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Human anthrax outbreak in North Kivu province, DRC and Uganda

Date and version of current assessment: 15 May 2025, v1
Date(s) and version(s) of previous assessment(s):

Overall risk and confidence (based on information available at time of assessment)

Overall risk		
National DRC and Uganda	Regional	Global
High	Moderate	Low

Confidence in available information		
National DRC and Uganda	Regional	Global
Moderate	Moderate	High

Risk statement

This RRA assesses the risk of two concurrent and related anthrax outbreaks reported in the Democratic Republic of the Congo and Uganda.

Democratic Republic of the Congo (DRC):
An anthrax outbreak has been confirmed in wildlife, livestock, and humans within North Kivu Province.

The outbreak originated in Virunga National Park, where wildlife carcasses were detected in March 2025. Between 22 March and 4 May, a total of 54 hippopotamuses, 10 buffaloes, and five cows were found dead in and around the park, particularly in a village, located between Lake Edward and the Ugandan border. On 29 March, samples collected from animal carcasses tested positive for *Bacillus anthracis* at the Goma veterinary laboratory.

On 6 April 2025, the first suspected human cases were identified in the Binza Health Zone, Nyakakoma Health Area. Laboratory confirmation was obtained on 28 April, when *B. anthracis* was isolated from one of six samples collected from a case in the Lubero Health Zone. By 30 April, a total of 17 suspected human cases, including one death, had been reported in four health zones: Alimbongo, Binza, Kyondo, and Lubero.

Epidemiological investigations suggest that the cases in Lubero may be linked to cattle imported from Uganda, while cases in Binza were associated with handling infected animals or consuming contaminated meat.

This resurgence of anthrax in North Kivu comes two years after a previous outbreak in the area and coincides with an ongoing anthrax outbreak across the border in Uganda.

Uganda:

The ongoing human anthrax outbreak was first detected on 24 March 2025 in Bushenyi District, Western Region. The initial suspected human case was a resident of a village in Kajunju parish, Kyabugimbi Sub-County, who presented to a health facility with fever, headache, malaise, nausea, abdominal pain, vomiting, swelling of the arms, and skin lesions with eschar formation. Two additional individuals from the same village were later reported with similar symptoms. Investigations found that all of them had participated in the slaughter or handling of dead livestock.

Between Epidemiological Weeks (EW) 1 and 13 (ending on 30 March 2025), 30 samples from suspected human cases were collected nationwide, of which 15 (50%) tested positive for *B. anthracis*. While the majority of confirmed cases originated from Sembabule District, increasing number of cases and alerts have been reported in several other districts, including Buhweju, Bushenyi, Kabale, Kazo, Kyegegwa, Moroto, and Sheema. Suspected animal anthrax cases have also been reported on farms in Sheema and Buhweju districts, where multiple livestock deaths have occurred. Human cases linked to these animal deaths continue to be reported.

According to an FAO report, the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), in collaboration with district-level One Health teams, has initiated outbreak response measures. This includes livestock vaccination

campaigns, deploying 19,200 doses deployed in Kabale and 15,000 in Kween, as well as joint investigations and sample collection in Kyegegwa and Moroto.

Response efforts face challenges due to low community awareness and persistent cultural beliefs, including attributing livestock deaths to witchcraft, which delays case reporting and undermines timely public health response.

The risk at the **national level** in both the DRC and Uganda is assessed as **High** based on:

- **Severity of the outbreaks:**
  - In DRC, 17 human cases (16 suspected, one confirmed) with one death (CFR 5.9%) have been reported.
  - In Uganda, 30 suspected human cases, have been reported across at least six districts, of which 15 were confirmed, including two deaths (CFR: 13.3%).
  - Both countries reported patients with severe clinical presentations and widespread animal mortality.

- **Ongoing outbreaks in both countries**: In both DRC and Uganda, multi-district outbreaks are simultaneously affecting human and animal populations. Unsafe practices, including the handling and consumption of meat from infected animal carcasses, low community awareness, and persistent cultural beliefs, continue to undermine control efforts.

