Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

May 24, 2022

DEPARTMENT MEMORANDUM
No. 2022 - 0220

TO : **ALL DIRECTORS OF CENTERS FOR HEALTH DEVELOPMENT, MINISTER OF HEALTH OF BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO (MOH-BARMM), CHIEFS OF DOH HOSPITALS, ATTACHED AGENCIES, LOCAL HEALTH SYSTEMS DIVISION CHIEFS AND OTHERS CONCERNED**

SUBJECT : **Interim Technical Guidelines for the Implementation of Monkeypox Surveillance, Screening, Management, and Infection Control**

I. BACKGROUND

Monkeypox is a zoonotic disease caused by infection with monkeypox virus which belongs to the *Orthopoxvirus* genus. This genus also includes variola virus (which causes smallpox), vaccinia virus (used in the smallpox vaccine), and cowpox virus. Monkeypox was first seen in humans in 1970 in the Democratic Republic of the Congo in a 9-year-old boy in a region where smallpox had been eliminated in 1968. There are two clades of monkeypox virus: the West African clade and the Congo Basin (Central African) clade. The natural reservoir of monkeypox remains unknown; however, African rodents and primates may harbor the virus and infect people.

According to the World Health Organization (WHO), a total of 1,315 monkeypox cases with 61 deaths were reported from four endemic countries: Cameroon, Central African Republic, Democratic Republic of the Congo, and Nigeria.

Previous cases in non-endemic areas have been associated with travel. However, between May 13 and 21, 2022, 87 laboratory-confirmed and 28 suspected monkeypox cases were reported to the WHO from 12 non-endemic countries. No death has been reported in the non-endemic countries, to date. While the virus itself is not a sexually transmitted infection, which are generally spread through semen and vaginal fluids, the most recent spike in cases appears to have been spread among men who have sex with other men who sought care in primary care and sexual health clinics, with no established travel links to an endemic area (anyone can contract monkeypox). All laboratory-confirmed cases were detected to be of the West African clade. The identification of confirmed and suspect cases with no direct travel links to an endemic area is atypical.

This memorandum provides interim technical guidance and directives on the case definition, prevention, detection, isolation, treatment, response, surveillance, and risk communication relative to monkeypox in all primary care facilities and hospitals.

II. GENERAL GUIDELINES

A. The Department of Health (DOH), through its Communication Office, shall keep the general public up to date with the latest news on Monkeypox in and outside the country from reputable sources.

B. Health care facilities from the different levels of care, health care provider networks, Local Government Units (LGUs), and private organizations/institutions including business establishments, schools, other public facilities, and formal and informal sectors shall familiarize themselves with the DOH Interim Guidelines on Monkeypox and report/coordinate information on suspect and confirmed cases to the DOH through the Epidemiology Bureau (EB) and respective Centers for Health Development (CHDs).

C. Healthcare workers shall refer exposed and at-risk individuals who are experiencing signs and symptoms of monkeypox, which include skin rashes accompanied by fever, intense headache, lymphadenopathy (swelling of the lymph nodes), back pain, myalgia (muscle aches) and intense asthenia (lack of energy), and /or skin eruption, to the nearest higher level of healthcare facility for thorough assessment.

D. Exposed and at-risk individuals shall be profiled, and health status shall be monitored for immediate detection, laboratory confirmation, and reporting to the epidemiology and surveillance network.

E. Individuals or travelers from countries with reported or ongoing cases of monkeypox, who are manifesting the above-mentioned signs and symptoms shall coordinate with the Philippine Embassy or the Department of Foregin Affairs (DFA), the DOH Bureau of Quarantine (BOQ), Department of Labor and Employment (DOLE), Overseas Workers and Welfare Administration (OWWA), and Philippine Overseas Employment Administration (POEA) for proper coordination and management.

F. Individuals traveling to monkeypox-endemic countries shall avoid contact with mammals such as rodents, marsupials, and non-human primates (dead or alive) that could harbor monkeypox virus and shall refrain from eating or handling wild game meat (bushmeat).

G. All individuals are advised to strictly adhere to the minimum public health standards (MPHS) set by the DOH to prevent different infectious diseases including monkeypox.

H. A Monkeypox Operation Center (MPXOpCen) shall be established by the DOH and the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) shall be activated once there is an observed increasing risk of importation of monkeypox in the country based on criteria of risk classification and assessment to be set by the DOH.

III. SPECIFIC GUIDELINES

A. Prevention and Control

1. Individual

a. Steps for self-protection include:

i. Avoiding direct skin to skin or face-to-face contact, including any sexual activity, with anyone who experiences symptoms or had a direct contact

with contaminated materials of probable or confirmed case of monkeypox;

ii. Keeping hands clean by hand washing with water and soap or using an alcohol-based hand rub; and

iii. Maintaining respiratory etiquette to include use of personal protective equipment such as face masks.

b. Any individual who develops skin lesions such as a macule, papule, pustule, vesicle, and accompanied by fever, intense headache, unilateral or bilateral lymphadenopathy (swelling of the lymph nodes), back pain, myalgia (muscle aches) and intense asthenia (lack of energy) shall contact their health care provider for risk assessment and diagnostic evaluation.

c. Any individual who develops skin lesions during international travel or upon return to the country shall immediately report to a health professional, and provide information about all recent travel history, sexual history, and smallpox immunization history.

d. Any individual who is a Suspected or Probable Case of monkeypox shall undergo home isolation for at least 21 days or until the resolution of all symptoms, including any rash, crusting, or scabs, and observe appropriate infection control protocols .

e. A person with confirmed infection (Confirmed Case) who does not require hospitalization for medical indications shall undergo home isolation for at least 21 days or until the resolution of all symptoms including any rash, crusting, and scabs and observe appropriate infection control measures such as the following:

i. Persons with extensive lesions that cannot be easily covered (excluding facial lesions), draining/weeping lesions, or respiratory symptoms (e.g. cough, sore throat, runny nose) shall be isolated in a room or area separate from other family members when possible;

ii. Persons with monkeypox shall wear a surgical mask, especially those who have respiratory symptoms (e.g., cough, shortness of breath, sore throat). If this is not feasible (e.g., a child with monkeypox), other household members shall wear a surgical mask when in the presence of the person with monkeypox;

iii. Persons with monkeypox shall not leave home for any purpose, including work, except as required for follow-up medical care. They shall also avoid contact with wild or domestic mammals if possible;

iv. Persons with monkeypox shall be advised to avoid skin manipulation or scratching and keep the lesions dry, clean and covered to avoid further transmission and superinfection;

v. Disposable gloves shall be worn for direct contact with lesions and disposed after use;

vi. Skin lesions shall be covered to the best extent possible (e.g., long sleeves, long pants, and wound dressing with sterile gauze for weeping lesions) to minimize risk of contact with others;

vii. Disinfection shall be done prior to the disposal of contaminated/potential infectious waste (such as dressings and bandages) in a separate receptacle or use a yellow bag. Household members or caregivers of infected patients shall inform the waste collector about the presence of contaminated/potential infectious waste in waste receptacles. The latter shall avoid disposing directly in landfills or dumps;

viii. Unexposed persons who do not have an essential need to be in the home of others are advised not to visit homes with persons under isolation;

ix. Household members who are not ill shall limit contact with the person with monkeypox; and
x. Pets shall be excluded from the infected person's environment.

f. Vaccination
   i. Currently, there is no Philippine Food and Drug Administration (FDA) approved and authorized vaccine for use against monkeypox;
   ii. Existing processes and requirements of the Philippine FDA and Health Technology Assessment Council (HTAC) shall be followed prior to the procurement of these vaccines to ensure local availability.

