DREF Final Report

Zambia Epidemic- Anthrax 2023

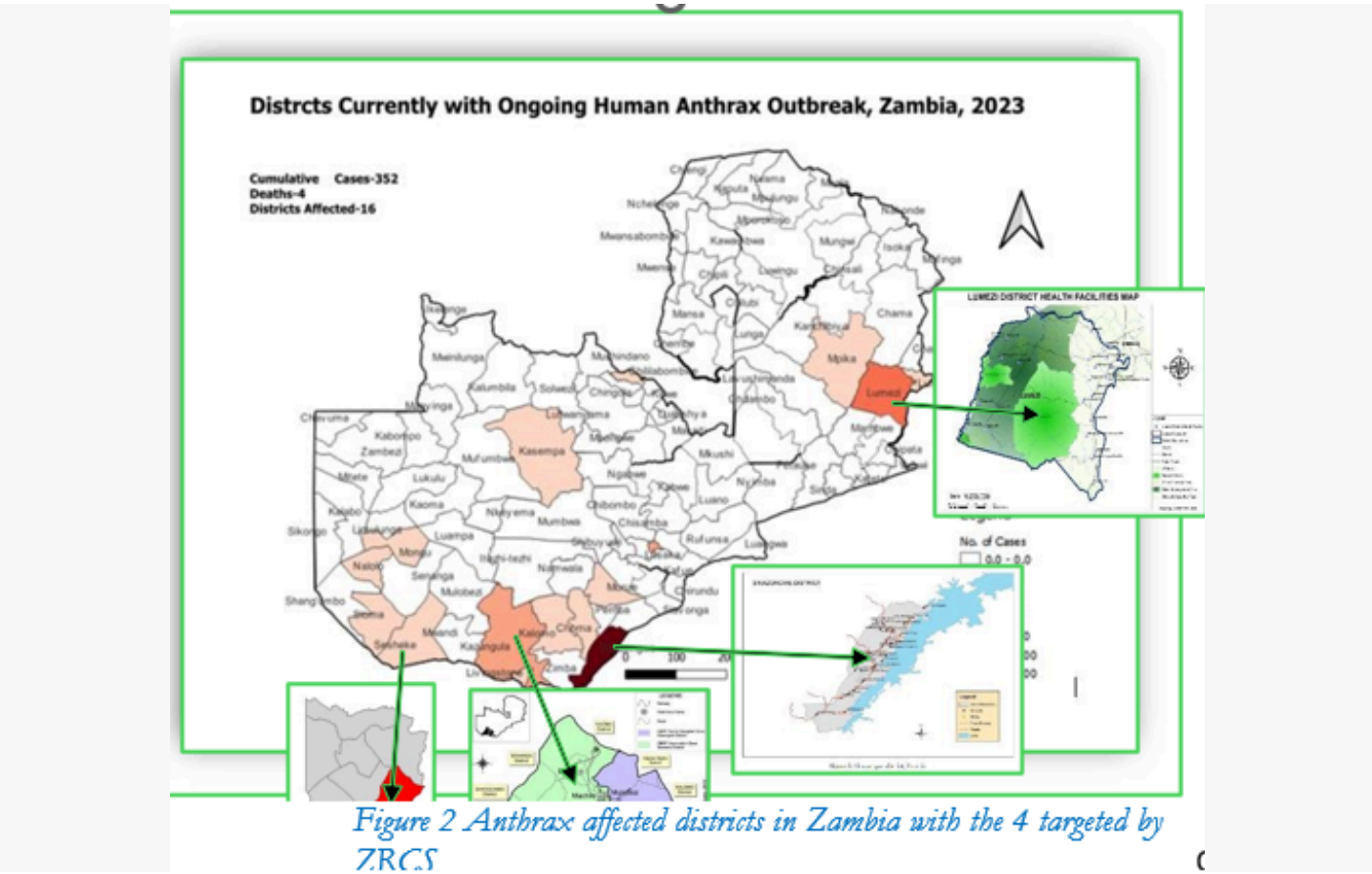
Volunteer meeting in Sesheke district

Appeal: **MDRZM020**	Total DREF Allocation: **CHF 290,183**	Crisis Category: Yellow	Hazard: **Epidemic**
Glide Number: **-**	People Affected: **5,383,271 people**	People Targeted: **5,383,271 people**	People Assisted: **763,612 people**
Event Onset: **Sudden**	Operation Start Date: **17-11-2023**	Operational End Date: **31-03-2024**	Total Operating Timeframe: **4 months**

Targeted Regions: **Eastern, Lusaka, North-Western, Southern, Western, Muchinga**

The major donors and partners of the IFRC-DREF include the Red Cross Societies and governments of Australia, Austria, Belgium, Britain, China, Czech, Canada, Denmark, German, Ireland, Italy, Japan, Luxembourg, Liechtenstein, Malta, Norway, Spain, Sweden, Switzerland, Thailand, and the Netherlands, as well as DG ECHO, Mondelez Foundation, and other corporate and private donors. The IFRC, on behalf of the National Society, would like to extend thanks to all for their generous contributions.

Description of the Event



Map showing districts affected by Anthrax

Date of event

01-11-2023

What happened, where and when?

Zambia experienced Anthrax outbreak, which was declared by the Minister of Health on the 1st of November 2023. The country recorded its first case of anthrax in October 2023 in Sinazongwe district in the Southern Province. As of the 3rd of November 2023, 15 districts reported cases of Anthrax, namely, Kazungula, Lusaka, Mpika, Chililabombwe, Lumezi, Lundazi, Sioma, Nalolo, Sesheke, Mongu, Livingstone, Choma, Monze, and Kalomo. With the evolution of the outbreak, a cumulative total of 892 cases with 4 deaths were reported from 9 out of 10 provinces as of the 15th of January 2024.