- **High-risk exposures:** Community members remain at risk through activities including the handling of animals or animal products, consumption of contaminated meat (including bushmeat), and illegal fishing in Lake Edward, where contact with contaminated water, infected carcasses and animals is possible.

- **Interruption of animal vaccination:** No routine livestock vaccination against anthrax has been conducted for more than a decade, increasing animal and human vulnerability.

- **Compounding risk factors in DRC:** Ongoing armed conflict in affected areas has severely restricted access for health interventions. Persistent insecurity, food shortages, and deepening poverty increase the likelihood of communities handling or consuming sick or dead animals, further elevating the risk.

- **Limited response capacities:** Health systems in both countries are overstretched by multiple concurrent epidemics (including Mpox, cholera, measles, plague in DRC, and the recently ended Ebola virus disease outbreak in Uganda) as well as ongoing humanitarian crises. Additional constraints include insecurity, funding gaps, limited veterinary and human health resources, weak surveillance systems (particularly in DRC), and financial constraints, which reduced operational capacity at WHO country offices.

The risk at the **regional level** is considered **moderate,** primarily due to factors that increase the potential for cross-border transmission**:**

- Frequent population movements and informal livestock trade between DRC, Uganda, Rwanda and Tanzania.
- Wildlife migration between Virunga National Park (DRC) and Queen Elizabeth National Park (Uganda), facilitating possible cross-species transmission.
- Shared ecosystems, including Lake Albert, create ecological and geographical connectivity that may contribute to disease spread.
- There is limited systematic control of meat imported from Uganda to DRC.
- The spread of human and animal outbreaks across bordering districts increases the risk of further geographic spread.
- Porous borders and unregulated animal movement and trade, particularly among pastoralist communities, increase the risk of spread to neighbouring countries.

- The onset of the rainy season may facilitate environmental persistence and dissemination of anthrax spores, which can survive in the soil for decades, especially in areas where infected animal carcasses have decomposed.

The **global risk** is assessed as **low** due to:

- There is minimal movement and tightly regulated international trade of livestock and wildlife from DRC and Uganda to countries outside Africa.
- No international human cases or export-related exposures have been identified to date.
- Anthrax is not generally transmitted from person to person, reducing the risk of international spread via human travel.
- Ongoing surveillance and response activities by national authorities and One Health partners contribute to early detection and containment.

Confidence in the available information on the anthrax outbreaks in DRC and Uganda is assessed as **Moderate**. Surveillance coverage remains incomplete, particularly in remote or conflict-affected areas of DRC, where insecurity and the presence of armed groups limit field investigations and access to affected communities. Wildlife surveillance in affected conservation areas of Virunga and Queen Elizabeth National Parks is limited, and many carcasses may go undetected or untested. While both countries have adopted One Health approaches, integration of human and animal health data remains inconsistent.

Risk questions

Risk question		Assessment		Risk	Rationale
		Likelihood	Consequences		
Potential risk for human health?	National	Highly likely	Moderate	High	Human anthrax remains a significant public health threat, particularly in areas where the disease is endemic and where exposure to infected animals or contaminated meat is common. The persistence of *B. anthracis* spores in the environment capable of surviving in soil for decades, adds to the long-term risk of transmission, especially in regions with limited veterinary infrastructure and high dependence on livestock. Climate change further exacerbates this risk by altering rainfall patterns, increasing flooding, and causing soil disruption, all of which

