

Reflections on the national guidelines for mpox in South Africa

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Summary

Mpox, historically a rare zoonosis confined to parts of Central and West Africa, has evolved into a global public health concern since 2022, with more than 175 000 confirmed cases reported across 142 countries by November 2025. South Africa reported its first cases in 2022 and has since strengthened its surveillance and response systems for mpox. In August 2025, the National Department of Health released the *Guidelines for the Clinical Recognition, Diagnosis, and Management of Mpox in South Africa* to enhance national preparedness and clinical management of mpox. Here, a reflection is presented on the strengths, gaps, and implementation considerations of these guidelines. Key advances include standardised case definitions, improved clinical recognition of atypical presentations, integrated HIV/STI screening, clear diagnostic pathways centred on polymerase chain reaction testing, and risk-stratified clinical management guidance. The guidelines also address infection prevention and control, mental health impacts, and stigma reduction. Ongoing challenges include sustaining laboratory readiness, ensuring consistent national implementation, strengthening integration with HIV and sexual health services, and expanding surveillance approaches, including wastewater monitoring. Effective implementation will require co-ordinated clinical training, laboratory capacity strengthening, community engagement, and multisector collaboration to mitigate the risk of future mpox transmission in South Africa.

Background

Mpox (known prior to 2023 as monkeypox) is a viral disease that, historically, was a rare zoonosis with limited human-to-human spread and was reported almost exclusively from certain central and West African countries.¹ The disease's most prominent clinical feature is a painful rash, which occurs with various degrees of severity.² More severe and even fatal cases are reported in immunocompromised individuals. Since 2022 and as of 17 February 2026, 177 750 cases of mpox have been confirmed and reported globally.³ These cases have been reported from 143 countries, most of which are considered non-endemic for the disease.³

The emergence of mpox has been associated with novel genetic variants of the virus, namely Clade IIb and Clade Ib.⁴ The former, reported since May 2022, has been associated with the largest number of cases and the widest distribution. The largest proportion of the Clade IIb mpox virus-associated cases involved men who have sex with men within the age range of 18–44 years, with sexual contact reported as the most frequent mechanism of transmission of the virus.³ In 2023, the Clade Ib mpox virus emerged from the Democratic Republic of the Congo, resulting in sizeable outbreaks of mpox in several African countries, with exports reported outside of the continent.³ For Clade Ib-associated mpox, transmission was more frequently reported through heterosexual contact but also occurred among close contacts, particularly household contacts.³ As such, the case demographics are more evenly distributed between males and



females and across age ranges.³

Prior to 2022, no cases of mpox had been diagnosed in South Africa. However, with the global emergence of the disease, cases have been reported in the country since 2022. No cases were detected in 2023, in parallel with a global reduction of cases in that year.⁵ The detection of clinical cases has been rare, with five cases confirmed in 2022, 25 cases in 2024, and 15 cases in 2025.⁵ Although some cases involved travellers, cases were also identified in those without recent travel histories to account for their exposure to the monkeypox virus. Since February 2023, mpox has been a category 1 notifiable medical condition (NMC) in South Africa. When a suspected case is identified, healthcare workers and laboratories must notify through the NMC platform within 24 hours of diagnosing a case, which includes a diagnosis based on clinical presentation. Management of cases and outbreak responses during this time were based on international guidelines.

While timely development of national guidelines is always desirable, the evolution of the global outbreak, changing clade dynamics, and emerging therapeutic evidence necessitated a period of evidence accumulation before formal publication. This culminated in the development of the *Guidelines for the Clinical Recognition, Diagnosis, and Management of Mpox in South Africa*, which were released in August 2025 to strengthen national preparedness and clinical management within the country.⁶ This brief summarises key reflections on these national mpox guidelines, highlighting strengths, gaps, and opportunities to support implementation across South Africa's health system.

