Infection prevention and control and water sanitation and hygiene in health facilities during mpox disease outbreaks: rapid assessment tool, user guide



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ISBN 978-92-4-010532-4 (electronic version) ISBN 978-92-4-010533-1 (print version)

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Cataloguing-in-Publication (CIP) data. CIP data are available at https://iris.who.int/.

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Acknowledgements

The World Health Organization (WHO) gratefully acknowledges the following individuals and organizations who contributed to the development of this user guide and rapid assessment tool.

The development of this document was coordinated by April Baller, who also co-led the writing together (in alphabetical order) with Hannah Hamilton Hurwitz, Mahmoud Hamouda, Soro Lacina, Madison Moon, Nosheen Usman and Victoria Willet of the Department of Country Readiness Strengthening, WHO Health Emergencies Programme.

WHO Regional Office of Africa

Landry Kabego

WHO country office, Democratic Republic of the Congo

Raphael Okum

UK Health Security Agency, UK Public Health Rapid Support Team

Emilio Hornsey and Anthony Twyman

United Nations Children's Fund (UNICEF)

Pierre-Yves Oger

Declaration of interest

Declarations of interests (DOI) have been collected and assessed for all external reviewers.

Financial support for this document is provided by WHO Contingency Fund for Emergencies.

Acronyms

ABHR	Alcohol-based handrub
IPC	Infection prevention and control
IPC-WASH RAT	Infection prevention and control - water, sanitation and hygiene rapid assessment tool
SOP	Standard operating procedure
PPE	Personal protective equipment
RAT	Rapid assessment tool
WASH	Water, sanitation and hygiene
WHE	WHO Health Emergencies Programme
wно	World Health Organization

Glossary

Alcohol-based handrub (ABHR): An alcohol-containing preparation (liquid, gel or foam) designed for application to the hands to inactivate microorganisms and/or temporarily suppress their growth. Such preparations may contain one or more types of alcohol, other active ingredients with excipients and humectants (1).

Ampoule: A hermetically sealed, small, bulbous glass vessel that is used to hold a solution for hypodermic injection (2).

Cleaning: The physical removal of foreign material (e.g. dust, soil) and organic material (e.g. blood, secretions, excretions, microorganisms). Cleaning physically removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action. Cleaning is the first step in the decontamination process (3).

Cohorting: Grouping of patients who are colonized or infected with the same microorganism with the aim to confine their care to one area and prevent them from coming into contact with other susceptible patients. Cohorts are created based on clinical diagnosis, microbiological confirmation with available epidemiology and the mode of transmission of the infectious agent (4).

Decontamination: The removal of soil and pathogenic microorganisms from objects so they are safe to handle, subject to further processing, use or disposal. There are several steps to effective decontamination of medical devices and personal protective equipment (PPE), including but not limited to: cleaning, disinfection and sterilization (*3, 5*).

Disinfection: A process to reduce the number of viable microorganisms to a less-harmful level. This process may not inactivate bacterial spores, prions and some viruses (3).

Geospatial location: Information consisting of, derived from, or related to data that are directly linked to specific geographical locations (2).

Hand hygiene: A general term referring to any action of hand cleansing; that is, the action of performing hand hygiene for the purpose of physically or mechanically removing dirt, organic material, and/or microorganisms (1).

Hand hygiene station: A station equipped with alcohol-based handrub solution (ABHR) OR water, soap and clean single-use towels at the point of care, within 5 metres of toilets and other areas, such as the sterile services departments, laboratories and mortuaries (4).

Health worker: Anyone primarily engaged in actions with the primary intent of enhancing health (6).

IPC committee: A multidisciplinary group of interested stakeholders across the facility, which interacts with and advises the IPC team. For example, the IPC committee could include senior facility leadership, senior clinical staff and leads of other relevant, complementary areas, such as biosafety, pharmacy, microbiology or clinical laboratory, waste management, water, sanitation and hygiene services and quality and safety, where in place (4).

IPC link person: Nurse or doctor (or other health professional) in a ward or within the facility (for example, staff working in clinical services, such as intensive care unit or maternal and neonatal care or water, sanitation and hygiene or occupational health) who has been trained in IPC and links to an IPC focal point/team at a higher level in the organization (for example, IPC focal point/team at the facility or district level). IPC is not the primary assignment of this professional but he/she may undertake tasks in support to IPC, including, for example, supporting implementation of IPC practices; providing mentorship to colleagues; monitoring

activities; and alerting on possible infectious risks (7).

IPC focal point: IPC professional appointed to be in charge of IPC at the national, subnational or facility/ organization level (7).

IPC professional: Health-care professional (medical doctor, nurse or other health-related professional) who has completed a certified postgraduate IPC training course or a nationally or internationally recognized postgraduate course on IPC, or another core discipline including IPC as a core part of the curriculum as well as IPC practical and clinical training (7).

Isolation: Isolation involves the creation of a barrier to prevent the spread of infectious diseases and multidrug-resistant organisms from one patient to another and to health care workers, carers and visitors (8).

Readiness phase: The state which links effective preparedness to efficient relief; a statement of the capacity and capability of a relief agency or service. These activities may take up to 6 months in order to ensure readiness for a specific defined threat (9).

Response phase: The setting in which emergency actions exceed the usual level of activities, in response to a defined public health threat (9).

Outbreak: A disease outbreak is the occurrence of cases of disease in excess of what would normally be expected in a defined community, geographical area or season (10).

Physical contact: Direct contact – contact with the patient or patient blood and body fluids.

Indirect contact: Contact with the potentially contaminated environment or equipment (adapted from Transmission-based precautions for the prevention and control of infections) (11).

Sanitation facility (improved): Toilet facilities that hygienically separate human excreta from human contact. Examples include flush/pour flush to a piped sewer system, septic tank or pit latrine, ventilated pit latrine, pit latrine with slab or composting toilet (4, 8).

Screening: A process through which an individual is evaluated to see whether that person meets a standardized case definition (*12*).

Sharps waste: Used or unused sharp items that could cause cuts or puncture wounds that could lead to infection. Examples include instruments (such as scalpels and blades), needles, syringes and broken glass or ampoules (13).

Steam sterilization equipment: Steam is the best sterilizer for heat-stable devices. It can be heated above 100°C only by increasing the pressure to exceed that of normal atmosphere at sea level. Removal of the air (required) from the chamber (via gravity or vacuum) causes pressurized, saturated steam to penetrate the packages in the chamber, where it is held (holding time). The steam is then extracted by reintroducing air to the chamber. Steam sterilization using an autoclave may not always be possible. Some of the options available for low-temperature sterilization are: low-temperature plasma sterilization, ethylene oxide gas, vaporized hydrogen peroxide, H_2O_2 -gas plasma, chemical disinfectants (glutaraldehyde, peracetic acid) and ultraviolet light (3, 5).

Patient-care area: Any area where patient care is provided directly (e.g. examination room) or indirectly (e.g. medication preparation area). This includes the surrounding health-care environment (e.g. patient toilets) (14).

Point of care: The place where the following three elements come together: the patient, the health worker and care or treatment involving contact with the patient or his/her surroundings (within the patient zone) (4).

Primary health-care facilities: Facilities that provide outpatient services, family planning, antenatal care,

maternal, newborn and child health services (including delivery), for example, health centres, health posts. For this document, any facility that has in-patient beds is included (4).

