

Anthrax Outbreak Investigation In Kazungula District of Southern Province, Zambia, November ,2023

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During the outbreak investigation there was evidence of cutaneous form of Anthrax among the local community suspected from bovine Animals dying from unknown causes in six villages of Kazungula District.

BACKGROUND

- Anthrax is a serious infectious disease caused by the bacterium *Bacillus anthracis* and can affect humans and animals, posing a threat to public health due to its potential for outbreaks. On September 20, 2023, the Kazungula district health office received two notifications of possible human anthrax cases about 190 kilometers from Kazungula Town. The aim of the investigation was to verify and describe the distribution of Anthrax cases by time, place and person in Kazungula district of Southern Province.

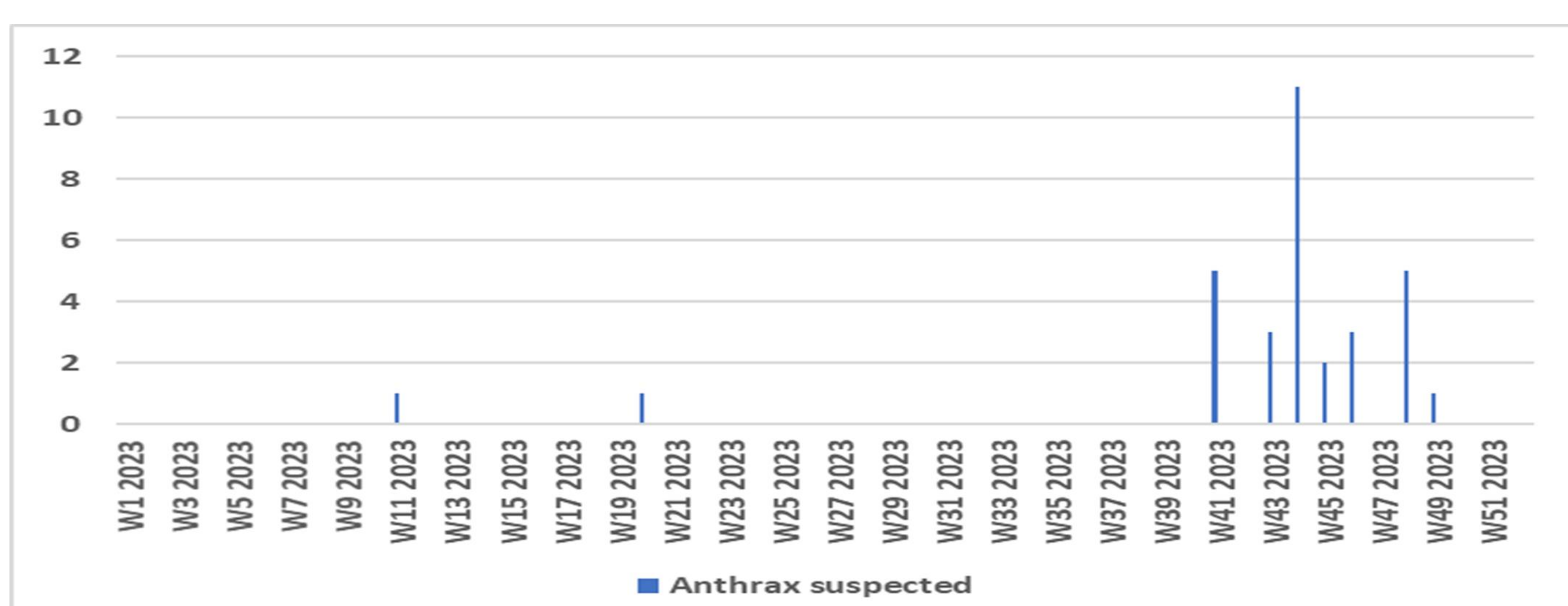
METHODS

- A cross section descriptive study was used in order to give a snapshot of the association between exposure and outcome. Study participants included all cases that met the World Health Organization standard case definition for anthrax as adopted by the Ministry of Health were included in the investigation. Data collection included review of district and facility records and collection of samples for laboratory confirmation and later shipped to Zambia National Public Health Reference Laboratory.

