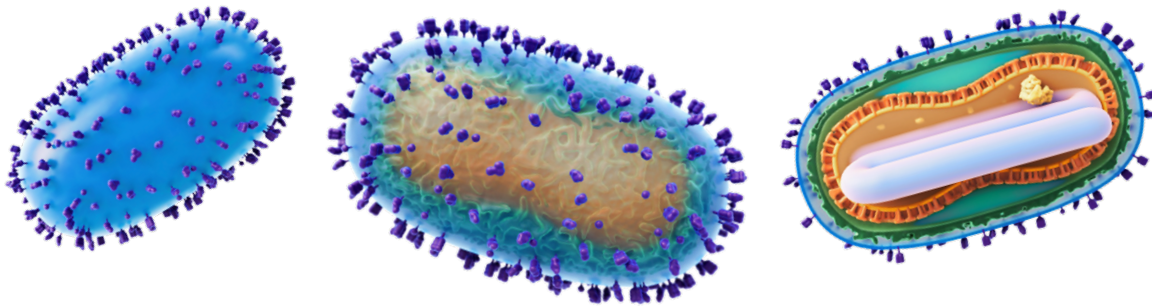




20 August 2024



Target Audience:

Clinicians, Port Health Officers, Nurses & other healthcare professionals.

Objective:

Summarize the established guidance as provided in the National Guidelines for the Prevention and Management of MPOX – 2024.

1. MPOX

Mpox (previously referred to as monkeypox) is a viral zoonotic infection that is caused by the monkeypox virus and results in a rash similar to that of smallpox.

2. VIROLOGY

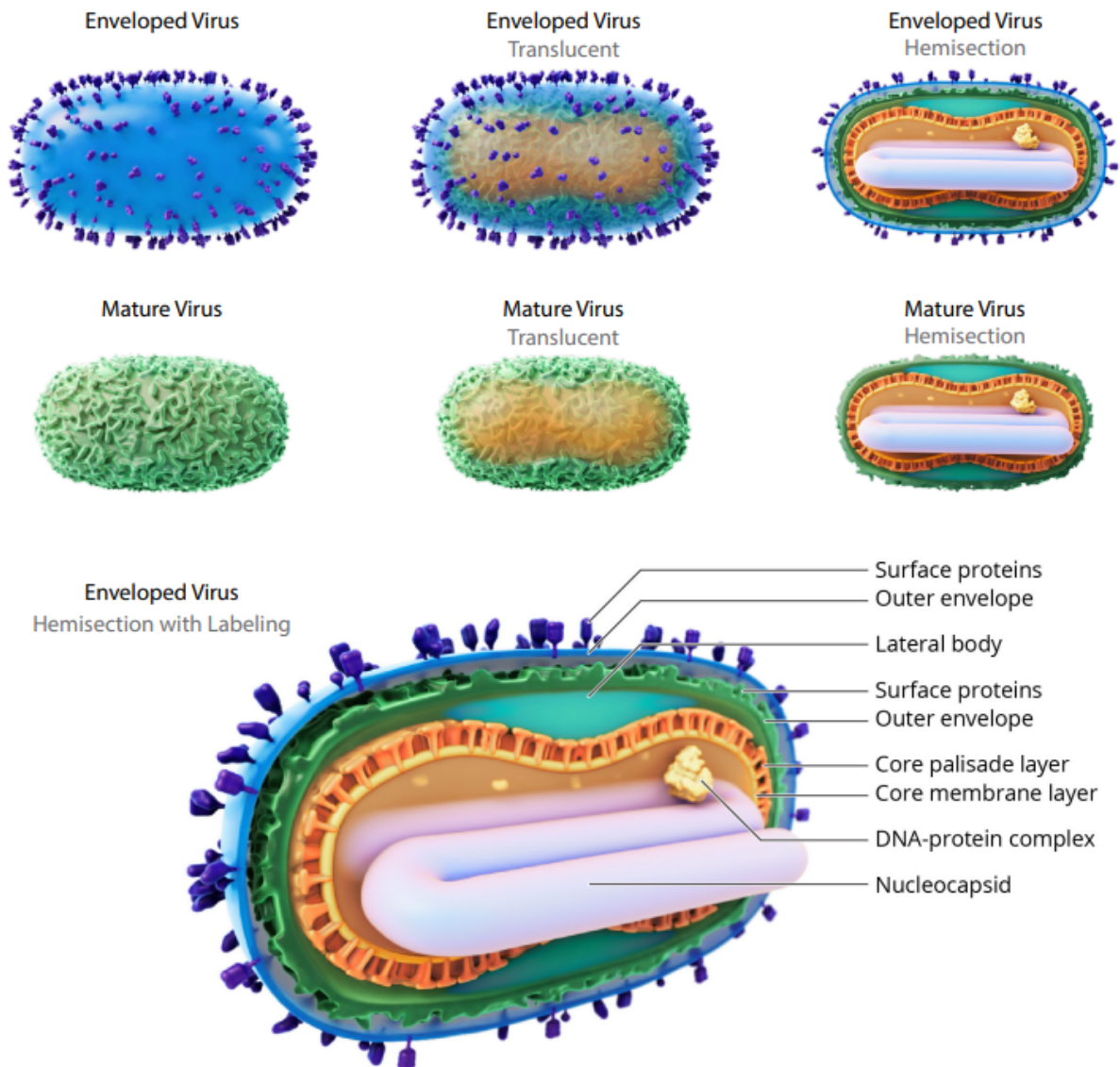
Monkeypox virus is an orthopoxvirus that is in the same genus as variola (the causative agent of smallpox) and vaccinia viruses (the virus used in the smallpox vaccine). There are two strains known as Clades I and II with two sub-strains each, I(a), I(b), II(a) and II(b). Clade I(b) is predominant in this outbreak, and reportedly more virulent and transmissible.

