Peste des Petits Ruminants (PPR) Factsheet



Introduction

PPR is one of the most important viral diseases of small ruminants. It opens the door to many other infections and has large impacts on animal production. It is common in many parts of Pakistan, with outbreaks often starting in December-February and reaching their peak in April, although they do not occur in the same location every year. Highest incidences are found in young stock less than two years old and can kill up to 90% of infected animals.

What is PPR/what causes PPR

PPR is an infectious disease affecting goats (especially) and sheep. It is caused by a virus that is closely related to the virus that causes rinderpest, a similar disease in cattle. Rinderpest was successfully eradicated from the entire globe in the last decade, and there are hopes that PPR can be similarly eradicated by 2030.

What signs are shown by animals affected by PPR

- Often many animals in a household or village are affected
- Runny nose and eyes, diarrhea, fever, stop eating, sores in mouth that get covered by a white scum
- Pneumonia, which can cause severe breathing difficulty
- In severe outbreaks, animals especially young ones die without showing any sign

How do animals get PPR and how is it spread?

- Disease spread through direct contact, which exposes new animals to the virus in secretions from infected ones (faeces, saliva, nasal discharges, tears, etc.). Animals can also be infected if they use water/feed troughs, bedding, etc used by infected animals
- Disease is often spread by movement of infected animals, some of which do not show clinical signs e.g. at mandis, grazing in communal areas, contact with sick animals within a village or with nomadic herds





Affected goat with runny nose & eyes; white scum in mouth of affected goat

How is PPR diagnosed?

Always suspect PPR if you see any combination of:

- Sudden onset of illness with fever, discharge from eyes/mouth/nose and diarrhoea
- Breathing problems/pneumonia
- High death rate
- Dead animals often have thickened, dark lungs, as well as darkened/reddened intestines or an enlarged gall bladder











Vets may take blood samples from sick and healthy animals to confirm the diagnosis

What to do if you suspect PPR in your animals/village

Who to contact

In case you suspect PPR call nearest local veterinary staff—Local government livestock dispensary/office, a professional private veterinarian or your livestock project area advisor

Treatment

- There is no specific treatment for PPR but animals may be treated with antibiotics for bacterial infections that often develop later in the illness
 - ✓ Commonly used antibiotics include penicillin or oxytetracycline. If you use antibiotics, make sure animals receive a full course of medication (treat once daily for at least 5 days).
 - ✓ Follow the guidelines for specific medications, but in general do not consume meat for 4 weeks or milk for 1 week after last treatment
- Vaccination is helpful—see 'Infection control' section, below
- Animals with diarrhoea need extra water; very sick animals can be gently drenched with water and electrolyte solution, which can be purchased from animal supplies shops
- Provide supportive care to sick animals, including good-quality feed; easy access to water; protection from extreme heat or cold; a clean & dry environment; soft bedding for animals that cannot stand

Infection control

- In case of disease outbreak, vaccination of animals is a good option to minimize disease in any healthy animal population. Nearest Government veterinary staff can be asked for PPR vaccination.
- During an outbreak, separate sick animals from healthy ones so that they do not spread PPR infection, and receive better care and feed.
- Feed sick animals <u>after</u> healthy ones, to avoid spreading the disease within your herd. Wash your hands thoroughly after handling sick animals.
- Use household bleach to disinfect feed troughs and equipment that has been in contact with sick animals.

Prevention & biosecurity

- Vaccination is the best way to prevent PPR—all goats and sheep should be vaccinated by experienced personnel, with priority given to young animals born since the last vaccination round
 - ✓ Try to make sure vaccination of new animals occurs before March, when disease risk increases.
 - ✓ Vaccines can be obtained from nearest Government Livestock department dispensary/office free of cost.
 - Keep the vaccine cool during use (try to use during the cooler part of the day and keep out of direct sun); store in a refrigerator
- Buy animals from a reputable source. Do not place sick animals in your herd—isolate them from other animals until they have been checked by a vet and are well again.
- If animals in other households are sick, do not allow your animals to come into contact with them
 or graze in common areas together









