

Standard Operating Procedure (SoP)
for Case investigation and Contact tracing of Monkeypox

Date: 2079/05/16



Epidemiology and Disease Control Division
Department of Health Services
Ministry of Health Population, Nepal



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Background

Since the beginning of January 2022, over 49,000 laboratory confirmed cases of Monkeypox has been detected from globally. Monkeypox (MPX) is a viral zoonotic disease that belongs to the Orthopoxvirus genus of the Poxviridae family. Human disease was first identified in 1970 in a 9-month-old boy in the Democratic Republic of the Congo and since then most cases have been reported across Central and West Africa.

The incubation period of monkeypox is usually 6 to 13 days following exposure but can range from 5 to 21 days. The primary infection is from animals to humans, and secondary infection is human to human and characterized by fever and rash. The mode of transmission is via contact with monkey pox vesicles on the skin, and droplet is secondary because of skin scales being inhaled. If a patient seeking care is suspected to have monkeypox, infection prevention and control personnel should be notified immediately.

A multi-country outbreak of monkeypox in humans has been reported in several regions that are not endemic for monkeypox virus. At present, the outbreak is linked to international travel, but community-based spread has also been noted in some areas.

Known sign and symptoms:

Mucocutaneous manifestations

Fever

Headache

Fatigue/lethargy

Myalgia

Arthralgia

Back pain

Lymphadenopathy: Axillary, cervical, and Inguinal

Other presentation:

Rectal pain or pain on defecation

Sore throat

Penile swelling

Bleeding/discharge per rectum

Dysuria

Conjunctivitis

Further, the sudden and unexpected appearance of monkeypox simultaneously in several countries without direct immediate travel history to areas that are endemic to monkeypox suggests that there may have been undetected transmission for several weeks or longer. Similarly understanding of the transmission dimension is ongoing, and with only one laboratory infrastructure (NPHL) for lab testing of Monkeypox in country, case investigation and contact tracing remain the critical to understanding and containment the disease at its earliest.

This guidance serves to provide interim recommendations for the surveillance, case investigation and contact tracing for human monkeypox in the context of the current multi-country outbreak of Monkeypox

Rationale for Case investigation and contact tracing

Monkeypox currently is being detected in nonendemic countries and is rapidly spreading across the globe. Although no cases have been detected in Nepal it is necessary to conduct surveillance along with rapid identification of suspect/probable cases to contain the outbreak.

Given that limited availability of vaccines and therapeutics for monkeypox, early detection and isolation with close follow-up of contacts are the methods to prevent onward transmission of the monkeypox disease. A single confirmed case of Monkeypox is considered as an outbreak. In the current context, as soon as a suspected case is identified, contact identification and contact tracing should be initiated. The case should be immediately reported to national IHR focal point.

Objective

The Key objective for case investigation and contact tracing would be to:

1. To rapidly identify the cases in order to initiate diagnostics and timely clinical care
2. To isolate cases to prevent further transmission
3. To initiate detail case investigation and contact tracing at the earliest.
4. To systematically follow up the identified contacts

Process for Case investigation and contact tracing

The mechanism for surveillance will be based on the experience and structure of Government of Nepal.

The following steps will be carried out to effectively manage & contain the monkeypox outbreak.

- A. Identification of suspected/probable cases of monkeypox
- B. Case Investigation
- C. Identification of contacts and contact tracing
- D. Contact monitoring and reporting

A. Identification of suspected/probable cases of monkeypox

1. Identification of suspected/probable cases will be based on the case definition mentioned below.
2. At the community level, any cases suspected of monkeypox is to be referred to the designated focal person (Dermatologist/Clinician) in the province (Ref Annexure 2 and 5)
3. The suspected cases referred from the community will be reverified by the clinical doctors at the hospital.
4. If the case definition is met, the individual will be categorized as a suspect case for monkeypox
5. Isolation of the case will be done at the hospital isolation and Home with constant monitoring
6. The clinician/dermatologist will do **detailed case investigation** of the case as per the form provided (Ref Annexure 7).
7. Communication to the respective local level, provincial level and EDCD about the suspected case through **case reporting form (CRF)** (Ref Annexure 6).
8. All efforts should be made to avoid unnecessary stigmatization of individuals and communities potentially affected by monkeypox.



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Case Definition on Monkeypox

A. Suspected case:

i) A person who is a contact of a probable or confirmed monkeypox case in the 21 days before the onset of signs or symptoms, and who presents with any of the following: acute onset of fever ($>38.5^{\circ}\text{C}$), headache, myalgia (muscle pain/body aches), back pain, profound weakness or fatigue.

OR

ii) A person presenting since 01 January 2022 with an unexplained acute skin rash, mucosal lesions or lymphadenopathy (swollen lymph nodes). The skin rash may include single or multiple lesions in the ano-genital region or elsewhere on the body. Mucosal lesions may include single or multiple oral, conjunctival, urethral, penile, vaginal, or ano-rectal lesions. Ano-rectal lesions can also manifest as ano-rectal inflammation (proctitis), pain and/or bleeding.

AND

For which the following common causes of acute rash do not fully explain the clinical picture:

Hand Foot and Mouth Diseases, varicella zoster, herpes zoster, measles, 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); any other locally relevant common causes of papular or vesicular rash.

N.B. It is not necessary to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected. Further, if suspicion of monkeypox infection is high due to either history and/or clinical presentation or possible exposure to a case, the identification of an alternate pathogen which causes rash illness should not preclude testing for MPXV, as co-infections have been identified

B. Probable case:

A person presenting with an unexplained acute skin rash, mucosal lesions or lymphadenopathy (swollen lymph nodes). The skin rash may include single or multiple lesions in the ano-genital region or elsewhere on the body. Mucosal lesions may include single or multiple oral, conjunctival, urethral, penile, vaginal, or ano-rectal lesions. Anorectal lesions can also manifest as ano-rectal inflammation (proctitis), pain and/or bleeding

AND

One or more of the following:

- has an epidemiological link to a probable or confirmed case of monkeypox in the 21 days before symptom onset
- Identifies as gay, bisexual or other man who has sex with men
- has had multiple sexual partners in the 21 days before symptom onset

C. Confirmed case:

A person with laboratory confirmed monkeypox virus infection by detection of unique sequences of viral DNA by real-time **polymerase chain reaction (PCR)** and/or **sequencing**.

