



Introduction

Foot and mouth disease is a severe, clinically acute vesicular disease of cloven hoofed animals that is on the OIE list of notifiable diseases. It has the potential for fast and extensive spread and has severe economic consequences.

Foot and mouth disease has been known for a long time and was first described by an Italian in 1546. It spread from Europe to the Americas in the 1860s, starting in Argentina and then spreading from there.

Today, foot and mouth disease is endemic in many areas but not in North America (last seen in 1929 in USA and 1952 in Canada), the EU (free in 1991), Central America, Australia and New Zealand.

Various serotypes of the foot and mouth disease virus exist.

The virus

Foot and mouth disease virus is an aphthovirus and, as such, is a picornavirus. It can be grown in cell culture, which is important when it comes to vaccine production.

The foot and mouth disease virus is not zoonotic and has no public health significance. Hand, foot and mouth disease in man is caused by a different virus. One case of infection with foot and mouth disease in man was reported in the UK in 1966 and this was in a man who lived on a foot and mouth infected farm and drank raw milk from the farm. Other instances of people being PCR positive but not showing clinical signs have been reported.

Human infection is not important in the epidemiology of foot and mouth disease but people can play an important role in the passive spread of this disease, for example on clothing and boots.

Geographical distribution

Foot and mouth disease is endemic in large areas of Africa, Asia, the Middle East and South America, although some countries in South America are free of this disease. The disease crosses international boundaries and can enter previously free areas. More recently, the disease has been seen in Japan and South Korea.

Host range

Foot and mouth disease affects cloven hoofed animals including pigs and is of most significance in cattle, pigs, sheep, goats and water buffalo. In Africa wild life such as buffalo, impala, kudu, antelope, gazelle and wild boar play an important epidemiological role. In South America a similar, but lesser, role has been inferred for llamas and alpacas.

Other animals, for example hedgehogs, can be infected but have not been seriously implicated in the spread of this disease.

Delacon

Interheat

Kemin

LUBING

Olmix