Primary-level hospital: A hospital with few specialties—mainly internal medicine, obstetrics and gynaecology, paediatrics and general surgery, or just general practice; limited laboratory services available for general, but not specialized, pathological analysis (4).

Secondary-level hospital: A hospital highly differentiated by its function, with five to 10 clinical specialties; sizes range from 200 to 800 beds; often referred to as a provincial or district hospital (4).

Tertiary-level hospital: A hospital with highly specialized staff and technical equipment, for example, cardiology, intensive care unit and specialized imaging units; clinical services highly differentiated by function; may have teaching activities; sizes range from 300 to 1 500 beds; often referred to as a teaching or university or regional hospital (4).

Vial: A small, closed or closable vessel, especially for liquids (2).

Wastewater: Wastewater produced from washbasins, showers, sinks (grey water) and from flushing toilets (black water) (15).



Introduction

1. Introduction

The rapid assessment tool (RAT) is meant to assess health facilities within mpox-affected areas that have at least one inpatient bed. Depending on time and resources available, certain facilities may be prioritized during an mpox outbreak. The RAT evaluates 16 infection prevention and control (IPC) and water, sanitation and hygiene (WASH) criteria identified as the minimum essential elements required for safe patient care and prevention of transmission within the health facility during readiness or response activities for outbreaks of mpox. The IPC-WASH RAT collects data as part of an IPC-WASH health facility performance assessment; helps to identify gaps; and guides the development of an improvement action plan and prioritization of activities based on the criteria not met.

The IPC-WASH RAT user guide is intended to provide instructions to those individuals who are conducting IPC assessments of a facility, regardless of the individuals' previous IPC and/or WASH experience. During mpox outbreaks, they might include but are not limited to IPC managers, IPC implementers, IPC committee members, IPC focal points, IPC response teams and WASH team members.

This guide describes the parameters for each criterion, data collection exercise and follow-up action based on the assessment findings and recommendations. The tool itself provides information to help detect IPC- and WASH-related gaps in health facilities; monitor the implementation of IPC-WASH activities in response to an outbreak; build an improvement plan for the assessed health facilities; and maximize the IPC-WASH response. It is important that those conducting the assessment are trained and knowledgeable about how to score each parameter of the tool so that they can achieve meaningful results and action plans.

A critical activity to support this process is mentorship and supportive supervision for IPC-WASH. This requires the external IPC and/or WASH expert to interact regularly with the focal person in the facility to address IPC-WASH issues and to provide support for implementation of improvement plans while strengthening the capacity of the IPC focal person-WASH engineer to provide expertise to their respective facility.

Support for training of health workers, provision of available tools and increasing general knowledge of IPC standards and transmission precautions will help strengthen the capacity of the IPC focal person in the facility. The provision of supportive supervision and mentorship in health facilities using this tool will enhance their ability to achieve sustainable improvements in IPC and WASH.

The IPC-WASH RAT for health facilities during mpox outbreaks and its user guide should be used in conjunction with related IPC and WASH resources, such as the Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance (16), Sphere Handbook (17), WHO safe management of wastes from health-care activities (18) and case definitions (not an exhaustive list) (19).

This tool is not meant to be used outside of the context of readiness or response for mpox outbreaks. Nor is it meant to be used in dedicated mpox treatment centres.

Countries should refer to the Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the national level, whereas health facilities should refer to the Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the health care facility level to guide their planning for outbreak management outside the context of mpox.

Other tools, such as the Assessment tool of the minimum requirements for infection prevention and control programmes at the national level should be used during the preparedness phase (e.g. during programmatic delivery of services when there is no ongoing mpox outbreak).

Links to these tools are found here:

- Assessment tool of the minimum requirements for infection prevention and control programmes at the national level. World Health Organization: Geneva; 2021. <u>https://www.who.int/publications/m/</u> <u>item/assessment-tool-of-the-minimum-requirements-for-infection-prevention-and-control-</u> <u>programmes-at-the-national-level</u>
- Infection prevention and control assessment framework at the facility level. World Health Organization: Geneva; 2018. <u>https://iris.who.int/handle/10665/330072</u>.
- Assessment tool on infection prevention and control minimum requirements for primary health care facilities. World Health Organization: Geneva; 2023. <u>https://iris.who.int/handle/10665/367505</u>
- Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the health care facility level. World Health Organization: Geneva; 2022. <u>https://iris.who. int/handle/10665/361522</u>.
- Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the national level. World Health Organization: Geneva; 2021. <u>https://iris.who.int/handle/10665/345251</u>.
- Infection prevention and control health-care facility response for COVID-19. World Health Organization: Geneva; 2020. <u>https://www.who.int/publications/i/item/WHO-2019-nCoV-HCF_assessment-IPC-2020.1</u>.



Methodology

2. Methodology

The IPC-WASH RAT was created as an "IPC Scorecard" rapid assessment tool during the 2014–2016 West African Ebola outbreak in Liberia. It was subsequently revised and validated during the Uganda Sudan virus outbreak, 2022–2023 using a mixed-method approach combining a prospective descriptive study of priority health facilities impacted by the outbreak and focus group discussions with the assessors.

In 2024, at the onset of the WHO's declaration of a public health emergency of international concern for mpox, this user guide was adopted and adapted for use in mpox disease outbreaks. Each criterion presented in the tool was selected and reviewed to ensure it aligns with the recommendations and implementation considerations in the Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance (*16*). Additional referces such as the WHO Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level (*8*), the Minimum requirements for infection prevention and control programmes (*4*), the WHO Safe management of waste from health-care activities: a summary (*18*) and the WHO technical notes on drinking water (*20*) were consulted.

Subsequently, the tool was circulated in the Democratic Republic of the Congo and widely used to assess numerous health facilities during two deployments from WHO headquarters to support IPC. Between September and November 2024, feedback obtained from use of the tool was discussed during weekly calls with the WHO Country Office IPC focal points in the Democratic Republic of the Congo (who were conducting the assessments with WHO headquarters support), the WHO Regional Office for Africa and WHO headquarters. Revisions were then made based on these conversations to provide additional clarity to the criterion.

The user guide and tool were subsequently circulated to external reviewers (see Acknowledgements) for critical review and feedback, which enhanced the clarity of instructions.



Instructions

3. Instructions

Section 3 provides detailed instructions for the assessor to evaluate each criterion in the tool.

Number of assessors and who should be an assessor

WHO advises that at least two assessors conduct the evaluation collaboratively. One should be an individual from the health facility being assessed. This individual might be someone with IPC-WASH experience, someone without this background who has been trained to use the IPC-WASH RAT or an IPC manager/ health facility manager who can help implement the recommended changes based on the results of the IPC-WASH RAT. The second individual should be an external assessor, for example, someone from WHO or an implementing partner.

How to undertake an assessment

Prior to the assessment, organize the date, time and persons who will be involved. On the day of the assessment, meet first with the health facility manager to explain the purpose and duration of the assessment, and who will be involved. Once the assessment has been completed and concurrence achieved, data should be shared with the health facility managers (if they were not already part of the assessment) to discuss and identify any gaps, areas for improvement and follow-up assessments, as required. The improvement process is outlined more in Section 4.

