

Interim Guidelines on Monkeypox Management in Malaysia
No. 1/2022
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1. INTRODUCTION

Monkeypox (Orthopoxvirus) is a viral zoonotic disease that occurs predominantly in Central and West Africa (i.e. Democratic Republic of the Congo, Republic of the Congo, Cameroon, Central African Republic, Nigeria, Ivory Coast, Liberia, Sierra Leone, Gabon and South Sudan) and is occasionally exported to other regions. It is transmitted to humans through close contact with an infected person or animal, or with materials contaminated with the virus such as beddings, and droplet exposure via exhaled large droplets.

Animal-to-human transmission may occur by bite or scratch, bush meat preparation, direct contact with blood, bodily fluids, or cutaneous or mucosal lesions of infected animals. The virus enters the body through broken skin (even if not visible), respiratory tract, or the mucous membranes (eyes, nose, or mouth).

The incubation period for monkeypox is usually 7–14 days but can range from 5 to 21 days. Monkeypox is usually a self-limited disease with the symptoms lasting from 2 to 4 weeks.

2. CLINICAL PRESENTATION

The illness begins with nonspecific symptoms and signs that include fever, chills, headaches, lethargy, asthenia, myalgia, back pain, and lymphadenopathy. Within 1 to 5 days after the onset of fever, rashes of varying sizes appear first on the face and spread to the arms and legs, then to the hands and feet including the palms and soles. The rash typically spreads to all parts of the body within 24 hours, becoming concentrated on the face, arms and legs (centrifugal distribution). The rash undergoes several stages of evolution from macules (flat lesion), papules (raised lesion), vesicles (fluid-filled blisters, Figure a) and pustules (pus filled blister, Figure b), followed by resolution over time with crusts and scabs (Figure c) which drop off on healing (Figure d) over a 2 to 4 weeks period.



a) Vesicle



b) Umbilicated
pustule



c) Ulcerated with
scab



d) Healing lesion

Figure (a), (b), (c) and (d) shows various stages of skin lesion in monkeypox

An individual is contagious until all the scabs have fallen off.

Infectivity period ranges from 1 day before symptoms onset (prodrome period) up to 21 days after the initial symptoms appear, or until all skin lesions have formed scabs and no other symptoms are present. A person is no longer contagious once all scabs have fallen off and there is intact skin underneath.

The disease may also affect oral mucous membranes, genitalia, conjunctivae and the cornea. Complications of monkeypox can include secondary infections, bronchopneumonia, sepsis, encephalitis, and infection of the cornea with ensuing loss of vision.

Because of the nonspecific nature of the symptoms and signs of monkeypox, a wide variety of differential diagnoses should be considered, ranging from chickenpox, measles, rickettsial infections, bacterial skin infections, scabies, syphilis, and drug reactions. The most important differential diagnosis is chickenpox.

In chickenpox, the lesions occur at various stages of development whereas all the lesions are generally at the same stage in monkeypox. Lesions in chickenpox are denser on the trunk than on the face and extremities (centripetal distribution) as compared to monkeypox which is more severe on the face, hands and feet (centrifugal distribution).

Lymphadenopathy is observed prior to and concomitant with the rash in monkeypox but not in chickenpox. The following table shows the differentiating features between monkeypox and chickenpox (*Varicella zoster*).

Characteristic	Monkeypox	Varicella
Time period		
Incubation period	7–17 d	10–21 d
Prodromal period	1–4 d	0–2 d
Rash period (from the appearance of lesions to desquamation)	14–28 d	10–21 d
Symptoms		
Prodromal fever	Yes	Uncommon, mild fever if present
Fever	Yes, often between 38.5°C and 40.5°C	Yes, up to 38.8°C
Malaise	Yes	Yes
Headache	Yes	Yes
Lymphadenopathy	Yes	No
Lesions on palms or soles	Yes	Rare
Lesion distribution	Centrifugal ^a	Centripetal
Lesion appearance	Hard and deep, well-circumscribed, umbilicated ^a	Superficial, irregular borders, “dew drop on a rose petal”
Lesion progression	Lesions are often in one stage of development on the body; slow progression with each stage lasting 1–2 d ^a	Lesions are often in multiple stages of development on the body; fast progression

Source: Table from “Human monkeypox” by McCollum, A. M., & Damon, I. K. (2014). *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*, 58(2), 260–267. <https://doi.org/10.1093/cid/cit703>

3. CASE DEFINITION (ADAPTED FROM WHO @ 21 May 2022)

WHO has developed surveillance case definitions for the **current monkeypox outbreak in non-endemic countries**.

Monkeypox endemic countries are: Benin, Cameroon, the Central African Republic, the Democratic Republic of the Congo, Gabon, Ghana (identified in animals only), Côte d'Ivoire, Liberia, Nigeria, the Republic of the Congo, and Sierra Leone.

3.1 Suspected case

A person of any age presenting in a monkeypox non-endemic country with an unexplained acute rash

AND

One or more of the following signs or symptoms, since 15 March 2022:

- Headache
- Acute onset of fever (>38.5°C),
- Lymphadenopathy (swollen lymph nodes)
- Myalgia (muscle and body aches)
- Back pain
- Asthenia (profound weakness)

AND

for which the following common causes of acute rash do not explain the clinical picture: varicella zoster (chickenpox), herpes zoster, measles, Zika, dengue, chikungunya, herpes simplex, bacterial skin infections, disseminated *gonococcus* infection, primary or secondary syphilis, chancroid, lymphogranuloma venereum, granuloma inguinale, molluscum contagiosum, allergic reaction (e.g., to plants); and any other locally relevant common causes of papular or vesicular rash.

Note: *It is not necessary to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected.*

3.2 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 workers without eye and 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 or anonymous sexual partners in the 21 days before symptom onset;
- has a positive result of an *orthopoxvirus* serological assay, in the absence of smallpox vaccination or other known exposure to orthopoxviruses; **OR**
- is hospitalized due to the illness.

3.3 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 sequencing.

3.4 Discarded case:

A suspected or probable case for which laboratory testing by PCR and/or sequencing is **negative** for monkeypox virus.

4. LABORATORY TESTING

Diagnosis of Monkeypox can only be confirmed with laboratory testing using real time RT-PCR method. Serology and antigen detection are not recommended for diagnosis as they cross react with other orthopoxviruses. To facilitate accurate diagnosis, the correct specimens should be collected from suspected cases and transported to the National Reference Laboratory (Institute for Medical Research (IMR) / National Public Health Laboratory (NPHL) for diagnosis as rapidly as possible

4.1 Specimen Collection, Handling And Transportation

4.1.1 Collection of Specimen

- i. The correct timing of sampling with respect to the onset of clinical signs is important for interpreting results and establishes an accurate conclusion.

- ii. Health care personnel involved in specimen collection for Monkeypox virus (MPXV) must wear recommended personal protective equipment as compliant with infection control guidelines ie. disposable gown, double gloves, respirator N95 and eye protector such as goggles (if involve splash procedure), head and shoe cover. Wash hands with soap and water before and after sample collection
- iii. Optimal diagnostic specimens are from lesions – vesicular swabs of lesion exudate or crusts stored in a dry, sterile tube (no viral transport media) and kept cold (2-8 degree Celsius). Blood and serum (in plain or gel tube) can be used but often can be inconclusive because of short duration of viremia and timing of specimen collection.

