



TETANUS

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While tetanus is one of the oldest diseases described in veterinary medicine there are many people that have a misunderstanding of the disease. I hope these short paragraphs will clear up some of the misunderstandings that exists.

The disease tetanus is caused by a bacteria called *Clostridia tetani*. This bacteria exists in soil and manure in all areas of the world. Even though the bacteria is found everywhere it is not a problem unless it enters a sheep through a wound. The bacteria grows in the absence of oxygen therefore open bleeding wounds are not a concern but puncture wounds such as from a nail or elastrator bands which stop blood flow create an ideal environment for the proliferation of the bacteria. *Clostridium tetani* produces a toxin, which binds to and affects nerves causing muscle rigidity, increased sensitivity to light and noise and ultimately death. Since penicillin is effective against *Clostridia* we recommend 2 cc at docking or castrating.

There are two types of products available for protection. The first is tetanus toxoid. This is a vaccine which stimulates the animal to produce antibodies against the tetanus toxin. If a properly vaccinated animal gets a puncture wound it will have adequate antibodies to inactive the toxin and the sheep will not be affected. The vaccine requires 2 doses, 4 weeks apart initially, then an annual booster. It is very effective to vaccinate pregnant ewes which then pass on colostral immunity to their lambs. Tetanus toxoid is very effective, cheap and convenient.

The second type of product is tetanus antitoxin. This contains antibodies from previously vaccinated animals. This product should only be used as treatment for an affected animal or possibly prophylactically at docking if the farm has a severe problem. The antitoxin provides protection for only 7-14 days.

Treatment of affected animals is generally unrewarding as the disease is usually fatal. Antitoxin and penicillin should be administered and the lamb should be confined to a dark, quiet area.