Key insights from the guidelines

Strengthened case definitions and clinical recognition

The guideline introduces a clear and tiered set of case definitions (suspected, probable, confirmed, and discarded) as recommended by the World Health Organization (WHO), with additional categories for cases associated with reinfection, persistent infection, and relapse. Recognition of atypical presentations – such as isolated anogenital lesions with minimal systemic symptoms – aligns with global observations from the Clade IIb mpox virus outbreak. Emphasis on comprehensive sexual and clinical history-taking, alongside integrated human immunodeficiency virus (HIV)/sexually transmitted infection (STI) screening tools, improves detection in high-risk populations and enhances syndromic management. It also discusses common differential diagnoses, which includes STIs but also other more common causes of vesicular rash.

Guideline recommendation: Standardised national case definitions support uniform reporting, the reduction of misdiagnosis and underdiagnosis, and strengthen the NMC Surveillance System (NMCSS).



Improved triage, screening, and infection prevention and control (IPC)

The guideline provides detailed facility-level guidance for screening, triage, patient flow, and personal protective equipment (PPE) requirements applicable to both high-volume and resource-limited settings. Structured triage and clinical assessment tools ensure early identification of severe disease, particularly among high-risk groups such as children, pregnant women, and immunocompromised individuals.

Guideline recommendation: Implementation will require sustained IPC training, adequate PPE supply chains, and consistent use of screening tools across all levels of care.

Clear diagnostic pathways and laboratory access

The gold-standard laboratory testing technique for confirming the diagnosis of mpox remains polymerase chain reaction (PCR), with emphasis on lesion-based sampling and appropriate specimen collection, storage, packaging, and transportation. Clinical findings that are suggestive of mpox in a patient necessitates immediate notification to the NMCSS. The guidelines strongly support integrated diagnostic approaches, particularly combined mpox–HIV–STI screening, testing, and clinical pathways. In addition, the guidelines explicitly highlight the importance of differential diagnosis for viral causes of vesicular or pustular rash, and they emphasise that mpox can mimic several other viral exanthems. This integration is consistent across clinical assessment, laboratory testing, and management sections.

Guideline recommendation: Strengthening national laboratory networks – including turnaround time, referral pathways, and data integration – remains central to responsive surveillance and rapid outbreak detection. Multiplex diagnostic approaches for STI and/or viral vesicular rash should support improved surveillance for mpox as well as improved case management.

Comprehensive clinical management framework

The guideline outlines the definition of, and management pathways for, mild and severe disease, with attention to common clinical challenges such as pain, proctitis, ocular involvement, and extensive skin lesions. Special emphasis is given to the management of people living with HIV, including same-day antiretroviral treatment (ART) initiation and prioritisation for mpox vaccination. Guidance for special populations (children, pregnant women, and immunocompromised persons) reflects a risk-stratified and patient-centred approach. Evidence from international trials (i.e., PALM007 and STOMP trials) on the use of tecovirimat shows limited impact on lesion resolution in mild-to-moderate disease. The guideline reserves use of tecovirimat for patients at the highest risk of severe outcomes. Clarity on the South African Health Products Regulatory Authority (SAHPRA)'s Section 21 access procedures support responsible and equitable use. Discharge criteria as well as issues regarding virus persistence are also included in the guideline.

Guideline recommendation: Implementation requires integration between HIV/STI services, sexual health clinics, paediatric services, and infectious disease units to manage complex cases effectively.



The use of tecovirimat requires ongoing evaluation as more evidence accumulates for its efficacy in the treatment of severe mpox cases.

Addressing mental health, stigma, and psychosocial needs

The guideline acknowledges the mental health impacts associated with mpox diagnosis, isolation, and stigma – especially within LGBTQIA+ communities. It encourages linkage to psychosocial support and community-based services.

Guideline recommendation: Health promotion activities must integrate stigma reduction and mental health messaging with targeted engagement of affected communities.

