



Rochester Veterinary Practice, 72 Lowry Street Rochester 3561, Phone (03) 54842255 admin@rochyvet.com.au

Botulism and Mixer Wagons

Botulism is a neurological disease caused by bacteria that produce toxins that cause paralysis. The bacteria proliferate in warm enclosed environments such as animal carcasses and decaying vegetation in hay bales or silage stacks.

Cows get botulism when they eat material contaminated with the toxin. The toxin is absorbed from the gut into the bloodstream where it blocks the junction between the nerves and muscle rendering the animal paralysed.

Botulism affected animals show a range of signs ranging from being floppy, weak and wobbly with drooling and tongue paralysis through to down cows that are unable to rise and do not respond to treatment with calcium.

There is no effective treatment for botulism other than good nursing. It is often fatal.

In Australia we see cases of botulism in extensive situations where cattle chew on bones of dead animals often because they are deficient in phosphorus. Cattle in northern Australia are routinely vaccinated against botulism.

The other situation where we see botulism is in more intensive systems where cattle are given feed that has been contaminated with dead mice, rabbits or foxes or spoiled silage that has not reached a low enough pH.

The significant risk in our systems is for people that use a mixer wagon that will mix any botulism toxin throughout the feed. In instances where this has occurred the outcomes have been catastrophic.

Prevention of botulism relies on avoiding having dead animals in hay and silage and keeping feed quality high. This is not always possible, so it is worth thinking about vaccinating against botulism.