Table 1: Guidance on specimens for MPXV

Case Category	Disease Phase	Sign / Symptoms	Specimens to Collect
Suspected or probable case	Rash	Vesicles or Pustules	Lesion fluid, roof, or biopsy
		Scabs or Crusts	Lesion scab or crust
Contact	Prodrome	Early stage of fever	Tonsillar tissue swab
			Nasopharyngeal swab
			Blood (Plain Tube with gel separator/ EDTA)
Confirmed case	Post-Rash	Absent	Convalescent serum (gap 2 samples in 2-3 weeks after diagnosis)

**Table 2: Type of sample and collection method
(Please send samples in DUPLICATE)**

No	Type Of sample		
1.	Lesion fluid		
	Materials needed	Procedure	Test Method
	Lesion Fluid Swab <ul style="list-style-type: none"> • 2 unit of disposable scalpel with no. 10 blade, or • 2 unit of 26 Gauge needle • 4 unit of sterile screw-capped container (1.5 to 2 mL) • 4–8 unit of sterile dry polyester or Dacron swabs • Alcohol wipes 	<ol style="list-style-type: none"> 1. Clean the lesion with gauze soaked with normal saline, allow to dry. 2. Use a disposable scalpel (or a sterile 26 Gauge needle) to open, and remove, the top of the vesicle or pustule. Retain lesion roof for testing. 3. Swab the base of the lesion with a sterile polyester or Dacron swab. 4. Break off end of applicator into a 1.5 or 2 mL screw-capped sterile container or place entire swab in a sterile container. <p>DO NOT ADD ANY VIRAL TRANSPORT MEDIA</p>	Real-time PCR
Lesion Fluid Aspirate <ul style="list-style-type: none"> • 2 unit of 26 Gauge needle • 2 unit of 1 ml syringe • 4 unit of sterile screw-capped container (1.5 to 2 mL) • 4–8 unit of sterile dry polyester or Dacron swabs • Alcohol wipes 	<ol style="list-style-type: none"> 1. Clean the lesion with gauze soaked with normal saline, allow to dry 2. Prick the vesicle using a sterile 26 Gauge needle and 1 ml syringe and aspirate the vesicle fluid. 3. Open, and remove, the top of the vesicle or pustule. Retain lesion roof for testing. 4. Inject the collected fluid into sterile screw-capped container (1.5 to 2 mL). <p>DO NOT ADD ANY VIRAL TRANSPORT MEDIA</p>	Real-time PCR	

2.	Lesion roof		
	Materials needed	Procedure	Test Method
	<ul style="list-style-type: none"> • 2 unit of disposable scalpel with no. 10 blade, or • 2 unit of 26 Gauge needle • 4 unit of Sterile screw-capped plastic vials with O-ring (1.5 to 2 mL) • Alcohol wipes 	<ol style="list-style-type: none"> 1. Clean the lesion with gauze soaked with normal saline, allow to dry 2. Use a disposable scalpel (or a sterile 26 Gauge needle) to open, and remove, the top of the vesicle or pustule (scalpel or needle to be discarded in sharp bin after disinfected with sodium hypochlorite). 3. Place the skin of the vesicle top into a 1.5 to 2 mL sterile screw-capped sterile container. DO NOT ADD ANY VIRAL TRANSPORT MEDIA 	Real-time PCR
3	Scab or crust		
	Materials needed	Procedure	Test Method
	<ul style="list-style-type: none"> • 1 unit of 26 Gauge needle • 2 unit of sterile screw-capped plastic vials with O-ring (1.5 to 2 mL) • Alcohol wipes 	<ol style="list-style-type: none"> 1. Clean the lesion with gauze soaked with normal saline, allow to dry 2. Use a 26 Gauge needle to pick or dislodge at least 4 scabs; two scabs each from at least two body locations 3. Place scabs from each location in separate sterile container. DO NOT ADD ANY VIRAL TRANSPORT MEDIA. 	Real-time PCR
4	Tonsillar tissue swab		
	Materials needed	Procedure	Test Method
	<ul style="list-style-type: none"> • Sterile screw-capped container (1.5 	<ol style="list-style-type: none"> 1. Swab or brush posterior tonsillar tissue with a sterile dry polyester or Dacron swab. 	

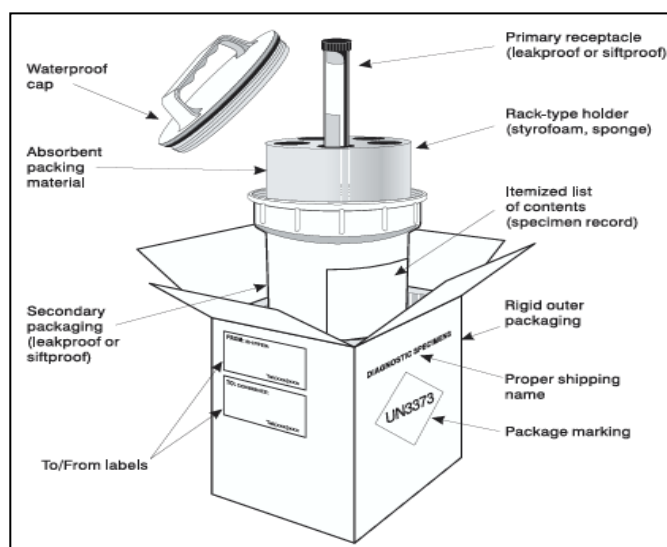
	to 2 mL) –2 set • Sterile dry polyester or Dacron swabs – 2 set	2. Break off end of applicator into a 1.5 or 2 mL screw-capped sterile container or place entire swab in a sterile container. DO NOT ADD ANY VIRAL TRANSPORT MEDIA.	Real-time PCR
5	Nasopharyngeal swab		
	Materials needed	Procedure	Test Method
	<ul style="list-style-type: none"> • Sterile screw-capped plastic tube with O-ring (1.5 to 2 mL) – 2 set • Sterile dry polyester or Dacron swabs – 2 set 	<ol style="list-style-type: none"> 1. Swab the nasopharynx with a sterile dry polyester or Dacron swab. 2. Break off end of applicator into a 1.5 or 2 mL screw-capped sterile container or place entire swab in a sterile container. DO NOT ADD ANY VIRAL TRANSPORT MEDIA 	Real-time PCR
6	Acute/convalescent serum and whole blood		
	Materials needed	Procedure	Test Method
	<ul style="list-style-type: none"> • 5ml or 10 cc syringe with needle 	<ol style="list-style-type: none"> 1. Collect 7 to 10 ml of patient blood into a plain or gel blood collection tube when patient is first identified. 2. Obtain convalescent-phase serum 2 to 3 weeks after initial acute-phase serum collection. 	Serological /Other test

Work flow of laboratory approach in monkeypox investigation as in Annex 1.

4.1.2 Specimen Transportation

- i. All specimens must be kept at cold temperature (2°C to 8°C) during transportation.

- ii. The Laboratory Request Form must be accompanied with the specimens and must be attached at the outside of the triple packaging system. Label the outside sample box with 'Monkeypox'.
- iii. All specimens from community (case or contacts) must be sent as soon as possible to NPHL. Hospital specimens are sent to IMR
- iv. Each specimen should be labelled with the patient's name, identification number, collection date, type of specimen, and body location for lesion specimens.
- v. Place specimens from a single patient into a biohazard bag.
- vi. Blood tubes should be placed in individual Styrofoam holders.
- vii. All specimens should be shipped on ice packs at 4°C.
- viii. Specimens may be stored at 4°C up to 48 hr before processing. If specimen cannot be processed within 48 hours, it should be stored at -70°C.
- ix. Specimens should be packaged and shipped in accordance with IATA rules and regulations for diagnostic specimens (UN 3373).
- x. All MPXV specimens transported to MKAK/ IMR should be packaged by following the Triple Packaging System (Picture 1) which consists of a primary receptacle in a seal able specimen bag wrapped with absorbent material, secondary receptacle (watertight, leak-proof), and an outer box.



**Figure 1 - Triple layer packaging Triple Packaging System
(graphic by IATA, Montreal, Canada)**

4.2 Request Form

In order to interpret test results, it is critical that patient information is provided with the specimens including:

- i. approximate date of onset of fever
- ii. date of onset of rash/ fever

- iii. other clinical signs
- iv. date of specimen collection
- v. current status of the individual (stage of rash)
- vi. nationality/country
- vii. travel history to affected MPXV country
- viii. contact history with MPX patient
- ix. specimen type
- x. date of specimen collection
- xi. date specimen sent to laboratory
- xii. requestor details i.e. name, contact number, email address

Use Specific Laboratory request form to be used for designated laboratories

- i. MKAK - *Borang Permohonan Ujian Umum* with coding MKAK-BPU-U01/Rev2018 – can be downloaded from MKAK website <https://mkak.moh.gov.my/ms/muat-turun/borang-dokumen-bahagian-penyakit/borang-permohonan-ujian.html>.
- ii. IMR – Borang permohonan ujian PER-PAT 301.

Please call officer on duty (annex 2) for any queries.