The infected individuals were believed to have come into contact with infected carcasses of livestock and wildlife or consumed meat from infected carcasses while others butchered and carried the meat to the communities. The meat from the carcasses was dried and taken to other districts for sale, hence the spread. Most of the affected districts were those alongside the game parks or located in the game management areas where there is increased human-animal interaction. The dry spell in the country experienced from October to March, negatively impacting livelihoods and food security. The outbreak situation was exacerbated by the effects of the long dry spell experienced in the country. Compared to the previous Anthrax outbreak, Zambia reported by far its most widespread anthrax outbreak ever, with 684 suspected cases and 4 deaths, the World Health Organization (WHO) reported. Households consumed the readily available meat from carcasses due to food inadequacy. Additionally, access to animal health services was limited due to lack of knowledge by the affected populations and by the extent of limited staff in hard-to-reach areas.

Following the declaration of the outbreak by the MOH, a national IMS was activated through a one health approach by the Ministry of Health. A number of measures were put in place for the public to adhere to, including a ban on the movement of animals and, in some areas, a ban on the sale of meat. The MOH, through Zambia National Public Health Institute (ZNPHI), spearheaded interventions using the One Health approach to ensure that the spread of Anthrax among humans and animals was curtailed. The public was encouraged to report suspected cases in communities to their nearest health facilities and veterinary offices. To address the Anthrax outbreak and its

potential ramifications, a multidisciplinary and multi-sectoral approach was adopted. This comprehensive strategy brought together various sectors and disciplines to respond effectively to the crisis. It was through this collaborative effort that the Ministry of Health and its multi sectoral response teams took a proactive measure to mitigate the impact of the outbreak and prevented further spread of the disease. Hence there were no cases reported after the end of the operation

Zambia last experienced an anthrax outbreak in 2011 where 500 people were infected and 5 deaths were recorded. The outbreak was associated with the consumption of dead hippos meat.(https://www.cdc.gov/anthrax/resources/features/anthrax-outbreak-zambia.html).

Figure 14 volunteers during community activities

Volunteer training activities in Sinazongwe District

Figure 8 community meeting in Lumezi District

Community meeting in Lumezi District

Scope and Scale

The key identified drivers contributing to the spread of anthrax in Zambia encompassed a range of factors that collectively fueled the outbreak. These include:
Low compliance with public health measures by the public due to the following:
- Limited knowledge and awareness on Anthrax disease and its transmission pathways among the general public contributed to lack of vigilance and precautions.
- Unsafe handling of livestock by herdsmen and individuals who handled animal products and had no knowledge on the risks associated with infected animals or contaminated animal products. As a result, they could not implement adequate safety measures when handling animals or animal products.
- Under-reporting or delayed reporting of suspected Anthrax cases by individuals experiencing symptoms to healthcare authorities due to various factors such as lack of understanding of the disease, fear of stigma, or challenges accessing healthcare facilities, hindered early detection and intervention.
- Poor hygiene practices related to food preparation, consumption, and personal hygiene facilitated Anthrax transmission. This includes consuming undercooked or contaminated animal products and insufficient handwashing.

Inadequate coordination among Multi-Sectoral Stakeholders:
The response to anthrax outbreaks necessitated collaboration among various sectors, including health, agriculture, veterinary services, and environmental management. Inadequate coordination among stakeholders led to fragmented efforts and ineffective containment of the disease before surpassing allowable cases in the endemic areas of the country.
- Challenges in allocating resources and responsibilities among different sectors hindered the timely deployment of necessary interventions, including vaccination campaigns, animal surveillance, and public health campaigns.
- Inadequate information sharing resulted in knowledge gaps and difficulties in decision-making.
- Delayed or fragmented responses from different sectors led to an extended duration of the outbreak, increased transmission, and elevated risks for public health and livestock. Transportation of meat and meat products
Transportation of infected animal carcasses from one location to another triggered the situation in most parts of the country.
This practice had dire consequences as it led to the spread of Anthrax spores in the environment, further perpetuating the cycle of infection and posing a considerable threat to public health and wildlife preservation.

The outbreak posed a serious risk to public health, further complicating the response to existing health crises such as Cholera. The outbreak, with four reported fatalities and 892 cases in human, presented a formidable challenge to containment and control efforts. Public health measures, often implemented through a comprehensive one-health approach, resulted in stringent restrictions on various

activities related to the handling and distribution of meat products.
Since the outbreak was reported a significant number of animals died of the disease, 320 cattle, 1 goat and 20 hippos ,2 dogs in 10 Districts as of 3rd November 2023. Increase in deaths of animals was attributed to:
- Increased interaction of both human and domestic animals with wildlife e,g due to shared grazing land and water sources,
- Forced to graze close to the ground due to depleting pasture.
- Inadequate information education and communication materials in most Districts where Anthrax occurred.
- Animals grazing on contaminated grazing land like old burial sites for animals.
- Inadequate vaccination coverage for domestic animals

To curb the anthrax outbreak, significant steps were taken, including the prohibition of animal transportation between different locations. At the end of the operation there was no situation outbreak reported by the ministry of Health.

National Society Actions

Have the National Society conducted any intervention additionally to those part of this DREF Operation?	Yes
Please provide a brief description of those additional activities	Anthrax is a big public health security threat to Zambia and the sub region as well, as part of the actors responding to the outbreak, ZRCS activated an Incident Management System (IMS) for internal coordination purposes. It was through the IMS that the Anthrax trend and Ministerial updates were shared for the purpose of planning and alignment of the response. The National Society mainly focused on community mobilization and sensitizations on Anthrax preventive and control measures in collaboration with several stakeholders such as the local Municipality, Civic leaders, Ministry of Health, Ministry of Livestock and Fisheries, Ministry of Green Economy. ZRCS managed to reach out to the affected communities through awareness raising using TV shows and radio programs on local TV and radio stations where different stakeholders were featured. ZRCS has a pool of 25 National Disaster Response Teams among which some were deployed to support implementation of activities in the districts. Two NDRTs were deployed to support coordination of response activities in Kazungula, Sesheke and Lumezi districts that were highly affected. In addition, the NS worked with ZRCS existing staff in Sinazongwe District which had registered more cases in Southern Province. Existing ZRCS branches across the country with a volunteer and membership base were notified and quickly mobilized 627 volunteers to support the RCCE activities in the 4 districts mapped to be high risk areas. The NS Headquarter Health and Care Department staff coordinated implementation of the operation, supported by disaster management team of the HQ. The NS through MOH trained 627 volunteers on Risk Communication and Community Engagement, Community Engagement and Accountability (CEA) and later these were deployed in the identified hot spot areas to conduct door to door health promotion activities to prevent the further spread of the outbreak. It is important to highlight that the response to the Anthrax outbreak marked a significant milestone for the Zambia Red Cross Society (ZRCS), as it was the organization's inaugural engagement in addressing such a public health emergency. With Anthrax being a relatively endemic occurrence in Zambia, the outbreak presented a unique and unprecedented challenge for the ZRCS and its partners as its boarders on both animal and human health (zoonotic).