The glossary and definitions section of the RAT should be referred to if the assessor needs clarity related to specific terminology used in the tool, for example, "hand hygiene station".

Frequency of using the RAT

In general, the timing of assessments should be based on the scores of the prior assessments. For example, WHO suggests that facilities that receive a score of <50% be reassessed in 2 weeks from the baseline assessment, in addition to receiving daily supportive supervision and mentorship; those that score 50–79% should be reassessed in 3 weeks while receiving supportive supervision and mentorship 2–3 times per week. Those with a score of 80% or higher should receive weekly supportive supervision and mentorship and be reassessed in 4 weeks.

The timing of reassessment will depend on the number of facilities requiring assessments as well as the resources (human, time, financial, etc.) available to conduct assessments and to provide support during the outbreak response.

Data collection and ownership

The data can be collected using a paper form or directly on an electronic platform. Data collected on a paper form can then be uploaded into an electronic data collection platform, such as KoboCollect (countries will be able to access and analyse only their own data). Countries and regions may also choose to use existing national or regional data-collection systems.

While WHO headquarters has created this IPC-WASH RAT for mpox, the data collected belong to the country in which they were collected and, at the time of this writing, WHO neither manages nor supports the KoboCollect platform. WHO headquarters will access the country data only if the individual countries that collected them grant permission to WHO.

Criteria

The form has several sections, all of which must be completed except for the geospatial location, which is an optional parameter.

The initial section of the form includes the health facility identification and assessment information, which captures the information about the facility and who is completing the form.

Subsequently, the RAT is divided into the following 16 sections spanning key IPC and WASH measures:

Section 1: IPC leadership at the health facility Section 2: Health worker training Section 3: Hand hygiene Section 4: Screening capacity Section 5: Care and capacity for isolation Section 6: Personal protective equipment (PPE) Section 7: Injection safety and sample collection Section 8: Environmental cleaning and disinfection Section 9: Decontamination of medical equipment and devices Section 10: Inpatient identification of mpox and management Section 11: Health worker post-exposure management Section 12: General patient placement Section 13: Sanitation Section 14: Water supply and storage Section 15: Waste management Section 16: Management of deceased patients

Scoring

Each section has criteria that need to be scored. For each criterion, a "Yes" is scored as 1 point and a "No" is scored as 0 points. The points for each section are added together to calculate a subtotal. These subtotals are added together to calculate the total score. To calculate the percentage, the total score is divided by the maximum possible score of 79.

Score calculation: Total points achieved ÷ Total possible points = Percentage

The assessor will need to modify the frequency of assessments based on the overall score and performance of health facilities assessed during the outbreak. See Section 4 for more details and for instructions on follow-up monitoring and development of an action plan for improvement.

3.0 Health facility identification and assessment information

Health facility and assessment information	Instructions
Date of assessment	Fill out the date in the DD/MM/YYYY format.
Geospatial location/coordinates	This is the ONLY optional parameter. If possible, use a phone to obtain geospatial coordinates of the health facility. When determining coordinates, ensure you have an unobstructed view of the sky (this question can be at the beginning or the end of the form, automatically collected on a mobile phone when prompted). If geospatial coordinates are obtained, add them into this section. If they are not available, leave this section blank.
Outbreak/disease: Mpox	Select mpox.
Region/state/province	The section should be adapted to reflect the country's
District	administrative structure before deployment. The list, including the official names of the health facilities, should
Sub-district	be pre-populated in the online tool.
Health facility	
Type of health facility	
Mpox treatment centre? (a centre developed exclusively for the care and treatment of patients with mpox). (y/n)	Indicate if this is an mpox treatment centre by responding "Yes" or "No". If "Yes", stop the assessment. This RAT is not for use in treatment centres. If "No", then proceed with the assessment.
 Facility level Primary health-care facility with at least 1 in-patient bed Primary-level hospital Secondary-level hospital Tertiary-level hospital 	Before deployment of this tool, the section should be adapted to the country's health system terminology or administrative structure. The terminology can be pre- loaded into the online tool. Select primary health-care facility, primary-, secondary- or tertiary-level hospital to describe the facility level.
Authority Government Private not-for-profit Private	The section should be adapted to the national context. Select the appropriate authority of government, private not-for-profit or private. Always refer to administrative documents to verify that this parameter is filled out accurately.
Number of beds in the facility	Record the total number of inpatient beds within the health facility. Check with hospital administration or census data to determine how many beds are in the facility. If no documented information is available, consider a manual count.
Total number of health workers in the health facility	Record the total number of health workers employed in the health facility.
Total number of health workers participating in the assessment	Record the number of health workers accompanying the assessor in the current assessment (IPC focal personnel, IPC committee, nurses, etc.).
Name of the IPC focal point/IPC link of the health facility or designate participating in assessment	Record the full name (first and last name) of the IPC focal point/IPC link of the health facility or the member of the IPC committee involved in the assessment and whom to contact for follow up (more than one person may be recorded).
Phone number of the IPC focal point/IPC link of the health facility or designee	Record the phone number of the IPC focal person/IPC link or the committee member involved in the assessment (as recorded above).

Health facility and assessment information	Instructions
This assessment is performed in response to a case or during readiness phase. □ Response to a case □ Readiness	Select the reason for the assessment (Response to a case either at the facility or in the immediate community served by that facility or priority health facility identified for readiness).
Does the facility have a reported (suspected or confirmed) mpox case (visitor or patient)?	Inquire/assess if the facility has reported a case (suspected or confirmed) of mpox in either a visitor or patient and select "Yes" or "No" accordingly.
Assessor's email	Record contact information of the external person
Assessor's phone	(mobile) phone number.

3.1 IPC leadership at the health facility

	1. IPC leadership at the health facility	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
1.1	The facility has at least one of the following: an IPC committee and/or a trained and dedicated IPC-WASH focal person or IPC link person.	Refer to definitions of IPC-WASH focal person, IPC link person and IPC committee to assess this criterion. The presence of a focal person, a link person or a committee is enough to select "Yes". If none are present, select "No".
1.2	During the last 2 weeks, the facility has held at least one mpox-related IPC meeting.	To select "Yes", confirm that meeting minutes are available for confirmation and meeting participants have discussed IPC topics specific to the mpox response within the last 2 weeks (as of date of assessment). Select "No" if there was no IPC meeting related to mpox within the last 2 weeks.
1.3	The facility has adopted standard operating procedures (SOPs) for standard precautions (risk assessment, hand hygiene, respiratory hygiene and cough etiquette, patient placement, personal protective equipment (PPE), aseptic technique, safe injections and sharps injury prevention, environmental cleaning, laundry and linen, waste management and management of reusable patient-care items and equipment) that are in line with international or national guidelines.	To select "Yes", confirm that policies, SOPs or work instructions are available in either printed form or on a digital platform easily accessible to all health workers. The precise number of SOPs may vary according to the scale of the health facility, but they should include, at a minimum: screening, triage and isolation, health worker exposure management, cleaning and disinfection, putting on and taking off PPE, waste management and safe management of dead bodies. They should be updated according to the latest mpox guidelines. Select "No" if there are no policies or SOPs specific to IPC and WASH for mpox.

