

Treatment, prevention and control of ECF

i. Treatment of ECF sick cattle

- After confirming ECF in infected cattle treatment using Butalex is commenced by a veterinary practitioner.
- In addition, oxytetracycline is also administered to slow down multiplication of the parasite as well as treat anaplasmosis which may occur together with ECF.
- There is a vaccine available for ECF in cattle and is only administered once.

ii. Tick control

- In areas where the disease exists, strict tick control programs are done regularly (weekly or every 2 weeks) using acaricides. The aim of this is to eliminate all the tick stages on the animals.
 - Acaricide application is done through hand spraying, dipping or spray races as per the manufacturer recommendation.
 - Acaricides can also be applied as spot-ons and pour-ons as per the manufacturer recommendations.
 - Ensure the entire body of the animal is covered by the acaricide for better results.

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HOW TO IDENTIFY AND MANAGE ECF IN CATTLE FOR IMPROVED PRODUCTIVITY



How to identify and manage ECF in cattle for improved productivity

What is ECF?

East Coast fever is a serious tick-borne disease of cattle. It also affects buffaloes, but they do not show clinical signs therefore they are carriers. It is called East Coast Fever (ECF) because it only occurs in countries on the eastern side of Africa.

Only ticks infected by the parasite can transmit the infection to healthy cattle. Some local cattle breeds have shown some levels of tolerance to ECF compared to exotic breeds.



A Friesian cow exhibiting signs of ECF



A healthy herd of cattle

What causes ECF and how is it spread?

ECF is caused by a protozoan parasite called *Theileria parva*. The parasite is spread from infected cattle to non-infected cattle by a tick called *Rhipicephalus appendiculatus* (the brown ear tick).



Male brown ear tick and an engorged female brown ear tick

The brown ear tick is found commonly in the ears but can also be found in other parts of the body in cattle.



Brown ear tick on the ears of a cow

Which are the common symptoms?

Cattle infected with ECF take about 14 – 21 days to show the following symptoms:

- High fever in infected cattle up to 42°C.
- Drop in milk production for milking animals.
- Large swollen lymph nodes (prescapular and precrural).

- Difficulty breathing.
- Discharge frothy saliva from the mouth.
- In late stages, some animals have bloody diarrhea and blindness.
- Many ECF infected cattle die because of fluids in the lungs leading to respiratory failure.

What are economic losses associated with ECF?

ECF causes serious economic losses including:

- Death of cattle in areas where the disease is usually present (endemic areas) ranges from 0 to 50% if no intervention is instituted.
- Death of cattle in areas where the disease is usually not present (non-endemic areas) ranges from 80% to 100% if no intervention is provided.
- It costs KES 4000-8000 to treat an infected animal (Butalex, the drug used for treatment is very expensive). Treatment success is also low since treated animals especially if treatment is done late will still die.
- Reduced milk production as well as discarding milk due to treatment.

