Tick control after East Coast Fever (ECF) immunization

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What is East Coast Fever?

It is a disease of cattle which kills around 100,000 animals of all ages in Kenya every year. It is called East Coast Fever (ECF) because it only occurs in countries on the eastern side of Africa.

What causes it?

The disease is caused by a parasite adapted to the African buffalo, similar to the malaria in humans. In buffalo it causes very mild or no apparent disease. In cattle the disease is very severe and will cause death if not treated.

How is it transmitted?

The parasites are transmitted from one animal to the other by the brown ear ticks found attached near the ears and the tip of the tail (picture).

How do I control the disease?

There are several ways of controlling the disease:

1. The most common method of controlling ECF and other tick-borne diseases is by eradicating the ticks that transmit the disease. This is done by dipping or spraying the animals with chemicals that kill ticks (acaricide). The effectiveness of this method depends on thorough wetting of the animal. It must be done once weekly. It is expensive and ticks develop resistance to the chemicals over time. The chemicals are toxic to humans and animals and must be handled according to the manufacturers' instructions.

2. When an animal recovers from ECF it develops immunity to clinical re-infection with the same strain of the parasites. The immunity is life-long as long as there is constant challenge which acts as a booster. A vaccine with a broad spectrum of protection is available commercially.

Tick control after immunization?

- Once animals are immunized, tick control must continue in order to reduce tick numbers.
- Ticks are parasites. They suck blood and cause irritation resulting in reduction in productivity.
- Ticks spread other diseases such as anaplasmosis and babesiosis. These diseases can be controlled by dipping once every 2-3 weeks.
- In areas where heartwater occurs, dipping should be maintained at the once weekly interval.
- In areas where heartwater does not occur, dipping can be reduced to once every 2-3 weeks depending on the number of ticks on the animal.