IFRC Network Actions Related To The Current Event

Secretariat	IFRC Cluster Office provided technical support to ZRCS throughout the operation through the in-country Operations Delegate and a Surge who provided real time technical guidance on the operations from the early phase of the response and supported the set-up of the operation.
Participating National Societies	Netherlands Red Cross supported the NS with coordination and initial funds to support the operation through Response Preparedness III Project. Netherlands Red Cross is the

	only PNS in-country and has supported ZRCS in epidemic preparedness and response initiatives. Netherlands' Red Cross is part of the IMS coordination at National level through meetings. NLRC continued providing technical guidance to the whole operation through its in-country delegates.

ICRC Actions Related To The Current Event

Currently there is no ICRC delegation in Zambia.

Other Actors Actions Related To The Current Event

Government has requested international assistance	Yes
National authorities	Following the declaration of the anthrax outbreak officially by the Ministry of Health (MoH), the Minister urged members of the public to be vigilant and report any suspected cases. The Ministry of Health together with Zambia National Institute of Public Health and the Ministry of Fisheries and Livestock supported the provincial and District Health teams in affected provinces through: - Sensitization and community engagement. - Intensifying event-based surveillance and early case detection. - Case management including vaccination of animals. - Monitoring and clinical evaluation of discharged of patients. - The district applied One health approach to control the outbreak. The government's commitment to protecting the health of its citizens is resolute, and it is reflected in the swift and coordinated response to the anthrax outbreak. Through these efforts, the Ministry of Health is dedicated to ensuring the safety and well-being of the nation's people.
UN or other actors	UN and other actors were part of the cluster system which was activated and helped the government in resource mobilization, surveillance and provision of supplies. They were part of the IMS and cluster coordination. WHO - supported MOH in implementation of the One Health approach.

Are there major coordination mechanism in place?

The Ministry of Health through the Zambia National Public Health Institute (ZNPHI) incorporated anthrax response into the already existing cholera National Incident Management System (IMS) at district, provincial and national levels.
At the national level, the IMS was held twice per week as ZRCS participates in all. Equally, the ZRCS internal IMS was activated for the cholera outbreak which was being experienced by the country for the purpose of coordinating internal response and resource mobilization.

Needs (Gaps) Identified

Health

Following the launch of this DREF intervention, the ZRCS conducted an assessment to inform on the effective factor of transmission, important gaps on the response and priority areas of the Anthrax intervention.

• A need assessment was conducted in Sinazongwe and Lumezi communities. It highlighted several critical areas that required attention. It was identified that there was a pressing need to continue community sensitization efforts aimed at altering unsafe hygiene practices, dispelling rumours, and promoting proper animal handling methods through vaccinations and safe disposal of dead animals. Strengthening monitoring and surveillance was also deemed crucial for early detection and containment of outbreaks. The various sectors of the intervention were informed by the result of that assessment and the RCCE and community engagement approach adapted to the needs.

• Livelihood support was identified as essential due to the loss of income sources, leading some community members to resort to selling or consuming infected meat products as a means of coping with hunger. However, reaching the farthest communities remained a challenge due to vast distances and insufficient logistics to support sensitization campaigns. Additionally, there was a lack of incentives for community-based volunteers to conduct follow-ups for home-based care, sensitization, and community-based surveillance.

• The needs assessment revealed significant gaps in knowledge, attitudes, and practices related to Anthrax among the population. It was evident that many community members lacked accurate information about the disease, its transmission, and preventive measures. Misconceptions and myths about Anthrax were prevalent, leading to misconstrued perceptions and inappropriate responses to suspected cases.

• Furthermore, the assessment identified shortcomings in the availability and capacity of community volunteers to disseminate Anthrax preventive messages effectively. There was a notable lack of trained volunteers equipped with the necessary knowledge and resources to engage in outreach activities and educate their communities about Anthrax prevention. This gap in volunteer capacity hindered the dissemination of accurate information and limited the reach of preventive measures, leaving communities vulnerable to the risk of Anthrax transmission.

• Based on anthrax evolution, the need to scale-up contact tracing was mainly in Lumezi district where cases were being recorded. ZRCS volunteers were trained in contact tracing for following up with people infected or those in contact with dead animals. Contact tracing was done on case bases, butchers and slaughter slabs were engaged through the local Authorities. community meeting also targeted unlicensed meat traders

By mid march no cases were reported in humans, sporadic cases in animals were reported in Kazungula which is attributed to measures such as active surveillance, case management, laboratory diagnostics, health promotion, and livestock vaccination to control the spread of the disease. Since then, there have been no new reported cases, suggesting that the outbreak has been effectively contained

Water, Sanitation And Hygiene

The National Society (NS) applied initiatives for environmental cleanliness, hygiene, and health promotion from house to house. This was accomplished by deploying volunteers twice a week for three (3) months, as the disease evolved. ZRCS also supported social mobilization to promote animal vaccination administered by the government through the Ministry of Agriculture, Livestock, and Fisheries (MALF). A total of 763,612 individuals were reached with Anthrax preventive messages.

