



Letter to the Editor

Anthrax outbreak in Nigeria: Government initiatives and response to protect livestock and public health

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Dear Editor,

Bacillus anthracis is a gram-positive and rod-shaped bacterium that causes anthrax, a deadly infectious disease which can infect human and animals, and its spores can survive for lengthy periods of time in the environment. Anthrax mostly affects herbivorous animals such as cattle, sheep, and goats usually via contaminated soil or feed [1]. Humans can become infected by coming into touch with contaminated animals or items. Although prompt antibiotic treatment is successful, untreated instances can be lethal. Vaccinating animals and at-risk groups help to keep infections at bay. Anthrax spores have the potential to be used in bioterrorism producing widespread disease and panic [2].

On July 17, 2023, the Federal Ministry of Agriculture and Rural Development (FMARD) formally recognized a single case of anthrax disease at a farm with a variety of animals in Niger State. This is the first documented case of the disease in an animal in Nigeria since the West African outbreak

began in Ghana in June 2023. The abrupt deaths of livestock in this farm were recorded on July 13, 2023, with eight fatalities. Furthermore, the animals that died were found to be bleeding from exterior orifices with no blood coagulation [3].

Another incident of anthrax disease was documented on July 30, 2023, in Lagos, the most densely populated state in Nigeria. Six animals within the state have been definitively identified as having contracted the illness. These occurrences were detected while conducting routine monitoring of animals on both Lagos Island and Agege. As a precautionary measure against the further propagation of the ailment, the concern agency has confiscated, incinerated, and interred the afflicted animals [4].

Several weeks prior to the epidemic, the Federal Ministry of Agriculture and Rural Development (FMARD) issued a warning to the general populace about the emergence of Anthrax in certain neighbouring nations of Nigeria located in the West African Sub-Region. In particular, this outbreak was identified along the northern border of Ghana, adjacent to Burkina Faso and Togo. FMARD emphatically recommended that the public refrain from consuming Hides (referred to locally as "Pomo"), smoked meat, and bush meat due to the significant hazards they present, until the situation is effectively managed [5].

To counter an anthrax outbreak, the Federal Government of Nigeria, in collaboration with relevant stakeholders, initiated a free vaccination program on July 27, 2023. This effort aimed to safeguard livestock and to prevent disease transmission to both animals and humans. To kick start the campaign, 50,000 doses of anthrax vaccines were provided to the state, targeting livestock within a 12-kilometer radius of the initial outbreak site. Dr. Umakhihe, the Permanent Secretary of FMARD, disclosed plans for a broader anthrax vaccination campaign across other states. Animals within the outbreak's farm are under a 20-day movement restriction to prevent further contamination, and comprehensive disinfection of the farm, equipment, and surroundings is underway. The Ministry is also enhancing disease surveillance in slaughterhouses, abattoirs, and livestock markets nationwide to swiftly identify and contain potential outbreaks.

In addition to the measures mentioned above, further infection control strategies utilized in similar anthrax outbreak situations like that of India, Russia and Zimbabwe could be employed including heightened public awareness campaigns to educate local communities about the disease, its symptoms, and preventive measures. The dissemination of information through media channels, workshops, and community meetings could empower individuals to promptly report any unusual animal deaths or illness. Furthermore, establishing a robust communication network among veterinary professionals, healthcare workers, and local authorities would facilitate rapid response coordination, enabling quick deployment of vaccination teams and containment efforts. Collaborative efforts with neighbouring regions or countries, if applicable, might also enhance information sharing and coordinated control measures to effectively mitigate the spread of anthrax.

Declaration of competing interest

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