	Regional	Likely	Major	High	can contribute to the resurfacing of dormant spores and facilitate new outbreaks. These environmental and ecological factors, combined with unsafe handling of animals and animal products, create a sustained risk of human infection and complicate control efforts. In the DRC, the current outbreak underscores these risks. Between 13 and 30 April 2025, a total of 17 human cases (16 suspected, 1 confirmed) and one death (CFR: 5.9%) were reported in North Kivu. Investigations traced the source to infected cattle imported from Uganda, specifically from one farm in the Lubero health zone. Five farmers involved in handling infected animals developed symptoms, and one died at Lubero General Hospital. In Uganda, the risk to human health is increased by the handling and consumption of meat from infected or dead animals, a practice reported in several affected districts, including Buhweju and Moroto, where confirmed human deaths have been reported. The wide geographic spread, combined with persistence of cultural beliefs and misconceptions, continues to delay case reporting and hinder the adoption of preventive measures. These factors increase the likelihood of sustained transmission and may lead to more severe clinical outcomes due to delayed in seeking medical care.
	Global	Likely	Minimal	Low	
Risk of event spreading?	National	Highly likely	Moderate	High	The risk of further spread of anthrax within the affected areas of the DRC and Uganda is considered high due to a combination of factors, including insecurity, weak health systems, unsafe practices, and active cross-border movement of people and livestock. In the DRC, ongoing armed conflict in North Kivu Province hampers access for response teams, delaying detection and containment. The absence of meat inspection and import controls, along with the consumption of meat from sick or dead animals, increases the risk of further human and animal exposures. Notably, no routine animal vaccination campaigns in livestock have been

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	Regional	Likely	Minor	Moderate	conducted in over a decade, increasing susceptibility in local herds, thereby contributing to sustained transmission. Uganda faces a multi-district outbreak affecting at least six districts and has resulted in confirmed human deaths. Risk of spread is driven by the unsafe slaughter and handling of infected animal carcasses, along with improper disposal practices that contribute to environmental contamination. These risks are further compounded by cultural beliefs and low risk perception, which hinder the adoption of recommended preventive measures. Without adequate control of livestock infections and carcass management, the likelihood of new human cases emerging and additional districts remain high. Both countries face significant limitations in surveillance, case management, and public awareness, particularly in rural and pastoralist communities. Although person-to-person transmission is very rare, and no human cases have been detected outside of the affected countries, the risk of cross-border transmission remains high due to porous borders, informal livestock trade, and seasonal movements of pastoralist populations between DRC, Rwanda, South Sudan, Tanzania, and Uganda. These factors facilitate the spread of disease, particularly in areas with limited animal health infrastructure. If animal outbreaks remain uncontrolled, the likelihood of further zoonotic spillover events will remain high. At the global level, the risk is considered low due to the absence of international spread of human cases and limited international trade in high-risk animal products from the affected areas.
	Global	Unlikely	Minimal	Low	

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Risk of insufficient control capacities with available resources	National	Likely	Moderate	High	Capacities at the national level in DRC and Uganda to effectively respond to ongoing anthrax outbreaks are limited. In both countries, health systems are already under strain due to ongoing humanitarian crises and multiple outbreaks, including cholera, measles, Mpox, and plague. Therefore, the risk of insufficient control capacities with the available resources in both DRC and Uganda is considered high at the national level. In the DRC, response operations are further hindered by insecurity and financial constraints affecting operations of the WHO country office. These limitations have impacted the ability to maintain consistent response operations in affected areas. The communities affected are in rural and insecure regions with limited access to healthcare, diagnostic facilities, and health education and community engagement, increasing the likelihood of underreporting, delay in detection and continued transmission of the disease. In Uganda, the outbreak spans several districts, making it challenging to contain with the resources currently available. Gaps in livestock vaccination coverage, inadequate carcass disposal, community sensitization, and treatment of human cases, are compounded by weak surveillance and persistent cultural beliefs. Neighbouring countries face similar vulnerabilities, particularly in border and pastoralist areas where disease surveillance and control capacities are limited. While regional coordination mechanisms are in place, their effectiveness is constrained by limited resource and limited data sharing and weak cross-border collaboration. Despite these challenges, the global risk remains low due to well-established zoonotic disease monitoring systems and low volume of international trade in high-risk animal products from the affected areas.
	Regional	Unlikely	Minimal	Low	
	Global	Very unlikely	Minimal	Low	

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Major actions recommended by the risk assessment team

	Action	Timeframe
☐	Refer the event for review by IHR Emergency Committee for consideration as a PHEIC by DG (Art 12, IHR)	Choose an item.
☒	Immediate activation of ERF response mechanism (IMS) as urgent public health response is required	Immediate
☒	Recommend setting up of grading call	Immediate
☐	Immediate support to response (no grading recommended at this point in time)	Not applicable
☐	Rapidly seek further information and repeat RRA (including field risk assessment)	Immediate
☒	Support Member State to undertake preparedness measures	Continuous
☒	Continue to closely monitor	Continuous
☐	No further risk assessment required for this event, return to routine activities	Choose an item.