RCCE activities were conducted through mini campaigns conducted in the targeted 4 districts. They included household health education sessions by volunteers, media engagement through local radios, use of public address systems' drive-throughs, and community dialogues. The activities aimed at increasing knowledge of the public on disease detection, transmission, and its prevention measures. The NS provided IEC materials for the volunteers to aid in the smooth dissemination of information to reach the targeted population.

The NS based its response on the community engagement and accountability (CEA) principles. The application of rumour tracking and participatory engagement, such as community engagement meetings, ensured that community interactions and feedback were incorporated and mainstreamed. The NS set up a community feedback system to capture data from communities through the volunteers in all the targeted districts. The feedback and rumours received by NS' RCCE/CEA focal persons were analysed and shared with pertinent stakeholders through the One Health technical working groups at the district level, activated committees, such as the CEA, RCCE committee, to inform the trajectory of interventions implemented in the communities.

In order to enhance knowledge and uptake of hygiene practices and behaviour necessary to prevent and control anthrax, volunteers sensitized communities in markets and animal slaughterhouses through door-to-door visits and distribution of IEC materials. Other techniques for information dissemination included the use of public address systems, radio messages and jingles, and social media. The NS procured visibility materials (t-shirts, bibs, caps) with anti-anthrax messages for volunteers and NS personnel. ZRCS periodically obtained data on the current situation from MoH/ZNPHI through daily updates and volunteer field reports, which were used to guide the operation team in decision making as well as sharing with key stakeholders.

Community Engagement And Accountability

The implementation of the community engagement and accountability in an inclusive manner was needed to address the outbreak root transmission.

For the identification of the adequate approach to effectively engage all the most at risk group, NS has consult the various district response team but also the local representatives. The interactive approach of setting-up meetings with communities proved to be the most inclusive and preferred. This was what was identified and implemented, alongside a strong feedback mechanism. That approach has brough significant lessons to the CEA approach. Notably on:

• Building Trust: Community engagement meetings provided an avenue for stakeholders to directly address concerns, dispel rumors, and provide accurate information regarding Anthrax and its management. By actively listening to community feedback and responding

promptly to inquiries, stakeholders demonstrated their commitment to addressing community needs and concerns, thereby fostering trust and credibility.

• Ensuring Two-Way Communication: Effective communication was not just about disseminating information but also about actively listening to community perspectives and experiences. Community engagement meetings facilitated two-way communication, allowing community members to voice their opinions, express their needs, and contribute to decision-making processes. This inclusive approach empowered communities and ensured that response efforts were tailored to local contexts and realities. Identifying Local Challenges and Solutions: Community engagement meetings served as platforms for identifying and addressing local challenges that may have impeded the response to Anthrax outbreaks. By soliciting input from community members, stakeholders gained valuable insights into the specific barriers and facilitators affecting disease control efforts. This information informed the development of targeted interventions and strategies that were culturally appropriate and contextually relevant.
• Enhancing Ownership and Sustainability: Engaging communities as active partners in the response process promoted a sense of ownership and responsibility for public health outcomes. When communities felt invested in the response effort, they were more likely to adhere to preventive measures, participate in surveillance activities, and support ongoing interventions. Moreover, by leveraging local resources and knowledge, community engagement meetings contributed to the sustainability of response efforts beyond the immediate crisis period.
• Building Social Cohesion and Resilience: Community engagement meetings provided opportunities for social interaction, networking, and collective problem-solving, fostering a sense of solidarity and resilience within communities. By bringing people together around a common goal – safeguarding public health – these meetings strengthened social cohesion and empowered communities to withstand and overcome challenges posed by Anthrax outbreaks and other health emergencies.

Operational Strategy

Overall objective of the operation

The DREF allocation aimed at supporting 200,000 directly and 3,380,191 people indirectly in need, and affected by Anthrax outbreak by providing RCCE and hygiene messages support in the 10 affected districts for a period of 4 months.

Operation strategy rationale

To reduce the spread of Anthrax infection, volunteers were selected from the affected communities and oriented about the disease and its preventive measures, which was new in most communities. This was done by employing an integrated RCCE approach, such as the use of a public address system and conducting radio and TV programs targeting the population at risk. The operation ensured that a One Health approach was integrated, facilitating interaction between human health, animal health, and environmental health. Outlined below are strategies used to respond to the outbreak.
1. Hygiene Promotion: The National Society (NS) applied initiatives for environmental cleanliness, hygiene, and health promotion from house to house. This was accomplished by deploying volunteers twice a week for three (3) months, as the disease evolved. ZRCS also supported social mobilization to promote animal vaccination administered by the government through the Ministry of Agriculture, Livestock, and Fisheries (MALF). A total of 763,612 individuals were reached with Anthrax preventive messages.
2. Stop Transmission through Contact Tracing: As the anthrax outbreak evolved, contact tracing was only prioritized in Lumezi district where cases were being recorded. ZRCS volunteers were trained in contact tracing for following up with people infected or those in contact with dead animals. Volunteers were provided with protective materials such as gumboots, and the Ministry of Fisheries and Livestock provided recommended and approved chemicals for disinfection. Volunteers continued with hygiene promotion messages.
RCCE and Social Mobilization: RCCE activities were conducted through mini campaigns conducted in the targeted 4 districts. They included household health education sessions by volunteers, media engagement through local radios, use of public address systems' drive-throughs, and community dialogues. The activities aimed at increasing knowledge of the public on disease detection, transmission, and its prevention measures. The NS provided IEC materials for the volunteers to aid in the smooth dissemination of information to reach the targeted population.
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operation team in decision making as well as sharing with key stakeholders.

3. One Health Coordination with Partners: ZRCS was part of the multisectoral anthrax response mechanism at national and subnational levels, coordinated by the MoH/ZNPHI. The platform aided in information sharing, complementarity of partners' interventions for synergistic effect, and avoided overlap among partners. This improved management and coordination of the anthrax outbreak response operation. ZRCS supported One coordination meeting with stakeholders.

