

Activity 4

The table below provides an overview of the most common bacterial infections, the effects of each, possible causes and preventive treatments, if available. The list provides information that highlights why a preventive vaccination program is important if bacterial infections are to be avoided in a herd.

Disease name	Effect(s) on cattle	Possible cause(s)	Preventive treatment
Anthrax (Legally notifiable disease)	Sudden death. Cattle usually found dead with bloodstained discharge at the nose, mouth and anus. Highly infectious. Can infect humans.	Bacteria cause infection via food, or by being breathed into the lungs or through cuts. Usually occurs in dry summers.	Vaccination. All suspected cases must be reported.
Black disease	Infection of the liver. Pain in the abdomen, depression, death in 1- 2 days.	Clostridial infection in the liver precipitated by liver fluke damage.	Vaccination. A '5 in 1' vaccine prevents the five clostridial diseases listed here.
Blackleg	Infection of muscles with severe swelling, lameness, depression, fever, death in 12- 36 hours.	Clostridial infection caused by ingestion of bacterial spores on feed. Spores survive for long periods in the open.	As above.
Botulism	Muscle weakness, lack of coordination, stumbling, going down, tongue paralysed. Sudden death.	Clostridial infection caused by eating spores in carrion.	Vaccination.
Brucellosis	Inflammation of genital tract, aborted foetuses, sterility, infertility.	Spread through vaginal discharges and milk. Infection caused by eating contaminated fodder or pasture.	Currently eradicated in Australia.

Disease name	Effect(s) on cattle	Possible cause(s)	Preventive treatment
Ephemeral fever or three -day sickness	Muscle stiffness, drooling, animal may go down and die from dehydration or starvation.	Viral disease spread by mosquitoes and perhaps other biting insects.	Not usually treated in larger herds. A vaccine is available.
Johnne's disease	Wasting, loss of condition and scouring, lasting weeks to months. Usually destroyed due to poor condition.	Bacterial infection of the intestines.	Responds poorly to treatment. Ask your vet about control measures, if required for your property.
Malignant oedema (Gas gangrene)	Infection of a wound, with fever, stiffness, depression, weakness, death in 1-2 days.	Clostridial infection entering wounds, such as castration.	Vaccination using the '5 in 1' vaccine.
Pulpy kidney	Usually affects calves, infecting the intestines. Variety of effects, including scouring, paralysis, convulsions, bellowing and death in a few hours to 3 days.	Digestive upset allows growth of the bacteria and release of toxins.	As above.
Tetanus	Stiffness, unsteady gait, muscle spasms, lock- jaw, death in 5-10 days.	Clostridial infection entering wounds, e.g. castration.	As above.
White scours, E coli, Salmonellosis	Scouring in young calves. Depression, loss of appetite, possible death.	Bacterial infection of the intestines with E coli, or salmonella species.	Antibiotics.