⁺If chosen, list actions and identify **persons responsible and due dates** for each action in section 2 (Supporting information)

Supporting information

Hazard assessment

Anthrax is an infectious disease caused by the bacterium *Bacillus anthracis*. In humans, this infection typically occurs through direct contact with infected animals or contaminated animal products (leather, wool, meat). Anthrax does not typically transmit from animal to animal or from human to human under natural conditions. The disease can present in several clinical forms depending on the route of entry of the bacteria. While localized infection may initially appear mild, if left untreated it can progress to systemic disease, leading to sepsis or even meningitis. Primary clinical forms are:

- Cutaneous form: the most common, accounting for approximately 95% of human cases. It begins with a small papule that evolves into a characteristic ulceration with a blackish center (eschar). If treated promptly with antibiotics, healing is usually complete.
- Gastrointestinal form: Acquired by ingesting contaminated meat, it causes severe digestive symptoms, which can lead to sepsis.
- Pulmonary (inhalation) form: the most severe and rarest form caused by the inhalation of spores, this form is the most severe with a high mortality rate without prompt treatment. It begins with flu-like symptoms, and progressing to severe respiratory distress and shock, usually seen in a bioterrorism event.

Meningeal form: A rare form, it results from bacterial dissemination to the central nervous system, with an often poor prognosis and is typically a complication of another primary form.

Diagnosis is based on clinical examination, culture of the bacteria, and molecular tests. Sample collection should take place prior to the patient receiving antibiotic treatment when possible. Treatment is based on clinical presentation (localized cutaneous), systemic (gastrointestinal, sepsis, inhalation) or meningitis and includes antibiotics. For localized cutaneous disease, treatment with single agent such as ciprofloxacin, doxycycline, penicillin or amoxicillin is recommended. For systemic disease, combination therapy with penicillin or ciprofloxacin and clindamycin (inhalation, sepsis) or gentamicin (gastrointestinal) and for meningitis from anthrax, combination therapy with penicillin or ciprofloxacin and rifampicin or vancomycin. Treatment should be accompanied with supportive therapy. Prevention includes vaccination of animals, strict management of infected animals and animal products, standard precautions for infection prevention and control in health-care settings for patients with suspected or confirmed anthrax exposure, adding contact precautions when patients present with discharge of pus/blood/fluid at the site of a cutaneous lesion, and strict biosecurity measures. All forms of anthrax in humans are associated with a risk of meningitis, which is almost always fatal. All forms can also be associated with sepsis. These complications most frequently arise from untreated cutaneous disease or gastrointestinal forms. Treatment with appropriate antibiotics as early as possible is essential.

The severity and lethality of anthrax depend on the route of exposure and the prompt initiation of adequate treatment. Without treatment, estimated case fatality rates (CFRs) are as follows: pulmonary and meningeal anthrax: > 95% - 100%, gastrointestinal anthrax, approximately 40%, and cutaneous anthrax, 10% - 20%.

Even with intensive treatment, the CFR of pulmonary anthrax remains high at approximately 50%, while for cutaneous anthrax, the CFR drops to less than 1% with timely and appropriate medical care.

Exposure assessment

Democratic Republic of Congo (DRC):

Between 22 March and 13 April 2025, a series of alerts were reported in unusual areas for animal deaths and symptoms suggestive of anthrax. The initial alert on 22 March came from the head of the police station following the discovery of three dead hippopotamuses. Between 23 and 27 March, eight more carcasses were found, bringing the total to 11. On 29 March, drone surveillance identified 39 additional carcasses in Lake Edward, located on the border between DRC and Uganda, increasing the total count to 50 hippopotamuses and two buffaloes. Following this, on 13 April, a suspected anthrax outbreak in humans was officially reported.

