b>	incident management team
<b>Infodemics</b>	excessive amount of information about a problem, which makes it difficult to identify a solution
<b>IPC</b>	infection prevention and control
<b>KAP</b>	knowledge, attitudes and practice
<b>MEURI</b>	Monitored Emergency Use of Unregistered and Investigational Interventions
<b>M&amp;E</b>	monitoring and evaluation
<b>MPXV</b>	monkeypox virus
<b>MSM</b>	men who have sex with men
<b>NAAT</b>	nucleic acid amplification tests
<b>NGO</b>	non-governmental organization
<b>NITAG</b>	national immunization technical advisory group
<b>NRA</b>	national regulatory authority
<b>OSL</b>	operational support and logistics
<b>PCR</b>	polymerase chain reaction
<b>PHEIC</b>	public health emergency of international concern
<b>PHEOC</b>	public health emergency operation centre
<b>PLWH</b>	people living with HIV
<b>PoE</b>	points of entry
<b>PPV</b>	primary preventive (pre-exposure) vaccination
<b>PEPV</b>	post-exposure preventive vaccination
<b>R&amp;D</b>	research and development
<b>RCCE</b>	risk communication and community engagement
<b>SAGE</b>	Strategic Advisory Group of Experts on Immunization
<b>SOPs</b>	standard operating procedures
<b>SPRP</b>	Monkeypox Strategic Preparedness, Readiness and Response Plan
<b>STIs</b>	sexually transmitted infections
<b>TESSy</b>	The European Surveillance System
<b>UN</b>	United Nations
<b>WASH</b>	water, sanitation and hygiene
<b>WHO</b>	World Health Organization
<b>WOAH</b>	World Organisation for Animal Health (founded as Office International des Epizooties (OIE))



# Introduction

The *Monkeypox Strategic Preparedness, Readiness, and Response Plan (SPRP)* invites national authorities to develop their own context-specific approach to prepare for and respond to the current monkeypox outbreak, in line with the guiding framework of the SPRP. Specifically, to work together towards the goal to **stop the monkeypox outbreak**, collective efforts should support the **three strategic objectives**: interrupt human-human transmission, minimize zoonotic transmission, and protect vulnerable groups at risk.

The SPRP sets **five core components (5Cs)** of preparedness, readiness, and response: emergency coordination, collaborative intelligence; community protection; safe and scalable care; countermeasures and research. Within those 5Cs are **Pillars** of the public health response to the monkeypox outbreak. A detailed set of key actions to be taken and capacities is given for each Pillar, for Member States to put in place for appropriate tiers of operation.

These *Operational Planning Guidelines* were developed by WHO to provide a practical collation of resources that may be used by national authorities in their context-specific planning and response for the current monkeypox outbreak. The checklist of proposed actions and capacities can be translated into workplans and used for monitoring the status of preparedness, readiness and response. As there has been ongoing operational planning in recent years relating to COVID-19, some actions indicated for the current monkeypox outbreak may be overlapping or complementary to COVID-19 preparedness, readiness and response actions.

In addition to national authorities, this document is intended for use by United Nations Country Teams and agencies, as well as key implementing partners, to develop or update relevant multi-agency plans with and in support of national authorities to facilitate coordinated public health actions for achieving the collective goal to **stop the monkeypox outbreak**.

Under the Public Health Emergency of International Concern (PHEIC), these *Operational Planning Guidelines* are provided in complement to the issued [Temporary Recommendations](#) that cover the following broad areas:

1. **Country readiness:** These recommendations are meant to ensure a state of readiness for an outbreak of monkeypox and apply to all States Parties.
2. **Outbreak response:** All States Parties with one or more cases of monkeypox, regardless of the initial source, or experiencing human-to-human transmission, including in population groups at high risk of exposure.
3. **Zoonotic transmission:** States Parties with known or suspected zoonotic transmission of monkeypox, including those where zoonotic transmission is known to occur or has been reported in the past, those where presence of monkeypox virus has been documented in any animal species, and those where infection of animals may be suspected or anticipated including in domestic pets, livestock or wildlife in newly affected countries. These recommendations apply to all States Parties.
4. **Development and deployment of medical countermeasures:** These recommendations apply to all States Parties, and particularly including those with capacity to innovate, develop and/or manufacture medical countermeasures.



**C1| Emergency coordination:** Strengthen emergency operations and foster coordination between Member States and key stakeholders for responsive public health action and adaptive key health services

**Pillar:** Leadership, coordination, planning, financing and monitoring



**C2| Collaborative surveillance:** Monitor and share information to improve the collective understanding of how this outbreak is evolving, identify specific risks and inform response measures

**Pillar:** Surveillance, epidemiological investigation and contact tracing

**Pillar:** Laboratories and diagnostics



**C3| Community protection:** Delivery of preventive measures and empowerment of communities

**Pillar:** Risk communication and community engagement (RCCE) and infodemic management

**Pillar:** Points of entry (PoE), international travel and transport, mass gatherings and population movements

**Pillar:** Vaccination



**C4| Safe and scalable care:** Provide safe and quality clinical care for individuals and prevent infections in health care

**Pillar:** Case management and clinical operations

**Pillar:** Infection prevention and control (IPC) that protects patients, health workers and communities



**C5| Countermeasures and research:** Improve access to effective medical health products for monkeypox and drive the cross-cutting research agenda

