

FMD



National Department of Agriculture

Foot-and-mouth diseaseA highly contagious disease

A highly contagious disease







- A very serious disease which spreads rapidly
- Causes large-scale economic losses
- Halt to exports of all animals and animal products as well as agricultural products used as animal feed

• Short incubation period (generally 2 to 14 days)

INCUBATION PERIOD

SYMPTOMS

03/11/2011

- Formation of vesicles in the mouth and on the feet (interdigital space, coronary band and bulbs of the heel)
- Lameness and salivation (sometimes lacrimation), smacking of the lips, grinding of the teeth and a nasal discharge
- Young animals may die suddenly without clinical signs as a result of inflammation of the heart (myocarditis)

DIAGNOSIS

- Based on the history, epidemiology, clinical signs and pathology
- Confirmed by laboratory examination of tissue to identify and type the virus responsible for the outbreak, as well as serological examination
- Tests include serology (ELISA—titre more than 1,5), virus neutralisation and virus isolation

HISTORICALLY

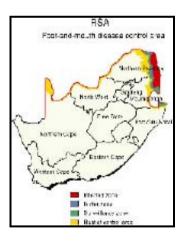


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- The Republic of South Africa has a foot-and-mouth-disease-free zone where vaccination is not practised (refer to resolution no XIV of the OIE)
- The "free zone status" was accepted by the OIE in 1995
- The Kruger National Park (KNP) is the only endemic foot-and-mouth-disease area in South Africa, because the African buffalo (*Syncerus caffer*) in the Park are permanent carriers of the virus
- Frequent outbreaks of the disease are diagnosed in cloven-hoofed game in the KNP

FMD CONTROL IN South Africa

- The Kruger National Park and the surrounding areas, as well as the northern borders of country are a declared FMD controlled area in terms of the Animal Diseases Act
- The FMD controlled area is divided into the following control zones according to the OIE code (see map)



- The Kruger National Park (a national game reserve) is the FMD Infected Zone
- The Park is about 350 km long and 60 to 80 km wide, fenced off by a 2,4 m electrified fence and situated in the north-eastern part of South Africa
- Regular game inspections are performed and any suspect FMD cases are reported to the state veterinarian

- The Buffer Zone comprises the area bordering the western and southern boundary of the KNP—about 350 km long and 10 to 20 km wide
- All cattle (70 000 head) are vaccinated every 6 months in the Buffer Zone and inspected (by Veterinary Services) for FMD every week
- Vaccinated cattle are branded with an `F' on the right side of the neck
- The Surveillance Zone is about 350 km long and 10 km wide and situated to the west and the south of the Buffer Zone
- All cattle are inspected every 14 days
- No FMD vaccination is permitted in this zone

• The rest of the control zone is situated to the west of the Surveillance Zone as well as an approximately 10 km wide area along the national borders of South Africa with Swaziland, Botswana, Zimbabwe and Mozambique. Cattle are inspected every 28 days. This is an extra protection zone. *EASE (FMD)*



MOVEMENT CONTROL

- Strict movement control of cloven-hoofed animals and their products is applied in the control area
- Movement is controlled by official veterinary permits, tests and quarantine
- Vaccinated animals are not allowed in the FMD free zone

IN THE EVENT OF AN OUTBREAK

- In the Free Zone, the stamping-out policy of the past will again be used in the future if an outbreak occurs
- Cordons will be erected around the infected area

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- Roadblocks on all roads leaving the infected area
- A 10 to 30 km radius of surveillance will be instituted around the infected property
- The area will be quarantined and the source as well as the spread of infection will be investigated
- No movement will be allowed to or from one property to another within the quarantine area

VACCINATION

- Only allowed in the Buffer Zone
- Vaccine is produced by Onderstepoort FMD laboratory
- Vaccine is only for official use, because all vaccinations are carried out by Veterinary Services' officials (therefore only restricted use)

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