3.2 Health worker training

	2. Health worker training	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
2.1	Within the last 6 months, all health workers have been trained on standard precautions (risk assessment, hand hygiene, respiratory hygiene and cough etiquette, patient placement, PPE, aseptic technique, safe injections and sharps injury prevention, environmental cleaning, laundry and linen, waste management and management of reusable patient care items and equipment). Request written records as validation.	To select "Yes", review documentation of IPC and WASH training from the last 6 months and ensure all health workers at the facility have received training during that time frame covering all topics listed. Any training on IPC and WASH topics meets the criteria; it does not have to be specific to mpox. However, verbal reports of training without written evidence from training records are not sufficient to meet the criteria and, in such cases, "No" should be selected. "No" should also

	2. Health worker training	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
		be selected if no training has occurred in the last 6 months. On the paper form, if all training topics have been taught to all health workers in the last 6 months, select "Yes" for the criterion. Otherwise, select "No" (the all-or-none principle applies). On the online platform, check only those training topics that were taught to all health workers in the last 6 months. Identify the missing items so they can be addressed in the action plan.
2.2	Health workers have been trained on IPC practices specific to mpox within the last 2 months: screening, isolation, PPE, injection safety and post-exposure management.	This criterion focuses on specific training for mpox in the context of the current outbreak, regardless of whether the facility is in a readiness or response phase. Select "Yes" if training was completed within the past 2 months and covered all four listed topics and all health workers were trained. In other words, to meet the criterion, the all-or-none principle applies: if any element is missing or if all health workers have been not trained, select "No". In such cases, identify the missing items so they can be addressed in the action plan.

3.3 Hand hygiene

	3. Hand hygiene	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
3.1	The screening area has a functional hand hygiene station (i.e. alcohol-based handrub (ABHR) dispensers or soap, water and disposable towels).	A functional hand hygiene station contains clean water and soap or ABHR or, if neither is available, a 0.05% chlorine solution. To select "Yes" for this criterion, ensure that the station is operational at the location of screening. Check this by observing and testing the station and by questioning health workers. If not all of the criteria above are met, select "No".
3.2	Functional hand hygiene stations (i.e. ABHR or soap, water and disposable towels) are available at all points of care.	A functional hand hygiene station contains clean water and soap or ABHR or, if neither is available, a 0.05% chlorine solution. To select "Yes" for this criterion, ensure that the station is operational at every point of care. Check this by observing and testing the station and by questioning health workers. If not all of the criteria above are met, select "No".
3.3	A functional hand hygiene station is available within 5 metres of toilets/latrines.	A functional hand hygiene station contains clean water and soap or ABHR or, if neither is available, a 0.05% chlorine solution. To select "Yes" for this criterion, an operational station must be located within 5 metres of every toilet/latrine block. Check this by observing and testing the station and by questioning health workers. If not all of the above criteria are met, select "No".

	3. Hand hygiene	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
3.4	Hand hygiene posters are displayed at all hand hygiene stations.	Assess this by observation. Refer to Annex 2 for example of poster. If posters are not on display at all hand hygiene stations or if the posters show incorrect procedure, select "No". If posters showing the correct procedure are on display, select "Yes".
3.5	The facility monitors hand hygiene compliance (every 3 months) using the WHO hand hygiene observation tool or equivalent.	Request documentation of the hand hygiene observation and monitoring programme. If a hand hygiene observation and programme is in place and is completed every 3 months, select "Yes". Select "No" if there is no hand hygiene observation and monitoring programme or if it is done less frequently than every 3 months.

3.4 Screening capacity

	4. Screening capacity	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
4.1	The health facility has a screening station at each of its entry points.	The health facility has clearly directed all patients, visitors and health workers to designated screening stations that are at each entrance of the facility. To select "Yes", verify that screening stations are clearly marked and that there is a clear directional flow to verify that all those entering the health facility are screened. If that cannot be verified, select "No".
4.2	A questionnaire or screening tool based on local epidemiology is used for everyone entering the health facility.	Verify that a screening tool/job aid that includes an algorithm based on the latest case definition is included at each screening station. If this is present, select "Yes"; if it is not, select "No". Refer to Annex 2 for an example of a screening tool.
4.3	A functional, non-contact thermometer is available at screening points.	Check if the thermometer is functional. To select "Yes", verify that it has batteries in place and that results are calibrated following thermometer-use instructions. If the thermometer is not functional, select "No".
4.4	There is a distance of at least 1 metre between screener and patient/visitor.	To select "Yes", verify that there is a separation of at least 1 metre between the screener and all patients/ visitors. If screeners are not able to maintain at least 1 metre distance, select "No".
4.5	Temperature is correctly taken using a non-contact thermometer and the reading is verified.	Observe at least two health workers taking temperatures during screening and refer to the thermometer user manual for operation. Different models of no-contact thermometers may have slightly different user instructions. Ensure you are assessing the correct procedure for that model. To select "Yes", observe that the health workers are taking temperatures according to the thermometer operating instructions; otherwise, select "No".

	4. Screening capacity	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
4.6	Suspected cases are transferred directly from screening to an isolation area or unit for triage/ clinical evaluation (using the local case definition) and appropriate referral pathway.	Refer to case definition for suspected cases. There should be a defined process and referral pathway with identified steps for health workers to follow when a suspected case is identified. This should be written and available to all health workers. To select "Yes", verbally confirm with a health worker that they are aware of the pathway. If there is no written protocol or awareness of steps or pathway to take when identifying a suspected case, select "No".
4.7	Screeners have access to PPE on an as-needed basis (based on risk assessment).	Through observation and asking the screeners, select "Yes" if PPE – including a medical mask, gown, gloves, and eye protection – is available to each screener for use on an as-needed basis. PPE should not be worn all the time during screening. If the listed PPE is not available or is inaccessible (such as in a locked cabinet), select "No".
4.8	Identified, suspected patients are provided a medical mask and asked to cover their lesions, if possible, and wash their hands.	Through observation and asking the screeners, select "Yes" if a person identified as suspected during screening is given a medical mask to immediately put on and told to cover as many of their lesions as possible, and then to wash their hands. Select "No" if any of the above do not occur or are not asked.

3.5 Safe care and capacity for isolation

	5. Safe care and capacity for isolation	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
5.1	The facility has an isolation area or unit for mpox cases.	All health facilities must have an isolation area. Primary health-care facilities may not have a dedicated room but instead may have a clearly marked, dedicated area away from other patients that is clearly identified for the suspected case. In secondary-care or tertiary- care facilities or temporary isolation tents, at least one single- patient room is a minimum requirement. Select "Yes" if there is a dedicated isolation area or unit. If there is no space or area to isolate a suspected patient, select "No".
5.2	The isolation area/unit is easily identified and separate from other units/services.	To select "Yes", verify that there is a clear separation between the dedicated isolation area/unit and other health facility units and that clear signage identifies the isolation area/unit. If one or both is not present, select "No".
5.3	There is a designated area for putting on PPE and a separate area for taking off PPE.	To select "Yes", verify that there are separate areas for putting on and taking off PPE, each with a hand hygiene station. Verify that, in the area for removing PPE, there is a full-length mirror and/or a buddy system (to supervise putting on and taking off of PPE) and there are containers for used PPE/waste. If there is no separate area or any of the items listed above are missing, then select "No".
5.4	Patients in the isolation area/unit remain in the designated area unless they are being transferred to the mpox treatment centre for medical care that is not available in the isolation unit, or they are being	To select "Yes", observe that no suspected patients are mingling with others or are outside of the designated area unless they are being transferred for medical care that cannot be provided in the isolation unit or