3. EPIDEMIOLOGY

The current multi-country outbreak has been reported in the several endemic and non-endemic countries on the African continent with approximately 16,000 new cases and 511 deaths during 2024. New cases are also now reported in Sweden, Pakistan, Philippines and Argentina, indicating transmission outside of the African continent.

4. TRANSMISSION

MPOX can be transmitted via direct and/or indirect contact with infected persons, animals, and/or contaminated fomites. Transmission includes vertical transmission, percutaneous inoculation and respiratory secretions.



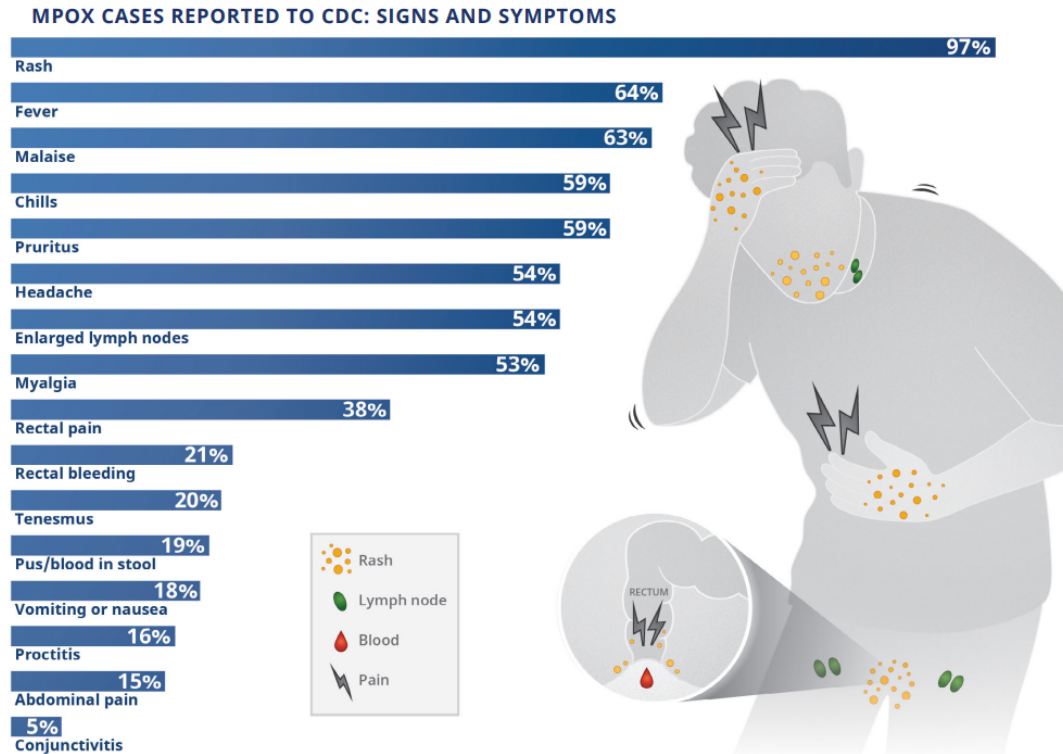
5. INCUBATION PERIOD

The incubation period of monkeypox virus infection is usually from 5 to 13 days but can range from 4 to 21 days. During the outbreak that began in 2022, the incubation period has generally ranged from 7 to 10 days following exposure.