Clinical sample must be clearly identified as "**swab from the skin lesion/vesicle and or crust**". Specimens collected for MPXV investigation **should be refrigerated (2 to 8°C) within one hour** of collection and dispatch the sample to lab (nearest PPHL** or NPHL***) as soon as possible.

** Sample received by PPHL should be again dispatched to NPHL as soon as possible

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B. Case Investigation:

Case investigation of suspected/ probable/ confirmed case should be initiated within 24 hrs. The case investigation should consist of:

- 1) Clinical examination of the patient using appropriate infection prevention and control measures by the treating doctor in ward
- 2) Identification of possible source of infection and the presence of similar illness in the patient community and contact.
- 3) Safe collection and dispatch of specimen for monkeypox laboratory confirmation.
- 4) The case investigation will be carried out as per the form circulated from the EDCD (Red Annexure 7).
- 5) Case management as per necessary protocol developed by DoHS.

C. Identification of contact and contact tracing:

As soon as the cases are identified, contact identification and contact tracing should be initiated. Contact identification and contact tracing will be done by the **RRT/Contact Tracing team** formed in the local Municipalities per the guideline. Contact identification, interview, and counselling for adequate quarantine measures/ contact follow-up should be completed in 48 hours of case identification and should reported to EDCD surveillance within 24 hours following field activities.

Definition of contact:

contact is defined as a person who has had one or more of the following exposures with a probable or confirmed case of monkeypox, in the period beginning with the onset of the source case's first symptoms and ending when all scabs have fallen off.

- direct skin-to-skin physical contact (such as touching, hugging, kissing, intimate or sexual contact)
- contact with contaminated materials such as clothing or bedding, including materials dislodged from bedding or surfaces during handling of laundry or cleaning of contaminated rooms
- prolonged face-to-face respiratory exposure in proximity without PPE
- respiratory exposure (i.e., possible inhalation of) or eye mucosal exposure to lesion materials (e.g., scabs/crusts) from an infected person
- The above definition also applies to health workers potentially exposed in the absence of proper use of appropriate personal protective equipment (PPE)

N.B. There could be existing networks of MSM community. Such networks could be important partners in tracing and monitoring contacts, considering the current epidemic patterns of the multi-country monkeypox outbreak.

D. Contact monitoring and reporting

Contact monitoring should be done at least daily for the onset of sign/symptoms from the last contact with a suspect/probable case. The "symptom diary" given in the case investigation form (Annexure) can be used for this purpose. Asymptomatic contacts can continue routine daily activities such as going to work and attending school (i.e., no quarantine is necessary), but should remain close to home for the duration of surveillance. Contact monitoring will be done till 21 days remotely.

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Contact monitoring will be done through either mechanism:

1. Active monitoring: Monitoring via EDCD call center
2. Passive monitoring: Contact will daily record the symptoms along with temperature and share with the Health Coordinator of respected local municipality. Local municipality will in turn notify EDCD shall there be any signs/symptoms observed
3. Direct (in-person) monitoring: By local municipality team Health Coordinator/RRT/ District RRT as necessary.

Monitoring and evaluation

Indicators for monitoring the quality of monkeypox contact tracing include:

The monitoring should be done weekly and reported.

1. Proportion of cases with complete demographic information
2. Proportion of suspected cases with laboratory testing performed.
3. Proportion of cases with complete clinical and risk factor information.
4. Proportion of probable and confirmed cases with identified contacts.
5. Number of contacts per probable and confirmed case.
6. Proportion of contacts with complete follow-up information.
7. Proportion of contacts that turned out to be cases

Reporting to EDCD

Daily update of confirmed, probable and suspected cases will be reported to EDCD, Surveillance and Research section and Epidemic and Outbreak Management Section in reporting template or Case Reporting Form (CRF) approved by the EDCD (Attached in Annex). Respective provinces, districts and local municipality health authority will be copied during reporting.

Also, any event notifying suspected cases of Monkeypox can be reported to EDCD call center 1115. Please report CRF in info@edcd.gov.np, ewarsnepal@gmail.com along with any additional information of cases

Probable and confirmed cases of MONKEYPOX should be reported immediately to WHO through National Focal Points- International Health Regulations (NFP-IHR).

Laboratory testing: (sample collection protocol)

All suspected and probable case of Monkeypox needs to be sent to lab for testing for Monkeypox.

1. **Sample collection:** Collect samples from all suspected cases.
2. **Equipment needed:**
 - *ensure availability of following
 - Sterile swab sticks
 - Sterile needle 'or' scalpel blade
 - Alcohol swabs
 - Disposable syringes
 - Tourniquet
 - EDTA tube

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- VTM (for throat swab)
- Sterile Cryovial/dry (universal) for crust collection
- Biohazard bag to discard waste
- Sharps container

3. ****PPE:** Wear PPE in accordance with contact and droplet precautions [Aprons, gloves, face mask (N-95), goggles]

4. **Labelling:** Proper labelling of the tube before the collecting the sample.

5. **Collect Samples from suspected cases as per the mentioned.**

a) **Day 1-4 (Febrile stage without rash)**

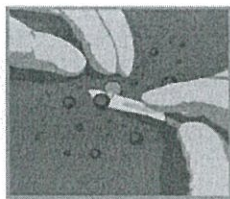
- Collect Nasopharyngeal/Oropharyngeal sample (2 specimens using two different swabs) swabs in VTM and store at 2 to 8 °C.
- Collect 4-5 ml of blood in plain vacutainer tubes, leave at room temperature for 30-60 minutes for blood to clot and serum separation. Then, store at 2 to 8 °C.

b) **Week 2-4 (Rash phase)**

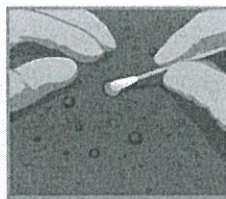
- Collect *lesion base scrapings* with sterile dry swab (2 specimen one from each lesion using 2 different swabs) in sterile tube and store at 2 to 8 °C.



Sanitize lesions



Remove lesion roof



Brush lesion base

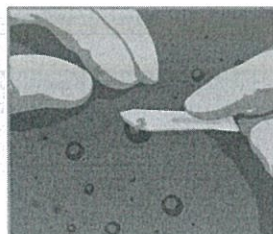


Put swab in container

- Collect *lesion roof or crust* (2 specimen one from each lesion) in sterile dry cryovials 'or' sterile urine culture bottle and store at 2 to 8 °C.