A group of five livestock farm workers showed cutaneous signs of anthrax over a two-week period. One of them died after seeking care at the general hospital, and the other four were transferred to the university clinics in Butembo, from where the alert was raised.

After preliminary investigation and sample collection from the four suspects, the INRB Laboratory in Goma confirmed the presence of *B. anthracis* in one of the samples on 28 April. The confirmed case is a 57-year-old patient who developed symptoms on 12 April with pruritus in the right hand, followed by the appearance of vesicles and swelling of the hand and forearm. He sought care at a University Clinic in Butembo on 14 April, where the alert was raised, investigated and validated. A whole blood sample and a swab were collected and sent to the INRB for testing. The result came back positive for the anthrax bacillus on 28 April.

As of 30 April, four health zones are reporting suspected cases. There are 17 suspected cases reported, including 6 samples taken, 4 analysed, and 1 positive. (The confirmed case is the only one whose sample was collected prior to antibiotic therapy)

During the investigation, it was noted that the farm where the confirmed and suspected cases worked has recorded deaths of four cows since mid-March 2025, with anthrax suspected as the cause. It is highly suspected, that the meat from these animals may have been consumed by the farmers.

On the animal side, according to official WOAH notifications, as of 4 May, a total of 54 hippopotamus carcasses and 10 buffalo carcasses were identified and managed by ICCN (Congolese Institute for Nature Conservation) teams in Virunga National Park. The smear samples taken from the remains of the animals were analysed at the Veterinary Laboratory in Goma, confirmed the presence of *B. anthracis*.

Uganda:

Between Epidemiological Weeks 1 and 13 (ending on 30 March) of 2025, 30 suspected human samples were collected nationally, with 15 (50%) tested positive for *B. anthracis*. The majority of these confirmed cases originated from Sembabule District, although an increasing number of cases and alerts have been reported from several other districts, including Buhweju, Bushenyi, Kabale, Kazo, Kyegegwa, Moroto, and Sheema.

The ongoing outbreak was first detected on 24 March 2025 in Bushenyi District, with a suspect human case presented to a health facility with fever, headache, malaise, nausea, abdominal pain, vomiting, swelling of the

arms, and distinctive skin lesions with eschar formation. Additional reports from the same village indicated two more individuals presenting with similar symptoms. Although no deaths have been recorded in Bushenyi to date, two suspected anthrax-related deaths have occurred in Buhweju District. Investigations found that most of the affected individuals had participated in the skinning of dead animals or were involved in handling and trading meat from these animals.

Suspected animal anthrax cases have also been reported in farms in Sheema and Buhweju, where multiple livestock deaths have been documented. Human cases linked to these animal deaths continue to be reported. At the time of reporting, two suspected cases from Buhweju District had died - one at a health centre and another in the community. Two other suspected cases remained admitted at the same health facility, one from Sheema and another from Buhweju, while one suspected case from Ruhumuro Sub-County was reportedly being managed within the community. One patient has since been discharged from the isolation unit. Active case search activities are ongoing across the affected areas to identify additional cases and people who had been in contact with infected animals.

In Kabale District, on 1 April, seven cows from five households died and were subsequently slaughtered and consumed by local residents. The meat was distributed and sold within Kabura Trading Centre and Kabale Central Market. Following this, seven men involved in slaughtering the carcasses developed symptoms consistent with cutaneous and systemic anthrax, including skin lesions, headache, back pain, sore throat, fatigue, muscle aches, mild chest discomfort, and painful swallowing. Efforts to control the outbreak have been challenged by widespread community myths associating the livestock deaths with witchcraft, which delay effective public health communication and control interventions.