6. CLINICAL FEATURES

Mpox has traditionally caused a systemic illness that includes fevers, chills, and myalgias, with a characteristic rash that is important to differentiate from that of other vesicular eruptions (e.g.,

varicella, smallpox). However, during the 2022 to 2023 multi-country outbreak, some patients presented with genital, anal, and/or oral lesions without the systemic illness. Systemic symptoms are common and may occur before the rash appears (prodromal stage) or shortly thereafter (early clinical stage). These symptoms are attributable to a viremic phase of illness.



7. MPOX RASH

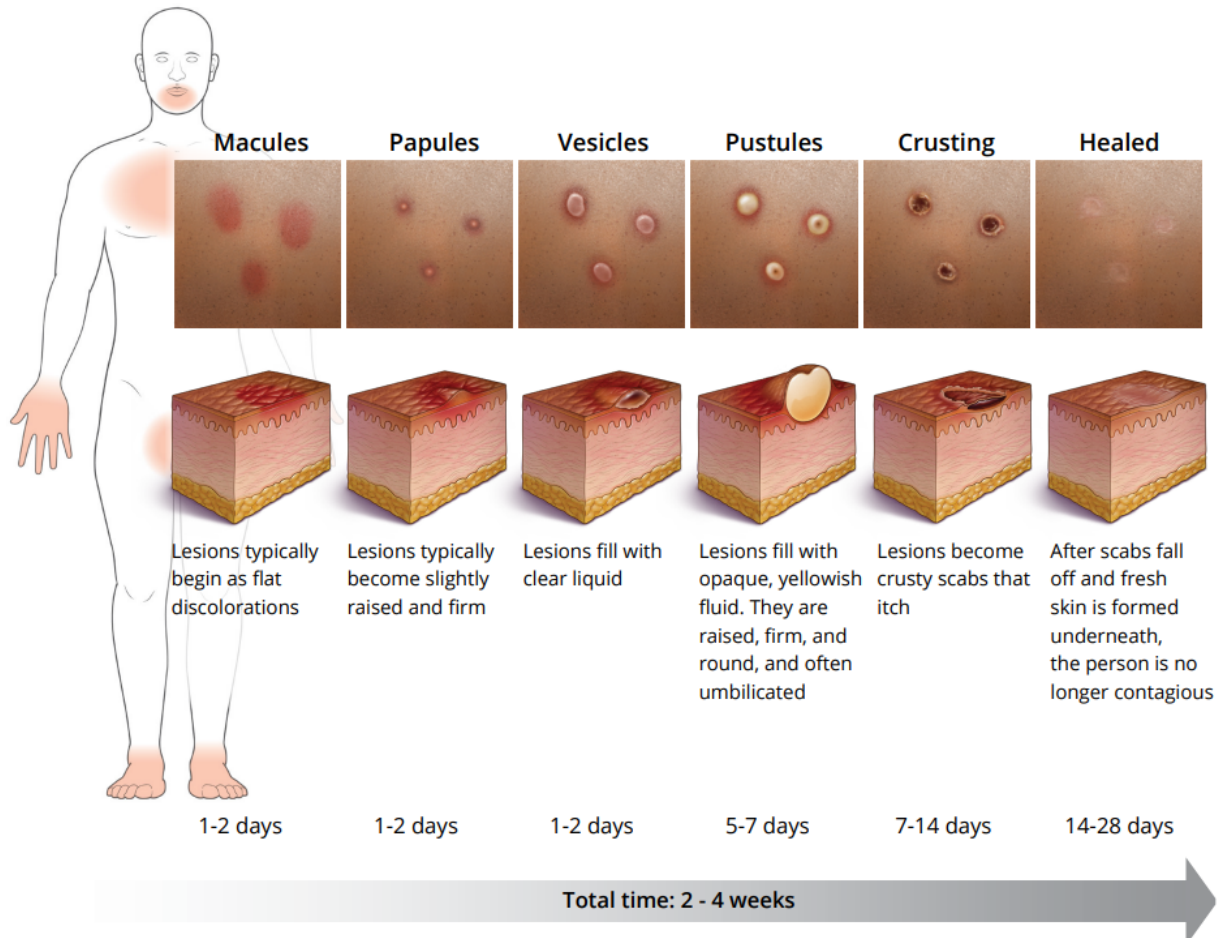
The skin eruption usually occurs between one to two days before and three to four days after the onset of the systemic symptoms and continues for two to three weeks, although rashes without systemic illness have been reported. The rash associated with mpox progresses through several stages:

