

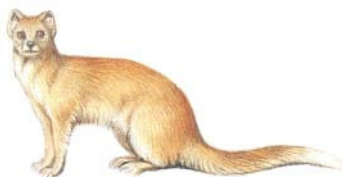


DEPARTMENT: AGRICULTURE

**Diseases shared by**



**wildlife  
and livestock**



M.S.K. Mashishi

Wildlife and livestock can have the same diseases. Contact with

wildlife (wild animals) can be dangerous to the health of livestock. They are a source of some diseases that can seriously affect the productivity of livestock and even lead to death. Livestock may be infected when they come into contact with wildlife. Insects carry some diseases from wild animals to livestock. Livestock can also infect wild animals with some diseases.

### ***Foot-and-mouth disease (FMD)***

- FMD affects all cloven-hoofed animals such as cattle, pigs, sheep and goats.
- African buffaloes in the Kruger Park are the maintenance hosts, but do not show signs of disease.
- Susceptible animals get the disease when they come into contact with infected animals. They breathe in droplets containing the virus (germ) that causes FMD, that were breathed out by animals that are carrying FMD. In some cases FMD is spread by objects contaminated by the virus. There is no vector involved.
- Signs of the disease are found on



**African buffalo**

the mouth and feet. The animal's tongue has vesicles (blisters) filled with fluid and these rupture easily, leaving the tongue with bleeding areas. Blisters are seen on the snout, between the hooves, on the heel and just above the hoof.

- To control this disease, certain measures should be adhered to:
  - Prevention of uncontrolled movement of all animals and their products out of an area where FMD is common (endemic area). A legal movement permit should be produced when moving animals and their products out of these areas.
  - Vaccination of cattle and other ruminants in endemic areas and areas next to these areas.
  - FMD-free areas should preferably be separated from FMD areas by fences. Any breaches in the fences should be reported to the Directorate Veterinary Services of the Department of Agriculture. Separation of these areas could also be by roads, rivers or farm boundaries.
- FMD **does not cause death** except for low mortalities mainly in calves, but it results in economic loss for the farmer as well as **for** the country. Infected cattle cannot eat or walk effectively for



several days, causing lactating cows to dry up and beef animals to lose weight. Also during outbreaks in cattle export of certain agricultural products are banned.

### **Corridor disease (CD)**

- CD affects only those cattle that graze on pastures where African buffaloes are grazing or have recently been grazing.
  - African buffaloes are the maintenance hosts.
  - The germ causing the disease is carried by ticks called brown ear ticks and lowveld brown ear ticks.
- ◆ Signs seen are decreased milk production, increased temperature, watery fluid coming from the eyes, very big lymph nodes, coughing, difficult breathing and froth coming from the nose. Death usually occurs.
- ◆ In South Africa the disease occurs in the Kruger Park, game reserves in KwaZulu-Natal and adjacent farms where cattle and buffaloes are in close contact.

### **Control measures**

- ◆ Prevention of contact between infected buffaloes and cattle by means of fences to separate them.
- ◆ Tick control.

- ◆ Keeping CD-free buffaloes in game parks in endemic areas. Buffaloes must test negative before they can be moved to game parks in corridor-disease-free areas

### *African swine fever (ASF)*

- Warthogs and bushpigs are the natural hosts.
- The virus (germ) causing the disease is spread by tsetse flies (a type of tick), which act as vectors.
- The disease is spread by these ticks to domestic pigs when they are in close contact with the hosts.
- The signs of the disease in live pigs are a high temperature, loss of appetite, inability to walk properly with weakness in the back legs, red skin and a bluish colour of the extremities, discharge from the eyes and nose, bloody diarrhoea or constipation, breathing difficulties, recumbency (lying down) and death. Sows may abort.



**Bushpig**



## Control measures

## Warthog

- There is no vaccine for ASF.
- Prevention of contact between domestic pigs and natural hosts.
- Movement of pigs into or out of ASF areas. A legal permit is needed.
- Do not feed swill that might contain pig or wild pig meat or products.

## *Bovine malignant catarrhal fever (BMCF) "snotsiekte"*

- Blue and black wildebeest are maintenance hosts for BMCF.
- Cattle are infected when they are in close contact with blue wildebeest.
- Signs seen in live cattle are enlarged lymph nodes, discharge from the eyes and nose, a whitish layer starting on the edge of the eye and growing inward, covering the eye.
- Death frequently occurs.
- In South Africa cattle and wildebeest should be separated by a distance of at least 1 000 m in order to prevent the spread of BMCF to the cattle.



**Blue wildebeest****Black wildebeest**

### ***Tuberculosis (TB)***

- TB was originally a cattle disease and is still the major source of infection for other cattle.
- TB has been found in African buffaloes in the Kruger Park and some game reserves in South Africa. Kudus can also play a role in the spread of TB to cattle. All infected species develop the disease.
- Infection occurs when animals with the disease come into contact with animals that do not have it. The disease can enter the body of an animal when the germ is breathed in, or taken in from contaminated grazing areas, get into contact with bruises or cuts on the skin or during mating. Infected animals may have TB germs in their urine, faeces, discharges from the vagina and semen.
- TB develops very slowly in the body of an animal. The signs seen in live cattle are coughing, difficulty in breathing, discharge from the nose and weight loss.
- Tests for TB include a skin test called the tuberculin test or a

blood test.

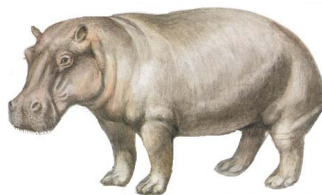


**An affected animal experiencing difficulty in breathing (note the typical extension of the neck)**

- Infected animals are a threat to humans, especially when domestic animals are infected (milk).
- Control is by prevention of contact between cattle and buffaloes.

***Trypanosomiasis (nagana)***

- Nagana occurs in many parts of sub-Saharan Africa. It is also found in South Africa but to a limited extent.
- Cattle, sheep and goats, pigs, horses, donkeys, dogs and humans are affected.
- African buffalo, zebra, warthog,



**Hippopotamus**



elephant, hippopotamus, rhinoceros and antelope are maintenance hosts.

- Tsetse fly, as the vector, spreads the disease between livestock and wildlife.
- Signs seen in animals are loss of weight, pale mucous membranes, enlarged lymph nodes, rough and dull hair coats and death.
- Frequent spraying and dipping of animals, use of insecticide-impregnated screens and flytraps can help control tsetse flies.



**Rhinoceros**

## **Rabies**

- Bat-eared foxes, blackbacked jackal and yellow mongoose and dogs can be the maintenance hosts. Where this disease occurs maintenance hosts are also affected.
- Rabies is a zoonotic disease (a disease which people can get from animals) and it can be a danger to livestock owners if their animals get this disease.
- Signs of the disease are changes in behaviour in all animals. Domestic animals can become wild and aggressive, while wild animals may become tame. Paralysis eventually occurs, resulting

in death.

- For control, vaccinate your dogs and cats against the disease.



**Bat-eared fox**



**Yellow mongoose**

### **Conclusion**

Livestock and wild animals are important to their owners and the country. Control measures should be followed to reduce the chances of these diseases affecting livestock, because some of them can have a negative economic impact on the country, cause serious diseases in humans and even death in animals and humans.

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

or

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