Sanitize lesions



Remove crusts



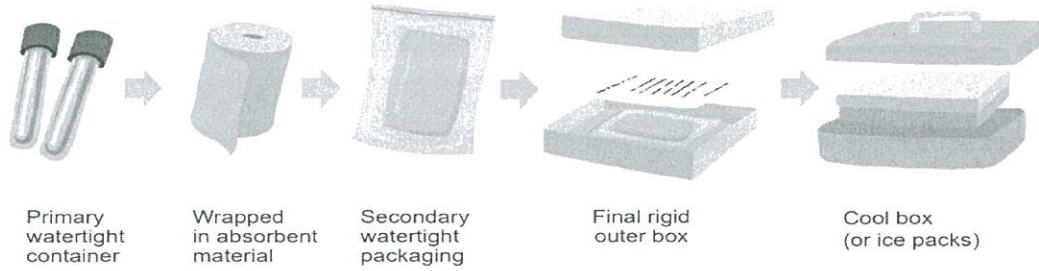
Put crust in container

- Also, collect Nasopharyngeal/Oropharyngeal sample (2 specimens using two different swabs) swabs in VTM and store at 2 to 8 °C

6. **Storage and transportation**

- Ensure the collected samples in tube is properly labelled, seal with parafilm 'or' adhesive tapes to avoid leakage and keep at 2 to 8 °C as soon as they are collected until shipped to NPHL, Teku.

- For shipping, wrap the collected samples with absorbent tissue/cotton and place into the secondary container (ziplock) and place it in the tertiary container
- Line the inside of specimen transport container with a frozen ice pack and transport at 2 to 8 °C.
- Send a copy of the laboratory form (NOT inside the specimen transport container to avoid contamination with the samples) along with the samples (Appendix 1).



(Note: Contact team of National Public Health Laboratory (NPHL), Teku as soon as hospital/laboratory collects sample from the suspected case. Inform EDCD and NPHL of the shipment of specimens to the NPHL by phone and email)

Tel -

Email -

Clinical sample must be clearly identified as "**swab from the skin lesion/vesicle and or crust**". Specimens collected for MPXV investigation **should be refrigerated (2 to 8°C) within one hour** of collection and dispatch the sample to lab (nearest PPHL** or NPHL***) as soon as possible.

** Sample received by PPHL should be again dispatched to NPHL as soon as possible

***Currently testing facility available at **National Public Health Laboratory (NPHL)**

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Algorithm

Collect from every patient:

- A) Collect 2 lesion specimens per patient. Each specimen should be from a separate lesion
- B) Specimens are a swab of vesicular/pustular fluid and/or a crust
- C) Collect 10mls of venous blood

A) For swab collection:

- 1) Assemble the recommended equipment for swab specimen collection (alcohol swab, swab, scalpel, needle, PPE).
- 2) Label swab containers with patient name, sex, date of sample collection, age, EPID number.
- 3) Perform hand hygiene. Don appropriate PPE.
- 4) Sanitise lesion with an alcohol wipe, allow to dry.
- 5) Use a disposable scalpel (or a sterile 26 Gauge needle) to open, and remove, the top of the vesicle or pustule.
Remove swab stick from sterile pouch and vigorously swab the bottom of the lesion with the swab.
- 7) The liquid from lesion must be visible on the swab.
- 8) Place the swab back into the sterile pouch and close.
- 9) Discard the scalpel or needle into sharps container.
- 10) Place swabs in a ziplock bag

B) For Crust/swab collection

- 1) Assemble the recommended equipment for crust specimen collection (alcohol swab, cryovial tube, needle, PPE).
- 2) Label 2 cryovial vials with patient name, sex, date of sample collection, age, EPID number.
- 3) Perform hand hygiene. Don appropriate PPE.
- 4) Sanitise lesion with an alcohol wipe, allow to dry.
- 5) Use the needle to loosen and lift the crust.
- 6) Once removed, place crust into a sterile cryovial tube.
- 7) Select a second crust from a different location on the body and repeat steps 3-5. Place specimen into labelled tube.
- 8) Discard the scalpel or needle into sharps container.
- 9) Add the tubes into the ziplock bag.

- Place ziplock bags into a vaccine carrier with frozen ice packs
- Place document into a separate ziplock bag and do not mix with samples during transportation
- Remove PPE and discard into biohazard bag
- Perform hand hygiene
- Transport to the National Public Health Laboratory (NPHL, Kathmandu within 24 hours at 2°C to 8°C using NPHL (COVID-19) transport guidelines
- Cold chain should be maintained during transportation to NPHL


Annex 1: TOR of Teams involved in case investigation and contact tracing

Additional supporting team can be added for support if case numbers rise.

