Overview of Monkeypox Surveillance

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Presentation Outline

- Goal and objectives of monkeypox surveillance
- Key components of monkeypox surveillance
  - Case detection and alert management system
  - Case investigation
  - Contact tracing
  - Data management for COVID-19 outbreak
  - Reporting and documentation
Goal & objectives of monkeypox surveillance

The goal is to stop human-to-human transmission and stop the outbreak

Key objectives

• To rapidly identify cases and clusters in order to provide optimal clinical care
• To isolate cases to prevent further transmission
• To identify, manage and follow up contacts to recognize early signs of infection
• To identify risk groups for infection and for severe disease
• To protect frontline health workers
• To tailor effective control and prevention measures
Major components of monkeypox surveillance

- Case detection & reporting
- Alert management system
- Case investigations
- Contact tracing
- Data management
- Reporting and documentation
Monkeypox Case Detection

*Aimed to facilitate early identification of cases using indicator- and event-based surveillance systems*

- Case detection is based on application of Standard Case Definitions, widely disseminated at:
  - Health facility
  - Community
  - Points of Entry (PoE)
- Clinicians and community health workers to be alerted for signals related to monkeypox
- Inform communities to recognize early disease and where/how to report
- Suspected cases to be reported immediately to the next level
Alert Management

Aimed to systematically manage and monitor alerts and reported cases

- Establish an **alert management system** to receive signals/ reports of monkeypox cases
- All alerts/rumors and reports to be verified and validated promptly
- Validated information to be referred for proper investigation and follow up
Alert Management

Algorithm for country alert management system for early detection of monkeypox cases

- **Community Leaders**
- **Heads of families**
- **Person with symptoms**
  - PHONE CALL
- **Contact Tracers**
  - PHONE CALL
- **Point of Entry**
- **Health Facility**

**ALERT DESK**
- Phone number 1
- Phone number 2

**VERIFICATION & TRIAGE**
- EPIDEMIOLOGIST/SURVEILLANCE OFFICER

- Meets case definition?
  - YES
    - Provide Instructions for transitional Isolation
    - Inform the Rapid Response Team
  - NO
    - Refer to the nearest health facility and follow up after 3 days

- Does not meet case definition?
  - YES
    - Rapid Response Team at District Level
  - NO
    - Perform Case Investigation
Case investigation

Aimed to elicit source, mode and transmission pattern, exposure factors, at risk groups, etc.

- Conduct case investigation of all reported cases
  - Interview patient/ care givers/ healthcare workers
  - Clinical assessment of patients
  - Complete Case Reporting Form (CRF) for each case (advised to use the detailed Case Investigation Form)

- Carry out exposure investigation (21 days prior to symptoms)

- Formulate plausible hypothesis

- Construct a line list and update with new information

- Conduct active case search to identify additional cases
Contact tracing

Aimed to interrupt transmission chains and facilitate early healthcare, esp. for people at risk of severe disease

- Set up a contact tracing system
- Interview cases and identify and list all contacts (contact listing form)
- Notify contacts within 24 hours of identification
- Monitor contacts for 21 days from the last exposure
- Quarantine or exclusion from work not necessary for asymptomatic contacts
Data management

• Establish a data management team at all levels
  Epidemiologist/Surveillance officer
  Data manager/HMIS officer, Records Officer, Data Clerks, etc.

• Ensure all data collection and reporting tools are disseminated to all levels
  Case report form, Line list template, Contact listing and follow up form

• Establish monkeypox outbreak database and collate reports from all reporting units

• Conduct epidemiological data analysis to describe and characterize the outbreak
  **Person:** Age and sex distribution of cases and deaths, symptoms & signs, risk factor analyses
  **Time:** Epidemic Curve for cases and deaths
  **Place:** Maps of cases and deaths by location
Reporting and documentation

Prepare & share the following reports with WHO and stakeholders

- Situation Report (weekly)
  - Situation/status update
  - Public health actions taken to date
  - Summary of gaps and needs

- Case report form for all probable and confirmed cases

- Updated and consolidated line list (from all reporting facilities)

- Case/outbreak investigation reports

- Periodic epidemiological reports
Key Messages

• Effective surveillance is a prerequisite for early case detection, interrupting transmission chain and eventually control of the outbreak

• Community participation/engagement is essential for successful surveillance and response to multi-country monkeypox outbreak

• Involvement of the private sector is paramount

• Strong field epidemiology practice is pivotal
Monkeypox Surveillance and Contact Tracing Tools
Surveillance, case investigation and contact tracing for monkeypox
Interim guidance
25 August 2022

New version of the MPX surveillance guide

WHO Disease outbreak toolboxes

Available at: https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolboxes
How to use the Toolbox

Develop the case definition
- Find the updated case definitions validated by the WHO expert groups.
- Adapt the case definition: include persons, time and place boundaries.
- Adapt the medical signs to fit with the local capacities.

Organise the data collection with tools
- Download the case reporting form(s) when available;
- Construct your line list.
- Learn if the disease-specific software dedicated to case-based data collection is available and where to find it.

Confirm the outbreak with laboratory confirmation
Read updated guidance for specimen collection, storage conditions, shipment procedures and laboratory testing.

Learn basic knowledge about the suspected disease from key reference documents
- Disease fact sheets
- Disease information page that includes links to technical documents, reports, guidelines, WHO position papers, press releases and updated news;
- WHO outbreak response guidelines (if available)

Learn about response tools & resources
Support national and sub-national authorities for effective management of outbreak.

Watch online training to Acquire the latest specific knowledge

Find other resources that address specific response issues

Available at: https://www.who.int/emergencies/outbreak-toolkit/disease-outbreak-toolboxes
WHO has published and updated the monkeypox Case Reporting Form (CRF)\(^\text{14}\) which constitutes the minimum data countries are requested to report to the respective WHO Regional Office, and includes the following information:

- Record ID
- Reporting Country
- Reporting location (subnational ADM1 level)
- Date of notification
- Case classification
- Age, sex, gender, sexual orientation
- Health worker
- Sex worker
- Medical history (pregnancy, immunosuppression, HIV status, HIV PrEP use)
- Smallpox and monkeypox vaccination status and vaccination date
- Clinical signs or symptoms
- Date of onset of first symptoms
- Presence of rash
- Date of rash onset

- Name of concurrent sexually transmitted infections
- Number of sex partners in the last three months
- Monkeypox treatment
- Hospital admission
- Intensive care unit (ICU) admission
- Complications
- Recent travel history (in the 21 days before onset of illness)
- Recent exposure to a probable or confirmed case (in the 21 days before onset of illness)
- Nature of contact with probable or confirmed case (where relevant)
- Contact with animals (in the 21 days before onset of illness)
- Mode of transmission
- Type of specimen collected for diagnosis
- Method of confirmation (where done)
- Genomic characterization and clade (if available)
- Accession number of the genomic sequence uploaded to public database
- Outcome status at time of reporting

Available at: https://www.who.int/publications/i/item/WHO-MPX-Surveillance-2022.3
Thank you for listening!
Questions?