2. Household

a. Household members caring for a person who is a suspected case, a probable case, or a confirmed case of monkeypox shall use the appropriate personal protective equipment and measures including wearing of a mask and disinfecting surfaces using FDA-registered and approved standard household cleaning materials.
b. Household members are encouraged to practice proper hand hygiene and cleaning practices such as the following:
   i. Hand hygiene (i.e. hand washing with soap and water or use of an alcohol-based hand rub) shall be performed by infected persons and household contacts after touching lesion material, clothing, linens, or environmental surfaces that may have had contact with lesion material;
   ii. Laundry (e.g., bedding, towels, clothing) may be washed in a standard washing machine with warm water and detergent; bleach may be added but is not necessary;
      1. Gloves and mask shall be worn when handling soiled laundry to avoid direct contact with contaminated material;
      2. Soiled laundry shall not be shaken or otherwise handled in a manner that may disperse infectious particles;
   iii. Dishes and other eating utensils shall not be shared. Soiled dishes and eating utensils shall be washed in a dishwasher or by hand with warm water and soap;
   iv. Contaminated surfaces shall be cleaned and disinfected. Standard household cleaning/disinfectants may be used in accordance with the manufacturer's instructions.

3. Community

a. Members of the community including schools, workplaces, and other public places shall be informed of the following preventive measures:
   i. Avoid contact with animals that could harbor the virus (including animals that are sick or that have been found dead in areas where monkeypox occurs);
   ii. Avoid contact with any materials, such as bedding, that have been in contact with a sick animal;
   iii. Observe proper isolation of infected individuals;
   iv. Practice good hand hygiene, including handwashing with soap and water or using an alcohol-based sanitizer, at all hand hygiene moments;
   v. Use of proper personal protective equipment (PPE) when caring for patients.

4. **Primary Care Facilities**
   a. Primary care providers who identify patients with skin lesions like macule, papule, pustule or vesicular rash that could be consistent with monkeypox, especially those with a recent travel history to a country where monkeypox cases have been reported, shall consider monkeypox as a differential diagnosis.
   b. Primary care providers shall elicit the following signs and symptoms associated with monkeypox during history-taking and physical examination such as but not limited to:
      i. Fever, chills, myalgia, back pain, asthenia, or lymphadenopathy;
      ii. Skin lesions such as vesicles or pustules that are deep-seated, firm or hard, well-circumscribed, and usually located on the head, palms and soles. The rash associated with monkeypox can be confused with other diseases that are more commonly encountered in clinical practice (e.g., secondary syphilis, herpes, chancroid, and varicella zoster);
      iii. Lesions that umbilicate or become confluent and progress over time to scabs.
   c. Primary care providers shall observe a high index of suspicion for monkeypox when evaluating people with the characteristic skin lesions, particularly for the following groups:
      i. People reporting contact with people who have a similar rash or have received a diagnosis of suspected or confirmed monkeypox;
      ii. People reporting sexual contact with the same sex or with multiple partners, and who present with lesions in the genital/perianal area; and
      iii. People reporting a significant travel history in the month before illness onset.
   d. Primary care providers shall observe standard environmental sanitation protocols, including adequate decontamination and disinfection, after each patient encounter.

5. **Environmental Sanitation (Home, Establishment, Health Facility)**
   a. Ensure that procedures are in place for cleaning and disinfecting environmental surfaces at home, establishments, and especially health facilities:
      i. At home, contaminated surfaces shall be cleaned and disinfected. Any FDA registered standard household cleaning/disinfectants may be used following the manufacturer's instructions;
      ii. At the establishments, in case of possible contamination of monkeypox virus, any FDA registered industrial grade cleaner/disinfectant whether alcohol or chlorine-based may be used particularly following the manufacturer's recommendations for concentration, contact time, and care in handling (information may be found in the Safety Data Sheet);
      iii. At the health facilities, any FDA registered industrial or hospital-grade alcohol-based or chlorine-based disinfectant may be used and particularly following the manufacturer's recommendations for concentration, contact time, and care in handling (information may be found in the Safety Data Sheet).
   b. A combination of standard, contact, droplet, and airborne precaution shall be applied in all healthcare settings when a patient presents with fever and vesicular/pustular rash:
      i. Isolate patients suspected of having monkeypox in a negative air pressure room as soon as possible. If unavailable, place patients in a

private examination room. If neither option is feasible, then precautions shall be taken to minimize exposure to surrounding persons which may include placing a surgical mask over the patient's nose and mouth, if tolerable to the patient, and covering any of the patient's exposed skin lesions with a sheet or gown;

ii. Personal protective equipment shall be donned before entering the patient's room and used for all patient contact. All PPE shall be disposed prior to leaving the isolation room where the patient is admitted:
   1. Use of disposable gown and gloves for patient contact;
   2. Use of NIOSH-certified N95 (or comparable) filtering disposable respirator that has been fit-tested for the healthcare worker using it, especially for extended contact in the inpatient setting;
   3. Use of eye protection (e.g., face shields or goggles), as recommended under standard precautions, if medical procedures may lead to splashing or spraying of a patient's body fluids.

iii. Other standard precautions that can limit the transmission of monkeypox virus include:
   1. Proper hand hygiene after all contact with an infected patient and/or their environment during care;
   2. Correct containment and disposal of contaminated waste (e.g., dressings) in accordance with facility-specific guidelines for infectious waste or local regulations pertaining to household waste;
   3. Care when handling soiled laundry (e.g., bedding, towels, personal clothing) to avoid contact with lesion material;
   4. Soiled laundry shall never be shaken or handled in a manner that may disperse infectious particles;
   5. Care when handling used patient-care equipment in a manner that prevents contamination of skin and clothing;
   6. Ensure that used equipment has been cleaned and reprocessed appropriately;

iv. Isolation and transmission-based precautions shall be continued to complete the 21 days or until the resolution of symptoms including the resolution of any rash and scabs that have fallen off and healed.

6. Local Government Units

a. LGUs shall directly coordinate and consult with their respective Centers for Health Development for guidance on the detection, prevention, management, and control of suspected or probable, and even confirmed cases.

b. Authorities at the LGUs shall give special attention to the following:
   i. Teaching individuals and communities on limiting the spread of infection, hand washing, and good respiratory hygiene/cough etiquette;
   ii. Ensuring continuous availability and accessibility to hand washing facilities and supplies (soap, paper towels, and tissues).
   iii. Orientation of the Barangay Health Emergency Response Team (BHERT) on the guidelines for surveillance, screening, management, and infection control in preparation for activation once the need arises.