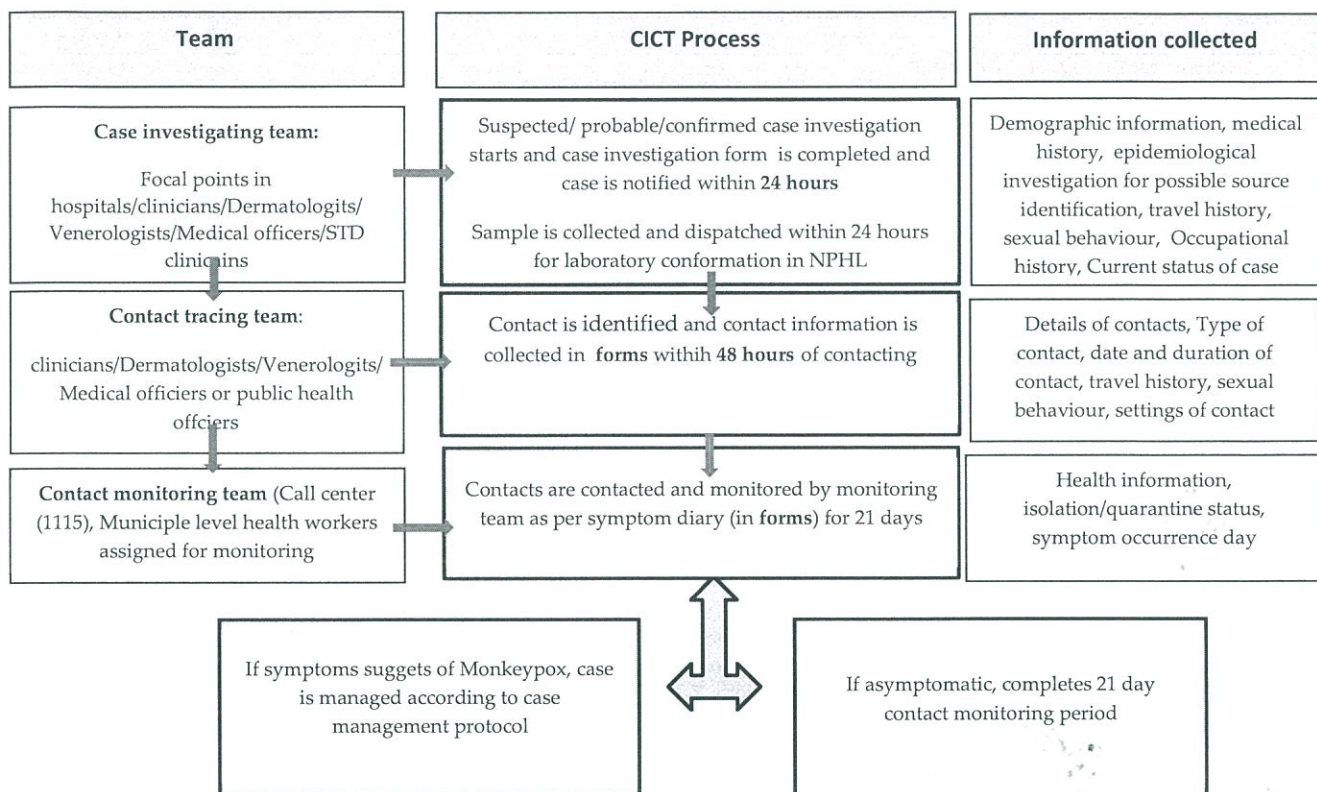
Team	Responsible member	Terms of Reference
Case investigating team	Focal points / clinicians / Dermatologist / Venerologists / Medical officers)	<ul style="list-style-type: none"> •Informs EDCCD using Case Reporting Format •Oversees suspected cases and performs through clinical examination and conducts interviews for case investigation. •Tries to identify source of exposure and lists out contacts (with assistance) •Fills the forms and notifies the suspected case as per national SOP for CICT for monkeypox •Collects samples of suspected cases and hands over to focal collection point with collaboration with local lab personnel/ PPHL •Lists out close contacts and hand out the line lists to contact tracing team
RRT/Contact tracing team	Public health officers/assigned RRT team from municipality	<ul style="list-style-type: none"> •Receives contact lists and finds/locates them •Alerts contacts of their status and informs them about the possible exposure and diseases •Informs self-care measures and orients on tracing and monitoring procedure •Conducts interviews and counsel them to report any possible sign/symptoms that occur (mostly remotely) •Provides hotline/ call center contact details for reporting •Fills Form A and reports to the EDCCD CICT secretariate and provincial focal point •Presents the contact information to the managers
Contact monitoring team	(Call center (1115), Municipal level health workers assigned for monitoring)	<ul style="list-style-type: none"> •Conducts daily follow up of the contact for development of possible sign/symptoms •Ensures adherence to follow up protocol by contacts •Provides daily report to the respective health authority
Data management team	Medical recorders and Stat. officer at district and local level, PHEOCs.	<ul style="list-style-type: none"> •Manages all data of Case investigation, contact tracing and monitoring daily. •Checks quality of data and verifies information •Relays information to the local health authority and EDCCD within 24 hours.



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Annex 2: Workflow for Case investigation and contact tracing for Monkeypox



Annex 3: IPC measures for case investigation and contact tracing team.

Recommended measures:

Location	PPE
During case investigation	Remote interview (by telephone or video conferencing) for case investigation won't require any PPE. If required in-person interview, perform hand hygiene and wear PPE according to contact and droplet precautions (gloves, gown, mask [e.g.N95] and eye protection) as patients with rashes that have not healed may still have infectious virus. Outdoor in-person interview is preferred to avoid contact with suspected or fomites.
During contact tracing and contact monitoring	Contact tracing should be performed remotely as possible. If required for in-person visit, perform hand hygiene and wear PPE according to contact and droplet precautions (gloves, gown, mask [eg. surgical mask] and eye protection). Contact monitoring is done remotely over phone and will not require any PPE.

Health workers who conduct in-person interview wearing appropriate PPE do not need to be excluded from work if they are asymptomatic but should undergo active surveillance for symptoms for 21 days post-exposure; and be instructed not to work with vulnerable patients.



Health workers who have had an exposure to a person with confirmed MPX should undergo medical evaluation and consideration for possible interventions.

Annex 4: Close contact in air travel:

Any passenger or crew team member who reports physical contact with a symptomatic case without using PPE can be considered a high-risk contact.

If a probable or confirmed case is reported in a long-distance travel (e.g., lasting more than 4 hours), travelers seated in the same row, two rows in front and two rows behind the sick traveler as well as the cabin crew who served the case, can be considered contacts even if they had no physical contact with the case and were not wearing protective PPE such as face mask.