4.3 Laboratory Biosafety Guidelines for Handling and Processing Specimens

Use of a certified Class II Biological Safety Cabinet (BSC) is recommended for manipulations of monkeypox specimens—If a BSC cannot be used, the risk of exposure to an inadvertent sample release should be reduced by the appropriate combinations of personal protective equipment (e.g., respirators, face shields) and physical containment devices (e.g., centrifuge safety cups or sealed rotors).

Use sealed centrifuge rotors or sample cups for centrifugation. Ideally, these rotors or cups should be unloaded in a BSC.

Routine specimen processing may be handled in BSL-2 facilities, but with more stringent BSL-3 work practices. Measures should be taken to minimize the risk of laboratory transmission when testing routine clinical specimens from confirmed or suspected monkeypox patients. These may include: limiting the number of staff testing specimens, wearing appropriate personal protective equipment, using rigorously applied standard precautions, and avoiding any procedures that could generate infectious aerosols.

Decontamination of work surfaces after the completion of work or at the end of the day is essential. Any Environmental Protection Agency (EPA)-registered hospital detergent-disinfectant currently used by health-care facilities for environmental sanitation may be used. Manufacturer's recommendations for use-dilution (i.e., concentration), contact time, and care in handling should be followed.

If the appropriate safety equipment and/or protocols are not available, consideration should be made to refer specimens to a suitably equipped reference laboratory.

4.4 Waste Disposal Management

After specimen collection is completed, disposable equipment (e.g., gown, gloves, mask) should be placed in a biohazard bag for disposal with other medical waste. Needles and other sharp instruments should be placed in a sharps container.

Reusable equipment (e.g., goggles, face shield) should be disinfected and set aside for reprocessing. If cloth gowns are used, they should be placed in a bag with other contaminated linens in the patient's room.

Contaminated waste generated during specimen collection should be handled in accordance with existing facility procedures and local or state regulations for regulated medical waste.

5. INFECTION PREVENTION AND CONTROL (IPC)

5.1 The principles of IPC to prevent or limit transmission of monkeypox infection in healthcare facilities include:

Ensuring triage, early and rapid recognition AND source control.

- a. Rapid case identification of patients should be done at all entry points of the healthcare facility.
- b. Creating awareness amongst Health care providers through webinars/CME session
- c. Post visual alerts (in appropriate languages) at the entrance to outpatient facilities (e.g., emergency departments, outpatient clinics) instructing patients and the visitor to inform healthcare personnel if he/she has symptoms related to monkeypox when they first register for care.
- d. Screening of patients and visitors
 - Screening questions should include epidemiological link (i.e travel history, contact with animals or consumption of partially cooked wild animals, sexual history) and clinical presentation.
 - Temperature screening/ Pustular eruptive rash on face and hand
- e. Advise patients to wear a mask or cover her/his nose and mouth during coughing or sneezing with tissue or flexed elbow.
- f. HCW should maintain at least 1 meter from the patient whenever possible.
- g. If a patient or visitor fulfills the criteria of suspected monkeypox based on the screening questionnaire, they should be separated from other patients such as isolation or negative pressure room / tent or areas as soon as possible

- h. Cleaning of high touch areas (i.e., chair, table, couch) at waiting and triage areas after the patient leaves the area or as required (i.e., spillage, soiling)
- i. Examination/ isolation room at entry points (i.e., ED/ primary care etc) should be in descending order of preference:
 - i) Negative air pressure room
 - ii) Single room (with door closed) and attached bathroom
 - iii) Single room

5.2 Application of Standard Precautions and Transmission Based Precautions (contact and droplet)

Health care workers caring for patients with suspected or confirmed monkeypox should implement standard, contact and droplet infection control precautions. This includes all workers such as cleaners and laundry personnel who may be exposed to the patient care setting, bedding, towels, or personal belongings. In addition, because of the theoretical risk of airborne transmission of monkeypox virus, airborne precautions should be applied whenever possible.

5.3 Standards Precautions

- i. **Hand hygiene** as per the WHO 5 moments.
- ii. **Personal protective equipment (PPE)** use should be guided by risk assessment concerning anticipated contact with blood, body fluids, secretions and non-intact skin for routine patient care. PPE should be donned before entering the patient's room and used for all patient contact. All PPE should be disposed of prior to leaving the isolation room where the patient is admitted.
 - N95 (or comparable) filtering disposable respirator
 - Isolation gown
 - Gloves
 - Eye protection (goggles or face shield)
- iii. **Disinfection and sterilisation**
 - All single use medical equipment should not be re-used.
 - All reusable medical equipment (e.g., blood glucose meter and other point of care devices, surgical instruments, endoscope) is cleaned and reprocessed appropriately prior to use on another patient.
 - Reusable medical equipment must be cleaned and reprocessed according to general protocols for disinfection and sterilization.
- iv. **Environmental Hygiene - Cleaning and Disinfection**
 - Ensure environmental cleaning and disinfection procedures are followed consistently and correctly as per healthcare facilities recommendation.

- Clean and disinfect surfaces that are likely to be contaminated with pathogens, including those that are in close proximity to the patient (e.g., bed rails, over bed tables) and frequently-touched surfaces in the patient care environment (e.g., door knobs, surfaces in and surrounding toilets in patients' rooms).
- Any disinfectant currently used by healthcare facilities for environmental sanitation may be used. Follow the manufacturer's recommendations.
- For ISOLATION ROOM, terminal cleaning and disinfection should be done following discharge/transfer of a patient. Refer to Infection Prevention and Control Policies and Procedures, 3rd Edition, 2019 for the steps of terminal cleaning.

v. Waste Management

- General waste should be segregated from infectious waste.
- Infectious waste should be handled and treated in accordance with healthcare facility policies and local regulations.
- HCW who are involved in waste management should be trained and wear appropriate PPE.

vi. Linen Management

- Contaminated linen should be handled with minimal manipulation to prevent contamination of the air, surfaces and persons.
- All linen should be handled inside the isolation room/cohort area/ward.
- Appropriate PPE should be donned prior to handling the used linen.
- Washing/disinfecting linen should be handled according to healthcare facilities protocol.

vii. Safe Injection Practices, Sharps Management and Prevention of Needle injuries

viii. Respiratory Hygiene/Cough Etiquette

- Should be applied by all individuals with respiratory symptoms.
- All individuals with signs and symptoms of a respiratory infection should:
 - Use a surgical mask.
 - Cover their mouth and nose when coughing/sneezing.
 - Use tissues, handkerchiefs, cloth/fabric or surgical masks and dispose of them into waste containers.
 - Clean hands after contact with respiratory secretions.
 - Keep at least 1 metre from other patients.

5.4 Transmission Based Precautions

a. Contact and Droplet Precautions

i. Patient Placement on Admission

- Confirmed or suspected patient should be placed in descending order of preference:
 - a) Negative air pressure room
 - b) Single room (with door closed) and attached bathroom
 - c) Single room

ii. Patient care equipment

Dedicate the use of non-critical patient-care equipment to avoid sharing between clients/patients/residents (e.g., stethoscope, sphygmomanometer, thermometer or bedside commode). If unavoidable, then adequately clean and disinfect them between use for each individual patient with hospital recommended disinfectant.

iii. Patient Transfer and Transport within the Healthcare Facilities

- Avoid the movement of patients unless medically necessary.
- If movement of patients is required, use pre planned routes that minimize exposure to other staff, patients and visitors. Notify the receiving area before sending the patient.
- Have the patient wear clean clothes/gown, wash their hands, wear a medical mask and cover their lesions to the best extent possible for transport.
- Clean and disinfect patient-contact surfaces (e.g., bed, wheelchair, incubators) after use.
- HCWs transporting patients must wear appropriate PPE.

iv. Specimen Collection and Transport

- Specimens should be packaged according to latest requirement and handled by trained staff and lab should be notified accordingly.
- Once samples are secured, no further additional PPE is required. In case of risk of spillage, HCW to wear a plastic apron and gloves.
- All specimens should be regarded as potentially infectious, and HCW who collect, or transport clinical specimens should adhere rigorously to Standard Precautions, to minimize the possibility of exposure to pathogens.
- Samples taken from people with suspected monkeypox virus infection should be handled by trained staff working in suitably equipped laboratories.
- Notify the laboratory as soon as possible that the specimen is being transported.

v. Visitors and caregivers

- No visitor should be allowed unless visitors who are essential such as parents of paediatric patients.
- HCW should educate and supervise the caregivers on hand hygiene (before entering and leaving the room), respiratory etiquette, physical distancing (maintain at least 1 metre), use of PPE and other IPC measures as well as on how to recognize the signs and symptoms of monkeypox infection.
- PPE recommended for these caregivers may be limited to surgical masks. The use of a plastic apron and gloves are recommended when anticipating exposure to bodily fluids.