**Pillar:** Research and innovation

**Pillar:** Operational support and logistics



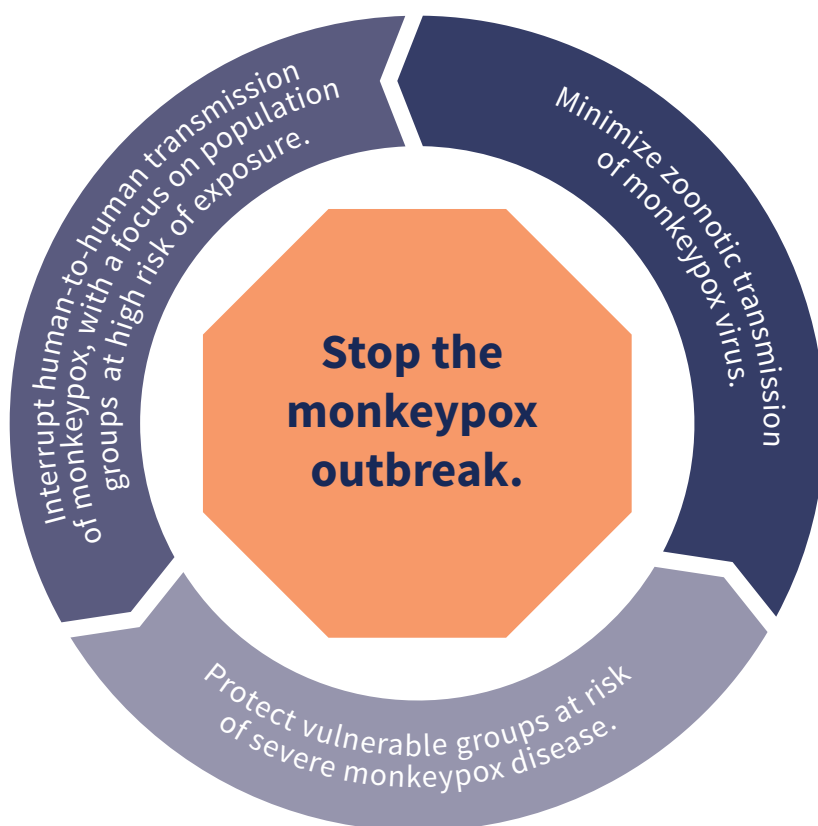


These *Operational Planning Guidelines* are a living document and will be updated to incorporate new technical guidance in response to the evolving epidemiological situation. Public health actions should be implemented in accordance with the principles of inclusiveness and respect for human rights. Additionally, as outlined in the SPRP four imperatives should guide our collective approach: information, action, evidence, and equity.

For aiding national planning, implementation, and monitoring additional resources are forthcoming:

- [WHO Partners Platform](#) to reflect the guidelines outlined in this document
- WHO Monkeypox SPRP Monitoring and Evaluation (M&E) Framework

**Figure 1. Strategic objectives**







# Leadership, coordination, planning, financing and monitoring

## Key activities and capacities

- ☐ Establish/activate an incident management team (IMT), within a public health emergency operation centre (PHEOC) or equivalent if available, and ensure enhancement, coordination, and networking of EOCs between levels of government, across sectors, and relevant civil society organizations.
- ☐ Undertake rapid risk assessment and prioritization of any subnational areas and vulnerable populations, including needs assessment within the specific contexts.
- ☐ Establish/activate subnational-level coordination hubs with multi-sectoral taskforce/incident-management structure in each high-risk area to be activated if required.
- ☐ Prepare templates for situation reports and press releases.
- ☐ Prepare for regulatory approval, market authorization and post-market surveillance of monkeypox products (e.g., laboratory diagnostics, therapeutics, vaccines), when available.
- ☐ Support planning functions, including response planning and development/adaptation and activation of standard operating procedures (SOPs), with relevant national stakeholders and partners at all levels.
- ☐ Inform health, local and administrative authorities about monkeypox and recommendations to curb its spread at the community level.
- ☐ Prepare for rapid deployment of staff from national and partner organizations as needed.
- ☐ Establish/activate cross-border coordination mechanisms, including mechanisms for sharing data, developed and adopted policies, and SOPs.
- ☐ Conduct simulation exercises to assess functionality of monkeypox readiness and response within the last 6 months.
- ☐ Review national policy and legislative frameworks to ensure the necessary authorization for proposed public health measures, using the principle of doing no harm.
- ☐ Ensure legal and operational framework to enable streamlined emergency fund activation and transfer from national to subnational level in place.

## Additionally, where there are recently reported cases of monkeypox, or ongoing human-to-human transmission, countries should ensure comprehensive response.

- ☐ Develop/update, approve and implement a national plan for monkeypox with a monitoring framework and budget, providing training where necessary for its implementation.
- ☐ Share national plan/contingency plan and budget with in country and external donors.
- ☐ Develop an operational plan within 72 hours – 10 days.
- ☐ Finalize and approve operational budget for enhanced detection and preliminary response, including clear timelines specified for all activities.
- ☐ Identify and mobilize accessible funds for immediate response to monkeypox emergency.
- ☐ Develop a resource mobilization plan including mapping of domestic and donor funding sources and mechanisms to track funding, resource utilization and financial reporting.
- ☐ Conduct a mapping of relevant civil society organizations to optimize engagement with affected communities during response operations.
- ☐ Conduct mapping of health services with particular attention to where population groups at higher risk of monkeypox seek care, in order to establish links between urgent care, sexual health, diagnostic and laboratory services, HIV prevention and care, and other relevant health service delivery points.

## All countries should also be aware of the possibility of transmission of monkeypox between animals and humans, including zoonotic transmission and the risk of human-to-animal spillback.

- ☐ Develop a collaborative One Health monkeypox control strategy, through coordination across all relevant sectors.
- ☐ Promote and conduct transdisciplinary research to generate knowledge on the animal reservoir in the context of environmental change and risk factors for spillover in human-animal interaction to promote risk mitigation measures.
- ☐ Strengthen multisectoral partnership and collaboration for continuous capacity building, and to design and implement appropriate measures to limit transmission between humans and animals.