Annex 5: Flow-chart for sample transport for Monkeypox

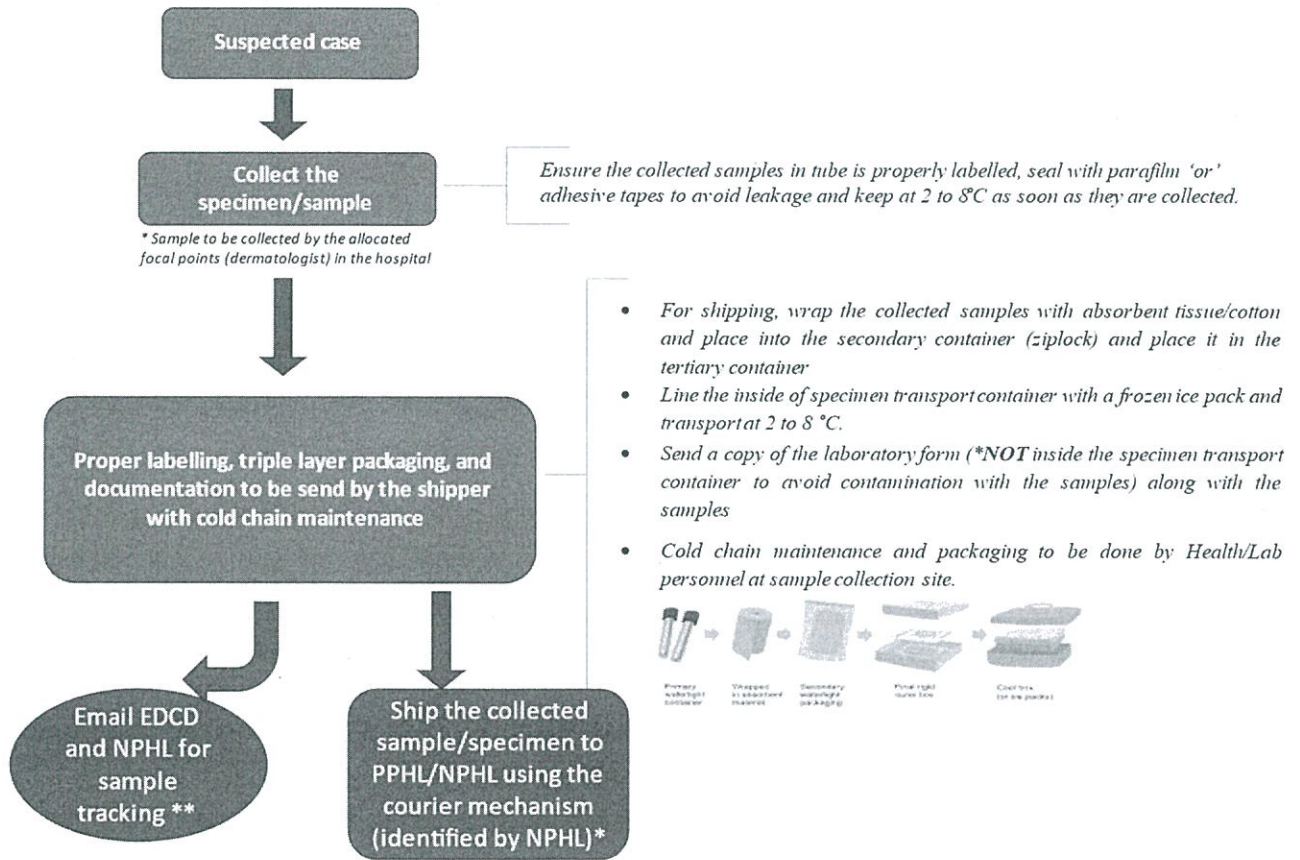


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Flow diagram for Sample Transportation

from identified Health Facility to NPHL | Readiness to MonkeyPox



- The collected sample should be stored at 2 to 8 ° at the designated health facility until shipped to NPHL.
- The cost/charges for the sample transportation from identified Hospital to NPHL will be covered by courier mechanism arranged through courier vendor identified by NPHL.
*Please contact with focal point of courier (Mr Rajendra Bhatta, +977 9851081184) .
- **Email communication should be sent from the respective health institution, while shipping the sample. The communication channel should include EDCD (adhikaribhola2034@gmail.com) , NPHL (alokbпкиs2013@gmail.com) .**

Contact focal point (NPHL): Mr. Lok Bandhu Chaudhary (9865090611) | EDCD: Mr Bhola Adhikari (9852678422)

Identified Health Facilities and Focal Point for Monkeypox readiness			
Hospital/Health Facility	Name of Focal person	Contact number	Email address
Mechi Hospital, Jhapa Bhadrapur	Dr Keshab Dhakal	9842055443	drkeshab@gmail.com
Koshi Hospital, Biratnagar	Dr C B Jha	9851166134	drcbha@gmail.com
BPKIHS Dharan	Dr Dr Dhan Keshar Khadka	9842026086	dhankesharjung@gmail.com
Provincial Hospital, Janakpur	Dr Ram Gyan Yadav	9846102565	ramgderma@gmail.com
Narayani Hospital, Birgunj	Dr Atulesh Kumar Chaurasia	9845100923	atulesh_brj@hotmail.com
Pokhara Academy of Health sciences, Pokhara	Dr Ananda Nepal	9846032688	anandnpl@gmail.com
Bharatpur Hospital, Bharatpur	Dr Shashi Hirachan	9845198255	shashi55hirachan@gmail.com
Bir Hospital, Kathmandu	Dr Niraj parajuli	9841777800	dmirajparajuli@gmail.com
STIDH, Teku, Kathmandu	Dr Shibendra Jha	9841567712	shivendrakjha@gmail.com
Patan Academy of Health Sciences, Patan	Dr Monique Kafle	9851203060	moniquekafle@pahs.edu.np
Lumbini Provincial Hospital	Dr Mani Lal Shrestha	9857025036	mani_lal@yahoo.com
Bheri Hospital, Nepalgunj	Dr Badri Chapagain	9851130245	badrichapagal@gmail.com
Provincial Hospital, Surkhet	Dr Susmita Pradhan	9849861203	sush_pradhan@hotmail.com
Seti Hospital, Dhangadhi	Dr Dinesh Shiwakoti	9861115666	shiwakotidinesh@yahoo.com

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Annex 6: Monkeypox Case Reporting Form (CRF)

Case reporting format for Suspected case of Monkey Pox

Reporting health facility:																		
Attending physician:																		
Reporting officer/ Contact number:																		
Sex	Date of reporting	Name of Patient	Age (month/year)	Gender (M/F/O)	Place of residence	Occupation	Pregnancy (Y/N)	Date of first symptoms onset	Date of fever onset	Date of Rash onset/ site of onset	Any other symptoms specify	Received smallpox vaccine (Y/N)	International Travel in past 5-21 days before illness (Y/N) Specify	Recent exposure to probable/ confirmed case (Y/N)	Date of Hospitalization (Y/N)	Date of sample collection (Skin lesion material for PCR)	Lab report finding for sample collected	Health status (Recovered/ healthy, not recovered, Lethal, Referred, Death, unknown)

Please provide the ~~link~~ list in info@edcd.gov.np, ewarsnepal@gmail.com along with any additional information of cases.

Suspected Case:

i) A person who is a contact of a probable or confirmed monkeypox case in the 21 days before the onset of signs or symptoms, and who presents with any of the following: acute onset of fever (>38.5°C), headache, myalgia (muscle pain/body aches), back pain, profound weakness or fatigue.

