

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)

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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 – 24th May **one health** joint investigation in Warrap

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- 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

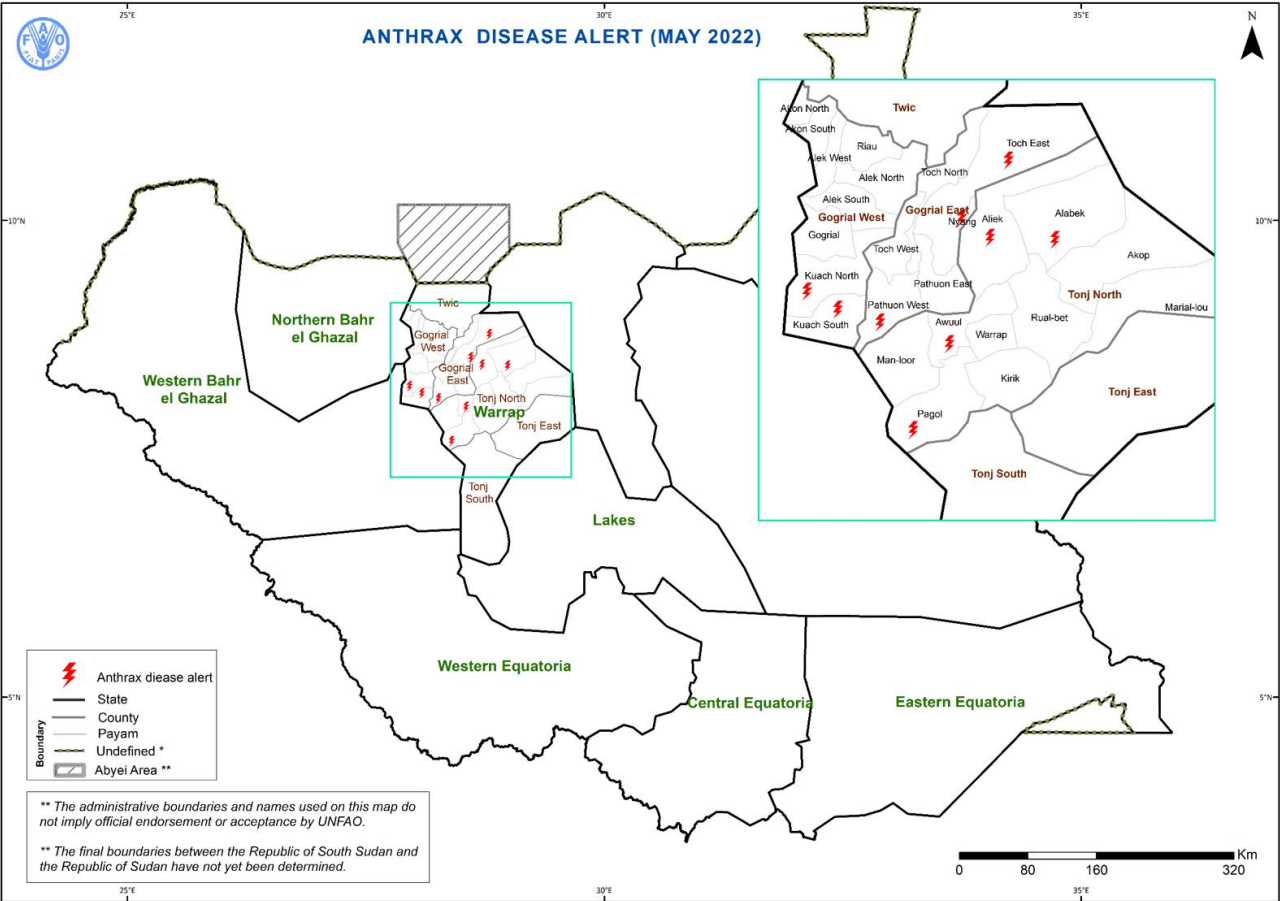
Kurnyuuk, Gogrial East

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

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- 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