Further north, in Moroto District, an adult female died upon arrival at the Regional Referral Hospital on 7 April. She has presented with fever, vomiting, coughing blood (haemoptysis), bloody diarrhoea, general body weakness, loss of appetite, chest pain, and abdominal pain. The illness was traced to the consumption of meat from a cow that had died on 14 March. The meat was reportedly sold raw at the community market, and approximately 25 individuals who consumed the meat, later developed similar, though less severe, symptoms.

Additionally, on 10 April, a suspected case of anthrax was reported in Kyegegwa District involving an adult male presenting with characteristic clinical features. It was established that the individual works in Kazzo District, an area already experiencing an active anthrax outbreak. Laboratory sample collection and further epidemiological investigations are ongoing to confirm the case and assess potential exposure risks.

The ongoing anthrax outbreak in Uganda is being driven by a combination of multiple interconnected risk factors. These include the consumption of meat from dead animals, unsafe handling and skinning of infected carcasses without protective measures, and the open trade and distribution of contaminated meat in community markets. Public health efforts have been further weakened by low community awareness and the persistent harmful beliefs, such as associating livestock deaths to witchcraft, with delay case detection and public health messaging. Additionally, human movement between affected districts, improper disposal of animal carcasses, limited access to veterinary and public health services in rural areas, and cross-district transmission through shared grazing areas and animal movements have all contributed to sustaining and amplifying the outbreak.

Context assessment

Anthrax is a disease highly sensitive to environmental changes, particularly shifts in precipitation, temperature, and vegetation. Scientific studies and local knowledge have consistently shown that certain climatic patterns significantly increase the risk of outbreaks. One key trigger is a sequence of rainfall followed by drought, which can bring long-dormant *Bacillus anthracis* spores to the soil surface. During dry periods, grazing animals are more

likely to ingest these spores as they feed closer to the ground. Flooding can also spread spores through water systems and expose infected carcasses, while prolonged heat and dry spells stress animals and increase their vulnerability. Soils rich in calcium and alkaline in nature further support spore survival, and high temperatures promote sporulation, increasing the likelihood of infection during hot seasons. According to FAO data, since 2010, the DRC reported a total of 25 outbreaks, with notable clustering observed in 2011 and again between 2021 and 2025.

The North Kivu province in the DRC is composed of six territories Beni, Lubero, Masisi, Nyiragongo, Rutshuru, and Walikale—and three major cities: Beni, Butembo, and Goma. It shares borders with Uganda and Rwanda to the east, and with several other provinces of the DRC, including Ituri, Maniema, South Kivu, and Tshopo. With an estimated population of 6.6 million (2015 census) and covering 59,483 km², the province accounts for 2.5% of the national territory. However, insecurity due to the presence of armed groups—particularly in Lubero, Masisi, Nyiragongo, and Rutshuru continues to disrupt both public health interventions and local governance systems.

Anthrax outbreaks in North Kivu have occurred repeatedly in recent years. In May 2021, the provincial government declared an anthrax outbreak in Virunga National Park, where it caused the deaths of wildlife, including ten hippos and one buffalo, and affected nearby human populations with 52 suspected case and no confirmed case. No control measures were implemented at the time due to the concurrent volcanic eruption in Goma. Further outbreaks emerged in October 2023, with the National Epidemiological Surveillance Service (SENES) reporting new cases in cattle in Lubero territory and suspected human cases in Butembo and Mutwanga: a total of 68 suspected cases were reported with 9 deaths, including 1 confirmed and 8 probable. In response, joint investigations were conducted by multisectoral teams, supported by FAO and WHO, to collect animal and human samples across several health zones. Laboratory tests confirmed anthrax in both animal and human specimens.

In early May 2025, provincial authorities reported a renewed epizootic in the Lake Edward region, resulting in the deaths of 54 hippos, 10 buffaloes, and one human case. Laboratory confirmation of anthrax was obtained from samples collected from the affected species. The proximity of Lake Edward to Uganda—where anthrax outbreaks in both animals and humans were confirmed in October 2023—raises substantial concern about cross-border transmission. Given the shared ecosystem and porous borders, there is a high likelihood of disease spread to other parts of the DRC, especially through livestock movement and waterborne transmission.

