



## Important diseases prevention practices in goat and sheep farm

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Goat and sheep rearing is common in rural India. It is an important source for income generation and poverty elevation. Goat and sheep not only provides milk and meat but wool, Mohair and Pashmina is also a source of income in some parts of India. Goat and Sheep milk and meat is a source of protein, Vitamin and many other essential minerals. Goat and Sheep are resistance to o programme.

### Some important diseases of goat and sheep:

**Blackleg :** Blackleg is caused by *Clostridium chauvoei*. The animals within 6 to 18 month of age are highly affected. *Clostridium chauvoei* mostly found in the gastrointestinal tract of the animals. The affected muscle part become blackish red in colour because of this is called as a Blackleg diseases. The spore of the Clostridium remains viable for many years in soil so the soil infection is a important source for infection. Infection in sheep generally takes place through skin wounds following shearing and docking. The important sign of the diseases are fever, lesion in the body, loss of appetite etc. Penicillin is the drug of choice for sudden onset of diseases. The vaccine containing Clostridium species should be used.

**Enterotoxaemia :** It is also called as a pulpy kidney. It is mainly caused by clostridium perfringens type C and D. It affects animals in a high state of nutrition on a lush feed, grass or grain. It is an acute disease of sheep of all ages, but primarily of lambs. Sudden death occurs due to the infection. The important clinical sign of the disease are fever, diarrhea, paralysis and loss of appetite. Pasture of the animals is highly affected due to the toxin effect on

the brain. Suphadimidine may be a highly effective for treatment. In treatment use of probiotics, electrolytes supplementation, and antibiotic are common in practice. In managerial approach we can reduce feed intake and proper vaccination.

**Tetanus :** Tetanus disease occurs in the Sheep and Goat by *Clostridium tetani*. It is an acute, infectious disease manifested by tonic convulsions of the voluntary muscles. The bacteria may remain for many years in the soil. The most important clinical sign of the diseases are stiffness and muscle spasm in animals. In sheep, it commonly follows routine operations such as shearing, docking, castration and even vaccination Tetanus antitoxin is usually administered but is of little value when the signs have appeared. However, we can prevent the occurrence of disease with proper care and management.

**Sheep pox :** It is a important viral disease in small ruminants which causes many eruption in whole body. Sometimes inflammation on the upper respiratory tract also seen. Spread may be by contact with infected animals and contaminated articles, or by inhalation. The normal incubation period of the disease is 6 to 10 days. The important early sign of the disease are the increase in the body temperature, lack in feeding and watering.

**Blue tongue :** Blue tongue is a insect transmitted disease mainly Cullicoides. The virus of the disease has many serotypes but only some are effective. This disease affects all domestic animals. The important clinical sign of the disease



**Table 1 : Some important causative agents of many diseases in goat and sheep**

Sr. No.	Type of infections	Causative agents
1.	External parasites	<i>Melophagusovinus</i> , <i>Damalinea</i> , <i>Chorioptes</i> , <i>Sarcoptes</i> , <i>Calliphora</i> , <i>Demodex</i> – <i>Lucilia</i> , <i>Chrysomya</i> , <i>Psoroptes</i> ,
2.	Roundworms	<i>Oesophagostomum</i> , <i>Haemonchus</i> , <i>Trichostrongylus</i> , <i>Chabertia</i> , <i>Nematodirus</i> , <i>Bunostomum</i> , <i>Trichuris</i> , <i>Ostertagia</i>
3.	Tapeworms (adult and larvae)	<i>Taenia multiceps</i> , <i>Thysanosoma aactinioides</i> , <i>Taenia ovis</i> , <i>Taenia hydatigena</i> , <i>Moniezia expansa</i> , <i>Echinococcus granulosus</i>
4.	Flukes – Trematodes	<i>Fasciola hepatica</i> and <i>Fasciolagigantica</i>
5.	Protozoa - Coccidia	<i>Eimeria</i>

are inflammatory reaction in the mouth and tongue. The body temperature may increase upto 41°C to 45°C. It can occur when animals are not vaccinated and are permitted to graze near water when there are a lot of midges. Prevention involves good management and vaccination. Stable animals in the late afternoon where possible, and do not let them graze in the areas where Vaccination requires 3 vaccinations, 4 weeks apart, before the late summer.

**Pasteurellosis** : Caused by *Pasteurella haemolytica* is a aerobic and non motile organism. Primary infection occurs at the lower respiratory tracts. Preventive vaccination is recommended, after which the animals should not be sent out for grazing for 2-3 days. The main drugs like Ampicillin, ceftiofur, Danofloxacin, trimethoprim and sulfa drugs are highly effective.