B. Detection

1. The main objective of detection is to rapidly identify cases, contacts, and clusters to provide rapid containment, appropriate clinical care, and prevent further transmission.
2. Monkeypox shall be considered a notifiable disease as defined under Republic Act No. 11332 (Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act) and its Implementing Rules and Regulations.
3. Samples shall be collected from all individuals fitting case definitions for suspect or probable case.
4. Samples of suspect or probable cases of monkeypox shall be coordinated with the Epidemiology Bureau for referral to the appropriate laboratory facility for confirmatory testing.
5. At the points of entry, the BOQ shall conduct symptom-based screening for monkeypox for all incoming international travelers, especially those individuals who came from countries with reported monkeypox cases. Symptom-based screening shall aim to capture the symptoms described in the case definitions for patients under investigation or suspect cases of monkeypox **(refer to *Annex A1*)**.
6. The BOQ shall immediately coordinate suspected cases to the EB and designated referral hospitals for further assessment, testing, and management.
7. Guidelines for public health surveillance are as follows:
    a. For humans
        i. All primary care providers, clinicians, public health authorities, points of entry, and institutions/offices shall notify the DOH of any suspect, probable, or confirmed case within 24 hours of detection;
        ii. Surveillance case definitions for monkeypox are found in ***Annex A1***;
        iii. Reporting of cases or contacts shall utilize the Case Investigation Form (CIF) attached as ***Annex B*;**
        iv. Case investigation shall focus on:
            1. Exposure investigation (back tracing) within 21 days prior to symptom onset;
            2. Characterization of clinical presentation; and
            3. Tracing and profiling of identified contacts.
        v. Contacts shall be quarantined and closely monitored at least a period of 21 days from the last contact with a patient or their contaminated materials during the infectious period.
    b. For animals
        i. Shipments of rats and primates shall be strictly monitored by the Department of Agriculture (DA), Department of Environment and Natural Resources (DENR), and Bureau of Customs (BOC) for animals with monkeypox symptoms.
8. Laboratory confirmation of monkeypox shall be done through the Reverse Transcription Polymerase Chain Reaction (RT-PCR) and/or whole-genome sequencing of skin lesion samples and other samples, as may be included in future policies.
    a. Two samples shall be collected and shall need to have sufficient volume to be able to accommodate parallel testing for differential diagnosis and whole-genome sequencing (WGS);
    b. Sample collection guidelines can be found in ***Annex C***;
    c. Samples for WGS must be coordinated with the EB through the Regional Epidemiology and Surveillance Unit (RESU) for processing either at RITM or the University of the Philippines-Philippine Genome Center (UP-PGC);

d. The second sample shall be sent to RITM for confirmatory testing through RT-PCR;
e. The RITM may opt to send out samples for PCR confirmation by its partner facility in Australia.

9. Reporting and Recording
   a. Cases reported to the RESU and EB using the CIF ***(Annex B)*** shall be recorded into a line list. The RESU and EB shall generate analysis and case bulletins on a regular basis.

C. Isolation/Quarantine

1. Isolation Facilities (depending on the risk of the patient)

a. During the activation of Doors 1 and 2 of DOH's 4-Door Alert System, the RITM is hereby designated as the main isolation facility for suspect, probable, and confirmed monkeypox cases. Regional isolation facilities/hospitals catering to other international points of entry shall be designated by the DOH Field Implementation and Coordination Team (FICT) and One Hospital Command Center (OHCC);
b. All government hospitals shall prepare an area for isolation and treatment facilities in the event that Doors 3 and 4 are activated;
c. Cases shall be immediately isolated in a private room, preferably with negative air pressure, until signs and symptoms have been resolved.

2. Quarantine

a. The DOH will designate dedicated isolation and quarantine facilities. Travelers coming in from countries with confirmed community transmission who meet the criteria for suspect, probable, or confirmed case shall be isolated. Close contacts of the cases shall be quarantined. The quarantine facility will be nearby the point of entry or within the region where the point of entry is located, if possible;
b. Infection prevention and control must be strictly observed during transfer of patients from point of entry to quarantine facility;
c. The DOH will instruct the BOQ, DOH-CHD, RESU and other concerned bureau to operate and maintain these quarantine facilities;
d. All patients under quarantine who manifest signs and symptoms of monkeypox shall be immediately transferred to the dedicated referral hospital for treatment;
e. All patients under quarantine who manifest signs and symptoms not related to monkeypox shall be treated onsite by a licensed physician and may refer to an infectious disease specialist, if necessary.

D. Treatment

1. Treatment for Monkeypox is mainly supportive and is directed at relieving symptoms such as fever, body malaise, and exhaustion.
2. Use of antipyretics, anti-inflammatory, and non-steroidal anti-inflammatory drugs (NSAIDS) may be warranted.
3. Increased oral fluid intake may also be beneficial.
4. Currently, no anti-viral or immune globulin treatments have been locally approved and authorized for the treatment of Monkeypox by the FDA. Existing processes and requirements of the FDA and HTAC shall be followed in the evaluation and prior to procurement of antiviral therapies for Monkeypox.

5. Treatment for secondary bacterial infections shall be warranted in cases of infected skin and eye lesions from erupted pustules and from complications brought about by weakened immune status such as pneumonia. Treatment with antibiotics shall be consulted to and guided by a licensed physician.

E. Reintegration

1. Discharge guidelines

a. Recovering adults shall continue to observe infection control;
b. Parents/Guardians of recovering children younger than 12 years shall likewise ensure compliance to infection control measures;
c. Individuals within the households, communities, schools and workplaces including key populations shall continuously observe infection control measures.

2. Precautions for the home

a. All household members shall practice hand hygiene especially:
   i. Before, during, and after preparing food;
   ii. Before and after meals;
   iii. Before and after use of the bathroom;
   iv. Before and after handling animals or animal waste;
   v. More frequently when someone in the home is sick;
b. All household members shall avoid touching the eyes, nose or mouth with unclean hands;
c. Members of the household shall clean and disinfect household surfaces likely to be contaminated by infectious secretions;
d. Individuals who have come into close contact with sick animals, or with other people with signs or symptoms of monkeypox such as skin rashes accompanied by fever, intense headache, lymphadenopathy (swelling of the lymph nodes), back pain, myalgia (muscle aches) and intense asthenia (lack of energy), and /or skin eruption, shall immediately isolate and contact the DOH Health Emergency Management Bureau Operations Center at +63 (2) 8711-1001, +63 (2) 8711-1002. The general public is reminded to be aware and get the right information from the DOH or their respective local health offices.

3. Reintegration to the Workplace (in the case of a worker who has recovered from an infection):

a. Clearance to return to work shall be provided by the attending physician and subsequently verified by the Human Resource Officer or the Occupational Health Physician;
b. A reintegration plan shall be implemented to bring back the worker's confidence in performing tasks, avoid possible stigma, and maintain confidentiality in terms of his medical condition;
c. Ensure constant implementation of the minimum public health standards as appropriate;
d. Employers shall ensure/arrange for the provision of workplace entitlements. (e.g. use of leave credits, medical benefits, alternative work arrangement)

IV. Disposal of Dead Bodies

Guidelines on the handling and disposal of dead bodies due to a confirmed, probable, or suspected case of Monkeypox shall follow the provisions of Chapter XXI Disposal of Dead Persons of the Code on Sanitation of the Philippines PD 856 and its Revised Implementing Rules and Regulations. Reference citations were based on Annex 7 "Prescribed Sanitation Requirements on the Handling and Disposal of Dead Persons When the Cause of Death is Dangerous Communicable Disease," as appropriate.