Uganda continues to experience a complex anthrax outbreak shaped by socio-cultural and epidemiological factors. As an anthrax-endemic country, particularly in pastoral and agro-pastoral areas, Uganda's livestock systems face numerous challenges, including open grazing, informal animal slaughter, and limited veterinary control. These practices significantly heighten the risk of human exposure through contact with infected animals or consumption of contaminated meat, and recently reported cases have presented with systemic form of anthrax infection (rather than localized cutaneous form). Misconceptions—such as attributing livestock deaths to witchcraft—also delay reporting and encourage high-risk behaviours that sustain disease transmission cycles.

Despite having national laboratory capacity and effective case detection mechanisms, Uganda's response is hampered by gaps at the community and district levels, especially in remote settings like Moroto. Veterinary services struggle with vaccination, carcass disposal, and timely reporting. Although the country has demonstrated strengths in case finding, laboratory confirmation, and community engagement, confirming 15 out of 30 suspected human cases by epidemiological week 13, 2025, resource limitations and poor cross-sectoral coordination continue to hinder comprehensive control. The long-term threat remains significant due to the environmental persistence of anthrax spores, which pose enduring risks to both human and animal health.

Following the confirmation of the outbreak and the activation of the One Health approach, the Ugandan Government deployed 34,200 animal vaccine doses across districts and imposed animal quarantine and restrictions on meat movement.

Democratic Republic of Congo	
Capabilities	**Vulnerabilities**
Coordination • Ministry of Health with the support of partners including WHO, MSF, and UNICEF have experience in managing epidemics. • A response plan is being developed for the PSF and Partners	**Coordination** • Weak financial capacity that prevents the implementation of an adequate response. • The ongoing humanitarian crisis is impacting the implementation of interventions
Epidemiological surveillance • The country has an integrated surveillance system and diagnostic capacities at the national and provincial levels. • Cross-border measures against anthrax could limit trade and cross-border travel, but also strengthen the detection of symptomatic cases	**Epidemiological surveillance** • The monitoring system is not working at its optimal level. • There is a need to strengthen diagnostic capacities. • The difficult accessibility to the affected localities limiting investigation and surveillance. • Commuting of the population with the risk of spreading the disease to other Health Zones and other countries in the region. • The anthrax epidemic impacting the health system, the ongoing disease surveillance and the existence of other ongoing epidemics in the country (Mpox, cholera, yellow fever, measles) limits resources for the intervention. • Accessibility to the areas of intervention remains difficult.
Case Management • The province and the health zone have the care structures.	**Case Management** • Insufficient medical supply care kits. • Weak technical capacity/clinical experience of clinicians in the field for case management. • Lack of essential medicines, including antibiotics for treatment.
Laboratory Confirmation • Samples are collected and sent to INRB Goma.	**Laboratory Confirmation**

• Existence of a branch of the INRB Analysis Laboratory in Butembo.	• Long delay between sample collection and laboratory confirmation, and the unavailability of some inputs and collection kits. • Insufficient culture and sampling kits. • Weak technical capabilities for sample collection and lab testing.
Risk communication: • Community alert system activated with support from the ICCN (Congolese Institute for Nature Conservation).	**Vaccination of animals:** • It has been more than 10 years since the last cattle vaccination. • There is a lack of available vaccines.

Uganda		
Response Pillar	**Capabilities**	**Vulnerabilities**
Coordination	• Multi-sectoral coordination structures operational in districts • National oversight through MOH & MAAIF	• Inconsistent sub-national coordination • Weak cross-border collaboration • Logistical challenges in hard-to-reach areas • No approved response plan
Surveillance & Laboratory	• Active case finding ongoing in affected districts • 30 human samples collected, 15 confirmed positive • National laboratory capacity functional	• Weak surveillance in remote/pastoral areas (e.g. Moroto, Kyegegwa) • Poor animal health reporting and carcass management • Limited sample transport logistics
Case Management & IPC	• Suspected cases isolated in health facilities and Moroto RRH • IPC orientations held • 1 patient successfully discharged	• Shortages of PPE and IPC consumables • Limited clinical expertise on anthrax • Overcrowded health facilities in outbreak areas