### Relevant guidance documents:

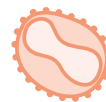
- [Temporary Recommendations issued by the WHO Director-General in relation to the multi-country outbreak of monkeypox, October 2022](#)
- [Monkeypox Strategic preparedness, readiness, and response plan, July 2022–June 2023](#)
- [Considerations for the control and elimination of monkeypox in the WHO European Region, 26 August 2022](#)
- [Technical Brief \(interim\) and Priority Actions: Enhancing Readiness for monkeypox in WHO South-East Asia Region, 18 May 2022](#)
- [International Health Regulations \(IHR\) 2005](#)
- [PHOEC-net \(general guidance\)](#)
- [Emergency response framework \(ERF\), 2nd edition, 13 June 2017](#)
- [Public Health Emergency Operations Centre Network \(EOC-NET\)](#)
- [Handbook for Public Health Emergency Operations Center operations and management \(developed by WHO AFRO\), 2021](#)
- [Intra and After-Action Reviews](#)
- [A Human Rights-based Approach to Data](#)
- [WHO guidance on preparing for national response to health emergencies and disasters, 20 December 2021](#)
- [Taking a multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonoses Diseases in Countries, 28 June 2019](#)
- [Tripartite Operational Tools \[Multisectoral Coordination Mechanism\], 21 September 2022](#)
- [WOAH guidance on monkeypox, 2022](#)
- [Risk Guidance on Reducing Spillover of Monkeypox Virus from Humans to Wildlife, Pet Animals and other Animals, 28 Sept 2022](#)



# Surveillance, epidemiological investigation, and contact tracing

## Key activities and capacities

- ☐ Establish a surveillance framework for monkeypox, including listing as a priority notifiable disease and establishment of a routine surveillance system.
- ☐ Develop/revise and disseminate monkeypox surveillance guidance and SOPs containing case and contact definitions, case investigation forms, and reporting protocols, to health facilities and health workers in public and private sectors, at national and subnational levels, particularly those that serve at-risk population groups (e.g., sexual health services, HIV prevention and care, One Health and veterinary services, refugee camps, and others).
- ☐ Continue conducting joint risk assessments involving all relevant sectors (particularly the animal health sector) as appropriate. Use global, regional and/or national and local risk assessments to guide actions or changes to the response strategy.
- ☐ Provide robust and timely epidemiological and social science data analysis to relevant stakeholders to continuously inform risk assessment and support operational decision-making for the response.
- ☐ Establish/utilize a formal event-based community surveillance system and enable timely follow-up of information/rumors from all sources, including the community and media; with guidance and support from WHO for detection, verification and analysis of events, as needed.
- ☐ Ensure that surveillance activities are complemented with a specific focus on relevant population groups at higher risk of infection and populations with low health-seeking behavior.
- ☐ Ensure surveillance and risk communication and community engagement pillars work in close collaboration towards the identification, tracing, and follow-up of contacts.
- ☐ Provide targeted training for monkeypox (detection, investigation, reporting and contact tracing) to health workers, including facility-based and community health workers, and those working with hard-to-reach populations.
- ☐ Establish/enhance and disseminate monkeypox contact tracing guidelines and SOPs at the national and subnational levels.
- ☐ Undertake reporting of cases that meet the case definition to WHO within 24 hours in accordance with IHR (2005), via Case Reporting Forms or existing regional mechanism (e.g. The European Surveillance System (TESSy) or Integrated Disease Surveillance and Response (IDSR)).
- ☐ Isolate cases to prevent further human to human transmission and control the outbreak.
- ☐ Identify, manage and follow-up with contacts to recognize early signs of infection, including use of partner notification approaches for groups as appropriate.
- ☐ Support regular supervision/mentoring of surveillance officers and community-based surveillance focal points.
- ☐ Establish/strengthen/rollout the data management system for monkeypox case line listing and contact tracing at the national and subnational levels, using WHO guidelines.
- ☐ Establish/strengthen existing multidisciplinary and multi-partner outbreak data management and analytics teams covering all pillars of the response at national level and in highly affected subnational areas. Establish/strengthen standardized surveillance data flows from peripheral to central level.
- ☐ Provide systematic and real-time evidence to explain outbreak dynamics and inform pillar decision-making and response operations.
- ☐ Produce and disseminate to stakeholders regular (e.g. weekly) epidemiological and clinical reports.
- ☐ Evaluate the performance of the existing surveillance system, through actual experience and/or table-top or simulation exercises and use the findings to inform future preparedness and response activities.
- ☐ Evaluate the performance of the existing surveillance systems, a through actual experience and/or table-top or simulation exercises and use the findings to inform future preparedness and response activities.
- ☐ Include animal contact tracing in the epidemiologic investigation of human cases.
- ☐ Undertake detailed case investigations and studies to characterize transmission patterns between humans and animals.
- ☐ Where zoonotic transmission is suspected, establish surveillance in animals, through collaboration with wildlife services, veterinary services, research institutions and public health authorities; Include One Health partners in the incident management team and continue to actively engage throughout the response.



### Relevant guidance documents:

- [Temporary Recommendations issued by the WHO Director-General in relation to the multi-country outbreak of monkeypox, October 2022](#)
- [Surveillance, case investigation and contact tracing for monkeypox: interim guidance. 25 August 2022](#)
- [Monkeypox and minimum dataset Case reporting form \(CRF\), 19 August 2022](#)
- [Monkeypox Case investigation form \(CIF\) for detailed epidemiological investigations, Version 3](#)
- [Protocol to accompany CIF \(developed by WHO EURO\) – available from WHO Regional Offices](#)
- [Monkeypox Outbreak Toolbox, September 2022](#)
- [Tripartite Operational Tools \[Surveillance and Information Sharing, Multisectoral Coordination Mechanism\], 21 September 2022](#)
- [Joint Risk Assessment Operational Tool, 9 March 2021](#)
- [Go.Data](#)
- [Guidelines on ethical issues in public health surveillance June 2017](#)



