

PPR (PESTE DES PETITS RUMINANTS) DISEASE IN GOATS AND ITS PREVENTION







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Farm Disinfection:

PPR virus can be killed by most common Disinfectants-Phenols, Sodium hydroxide 2% Vaccination:

- Live attenuated PPR vaccine is available.
- Names: PPR vaccine, Raksha PPR.
- **Availability:** 100 and 50 doses with diluent and freeze dried vaccine vials.
- Dose: 1 ml.
- Age group: 3 months' kids.
- Route: Subcutaneous route.
- **Immunity:** 3 years.



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- Whole blood in heparin or EDTA.
- Post mortem: Mesenteric and bronchial lymph nodes, spleen, large intestine and lungs.
- Samples of lungs, lymph nodes, intestinefor histopathology should be collected in 10% neutral buffered formalin
- These samples should be labelled with the history and transported in icepack/ chilled condition to laboratory for virus isolation and detection to confirm the disease.

Treatment:

Only supportive treatment to counteract secondary bacterial infection. One course of antibiotics (Ceftriaxone, Gentamycin), 5% dextrose, Multivitamins, Meloxicam can be given in affected animals.





Introduction:

Peste des petits ruminants (PPR) is an acute viral disease of goats characterised by fever, oculo-nasaldischarges, stomatitis, diarrhoea and pneumonia with foul offensive breath. Because of the respiratory signs, PPRcan be confused with contagious caprine pleuropneumonia (CCPP) or pasteurellosis. Once the disease comes, it causes heavy mortality and morbidity in goats affecting entire flock leading to severe economic losses to goat farmers.

In India, a live attenuated PPR vaccine based on the PPRV/Sungri/96 strain is availablecommercially but despite vaccination, PPR outbreaks are being reported goats regularly throughout the year. The national PPR control programme through vaccination is widely implemented in many states and vaccination of young animals with PPR vaccine is the only remedy to control this deadly disease in goats.

Common names:

Goat plague, Ovine rinderpest, plague of small ruminants, Kata

Cause:

PPR virus belongs to Morbillivirus genus of family Paramyxoviridae

Transmission:

- By close contact in goat herd/flock
- The virus is present in ocular, nasal, and oral secretions as well as feces.
- Inhalation of aerosols from sneezing and coughing animals.

Clinical signs:

- The incubation period is 4–6 days
- High fever (41°C/106°F), erosive stomatitis, conjunctivitis, gastroenteritis, and pneumonia, drymuzzle, oculo-nasal discharges,
- · Watery blood-stained diarrhea.



- Erosions-small pin-point red-greyish areas on the gums, dental pad, palate, lips, inner aspects of the cheeksand upper surface of the tongue.
- Eye, nose and mouth discharges with scabs or nodules around the mouth
- Death usually occurs 4–6 days after the onset of fever.
- High morbidity (up to 100%) and up to 90% mortality

Post mortem findings:

• Prominent crusty scabs along the outer lips and severe congestion of lungs due to interstitial pneumonia





- Erosive lesions may extend from the mouth to the reticulo-rumen junction
- Erosive or haemorrhagic enteritis
- Peyer's patches may be necrotic. Lymph nodes are enlarged, and the spleen and liver mayshow necrotic lesions.



Diagnosis

A tentative diagnosis of PPR infection can be made based on characteristic signs like mucopurulent nasal discharge, pneumonia, diarrhea, scaby lesions on tongue, around mouth and death of many animals in flock should be suspected of PPR.

Samples to be sent for diagnosis of PPR:

• Swabs of the eyes, nasal, mouth, tongue and rectal discharges.