Risk Communication & Community Engagement (RCCE)	• Sensitization through radio, leaders, and health workers • Community dialogues improving awareness	• Cultural beliefs (witchcraft) delaying reporting • Limited reach to nomadic and remote communities • Poor understanding of anthrax transmission
Animal Health Response	• Veterinary investigations conducted • Targeted livestock vaccination plans initiated • Deployment of 34,200 vaccine doses across districts • Animal quarantine and meat movement restrictions.	• Low livestock vaccination coverage • Poor community animal reporting • Inadequate carcass disposal capacity
Logistics & Supplies	• Lab supplies and reagents are available nationally • Sample transport is ongoing from the districts	• Shortages of PPE and veterinary field kits • Transport/logistics gaps for rapid deployments
Points of Entry (PoE) & Cross-border Health	• Border health screening systems in place • Regional notification through health networks	• Unmonitored informal cross-border livestock trade • Limited anthrax-specific surveillance at PoEs • Sparse data from neighbouring countries

Immediate actions (taken and in process)

WHO to continue to closely monitor the situation and provide support to the Member States as requested.

1. Coordination and Planning

- **DRC**
  - Support the Ministry of Health in finalising and implementing the Anthrax Preparedness and Response Plan.
  - Developed and shared the WHO Anthrax Response Plan and involved humanitarian actors in its implementation.
  - Organise cross-border coordination between the DRC and Uganda.
- **Uganda**

- Strengthened district-level outbreak coordination with integration of One Health (human, animal, environmental sectors).
- Provided logistical and technical support to finalize the national response plan.

- **WHO AFRO/HQ**
  - Finalise modalities for implementing the Epidemic Management Support Team across national, regional, and HQ levels.
  - Facilitate cross-border surveillance activation and notify neighbouring countries via IHR mechanisms.

2. Surveillance and Laboratory Support

- **DRC**
  - Strengthened technical and logistical capacity at the INRB (Institut National de Recherche Biomédicale).
- **Uganda**
  - Support active case finding in affected and neighbouring districts.
  - Enhance sample collection, transport, and laboratory confirmation in peripheral areas.
- **WHO AFRO/HQ**
  - Deploy experts in outbreak management and veterinary surveillance.
  - Monitor global anthrax alerts and refined risk assessments

3. Case Management and Infection Prevention and Control (IPC)

- **Uganda**
  - Prepositioned IPC supplies (PPE, disinfectants) at health facilities.
  - Conducted orientation for clinicians and veterinary officers on anthrax case management.
- **WHO AFRO/HQ**
  - Mobilize emergency health kits and PPE for use both in Uganda and DRC.
  - Supporting development of summary advice on case management and IPC for anthrax.

4. Risk Communication and Community Engagement (RCCE)

- **DRC**
  - Brief health workers on case detection and public awareness.
  - Disseminated community-based case definitions to support surveillance.
- **Uganda**
  - Scale up culturally adapted RCCE campaigns to address myths (e.g., witchcraft).
  - Supported RCCE teams with materials and transport to reach remote areas.
- **WHO AFRO/HQ**
  - Provide RCCE technical expertise and virtual training support for both countries.

5. Animal Health and One Health Response

- **Uganda**
  - Facilitate livestock vaccination in high-risk areas in partnership with MAAIF.
  - Supported training and protection of community animal health workers.
- **WHO AFRO/HQ**
  - Advocate for One Health funding with partners (e.g., FAO, WOAH).
  - Provide guidance on veterinary surveillance and carcass disposal.

6. Cross-Border and Regional Collaboration

- **DRC & Uganda**
  - Conduct cross-border meetings and alerts to enhance joint surveillance.
  - Disseminate situational updates through regional coordination platforms.
- **WHO AFRO/HQ**

- Coordinate regional IHR notifications and facilitated technical exchange between countries.

Reference documents used for risk assessment:

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