- The rash typically begins as 2 to 5 mm diameter macules. The lesions subsequently evolve to papules, vesicles, and then pseudo-pustules (papules that simulate pustules but are predominantly filled with cell debris and do not contain fluid or pus).
- Lesions are well circumscribed, deep seated, and often develop umbilication (a central depression on the top of the lesion).
- The lesions eventually crust over, and these crusts dry up and then fall off. This typically occurs 7 to 14 days after the rash begins.
- The lesions typically begin to develop simultaneously and evolve together on any given part of the body. However, during the global outbreak of mpox beginning in May 2022, not all lesions were in the same stage of development.
- The rash associated with mpox is often described as painful, but in the healing phase (crusts), it can become itchy.

8. DIAGNOSIS

MPOX can be confirmed in Guyana with the identification of MPXV via RT-PCR analysis conducted at the National Public Health Reference Laboratory (NPHRL) in Georgetown.

MPOX LESION PROGRESSION DESCRIPTION AND TIMELINE



9. SAMPLE COLLECTION

The recommended specimen type for laboratory confirmation of mpox is skin lesion material, including: Swabs of lesion surface and/or exudate, Roofs from more than one lesion, or Lesion crusts. After carefully cleaning with sterile saline, swab the lesion vigorously using Dacron or polyester flocked swabs, to ensure adequate viral DNA is collected. There is no need to derroof or puncture the lesions before swabbing. Both dry swabs and swabs placed in viral transport media (VTM) can be used. These swabs are the same as those utilized for sample collection to diagnose COVID-19 or Influenza.

OVERVIEW

Collect 2 specimens from at least 2 lesions



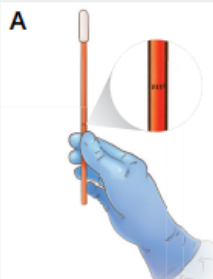
SUPPLY LIST

- At least 4 synthetic swabs
- Container for each swab*
- Specimen bags
- Patient labels
- Sterile gauze
- EPA-registered disinfectant wipes
- Any supplies needed for basic patient care

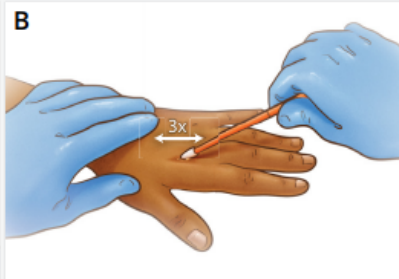
*The type of container, swab, and transport medium may differ per local laboratory guidelines; please ask your local testing site for preference.

1 Before swabbing: Perform hand hygiene and don PPE prior to entering patient room.

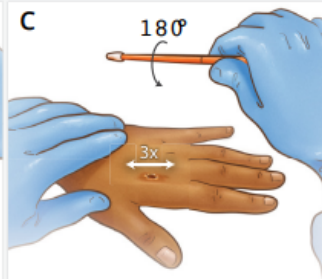
2 At first lesion site: Do NOT clean the lesion area with ethanol or other disinfectant prior to swabbing.



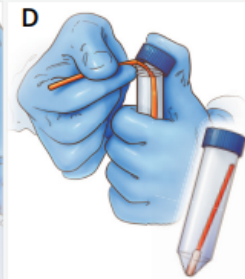
Grasp swab firmly. Avoid touching shaft at least an inch before the tip.