# Laboratories and diagnostics

## Key activities and capacities

- ☐ Clearly define and implement a national laboratory strategy and sample criteria, with the goal of ensuring all suspect cases have access to timely, high-quality diagnostics for monkeypox virus.
- ☐ Adopt and disseminate standard operating procedures (SOPs) as part of disease outbreak and routine investigation protocols for collection, storage, and transport of monkeypox diagnostic specimens.
- ☐ Establish access to testing using the recommended nucleic acid amplification tests (NAAT), such as real time polymerase chain reaction (PCR) testing, through designated domestic monkeypox virus diagnostic laboratories at national and subnational level.
- ☐ Ensure a national system and protocols for sample collection, testing and tracking is in place and functional. Identify hazards and perform a biosafety risk assessment at designated laboratories; use appropriate biosafety measures to mitigate risks.
- ☐ Develop surge capacity deployment plans to manage increased demand for testing and the need to decentralize testing services.
- ☐ Support testing by ensuring the workforce is trained appropriately, an information management system is in place, the supply chain can provide timely access to reagents and testing kits, and by maintaining a strategic stock of reagents and other critical laboratory materials.
- ☐ Ensure access to regional and/or global reference laboratories for confirmatory testing and virus characterization, as may be necessary, and ensure availability of staff certified for shipping infectious substances according to international regulations.
- ☐ Ensure testing results can be communicated back to patients and healthcare providers in a timely manner, with due attention to confidentiality of patients' personal health information.
- ☐ Ensure laboratory data is linked with key epidemiological and clinical data, including clinical information and test results for HIV and sexually transmissible infections, through design of appropriate informational management systems to enable timely data analysis and action.
- ☐ Support laboratories in safe management of laboratory waste including through dedicated human resources and infrastructure.
- ☐ Develop a performance evaluation mechanism for laboratory testing, including quality indicators and external quality assessment (EQA) programmes.
- ☐ Monitor and evaluate diagnostics, data quality and staff performance, incorporate findings into a strategic review of national laboratory capacity, and share lessons learned.
- ☐ Develop a national genomic surveillance strategy for monkeypox virus considering the need for genomic sequencing to monitor virus evolution and availability of resources.
- ☐ Share genetic sequence data on publicly accessible platforms and share virus materials as relevant.

## Relevant guidance documents:

- [WHO Laboratory testing for the monkeypox virus: Interim guidance, 23 May 2022](#)
- [Monkeypox: experts give virus variants new names, 12 August 2022](#)
- [WHO Guidance on regulations for the transport of infectious substances 2021-2023, 25 February 2021](#)
- [Laboratory Biosafety Manual 4th edition, 21 December 2020](#)
- [WHO Guidance on regulations for the transport of infectious substances 2021-2022, 25 February 2021](#)
- [PAHO Laboratory Guidelines for the Detection and Diagnosis of Monkeypox Virus Infection, 2 September, 2022](#)



# Risk communication and community engagement (RCCE) and infodemic management

## Key activities and capacities

### Strategy and coordination

- ☐ Map out key partners, stakeholders, capacities and gaps, as well as key activities, priority and vulnerable population groups and geographical areas.
- ☐ Develop/update the RCCE strategy to include infodemic management approaches, work plans, monitoring mechanisms and budgets.
- ☐ Ensure RCCE and infodemic management are incorporated into the IMT/national outbreak response coordination mechanisms, strategies and plans.
- ☐ Include RCCE and infodemic management in risk assessments.
- ☐ Establish/reactivate coordination mechanisms with key partners and the affected communities at a national level and in high-risk subnational areas. Activate community task forces and allocate funding.
- ☐ Develop effective collaboration between psychosocial actors, community members, clinicians, event organizers and other relevant stakeholder groups to maximize the positive impact of activities among the population.

### Social and behavior insights

- ☐ During the readiness phase (if possible), at the beginning of the outbreak and at key points during the outbreak response, conduct a rapid qualitative analysis of community contexts in high-risk areas and among high-risk groups, including:
  - ☐ Mapping critical, trusted communication networks, platforms and channels
  - ☐ Mapping key influencers at national and subnational level per key audience
  - ☐ Developing feedback mechanisms for capturing, analyzing and acting upon sources of community perspectives (e.g., knowledge, attitudes and practice (KAP) surveys, focus group discussions, key informant interviews, socio-anthropological studies (ethnography), rumour tracking, tracking of calls to public health and medical hotlines, monitoring national and local media opinion pieces, social media monitoring etc., reviews of published and unpublished social science reports, community dialogues and consultation mechanisms).
- ☐ Conduct regular social listening to gather data on knowledge gaps, perceptions, beliefs, behaviours, attitudes, acceptability of interventions, rumours and misinformation.
- ☐ Conduct social scientific analysis to understand and address early concerns and issues related to adopting desired behaviours, and suggest actions to foster acceptance and empower communities.
- ☐ Include social and behavioural insights as one component of the outbreak multi-source surveillance programme, using insights to inform action across the outbreak response.

### Community engagement

- ☐ Map and engage communities affected by the outbreak and include them in the outbreak response throughout the emergency cycle (prevention, preparedness, readiness, response and recovery).
- ☐ Identify and engage key influencers (e.g., local government, politicians, journalists, community/religious leaders, security forces etc.) at community level.
- ☐ Support community outreach and provide funding for community organizations.
- ☐ Include communities in governance, planning and response activities.
- ☐ Ensure community engagement is culturally appropriate, empathetic, and sensitive to stigmatization.
- ☐ Co-develop evidence-informed strategies, plans, interventions or activities, and materials that are tailored to the needs of the respective communities.
- ☐ Where population groups at higher risk of infection are marginalised and stigmatised, work with existing community networks established to reach and support those groups, including those represented by affected and vulnerable populations, HIV networks, as well as those of faith organizations, employers and businesses, and others.
- ☐ Systematically establish feedback mechanisms through social media, community perceptions surveys, knowledge, attitude and practice surveys, direct dialogues and consultations to ensure community feedback informs response measures, and that the response is accountable to affected communities and population groups.



### Community engagement (continued)

- ☐ Establish/strengthen/roll out public health dialogues and consultation mechanisms (including hotlines and social media apps) allowing for two-way conversations; utilizing community networks for dissemination, especially in communities where groups at higher risk of infection are marginalized.
- ☐ Ensure the outcomes related to feedback received are always communicated back to the communities that made the report.
- ☐ Adjust community engagement approaches and key messages of each Pillar according to the results of relevant surveys, social science analysis, and community feedback.
- ☐ Address and manage possible stigmatization of those who have/had monkeypox, their contacts and their families.
- ☐ In support of surveillance, strengthen active research in the community-based early warning alert system for suspected cases and community deaths.
- ☐ Foster ownership to support socio-behavioural studies risk factors for spillover in monkeypox enzootic areas.

