

# Monkeypox Outbreak Toolbox

Updated: May 2022



## Key reference documents

- [Monkeypox health topic page](#) (Geneva: World Health Organization, 2022).
- [Monkeypox fact sheet](#) (Geneva: World Health Organization; 2022).
- [Surveillance, case investigation and contact tracing for Monkeypox, Interim guidance, WHO Geneva, 22 May 2022.](#)



## Case definitions

### WHO suggested outbreak case definition

#### Suspected case

A person of any age presenting in a monkeypox non-endemic country<sup>[1]</sup> 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, 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.

*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.*

<sup>[1]</sup> 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. Benin and South Sudan have documented importations in the past. Countries currently reporting cases of the West African clade are Cameroon and Nigeria. With this case definition, all countries except these four should report new cases of monkeypox as part of the current multi-country outbreak.

### 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<sup>1</sup> 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
- is hospitalized due to the illness

### Confirmed case:

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

### Discarded case:

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

## WHO surveillance case definition

### Suspected case:

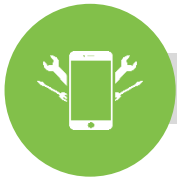
- An acute illness with fever  $>38.3^{\circ}\text{C}$  ( $101^{\circ}\text{F}$ ), intense headache, lymphadenopathy, back pain, myalgia and intense asthenia followed one to three days later by a progressively developing rash often beginning on the face (most dense) and then spreading elsewhere on the body, including soles of feet and palms of hands.

### Probable case:

- A case that meets the clinical case definition, is not laboratory confirmed but has an epidemiological link to a confirmed or probable case.

### Confirmed case:

- A clinically compatible case that is laboratory confirmed.



## Data collection tools

- Case investigation form:
  - [WHO case investigation form: to be release by May 28th](#)
- Line list(s): soon available.
- Electronic tools:
  - [Godata website](#)



## Laboratory confirmation

- [Laboratory testing for monkeypox virus: interim guidance \(Geneva: world health organisation, 23 May 2022\)](#)



## Response tools and resources

- [Interim national guidelines for monkeypox outbreak response](#) (Abuja: Federal Ministry of Health and Nigeria Centre for Disease Control; 2017).



## Training

### English

- Monkeypox: Introduction (online course) (Geneva: World Health Organization; 2020).
- Monkeypox epidemiology, preparedness and response. Extended online training. Open WHO course. (Geneva: World Health Organisation; 2022).

### Français

- [Variole du singe: Introduction](#) (Geneva: World Health Organization 2020).
- [Épidémiologie de la variole du singe, préparation et réponse. Formation avancée en ligne. Cours Open WHO](#) (Geneva: Organisation Mondiale de la Santé ; 2022).



## Other resources

- [Managing epidemics: Key facts about major deadly diseases](#) (page 170) (Geneva: World Health Organization; 2018). Soon updated.

- [Map of African countries reporting human monkeypox cases \(1970–2021\)](#) (Geneva: World Health Organization; 2022).
- [Monkeypox: Current status in West and Central Africa. Report of a WHO Informal Consultation](#) (Geneva: World Health Organization; 2017).
- [Emergence of monkeypox in West Africa and Central Africa, 1970–2017](#). Weekly Epidemiological Record No. 11, 16 March 2018.