Monkeypox multi-country outbreak

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Monkeypox research: What are the knowledge gaps and priority research questions?
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Outline

Detection of outbreak
Evolution
Response
Surveillance data
Detection of outbreak

Monkeypox cases with no travel history reported from UK
Around same time, cluster of cases of genital rash reported from Portugal in EpiPulse (system for reporting of unusual events in EU/EEA)
Discussions with UK and Portuguese colleagues -> consider monkeypox among MSM
Testing led to first cases among MSM in UK and confirmation of cases in Portugal
Monitoring of outbreak

EU/EEA Member States reporting aggregated case numbers in EU Early Warning and Response System

ECDC also monitors cases through scanning media reports at global level

Basic case-based reporting implemented through EpiPulse

Dedicated surveillance system launching today: joint surveillance developed with WHO-Euro
Epidemic curve

Figure 1. Monkeypox cases in the EU/EEA since 18 May 2022 by reporting date
Geographical distribution of confirmed monkeypox cases in the EU/EEA, as of 01 Jun 2022

- >100 cases reported
- 50-99 cases reported
- 10-49 cases reported
- 1-9 cases reported
- No reported cases
- Not included
Epidemiological update as of 1 June 2022

• 373 cases in the EU/EEA since 18 May:
  Austria (1), Belgium (10), Czechia (5), Denmark (2), Finland (1), France (17),
  Germany (44), Hungary (1), Ireland (2)*, Italy (14), Malta (1), the Netherlands
  (26), Portugal (100), Slovenia (2), Spain (142)* and Sweden (4).

• Almost all cases have no travel history to endemic countries.

• The majority of cases are in young men, self-identifying as MSM.

• Most cases presented with lesions on genitalia or peri-genital area,
  indicating that transmission likely occurs during close physical contact
  during sexual activities.

• **No deaths** have been reported.

• First time that chains of transmission are reported in Europe **without**
  known epidemiological links to West or Central Africa.

Disclaimer: Data presented in this update are compiled from official sources or, if not available, from public media sources quoting national authorities. An asterisk (*) indicates that the latest data were collected through media.
Data reported in EpiPulse

91 cases reported
Age: 30-39 year olds: 48 (54%)
Epidemiological links: 13 out of 61 cases with reported data
Male: 88 (100%)
Imported: 38 (61%)
Sexual orientation: MSM 45 (100%)
HIV: 6 (33%)
Concurrent STI: LGV, syphilis, gonorrhoea
Hospitalised: 3 (4%)
No intensive care admissions
Healthcare workers: 4 (8%)
Portuguese outbreak investigation (in print today)

96 cases as of 27 May 2022
Earliest symptom onset date was 29 April
Limited data on exposures available
Out of 15 cases with exposure history:
  - 8 linked to 2 venues;
  - 4 with travel history (no endemic countries);
  - 1 contact with confirmed case

Figure. Confirmed monkeypox cases by date of symptom onset and exposure, Portugal, 29 April–23 May 2022 (n = 41³)

Mariana Perez Duque, Sofia Ribeiro et al. Ongoing monkeypox virus outbreak, Portugal, 29 April to 23 May 2022. Eurosurveillance
Portugal outbreak

Additional data on 27 cases:
- All male
- 30-39 year olds: 13 out of 27
- MSM: 18 out of 19
- HIV infection: 14 out of 26
- Multiple partners: 14 out of 16
- Hospital admission: 3 cases

“We hypothesise that MPX has been circulating below the detection of surveillance systems”
Objectives for reporting of surveillance data

• Monitor the intensity and geographical spread of the monkeypox virus in the population in time, place and person;
• To understand the natural history and epidemiology of the disease including risk factors for infection in order to assess its impact and prepare accordingly
• To describe the population at highest risk of infection and severe outcomes in order to target preventive or control measures
• Assess the impact of any control and prevention measures.
Case-based reporting of monkeypox

- **MPX TESSy reporting launching 2 June**
- **Joint surveillance with WHO-Euro**
- **Variables include demographic, clinical, laboratory, risk factor and outcome**
- **Twice weekly reporting for time being**
- **Reporting protocol will be available on ECDC website in coming days (https://www.ecdc.europa.eu/en/monkeypox-outbreak)**
Thank you!

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Epidemiological curve - global

Figure 2. Monkeypox cases reported worldwide since 7 May 2022 by reporting date

Number of cases

Date of report

07 May 09 May 11 May 13 May 15 May 17 May 19 May 21 May 23 May 25 May 27 May 29 May 31 May
Geographical distribution globally

Geographical distribution of confirmed monkeypox cases worldwide, as of 01 Jun 2022

No reported cases  1-9 cases  10-49 cases  50-99 cases  >=100 cases

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