	5. Safe care and capacity for isolation	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
	discharged.	are being discharged for home isolation. If any of the above occurs, select "No". If no suspected patients are present, ask health workers when it is acceptable for a suspected patient to leave the isolation area, if they answer they can leave for any reason other than medical care then select "No".
5.5	Suspected mpox patients are isolated in single-patient rooms. If isolation capacity is limited, suspected patients are referred elsewhere as per local or national referral pathways.	Select "Yes" if all patients suspected of having mpox per the national or local case definition are individually isolated in their own rooms. Select "Yes" if, due to space limitations at the facility, they are referred to another facility using the correct referral protocol. Select "No" if there is more than one suspected patient in a room (or rooms) together or if patients are not correctly referred, per guidance, to other facilities when capacity is limited.
5.6	Suspected and confirmed patients are kept separate from one another and do not intermingle.	Select "Yes" if all patients suspected of having mpox are isolated away from confirmed patients (per the national or local case definitions) and are not intermingling in any manner or at any time. Select "No" if there are any occasions in which you observe or, through asking health workers, learn of contact or mingling between suspected and confirmed cases.
5.7	Functional hand hygiene stations (i.e. ABHR or soap, water and disposable towels) are available at all points of care within the isolation area or unit.	If there is a functional (operational) hand hygiene station at all points of care in the isolation area or unit, select "Yes"; if a hand hygiene station is not present in every point of care area, or not operational, select "No".
5.8	Patient beds are spaced at least 1 metre apart.	Observe spacing between patient beds; if they are more than 1 metre apart, select "Yes". If any beds are closer than 1 metre or if patient relatives are sleeping between beds and thereby reducing the space between beds to less than 1 metre, select "No".
5.9	There is only one patient per bed.	Observe and, if you see that patients are sharing beds during the assessment, select "No". If you see only one patient in a bed, select "Yes".
5.10	The isolation area/unit is configured in a unidirectional flow for patients.	There is no crossing between the flow of patients and the flow of staff at either the entry or exit points. Unidirectional flow (between and within the isolation area) should be present. Separate entrances and exits should be present for both health workers and patients, respectively. Patient-care supplies must move from low-risk zones to high-risk zones (isolation areas/units). Waste is removed from the high-risk zone (isolation area/unit) directly to waste-storage and waste-treatment areas. Assess this by observing and questioning health workers on the process and select "Yes" if unidirectional flow is present. If unidirectional flow is not present for all parameters, select "No".
5.11	The isolation unit is well-ventilated (including through the use of natural ventilation).	Select "Yes" if there is sufficient natural or mechanical ventilation by assessing if windows are open and the following is in place: Overall airflow moves from clean to dirty zones and outdoor air is consistently delivered indoors. Well-ventilated is defined as at least 6 air changes per hour or 60 litres/second/patient using natural or mechanical ventilation. Note: Fans should

	5. Safe care and capacity for isolation	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
		not be used in the rooms. If any of the above is not in place, select "No".
5.12	There is a designated toilet/latrine (e.g. toilet or pit toilet) for each isolated suspected and confirmed patient.	To select "Yes", verify that there is a separate toilet or latrine for each patient (suspected or confirmed). If toilets are not available and commodes or buckets are used and dedicated for the patient, then select "Yes". If there is any sharing of toilets, latrines or commodes among any patients in the isolation area/unit, select "No".
5.13	Environmental cleaning and disinfection SOPs exist for cleaning and disinfection of toilets/latrines in the isolation area/unit at least twice daily with a signed cleaning schedule. Frequency of cleaning and disinfection is increased toilets/latrines are shared.	To select "Yes", verify that environmental cleaning policies, SOPs or work instructions are available in either printed form or on a digital platform accessible to all health workers in the isolation area AND an up- to-date, signed cleaning schedule is present for every toilet/latrine showing at least twice daily cleaning. In addition, verify that the SOPs reflect the latest mpox cleaning and disinfection guidelines. Select "No" if there are no mpox environmental cleaning and disinfection policies or SOPs accessible to staff; if the SOPs are available but not for all staff; or if there is not an up-to-date, signed cleaning schedule at every toilet/latrine.
5.14	Health workers put on and take off PPE correctly and in line with local or national SOPs (observe at least two health workers in isolation area or room putting on and taking off PPE).	If possible, observe at least two health workers putting on and taking off PPE; if that is not possible, then question at least two health workers on the process. If they describe or demonstrate any errors in the process, select "No" for this criterion.
5.15	Visitors to the isolation unit are managed according to local or national policies.	Select "Yes" if visitors are correctly managed according to national or local policies, such as being required to wear PPE and wash their hands before entering the isolation area or alternative options for visitation are in place (e.g. videoconference). Visitors provide important support in promoting the well-being of patients. Visitors or caregivers should receive instruction and be closely supervised on the use (putting on and taking off) of PPE for contact and droplet precautions. Vulnerable individuals should be counselled regarding the risks so that they can make an informed decision on whether to visit the patient.

3.6 Personal protective equipment (PPE)

	6. Personal protective equipment (PPE)	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
6.1	Posters that describe how to put on and take off PPE are displayed in areas where those activities occur.	Posters that describe how to put on/take off PPE in the context of mpox should be displayed in all areas for putting on and taking off PPE (refer to Annex 4 for examples of PPE posters).
6.2	Facility PPE SOPs are in alignment with national mpox guidelines (gloves, gown and eye protection).	To select "Yes", verify that PPE SOPs are aligned with the latest mpox guidelines, requiring use of all of the types of PPE: gloves, gown and eye protection. Select "No" if the SOPs for PPE do not align or there are no policies or SOPs specific to IPC for mpox.

	6. Personal protective equipment (PPE)	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
6.3	The facility has the required PPE available to manage patients with suspected or confirmed mpox (gloves, gown and eye protection).	Check each item that is available, but note that, to achieve "Yes", observers must apply the all-or-none principle. If even one element is missing, "No" should be selected. Identify which items are missing so that this information can be included in the improvement plan. On the paper form, if all items are present, then check "Yes" for the overall criterion. Otherwise, check "No". On the online platform, check only those items that are available.