6. CASE MANAGEMENT

6.1 Management of Initial Monkeypox cases in Malaysia

All initial suspected, probable and confirmed monkeypox cases should be admitted to hospitals for isolation because:

- i. Malaysia has not reported any monkeypox cases and we have limited experience and knowledge on its management,
- ii. to comply with the section 14 of Act 342 in managing patients with infectious diseases ("*Section 14. An authorized officer may cause any person who is infected or whom he has reason to believe to be infected to be removed to a quarantine station for treatment and may detain the person at the station until he can be discharged without danger to the public.*"), and
- iii. non-compliance to the isolation order other than hospital facilities can facilitate the transmission in the community.

Maculopapular rash is a required sign for admission.

Monkeypox case should be isolated and discharged upon assessment on the risk of disease transmission to others. Isolation precautions should be practiced until all lesions have resolved, and a fresh layer of skin has formed. Monitoring of patient's health status during continuation of isolation at home can be done through Home Assessment Tool (HAT) in *MySejahtera* application.

6.2 Widespread Monkeypox Cases in Malaysia

Admission criteria

- a. Patients who are clinically ill **OR** have the following symptoms:
 - Persistent fever beyond day 5
 - Exertional dyspnoea, SP02 < 95% (at rest or at exertion)

- Dehydration
 - Secondary infection of skin lesions
 - Reduced level of consciousness
 - Blurring of vision
- b. Patients with uncontrolled medical conditions, immunocompromised status, pregnant women, extremes of age (< 2 years or > 60 years old).
- c. Patients who do not fulfil the above criteria but are not suitable for home surveillance, to consider admission.

NOTE: *If there were to be high number of cases, admission for isolation of monkeypox cases into the ward will be reviewed.*

Checklist for suitability of patients to undergo home surveillance:

(The checklist is provided as a guide, hence the assessment of patient suitability for home surveillance is tailored from one patient to another).

- a. Has a separate bedroom with en-suite bathroom (preferable); if not, common bathroom with frequent disinfection
- b. Has access to food and other necessities
- c. Has access to face mask, glove and disinfectant at home
- d. Able to seek medical care if necessary and return with own private transport
- e. Able to adhere to instruction to follow home surveillance order
- f. Able to stay away (at least 2 meter apart) from the high-risk household members (e.g. individual > 60 years old, young children <2 years, pregnant women, people who are immunocompromised or who have chronic lung, kidney, heart disease)

7. CASE NOTIFICATION

All suspected, probable or confirmed monkeypox cases must be notified to the District Health Office within 24 hours via phone call. This is then followed by the Borang Notifikasi Penyakit Berjangkit under “other life-threatening microbial infection” (Annex 3) or input patient’s information into the e-Notification System.

All notified monkeypox cases (suspected, probable or confirmed) must be investigated using the Investigation Form in Annex 4. It is to identify the source of the infection, so that preventive and control measures can be taken immediately to prevent its spread.

8. CASE TREATMENT

Currently, there is no proven definitive treatment for monkeypox virus infection. The main principles of management is rapid isolation to control the outbreak, as well as symptomatic treatment for patients.

CDC Atlanta has reported that monkeypox outbreak can be controlled with smallpox vaccine, antiviral cidofovir, tecovirimat and vaccinia immune globulin (VIG). MOH will explore further on the availability of specific treatment and vaccine for monkeypox.

8.1 General Care

- Supportive care and symptomatic treatment, optimal nutritional support, maintain fluid and electrolytes balance, and close monitoring.
- Monitor vital signs (BP/PR/RR) 12 hourly to 8 hourly with increase in monitoring if indicated.
- Blood investigations, e.g. trend FBC, CRP, LFT, RP, coagulation and blood culture according to clinical indications.
- Monitor sugar if indicated.
- Patients should not be routinely prescribed antibiotics unless suggestive of bacterial infection.

8.2 Skin care

Treatment objectives of skin care are:

- To prevent secondary bacterial infections
- To promote lesion healing
- To minimize insensible fluid loss

Therapeutic considerations

- Avoid scratching and picking the skin lesions
- Wash/bath: Use gentle cleanser or soap twice a day
- Apply calamine lotion twice a day for soothing effect and to relieve itch
- Topical antibiotics/antiseptics can be applied onto the excoriated lesions
- Avoid using topical corticosteroid onto the skin lesions

Follow up/Monitoring: to observe for the following signs

- Fever
- Lesion count/rash burden
- Pain/tenderness
- Erythema
- Oedema
- Exudate
- Warmth

If ulcer or abscess developed,

- Antiseptic wash with occlusive dressing
- Systemic antibiotic to treat secondary bacterial infection
- Consider surgical debridement for abscess or infected ulcers

8.3 Specific Treatment

Currently there is no specific treatment for monkeypox infection.

8.4 Home care - skin care

The following are the important steps of skin care at home

- Avoid scratching and picking the skin lesions to prevent secondary bacterial infection.
- Use gentle cleanser or soap with lukewarm water to wash your body twice a day
- Gently dap your skin with a clean towel after bath and avoid rubbing on the skin lesions.
- You may apply calamine lotion twice a day onto your skin to reduce itch sensation.
- If there is any open wound, you may use antiseptic wash or apply antibiotic cream onto the wound.
- Observe closely for the following signs of secondary bacterial infection:
 - Fever
 - Pain, swelling, redness, warmth and pus discharge from the skin lesions
- Seek treatment immediately from a doctor if you have any above signs of secondary infection.

9. CONTACT TRACING

9.1 Close contact includes:

- i) Anyone who provided care for a monkeypox patient including a health care worker or family member, or had other similarly close physical contact,
- ii) Anyone who stayed at the same place with a probable or confirmed monkeypox case while he/she was symptomatic with maculopapular rash (e.g., lived with or visited).

9.2 Management of Close Contact

Contacts with high risk of infections need to be observed for 21 days from the date of last exposure to the confirmed case, for any monkeypox symptoms and signs. The order for

observation is a provision under subsection 15(1) Act 342, which is

“Subsection 15. (1) An authorized officer may order any contact to undergo observation in such place and for such period as he may think fit, or to undergo surveillance until he may be discharged without danger to the public.”

Their health status will be monitored daily using *MySejahtera*'s Home Assessment Tool (HAT).

Asymptomatic contacts should not donate blood, cells, tissue, organs, breast milk or semen while they are under symptom surveillance.

10. MANAGEMENT OF DEAD BODY

The dead body is considered infectious as long as there are maculopapular rash with or without exudate, as long as there is no intact skin underneath the rash. Hence, the management of decease is per infectious disease protocol.

Personnel who manage the decease should wear PPE as recommended for Standard, Contact and Airborne Precautions.

All post-mortem procedures require adherence to standard precautions with the use of appropriate personal protective equipment (PPE). It should be conducted in facilities with appropriate safety features. When possible, personnel with smallpox vaccination should participate in autopsy or mortuary care for patients with confirmed or suspected monkeypox.

11. PREPAREDNESS AND RESPONSE AT INTERNATIONAL POINT OF ENTRY

11.1 Suspected case is required to report to Health Personnel at the Health Screening area at entry point.

- i. Passengers and crew who detected to have fever or self-referral at the health screening area / health quarantine centre will be screened for monkeypox infection through history taking and examination as detailed in Annex 5 which include history of travel to Monkeypox affected countries.
- ii. Cases suspected of monkeypox with history of travel to affected Monkeypox countries will be referred to the nearest health facilities for further management.
- iii. Cases which did not fulfil the criteria of suspected monkeypox will be provided with health advice and issued a copy of a Health Alert Card (HAC) as in Annex 6.