### Emergency risk communication

- ☐ Acknowledge and proactively communicate what is known, what is unknown and what response organizations are doing to find out more.
- ☐ Develop evidence-based, transparent, empathetic key messages for population groups at higher risk of infection on monkeypox symptoms, how it spreads, how to protect yourself and others, and what to do if you have confirmed or suspected monkeypox.
- ☐ Identify population groups at higher risk of infection and/or vulnerable groups at risk of severe monkeypox disease, and address their respective communication needs through adequate channels.
- ☐ In enzootic areas, provide information on prevention and reduce risks related to handling susceptible animals, including wildlife and handling or consumption of bushmeat.
- ☐ Conduct message testing to ensure messaging resonates with target audiences.
- ☐ Build relationships with media outlets and provide workshops with journalists to develop strong understanding of the subject matter to encourage accurate reporting.
- ☐ Use channels that are already trusted by communities and populations groups at higher risk of infection (TV, radio, social media, community platforms, etc).
- ☐ Engage trusted voices to amplify messaging through multiple targeted channels used and trusted by specific affected populations.
- ☐ Disseminate key messages and materials widely to reach target audiences (e.g., through media, health workers, local government, community/religious leaders, event organizers, schools, traditional healers and other identified stakeholders).
- ☐ Use social-behavioural data and community insights from feedback mechanisms to develop/update/adapt key messages based on the needs of the communities and population groups at higher risk of infection.
- ☐ Use evidence-based strategies and approaches to prevent and address stigma and discrimination.

### Infodemic management

- ☐ Activate infodemic listening, analysis and response mechanisms.
- ☐ Activate systems for rapid tracking and management of misinformation through risk communication approaches.
- ☐ Use data from on and offline social listening systems to address misinformation/rumours and any questions that communities raise.





### Capacity building

- ☐ Engage with local networks and train dedicated risk communication, community engagement and infodemic management teams for affected and higher-risk subnational areas. Include community outreach workers, community leaders and sexual health service providers.
- ☐ Train local health workers and other relevant stakeholders on their duties to communicate, key intervention strategies, main messaging to share with communities, and conflict management techniques.
- ☐ Train media professionals including media influencers and factcheckers, on identifying and communicating credible scientific information.
- ☐ Train key stakeholders, including health workers, on interpersonal communication skills and culturally appropriate interactions with all members of communities to ensure that response interventions will be accepted.

### Monitoring and evaluation

- ☐ Monitor the effectiveness of the RCCE strategy and document lessons learned to inform future preparedness and response activities.

### Relevant guidance documents:

- [Risk communication and community engagement \(RCCE\) for monkeypox outbreaks: Interim guidance, 24 June 2022](#)
- [Risk communication and community engagement public health advice on understanding, preventing and addressing stigma and discrimination related to monkeypox, 1 September 2022](#)
- [Public health advice for men who have sex with men, 18 July 2022](#)
- [Recovering from monkeypox at home, 24 July 2022](#)
- [Monkeypox Outbreak: Advice for health workers, 25 May 2022](#)
- [Monkeypox Key Facts, 19 May 2022](#)
- [Monkeypox Q&A, 31 August 2022](#)
- [Guidelines on ethical issues in public health surveillance, June 2017](#)



## Points of entry (PoE), international travel and transport, mass gatherings and populations movements

### Key activities and capacities

- ☐ Issue travel advice for confirmed and suspected cases of monkeypox in line with the recommendations of the IHR Emergency Committee regarding the multi-country monkeypox outbreak, including exemptions for those travelling to seek urgent medical healthcare, fleeing from life-threatening situations, or cross-border workers.
- ☐ Ensure continuous communication and data sharing between health and transportation authorities, and PoE, within and between countries, to facilitate international contact tracing for outbreak investigation and health monitoring purposes.
- ☐ Ensure that health monitoring is duly coordinated between jurisdictional health authorities from both/all sides of the border.
- ☐ Countries should have a clear surveillance strategy and sufficient public health capacity to reliably identify cases and trace contacts, including the link of travel history, in alignment with national and sub-national surveillance and response efforts. National and, where needed and applicable, sub-national authorities involved in the risk assessment process should:
  - ☐ Develop risk communication messages and provide travelers with information and instructions, at PoE or via travel health clinics, travel agencies, conveyance operators, on signs and symptoms consistent with monkeypox; infection prevention and control; IHR recommendations for international travel and advice on attendance of mass gatherings during the ongoing monkeypox outbreak as well as on how and when to seek medical care and contact local health authorities.
  - ☐ Make operational arrangements to facilitate the compliance with requirements for managing cases and contacts, including the timely exchange of information with health authorities (for example through passenger manifests for contact tracing purposes and completion and collection of passenger locator forms).
  - ☐ Coordinate with conveyance operators to comply with countries' requirements for the submission of the Maritime Declaration of Health, Annex 8 of the IHR (2005), and the Health Part of the Aircraft General Declaration, Annex 9 of the IHR (2005).
  - ☐ Enhance communication channels between countries including through IHR (2005) focal points to facilitate international contact tracing.
- ☐ Ensure accurate and timely activities monitoring systems for implementing Temporary Recommendations of the IHR Emergency Committee regarding the multi-country monkeypox outbreak related to international travel are established to capture any progress or gaps.
- ☐ Conduct mapping of all current and future mass gatherings in collaboration with competent national and subnational authorities to apply a rigorous risk-based approach. Such an approach consists of three steps: risk evaluation, risk mitigation and risk communication – leading to an informed decision on whether the event under consideration should proceed, and on the best arrangements to decrease any associated risk of spread of MPXV, should it go ahead.
- ☐ Ensure that communities involved in actual and future identified mass gatherings are sensitized on the assessed disease transmission risk and that all appropriate measures are implemented in collaboration with competent national and subnational authorities to minimize these risks.
- ☐ Ensure clear risk communication for helping people accept changes and modifications to how an event is carried out. This should be built on two foundational understandings: (i) the rationale behind the mass gathering modifications/changes; (ii) the communication needs of those at the gathering.
- ☐ Ensure risk communication and other precautionary measures are implemented in mass gathering and travel settings linked to high-risk activities, including but not limited to sex-on-premises venues, such as bathhouses, darkrooms and themed cruises.
- ☐ Conduct close monitoring of the activities and regular formative supervision to ensure that the achievements are on track and the quality is kept to standard.