OR

ii) A person presenting since 01 January 2022 with an unexplained acute skin rash, mucosal lesions or lymphadenopathy (swollen lymph nodes). The skin rash may include single or multiple lesions in the ano-genital region or elsewhere on the body. Mucosal lesions may include single or multiple oral, conjunctival, urethral, penile, vaginal, or ano-rectal lesions. Ano-rectal lesions can also manifest as ano-rectal inflammation (proctitis), pain and/or bleeding.

AND

For which the following common causes of acute rash do not fully explain the clinical picture:
 Hand Foot and Mouth Diseases, varicella zoster, herpes zoster, measles, 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); any other locally relevant common causes of papular or vesicular rash.

N.B. It is not necessary to obtain negative laboratory results for listed common causes of rash illness in order to classify a case as suspected. Further, if suspicion of monkeypox infection is high due to either history and/or clinical presentation or possible exposure to a case, the identification of an alternate pathogen which causes rash illness should not preclude testing for MPXV, as co-infections have been identified



Annex 7: Case investigation form

CASE INVESTIGATION FORM (CIF)

The Case investigation form (CIF) is designed to collect data obtained from persons with suspected, probable, or confirmed monkeypox infection. Data may be collected prospectively or retrospectively. This form comprises modules for both cases and for subsequent investigation of contacts.

Suspected Case:

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FOR CASES:

Module 1: Case identification

Module 2: Epidemiological investigation

Module 3: Laboratory investigation and case outcome

Module 4: Forward Contact Tracing and Contact follow-up

FOR CONTACTS

Form A: Contact minimal reporting form – for contacts of suspected, probable and confirmed monkeypox cases

Form B: Symptom diary for contacts of suspected, probable and confirmed monkeypox cases



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MODULE 1. CASE IDENTIFICATION

Unique Case ID: _____

Cluster number (if applicable): _____

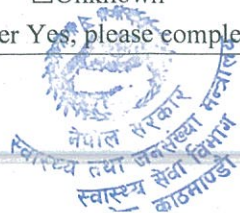
Case origin: In-country POE

Current status: Home Treatment Facility Institutional Isolation Quarantine

1. Data collector information	
Name of data collector	
Data collector role	
Data collector facility	
Data collector telephone number	
Data collector email	
Form completion date	[Y][Y][Y][Y]/[M][M]/[D][D]
Date of notification	[Y][Y][Y][Y]/[M][M]/[D][D]

CASE CLASSIFICATION		
<input type="checkbox"/> Confirmed	<input type="checkbox"/> Probable	<input type="checkbox"/> Suspected

1a. CASE IDENTIFIER INFORMATION	
First name _____	Family name _____
Date of birth: [Y][Y][Y][Y]/[M][M]/[D][D]	
If date of birth is unknown, record:	
Age [][] years OR [][] months OR [][] days	
Sex at birth: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other(specify) <input type="checkbox"/> Unknown	
If sex is other, specify: _____	
Gender: <input type="checkbox"/> Man <input type="checkbox"/> Woman <input type="checkbox"/> Non-binary <input type="checkbox"/> Other(specify)	
If gender is other, specify: _____	
Individual's national identification number (if applicable): _____	
Nationality _____	Passport Number _____
Country of residence _____	
Phone number _____	Alternate phone number: _____
Email _____	
Place of stay _____	Municipality/ District/ward/Tole/Landmark: _____
Occupation of the case: _____	
Education: _____	
Healthcare worker?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If Healthcare worker Yes, please complete the specific section (X).	



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1b. TRAVEL HISTORY (up to 3 weeks prior to onset of symptoms or diagnosis) (Unk = Unknown)

Did the patient travel outside of the country in the past 21 days? Yes No Unk

The following questions should only be asked if patient reports "Yes"

Country/ies of travel	1. _____	Travel Subnational Region/City	1. _____
	2. _____		2. _____
	3. _____		3. _____

Date of entry in country

1. _____

[2][0][Y][Y]/[M][M]/[D][D]

2. _____

[2][0][Y][Y]/[M][M]/[D][D]

3. _____

[2][0][Y][Y]/[M][M]/[D][D]

Date of departure

1. _____

[2][0][Y][Y]/[M][M]/[D][D]

2. _____

[2][0][Y][Y]/[M][M]/[D][D]

3. _____

[2][0][Y][Y]/[M][M]/[D][D]

Contact with animals (if travel to Central or West Africa)

(select all that apply)

Household pets excluding rodents

Rodent pets

Wild animals excluding rodent

Wild rodents

Other (specify)

1c. MEDICAL HISTORY (Unk = Unknown)

Concurrent Sexually

Yes

Pregnancy?

Yes, Pregnancy, trimester is unknown



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Transmitted Infections (STI)	<input type="checkbox"/> No <input type="checkbox"/> Unk		<input type="checkbox"/> Yes, Pregnancy, 1st trimester, the 1st trim is from week 1 to the end of week 12
Chlamydia	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		<input type="checkbox"/> Yes, Pregnancy, 2nd trimester, the 2nd trim is from week 13 to the end of week 26
Gonorrhea	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		<input type="checkbox"/> Yes, Pregnancy, 3rd trimester, the 3rd trim is from week 27 to the end of the pregnancy
Genital herpes	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		<input type="checkbox"/> Post-partum (<6 weeks) <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> Unk
Lymphogranulo ma venereum (LGV)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		
Mycoplasma genitalium	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		
Syphilis	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		
Trichomonas vaginalis	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		
Genital warts	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Immunosuppressed	<input type="checkbox"/> Yes, due to disease <input type="checkbox"/> Yes, due to medication <input type="checkbox"/> Yes, reason unknown <input type="checkbox"/> No <input type="checkbox"/> Unk
Other STIs	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	If Immunosuppressed Yes, specify the cause of the immunosuppressed status	
If Other STI Yes, specify:	_____		
What antiviral treatment is the case receiving for monkeypox?	<input type="checkbox"/> Tecovirimat <input type="checkbox"/> Brincidofovir <input type="checkbox"/> Cidofovir <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Yes, but name of antiviral treatment not known <input type="checkbox"/> No antiviral treatment <input type="checkbox"/> Unknown		
HIV status	<input type="checkbox"/> Positive <input type="checkbox"/> Negative	HIV status assessment	<input type="checkbox"/> Self-reported <input type="checkbox"/> Laboratory-confirmed