- iv. All cases of suspected monkeypox are to be notified to the nearest District Health Office, State CPRC and National CPRC.

11.2 Management of Suspected Monkeypox case on-board flight /cruise/ships

- i. The suspected cases which have been identified by the crew will be informed by the crew to the health authority at the point of entry.
- ii. Suspected case will be received by health personnel at the arrival gates. Other passengers and crew are allowed to disembark from the aircraft and proceed to health screening at arrival hall.
- iii. Health personnel will bring the suspected case to health screening area for full examination and history taking.
- iv. Suspected case (name, citizenship, passport number/identification number, contact details and address in Malaysia) will be submitted to State Health Department and Zoonosis Sector, MOH for immediate implementation of surveillance and prevention activities.
- v. Cases suspected of monkeypox with history of travel to affected monkeypox countries will be referred to the nearest health facility for further management.
- vi. Travelers sitting 2 seats in front, back and side of the suspected monkeypox will be given a Health Alert card so that they can monitor their health for the next 3 weeks. If they get symptoms of fever, swelling, headache, back pain, macular-pustular rashes they are required to seek immediate treatment at any clinic and should inform the doctor history of returning from the affected country with monkeypox.
- vii. Flow chart for management and screening of travellers and crew arriving from affected countries with human monkeypox cases at the international point of entry is summarised in Annex 7.

11.3 Other Preparedness and Response Against Monkeypox Infection

Heighten awareness on monkeypox, prevention and control measures to public, passengers and crew through:

- i. Distribution of education materials such as pamphlets, posters and Travel advisory to passengers, crew, airport/port/ground crossing workers (Annex 8).

- ii. Pre-departure or on board announcement for flight, cruise or ship coming from affected countries before arrival (Annex 9). On arrival announcement should be based on convenience.
- iii. Updated information on social media – Website, Facebook (FB).
- iv. Displays streamer/bunting on Monkeypox and control measures.

12. HEALTH EDUCATION

Health promotion and education is to be conducted through multiple channels and methods to:

- Encourage people with symptoms to seek treatment and to confirm the diagnosis;
- Isolate infected patients from others who could be at risk for infection;
- Urge contact of monkeypox cases to stay home and observe symptoms and signs of monkeypox for 21 days from the last day of meeting the case;
- Advise those caring monkeypox patient to use personal protective equipment (PPE) when managing them;
- Avoid contact with any materials, such as bedding and clothes that has been in contact with a monkeypox case;
- Avoid contact with animals that could harbour the virus (including animals that are sick or that have been found dead in areas where monkeypox occurs); and
- Practice good hand hygiene after contact with infected humans or animals, washing hands with soap and water or using an alcohol-based hand sanitizer.

13. COLLABORATION WITH OTHER AGENCIES & MINISTRIES

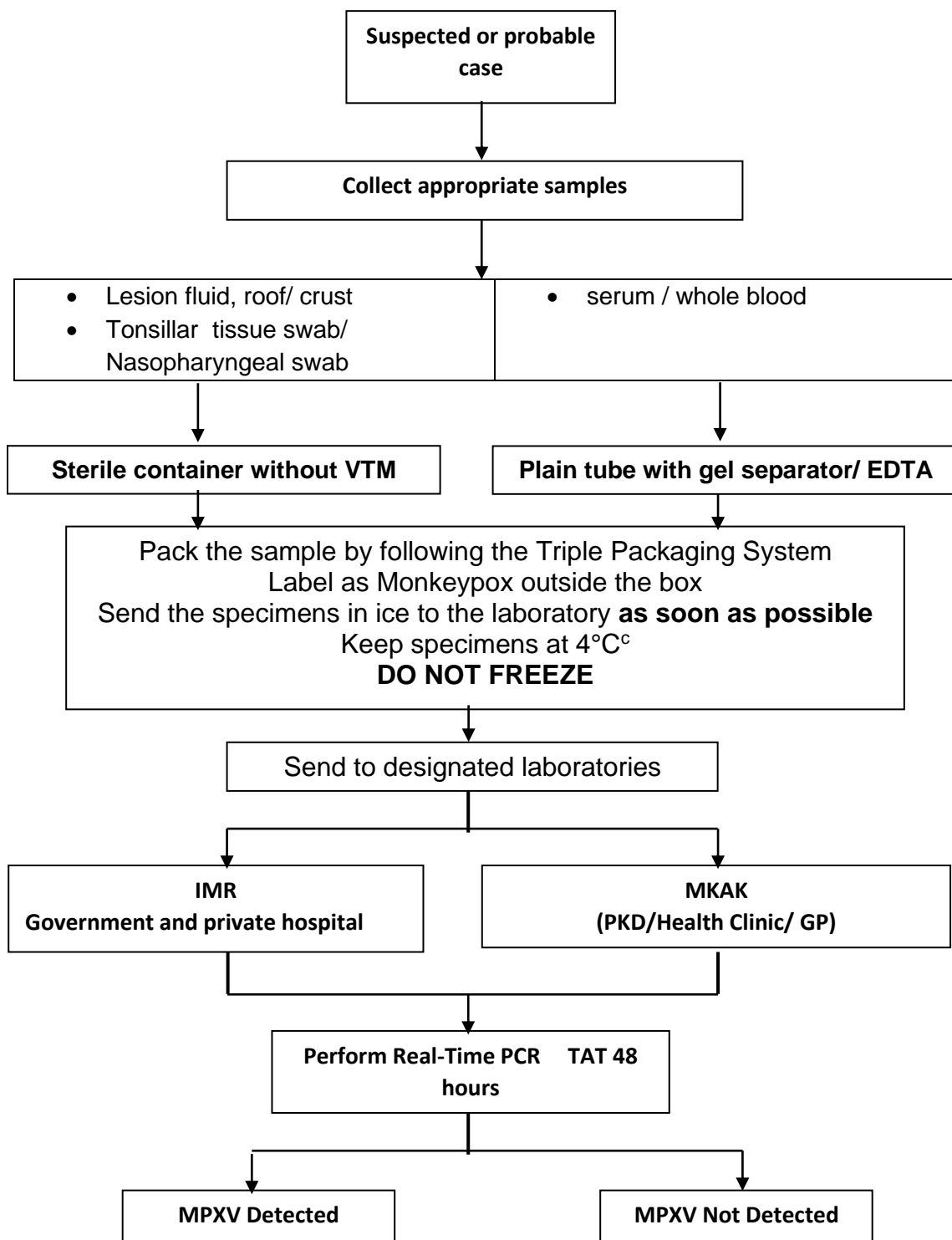
- i. Sharing information on surveillance of monkeypox in animals among MOH, Department of Veterinary Services (DVS) Malaysia, Department of Malaysian Quarantine Inspection Services (MAQIS) and Department of Wildlife and National Parks of Peninsular Malaysia (PERHILITAN).
- ii. Working in close collaboration with other relevant agencies such as National Security Council (MKN), Ministry of Foreign Affairs (MOFA), Ministry of Home Affairs (KDN), Ministry of Transport (MOT), Ministry of Tourism, Art and Culture (MOTAC), The Immigration Department of Malaysia, Royal Malaysian Customs, Royal Malaysian Police Force, Department of Civil Aviation Malaysia, airport / port / ground crossing authorities and agencies, airlines, shipping companies, private health facilities and other agencies/ministries, etc.

- iii. Reporting to health authority at international point of entry is required by the aircraft / ship / vehicle if there are passengers from monkeypox affected countries showing signs and symptoms of monkeypox.
- iv. To obtain assistance and cooperation as and when needed from all agencies/stake holders in disease prevention and control activities.

