

# FAQs

**Blackleg is a generally fatal bacterial disease of young cattle or sheep of any age. The disease is seen as acute, localised inflammation of muscle tissue due to growth of the blackleg organism. This is followed by generalised toxæmia or poisoning of the animal causing rapid death. It can affect cattle and sheep; cattle 6 to 18 months old are most commonly affected.**

## **What causes the disease?**

Blackleg is caused in most cases by the bacterium, *Clostridium chauvoei*. *Clostridium septicum* or *Clostridium novyi* are less common causes.

## **How does the animal become affected?**

Like all clostridial bacteria, *C. chauvoei* survives in the environment as a durable spore. The spores can survive in soil for many years. They are ingested from pasture by the animal, enter the bloodstream and lodge in the muscle. They can remain dormant without causing ill-effect. In cattle, the disease is thought to be caused by excessive bruising or excessive exercise. This causes the spores to germinate, multiply and cause the disease. Blackleg in sheep is frequently associated with wounding as a result of shearing, tail docking, castration, injury to ewes at lambing or infection of the navel soon after birth.

## **What does the organism do?**

Growth of the bacteria causes acute, localised inflammation of muscle tissue. Affected muscles, often in the leg, are blackish-red in colour, hence the disease is called "blackleg." Growth of the organism leads to generalised toxæmia or poisoning and rapid death.

## **What are the clinical signs of blackleg?**

There is a sudden onset of fever, depression and a loss of appetite. If the affected muscles are in the leg, the animal will become lame. The leg may be swollen, hot and painful in the affected area. Limb muscles are the most common site of infection although muscles anywhere in the body, such as the tongue, can also be involved. A crackling sensation may be noted, when the skin over the affected area is pressed; this is due to gas formation in the tissue.

## **Which animals are most likely to get blackleg?**

Young cattle between 6 to 18 months old in good condition are mostly affected. However, younger calves and occasionally, older cattle can also become infected. Sheep of any age can be affected.

## **Will the animals recover?**

Very few affected animals survive. Death usually occurs within 48 hours of symptoms being noted. Animals are often found dead.

## **How do we diagnose blackleg?**

Lameness, depression, loss of appetite and a hot painful swelling on a limb which crackles when pressed may indicate blackleg. Later, the skin over the swelling will become cold, dry and leathery. In areas where blackleg is a known problem, it should be suspected in cases of sudden death. Post-mortem examination usually reveals, somewhere in the body, an area of dark red, dry-looking muscle containing small bubbles of gas. The diagnosis should be confirmed by a veterinarian, preferably by a laboratory examination of tissues from affected animals.

## **Is there an effective treatment?**

In some cases large doses of appropriate antibiotics can result in a cure. Veterinary attention in the early stages can therefore be considered. Treatment is generally unsuccessful.

## **Can blackleg be controlled or prevented?**

Vaccination is the only effective way to control blackleg: Glanvac<sup>®</sup> 6, Glanvac<sup>®</sup> 6B12 and Glanvac<sup>®</sup> 6SB12 will protect sheep against blackleg. In cattle, Ultravac<sup>®</sup> 5in1 can be used, or Ultravac<sup>®</sup> 7in1 if protection is also required against leptospirosis.

## **What vaccination programs are recommended?**

For previously unvaccinated cattle and sheep, the primary course consists of 2 doses ideally given 4–6 weeks apart in cattle and 4 weeks apart in sheep. This should be followed by a booster dose 12 months later. Annual boosters should be done about a month before calving or lambing so that passive immunity is transferred from dam to offspring. This will protect them in the first vulnerable period of life prior to them receiving their first vaccination at marking time.

For complete directions refer to the product label. Consult your veterinarian or animal health consultant for advice on specific vaccination programs.

**SPECIAL NOTE:** Carcasses of animals suffering blackleg should be burned or buried deeply to limit contamination of the area.

## **What are the correct dose rates?**

Glanvac<sup>®</sup> 6 1mL for sheep/1mL for goats\*  
Ultravac<sup>®</sup> 5in1 1mL for sheep/2mL for cattle  
Ultravac<sup>®</sup> 7in1 2.5mL for cattle

\* Glanvac<sup>®</sup> 6 & Glanvac<sup>®</sup> 12 are registered for goats.