Vigorously rub the swab back and forth on lesion surface 3x. If lesion ruptures, ensure swab collects lesion fluid. Unroofing the lesion is not recommended and is unnecessary



Rotate the swab 180 degrees. Vigorously swab the lesion 3x again.



Place swab in appropriate container, breaking shaft if necessary. Wipe down with EPA-approved disinfectant.



REPEAT Step 2, A through D on the same lesion with a second swab.

3 At second lesion site: At second lesion site, repeat step 2, A through E.



The second lesion is ideally on a different part of the body and/or has a different appearance.

4 Label and package specimens:




Label, package, store, and ship specimens following specifications put forth by testing laboratory.

10. SAMPLE STORAGE

Due to the nature of the disease, it is strongly recommended that samples be sent to the NPHRL within 24 hours from the time of sample collection. If the same cannot be facilitated, the sample can be refrigerated (2 to 8°C) within one hour after collection for no more than six (6) days.

11. SURVEILLANCE

All suspected cases should be interviewed immediately to complete the established “MPOX Case Investigation Form” to determine epidemiological details and case tracking. Each contact should be interviewed to complete the established “MPOX Contact Investigation Form”. Suspected cases should be reported immediately to the central Epidemiology & Surveillance Unit and the Office of the CMO.


MINISTRY OF HEALTH - GUYANA
MPOX CASE NOTIFICATION AND INVESTIGATION FORM

ALL DATA ON THE FORM SHOULD BE ENTERED USING BLOCK LETTERS IN A LEGIBLE MANNER.


Date of report:	Day: _____	Month: _____	Year: _____
Reporting facility:	_____	Reporting region:	_____
Report prepared by:	_____	Designation:	_____

CASE DEMOGRAPHICS

First name(s):	_____	Middle name(s):	_____
Surname:	_____		
Date of birth:	Day: _____	Month: _____	Year: _____
Sex at birth:	<input type="checkbox"/> Female <input type="checkbox"/> Male		
Gender identity	<input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Trans Male <input type="checkbox"/> Trans Fe		
Sexual Orientation	<input type="checkbox"/> Heterosexual <input type="checkbox"/> Homosexual male <input type="checkbox"/> Lesbian <input type="checkbox"/>		
Contact numbers:	Home: _____	Mobile: _____	Wo _____
Nationality	<input type="checkbox"/> Guyanese <input type="checkbox"/> Canadian <input type="checkbox"/> American <input type="checkbox"/> <input type="checkbox"/> Cuban <input type="checkbox"/> Brazilian <input type="checkbox"/> Venezuelan <input type="checkbox"/> Trinidadia		
Ethnicity/Race	<input type="checkbox"/> Afro-Guyanese <input type="checkbox"/> Indo-Guyanese <input type="checkbox"/> Indig <input type="checkbox"/> Portuguese <input type="checkbox"/> Other <input type="checkbox"/>		
Current address:	_____		
Permanent address:	_____		
Occupation:	_____		
Address of place of work/school:	_____		

Clinical Information

Skin rash:	<input type="checkbox"/> Macular [_][_][_][_]/[_][_][_][_]/[_][_][_][_] <input type="checkbox"/> Papular [_][_][_][_]/[_][_][_][_]/[_][_][_][_] <input type="checkbox"/> Vesicular [_][_][_][_]/[_][_][_][_]/[_][_][_][_] <input type="checkbox"/> Pustular [_][_][_][_]/[_][_][_][_]/[_][_][_][_] <input type="checkbox"/> Ulcerous [_][_][_][_]/[_][_][_][_]/[_][_][_][_] <input type="checkbox"/> Crusted [_][_][_][_]/[_][_][_][_]/[_][_][_][_]
Location(s) of the rash/lesions:	<input type="checkbox"/> Anogenital/perianal <input type="checkbox"/> Hand <input type="checkbox"/> Oral (mouth, lips, oral mucosa including throat) <input type="checkbox"/> Head <input type="checkbox"/> Face, excluding oral and mucosal surfaces <input type="checkbox"/> Torso <input type="checkbox"/> Soles of feet <input type="checkbox"/> Other, specify: _____


MINISTRY OF HEALTH - GUYANA
MPOX CONTACT INVESTIGATION FORM

CONTACT

DATE OF REPORT:	DATE: _____	MONTH: _____	YEAR: _____
REPORT PREPARED BY:	_____	DESIGNATION:	_____
NAME OF POSITIVE CASE:	_____	SEX OF POSITIVE CASE:	_____
ADDRESS OF POSITIVE CASE:	_____		