RESULTS

A total of 5(63%) Females and 3(37%) Males suspected cases of Anthrax from six villages were investigated in Kazungula District. Villages included Sianamunyama (1 male and 2 females), Nyambe (1 male), Tom muyambango (1 female), Namapande (1 female) Mwananalisa (1 male) and Chilale (1 female). 50% of participants were aged 15 to 44 years while 25 % were below 14 years and 25 % were above 45 years. 100 % had symptoms of cutaneous form of Anthrax A Sample from one patient was collected for further analysis and the results were negative. 88 % of participants reported having contact with beef from suspected animals which died from Anthrax. Evidence of bovine carcasses which died from unknown causes were also found being prepared by the local community further exposing them to the spread of anthrax.

Figure 1. Distribution of Anthrax cases by onset in Kazungula District of Southern Province , Zambia, 2023.



RESULTS CONTINUED

Figure 2:Distribution of Anthrax cases by Village in Kazungula District of Southern Province ,Zambia,2023

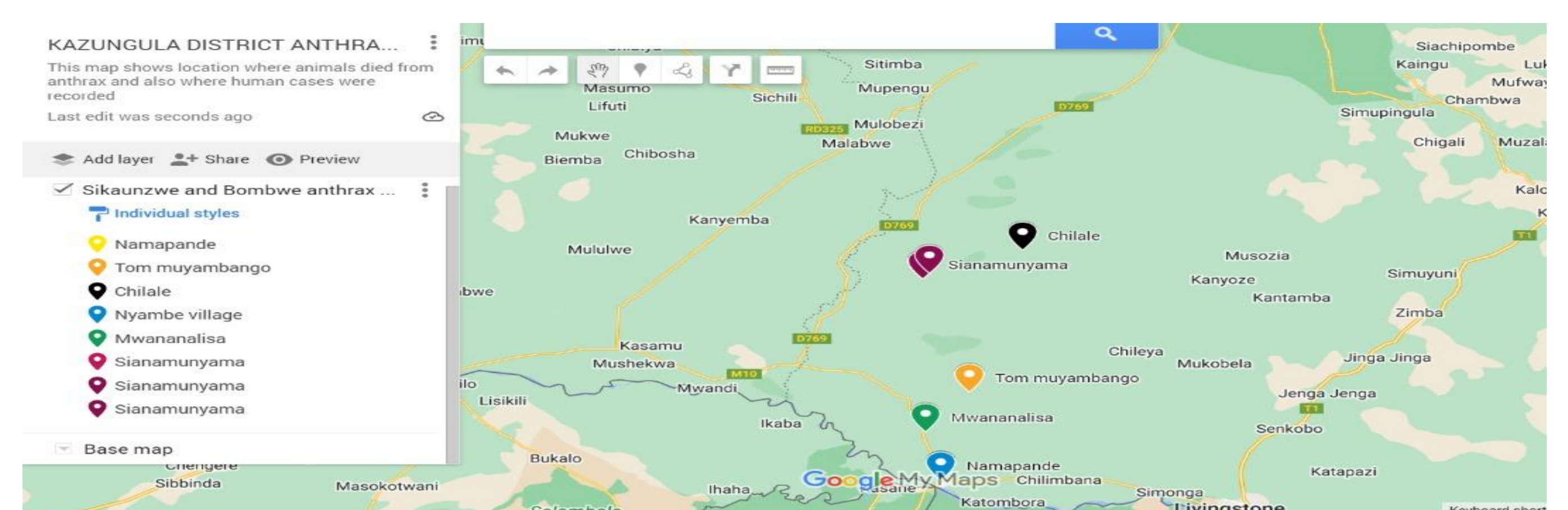


Figure 3.:Bovine carcass being prepared in Kazungula District of Southern Province ,Zambia,2023



CONCLUSION

- The investigation established that there was evidence of anthrax cases in the six villages of the district despite the results coming out negative. Kazungula district remains at high risk of the outbreak of anthrax due to high interaction between wild and domestic animals hence there is need to strengthen the one health approach to combat the spread of the disease

ADDITIONAL KEY INFORMATION

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Funding Source

Zambia Field Epidemiology Training Program

Conflicts of Interest

I declare no conflict of interest

Acknowledgements