### Relevant guidance documents:

- [Temporary Recommendations issued by the WHO Director-General in relation to the multi-country outbreak of monkeypox, October 2022](#)
- [Public health advice for gatherings during the current monkeypox outbreak, 28 June 2022](#)
- [EPI-WIN Webinar on Monkeypox outbreak and mass gatherings \(recording and presentations\), 24 June 2022](#)
- [WHO EURO & ECDC: Monkeypox outbreak: Resource toolkit for event organisers, 5 July 2022](#)
- [WHO EURO, ECDC: Interim advice for public health authorities on summer events during the monkeypox outbreak in Europe, 14 June 2022](#)



## Key activities and capacities

### Coordinate and plan vaccine introduction

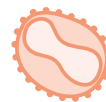
- ☐ Ensure national immunization technical advisory groups (NITAGs) and associated working groups, or the equivalent, are established/utilized and resourced to enable a policy recommendation/advice/decision-making on the use of smallpox/monkeypox vaccines.
- ☐ Convene NITAGs to review the evidence and develop policy recommendations for the use of vaccines for monkeypox as relevant to the national context and guidelines.
- ☒ NITAGs are advised to review vaccine choices and availability in their jurisdiction and discuss the implications of vaccination with smallpox/monkeypox vaccines including off-label use, protocols for compassionate use or emergency authorization, and investigational protocols for robust data collection in line with WHO recommendations.
- ☐ Ensure that National Regulatory Authorities (NRA) have legal frameworks, guidelines and the capacity to issue regulatory approvals for the use of smallpox and monkeypox vaccines with risk management plans in place.

### Mass vaccination is not required nor recommended for Monkeypox at this time.

- ☐ Where appropriate vaccines are available, consider primary preventive (pre-exposure) vaccination (PPV) for individuals at high-risk of exposure including: individuals but not limited to those who self-identify as gay or bisexual or other men who have sex with men (MSM) or other individuals with multiple sexual partners; and health workers at high risk of exposure, laboratory personnel working with orthopoxviruses, clinical laboratory personnel performing diagnostic testing for monkeypox, outbreak response team members (as designated by national public health authorities).
- ☐ Where appropriate vaccines are available, consider post-exposure preventive vaccination (PEPV) for close contacts of cases prior to onset of any symptoms, 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. PEPV may be considered for individuals in 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.
- ☐ Develop strategies to increase vaccination coverage among population groups identified for PPV and PEPV, and address vaccine hesitancy.
- ☐ Review epidemiological data and operationally define target populations that will be prioritized for access to vaccines, estimate their numbers, and develop a delivery strategy for reaching these populations.
- ☐ Identify funding gaps in operational costs and if needed apply to multilateral-backed funding and in-country donor funding.

### Optimize service delivery

- ☐ Where vaccines are proposed, national health authorities must ensure that staff are fully informed and trained on the safe and proper use of replication-competent, minimally replicating and/or non-replicating smallpox and monkeypox vaccines.
- ☐ National health authorities must ensure that information is provided to health personnel on administration of MVA-BN monkeypox vaccine via sub-cutaneous or intradermal injection, and on the use of bifurcated needles for administration of ACAM2000 or LC16.
- ☐ Review and address specific training requirements of the involved staff for vaccination and reporting adverse events following immunization (AEFI).
- ☐ Make sure decisions around immunization with smallpox or monkeypox vaccines are made by shared clinical decision-making, and are based on a joint assessment of risks and benefits, between a health care provider and prospective vaccinee, on a case-by-case basis.
- ☐ Update protocols for infection prevention and control measures including adequate personal protection equipment to minimize exposure risk during immunization sessions.
- ☐ Engage healthcare workers as central to vaccine rollout success, with their three roles as vaccine receivers, providers, and influencers of people's vaccine acceptance and uptake.



### Initiate and evaluate vaccine deployment processes

- ☐ Develop key messages and materials for public communications and advocacy, in alignment with demand plan.
- ☐ Identify and implement smallpox/monkeypox vaccine delivery strategies leveraging existing vaccination platforms to best reach identified target groups.
- ☐ Establish post-implementation vaccine effectiveness and impact assessments to inform policy and optimization. Establish approaches to assess vaccine breakthrough cases as indicators of vaccine effectiveness.
- ☐ Update the national vaccine plans or similar strategy document with input from relevant bodies and in line with WHO Strategic Advisory Group of Experts on Immunization (SAGE) and NITAG recommendations incorporating new information vaccine profiles, etc.
- ☐ Develop or adapt necessary electronic and/or paper-based monitoring tools and appropriate institutional arrangements (e.g. vaccination cards/certificates, facility-based nominal registers, etc.) to monitor progress and coverage among different at-risk categories and facilitate vaccine delivery and timely reporting.
- ☐ Produce and distribute monitoring tools to eligible vaccination providers, develop, test and roll-out any changes to electronic systems, provide training for use of these tools and processes to traditional and new providers.
- ☐ Plan and implement a strong information campaign to inform vaccinees that it takes approximately 2 weeks from finalizing a complete series of vaccination (1 or 2 doses depending on product) for immunity to develop and that the level of protection conferred by vaccination is currently unknown.
- ☐ Address vaccine hesitancy, stigma, misinformation and other demand-side issues.