A. Handling of Remains

1. Removal of the Body of Suspect, Probable, and Confirmed Monkeypox Cases from Isolation Room or Area in a Healthcare Facility
    a. All healthcare personnel, support staff, and funeral parlor workers, among others, shall wear appropriate PPE before handling the human remains.
    b. All tubes, drains, and catheters shall be removed with extreme caution and disposed of properly.
    c. Implants (e.g. pacemaker, orthopedic implants) in the cadaver shall not be removed to minimize exposure of personnel handling the body. In this case, the body shall be buried instead of cremated.
    d. Wound drainage and needle puncture holes shall be disinfected and dressed with impermeable material.
    e. Wrap the body with cloth and place it in the airtight cadaver bag that is leak-proof and zip or close tightly with tapes and bandage strips. For patients with Islamic faith, double cadaver bags with thickness of not less than 150 pm shall be used.
    f. Decontaminate surface of the bag with hypochlorite solution (50-100 ppm) or one-in-four diluted household bleach (mixing | part of 5.25% bleach with 4 parts of water).
    g. If the family of the patient wishes to view the body after removal from the isolation room or area, they may be allowed for as long as standard precautions are strictly followed.
    h. Ensure that the body is fully sealed in an impermeable airtight cadaver bag before being removed from the isolation room or area and before transfer to mortuary or crematorium, to avoid leakage of body fluid.
    i. Properly dispose of the PPE used and wash hands with liquid soap and water immediately.

2. Removal of Body of Suspect, Probable, and Confirmed Monkeypox Cases who were Quarantined in a Non-Healthcare Facility
    a. The relative of the deceased shall coordinate with the local government for the proper disposal of the remains who are quarantined in a non-healthcare facility (e.g. home).
    b. Only authorized personnel (e.g. health personnel and support staff, LGU team for management of the dead and missing persons, funeral parlor workers) shall be allowed to handle the human remains.
    c. All must wear appropriate PPE before handling the human remains.
    d. All attached apparatuses, if any, such as tubes, drains, catheters on the human remains, should be removed with extreme caution and placed in a leak-proof plastic bag and closed tightly with tapes and bandagestrips and properly labeled.
    e. Oral nasal and rectal orifices of the human remains have to be plugged to prevent leakage of body fluids.

f. The body should be wrapped with cloth, or robust and leak-proof transparent plastic bag, and placed in the airtight cadaver bag that is leak-proof and shall be zipped or closed tightly with tapes and bandagestrips and properly labeled.
g. The outside or surface of the cadaver bag should be decontaminated with hypochlorite solution (50-100 ppm) or one-in-four diluted household bleach (mixing | part of 5.25% bleach with 4 parts of water) and allow the air to dry.
h. Ensure that the human remains are fully sealed in an impermeable airtight cadaver bag before being removed from the room or area and before transfer to the mortuary, to avoid leakage of body fluids.
i. When properly packed, the body can be safely removed from storage in the mortuary and transported to the crematorium,or placed in a coffin for burial.
j. At no instance shall unzipping the cadaver bag of the body and removal of the body be permitted.
k. The accredited/identified funeral establishment shall provide transport. If not available, the LGU shall provide transportation to the burial site/crematorium.
l. The household shall be advised to clean and disinfect the room occupied by the deceased immediately after the body was removed.
m. All soiled linens and fabrics by the deceased shall be properly washed and disinfected.

3. Transfer to Funeral Home/Crematorium
   a. The accredited/identified funeral establishment/crematorium shall provide proper transport. Otherwise, the concerned Local Government Unit (LGU)shall assist in securing the services of a funeral establishment which will transport the remains to the burial site/crematorium.
   b. The body shall be fully sealed in a cadaver bag and decontaminated as not to pose additional risk to the staff transporting the dead body.
   c. At no instance shall unzipping the cadaver bag of the body and removal of the body be permitted.
   d. Embalming and hygienic preparation, such as cleaning of the body, tidying of hair, trimming of nails and shaving shall not be allowed.
   e. The personnel handling the body shall wear at the minimum a mask, gloves, water-resistant gown/apron, and goggles as protection if there be splashes.
   f. The vehicle used for transport shall be disinfected immediately following proper disinfection protocol.
   g. Dispose properly the PPE used and wash hands with liquid soap and water immediately.

4. Procedures for Burial and Cremation
   a. The procedures for burial and cremation shall be done within 12 hours after death. However, burial of remains should be in accordance with the person's religion and culturally-acceptable norms, to the most possible extent (e.g. in Islamic rites, cremation is forbidden or "haram").
   b. The staff should practice hand hygiene, use of masks, gloves, goggles and water-resistant gown/apron as standard precautions.
   c. Transportation shall be provided by the funeral home to the burial site.
   d. Large gatherings at the crematorium/ burial ground should be avoided.
   e. For those that will be buried:
      i. Only adult members of the family of the deceased may be permitted to attend the funeral;

ii. Remains shall be placed in a durable, airtight and sealed meta casket. For patients with Islamic faith, as stated above, remains shall alternatively be placed in a double cadaver bag with thickness of not less than 150 um.
iii. Remains shall not be taken to any place of public assembly and viewing of the deceased shall not be permitted.

f. For those that will be cremated:
   i. Cremains shall be reduced to the size of fine sand or ashes and packed in a cremains container before they are turned over to the relatives of the deceased; and
   ii. Cremains shall be placed in a container with a minimum capacity of 0.0049 cubic meter and made of polyethylene provided with a liner bag (preformed 5 ml plastic), locking tie and identification label.

For immediate dissemination and strict compliance.

By Authority of the Secretary of Health:

MARIA ROSARIO SINGH-VERGEIRE, MD, MPH, CESO II
Undersecretary of Health
Public Health Services Team

