



HEARTWATER

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Heartwater is a tick-borne disease that is transmitted by the heartwater tick, *Amblyomma haebraeum*, the Bont tick. The disease occurs where the tick is present, for example the bushveld areas of South Africa, Northern Gauteng, Limpopo Province, the lowveld of Mpumalanga and along the eastern coastal areas. South Africa can be divided into three areas.

1. Habitat where the Bont tick occurs in high numbers.
2. Areas where there are no Bont ticks, for example the highveld, the central and western parts of the country.
3. The transitional areas where the Bont tick occurs in low numbers. The transitional areas are the most difficult to manage. Early exposure to the Bont tick in new borne calves is important to ensure that the calves develop resistance to the disease.

To manage Heartwater is difficult, especially when animals are moved. Even within heartwater areas because there are different strains of the disease. Moving animals from a Heartwater-free area to a Heartwater area needs to be managed well otherwise deaths will occur. There are two methods of managing the transition of cattle.

1. Animals can be vaccinated with the Onderstepoort vaccine which is a live vaccine that must be administered into the vein. The vaccine is often not available. After administration of the vaccine temperatures of animals must be taken from day 8. If they show a temperature reaction of 40° C or more, they should immediately be treated because the vaccine can cause deaths. Not all animals show a temperature reaction and therefore all animals should be treated on day 16 in order to prevent deaths.

2. Another method of managing the disease in animals that have been moved from a Heartwater-free area to a Heartwater area is the Purnell method. There has to be a good tick infestation, usually during summer months. Animals are treated with a oxytetracycline injection, seven days after arrival. This injection should be repeated on days 14 and 21. During this period animals must not be dipped to ensure that they are exposed to the Bont tick. The Bont tick has long mouth parts and can cause damage to the teats and udder of cows. Therefore, spot treatment in these areas must be applied during this period with an amitraz water soluble dip in a spray formulation, for example the Eraditick range* from Afrivet.

The disease is characterised by nervous symptoms. Animals show a high stepping gate and are hypersensitive to touch. Very susceptible animals are usually found very

sick and paddling when lying down. As in all tick-borne diseases, early diagnosis is very important. Animals that have been moved should be examined twice a day and temperatures taken. When the animal shows an elevated temperature of 40°C or more they should immediately be treated with an oxytetracycline, for example Ultratet* from Afrivet. In more advanced cases where an animal is down, more treatment will be necessary, like corticosteroids, obtainable from your veterinarian.

When a farmer is not sure how to handle the disease and the movement of animals, contact your herd veterinarian or the Technical Team at Afrivet (012 817 9060).

* Act 36/1947 Product registration numbers for foot note:

Eraditick 125 (G3583), Eraditick 250 (G4047), Ultratet (G0296), Ultratet LA (G2857), Ultratet LA 200 (G3559).