### Establish or reinforce vaccine safety surveillance systems

- ☐ Implement a robust pharmacovigilance system to detect and report adverse events following immunization (AEFIs), and ensure guidelines, documented procedures and tools for planning and conducting vaccine pharmacovigilance activities (i.e. AEFI) reporting, investigation, causality assessment, risk communication and response), have been developed and disseminated to surveillance facilities/sites.
- ☐ Ensure a safety coordinating committee is in place.
- ☐ Establish the reporting forms and procedures among the EPI and NRA to share safety information and decision making.
- ☐ Define roles and responsibilities and establish a coordination mechanism between relevant stakeholders (NRA, Expanded Programme on Immunization (EPI), Ministry of Health, WHO and others) for exchange of smallpox/monkeypox vaccines safety information, including relevant data systems and information flow.
- ☐ Identify and secure channels of data sharing mechanisms to share smallpox/monkeypox vaccines safety data and findings with relevant regional and international partners.
- ☐ Monitor emerging evidence on vaccine performance, safety, and updates to vaccine recommendations from SAGE, and convene NITAG for updates to vaccine use policies as needed.

### Relevant guidance documents:

- [Vaccines and immunization for monkeypox: Interim guidance, 24 August 2022](#)
- [Currently available evidence on monkeypox vaccines, 2 August 2022](#)
- [Policy brief on vaccination against monkeypox in the WHO European Region, 26 August 2022](#)



# Case management and clinical operations

## Key activities and capacities

### Case management

- ☐ Identify population groups at high risk of exposure to monkeypox and/or vulnerable groups at risk of severe monkeypox disease.
- ☐ Map public and private health facilities and workforce (e.g. primary and urgent care, sexual health services, dermatology clinics, other frontline care services including traditional healers, pharmacies, and other providers), and identify alternative facilities that may be used to provide treatment, according to the local context of the outbreak.
- ☐ Continuously assess the burden on the local health system, with particular reference to sexual health services, laboratory testing capacity, and immunization programmes where relevant.
- ☐ Ensure that clinical management guidance is disseminated for the care of all patients with monkeypox, including for patients requiring primary care and to prevent/care for complications.
- ☐ Disseminate regularly updated information, train, and refresh the health work force (including community health workers, medical, nursing, physical therapists, ambulatory teams) in the management of monkeypox, using specific protocols based on international standards and WHO clinical guidance.
- ☐ Establish dedicated pre-hospital monkeypox urgent care and referral pathways.
- ☐ Support medical facility mapping and evaluation.
- ☐ Surge clinical care capacity according to the epidemiological situation, leveraging existing professional networks such as those for sexually transmitted infections (STIs), HIV, or dermatology.
- ☐ Ensure comprehensive medical, nutritional, psycho-social, and palliative care for those with monkeypox, including management of other infections (e.g., HIV, STIs, bacterial infections).
- ☐ Deliver optimized standard of care for all patients and reinforce prevention of onward transmission of monkeypox.
- ☐ Evaluate implementation and effectiveness of case management procedures and protocols and adjust guidance and/or address implementation gaps as necessary.
- ☐ Inform relevant authorities and other stakeholders on how to participate in the MEURI and CORE protocols, and ensure national approvals and systems are in place for access to antiviral agents through these mechanisms.
  - ☐ The use of antivirals for monkeypox should be under collaborative clinical efficacy studies using standardized design methods (e.g. CORE) and data collection tools for clinical and outcome data to rapidly increase evidence generation on efficacy and safety.
  - ☐ If this is not possible, their use can still be considered under expanded access protocols (MEURI – Monitored Emergency Use of Unregistered and Investigational Interventions) using harmonized data collection for safety and clinical outcomes (such as the [WHO Clinical Data Platform for Monkeypox](#)) that represent the desirable minimum in the context of an outbreak such as the current one.
- ☐ Participate in harmonized data collection to foster knowledge exchange via the WHO Clinical Data Platform for Monkeypox and in the bi-weekly Clinical Network calls hosted by the Clinical Management Team to aid in the clinical characterization of monkeypox, address challenges, share best practices in clinical care, and foster global collaboration.
- ☐ Map out the regulatory pathway and approvals required for the importation and/or clinical use of specific therapeutics in line with recommendations or under the different protocols outlined above.

### Relevant guidance documents:

- [WHO Global Clinical Platform for Monkeypox](#)
- [Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022](#)
- [WHO Target Product Profiles for Monkeypox Therapeutics, 25 August 2022](#)
- [CORE Protocol: A randomized, placebo-controlled, double-blinded trial of the safety and efficacy of treatments for patients with monkeypox virus disease, 24 July 2022](#)
- [Emergency use of unproven clinical interventions outside clinical trials: ethical considerations, 12 April 2022](#)



# Infection prevention and control (IPC)

## Key activities and capacities

- ☐ Assess IPC and WASH capacities (ability to implement IPC and WASH standards and interventions) within the health care facilities (including public and private services, as well as STI primary care services) and in community settings where risk of transmission is considered high.
- ☐ Convene the National IPC programme or National outbreak IPC taskforce to revise, adapt and disseminate policies, national IPC guidelines, training, surveillance, management of exposed and confirmed health worker infection and other IPC-related activities across the health system and community settings, and strengthen IPC programmes at health facility level.
- ☐ Leverage existing national IPC training programmes and incorporate IPC measures required for monkeypox in healthcare and community settings.
- ☐ Develop and implement a surveillance system and policies to identify and report health care-associated monkeypox infections among patients, and health workers in accordance with national policies.
- ☐ Develop a system, in collaboration with Occupational Health Services where possible, to detect and manage health worker exposures and infections with monkeypox including infection detection and management of exposed and confirmed cases.
- ☐ Implement IPC measures for management of monkeypox in health care and community settings including standard precautions for all patients at all times with the addition of transmission-based precautions for suspected or confirmed monkeypox cases; screening, triage, early recognition and isolation measures in health facilities.
- ☐ Assess surge capacity, identify required resources (financial, logistical, human resources) and activate contingency plans as required to ensure adequate health workers staffing level, triaging capacities, availability of isolation rooms with dedicated toilet, availability of personal protective equipment and other IPC supplies.
- ☐ Undertake thorough risk assessments, prepare for, and rapidly respond to any case or outbreak of monkeypox in congregate settings including hospitals, prisons, migrant worker residences, or other situations where population density may be high, including facilities for internally displaced persons or refugees.
- ☐ Collaborate with communications teams and relevant stakeholders to develop risk communication messaging and dissemination strategies related to IPC and public health and social measures considering contextual issues such as community settings and at-risk population groups.
- ☐ Support IPC research and development through implementation of research protocols to address knowledge gaps related to monkeypox.