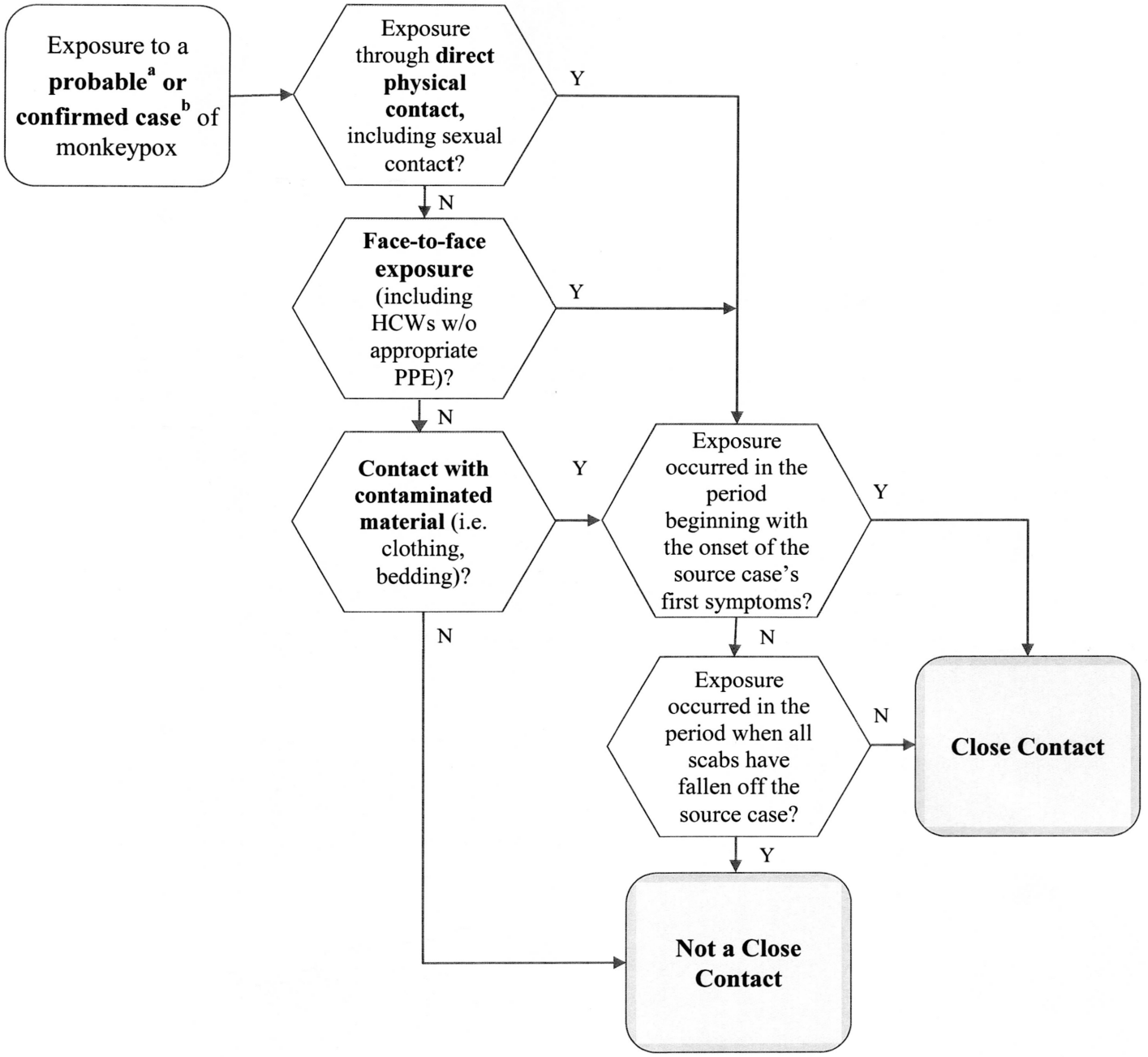
ANNEX A1
Case and Contact Definitions for Monkeypox

Case Classification	Case Definition
Suspected Case	1. A person of any age presenting with an unexplained acute rash **AND** 2. One or more of the following signs or symptoms: a. Headache; b. Acute onset of fever (>38.5°C); c. Myalgia; d. Back pain; e. Asthenia; f. Lymphadenopathy; **AND** 3. For which the following common causes of acute rash do not explain the clinical picture: varicella zoster, herpes zoster, measles, herpes simplex, bacterial skin infections, disseminated gonococcal infection, primary or secondary syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, molluscum contagiosum, allergic reaction (e.g., to plants); and any other locally relevant common causes of papular or vesicular rash. As per WHO, it is <u>not necessary</u> to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected.
Probable Case	A person meeting the case definition for a suspected case **AND** One or more of the following: • has an epidemiological link (face-to-face exposure, including health care workers without respiratory protection; direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils) to a probable or confirmed case of monkeypox in the 21 days before symptom onset; • reported travel history to a monkeypox endemic country in the 21 days before symptom onset; • has had multiple sexual partners in the 21 days before symptom onset; • is hospitalized due to the illness.
Confirmed Case	A case meeting the definition of either a suspected or probable case and is laboratory confirmed for monkeypox virus by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or whole genome sequencing.

Case Classification	Case Definition
Contact	A contact is defined as a person who, in the period beginning with the onset of the source case's first symptoms, and ending when all scabs have fallen off, has had one or more of the following exposures with a probable or confirmed case of monkeypox: • face-to-face exposure (including health care workers without appropriate PPE); • direct physical contact, including sexual contact; • contact with contaminated materials such as clothing or bedding.
Discarded Case	A case meeting the definition of either a suspected or a probable case but tested negative for monkeypox virus through RT-PCR or WGS.

ANNEX A2
Algorithms for the Classification of Cases and Contacts for Monkeypox

A2.1 Classification of Close Contacts of Probable or Confirmed Monkeypox Cases

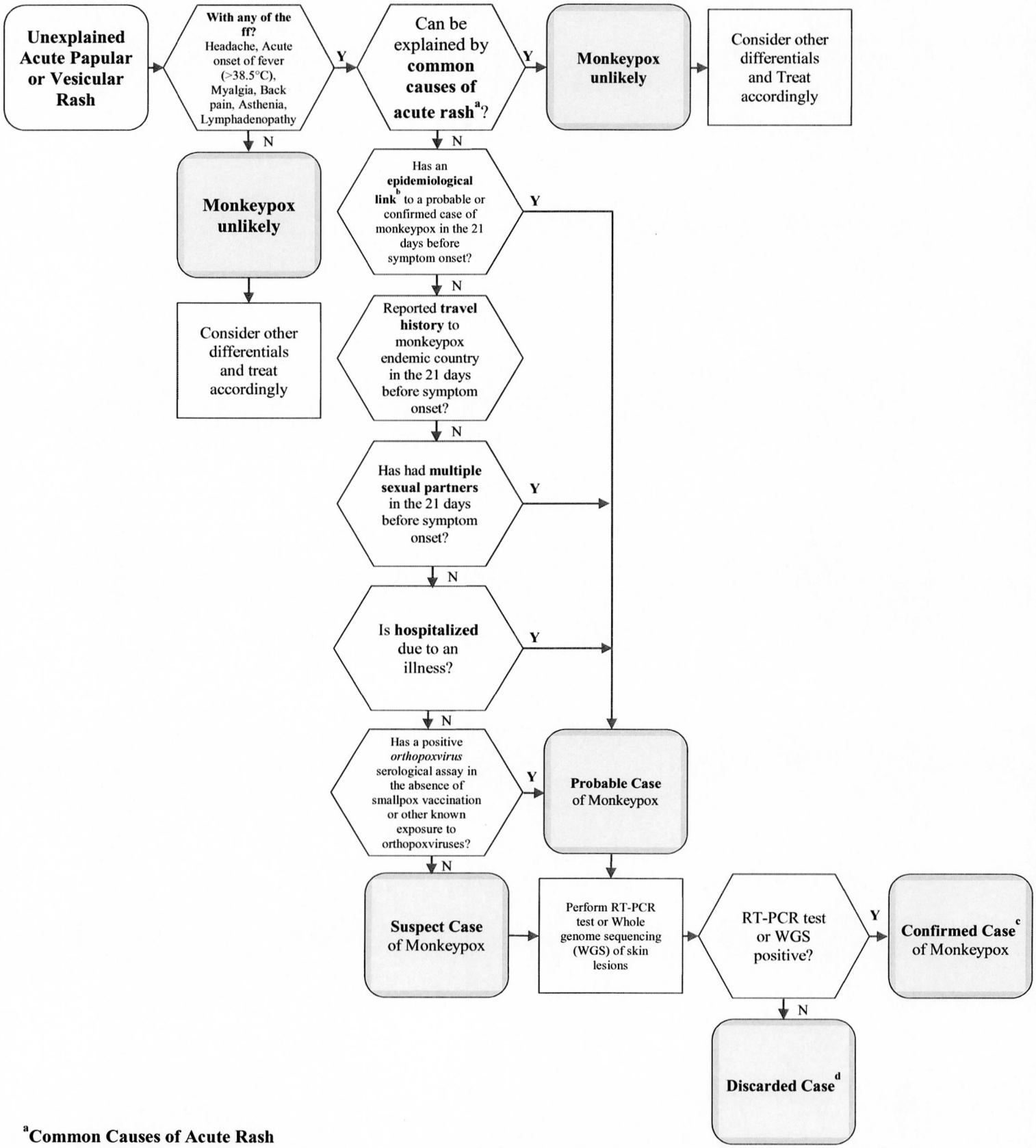


[a]Probable Case
A person meeting the case definition for a suspected case
AND
One or more of the following:

- has an epidemiological link (face-to-face exposure, including health care workers without respiratory protection; direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils) to a probable or confirmed case of monkeypox in the 21 days before symptom onset;
- reported travel history to a monkeypox endemic country in the 21 days before symptom onset;
- has had multiple sexual partners in the 21 days before symptom onset is hospitalized due to the illness.