The value of routine surveillance

The guideline reinforces case reporting, contact tracing, and genetic sequencing where indicated. Surveillance supports prioritisation of interventions for high-risk groups, planning for clinical care capacity, decisions about vaccination and antiviral use, and resource mobilisation during outbreaks. Surveillance for mpox is based on clinical recognition and laboratory confirmation of cases with reporting through the NMCSS. Although the guidelines do not include a description of the utility of wastewater surveillance as a supplementary surveillance tool for mpox, wastewater surveillance offers a complementary, non-invasive method of detecting mpox viral DNA at the population level. This surveillance method can provide early warning of community transmission, detect cases missed in clinical surveillance, guide targeted interventions, and support trend monitoring over time. Integrating wastewater data with clinical and laboratory surveillance can strengthen situational awareness and preparedness for mpox outbreaks. National wastewater surveillance for mpox has been underway at the National Institute for Communicable Diseases (NICD), a division of the National Health Laboratory Service, since October 2024.⁷

Guideline recommendation: South Africa's current mpox surveillance framework is entirely reliant on clinical presentation and laboratory confirmation, which may result in missing or under-reporting cases associated with asymptomatic or mild infections, individuals who do not seek care due to stigma or access issues, as well as early community transmission before clinical detection occurs. However, there are no published international guidelines on the use of environmental data for early detection and the response at the time of writing.

Considerations and recommendations for the guidelines

- **Strengthen clinical capacity across all levels of care.** Prioritise national training on case recognition, specimen collection, and IPC. Expand clinical mentorship through infectious disease specialists to support complex and severe cases. Training should be included in curricula for



healthcare professionals of all cadres at undergraduate and postgraduate levels. Training should also be offered through continued professional development platforms.

- **Ensure sustainable diagnostic and laboratory readiness.** Maintain clade-diagnostic PCR capacity across national and private laboratories. Improve reporting timeliness (i.e., the global benchmark for outbreak response, the 7-1-7 approach) through strengthened NMC integration, especially from the private sector.
- **Enhance preparedness for high-risk populations.** Integrate mpox screening into sexual health, HIV, and STI programmes. Promote early HIV testing and immediate ART initiation for all mpox patients. Ensure availability of vaccination for high-risk individuals as supply becomes available. Continue to evaluate available efficacy data for use of tecovirimat for the treatment of mpox and review the guidelines accordingly. Collaboration between the National and Provincial Departments of Health, non-profit organisations, SAHPRA, and public and private laboratory services is required to support integration of these programmes, including monitoring and evaluation of interventions.
- **Advance community engagement and stigma reduction.** Collaboration between National and Provincial Departments of Health, civil society, LGBTQIA+ networks, and youth health organisations to promote sound health-seeking behaviours and to reduce stigma is required. Clear, targeted, and culturally sensitive risk communication and community engagement are required.
- **Strengthen surveillance approaches.** Invest in an integrated and routine surveillance approach which includes wastewater surveillance for mpox. The NICD and other custodians of wastewater surveillance programmes in South Africa can contribute to accurate and accessible mechanisms for reporting wastewater surveillance data and provide guidance in the interpretation of these results for public health action.

Conclusion

The 2025 national mpox guideline provides a comprehensive, evidence-informed framework for improving South Africa's clinical and public health response to mpox. It is duly noted that the guidelines were informed by the best available international evidence at the time of publication, supplemented by local expert input, and should be subject to future review and amendments as the need arises. In particular, certain recommendations, for example, antiviral use, duration of isolation, and vaccination strategies, will require ongoing review as new evidence emerges. The integration of case definitions, diagnostic pathways, clinical management, and psychosocial considerations reflects global best practice tailored to local epidemiologic realities. There is a need for effective implementation of the guidelines, which will rely on sustained clinical training, strengthened laboratory capacity, improved integration across HIV/STI services, and community partnerships to reduce stigma and promote early care-seeking. South Africa will



continue to remain vulnerable to introductions of mpox through international travel. The guideline offers a critical platform for co-ordinated national action.

Funding

No funding to declare.

Conflicts of interest

The authors declare no conflict of interest.



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