4. Provision of IEC Materials: The printing and distribution of Information, Education, and Communication (IEC) materials played a crucial role in disseminating key messages about Anthrax prevention and control to communities. A total of 2225 assorted IEC materials were printed, including Volunteer Anthrax Booklets, Posters on Anthrax in Human and Animals, and Prevention Guidelines. These materials were strategically distributed in health facilities, markets, churches, and game reserves camps to reach diverse populations. They effectively raised awareness, promoted behaviour change, and facilitated community engagement and education, empowering individuals to protect themselves from Anthrax and other infectious diseases.

Targeting Strategy

Who was targeted by this operation?

The response efforts targeted groups such as women, children, farmers, and individuals involved in meat and meat products handling. Additionally, the general population was also targeted by ensuring that a comprehensive and inclusive approach was adopted. By addressing the needs of various special groups and the broader community, our goal was to provide effective support and protection against the Anthrax outbreak. This approach aimed at leaving no one behind and mitigated the impact of the outbreak on all segments of the population. The response at the end targeted four out of the 10 affected districts as the other 6 districts the outbreak didn't continue. The districts targeted include Sinazongwe,Kazungula, Lumezi and Sesheke.

Explain the selection criteria for the targeted population

The entire population of the targeted districts was included in the response. However, reaching the rural population posed accessibility challenges, leading to a target of 70% of the affected population.

Total Targeted Population

Women	2,239,441	Rural	47%
Girls (under 18)	559,860	Urban	53%
Men	2,067,176	People with disabilities (estimated)	2%
Boys (under 18)	516,794		
Total targeted population	5,383,271		

Risk and Security Considerations (including "management")

Please analyse and indicate potential risks for this operation, its root causes and mitigation actions.

Risk	Mitigation action
Zambia still faces several health-related risks other than the Anthrax epidemics, including dreadful seasonal natural calamities like droughts which continuously negatively impact on people's lives. The country still faces threats of continued Anthrax cases due to the serious Food insecurity situation where people are expected to continue eating meat from infected dead animals because of starvation. Therefore, there is high risk of	In addressing these risks, ZRCS through radio programs outlined specific problematic concerns from the public where specific institution representatives were invited to give messages on mitigating the risk vices such as eating meat from animals that have died from unknown causes. Issues such as community responsibility in disease prevention linking it to "one health concept" (interaction or connectedness of man, environment,

continuously register more Anthrax and Cholera cases in the face of serious food shortage the country is facing this year	animals) were discussed. This helped in addressing risk behaviors and was further emphasized through the door-to-door.

Please indicate any security and safety concerns for this operation:

There were no major security concerns existing in the affected districts.

Has the child safeguarding risk analysis assessment been completed?	**No**

Implementation

Health

Budget: CHF 153,423
Targeted Persons: 200,000
Assisted Persons: 763,612

Indicators

Title	Target	Actual
# of assessments conducted	1	1
# of IEC printed	3,000	2,225
#of radio programs conducted	20	25
# of volunteers trained on ECV, RCCE, CEA,PSS	750	627
# of people reached with messages	200,000	763,612
# of butchers reached with Anthrax messages	50	0
% of listed contacts followed up	90	0
# of volunteers trained in contact tracing.	250	627

Narrative description of achievements

To reduce the spread of Anthrax infection, NS employed an integrated RCCE approach, contact tracing, and a strong coordination to inform the response. The operation ensured that a One Health approach was integrated, facilitating interaction between human health, animal health, and environmental health. Outlined below are strategies used to respond to the outbreak. The Zambia Red Cross Society supported 4 out of 10 affected districts, with a total population of 763,612 reached with preventative messages on Anthrax.

• A need assessment was conducted in Sinazongwe and Lumezi communities. It highlighted several critical areas that required attention. See findings in relevant sectors under the need section. The various response sectors for this DREF were informed by the result of that assessment and the RCCE and community engagement approach adapted to the needs.

• Addressing the identified gaps in knowledge and volunteer capacity emerged as critical priorities in the response effort . Strategies were developed to bridge these deficiencies through targeted training programs, capacity-building initiatives, and community engagement activities. A total of 627 volunteers were trained in ECV, CEA and PSS against the 750 planned due to the reason that initially the intervention was planned for 10 Districts, but implementation was done in 4 Districts due to changes of the context and situation during implementation. Therefore, number of volunteers engaged was also reduced. Volunteers were provided with protective materials such as gumboots, and the Ministry of Fisheries and Livestock provided recommended and approved chemicals for disinfection.

Volunteers continued with hygiene promotion messages.

• Hygiene promotion efforts reached 763,612 individuals, with contact tracing focused on Lumezi district. The RCCE activities, including household education and media engagement, aimed to increase public knowledge about Anthrax detection and prevention. The response was based on community engagement and accountability principles, incorporating rumor tracking and participatory engagement through community meetings and feedback systems.

As the anthrax outbreak evolved, contact tracing was only prioritized in Lumezi district where cases were being recorded. ZRCS volunteers were trained in contact tracing for following up with people infected or those in contact with dead animals. Contact tracing was done on case bases, butchers and slaughter slabs were engaged through the local Authorities. Community meetings also targeted unlicensed meat traders.

• The printing and distribution of Information, Education, and Communication (IEC) materials played a crucial role in disseminating key messages about Anthrax prevention and control to communities across various settings. The response effort prioritized the production of a diverse range of IEC materials to cater to different audience preferences and communication channels. The IEC materials served as valuable tools for community engagement and education, facilitating discussions and interactions between volunteers, healthcare providers, and community members. Through the dissemination of accurate and culturally relevant information, the response effort fostered a sense of empowerment and collective responsibility among communities in preventing the spread of Anthrax and other infectious diseases. A total of 2,225 assorted IEC materials were printed as part of the response initiative against the planned 3000 due to under budgeting of the activity. These materials included:

- Volunteer Anthrax Booklets: Comprehensive booklets containing essential information about Anthrax, its transmission, symptoms, prevention measures, and treatment options. These booklets served as valuable educational resources for volunteers to reference during community outreach activities and engage with community members in meaningful discussions.
- Posters on Anthrax in Human and Animals: Eye-catching posters were designed to raise awareness about Anthrax among both human and animal populations. These posters highlighted the signs and symptoms of Anthrax infection in humans and animals, the importance of early detection, and measures to prevent transmission.
- Additional visual aids culturally adapted such as illustrations and graphics were utilized to make the information easily understandable and accessible to diverse audiences.
- Prevention Guidelines: Practical guidelines and tips on how to prevent Anthrax infection were included in the IEC materials. These guidelines outlined simple yet effective measures that individuals and communities could take to minimize their risk of exposure to Anthrax, such as avoiding contact with sick or dead animals, practicing safe meat handling and consumption, and seeking prompt medical attention if symptoms develop.

