



# Anthrax

**Anthrax is a highly contagious disease of domestic and wild animals which can affect humans**

- ◆ Animals usually die suddenly without any symptoms of illness.
- ◆ There is, however, an effective vaccine to prevent the disease.
- ◆ The correct handling of affected carcasses will also prevent the spread of the disease.

## What causes anthrax?

The disease is caused by the bacterium *Bacillus anthracis*. When animals die of anthrax and particularly when carcasses are cut open, resistant spores are formed which can survive in the soil for many years. The bloody discharge from the nostrils, mouth and anus, as well as skin, bone and other tissue is important in the spreading of the disease.

Scavengers, vultures and even flies play an important role in the spreading of these resistant spores. Runoff water can also disperse the spores to pans or dams and create concentrated sources of infection in other areas.

The infection is usually acquired by drinking contaminated water, grazing on contaminated pastures or when animals lick contaminated skins, bones, blood or carcasses.



agriculture

Department:  
Agriculture  
REPUBLIC OF SOUTH AFRICA

## What are the symptoms of anthrax?

- ◆ Animals may die within 2 hours without showing any signs of illness (sudden death).
- ◆ Fever.
- ◆ Difficult breathing.
- ◆ Muscle tremors and redness of the mucous membranes may be observed.
- ◆ Blood-stained discharge from the nostrils, mouth and anus.
- ◆ Advanced cases may have a swelling of the throat and neck. This could lead to breathing problems and difficulty in swallowing.



## How can anthrax be diagnosed?

Anthrax is diagnosed by microscopic examination of a blood smear. Consult your local veterinarian or animal health technician in this regard.



**Never cut the carcass open or eat the meat of an animal that has died suddenly!!**

## How do humans contract the disease?



- ◆ Direct contact with affected animals or animal products.
- ◆ Inhaling dust which contains spores.

**Although people normally contract a skin form of the disease, death may occur in humans as a result of anthrax.**

**If anthrax is suspected carcasses should never be handled, cut open or eaten!!**

## **Can animals or humans be treated for the disease?**

- ◆ Animals often die before the disease can be diagnosed or the animals treated.
- ◆ Humans and resistant animals, such as pigs, dogs and horses can, however, be treated with antibiotics.
- ◆ **Consult your doctor if contact with anthrax is suspected.**

## **Control**

### **Animals**

- ◆ Vaccinate livestock annually against anthrax.
- ◆ Do not cut open carcasses of animals which have died if anthrax is suspected.
- ◆ Bury these carcasses at a depth of at least 2 metres and treat the soil liberally with chloride of lime.
- ◆ Carcasses may also be burnt without cutting them open.
- ◆ Report suspected cases immediately to the nearest animal health technician or state veterinarian.
- ◆ The state veterinarian may prescribe methods to disinfect the premises, transport vehicles and other products.



**Anthrax can be prevented with the cooperation of every farmer!!**

## **Humans**

- ◆ The carcasses of affected animals should **never** be eaten!!
- ◆ Avoid direct contact with a carcass of an animal suspected to have died of anthrax. Always wear **protective clothing** when the carcass is buried or burnt.

For further information contact your nearest animal health technician or state/private veterinarian

*or*

Directorate Animal Health  
Private Bag X138, Pretoria 0001  
Tel: 012 319 7452  
Cell: 086 695 0240  
Fax: 012 319 7551

*or*

Resource Centre  
Department of Agriculture  
Tel: 012 319 7141/7085

This publication is available on the web at: [www.nda.agric.za/publications](http://www.nda.agric.za/publications)

2007

2004 Third print

2003 Second print

1998 First print

Compiled by

Directorate Agricultural Information Services, Department of Agriculture

in cooperation with

Directorate Animal Health

Printed and published by

Department of Agriculture

Obtainable from

Resource Centre, Directorate Agricultural Information Services  
Private Bag X144, Pretoria, 0001 South Africa