[b]Confirmed Case
A case meeting the definition of either a suspected or probable case and is laboratory confirmed for monkeypox virus by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or whole genome sequencing.

. . A2.2 Classification of Suspect, Probable, Confirmed or Discarded Monkeypox Cases



[a]Common Causes of Acute Rash

varicella zoster, herpes zoster, measles, herpes simplex, bacterial skin infections, disseminated gonococcal infection, primary or secondary syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, molluscum contagiosum, allergic reaction

[b]Epidemiological link

face-to-face exposure, including health care workers without respiratory protection; direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils to a probable or confirmed case of monkeypox in the 21 days before symptom onset

[c]Confirmed case

A case meeting the definition of either a suspected or probable case and is laboratory confirmed for monkeypox virus by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or whole genome sequencing

[d]Discarded Case

A case meeting the definition of either a suspected or a probable case but tested negative for monkeypox virus through RT-PCR or WGS.

ANNEX B
Monkeypox Case Investigation Form (CIF)

Case Investigation Form

Monkeypox Case Investigation Form
(ICD 10 –CM Code: B04)

Name of DRU:	Date of investigation: *(mm/dd/yyyy)*
Address of DRU:	Type: ☐ C/MHO ☐ Gov't Hospital ☐ Private Hospital ☐ Airport ☐ Seaport ☐ Gov't laboratory ☐ Private Laboratory

I. PATIENT INFORMATION: Patient Number: | Patient's First Name | Middle Name | Last Name/Suffix

COMPLETE CURRENT ADDRESS House Number/Purok/Sitio/: Street Name: Municipality: Province: Region:	**Laboratory ID**	
	Sex assigned at birth: ☐Male ☐Female	Date of Birth: mm / dd / yyyy Age: ☐Days ☐Months ☐Years
COMPLETE PERMANENT ADDRESS House Number/Purok/Sitio/: Street Name: Municipality: Province: Region:	Nationality:	IP Group? ☐Yes ☐No If Yes, Specify:_____
	Occupation: Contact Number:	Contact No.:
Name Workplace	Address of Workplace:	
Name of Informant:	Relationship with Patient:	Contact No. of Informant:

II. PATIENT STATUS

Date Admitted/ Seen/Consult mm / dd / yyyy Admission: ER: ☐Yes ☐No ☐Unknown Ward: ☐Yes ☐No ☐Unknown ICU: ☐Yes ☐No ☐Unknown	Blood Donation/Transfusion History: ☐Donor ☐Recipient Place of Donation/Transfusion: _____ Date of Donation/ Transfusion: ___/___/___ mm / dd / yyyy
Pregnant? ☐Yes ☐No # of weeks:___ Any other known medical information: _____	

III. CLINICAL HISTORY/PRESENTATION

Date onset of illness (mm/dd/yyyy) _____

1. Does the patient have a cutaneous rash?
   ☐Yes ☐ No If yes, date of onset for the rash: ___/___/___ (mm / dd / yyyy)
2. Did the patient have fever?
   ☐Yes ☐ No If yes, date of onset for the fever: ___/___/___ (mm / dd / yyyy)
   Duration of fever (___ days)
3. If there is active disease,
   3.1 Lesions are in the same state of development on the body?
   ☐Yes ☐ No
   3.2 Are all of the lesions the same size?
   ☐Yes ☐ No
   3.3 Are the lesions deep and profound?
   ☐Yes ☐ No
   3.4 Did the patient develop ulcers ?
   ☐Yes ☐ No
4. Type of lesions:
   ☐Macule ☐ Papule ☐Vesicle ☐Pustule ☐Scab
5. Localization of the lesions:
   ☐ Face ☐ Palms of the hands ☐ Thorax ☐ Arms
   ☐ Legs ☐ Soles of the feet ☐ Genitals
   ☐ All over the body

List other areas : _____

SIGNS AND SYMPTOMS

Check all that apply:

- ☐ Vomiting/nausea
- ☐ Headache
- ☐ Cough
- ☐ Muscle pain (myalgia)
- ☐ Asthenia (weakness)
- ☐ Fatigue
- ☐ Conjunctivitis
- ☐ Chills or sweats
- ☐ Sensitivity to light
- ☐ Sore throat when swallowing
- ☐ Oral ulcers
- ☐ Lymphadenopathy, localization:
  ☐ Cervical ☐ Axillary ☐ Inguinal

Monkeypox Case Investigation Form

(ICD 10 –CM Code: B04)

IV. HISTORY OF EXPOSURE

1. Did the patient travel anytime in the three weeks before becoming ill?: ☐Yes ☐ No
   If yes, please specify: _____
   Date of travel: (mm/dd/yyyy) ____/____/____
   Flight/Vessel #:_____
   Date of arrival:(mm/dd/yyyy) ____/____/____
   Point of entry and exit:_____

2. Did the patient travel during illness?: ☐Yes ☐ No
   If yes, please specify: _____
   Date of travel: (mm/dd/yyyy) ____/____/____
   Flight/Vessel #:_____
   Date of arrival:(mm/dd/yyyy) ____/____/____
   Point of entry and exit:_____

3 Within 21 days before symptom onset, did the patient have contact with one or more persons who had similar symptoms? ☐Yes ☐ No

   If Yes, accomplish Appendix A "Monkeypox Contact listing Form"

4. Did the patient touch a domestic or wild animal within 21 days before symptom onset? ☐Yes ☐ No

If Yes, what kind of animal: _____

Date of first exposure/contact: (mm/dd/yyyy) ____/____/____

Date of last exposure/contact: (mm/dd/yyyy) ____/____/____

Type of contact (check all that apply)
- ☐ Rodents alive in the house
- ☐ Dead animal found in the forest
- ☐ Alive animal living in the forest
- ☐ Animal bought for meat
- ☐ Others: _____

5. Patients Gender Identity:
   - ☐Man
   - ☐Woman
   - ☐In the middle
   - ☐Non binary

6. Did the patient engage in sex (vaginal, oral, or anal) within 21 days before symptom onset?
   ☐Yes ☐No (skip, answer next question)

	History of sexual activity or close intimate contact	No. of sexual partners
Male to male	☐ Yes ☐ No	
Male to female	☐ Yes ☐ No	
Unknown	☐ Yes ☐ No	