• Mass media messages used also the radio diffusion and TV shows. A total of 25 radio programs were conducted, along with a TV show on a local station. These platforms served as vital channels for disseminating information about Anthrax prevention and addressing community concerns. The radio programs and TV show allowed for extensive coverage, reaching not only the target areas but also communities beyond. This broader reach was instrumental in ensuring that critical messages about Anthrax prevention reached as many people as possible, thereby increasing awareness and promoting behavior change across diverse populations.

• Through these programs, community volunteers engaged directly with listeners, answering questions, dispelling rumors, and providing accurate information about Anthrax and its preventive measures. Additionally, the interactive nature of radio and TV allowed for real-time feedback from the audience, enabling immediate responses to community inquiries and concerns.

• Furthermore, the use of radio and TV for RCCE activities helped to overcome geographical barriers and reach remote or inaccessible communities. By leveraging these mass media platforms, the response effort extended its reach beyond the limitations of physical outreach activities, ensuring that even the most marginalized populations received crucial information about Anthrax prevention. Overall, the employment of radio and TV programs in RCCE activities significantly contributed to the effectiveness of the response by facilitating widespread dissemination of information, fostering community engagement, and promoting a collaborative approach to Anthrax prevention across diverse populations.

• ZRCS was part of the multisectoral anthrax response mechanism at national and subnational levels, coordinated by the MoH/ZNPHI. The platform aided in information sharing, complementarity of partners' interventions for synergistic effect, and avoided overlap among partners. This improved management and coordination of the anthrax outbreak response operation. ZRCS supported One coordination meeting with stakeholders.

Lessons Learnt

The integration of "One Health" teams into the community response framework was pivotal in enhancing the effectiveness of Rapid Community Case Evaluation (RCCE) activities, particularly in the identification and management of suspected Anthrax cases. This collaborative approach, involving various stakeholders such as health professionals, veterinarians, environmental scientists, and community volunteers, fostered a robust system capable of real-time response to community feedback.
By leveraging the diverse expertise of these stakeholders, the identification and referral process for suspected Anthrax cases were streamlined and made more efficient. Community volunteers, who often had intimate knowledge of local conditions and dynamics,

played a crucial role as frontline responders. Equipped with training provided by health authorities and One Health teams, these volunteers were adept at recognizing potential Anthrax cases and promptly referring them to designated health facilities.
The close collaboration between community volunteers and health facility staff ensured seamless transitions in the referral process. Health facility staff, trained to handle Anthrax cases and equipped with necessary diagnostic tools, could swiftly confirm suspicions and initiate appropriate treatment protocols. Moreover, this collaborative effort facilitated the dissemination of accurate information and ensured that communities were kept informed about the situation, thereby mitigating panic and misinformation.
Furthermore, the One Health approach emphasized the interconnectedness of human, animal, and environmental health, thereby enabling a more comprehensive understanding of Anthrax outbreaks. By addressing underlying environmental factors and potential animal reservoirs of the disease, these teams contributed to the prevention and control of future outbreaks.
The printed key messages helped volunteers to easily and timely disseminate preventive messages to the communities which led to effective response to the outbreak.

Challenges

• Lack of enough Radio Stations in the targeted Districts: Radio serves as a vital communication medium for broadcasting hygiene messages and raising awareness, especially during public health emergencies. In districts without radio stations, our ability to conduct mass broadcasts and disseminate important information was severely limited. This constraint affected outreach efforts and the overall effectiveness of health promotion campaigns.
Overcoming these communication gaps required us to explore alternative methods of information dissemination, which were often less efficient and had a narrower reach. Addressing these challenges necessitated innovative solutions, such as coordinating with local authorities and leveraging community networks to overcome transportation obstacles. To improve communication in areas without radio stations, alternative communication channels were used, such as community meetings, printed materials, and the training of community leaders as information disseminators.
Poor road network affected the implementation of the response interventions, but NS managed to timely implement through involvement of local branches and volunteers.

Community Engagement And Accountability

Budget: CHF 37,599
Targeted Persons: 200,000
Assisted Persons: 763,612

Indicators

Title	Target	Actual
# of supported volunteers to conduct rumour tracking	750	627
# of coordination and review meetings with stakeholders supported	30	1
% of complaints and feedback received and responded to by NS	80	3,163
# of staff and volunteers trained in RCCE	350	267

Narrative description of achievements

• As a pivotal component of this strategy, the response also prioritized the training of 627 dedicated volunteers in Community Engagement and Accountability (CEA) and RCCE. These trained volunteers were strategically deployed to various communities to facilitate the dissemination of critical messages regarding Anthrax prevention. Their role extended beyond one-way communication, as they actively captured community feedback, ensuring that the response remained adaptive and responsive to the evolving needs and concerns of the affected populations. They also managed to address the feedback such as misconceptions, rumors and misinformation.

• A comprehensive community engagement strategy was implemented during the response effort, which involved conducting a total of 69 community meetings across the four districts. The primary focus of these meetings was to engage with community leaders and members, with the overarching goal of monitoring and addressing prevailing rumours and misconceptions related to Anthrax prevention, causes, treatment, and symptoms. A total of 3,163 feedback was received from the community and all of them were followed

up and addressed.
During these community meetings, a remarkable outreach was achieved, with a total of 62,959 individuals directly reached by this awareness and information-sharing sessions and community meetings. This included males and females, demonstrating a significant impact on gender-inclusive communication and engagement.

