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TETANUS

WHAT IS TETANUS?

Tetanus is an often fatal bacterial disease caused by a toxin produced by the organism *Clostridium tetani*. The bacteria is found in soil and droppings and is present all over the world. The bacterial spores can survive in the environment for long periods of time and although harmless in the ground, when bacteria enter the body through wounds in the skin, severe illness can occur. The tetanus bacteria do not need oxygen to survive so they multiply rapidly in the damaged tissues at the injury site.

HOW DOES IT AFFECT ANIMALS?

All grazing animals are susceptible to the toxins produced by *Clostridium tetani* especially after standard management practices such as castration, dehorning, calving, wounds and dentals. Likewise, tetanus is also often seen in working and hunting dogs that are commonly wounded or may have grass seed abscesses. Of all animals, horses are particularly sensitive.

Once the bacteria is inside a wound and if the conditions are favourable (ie. reduced tissue oxygenation), the spores germinate and produce a powerful toxin that affects the central nervous system. The toxin causes spasmodic contractions of the muscles and death often comes from respiratory failure. Most commonly, symptoms appear approximately 10d after the injury but there can be a delay of several weeks.

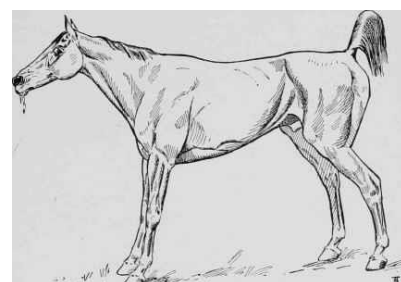
SIGNS OF TETANUS

Tetanus attacks the animal's central nervous system with signs starting out as being as simple as a change in way your animal's moves and stands at rest to progressive muscle stiffness, spasms, convulsions, recumbency and death. Initial signs in most animals include:

- Tail may be stiff and stand straight out
- Ears stand erect and skin may bunch together across the forehead
- Rigid muscles with a classical 'saw-horse' stance
- Eating difficulties
- Anxious facial expression caused by facial muscle stiffness
- Hypersensitivity to noise and light
- Third eyelid protrusion

CAN TETANUS BE TREATED?




If diagnosed early, animals may be treated with intensive care hospitalisation, large doses of antibiotics and tetanus antitoxin injections. Dogs have a reasonable survival rate when detected early due to their easier ability to hospitalise. Treatment is demanding and highly costly and some owners are faced with having to euthanase their animals, particularly horses, on humane grounds.



HOW DO I PREVENT AGAINST TETANUS?



Tetanus is an easily prevented disease in all animal species. Vaccinations can be administered by a veterinarian or yourself and are very simple to give.

Below is a list of common vaccines for horses and cattle that will protect against tetanus. If you wish to vaccinate your dogs against tetanus, please speak to your local veterinarian for advice.

<u>EQUINE VACCINES</u>		
 Equivac T	Tetanus only (long-term ongoing protection)	1 st – any age (>12wks) 2 nd – 1month later Ongoing – every ~4yrs
 Equivac TAT	Tetanus Anti-toxin (short-term immediate protection)	When immediate protection is required
 Equivac 2in1	Strangles + Tetanus	1 st – any age (>12wks) 2 nd – 2wks later (or EquivacS) 3 rd – 2wks later Ongoing – every 12m

Mares should receive their annual booster 1-2m prior to foaling to ensure high antibody levels in colostrum to protect foal for the first 2-3m of its life

- . foals from vaccinated mothers = vaccinate from 3m of age*
- . foals from unvaccinated mothers = tetanus anti-toxin at birth, vaccinate from 6wks of age*

<u>CATTLE VACCINES</u>		
 Ultravac 5in1	Tetanus, Blackleg, Pulpy Kidney, Black Disease, Malignant Oedema	1 st – any age (>6wks) 2 nd – 4-6wks later Ongoing – every 12m
 Ultravac 7in1	Tetanus, Blackleg, Pulpy Kidney, Black Disease, Malignant Oedema Leptospirosis	1 st – any age (>4-6wks) 2 nd – 6wks later Ongoing – every 12m

*This information sheet is not intended as a substitute for a veterinary consultation.
It is recommended that a consultation be arranged with a veterinary practitioner
if you have any concerns with your herd or animals health.*