## Relevant guidance documents:

- [Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance, 10 June 2022](#)
- [Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the national level, 2021](#)
- [Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the health care facility level, 2022](#)
- [WHO and UNICEF. Water and sanitation for health facility improvement tool \(WASH FIT\): a practical guide for improving quality of care through water, sanitation and hygiene in health care facilities, 2nd ed., 2022](#)
- [Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level, 2016](#)
- [Minimum requirements for infection prevention and control programmes, 2019](#)
- [Instruction for the national infection prevention and control assessment tool 2 \(IPCAT2\), 2017](#)
- [Infection prevention and control assessment framework at the facility level, 2018](#)



## Research and innovation

### Key activities and capacities

- ☐ Work on country research priorities and engage in worldwide interdisciplinary collaborations for conducting research on global research priorities, for evidence generation, closing key knowledge gaps, and sharing of best practices.
- ☐ Use standardized tools for research and development for emergencies (e.g., generic protocols, case report forms).
- ☐ Use established research networks for peer-to-peer knowledge exchange.
- ☐ Encourage, support and facilitate data gathering and priority research in areas of work relevant to monkeypox, including but not limited to disease transmission and the natural history of disease; diagnostics and innovative technologies including point-of-care tests, viral kinetics across specimen types and animal diagnostics; behavioural insights research and studies on effectiveness of interventions; exposure risk for health workers and pre- and post-exposure management; research on zoonotic transmission of monkeypox at the human-animal-environment interface, including socio-economic and behavioural risk factors, and indications for environmental surveillance in wastewater.

### Diagnostics, therapeutics, vaccines

- ☐ Adapt international R&D Blueprint research protocols to local circumstances as needed.
- ☐ Assess diagnostics, therapeutics, and vaccines for compassionate use and clinical trials, regulatory approval, market authorization, and/or post-market surveillance, as appropriate.
- ☐ Make all efforts to use existing or new vaccines against monkeypox within a framework of collaborative clinical efficacy studies, using standardized design methods and data collection tools for clinical and outcome data, to rapidly increase evidence generation on efficacy and safety, collect data on effectiveness of vaccines (e.g., such as comparison of one or two dose vaccine regimens), and conduct vaccine effectiveness studies.
- ☐ Make all efforts to use existing or new therapeutics and antiviral agents for the treatment of monkeypox cases within a framework of collaborative clinical efficacy studies, using standardized design methods and data collection tools for clinical and outcome data, to rapidly increase evidence generation on efficacy and safety.
- ☐ When the use of vaccines and antivirals for monkeypox in the context of a collaborative research framework is not possible, use under expanded access protocols can be considered, such as the Monitored Emergency Use of Unregistered and Investigational Interventions (MEURI), under certain circumstances, using harmonized data collection for clinical outcomes (such as the WHO Global Clinical Platform for Monkeypox).

### Innovation, development and manufacturing capacity for medical countermeasures

- ☐ Raise production and the availability of medical countermeasures.
- ☐ Work with WHO to ensure necessary supplies are made available based on public health needs, on solidarity, and at reasonable cost to countries.

### Relevant guidance documents:

- [Temporary Recommendations issued by the WHO Director-General in relation to the multi-country outbreak of monkeypox, October 2022](#)
- [WHO R&D Blueprint: Monkeypox](#)
- [WHO R&D Blueprint: WHO Monkeypox research – What are the knowledge gaps and priority research questions? 2–3 June 2022](#)
- [WHO monkeypox research: What study designs can be used to address the remaining knowledge gaps for monkeypox vaccines? 2 August 2022](#)
- [CORE Protocol: A randomized, placebo-controlled, double-blinded trial of the safety and efficacy of treatments for patients with monkeypox virus disease, 24 July 2022](#)
- [Emergency use of unproven clinical interventions outside clinical trials: ethical considerations, 12 April 2022](#)
- [Monkeypox Strategic preparedness, readiness, and response plan, July 2022–June 2023](#)





## Operational support and logistics

### Key activities and capacities

- ☐ Based on the results of a needs assessment, develop and adopt an operational support and logistics (OSL) plan with the Ministry of Health, relevant partners and sectors for the best use and organization of available resources.
- ☐ Support consolidation of supply-need forecasts to define, calibrate and implement appropriate supply chain strategies as needed.
- ☐ Implement supply chain control and management system (procurement, storage, security, transportation and distribution arrangements).
- ☐ Review procurement processes (including importation and customs).
- ☐ Assess the capacity of the local market for local procurement for items needed for optimal care wherever suitable.
- ☐ Evaluate and ensure storage capacities, cold chain and stock management for procurement of new vaccines, therapeutics and supplies as needed.
- ☐ Prepare staff surge capacity and deployment mechanisms; health advisories (guidelines and SOPs); pre-deployment and post-deployment packages (briefings, recommended/mandatory vaccinations, enhanced medical travel kits, psychosocial and psychological support including peer support groups) to ensure staff wellbeing.
- ☐ Ensure sample collection transport mechanism from point of origin to reference laboratory is reliable and operational at national and international levels.
- ☐ Assess and map operational support capacities and resources and gaps in country (offices, accommodation, transport infrastructures, resources resources) to plan required resources.
- ☐ Assess communication network capacity.
- ☐ Update and approve logistics SOPs covering supply, procurement, sample transport, telecommunications, structures support and maintenance, transport resources mobilization, and security management.
- ☐ Share and review vaccination protocols with logistician and case management and vaccination pillars.
- ☐ Ensure the logistics component of the incident management system (IMS) is operational in affected prefectures/districts where needed.
- ☐ Maintain logistical expertise in country to provide operations support for preparedness and readiness.
- ☐ Establish warehouse and transportation capacities and implement decentralized approaches as appropriate.



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