3.7 Injection safety and sample collection

	7. Injection safety and sample collection	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
7.1	The medication preparation area is observed to be clean and orderly.	Observe if the medication preparation area is clean. If there are no debris or soiled items and surfaces are visibly clean, select "Yes". If there is any visible soil or debris in the area, select "No".
7.2	Staff use one needle/syringe/intravenous cannula per patient for each injection.	Observe or ask health workers about use of needles and syringes. To select "Yes", you must determine that the needle/syringe/intravenous cannula has been taken from a new, sealed and undamaged package for each patient injection (21). Needles and syringes should not be reused between patients. A new, single- use needle and syringe should be used every time a patient is given an injection. If there is any concern that needles, syringes or intravenous cannulas are not single-use, then select "No".
7.3	Ampoules or vials are discarded immediately after the required medication dose is delivered (no open ampoules covered with gauze).	Observe the medication preparation area and the area around the patient's space for ampoules or vials that are partially used. Select "No" if any open ampoules or vials have not been disposed of. Observe if ampoules or vials are discarded immediately after the medication is withdrawn and not saved for reuse, as any remaining medication may be contaminated. Select "Yes" if ampoules or vials are discarded immediately after use.
7.4	Health workers discard needles, syringes and intravenous waste directly into approved, puncture- resistant sharps containers.	Sharps waste should be disposed of in puncture- resistant safety boxes that have been labelled with a biohazard symbol. The containers should be placed as close as possible to where the sharps are used to reduce the risk of injury during transport. Safety boxes should be on a stable surface and out of the reach of children. Observe and, if all sharps are discarded properly, select "Yes"; if appropriate containers are not available, sharps are found disposed of in containers that are not puncture-resistant, or are in the wrong locations (e.g. soft containers, waste-bins) select "No".
7.5	Sampling of mpox lesions is done by rigorous swabbing (no deroofing or sharps used).	Swab the lesion vigorously to ensure adequate viral DNA is collected. Swabs can be transported dry in capped tubes or placed in viral transport media. Specimens from two lesions – preferably from different locations on the body – should be collected in one

7. Injection safety and sample collection	
Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
	single tube. Avoid contaminating gloves during the process. Select "Yes" if this process is followed. Select "No" if deroofing the lesion is performed or if sharps are used in any manner during collection of a sample.

3.8 Environmental cleaning and disinfection

	8. Environmental cleaning and disinfection	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
8.1	Mattresses and bedframes are intact and covered with or constructed of an impermeable material (e.g. vinyl, plastic) that allows for cleaning and disinfection.	Observe several mattresses or mattress covers for impermeable material and whether they are intact (no rips or tears, visibly clean, with intact seams). This includes any mattresses used for an examination table or stretcher. If mattresses are in good condition, as described above, select "Yes". If any mattress is in poor condition or is ripped, select "No".
8.2	The facility has the necessary materials for cleaning and disinfecting the patient-care areas (any area where patient care is directly or indirectly provided), including screening and triage (materials include clean water, detergent, buckets, cleaning cloths, mops and disinfectant).	Ask for the list of disinfectants (chlorine-based solutions) available in the facility or ask to see the products. Observe the presence of the items listed. Check that each item is available, but note that, to select "Yes" for this criterion, you must apply the all-or- none principle. If even one element is missing, select "No". Identify which items are missing so that this information can be included in the improvement plan. On the paper form, if all items are available, select "Yes" for the criterion. Otherwise, select "No". On the online platform, check only those items that apply.
8.3	Health workers performing cleaning and disinfection activities wear appropriate PPE according to national or local SOPs (heavy-duty gloves, gown and eye protection).	If possible, observe at least two health workers while they are performing cleaning and disinfection activities; if that is not possible, then question at least two health workers on the correct PPE worn. If they describe or demonstrate any errors in what PPE to wear, select "No" for this criterion. The gloves should be heavy-duty gloves. Check that each item is correctly worn, but note that, to select "Yes" for this criterion, you must apply the all-or-none principle. If even one element is missing, select "No". Identify which items are missing so that this information can be included in the improvement plan. On the paper form, if all items are checked, then select "Yes" for the criterion. Otherwise, select "No". On the online platform, check only those items that are available.
8.4	Posters that describe how to prepare disinfectant solutions are displayed in preparation areas.	Observe for the presence of posters and verify that the visual aids show approved disinfectant solutions and concentrations for environmental cleaning in the context of mpox (e.g. minimum chlorine solution of 0.05%). If these are present, select "Yes"; otherwise, select "No".
8.5	Cleaning schedules are signed after cleaning and disinfection of the patient environment.	Observe if there is a posted, signed schedule or cleaning record that is up to date. If one is present,

	8. Environmental cleaning and disinfection	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
		select "Yes". If records are not present, completed incorrectly or incomplete, select "No".
8.6	Disinfectants (e.g. chlorine-based solutions) for general cleaning and disinfection are prepared and used (1-minute contact time) according to national or local guidelines/SOPs.	If possible, observe at least two health workers responsible for disinfectant preparation prepare the solution (at least 0.05% chlorine solution). If that is not possible, then question at least two health workers on the process. If questions are answered correctly and/or the correct process is observed, select "Yes". If questions are answered incorrectly or an incorrect process is observed, select "No".
8.7	Health workers perform cleaning and disinfection of the environment using a multi-bucket technique (at least 2 buckets – 1 containing soapy water and the other containing disinfectant).	If possible, observe at least two health workers responsible for environmental cleaning and disinfection performing cleaning and disinfection. If that is not possible, then question at least two health workers responsible for cleaning on the process. To select "Yes", verify that at least a two-bucket technique is used that includes: 1) soapy water, 2) prepared disinfectant, both of which were made within the past 24 hours. If a bucket system is not used, if the solutions are old, or if only spraying is used, select "No".
8.8	Health workers performing cleaning and disinfection have been trained on environmental cleaning and disinfection SOPs during the last 6 months.	Review training records and documents and interview health workers. If there is a record of training in the last 6 months, select "Yes". If there are no records or health workers do not know or answer in the negative, select "No".
8.9	Environmental cleaning and disinfection SOPs exist on the following: routine cleaning of high-touch surfaces 1) at least once daily in general wards and 2) at least twice daily in isolation rooms/units.	To select "Yes", verify that policies, SOPs or work instructions exist for mpox and are available in either printed form or on a digital platform easily accessible to all health workers. The precise number of SOPs may vary according to the scale of the health facility, but should include, at a minimum, the following topics: routine cleaning and disinfection of high- touch surfaces in general wards at least once daily and routine cleaning and disinfection of high-touch surfaces in general wards at least twice daily. Select "No" if there are no policies or SOPs specific to IPC and WASH for mpox.
8.10	Terminal cleaning SOP exists (includes discharges and/ or transfers).	To select "Yes", verify that policies, SOPs or work instructions exist and are available in either printed form or on a digital platform easily accessible to all health workers covering terminal cleaning of all indications, including transfer of a patient and discharge home. Select "No" if there are no policies or SOPs specific to IPC and WASH for mpox.
8.11	Laundry and linen are washed in warm or hot water (at least 20 °C) for at least 20 minutes OR washed in 0.05% chlorine in warm water for at least 20 minutes (without soap/detergent) OR machine-washed in hot water (70 °C) for 20 minutes.	If possible, observe the washing of linens by responsible health workers. If that is not possible, then question at least two health workers responsible for laundering of linens on the process. Check that each step of the process is correctly done, but note that, to select "Yes" for this criterion, you must apply the all-or-none principle. Required elements include: 1) hot or at least warm water used; 2) if handwashing, detergent or 0.05% chlorine solution is

8. Environmental cleaning and disinfection	
Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
	used and, if machine washing, at minimum hot water (70 °C) is used, preferably with detergent; 3) regardless of the washing method, washing is done for at least 20 minutes. If even one element is missing, select "No". Identify which items are missing so that this information can be included in the improvement plan.