<input type="checkbox"/> Unk	<input type="checkbox"/> Medical record <input type="checkbox"/> Unk
If HIV positive, most recent	
Most recent CD4 counts _____	<input type="checkbox"/> Unk
HIV treatment: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Unk
Has the case received smallpox vaccine? (select all that apply)	<input type="checkbox"/> Yes, previous vaccination unrelated to current event <input type="checkbox"/> Yes, but scar not present <input type="checkbox"/> Yes, but scar present <input type="checkbox"/> No <input type="checkbox"/> Unk
Date when the case received the latest dose of smallpox vaccine? (If the case does not recall the exact date of vaccination, please report only the year or an approximate date)	[_Y_] [_Y_] [_Y_] [_Y_] / [_M_] [_M_] / [_D_] [_D_]

1d. DATE OF ONSET (first available data at presentation/admission)	
Date of first clinical diagnosis [_2_] [_0_] [_Y_] [_Y_] / [_M_] [_M_] / [_D_] [_D_]	<input type="checkbox"/> Unknown
Does the case present/has the case presented with any symptoms related to monkeypox?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes,	
Date symptoms onset (date of first/earliest symptom) [_2_] [_0_] [_Y_] [_Y_] / [_M_] [_M_] / [_D_] [_D_]	
Date onset of rash [_2_] [_0_] [_Y_] [_Y_] / [_M_] [_M_] / [_D_] [_D_]	<input type="checkbox"/> Not applicable

1e. SIGNS AND SYMPTOMS IF CASE IS/HAS BEEN SYMPTOMATIC (Unk = Unknown)			
Skin/mucosal lesions (excluding oral or anogenital area)	<input type="checkbox"/> Yes	Sore throat	<input type="checkbox"/> Yes
	<input type="checkbox"/> No		<input type="checkbox"/> No
	<input type="checkbox"/> Unk		<input type="checkbox"/> Unk
Anogenital skin/mucosal lesions	<input type="checkbox"/> Yes	Conjunctivitis	<input type="checkbox"/> Yes
	<input type="checkbox"/> No		<input type="checkbox"/> No
	<input type="checkbox"/> Unk		<input type="checkbox"/> Unk
Oral skin/mucosal lesions	<input type="checkbox"/> Yes	Chills or sweats	<input type="checkbox"/> Yes
	<input type="checkbox"/> No		<input type="checkbox"/> No
	<input type="checkbox"/> Unk		<input type="checkbox"/> Unk
Fever >38.5C	<input type="checkbox"/> Yes	Headache	<input type="checkbox"/> Yes



	<input type="checkbox"/> No <input type="checkbox"/> Unk		<input type="checkbox"/> No <input type="checkbox"/> Unk
Asthenia (profound weakness)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Vomiting/nausea	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
Muscle pain (myalgia)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Cough/respiratory symptoms	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
Back pain	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Localized lymphadenopathy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
Fatigue	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Generalized lymphadenopathy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
Other symptoms	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Diarrhea	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
If Other symptoms Yes, specify:			

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Large event with sexual contact
 Unknown
 Other, specify: _____

Name and address of exposure setting: _____

Close contact (<1m distance but no physical contact)
 Physical skin to skin contact, but no mucosal contact and no sexual intercourse
 Mouth to skin contact (kissing and oral sex)
 Sexual intercourse contact
 Contact with contaminated material (body fluids, objects, bedding, etc.), but no direct contact with the case
 Healthcare worker in contact with a case
 Unknown
 Other, specify _____

Type of contact
(select all that apply)

2c. SEXUAL BEHAVIOR (up to 3 weeks prior to onset of symptoms or diagnosis) (Unk = Unknown)

Sexual orientation

MSM (men who have sex with men, gay, bisexual, others) Lesbian Homosexual Heterosexual Other Unknown



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 [Handwritten text]

(Select all that apply)

- Household pets excluding rodents
- Rodent pets (such as Guinea pigs, prairie dogs, gerbils, mice, rats, squirrels...)
- Wild animals excluding rodents (such as monkeys, live exposure or cadavers, wild game/bushmeat)
- Wild or urban rodents (such as squirrels, rats, dormice, live exposure, farmed or as wild game or bushmeat)
- Other (specify) _____

Patient contact with bush meat in country of diagnosis, independent of travel Yes No Unk

If yes, specify location _____

2d. Occupational exposure in healthcare setting (up to 3 weeks prior to onset of symptoms or diagnosis) (Unk = Unkn)

If case is not a Healthcare worker, please skip to next Section

What kind of healthcare worker (HCW) is the Case?

Specify place of work _____

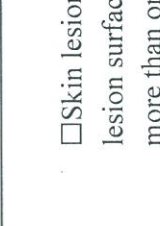


2e. MOST LIKELY MODE OF TRANSMISSION, based on the previously reported information
(to be determined by investigator based on the previously reported exposure information)

- Direct contact transmission from person to person (excluding mother-to-child, healthcare-associated or sexual transmission)
- Sexual transmission
- Animal to human transmission
- Healthcare-associated (healthcare setting or facility or when delivering health care)
- Transmission in a laboratory due to occupational exposure
- Transmission from mother to child during pregnancy or at birth
- Contact with contaminated material (e.g bedding, clothing, objects)
- Transfusion recipient
- Other transmission, specify _____
- Unknown

MODULE 3. LABORATORY INFORMATION AND CASE OUTCOME

3a. DIAGNOSTIC/PATHOGEN TESTING: Please select all positive specimens used for diagnosis of monkeypox

Laboratory identification number	Specimen type (select all that apply)	Test performed
Date of sampling  नेपाल सरकार स्वास्थ्य प्रवर्धन विभाग काठमाडौं	<input type="checkbox"/> Skin lesion material (including swabs of lesion surface, and/or exudate, roofs from more than one lesion) <input type="checkbox"/> Lesion crust <input type="checkbox"/> Serum <input type="checkbox"/> Genital swab <input type="checkbox"/> Oropharyngeal swab	<input type="checkbox"/> Monkeypox PCR <input type="checkbox"/> Orthopoxvirus PCR <input type="checkbox"/> Sequencing <input type="checkbox"/> Serology <input type="checkbox"/> Other (specify) _____
D__D__/_M__M__/202__Y		

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	<input type="checkbox"/> Urine <input type="checkbox"/> Semen <input type="checkbox"/> Rectal swab <input type="checkbox"/> Other, <i>Specify:</i> _____
--	---

Genomic characterization undertaken? Yes No Unknown

If yes, clade West African clade Congo Basin Clade

If yes, accession number of the sequence uploaded to a public database _____

3b. HOSPITALISATION AND INTENSIVE CARE (ICU)