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11. Surveillance, preparedness and outbreak response activities for monkeypox in affected countries. WHO

WORK FLOW OF LABORATORY APPROACH IN MONKEYPOX INVESTIGATION



**SENARAI PEGAWAI UNTUK DIHUBUNGI UNTUK PENGHANTARAN SAMPEL
DI LUAR WAKTU PEJABAT, Hujung Minggu DAN CUTI UMUM KE IMR DAN MKAK**

UNIT VIROLOGI, IMR/ MKAK

No.	Nama Pegawai IMR	Jawatan	No. Pejabat	No. H/P
1	Dr. Ravindran Thayan	Ketua Unit Virologi	03-3362 8938	016-286 7647
2	Dr. Rozainanee Mohd Zain	Pakar Patologi (Mikrobiologi Perubatan)	03-3362 8120	013-341 2468
3	Pn Tengku Rogayah Tg Abd Rashid	Pegawai Penyelidik	03-3362 8942	019-228 3955
4	Dr. Banusha Vanukuppal	Pegawai Perubatan	03-3362 8941	013-345 6300
5	Dr. Khayri Azizi Kamel	Pegawai Perubatan	03 3362 7411	011-1564 9265
6	Dr Safiah Abdullah	Pegawai Perubatan	03-3362 7521	019-332 2711
7	Dr Fatin Amirah Shuib	Pegawai Perubatan	03-3362 8641	017-614 6838
No.	Nama Pegawai MKA Kebangsaan (MKAK)	Jawatan	No. Pejabat	No. H/P
1	Dr Donal Huda Nasril	Pakar Patologi (Mikrobiologi Perubatan)	03-61261281	016-2217131
2	Pn Yu Kie A/P Chem	Pegawai Sains Mikrobiologi	03-61261304	013-2081724
3	En Selvanesan A/L Sengol	Pegawai Sains Mikrobiologi	03-61261301	016-2657105

NOTIFICATION FORM

JADUAL (Pasukan 2) Borang (Pasukan 2) AKTA PENCEGAHAN DAN PENGAWALAN PENYAKIT BERJANGKIT 1988 PERATURAN-PERATURAN PENCEGAHAN DAN PENGAWALAN PENYAKIT BERJANGKIT (BORANG NOTIS (PINDAAN) 2011)			Borang Notis: Rev/2010 No. Siri:
NOTIFIKASI PENYAKIT BERJANGKIT YANG PERLU DILAPORKAN (Seksyen 10, Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988)			
A. MAKLUMAT PESAKIT			
1. Nama Renuh (HURUF BESAR): <table border="1" style="width: 100%; height: 20px;"></table>			
Nama Pengiring (Ibu/Bapa/Pinjaga): <table border="1" style="width: 100%; height: 20px;"></table> <i>(Jika belum mempunyai Kad Pengenalan diri)</i>			
2. No. Kad Pengenalan Diri / Dokumen Perjalanan <table border="1" style="width: 100%; height: 20px;"></table> <input type="checkbox"/> Sendiri <input type="checkbox"/> Pengiring <i>(Untuk Bukan Warganegara)</i>			
No. Daftar Hospital / Klinik <table border="1" style="width: 100%; height: 20px;"></table> Nama Wad: _____ Tarikh Masuk Wad: <table border="1" style="width: 100%; height: 20px;"></table>			
3. Kewarganegaraan: Warganegara: <input type="checkbox"/> Ya Keturunan: <table border="1" style="width: 100%; height: 20px;"></table> Sukuketurunan: <table border="1" style="width: 100%; height: 20px;"></table> <i>(Bagi C/Asli, Pribumi Sabah/Sarawak)</i> <input type="checkbox"/> Tidak Negara Asal: <table border="1" style="width: 100%; height: 20px;"></table> Status Kedatangan: <input type="checkbox"/> Izin <input type="checkbox"/> Tanpa Izin <input type="checkbox"/> Penduduk Tetap		4. Jantina: <input type="checkbox"/> Lelaki <input type="checkbox"/> Perempuan 5. Tarikh Lahir: <table border="1" style="width: 100%; height: 20px;"></table> 6. Umur: <table border="1" style="width: 100%; height: 20px;"></table> Tahun <table border="1" style="width: 100%; height: 20px;"></table> Bulan <table border="1" style="width: 100%; height: 20px;"></table> Hari 7. Pekerjaan: _____ <i>(Jika tidak bekerja, nyatakan status diri)</i>	
8. No. Telefon: <input type="checkbox"/> Rumah <input type="checkbox"/> Tel. Bisnes <input type="checkbox"/> Pejabat <table border="1" style="width: 100%; height: 20px;"></table> <i>(Untuk dihubungi)</i>			
9. Alamat Kediaman <table border="1" style="width: 100%; height: 20px;"></table>		10. Alamat Tempat Kerja / Belajar: <table border="1" style="width: 100%; height: 20px;"></table>	
B. DIAGNOSIS PENYAKIT			
<input type="checkbox"/> 1. Poliomyelitis <input type="checkbox"/> 2. Viral Hepatitis A <input type="checkbox"/> 3. Viral Hepatitis B <input type="checkbox"/> 4. Viral Hepatitis C <input type="checkbox"/> 5. Viral Hepatitis (Others) <input type="checkbox"/> 6. AIDS <input type="checkbox"/> 7. Chancroid <input type="checkbox"/> 8. Cholera <input type="checkbox"/> 9. Dengue Fever <input type="checkbox"/> 10. Dengue Haemorrhagic Fever <input type="checkbox"/> 11. Diphtheria <input type="checkbox"/> 12. Dysentery <input type="checkbox"/> 13. Ebola <input type="checkbox"/> 14. Food Poisoning <input type="checkbox"/> 15. Gonorrhoea <input type="checkbox"/> 16. Hand, Food and Mouth Disease <input type="checkbox"/> 17. Human Immunodeficiency Virus Infection <input type="checkbox"/> 18. Leprosy (Multibacillary) <input type="checkbox"/> 19. Leprosy (Paucibacillary) <input type="checkbox"/> 20. Leptospirosis <input type="checkbox"/> 21. Malaria - Vivax <input type="checkbox"/> 22. Malaria - Falciparum <input type="checkbox"/> 23. Malaria - Malariae <input type="checkbox"/> 24. Malaria - Others <input type="checkbox"/> 25. Measles <input type="checkbox"/> 26. Plague <input type="checkbox"/> 27. Rabies <input type="checkbox"/> 28. Relapsing Fever <input type="checkbox"/> 29. Syphilis - Congenital <input type="checkbox"/> 30. Syphilis - Acquired <input type="checkbox"/> 31. Tetanus Neonatorum <input type="checkbox"/> 32. Tetanus (Others) <input type="checkbox"/> 33. Typhus - Scrub <input type="checkbox"/> 34. Tuberculosis - PTB Smear Positive <input type="checkbox"/> 35. Tuberculosis - PTB Smear Negative <input type="checkbox"/> 36. Tuberculosis - Extra Pulmonary <input type="checkbox"/> 37. Typhoid - Salmonella typhi <input type="checkbox"/> 38. Typhoid - Paratyphoid <input type="checkbox"/> 39. Viral Encephalitis - Japanese <input type="checkbox"/> 40. Viral Encephalitis - Nipah <input type="checkbox"/> 41. Viral Encephalitis - (Others) <input type="checkbox"/> 42. Whooping Cough / Pertussis <input type="checkbox"/> 43. Yellow Fever <input type="checkbox"/> 44. Others: please specify: _____			
Selain dari notifikasi bertulis, penyakit berikut perlu dinotifikasi melalui telefon dalam tempoh 24 jam iaitu:- Acute Poliomyelitis, Cholera, Dengue, Diphtheria, Ebola, Food Poisoning, Plague, Rabies dan Yellow Fever			
11. Cara Pengesanan Kac: <input type="checkbox"/> Kac <input type="checkbox"/> Kontak <input type="checkbox"/> FOMQMA * <input type="checkbox"/> Ujian Saringan _____		12. Status Pesakit: <input type="checkbox"/> Hidup <input type="checkbox"/> Mati <table border="1" style="width: 100%; height: 20px;"></table>	
13. Tarikh Onset: <table border="1" style="width: 100%; height: 20px;"></table>		14. Ujian Makmal: Nama Ujian: (i) _____ (ii) _____ (iii) _____ Tarikh Sampel Diambil: <table border="1" style="width: 100%; height: 20px;"></table>	
15. Keputusan Ujian Makmal: <input type="checkbox"/> Positif (_____) <input type="checkbox"/> Negatif <input type="checkbox"/> Belum Siap		16. Status Diagnosis: <input type="checkbox"/> Sementara (Provisional/Suspected) <input type="checkbox"/> Disahkan (Confirmed) Tarikh Diagnosis: <table border="1" style="width: 100%; height: 20px;"></table>	
17. Maklumat Klinik Yang Relevan: <table border="1" style="width: 100%; height: 20px;"></table>		18. Komen: <table border="1" style="width: 100%; height: 20px;"></table>	
C. MAKLUMAT PEMBERITAHU			
19. Nama Pengamal Perubatan: <table border="1" style="width: 100%; height: 20px;"></table>			
20. Nama Hospital / Klinik dan Alamat: <table border="1" style="width: 100%; height: 20px;"></table>			
21. Tarikh Pemberitahuan: <table border="1" style="width: 100%; height: 20px;"></table>			
<i>Tandatangan Pengamal Perubatan</i>			