3.9 Decontamination of medical equipment and devices

	9. Decontamination of medical equipment and devic	:es
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
9.1	Patient-care equipment is cleaned and disinfected between patient uses.	If possible, observe at least two health workers clean and disinfect medical equipment after use on a patient; if that is not possible, then question at least two health workers on the process. If they describe or demonstrate any errors in the process, select "No" for this criterion. If equipment is disposable, select "Yes" if it is observed that equipment is discarded into the infectious waste stream after use.
9.2	There is an adequate space for cleaning of medical equipment and devices in the medical reprocessing unit/area.	To select "Yes" for this criterion, observe if there is a space where this activity is performed that has enough room for disinfectants and rinsing and drying of reusable medical equipment. The space required will depend on the size of the facility and the assessment will depend, in part, on the judgement of the assessor. If there is inadequate space, select "No".
9.3	There is a functional reprocessing area for medical devices.	To select "Yes" for this criterion, observe if the reprocessing area possesses functioning equipment (e.g. a steam sterilizer) and the flow is appropriate for the process of reprocessing (e.g. there is a one-way flow from the decontamination area (dirty area) to the preparation, packaging and sterilization area and, finally, to the storage area) ($\underline{3}, \underline{5}$). If any of the above are not present, select "No".
9.4	Instruments are reprocessed according to local or national guidelines/SOPs.	To select "Yes", verify the presence of relevant SOPs and interview the person responsible for processing surgical instruments. If SOPs on how to ensure adequate cleaning and drying prior to sterilization are not present or if the health worker responsible is not aware of the correct process, select "No".
9.5	Sterilization equipment (e.g. autoclave, chemical) is available and functional.	If possible, observe at least one health worker responsible for sterilization. If that is not possible, then ask the health worker if the equipment is operational; review the cycle validation logbook if it is available. There is no need to initiate a sterilization process solely for this assessment. If the equipment is not reliable or if there is no cycle validation recorded, select "No". If the equipment is functional, select "Yes". Observe for the presence of serviceable sterilization equipment. To select "Yes", verify that a steam sterilizer such as an autoclave is available. Select "No" if simple pressure cookers or boilers are in use or if there is no sterilization equipment.

3.10 Inpatient identification of mpox and management

	10. Inpatient identification of mpox and management	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
10.1	Inpatients are screened daily for mpox (signs and symptoms of mpox according to existing case definition).	If there is a record of once daily mpox assessment of temperature and signs/symptoms for all inpatients, select "Yes". If there are no records or they are incomplete, select "No".
10.2	Once identified, inpatient suspected cases are transferred to the isolation area.	Review SOPs and protocols in place and case definition. Ask health workers if they know what to do if an inpatient develops signs or symptoms of mpox. If they answer correctly (isolation and safe transfer), select "Yes". If there is no documentation or if it is insufficient, or if health workers are not aware of the process, select "No".

3.11 Health worker post-exposure management

	11. Health worker post-exposure management	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
11.1	There is a policy for primary (preventive) vaccination for health workers who are considered high-risk (including those with repeated risk of exposure to MPXV, laboratory personnel working with orthopoxviruses, health workers performing diagnostic testing).	Check to see whether a policy on vaccination against orthopoxviruses for health workers is place at the facility. Ask health workers if they are aware of a vaccination programme at their facility for mpox/smallpox. If the policy is present and includes orthopoxviruses, select "Yes"; otherwise select "No".
11.2	The health facility has an mpox post-exposure management protocol for health workers.	Check to see whether SOPs are available and, if they are, whether they are being followed. Ask some health workers if they would know what to do or whom to contact in the event of a possible exposure. If SOPs are being followed and health workers correctly describe what they would do in the event of a possible exposure,
11.3	The health facility has SOPs or guidance for health workers in the event of an exposure to blood or body fluids.	Observe if there are SOPs and/or reminders, such as posters or a flow chart with a contact number, available with instructions about what to do in the event of a blood or body-fluid exposure. If these are present, select "Yes"; if not, select "No".

3.12 General patient placement

	12. General patient placement	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
12.1	Patient beds are spaced at least 1 metre apart.	Observe spacing between patient beds; if they are at or more than 1 metre apart, select "Yes". If any beds are closer than 1 metre or if patient relatives are sleeping between beds and thereby reducing the space between beds to less than 1 metre, select "No".
12.2	There is only 1 patient per bed.	Observe and, if you see that patients are sharing beds during the assessment, select "No". If you see only one patient in a bed, select "Yes".

3.13 Sanitation

	13. Sanitation	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
13.1	The facility has adequate numbers of toilets or improved latrines separated for patients (minimum one toilet/20 inpatients), and by gender.	Observe that at least one toilet or improved latrine per sex is available and functional for patients to use and, for larger facilities, that there is a minimum of one toilet per 20 patients. If these are present, select "Yes"; otherwise select "No".
13.2	At least two functional toilets/latrines for outpatients: one for males, one for females.	Observe that there is at least one toilet per sex for outpatients to use and, for larger facilities, that there is a minimum of one toilet per 25 outpatients. Confirm that they are functional and usable. If the elements described are present, select "Yes". If either element is not in place, select "No".
13.3	At least two functional toilets/latrines are dedicated for health workers: one for males, one for females.	Observe that there is at least one toilet or improved latrine per sex for health workers to use and, for larger facilities, that there is a minimum of one toilet per 20 health workers. Confirm that they are functional and usable. If the elements described are present, select "Yes". If either element is not in place, select "No".
13.4	The cleaning schedule for toilets/latrines is signed at least twice daily.	Observe for cleaning records and, if they are not present, they are incomplete or not up to date, select "No". If they are present, up to date and signed at least twice a day, select "Yes".
13.5	Wastewater is safely contained on-site with no contact with patients, visitors or the community.	Observe where wastewater goes from the facility and ask a health worker. To select "Yes", verify that the wastewater is connected to a septic tank or is connected to the public sewerage network. If any wastewater from the facility is not safely contained, select "No".

3.14 Water supply and storage

	14. Water supply and storage	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
14.1	A continuous supply of water in sufficient amounts is available within the health facility at the time of the assessment (60 L/patient/day).	To select "Yes", verify the type of source of water in the facility by observation and by asking health workers. Water may be supplied through a public network (piped water supply) or through an on-site water source (reliable tubewell, borewell). Rainwater harvesting alone is not a continuous source of water; therefore, if this is the only water source present, select "No". If water supply is intermittent or slow, select "No".
14.2	There is capacity to safely store water for at least 48 hours at the facility (60 L/patient/day for 48 hours' storage).	Calculate the 48-hour supply needed by recording the number of beds and outpatient visits per day and using the following WHO recommendations for health centres and hospitals: Safe storage containers (with a lid or cover) should be present capable of storing 300-400 litres of water per patient per day for 48 hours (<i>15, 17</i>). Additional quantities may be needed for laundry equipment, flushing toilets, etc., if used at the facility. If water storage capacity meets these specifications, select "Yes".

	14. Water supply and storage	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
		If there is an insufficient quantity of water or water storage is unsafe at the time of assessment, select "No".
14.3	The water supply is monitored and the free residual chlorine = 0.2–0.5 mg/L in water, which means it is safe for drinking, cooking, personal hygiene, medical activities, cleaning and laundry.	Ask if there is a chlorination process for water used in the health facility and if this is locally managed or whether it is done by municipal services for piped water supply. Water should be tested at point of use by using pool testers to check the residual chlorine. The logbook should be available to record the testing results and time of sample collection. Pool testers with DPD 1 (diethyl-p-phenylenediamine) should be used to check the residual chlorine (20). Select "Yes" if the results are available with the health facility or if the assessor can check the residual chlorine at the time of data collection and confirm the residual chlorine. Select "No" if neither a pool tester nor a result is available.