CONTACT INFORMATION

FIRST NAMED:	_____
MIDDLE NAMED:	_____
SURNAME:	_____
AGE (YEARS):	_____
DATE OF BIRTH:	DATE: _____
SEX:	_____
CONTACT NUMBERS:	HOME: _____ MONTH: _____ YEAR: _____
NATIONALITY:	_____
CURRENT ADDRESS:	_____
PERMANENT ADDRESS:	_____
REGION OF RESIDENCE:	_____ (REGION 1 - 10)
OCCUPATION:	_____
ADDRESS OF PLACE OF WORK:	_____

SKIN RASH:	DATE OF ONSET: _____	DESCRIPTION (TYPE, NUMBER OF LESIONS, LOCATION, CHARACTERISTICS, ETC)
FEVER:	DATE OF ONSET: _____	DESCRIPTION
OTHER SYMPTOMS (CASE DEFINITION OR OTHERWISE)	_____	_____
PAST MEDICAL HISTORY OF DISEASE AND/OR COMORBIDITIES	_____	_____

12. ISOLATION

Due to the infectious nature of MPOX, suspected, probable and/or confirmed cases should be isolated immediately in a controlled room or area with limited access to healthcare personnel or the public. Confirmed cases and suspected/probable cases should not be placed in the same room or area, so as to avoid further transmission. As long as lesions are present, the individual should be isolated until the lesions scab over, typically lasting 2 to 4 weeks.

13. INFECTION PREVENTION AND CONTROL

Healthcare professionals should utilize PPE inclusive of Gowns, Gloves, Eye protection (i.e., goggles or a face shield that covers the front and sides of the face), and N95 filters or higher. Standard cleaning and disinfection procedures should be performed using disinfectants, such as Chlorine Bleach (5%), Hydrogen Peroxide, Alcohol (70%), etc.

Personal protective equipment (PPE) to use

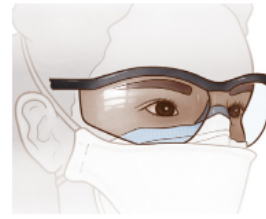
NOTE: Perform hand hygiene and then don PPE prior to entering patient room.



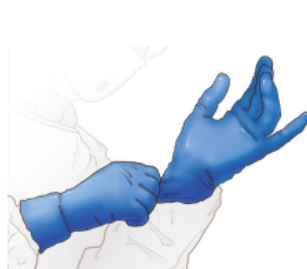
Full PPE



Fit tested NIOSH-approved respirator (equipped with a N95 filter or higher)



Eye protection (with coverage of front and sides of face)



Gloves



Gown

14. CLINICAL MANAGEMENT

Treatment is principally symptomatic. Most immunocompetent patients with mpox have mild disease and will recover without medical intervention. However, some patients may require pain relief medication (e.g., for pain related to proctitis or tonsillitis). In addition, for conditions like proctitis, stool softeners, topical lidocaine, and/or sitz baths many need to be used. The use of antiviral therapy is controlled and restricted for select cases following specialist consultation. Secondary bacterial infections can occur in patients with mpox. Should a bacterial infection be suspected, the patient should receive appropriate antibiotic coverage; regimens should generally include agents that are used to treat soft tissue infections (e.g., those that cover both staphylococcal and streptococcal species).

Mpox disease is characterized by an incubation period, prodrome, and rash.

Stage of Mpox	Duration	Symptoms	Contagious
Incubation Period	1 to 14 days but can last up to 21 days in some cases	Asymptomatic	noncontagious
Prodrome	5 to 7 days	fever, malaise, headache, sore throat, or cough and lymphadenopathy	can be contagious
Rash	1 to 14 days	progressive rash from papules, macules, vesicles, pustules, and then scabs	A person is contagious until after all the scabs on the skin have fallen off and a fresh layer of intact skin has formed underneath

15. DIFFERENTIAL DIAGNOSIS

Clinicians are advised to conduct exhaustive differential diagnosis which may include: Varicella, Herpes simplex virus, Sexually transmitted infections (primary syphilis, lymphogranuloma venereum, chlamydia, gonorrhoea, etc.), Impetigo, small pox, etc.