**BORANG SIASATAN
KES MONKEYPOX**

Maklumat Pesakit

Nama: _____

No. K/P atau Passport: _____

No. Telefon untuk dihubungi: _____

Warganegara Malaysia / Bukan Warganegara Malaysia (nyatakan): _____

Jika Bukan Warganegara, tempoh telah berada di Malaysia (hari/bulan/tahun):

Alamat semasa:

Daerah: _____ Negeri: _____

Tarikh lahir: _____

Pekerjaan: _____

Alamat tempat kerja:

Status pesakit (tanda yang berkaitan)

- i. Dirawat di hospital kerajaan / swasta *

Nota: * potong mana yang tidak berkenaan

- ii. Tarikh dimasukkan ke wad

Wad umum

Wad pengasingan

ICU

- iii. Sekiranya mati (tarikh): _____

- iv. Tarikh disahkan positif monkeypox: _____

Jenis ujian: PCR
Virus isolation

Gejala (tanda yang berkenaan):

No.	Simptom	√ di mana yang bersesuaian & Tarikh onsets
i.	Demam	
ii	Sakit kepala	
iii	Sakit belakang (back pain)	
iv.	Sakit otot (myalgia)	
v.	Kejang otot (asthenia)	
vi.	Bengkak kelenjar (lymphadenopathy)	
vii.	Maculopapular rash	

Other relevant symptoms/komplikasi:

No.	Simptom	√ di mana yang bersesuaian
i.	Demam berpanjangan melebihi 5 hari	
ii	<i>Exertional dyspnoea</i> dengan $SP02 < 95\%$ (sewaktu rehat atau semasa berpenat lelah)	
iii.	Dehidrasi	
iv.	Jangkitan sekunder pada lesi <i>monkeypox</i> di kulit	
v.	Tahap sedar berkurang (<i>reduced level of consciousness</i>)	
vi.	Kabur penglihatan	

Sejarah pengambilan ubat-ubatan (termasuk ubat tradisional):

Sejarah ke luar negara dalam tempoh tiga (3) minggu yang lalu. Jika "Ya", nyatakan tarikh ketibaan di Malaysia dan nombor penerbangan.

Sejarah kontak dengan individu bergejala ruam maculopapular dalam tempoh tiga (3) minggu yang lalu:

Sejarah kontak dengan haiwan dengan tanda-tanda jangkitan monkeypox:

Penyiasatan makmal:

Spesimen	Keputusan
Fluid / exudate maculopapular rash	
Scab / crust	
Elektron Microscopic	
Kajian genetik	

Penyiasatan Kontak:

Senarai ahli rumah, kontak rapat dan pasangan:

No.	Nama	Umur	Simptom (jika ada)

Lain-lain sejarah ahli keluarga atau pasangan yang berkaitan:

Status kesihatan, penglibatan dalam aktiviti luar dalam tempoh tiga (3) minggu (atau 21 hari) yang lalu.

Penyiasatan Persekitaran:

Terdapat haiwan dengan gejala jangkitan monkeypox:

Ya

Tidak

Pegawai Penyiasat:

Nama dan tandatangan:

Jawatan:

Tempat bertugas:

Tarikh:

Disemak dan disahkan oleh:

Nama dan tandatangan:

Jawatan:

Tempat bertugas:

Tarikh:

**Senarai Semak Pemeriksaan Kes Disyaki Jangkitan Monkeypox
di Pintu Masuk:**

Tarikh pemeriksaan :

Masa:

A)Maklumat pesakit

Nama		Email	
Umur		No Telefon (di Malaysia)	
Jantina		Warganegara	
Sekiranya Wanita, tarikh LMP		Alamat Tempat Tinggal di Malaysia (catatkan alamat dengan lengkap/detail)	
No Kad Pengenalan / Paspport			

B)Butiran Lanjut

1. Telah tiba dari negara dijangkiti penyakit monkeypox dalam masa 21 hari sebelum ini		Sila maklumkan nama negara :			
2. Butiran penerbangan pulang					
<ul style="list-style-type: none"> • Route: <input type="checkbox"/> No penerbangan : • No tempat duduk : 					
3. Gejala yang dikesan (Sila pilih YA atau Tidak (√)bagi setiap gejala yang disenaraikan) :					
<input type="checkbox"/> Demam	Ya	Tidak	<input type="checkbox"/> ruam	Ya	Tidak
<input type="checkbox"/> Sakit otot / sakit belakang	Ya	Tidak	<input type="checkbox"/> asthnia (extreme lethargy)	Ya	Tidak
<input type="checkbox"/> Bengkak kelenjar (lymphadenopathy)	Ya	Tidak	<input type="checkbox"/> headache	Ya	Tidak

C) Pemeriksaan Fizikal

Umum

- Suhu Badan -°C
- Blood Pressure -mmHg PR - / minit
- Macular/vesicular rash YA Tidak

- Lymphadenopathy YA Tidak

Physical examination findings:

D) Rawatan dan Tindakan susulan :

.....
.....

E) Pemeriksaan oleh :

Nama :

Jawatan :

Senarai negara melaporkan jangkitan monkeypox @ 22 Mei 2022:

Cameroon, Canada, Central African Republic, Cote d' Ivoire, Democratic Republic of Congo, France, Italy, Liberia, Nigeria, Portugal, Republic of Congo, Sierra Leone, Spain, Sweden, the United Kingdom, the United States of America

Nota: Senarai akan dikemaskini dari masa ke semasa berdasarkan laporan WHO.



MINISTRY OF HEALTH MALAYSIA

HEALTH ALERT CARD

*Keep this card for the next 21 days after arriving to Malaysia. Monitor your body temperature and look out for fever, skin rash (popular/vesicular), muscle or back pain, feeling weak (asthenia), headache and lymphadenopathy. If these symptoms developed and you are not feeling well, seek medical advice **immediately**.*

Attention to The Attending Doctor:

*The person presenting this **HEALTH ALERT CARD** had recently travelled or returned from a *Monkeypox Affected Country (within the past 21 days). If the person presents with fever (low grade fever less than 38.5°C), skin rash (popular/vesicular), muscle or back pain, feeling weak (asthenia), headache and lymphadenopathy please refer him/her **immediately** to the nearest hospital for investigation and treatment.*

****List of countries affected by Monkeypox:***

Cameroon, Canada, Central African Republic, Cote d' Ivoire, Democratic Republic of Congo, France, Italy, Liberia, Nigeria, Portugal, Republic of Congo, Sierra Leone, Spain, Sweden, the United Kingdom, the United States of America

Note: This list will be updated from time to time as per WHO report.

Date issued:

Name of Entry points:



KEMENTERIAN KESIHATAN MALAYSIA

KAD AMARAN KESIHATAN

Simpan kad ini untuk tujuh 21 hari akan datang selepas kembali ke Malaysia. Pantau suhu badan untuk demam, ruam kulit (popular/vesicular), sakit otot atau belakang, kelesuan, sakit kepala dan bengkak kelanjar (lymphadenopathy). Sekiranya anda tidak sihat dan menghidap gejala tersebut, segeralah berjumpa doktor.

Kepada Pengamal Perubatan Yang Merawat Pesakit Ini

Individu yang membawa KAD AMARAN KESIHATAN ini telah membuat perjalanan atau kembali dari*^{*}Negara yang terdapat jangkitan Monkeypox (dalam 21 hari lalu). Jika individu ini mendapat demam (demam yang rendah kurang dari 38.5°C), demam, ruam kulit (popular/vesicular), sakit otot atau belakang, kelesuan, sakit kepala dan bengkak kelanjar (lymphadenopathy), sila rujuk ke hospital yang berhampiran dengan kadar segera untuk pemeriksaan dan rawatan.