- The community feedback mechanism that was set up enabled the 627 trained volunteers in the collection of rumours and feedback which was addressed either directly or indirectly through one-on-one engagement during door-to-door sensitization, radio programs and community engagement meetings.

This multi-pronged approach to community engagement not only contributed to dispelling myths and rumours but also fostered a sense of ownership and participation among community members. It empowered them with accurate information and created channels for them to voice their feedback and concerns, ultimately enhancing the effectiveness of the Anthrax prevention and response efforts.
The Anthrax response prioritized the strengthening of coordination activities at the district level, recognizing the importance of mobilizing key stakeholders to plan and integrate interventions effectively. To achieve this, four district coordination meetings were convened, with one held per district in the four target districts.
These district coordination meetings served as crucial platforms for bringing together representatives from various sectors, including health, agriculture, veterinary services, local government, and community leaders. The objective was to facilitate collaboration, synchronize efforts, and ensure a unified approach to addressing the Anthrax outbreak..

One key lesson learned was the importance of activating and maintaining regular district coordination meetings. These meetings played a vital role in streamlining efforts, enhancing communication, and avoiding duplication of activities. By providing a platform for stakeholders to share updates, exchange information, and coordinate response efforts, the meetings facilitated a more efficient and effective Anthrax response. Moreover, the district coordination meetings fostered a sense of collective ownership and shared responsibility among stakeholders, encouraging greater collaboration and synergy in addressing the Anthrax outbreak. Through open dialogue and active participation, participants were able to identify gaps, leverage resources, and align strategies to maximize impact and minimize redundancy. However, challenges were encountered for the coordination process, particularly with the deactivation of the Incident Management System (IMS) at the district level. As a result, most meetings were ad hoc and based on alerts, making it difficult to establish consistent and structured coordination mechanisms.

Lessons Learnt

- The utilization of community engagement meetings emerged as a valuable strategy in fostering trust and transparency within the response framework, thereby enhancing the effectiveness of public health interventions. These meetings served as platforms for open dialogue between community members and various stakeholders such as department of National Parks and World Life Authority (DNPWA) involved in the response effort, including health authorities, local government representatives, Traditional Leadership, and One Health teams. Through these interactions, several other key lessons were learned:
- Community engagement meetings specifically played a critical role in closing feedback loops, building trust, and enhancing the overall effectiveness and sustainability of Anthrax response efforts. By prioritizing community perspectives and participation, stakeholders were able to foster collaborative partnerships that were essential for mitigating the impact of Anthrax outbreaks and safeguarding public health
- Moving forward, the Anthrax response recognized the need to institutionalize and sustain district coordination mechanisms beyond the immediate crisis. By establishing regular meeting schedules, clarifying roles and responsibilities, and promoting accountability, future response efforts can build upon the lessons learned to ensure more coordinated and effective public health interventions.

Challenges

- Poor reporting by some health facilities due to network coverage, to address this underreporting, the PMER took time to visit the facility and conduct data audit and updating the system.
- Some Anthrax cases where not reported to the national level.
- Amidst the Anthrax outbreak, communities still requested for livelihood support in order to the adverse effects of the drought experienced.
- Deactivation of IMS at national level affected continuation of coordination at this level as most key parties were unavailable for meetings.

Secretariat Services

Budget: CHF 24,634
Targeted Persons: 1
Assisted Persons: 2

Indicators

Title	Target	Actual
# of Surge deployed	1	1

Narrative description of achievements

IFRC has continuously been supporting the NS with Technical guidance and coordination.

02 country Delegates were available to closely working with the national Society in providing technical guidance and development of the operation plans. This includes the Cholera Country Support Delegate who liaises with the country platform on the elimination of Cholera in Zambia. The Operations delegate was responsible for providing strategic and technical guidance to the operation and coordinates with the Harare cluster office and the regional office in Nairobi.

The emergency response also received a continuous assistance of a surge for the technical assistance.

Lessons Learnt

• Deployment of surge assisted the NS in timely implementation of the operation.

Challenges

• There were no notable challenges experienced.

National Society Strengthening

Budget: CHF 74,527
Targeted Persons: 762
Assisted Persons: 627

Indicators

Title	Target	Actual
# of volunteers deployed	750	627
# of staff deployed	8	8
# of NDRTs deployed	4	3

Narrative description of achievements

• As part of the response team, 8 National Society staff working with 2 NDRTS and 1 field officer were attached to the response for the purpose of supporting the operation. These individuals were strategically selected to strengthen various aspects of our operation, including logistics, community engagement, and data management. No additional recruitment were done to support the NS capacity on this intervention.
• The response initiative trained and deployed a total of 627 volunteers recruited from communities across the four targeted districts. Originally, the response aimed to target 10 districts, but adjustments were made in response to changes in the spread and number of Anthrax cases. These volunteers underwent comprehensive training sessions focused on Risk Communication and Community Engagement, as well as Community Engagement and Accountability principles.
• Equipped with essential knowledge and skills, these trained volunteers played a crucial role in supporting community sensitization efforts. They engaged in various outreach activities, including door-to-door visits, public address announcements, and distribution of informative posters. Through these channels, volunteers effectively disseminated key messages about Anthrax prevention, transmission, and control measures to community members.

• Furthermore, volunteers utilized their training to engage with community members in meaningful dialogue, addressing concerns, dispelling myths, and promoting safe practices. By leveraging local networks and trusted relationships, volunteers were able to reach individuals and households in both urban and rural settings, ensuring that Anthrax prevention information reached diverse populations.

The involvement of volunteers in these outreach activities not only facilitated the dissemination of critical information but also fostered community ownership and participation in the response effort. By actively engaging with community members and soliciting their feedback, volunteers helped build trust and rapport, strengthening the overall effectiveness of the Anthrax response initiative.