6. Did the patient experience close intimate contact (cuddling, kissing, mutual masturbation, sharing sex toys) within 21 days before symptom onset? ☐ Yes ☐ No

7. Sharing of items (e.g. towels, beddings, food, utensils etc.) with your sexual partners within 21 days before symptom onset? ?
☐ Yes ☐ No ☐ Refuse to answer

8. Did the patient have sex and/or close intimate contact with someone who had recently traveled outside of your city or community within 21 days before symptom onset?
   - ☐ No
   - ☐ Yes, to another country (please specify) _____
   - ☐ Yes, to another province
   - ☐ Yes, to another city within my province
   - ☐ Unknown

V. LABORATORY TESTS *(Note: Collect at least two types of specimens from each patient. For each specimen: place a label on this form and a label on the specimen tube. Ensure that the two labels have the same name/number of the specimen.)*

Test Done* (check all that apply)	Date Collected*	Laboratory	Results	Date Released
☐ Nasopharyngeal or oropharyngeal swab				
☐ Lesion Fluid				
☐ Lesion Roof				
☐ Lesion Crust				
☐ Serum				

VI. HEALTH STATUS

☐ Active (Currently admitted or in isolation/ quarantine)

☐ Discharged

Date Discharged : ____/____/____ (mm / dd / yyyy)

Final Diagnosis: _____

Outcome:

☐ Recovered
Date Recovered: ____/____/____ (mm / dd / yyyy)

☐ Died
Date Died: ____/____/____ (mm / dd / yyyy)

Cause of death: _____

☐ Unknown
☐ HAMA ☐ Lost to follow-up

☐ Transferred to other healthcare setting

Case Classification:
- ☐ Suspect
- ☐ Probable
- ☐ Confirmed
- ☐ Contact
- ☐ Discarded

Case Investigation Form

Monkeypox Case Investigation Form

(ICD 10 –CM Code: B04)

Case Classification	Case Definition
Suspected Case	A person of any age presenting with an unexplained acute rash **AND** One or more of the following signs or symptoms: • Headache; • Acute onset of fever (>38.5°C); • Myalgia; • Back pain; • Asthenia; • Lymphadenopathy; **AND** For which the following common causes of acute rash do not explain the clinical picture: varicella zoster, herpes zoster, measles, herpes simplex, bacterial skin infections, disseminated gonococcal infection, primary or secondary syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, molluscum contagiosum, allergic reaction (e.g., to plants); and any other locally relevant common causes of papular or vesicular rash. As per WHO, it is not necessary to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected.
Probable Case	A person meeting the case definition for a suspected case **AND** One or more of the following: • has an epidemiological link (face-to-face exposure, including health care workers without respiratory protection; direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils) to a probable or confirmed case of monkeypox in the 21 days before symptom onset; • reported travel history to a monkeypox endemic country in the 21 days before symptom onset; • has had multiple sexual partners in the 21 days before symptom onset is hospitalized due to the illness.
Confirmed Case	A case meeting the definition of either a suspected or probable case and is laboratory confirmed for monkeypox virus by detection of unique sequences of viral DNA either by real-time polymerase chain reaction (PCR) and/or whole genome sequencing.
Contact	A contact is defined as a person who, in the period beginning with the onset of the source case's first symptoms, and ending when all scabs have fallen off, has had one or more of the following exposures with a probable or confirmed case of monkeypox: • face-to-face exposure (including health care workers without appropriate PPE); • direct physical contact, including sexual contact; • contact with contaminated materials such as clothing or bedding.
Discarded Case	A case meeting the definition of either a suspected or a probable case but tested negative for monkeypox virus through RT-PCR or WGS.

Appendix A. Monkeypox Contact Listing Form

Name of Case:_____

Full Name	Age	Sex	Date of Birth	Contact #	Occupation	Relation to case	No. of house-hold members	Address	Date of first contact with case	Date of last contact with case	Type of contact	Laboratory Done
Indicate Last Name, First Name, Middle Name	*Age*: Indicate D - days M - months Yr. - years *Sex*: F - Female M - Male		mm/dd/yyyy	Specify contact information	Please Specify Occupation	Specify relationship with case	Specify total number	Specify House # Street/Purok/ Subdivision, Barangay, Municipality/City, Province, Region	mm/dd/yyyy	mm/dd/yyyy	Type 1 Type 2 Type 3	Y-yes N-no If yes, Specify test and result

Types of contact:
Type 1– Direct contact with skin lesions of a confirmed MPX case - vesicles, pustules, crusts etc. (including sexual contact) OR direct contact with a confirmed animal case.
Type 2 – Direct contact with body fluids of confirmed monkeypox case (blood, urine, vomitus, feces, stool, sputum etc.)
Type 3 – Sharing of common space with case (e.g. vehicle, household, shared room/workstation, flight, etc.)

ANNEX C
Specimen Collection Guidelines for Monkeypox

A. Biosafety precautions

All specimens collected for laboratory investigations should be regarded as potentially infectious and handled with caution.

All personnel collecting samples for monkeypox shall wear appropriate personal protective equipment to protect against contact and droplet transmission. In general, PPE for specimen collection should include the following:

a. A properly fit tested, NIOSH-approved filtering facepiece respirator that provides a level of filtration of 95% (N95) or greater.
   - Powered air-purifying respirator (PAPR) equipped with high-efficiency particulate air (HEPA) filters must be used in case of failed Respirator Fit Test.
b. Impermeable laboratory gown/Cover-all
c. Head covers (disposable)
d. Face shield or goggles
e. Nitrile Gloves (disposable)
f. Shoe covers (disposable)

NOTE: *The proper order of donning and doffing PPE must be determined by local risk assessment. CDC provides guidance on the order of PPE donning and doffing. Refer to https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf*

B. Specimen Type and Timing of Collection

The recommended specimen type for virologic tests for monkeypox are swabs of skin lesion surface and/or exudate, lesion roof/scab/vesicle top, or lesion crusts.

Collection of oropharyngeal swabs may be considered.

C. Specimen Collection

1. Dacron/rayon swabs* and sterile screw-capped tubes may be used to collect samples. Surgical blades or a gauge 23 needle can be used to open the scab or vesicle for sample collection but these shall NOT be included in the shipment. Transport media is NOT required for sample collection. (*Oropharyngeal swab may be used)
2. Label all tubes and slides with the patient's full name or unique identifier, date of collection and type of specimen (e.g., lesion swab, lesion scraping slide, touch-prep slide, scab/vesicle top).
3. Swab at least two lesions from different parts of the body and place them in a single sterile container. Place lesion crusts/scab/vesicle top in a separate sterile container. These samples shall be labeled and shipped to the UP-PGC for whole-genomic sequencing and metagenomics analysis.
4. Prepare another set of samples. This shall be labeled and shipped to the Research Institute for Tropical Medicine (RITM) for RT-PCR confirmatory testing and other analysis.

D. Specimen Collection Proper for Lesions

1. Sanitize the patient's skin with an alcohol wipe and allow the skin to dry.
2. Remove the roof of the lesion with a disposable scalpel or sterile 26-gauge needle.

3. Swab the base of the lesion vigorously to ensure adequate viral DNA is collected. Place in a dry, sterile 1.5-2-mL screw capped tube. Two swabs may be placed in one tube to increase yield..
4. Place the roof of the lesion in a separate dry, sterile 1.5- to 2-mL screw-capped tube.
5. Label the tubes accordingly.

