What is malignant catarrhal fever and what causes it?

Malignant catarrhal fever (MCF) is a serious, often fatal viral disease of even-toed, hoofed animals (e.g., cattle, sheep, pigs). The disease is caused by a number of similar viruses, each maintained by a specific reservoir species. The most commonly seen forms of the disease are sheep-associated MCF and wildebeest-associated MCF. Malignant catarrhal fever is found worldwide, but its occurrence depends on the virus type and species present. The disease is a particular problem in zoo animals, farmed bison and farmed deer but cattle are also affected frequently in Africa and Indonesia.

What animals get malignant catarrhal fever?

Most wildebeest (in the wild and zoos) are considered infected, as are most sheep and goats (each with their respective MCF virus). These species usually do not show signs of infection or illness.

Clinical signs of disease are usually seen in cattle, water buffalo, bison, and many species of wild ruminants, including gaur, banteng, and deer. Malignant catarrhal fever has also been seen in domestic pigs, giraffes, and some species of antelope.

How can my animal get malignant catarrhal fever?

Transmission of MCF varies with the particular type of virus. The wildebeest form is mainly spread by wildebeest calves, which become infected during pregnancy, by direct contact or in aerosols during close contact with other wildebeest. Contamination of pastures may also occur. Infected calves, particularly those one to two months of age, shed the virus in nasal and eye discharge. Calves over the age of six months rarely shed the virus. Exposure can also occur by contact with pregnant or post partum wildebeest.

The sheep form of the disease is spread mainly by aerosol. The virus is shed intermittently in nasal secretions of infected lambs. The virus has also been found in the semen of rams. This form of the disease is rarely spread during pregnancy. Other species are exposed by direct contact with these infected lambs.

How does malignant catarrhal fever affect my animal?

Malignant catarrhal fever can have a number of clinical signs; however, some infected animals may show no signs of illness at all. Signs of illness may include fever, depression, weakness and diarrhea. Sudden death is possible. Infected animals may also have difficulty breathing, discharge from the eyes and noses, cloudiness of the eyes, as well as ulcers and crusting of the muzzle, mouth, udder and teats; the horns and hooves may slough off. Occasionally, animals may have incoordination and head pressing.

Can I get malignant catarrhal fever?

No. Humans are not at risk of developing malignant catarrhal fever.

Who should I contact, if I suspect malignant catarrhal fever?

In Animals – Contact your veterinarian immediately.

How can I protect my animals from malignant catarrhal fever?

Cattle and other susceptible animals should be kept separate from sheep, goats, wildebeest or other reservoir hosts, especially during birthing. African wildlife, particularly wildebeest, should be kept separate from susceptible animals such as cattle and bison. Any animals entering the herd should be tested for the disease. There is no vaccine available.

For More Information

CFSPH Technical Fact Sheets. Malignant Catarrhal Fever at http://www.cfsph.iastate.edu/DiseaseInfo/