***Senarai negara terlibat dengan jangkitan virus Monkeypox:**

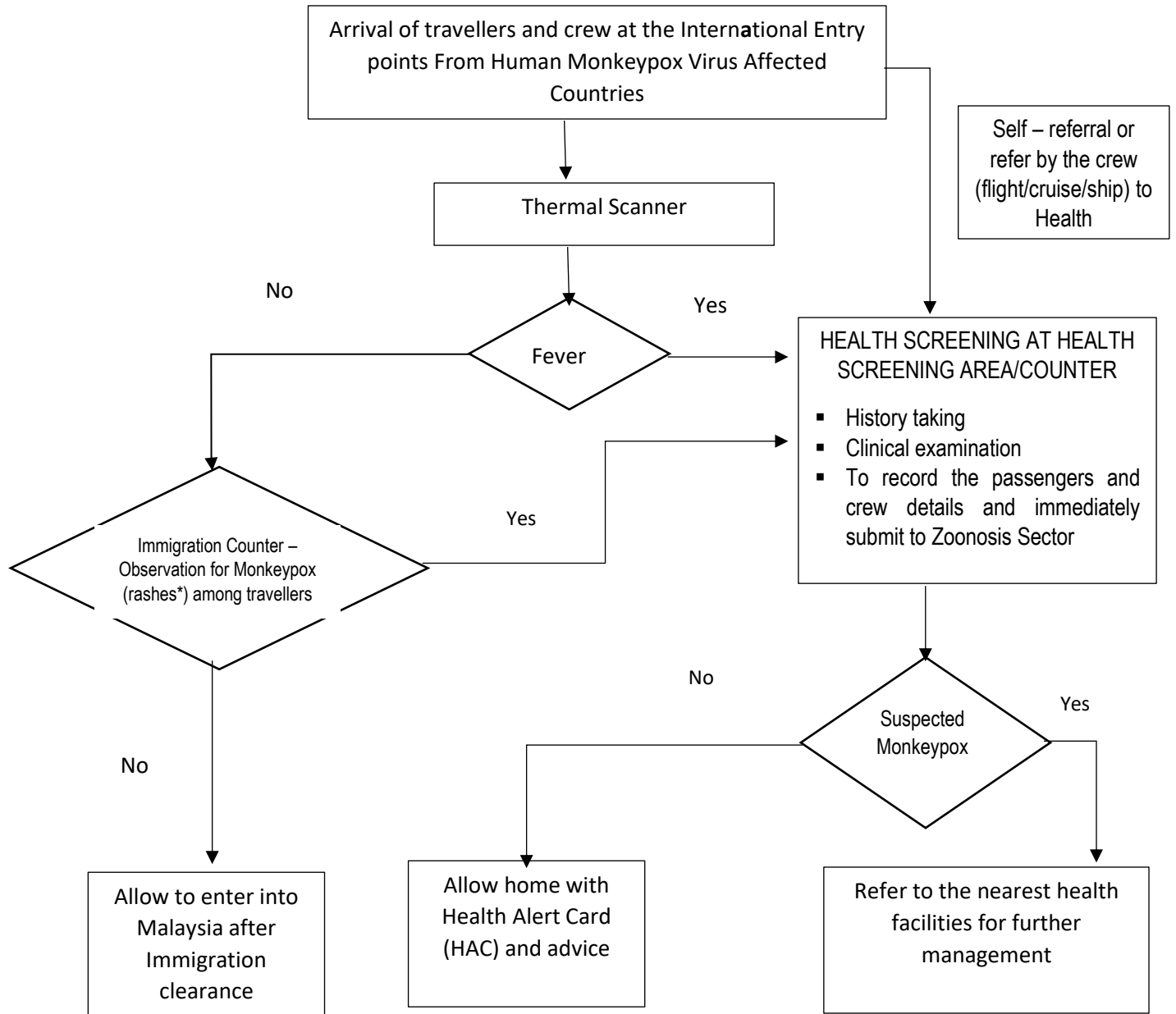
Cameroon, Canada, Central African Republic, Cote d' Ivoire, Democratic Republic of Congo, France, Italy, Liberia, Nigeria, Portugal, Republic of Congo, Sierra Leone, Spain, Sweden, the United Kingdom, the United States of America

Nota: Senarai ini akan dikemaskini dari masa ke masa berdasarkan laporan oleh WHO.

Tarikh dikeluarkan:

Nama Pintu Masuk:.....

FLOW CHART FOR SCREENING OF TRAVELLERS AND CREW ARRIVING FROM HUMAN MONKEYPOX VIRUS AFFECTED COUNTRIES AT THE INTERNATIONAL POINT OF ENTRY



Note : Rashes (vesicle/pustules in the face or extremities)

TRAVEL ADVISORY FOR TRAVELLERS TO COUNTRIES WITH MONKEYPOX TRANSMISSION

Key facts Monkeypox

- Monkeypox is caused by monkeypox virus, a member of the Orthopoxvirus genus in the family Poxviridae.
- Monkeypox is a viral zoonotic disease that occurs primarily in tropical rainforest areas of Central and West Africa and is occasionally exported to other regions.
- Monkeypox typically presents clinically with fever, rash and swollen lymph nodes and may lead to a range of medical complications.
- Monkeypox is usually a self-limited disease with the symptoms lasting from 2 to 4 weeks. Severe cases can occur. In recent times, the case fatality ratio has been around 3-6%.
- Monkeypox is transmitted to humans through close contact with an infected person or animal, or with material contaminated with the virus.
- Monkeypox virus is transmitted from one person to another by close contact with lesions, body fluids, respiratory droplets and contaminated materials such as bedding.
- The clinical presentation of monkeypox resembles that of smallpox, a related orthopoxvirus infection which was declared eradicated worldwide in 1980. Monkeypox is less contagious than smallpox and causes less severe illness.
- Vaccines used during the smallpox eradication programme also provided protection against monkeypox. Newer vaccines have been developed of which one has been approved for prevention of monkeypox
- An antiviral agent developed for the treatment of smallpox has also been licensed for the treatment of monkeypox.

Health Advisory:

Based on the current available information WHO does not recommend any travel or trade restrictions to Monkeypox affected countries. Given the current global situation of Monkeypox infections, the Ministry of Health, Malaysia would like to advise the public who wish to visit countries affected by the Monkeypox to take the same precautionary measures as follows;

- i. Maintain a high standard of personal hygiene, including frequent hand washing after going to the toilet, or when hands are soiled.
- ii. Avoid direct contact with skin lesions of infected living or dead persons or animals, as well as objects that may have become contaminated with

- iii. h infectious fluids, such as soiled clothing or linens (e.g. bedding or towels) used by an infected person.
- iv. Avoid contact with wild animals, and consumption of bush meat.
- v. Returning travellers from areas affected by Monkeypox should seek immediate medical attention if they develop any disease symptoms such as:-
 - sudden onset of high fever,
 - headache,
 - swollen lymph nodes,
 - myalgia,
 - back pain,
 - extreme fatigue (intense asthenia)
 - macular-papular rash (vesicles or pustules on the body, especially on the face, hands, feet, in the mouth and on the genitalia) **within three weeks of their return**. They should inform their doctor of their recent travel history.

Prepared by:

Disease Control Division
Ministry of Health Malaysia

21 May 2022

Announcement in flight, cruise or ship from affected countries
before arrival to Malaysia

**“ANNOUNCEMENT REGARDING HEALTH ALERT ON
MONKEYPOX OUTBREAK**

Ladies and Gentlemen, this is a health announcement with regards to monkeypox outbreak reported in several countries globally since May 2022.

If you are experiencing any of the following symptoms, please identify yourself and report to the health authority at the Point of Entry on arrival.

- High fever
- Swelling at the neck, axilla or groin area (lympadenopathy)
- Rashes, vesicles or pustules on the body, especially on the face, palms, hands, soles, feet, in the mouth and on the genitalia
- Severe headache, backache or muscle ache

This is a requirement by the Government of Malaysia under the provision of the Prevention and Control of Infectious Disease Act 1988 to prevent the spread of monkeypox infection.

Thank you for your kind attention and cooperation.”