Hospitalization? Yes, for isolation purposes Yes, due to clinical needs No Unknown

If yes

Date of hospital admission [2][0][Y][M][D] [2][0][Y][M][D] [N/A]

Date of hospital discharge [2][0][Y][M][D] [2][0][Y][M][D] [In hospital at time of form completion] [N/A]

ICU or high dependency unit admission? Yes No Unknown

If yes

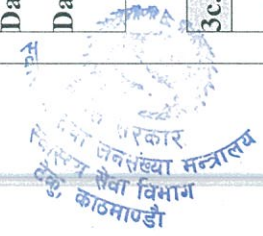
Date of ICU admission [2][0][Y][M][D] [2][0][Y][M][D] [N/A]

Date of ICU discharge [2][0][Y][M][D] [2][0][Y][M][D] [In ICU at time of form completion] [N/A]

3c. OUTCOME

Outcome: No outcome yet Deceased Unknown (lost-to-follow-up) Recovered

Outcome date: [2][0][Y][M][D] [2][0][Y][M][D] [Unknown]



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(Handwritten signature)

If outcome is death, report date of death: [2][0][_][Y][_][Y][_][M][_][M][_][D][_][D][_][D][_][Unknown

8. Status of form completion

Form completed

Yes No or partially

If No or partially, reason:

- Missed
- Not attempted
- Not performed
- Refusal
- Other, specify:



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MODULE 4: FORWARD CONTACT TRACING

4a. FORWARD TRACING (Unk = Unknown)

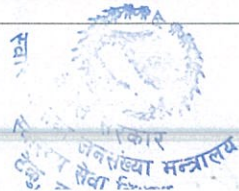
Has the case had any contact (face to face, physical or sexual) with one or more persons in the period between onset of symptoms or diagnosis and all vesicle scabs falling off?

Yes No Unk

The following questions should only be asked if patient reports "Yes"

<p>How many contacts has the case had since the onset of symptoms or diagnosis?</p> <p>_____</p> <p>How many of the reported contacts are unidentified? <i>(the case does not have their contact details or knows how to reach them.)</i></p> <p>_____</p>	<p><input type="checkbox"/> Household</p> <p><input type="checkbox"/> Workplace</p> <p><input type="checkbox"/> School/nursery</p> <p><input type="checkbox"/> Healthcare (including laboratory exposure)</p> <p><input type="checkbox"/> Night club/private party/sauna with sexual contact</p> <p><input type="checkbox"/> Bar/restaurant or other small event where there was no sexual contact</p> <p><input type="checkbox"/> Large event with no sexual contact (e.g., festival or sports event)</p> <p><input type="checkbox"/> Large event with sexual contact</p> <p><input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Other, specify: _____</p>
<p>Where did the case have contact (face to face, physical or sexual)? <i>(select all that apply)</i></p>	

Please list all the contacts below



Surname	Name	Contact details (Phone number, email address, home address)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		



For each contact that is reached, please complete the Contact initial and follow up reporting forms (Form A and Form B)

[Handwritten initials]



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FORM A: CONTACT INITIAL REPORTING FORM— for contacts of confirmed cases, who are not symptomatic.
Symptomatic contacts meeting the suspected or probable case definition need to be administered the full CIF.

Name of confirmed case

--

Confirmed Case ID/Cluster number (if applicable):

--

Contact ID Number (C...):

--

Note: Contact ID numbers should be issued at the time of completion of Form X.

1: DATA COLLECTOR INFORMATION

Name of data collector	
Data collector institution	
Data collector telephone number	
Data collector email	
Form completion date (dd/mm/yyyy)	_ / _ / _



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3. CONTACT DEMOGRAPHICS

First name _____ Family name _____

Date of birth: [Y][Y][Y][Y]/[M][M]/[D][D]

If date of birth is unknown, record:

Age [] [] years OR [] [] months OR [] [] days

Sex at birth: Male Female Other (specify) Unknown

If sex is other, specify: _____

Gender: Man Woman Non-binary Other (specify)

If gender is other, specify: _____

National social number/identifier (if applicable): _____

Country of residence _____

Telephone number _____

Email _____

Address _____

Sexual orientation

MSM (men who have sex with men) Homosexual Heterosexual Bisexual Other Unknown

If other, specify: _____

Health care worker?

Yes No Unknown

Occupation of the case (including specific type of HCW): _____

4. DETAILS OF CONTACT

Relationship to the case

Type of contact with the case



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[Handwritten signature]

- Face-to-face contact less than one meter distance but no physical contact
- Physical skin to skin contact but no sexual intercourse
- Sexual intercourse contact
- Contact with specimens or body fluids but no direct contact with a case
- Healthcare worker in contact with a case
- Unknown
- Other (specify) _____

- Spouse/partner
- Household member
- Non-household relative
- Friend
- Sexual partner
- Colleague
- Healthcare exposure
- Other (specify) _____

- Cumulative duration of the contact**
- <5 minutes
 - 5<15 minutes
 - 15 minutes < 1 hour
 - 1<4hours=
 - 4h+
 - UNK= Unknown

- Occurrence of the contact**
- Once
 - Multiple times

Details on the setting of the contact:

Name: _____

Address: _____

- Setting of the contact**
- Household
 - Workplace
 - School/nursery
 - Healthcare (including laboratory exposure)
 - Night club/private party/sauna with sexual contact
 - Bar/restaurant/ or other small event where there was no sexual contact
 - Large event with no sexual contact (e.g., festival or sports event)
 - Large event with sexual contact
 - Other (specify) _____



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Unknown

Date of first contact

(In the period between the first symptom onset or diagnosis to today or to last vesicle scabs falling off)

[Y][Y][Y][Y][Y][M][M][D][D]

Date of last contact

(In the period between the first symptom onset or diagnosis to today or to last vesicle scabs falling off)

[Y][Y][Y][Y][Y][M][M][D][D]

Form B: Symptom diary for contacts of suspected, probable and confirmed monkeypox cases

Follow-up of contact - Symptoms			Is the contact a suspected case?
Day Number	Symptoms Yes/No/Unknown	If symptoms Yes, list	Yes/No/Unknown
1			
2			
3			
4			
5			
6			
7			
8			
9			

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 नेपाल सरकार
 स्वास्थ्य तथा जनसंख्या मन्त्रालय
 सेवा विभाग
 काठमाडौं


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