Mpox and HIV coinfection: Lessons from integrated screening in 11 health zones of Kinshasa, DRC

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BACKGROUND

- **Epidemiological burden:** Between January 2024 and October 2025, DRC reported 31 570 confirmed cases and 75 deaths, the vast majority of mpox burden in Africa
- **Disproportionate impacts**: Mpox cases have been concentrated among sex workers and men who have sex with men. HIV prevalence within these same groups is 7–8%, substantially higher than the national HIV prevalence estimates (1%).
- **Clinical importance**: HIV-related immunosuppression has been linked to severe mpox outcomes and considered a critical driver of case fatalities.
- **Integration opportunities**: Bringing mpox, HIV and syphilis services together is recommended. WHO issued standard operating procedures (SOPs) specific to integrating HIV and syphilis testing to enhance early detection, referral and linkage.

METHODS

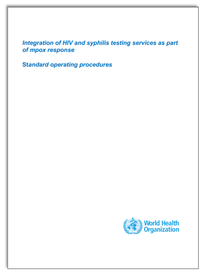
- **Study design and setting:** A feasibility and impact evaluation conducted across 11 high-burden health zones in Kinshasa. Early prospectively collected programme data was analyzed (March–July 2025, including test uptake, co-infection rates, and supply chain metrics. Ongoing retrospective study is also underway to include case reports.
- **Operational framework**: Implementation followed WHO SOPs, supported by a newly developed integrated service delivery protocol and procurement plan.
- **Capacity building**: Specialized training was provided to frontline health workers to ensure competency in dual-pathogen screening and referral pathways.
- **Testing and linkage strategy**:
  - *Mpox*: confirmation of suspected cases via polymerase chain reaction (PCR).
  - *HIV/Syphilis*: dual HIV/syphilis rapid diagnostic test, if reactive confirmed according to national guidance
  - *Linkage*: All clients with confirmed mpox, HIV, and/or syphilis were immediately referred for specialized care and treatment.

Integrated HIV-syphilis-mpox screening can be high impact and feasible. Opportunities to enhance HIV and STI detection within the mpox response should not be missed.


Intégration des services de dépistage du VIH et de la syphilis dans le cadre de la réponse à Mpox

Procédure opératoire standardisée

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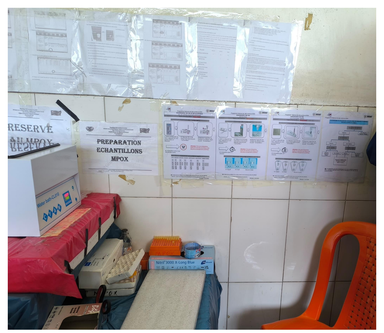

Integration of HIV and syphilis testing services as part of mpox response

Standard operating procedures

World Health Organization

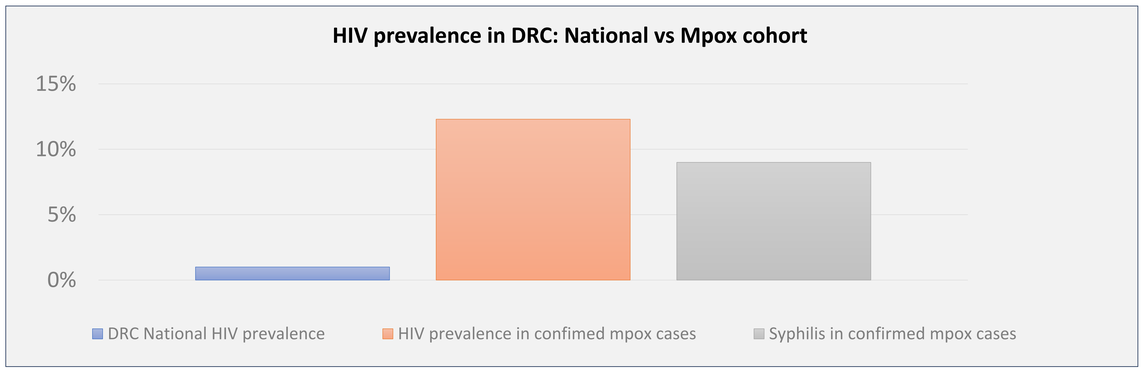






RESULTS

- **Testing uptake**: Out of 1,525 suspected mpox cases, 1,228 (80.5%) successfully received dual HIV/syphilis rapid testing.
- **Mpox confirmation**: PCR confirmed mpox in 277 cases (18.2%).
- **Co-infection among confirmed mpox cases:**
  - **HIV-positive**: 12.3% (n=34)—over 12-times higher than the national average (1%).
  - **Syphilis-positive:** 9.0% (n=25)
- **Clinical outcomes**: Preliminary records from select tertiary hospitals providing treatment for severe mpox cases indicated 7 deaths among 25 individuals with confirmed HIV/mpox co-infection (28% case fatality rate (CFR). These findings are limited to patients with severe clinical presentations and require cautious interpretation before further validation following a full retrospective review.



CONCLUSIONS AND NEXT STEPS

- **Integration was feasible**: The vast majority of individuals with suspected mpox received rapid HIV and syphilis testing. This shows the SOP is pragmatic and scalable way to integrate services in resource-limited settings.
- **Impact**: The strategy successfully identified undiagnosed and untreated HIV co-infections which is important to facilitating prompt linkage to treatment. Further investigation into case fatality rates among those with mpox/HIV/syphilis co-infection is needed.
- **Future directions**:
  - Data collection is ongoing – including a retrospective study that will provide a more comprehensive dataset for further analysis.
  - Building integrated diagnostic testing and responses remains a priority. This integrated approach can provide an important road map to strengthen response to emerging pathogens and furthering broader integration efforts.
  - PNLS together with WHO and partners, PATH, DNDI and Aurum Institute are working to continue and expand efforts, including integrated management of advanced HIV disease, in strategic sites within DRC through support from Unitaid.

ADDITIONAL KEY INFORMATION

Acknowledgements

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