**Foot and mouth disease** : This disease is transmitted by contact with the diseased animal which is highly communicable. The virus may remain in the contaminated soils, feed and fodder. Viruses may transmitted through respiratory and digestive route. Many blisters and vesicles formed in the different part of the body like mouth, tongue, gums, chip, nose, palate etc. Animals suffer during the feed intake as the blisters causes' pain. Antibiotics are recommended to check secondary infections. Vaccination is the best control of the diseases.

**Contagious ecthyma** : Contagious ecthyma is a zoonotic disease also called sore mouth. It is caused by poxi virus which is related to the pseudocowpox and bovine stomatitis virus family. The lesions may present under als. The virus gains entry through unobserved wounds on the lips. Iodine solution can be used for lesion treatment. Antibiotics are recommended to check secondary infections.

**Ruminal tympany (Bloat)** : It is the over-distension of the left flank either due to free gas or froth which is caused due to "greedy feeders" when lush green pasture is available. Certain weeds may create problems in the rumen. Oral administration of sweet oil with turpentine oil or at times with formalin is advised. Use of sodium bicarbonate may useful for balancing the ruminal pH.

**Pneumonia** : Pneumonia is a common respiratory problem in the sheep and goat. It is characterized clinically by increased respiration, coughing and abdominal breathing. There are many causes of this disease but important are- Crowding, under-nutrition, poor hygiene, sudden environmental changes and increase in humidity. It occurs due to many effective and non-effective agents. Another type of pneumonia is drenching pneumonia caused to wrong and forceful drenching operations. If some fluid has erroneously entered the animal's respiratory tract, its

head should be lowered immediately and slapped a few times. Many medicines like ampicillin, penicillin, oxytetracycline, ceftiofur can be used for treatment. Provide sufficient space to the animals and separate new arrival animals for some days. Provide good quality feed and fodder. Avoid transportation without any proper managerial applications.

**Rumen acidosis** : Ingestion of large amounts of highly fermentable carbohydrate feeds causes excess production of lactic acid in the rumen. The important symptoms are diarrhea, bloat, lack of appetite, teeth grinding and muscle twitching. The use of sodium bicarbonate and calcium carbonate by oral administration is advantageous which has the capacity of neutralize the acidity of Rumen. We can also use the anti inflammatory drugs.

**Intussusception** : It occurs commonly due intestinal problems, nodular worms, change in feed and local. Emergency surgery is the only rational treatment. It may cause a sudden death of animals. We should treat immediately and if possible surgery may be recommended.

**Deficiency diseases** : A number of deficiency diseases which can be prevented by proper formulation of ration through supplementation of adequate amount of minerals.

**Poisoning**: Organochlorine compounds, Organophosphorous compounds, Snake bites.

### **Keeping animals healthy through following better management :**

- Purchase of healthy herd and sound feeding practices
- Sound principles of sanitation, cleaning of utensils and maintenance of hygiene surrounding
- Judicial and appropriate use of dependable vaccines, sera and proper deworming
- Include prevention via- hand hygiene/hand washing, cleaning/disinfection/sterilization, vaccination, Surveillance, monitoring/investigation of demonstrated or suspected spread of infection.

Along with the above mentioned preventive measures some other factors taken into consideration are:

- By recognising the important diseases in your area you can know best how to prevent and treat them
- As soon as outbreak occurs-
- Segregate the sick animal and Avoid grazing in common place
- Stop animal, animal product, vehicles to come into the livestock farms
- Provide foot disinfectants, dips to gear up sanitation and hygiene.

**Isolation and quarantine** : Isolation of animals which are known to be or suspected to be affected with contagious

**Table 2 : Vaccination schedules for sheep and goat**

Sr. No.	Diseases	Vaccination time	Route
1.	Foot and mouth disease	6-8 weeks, repeat every 6-9 months	s/c or i/m depending on the vaccine
2.	Enterotoxaemia	3-4 months, repeat after 15 days and then annually	2.5ml s/c
3.	Hemorrhagic septicaemia	3-4 months, repeat annually	1ml s/c
4.	Anthrax	4-6 months, repeat annually	0.5 ml s/c at tail fold
5.	Tetanus	3-4 months, repeat at 6 months and then annually	0.5 - 1 ml s/c or i/m

diseases. Segregation of apparently healthy animal being brought into herd for the first time is called quarantine. These practices should be done for prevention of the diseases in other healthy animals.

piperazine salts, thabendazole, phenothiazine, hexachloroethane, carbontetrachloride, hexachlorophene etc.

**Deworming and vaccination :** Deworming agents are

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