

Peste des petits ruminants (PPR)

What is Peste des petits ruminants (PPR)?

Peste des petits ruminants (PPR), also known as 'goat plague', is a viral disease of goats and sheep characterized by fever, sores in the mouth, diarrhea, pneumonia, and sometimes death.

It is caused by a morbillivirus in the family of paramyxoviruses, that is related to rinderpest, measles and canine distemper. Cattle and several wild ruminants have been infected most often experimentally, but goats and sheep are the usual targets.

PPR is a disease listed in the OIE *Terrestrial Animal Health Code*, and countries are obligated to report the disease to the OIE according to the criteria (OIE *Terrestrial Animal Health Code*).



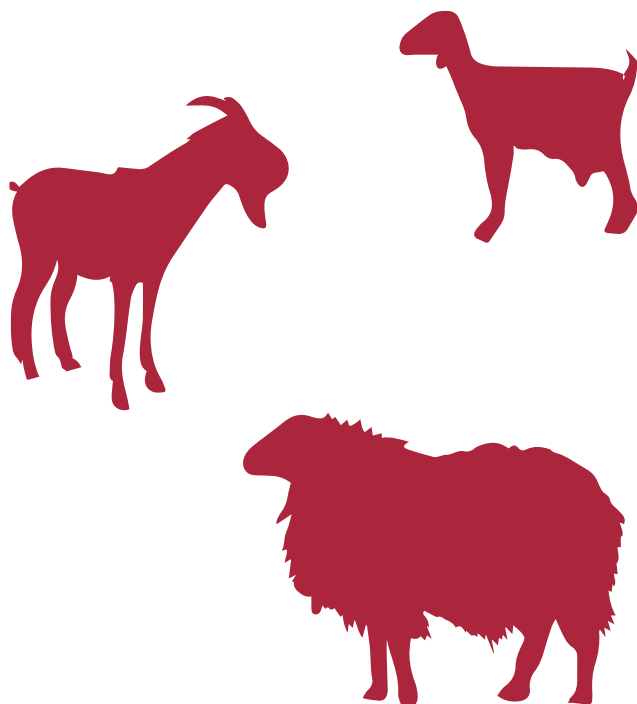
Where is the disease found?

The disease occurs in a band that spreads across Africa between the equator and the Sahara, through the Arabian Peninsula, the Middle East, south-west Asia and India. China first reported the disease in 2007 and it spread into North Africa for the first time in Morocco in 2008.

How is the disease transmitted and spread?

The virus is secreted in tears, nasal discharge, secretions from coughing, and in the faeces of infected animals. Therefore, close contact between animals, especially through inhalation of fine droplets that are released into the air when affected animals cough and sneeze will spread the disease. Water, feed troughs, and bedding can also be contaminated with secretions and become additional sources of infection, however the virus does not survive for a long time outside the body of a host animal.

Since animals excrete the virus before showing signs of the disease, it can spread by movement of infected animals.





What are the clinical signs of the disease?

Similar to Rinderpest in cattle, after an incubation period of 3-6 days, there is a sudden onset of fever, severe depression, loss of appetite, and clear nasal discharge. The nasal discharge becomes thicker and yellow, often becoming so profuse that it forms a crust that blocks the nostrils causing respiratory distress. The eyes may also become infected, causing eyelids to mat together with discharge. Tissues in the mouth can swell and ulcers form on the lower gums, dental pad, hard palate, cheeks and tongue. Severe diarrhea develops in some animals, resulting in dehydration and weight loss. Pneumonia is common in later stages. Pregnant animals may abort. The prognosis of peste des petits ruminants is poor and death can occur within five to ten days of the onset of fever.

Young animals are most severely affected, goats more than sheep. In its most severe form (peracute) animals are found dead. However, the disease can be mild or unapparent and circulate in a country causing little or no illness until susceptible goats are exposed.

How is the disease diagnosed?

The disease may be suspected when there is sudden onset of fever, nasal discharges, diarrhoea in sheep and goats, while cattle are uninvolved. Because the disease could resemble a great many common diseases including Foot and Mouth Disease, Bluetongue or Rinderpest, laboratory confirmation is important. Identification of the virus or serological testing is performed as outlined in the *OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*.

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What is being done to prevent or control the disease?

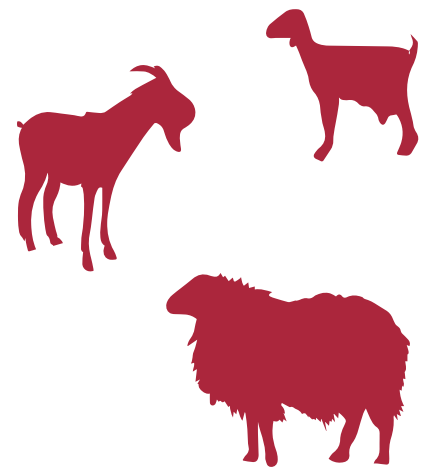
When the disease appears in a previously unaffected area, the standard disease control measures consisting of quarantine, movement control, sanitary slaughter, and cleaning and disinfection are applied. The virus is susceptible to most disinfectants.

There are no medications available to treat the disease, but supportive treatment may decrease mortality.

A vaccine is used where the disease is established and it provides good immunity. Because of the close relationship of PPR virus to Rinderpest virus, Rinderpest virus had been used as a vaccine, but with the current efforts to eradicate Rinderpest worldwide, it is no longer used.

What is the public health risk associated with this disease?

Humans are not affected by the virus.



More Information?

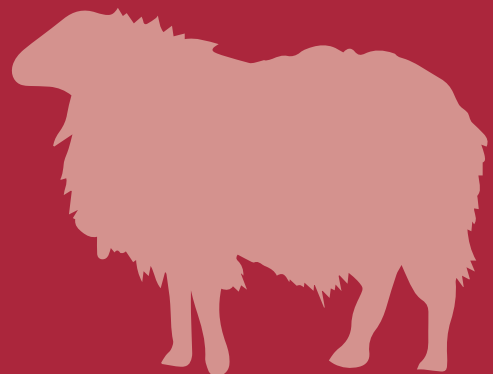
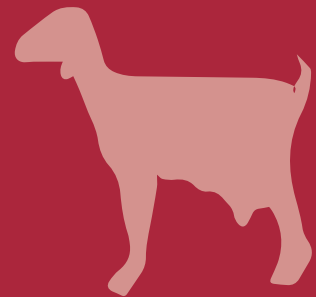
References:

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Key Facts

- PPR was first reported in the Ivory Coast in 1942, where it was called Kata (Pidgin for Catarrh).
- In 2007 China reported PPR for the first time.
- In 2008 an outbreak in Morocco was the first time the disease appeared in North Africa.
- An outbreak in a zoo in United Arab Emirates in 1987 affected gazelles, ibex, and gemsbok, the first outbreak in species other than sheep and goats.

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