Monkeypox outbreak update

SITUATION – TRANSMISSION – COUNTERMEASURES

UPDATE NO.







Monkeypox declared a Public Health Emergency of International Concern (PHEIC)

Cases reported across all 6 WHO regions and 92 countries

- Reported since 1970s, but since May 2022, the outbreak has rapidly spread to many new countries and shown atypical symptoms
- New modes of transmission are being reported
- Clear risk of further international spread





Global epidemiological situation

Data as of 27 August 2022, 17:00 CEST



Since 1 Jan 2022, cases reported to WHO from 101 (5 new) Member States / territories across all 6 WHO regions

- As of 27 August 2022 (17h CEST), a total of 47,751 laboratory confirmed cases including 15 deaths (3 new), have been reported to WHO
- Number of cases has increased by 9.3% compared to the previous week



Confirmed cases of monkeypox

from 1 Jan 2022 to 29 Aug 2022



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Data source: World Health Organization Map production: WHO Health Emergencies Programme ©WHO 2022. All rights reserved.



Current outbreak is due to variant named Clade IIb

Monkeypox clades have been renamed on 13 August 2022

- Monkeypox virus is part of the Orthopoxvirus genus which includes variola virus (smallpox) and cowpox virus
- There are two variants of monkeypox: Clades I and II
- Clade I was formerly known as the Congo Basin Clade (Central African)
- Clade II was formerly known as the West African Clade
- Clade II has two sub-clades, Clade IIa and Clade IIb
- Clade IIb is attributed to most cases in the current outbreak





Symptoms in current outbreak

People may experience all, only a few or no symptoms

- Symptoms can include:
 - > fever,
 - > swollen lymph nodes,
 - > typical or atypical rash
- New clinical features include severe inflammation of the rectum - proctitis (which is characterised by rectal bleeding, pain, diarrhoea), inflammation of the urethra (urethritis) and urinary retention
- Many cases are without any symptoms
- Complications include severe pain, secondary infections, abscesses, blindness, inflammation of the heart muscle and the brain (myocarditis and encephalitis)





Some atypical presentations

This outbreak has seen atypical clinical presentation, such as:

- only a few or a single lesion
- absence of skin lesions in some cases, with anal pain and bleeding
- lesions in the genital or perineal/perianal area which do not spread further
- lesions appearing at different (asynchronous) stages of development
- the appearance of lesions before the onset of fever





Vulnerable populations

The overwhelming majority of cases (99%) are male*

- Males between 18-44 years of age continue to be disproportionately affected (77%)
- The majority of cases (98.1%) have been detected in Men having sex with men (MSM)
- Those who identify as gay, bisexual or MSM and those with recent multiple partners have been primarily affected
- Among cases with known HIV status, 39% are HIV positive
- Many health workers have also been infected, mostly in the community. At least three cases of infection due to occupational exposure has been reported
- Pregnant women, children and those immunocompromised continue to be vulnerable and should take precautions





Modes of transmission

Monkeypox virus is transmitted from one person to another by close contact

- Knowledge of monkeypox transmission is evolving
- Most commonly reported mode of transmission was sexual encounters
- Person to person contact
 - > Close contact with skin lesions, body fluids
 - Ulcers, lesions or sores in the mouth and other mucocutaneous lesions
 - Inhaling contaminated particles or virus, usually in close proximity
- Contaminated materials
 - Needles, tattoos, bedding, linens, clothing, eating utensils, sex toys
- Common exposure settings include parties, bars, and large gatherings





Managing the spread

Persons remain infectious while they have symptoms, normally for between 2- 4 weeks

- Household members and sexual partners are at greater risk of infection
- Those at risk should avoid close contact with people who have suspected or confirmed monkeypox
- Any person with suspected or confirmed monkeypox should be isolated until their lesions have crusted and the scabs have fallen off





Managing the contacts of monkeypox infected persons

Contacts should be monitored daily for the onset of symptoms for a period of 21 days

- Asymptomatic contacts:
 - should not donate blood, cells, tissue, organs, breast milk, or semen while they are under symptom surveillance
 - > can continue daily activities such as work and school (i.e., no quarantine is necessary)
- Health workers exposed while not wearing appropriate PPE do not need to be excluded from work if asymptomatic, but should undergo active monitoring
- Proper information and training is needed for health workers and services providers



Vaccines against monkeypox

In the past, vaccination against smallpox was demonstrated to be about 85% effective in preventing monkeypox

- Research has yielded several safer vaccines for smallpox
- Second generation smallpox vaccines (ACAM 200)
- Third generation MVA BN & LC16 smallpox vaccines approved for monkeypox
- Supplies and access remain limited
- Primary (pre-exposure) preventive vaccination (PPV) is recommended for persons at high risk of exposure
- men who have sex with men, others with multiple sex partners
- health workers, clinical laboratory personnel working on monkeypox,
- Others who may be at high risk



Post-exposure vaccination (PEPV) is recommended for close contacts of cases, ideally within 4 days (within 14 days if asymptomatic), especially for those at high risk of severe disease



Therapeutics & antivirals

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- Tecovirimat
 - > is approved for treatment of smallpox in the US and Canada
 - has received full market approval for monkeypox by the European Medical Agency (EMA) under 'exceptional circumstances'
 - WHO recommendation is for use under randomized control trial or Monitored Emergency Use of Unregistered and Experimental Interventions (MEURI)
 - > not approved by WHO for Emergency Use Listing (EUL)
 - on grounds of compassionate use, limited supplies may be made available to governments for treatment of severe disease

Photo: siga.com



WHO public health actions to support member states

WHO and partners are working with Member States to understand the source and characteristics of the current outbreaks and raise awareness of monkeypox symptoms and protective measures

- WHO has developed <u>surveillance case definitions</u> and <u>new guidance</u> for laboratory testing for the current monkeypox outbreak in non-endemic countries
- **Public health investigations are ongoing**, including extensive case finding and contact tracing, laboratory investigation, clinical management and isolation provided with supportive care
- WHO is working on ensuring **rapid access to testing** for monkeypox
- **Genomic sequencing** has been undertaken to determine the monkeypox virus clade(s) in this outbreak
- Vaccination for monkeypox is being deployed in some countries to manage close contacts, such as health workers. WHO is convening experts to discuss recommendations on vaccination
- Participation in coordinated clinical trials for vaccines and therapeutics with standardized collection of clinical and outcome data has been encouraged



Additional resources



Multi-country monkeypox outbreak: External situation reports

https://www.who.int/emergencies/situation-reports



Key facts about Monkeypox

https://www.who.int/news-room/fact-sheets/detail/monkevpox



OpenWHO: Monkeypox introduction

English: https://openwho.org/courses/monkeypoxintroduction

Français: https://openwho.org/courses/variole-dusinge-introduction



WHO website: Monkeypox

https://www.who.int/health-topics/monkevpox/#tab=tab_1



OpenWHO: Monkeypox epidemiology, preparedness and response

https://openwho.org/courses/monkeypox-English: intermediate

Français : https://openwho.org/courses/variole-du-singeintermediaire/



Monkeypox Q&A

https://www.who.int/philippines/news/g-a-detail/monkevpox



Monkeypox outbreak toolbox

https://www.who.int/emergencies/outbreak-toolkit/diseaseoutbreak-toolboxes/monkevpox-outbreak-toolbox



Monkeypox: public health advice for gay, bisexual and other men who have sex with men

https://www.who.int/publications/m/item/monkeypox-publichealth-advice-for-men-who-have-sex-with-men







