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Keratoconjunctivitis (Pinkeye) in Goats

Introduction

Pinkeye (keratoconjunctivitis) is the inflammation of the inside of the eyelid. In goats, pinkeye is primarily caused by the microorganisms *Mycoplasma conjunctivae* and *Chlamydia*. These are not the same microorganisms that cause pinkeye in cattle (*Moxarella bovis*), so the vaccine used to prevent pinkeye in cattle is useless in goats.

Pinkeye is a highly contagious infection that spreads through contact. Outbreaks frequently occur when new goats are introduced to the herd, when they are transported or relocated, and when goats experience severe stress due to very dry or cold weather. Infection spreads easily from one eye to the other and from animal to animal. Therefore, goat producers are encouraged to wash their hands often and to wear gloves when applying treatments. In an outbreak, more than 80 percent of the herd can contract the infection. The treatment will be costly, thus increasing cost production.

Diagnosis, Treatment, and Prevention

Pinkeye progresses rapidly once a goat is infected. Signs of pinkeye include:

- Squinting
- Watery, red, swollen eyes
- Formation of new blood vessels
- Cloudiness in white part of eyes
- In severe cases, wound-like ulcers may appear in the eyes

As pinkeye progresses, the eyes become redder. Goats also experience pain, swelling, and tearing in the eyes; yellow or green pus will drain from the eyes and dry into crusts. Pinkeye can cause temporary blindness in goats, or permanent blindness in severe and untreated cases. Goats with pinkeye may experience weight loss and decreased performance.

Diagnosis

Pinkeye is diagnosed by clinical signs, and by culture or isolation of the microorganisms from eye secretions. Swabs from infected animals should be sent to a laboratory for isolation and identification of causal agent. Laboratory evaluation of scrapings that test positive for pinkeye will reveal *Mycoplasma conjunctivae* or *Chlamydia* microorganisms. Treatment should be specific to the microorganism identified.

Treatment

In most cases of pinkeye, the infection is resolved naturally. However, treatment should be applied in severe cases.

- Immediately isolate sick goats from the herd. The microorganisms that cause pinkeye can be spread to healthy animals through contact.
- Flush eyes with sterile saline.

Goat displaying pinkeye symptoms

- Consider using an antibiotic. The injection Oxytetracycline has produced positive results. When infection is caused by *Mycoplasma conjunctivae*, the use of Tylosin (200 mg/head/day) has been reported as effective. If the infection is caused by *Chlamydia*, treat with penicillin. Applying the antibiotic ointment Terramycin to eyes has been shown to be very effective. Prevent contamination of the entire herd by feeding and treating sick animals ***after*** feeding healthy animals.
- Always wear surgical gloves when treating sick animals. When using antibiotics, either subcutaneous (under the skin) or intra-muscular, be aware that the antibiotic can pass through the milk and can leave a residue in the meat. Ask a veterinarian what the withdrawal period should be after antibiotic use.
- Provide clear water and good feed to sick animals. Sick animals can be temporarily blinded and may not be able to easily reach food and water.
- Controlling flies is also essential to preventing the disease from spreading.

Prevention

To date, no vaccine exists to treat pinkeye in goats. To help prevent the disease:

- Always purchase animals from fairly clean grounds.
- Minimize transportation stress.
- Prevent stress when managing the herd because stress increases the hormone cortisol, which lowers immunity.
- Quarantine newly purchased animals to avoid the possibility of introducing sick animals into the herd.

NOTE: Some products mentioned in this article may not be approved for use in meat or dairy goats. Therefore, their use may be considered extra-labeled. Consult a veterinarian before using extra-labeled products.

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Maria Leite-Browning, DVM, MS, *Extension Animal Scientist,* Alabama A&M University

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