3.15 Waste management

	15. Waste management	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
15.1	Covered waste-bins (colour coded or labelled) are available close to patient-care area and/or waste- generation points.	To select "Yes", observe to verify the presence in all patient-care areas of waste-bins and puncture- resistant sharps containers that are labelled or colour- coded for collection of general waste, infectious waste and sharps. If no waste-bins are present, insufficient bins are present, bins are not properly labelled, or the correct, properly labelled bins are present but not in all clinical areas, then select "No".
15.2	Waste is segregated according to type (general, infectious and sharps).	To select "Yes", observe a sample of waste in each of the bins in patient-care areas. Waste bags should be available for the safe collection and transportation of waste. The size of the waste bags should correspond to the size of the waste-bins. If waste is improperly segregated or properly sized waste bags are not available, select "No".
15.3	Waste storage and treatment sites are secure and not accessible to the public or animals.	To select "Yes", ask health workers about waste transport, storage, treatment and final disposal. Observe that the waste storage and treatment sites are secure (e.g. fenced) and either locked or monitored so that the public cannot access them. If the above is not observed, select "No" for this criterion.
15.4	Infectious and sharps waste is burned on-site in an incinerator or other treatment system (e.g. autoclave) or there is a system in place to transport it safely to another suitable location.	Observe waste-treatment area, if one is present, to verify that each of the incinerators at a minimum: 1) has fuel and a twin chamber and 2) that they reach temperatures of at least 850 °C. Any functional incinerator should be equipped with a thermometer to monitor and help maintain the required temperature. If there is no thermometer, then the incinerator should be considered as partially functioning, If infectious and sharps waste is collected from the facility for treatment and disposal, this should be done by a specialist medical waste operator; it should not be

	15. Waste management	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
		combined with municipal waste. Select "Yes" if the incinerator meets the minimum standards described above or if there is a process for collection and transport of waste for disposal as described. If a single chamber or open burn pit is present or sharps are not managed as described above, select "No".
15.5	An incinerator for organic waste or an organic waste-pit is present and used when required.	Observe waste-treatment area for the presence of a placenta or organic waste-pit, (this should be covered and not accessible to the public). If incinerators are used, verify that each of them has fuel and a twin chamber and that they reach temperatures of at least 850 °C. If organic waste is collected from the facility for treatment and disposal, this should be done by a specialist medical waste operator; the organic waste should not be combined with municipal waste. Select "Yes" if the organic pit or incinerator meets the minimum standards described above or if there is a process for collection and transport of waste for disposal as described. Select "No" if a single chamber or open burn pit is present, or if organic waste is not managed as described above.

3.16 Management of deceased patients

	16. Management of deceased patients	
	Criterion	Instructions on how each criterion is assessed as either "Yes" or "No"
16.1	Bodies of deceased patients are wrapped in a cloth or shroud and transferred to a morgue or funeral home.	By asking health workers responsible for the care of mpox patients about the process followed when a patient dies, determine if they understand that the body must be wrapped in a cloth or shroud prior to transfer to a morgue or funeral home. If they do, select "Yes". If they do not (i.e. if they do not identify that as a step in the process or if they identify it as being done after transfer), select "No".
16.2	Health workers preparing the body wear appropriate PPE (gown, gloves and eye protection).	Ask health workers responsible for the preparation of those deceased from mpox about the process. If they describe or demonstrate any errors in the process, select "No" for this criterion. Check off each PPE item that is worn (gloves, gown, respirator and eye protection), but note that, to select "Yes" for this criterion, you must apply the all-or- none principle. If even one element is missing, select "No". Identify which items are missing so that this information can be included in the improvement plan. If nitrile gloves are not available, but latex gloves are available instead, select "Yes" for this criterion. On the paper form, if all items are checked, then select "Yes" for the criterion. Otherwise, select "No". On the online platform, check only those items that are available.

Total score (%) and colour	Instructions and next steps according to score
Less than 50% = red	Develop/implement action plan for improvement; provide supportive supervision and mentorship daily; reassess in 2 weeks.
50 – 79% = yellow	Develop/implement action plan for improvement; provide supportive supervision and mentorship two or three times a week; reassess in 3 weeks.
Equal to or higher than 80% = green	Develop/implement action plan for improvement; provide supportive supervision and mentorship once a week; reassess in 4 weeks.

Table 1. Recommendations for frequency of supportive supervision, mentorship and reassessment



Gap prioritization and developing the action plan for improvement

4. Gap prioritization and developing the action plan for improvement

Upon completion of the IPC-WASH RAT, the assessor and facility representative participating in the assessment process should discuss areas where any gaps have been noted and develop an action plan for improvements (see Table 2 and 3 and Sheet 2 of the mpox IPC-WASH RAT tool) to address any deficiencies.

Progress on this improvement plan should be supervised and monitored daily for facilities that score in the red category (<50%). For those with scores ≥50% the frequency of supportive supervision, mentorship and reassessment are proposed in section 3, Table 1.

However as described in the introduction section, depending on the local response capacity and the number of facilities included the frequency of reassessment may be adjusted accordingly.

Subsequent reassessments will require a new improvement plan and scheduled visits agreed upon between the assessor and facility representative.

This tool follows a stepwise approach for continual quality improvement similar to the approach used when implementing the WHO Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level (8). A series of steps for implementation should be followed keeping the multimodal improvement strategy embedded throughout the process (see Table 2 and Figure 1).

Wherever possible, during readiness and response phases, efforts should be made to ensure improvements made are sustainable.

Step 1 Prepare for action	Step 2 Conduct the baseline assessment	Step 3 Develop and implement the action plan for improvement	Step 4 Evaluate the impact
 Identify the targeted health facilities requiring an assessment based upon geographic and epidemiologic data identified during the IPC ring process. Identify the assessors (internal and external) for the facility. 	 ✓ Conduct the assessment using the RAT. ✓ Collect the data. 	 Document the agreed- upon action plan for improvement, including timelines and identification of persons/organizations accountable. 	 Analyse the data. Implement supervision and monitoring of progress.

Table 2: Steps for developing improvement plans

Figure 1. Multimodal improvement strategy



Adapted from Minimum requirements for infection prevention and control programmes) (4).

Table 3. Sample gap identification and action plan for improvement

Action plan for improvement						
Gap identified	Actions needed for improvement	Date action completed	Resources needed (financial, materials, facility staff, and partner support; include quantities/ details when possible)	Responsible person and contact	Status (completed/ ongoing/ not started/ delayed)	
e.g. No gloves available	Contact supply staff to ensure gloves are ordered, delivery date and stocked on the unit	Add date completed	Financial- need to order x # of boxes	First and last name and contact (email/phone)	ongoing	

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Annex 1 Hand hygiene posters

Annex 1: Hand hygiene posters

i) How to handwash



ii) How to handrub



Annex 2 Mpox screening form for healthcare facility entrances

Annex 2: Mpox screening form for healthcare facility entrances



Source: https://www.who.int/publications/m/item/mpox-screening-form-for-healthcare-facility-entrances