



ID der Kurzfassung : 418

Delayed Detection and High-Risk Livestock Exposure Drove a Mixed Anthrax Outbreak in Lyantonde District, Uganda, February 2026

Inhalt

Background: Anthrax, caused by *Bacillus anthracis*, is endemic in Uganda's cattle corridor. In January 2026, an outbreak was reported in Lyantonde District following sudden livestock deaths. We investigated to determine magnitude, risk factors, timeliness, and control measures.

Methods: We reviewed medical records, conducted active case finding, and performed a 1:4 matched case-control study. Case definitions spanned cutaneous and gastrointestinal presentations, confirmed via PCR. Conditional logistic regression identified risk factors, a common-reference-group analysis assessed dose-response, and the 7-1-7 framework evaluated timeliness.

Results: We identified 64 cases (60 suspected, 4 confirmed; 7 deaths), including 31 cutaneous (48.4%) and 2 mixed cases (3.1%). Care was initially sought from traditional healers by 65% of patients. Infection risk increased with dead livestock fluid contact (aOR=124.3, 95%CI: 8.9-1736.2), meat consumption (aOR=20.1, 95%CI: 4.5-89.6), and slaughter/dissection involvement (aOR=57.8, 95%CI: 5.1-653.6). Detection occurred 22 days post-emergence, and response 17 days post-notification. Delays were tied to low community awareness and traditional healer care.

Conclusion: Carcass handling and meat consumption drove this outbreak. Risks can be reduced via livestock vaccination, safe disposal, meat inspection, and One Health surveillance. Improving community awareness and clinical recognition will accelerate detection.

Keywords

Anthrax, matched case-control study, body fluids, meat, livestock, traditional healers, livestock vaccination

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Professional Status of the Speaker

Graduate Student

Junior Scientist Status

Yes, I am a Junior Scientist.

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