E. Specimen Collection Proper for Scab/Crust Material

1. Sanitize the patient's skin with an alcohol wipe and allow the skin to dry.
2. Use a 26-gauge needle to remove two to four scabs. Do not include the needle in the sample shipment.
3. Place one or two scabs in each of two dry, sterile screw-capped plastic tubes.
4. Label the tubes accordingly.

F. Case Data for Inclusion Along with Patient Specimen

Fully accomplished CIF shall include at a minimum the following information: date of report; reporting location; name, age, sex and residence of the case; date of onset of first symptoms; recent travel history; recent exposure to a probable or confirmed case; relationship and nature of contact with probable or confirmed cases (where relevant); recent history of multiple or anonymous sexual partners; smallpox vaccination status; presence of rash; presence of other clinical signs or symptoms as per case definition; date of confirmation (where done); method of confirmation (where done); genomic characterization (if available); other relevant clinical or laboratory findings, particularly to exclude common causes of rash as per the case definition; whether hospitalized; date of hospitalization (where done); and outcome at time of reporting. This shall be submitted along with the sample referral to UP-PGC and RITM.

G. Specimen Handling, Storage, Referral to UP-PGC and RITM

1. All specimens should be kept cold (4°C) from collection to transport. Store samples in a refrigerator prior to shipment. Store the specimens separately from vaccine, medicine, and food items.

2. Arrange for immediate shipment. If delay in shipment is anticipated, freeze the samples (-20°C or lower). Repeat freeze-thaw cycles should be avoided to prevent deterioration in specimen quality.

3. For local land transport, samples shall be triple-packed and labeled accordingly. For air transport, shippers must follow specific IATA packaging instructions for Cat A Infectious Substances.

4. All specimens for submission to UP-PGC and RITM must be coordinated with the Epidemiology Bureau and the Regional Epidemiology and Surveillance Unit.

5. For all specimens bound for UP-PGC, the RESU or the referring institution shall coordinate with the EB-COVID-19 Surveillance and Quick Action Unit prior to sending of the specimens. Once sending has been approved, specimen containers should be labeled as follows:

DR. EDSEL MARC AYES
Clinical Genomics Center
University of the Philippines - Philippine Genome Center
Diliman, Quezon City

a. Specimens are accepted by UP-PGC daily with a cut-off time of 5:00 PM.
b. Specimens should be accompanied by a completely filled out CIF and linelist of the referred samples.
c. The UP-PGC reserves the right to reject specimens that are leaking, contaminated, improperly labeled or with no label, or with no dry ice upon receipt. Rejected specimens shall be immediately communicated to the RESU.

6. For all specimens bound to RITM, the following shall be observed:
   a. RESU shall coordinate with the Epidemiology Bureau and the Surveillance and Response Unit of the Research Institute for Tropical Medicine (RITM SRU) the following details prior to sending of the specimens.
      i. Date of Request
      ii. Region
      iii. Referring institution/ESU
      iv. Requesting physician/health worker
      v. Outbreak details: Number of cases, location
      vi. Suspected pathogen
      vii. Test requested
      viii. Purpose (i.e. confirmatory testing for outbreak investigation)
      ix. Specimen type and total number sent
      x. Expected date of arrival in testing laboratory
      xi. Courier (if applicable) including tracking number
      xii. Shipper's name, signature, position, institution/agency and contact information
      xiii. Required documents
         1. Completely filled-out CIF
         2. Linelist of referred samples

   b. The referring institution/ESU shall ship the specimen with the required documents to the Research Institute for Tropical Medicine.-The shipment shall be addressed to:

      MS. JUNE C. CARANDANG
      Surveillance and Response Unit
      Research Institute for Tropical Medicine
      9002 Research Drive Filinvest Corporate City Alabang Muntinlupa

   c. The shipment shall be picked up at scheduled days and within cut-off time as indicated below:

      Schedules for Pickup of Samples:

      Outbreak Samples/EREID Samples
      Daily (Monday-Sunday), Cut off: 3:00 PM PST

   d. The referring institution/ESU shall ensure acknowledgement of the shipment at RITM through SMS/email.
   e. Upon receipt of shipment, the testing laboratory shall check that the number and type of specimens conform with the information/notification provided by the

sending institution, and that all required documents are complete. The specimen type and quality shall also be checked.

f. If there are discrepancies or if a specimen is rejected, the testing laboratory shall immediately inform the referring institution/ESU through the RITM-SRU for appropriate action. Specimen rejection criteria include the following:

1. **Specimen Quality (Non-Compliance with Specimen Requirements)**
    - Inappropriate specimen type for the requested test
    - Insufficient quantity
    - Leaking/broken container
    - Suspicion of contamination or tampering
    - Inappropriate transport or storage
    - Unknown time delay
    - Sample deterioration (e.g. hemolysis for serologic samples; bacterial overgrowth or contamination)
    - Unlabeled or illegibly labeled specimen
2. **Specimen Information (Non-Compliance with Document Requirements)**
    a. Incomplete documents
    b. Missing information in documents
3. **Specimen Coordination (Non-Compliance with communication/ Coordination Requirements)**
    a. Testing laboratory is not notified of the shipment
    b. There is no documented acknowledgement by the testing laboratory of acceptance of the specimen

g. All coordination and communications regarding sample pick-up and laboratory results for referred samples shall be coursed thru the RITM SRU using the following numbers:

RITM SURVEILLANCE AND RESPONSE UNIT

RITM LANDLINE - (02) 8807-2631 local 412
SMART – 0919-9279197
GLOBE - 09153578603

H. Release and Reporting of Results

RITM SRU shall forward the results to the RESU and EB as soon as available.The RESU shall provide the result to the referring institution.

ANNEX D
References

US Centers for Disease Prevention and Control. (2022). *2022 United States Monkeypox Case*. https://www.cdc.gov/poxvirus/monkeypox/outbreak/current.html

US Centers for Disease Control and Prevention (CDC). (2019). *Monkeypox and smallpox vaccine guidance. Updated December 2, 2019.* https://www.cdc.gov/poxvirus/monkeypox/ clinicians/smallpox-vaccine.html

UK Health Security Agency. (2022). *Recommendations for the use of pre and post exposure vaccination during a monkeypox incident. Updated May 2022.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1077437/Recommendations-for-use-of-pre-and-post-exposure-vaccination-during-a-monkeypox-incident

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1077329/20220520_monkeypox-contact-tracing-classification-and-vaccination-matrix.pdf

World Health Organization (21 May 2022). Disease Outbreak News; Multi-country monkeypox outbreak in non-endemic countries. Available at: https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON385

Laboratory testing of monkeypox. https://www.who.int/publications/i/item/WHO-MPX-laboratory-2022.1

Specimen collection procedures for monkeypox. https://www.cdc.gov/smallpox/lab-personnel/specimen-collection/specimen-collection-procedures.html#tonsillar

Specimen transport procedures for monkeypox. https://www.cdc.gov/smallpox/lab-personnel/specimen-collection/specimen-collection-transport.html

Specimen submission procedures for monkeypox. https://www.cdc.gov/laboratory/specimen-submission/detail.html?CDCTestCode=CDC-10515