

# Dourine of horses

## Susceptible species

Horses and other equids are considered to be natural primary hosts. Laboratory rodents (rats, mice, rabbits) and dogs are susceptible to experimental infection.

## Distribution area

It is assumed that the pathogen occurs in Southern and Southeastern Europe, parts of the Middle East, Asia, Africa, and South America. Germany has been free of dourine for many decades.

## Causative agent

Dourine is caused by *Trypanosoma (T.) equiperdum*, a protozoan parasite. The taxonomic classification of the pathogen within the order Trypanosomatida is the subject of scientific investigations.

## Transmission

Dourine is a classical venereal disease. Transmission of the pathogen occurs exclusively during coitus.

## Clinical picture

The severity of disease can vary from fatal outcome to spontaneous remission. Animals that survive the disease can become latent carriers. In acute cases, duration of the disease is two months, a chronic mild form can persist for several years. The clinical course is characterized by periodic episodes of fever, local edema of the genital organs and the udder, local edema of the

skin, paralysis of nerves (head, extremities), movement disorders, weight loss, emaciation, and anemia.

## Diagnostics

Detection of specific antibodies in blood serum is done by complement binding reaction, indirect fluorescence antibody test or ELISA. Direct pathogen detection is only possible in the acute phase of disease.

For more detailed information please refer to the “Amtliche Methodensammlung” (in German language only).

## Similar clinical pictures

Other viral, bacterial or parasitic pathogens can cause similar clinical pictures, e.g. coital exanthema, equine viral arteritis, equine infectious anemia, hemorrhagic purpura (strangles-related complication), contagious equine metritis, anthrax, surra (*T. evansi*), Nagana (*T. brucei brucei*), but also malnutrition, helminthosis, tooth problems and other chronic infections.

## Control

Since 1965, dourine has been a notifiable disease in Germany. To ensure freedom of disease within the EU, measures are stipulated in Commission Decision 93/197/EEC of 5 February 1993 on animal health conditions and veterinary certification for imports of registered equidae and equidae for breeding and production and in Council Directive 2009/156/EC of 30

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November 2009 on animal health conditions governing the movement and importation from third countries of equidae, last modified by Council Directive 2004/68/EC of 26 April 2004. Details are stipulated by the competent authorities of the federal states. Currently, a safe therapy leading to complete elimination of the pathogen is not known.

Further information: [National Reference Laboratory for Dourine](#)

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