Need more information?

Reference Experts:

Dr Michael Baron
Institute for Animal Health
Pirbright Laboratory,
Ash Road, Pirbright, Woking
Surrey GU24 ONF
Telephone: (+44 1483) 232441
(direct: 231024)
Fax: (+44 1483) 232448
E-mail: michael.baron@bbsrc.ac.uk

Dr Geneviève Libeau
CIRAD/EMVT
Programme Santé animale,
TA 30/G Campus international
de Baillarguet,
34398 Montpellier Cedex 5
FRANCE
Tel: (33 (0)4) 67.59.37.98 Fax:
(33 (0)4) 67.59.38.50
Email: genevieve.libeau@cirad.fr

References:

1. *OIE Manual for the Development of Diagnostic Tests and Vaccines for Terrestrial Animals.* **http://www.oie.int/fileadmin/Home/eng/Health_standards/tahm/2.01.15_RINDERPEST.pdf**

2. Food and Agriculture Organization of the United Nations **http://www.fao.org/ag/againfo/programmes/en/grep/home.html**

3. *The Merck Veterinary Manual* **http://www.merckvetmanual.com/mvm/index.jsp?cfile=htm/bc/56300.htm&word=rinderpest**

4. Center for Food Security and Public Health Iowa State University **http://www.cfsph.iastate.edu/Factsheets/pdfs/rinderpest.pdf**

Key Facts

- **Rinderpest was known before the Roman era, when plagues of rinderpest killed hundreds of millions of cattle in Europe, Asia and Africa.**
- **There were attempts to vaccinate animals as early as 1744 in the Netherlands and England. An effective vaccine was developed by the beginning of the twentieth century.**
- **An outbreak of rinderpest in Belgium in 1920 was the impetus for international cooperation in controlling animal diseases, leading to the establishment of the OIE in 1924.**
- **An international campaign against rinderpest progressively reduced the number of countries affected and the disease was officially declared eradicated from the planet in 2011. Rinderpest is the first animal disease to have been entirely eradicated in the history of humankind.**

• 12, rue de prony • 75017 paris france
• tel. 33 (0)1 44 15 18 88 - fax 33 (0)1 42 67 09 87
• www.oie.int • oie@oie.int

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Rinderpest

What is Rinderpest ?

Rinderpest, also known as cattle plague, is a contagious viral disease affecting cloven-hoofed animals mainly cattle and buffalo. Rinderpest is caused by a virus of the family *Paramyxoviridae*, genus *Morbillivirus*. Many species of wild and domestic cloven-hoofed animals including sheep and goats, show milder symptoms of the disease when infected, but the mortality rate can reach up to 100 per cent in highly susceptible cattle or buffalo herds,.

The *OIE Terrestrial Animal Health Code* (2011) contains detailed recommendations on prevention and control of rinderpest (Chapter 8.12.). Rinderpest was one of the diseases for which the OIE established procedures of official recognition of the sanitary status of countries and zones.

Rinderpest is a listed disease in the *World Organisation for Animal Health (OIE) Terrestrial Animal Health Code* (2011; Chapter 1.2, Article 1.2.3) and must be reported to the OIE as per Chapter 1.1 Notification of diseases and epidemiological information.

General Disease Information Sheets

Rinderpest

Where is the disease found?

Rinderpest had historically occurred in Europe, Africa and Asia. The Americas and Oceania never faced rinderpest epizootics.

How is the disease spread?

Rinderpest is spread by contact between animals carrying the virus and susceptible animals. The virus is found in nasal secretions a few days before the clinical signs appear. As the disease progresses the virus is found in most body fluids and either death ensues, or the animal recovers, develops immunity and clears the virus from the body.

Other than cattle and buffalo, rinderpest can infect zebus, water buffaloes, African buffaloes, eland, kudu, wildebeest, various antelopes, bushpigs, warthogs, giraffes, sheep, and goats. Some wild animals can carry the virus without showing signs of disease and, in a few cases; (re) introduced the disease into domestic animal populations by contact.

What are the clinical signs?

In cattle, the most susceptible species, classical signs of the disease include fever, erosive lesions in the mouth, discharge from the nose and eyes, profuse diarrhea, and dehydration, often leading to death within 10 to 15 days. In other species rinderpest may show milder clinical signs.

How is the disease diagnosed?

The clinical signs especially in milder cases do not point specifically to rinderpest. Serological tests indicate animals exposed to the virus, while a definitive diagnosis is based on identifying the virus from blood or tissues, according to the standards in Chapter 2.1.15 of the *OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (2011).

What can be done to prevent or control this disease?

Should rinderpest ever be detected in its natural host again, a full animal disease emergency response would be needed. OIE Member countries agreed to follow guidelines for the safe storage and destruction of any remaining rinderpest virus under highy biosecure conditions.

Measures to control rinderpest in animals include:

- movement control,
- destruction of infected and contact animals,
- disposal of carcasses and infective material,
- sanitation and disinfection.

Animals that recovered from rinderpest have lifetime immunity and in the past vaccination has led to a continuous decline in the prevalence of rinderpest in the world.

A program named the Global Rinderpest Eradication Programme (GREP) was initiated in the 1980s. GREP was coordinated by the Food and Agriculture Organization of the United Nations (FAO), in collaboration with the OIE and major donors such as the European Commission; it based on the OIE surveillance and control guidelines and its official recognition Pathway to successfully control rinderpest.
Subsequently the world was officially declared free of rinderpest in 2011.

What is the Public Health Risk?

There is no public health risk, since Rinderpest does not affect people.

Disease-free Status

Rinderpest is a disease for which the OIE established official recognition of the sanitary status of countries. The OIE has defined a transparent, science-based and impartial procedure for the recognition of rinderpest disease status of Member Countries and non-OIE Member countries that have rinderpest susceptible livestock.