Lessons Learnt

• The insurance coverage for volunteers engaged in short-term activities should be facilitated through the IFRC insurance policy. This measure ensures a comprehensive coverage for volunteers involved in response activities, safeguarding their well-being throughout their engagement. However, it was difficult to acquire insurance coverage for volunteers over a shorter duration corresponding to the response period. Addressing insurance coverage limitations and bolstering the availability of trained response personnel like NDRTs are critical areas for improvement in future operations.

Challenges

• The response to the Anthrax outbreak encountered several challenges that posed obstacles to the smooth implementation of our operation:
Insurance Premium Duration: One significant challenge was related to the insurance coverage for our volunteers. In Zambia, many insurance companies offer cover policies with annual premium payments as the standard practice. This posed difficulties for the operation, which required insurance coverage for volunteers over a shorter duration corresponding to the response period. The mismatch between the insurance premium duration and the operational timeframe made it challenging to secure appropriate coverage for our dedicated volunteers, potentially exposing them to risks during the response.
In availability of NDRTs for deployment: The operation also faced challenges in finding and mobilizing National Disaster Response Team (NDRT) members to support our response efforts. NDRTs are crucial for coordinating various aspects of disaster response, including risk communication, community engagement, and logistics. However, the availability of trained NDRT members who could be deployed to support our operation proved to be a significant challenge due to other demands on their services such supporting the Cholera outbreak in Lusaka and other districts within the country.

These challenges underscored the importance of flexibility and adaptability in the response strategies. Addressing insurance coverage limitations and bolstering the availability of trained response personnel like NDRTs are critical areas for improvement in future operations.

To address this challenge, the response co-opted field officers from other existing NS projects, like for the case of Sinazongwe, a field Officer was deployed to support the Anthrax operation which worked well

Financial Report

Selected Parameters			
Reporting Timeframe	2023/11-2025/03	Operation	MDRZM020
Budget Timeframe	2023/11-2024/03	Budget	APPROVED

DREF Operation

FINAL FINANCIAL REPORT

Prepared on 09/May/2025

All figures are in Swiss Francs (CHF)

MDRZM020 - Zambia - Anthrax Outbreak Response

Operating Timeframe: 17 Nov 2023 to 31 Mar 2024

I. Summary

Opening Balance	**0**
Funds & Other Income	**290,183**
DREF Response Pillar	290,183
Expenditure	**-271,603**
Closing Balance	**18,580**

II. Expenditure by area of focus / strategies for implementation

Description	Budget	Expenditure	Variance
AOF1 - Disaster risk reduction			**0**
AOF2 - Shelter			**0**
AOF3 - Livelihoods and basic needs			**0**
AOF4 - Health	153,423	156,300	**-2,877**
AOF5 - Water, sanitation and hygiene			**0**
AOF6 - Protection, Gender & Inclusion			**0**
AOF7 - Migration			**0**
Area of focus Total	**153,423**	**156,300**	**-2,877**
SFI1 - Strenghten National Societies	112,126	103,740	**8,386**
SFI2 - Effective international disaster management			**0**
SFI3 - Influence others as leading strategic partners			**0**
SFI4 - Ensure a strong IFRC	24,634	11,563	**13,071**
Strategy for implementation Total	**136,760**	**115,303**	**21,457**
Grand Total	**290,183**	**271,603**	**18,581**

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Please explain variances (if any)

IFRC-DREF allocation for this Anthrax intervention was CHF 290,183. By the end of the 4 months response timeframe, the expenditures were CHF 271,603. The closing balance of CHF 18,581 will return to the DREF pot following the publication of this report. Variances explanations are as follows:

The current balance does not reflect the expected proportional savings from activities not implemented in the 6 districts because the available funds were not sufficient to support implementation in the 2 districts. While there was a reduction in targeted areas to 4 districts, the overall allocation of resources remained focused on ensuring the effectiveness and quality of interventions in the districts where implementation was feasible.

Funds allocated for Cluster Technical supervision including finance and PMER was not utilized as the IFRC Office in Zambia had a deployment of a technical team supporting the Cholera Emergency Appeal. This team was able to provide this technical support without having to send someone from the cluster office thus savings in the DREF.
The costs allocated for Surge deployment was not fully utilized as the technical resources that were present in the IFRC office in Zambia were sufficient.

Contact Information

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Click here for reference

Selected Parameters			
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Budget Timeframe	2023/11-2024/03	Budget	APPROVED

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SFI3 - Influence others as leading strategic partners			**0**
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Selected Parameters			
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Budget Timeframe	2023/11-2024/03	Budget	APPROVED

DREF Operation

FINAL FINANCIAL REPORT

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MDRZM020 - Zambia - Anthrax Outbreak Response

Operating Timeframe: 17 Nov 2023 to 31 Mar 2024

III. Expenditure by budget category & group

Description	Budget	Expenditure	Variance
Relief items, Construction, Supplies	**45,044**		**45,044**
Medical & First Aid	7,913		7,913
Teaching Materials	37,131		37,131
Logistics, Transport & Storage	**17,125**	**77**	**17,047**
Transport & Vehicles Costs	17,125	77	17,047
Personnel	**119,973**	**-32,035**	**152,008**
International Staff	22,725	-32,055	54,780
National Society Staff	12,038	20	12,018
Volunteers	85,210		85,210
Workshops & Training	**63,812**	**28**	**63,785**
Workshops & Training	63,812	28	63,785
General Expenditure	**26,519**	**2,574**	**23,945**
Travel		2,429	-2,429
Information & Public Relations	6,087		6,087
Office Costs	0	23	-23
Communications	730	209	522
Financial Charges	710	-87	797
Other General Expenses	18,992		18,992
Contributions & Transfers		**284,382**	**-284,382**
Cash Transfers National Societies		284,382	-284,382
Indirect Costs	**17,711**	**16,577**	**1,134**
Programme & Services Support Recover	17,711	16,577	1,134
Grand Total	**290,183**	**271,603**	**18,581**