Update on suspected Anthrax outbreak in Gogrial East, Gogrial West and Tonj North Counties

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Introduction & background

- Anthrax is an airborne and zoonotic infectious bacterial disease caused by the spore-forming bacterium *Bacillus anthracis*.
- The organisms (spore) can stay on soil for over a decade.
- Animals get infected when they graze on infected grazing area.
- Humans get infection from domestic livestock (cattle, sheep, goats, buffaloes, pigs and others) or wild game animals.
- Humans get infected by direct or indirect contact with animals or their products.
  - Persons may also become infected by handling or consuming meat from animals that are sick with or have died of the disease.
  - Exposure (occupational hazards) include those handling infected carcasses and those employed in the processing of bones, hides, wool and other animal products.
Anthrax in livestock

Signs and symptoms

• Sudden death **(abrupt fever, staggering, trembling, breathing difficulty, convulsions depression and death)**,
• Blood oozing from natural orifices (mouth, nose and anus)
• Bloat (swollen stomach in short period)
• No rigor mortis (No stiffness of body after death)
Cont.

Anthrax local names:
• Joknhial (cattle) in Dinka
• Adhom/Angin (small ruminants) ( in Dinka
• Nyakalokan in Toposa
• Nyongi Durjo in Bari
Prevention and control

• Vaccination of livestock (animal vaccine available)
• Avoid grazing in infected grazing areas
• Treatment with antibiotics (but often difficult due to sudden death)
• No opening and eating of animals that died from anthrax (awareness campaigns and Radio talk shows)
• Proper and safe disposal dead animals
Anthrax update in Warrap State

- In February 2022, suspected anthrax cases were detected at the Kuajok hospital (Kuac North)
- In April 2022, out of the 18 Human samples, 8 tested positive by PCR for *Bacillus anthracis* from a regional laboratory in Arua Uganda
- One human death case (CFR= 6%)
- Most of the reported human cases are cutaneous form
- 17 – 24\textsuperscript{th} May *one health* joint investigation in Warrap
• In March, suspected death cases of Anthrax in livestock were reported from Tonj North.

• 28th and 29th of April two disease investigations were conducted by state livestock team (DARF and FAO)

• Livestock samples collected for laboratory confirmation

• From the history, 114 sick cases (Morbidity 80%), 94 death cases (Mortality 66%) reported in Gogrial west county (Mathiang mongs, Nyoric and Mathing) CFR = 82%

• Ongoing vaccinations on small and large ruminants

• Awareness messaging on radios in Warrap and Juba (Eye radio) ongoing
Joint Disease Investigation to Warrap State

• From 17 to 24 of May 2022
• Covered Gogrial West, Gogrial East and Tonj North Counties

- Mathiang-Monyjoc, Gogrial West
- Nyoric, Gogrial West
- Marol, Gogrial West
- Kurnyuuk, Gogrial East
- Agok, Gogrial West
- Rorkou, Tonj North
- Agon, Tonj North
The map shows Anthrax hotspot areas, Ws.
Key findings

• A total 37 samples collected within the affected flocks/herds (blood smear, swabs, serum and 5 soil samples)
• Two suspected Anthrax cases were found (one dead and one sick) Agok and Mathiang of Gogrial West County.
• During the investigation, 26 suspected human cases were found and reported to the health team.
• 99% of reported suspected Anthrax cases were small ruminates
• In Gogrial East, County Livestock Department started vaccination of small ruminant against anthrax
The recent Anthrax outbreaks are related to the last year flooding

Based on the PDS interviews Anthrax disease was ranked number one in most of the visited areas.

From the filled questionnaires show that the disease is endemic in the area

The local communities don’t take Anthrax as serious problem (which lead to under reporting of the disease)

Some
Recommendations

• Establish a way to allow sharing of disease reports, other information and discussions among the animal health and human health departments at State and National level.
• The livestock team on ground should continue conducting active case search
• Immediate reporting of any case of anthrax in the hotspot zones
• Massive vaccination including goats and sheep
• Awareness and sensitization campaigns on Anthrax (radio talk shows and posters).
• Safe disposal of dead animals
Thank You for your attention