

# ANTHRAX SPORE VACCINE

NONENCAPSULATED  
LIVE CULTURE

## GENERAL INFORMATION

Anthrax Spore Vaccine is prepared with a relatively nonpathogenic, unencapsulated variant strain of *B. anthracis*, originally developed at the Onderstepoort Laboratory, Pretoria, South Africa and used with excellent results throughout South Africa, England, India and in many other countries. Extensive use in recent years in the United States has been with most gratifying response. The vaccine consists of viable spores suspended in diluent containing saponin. It is fully tested for purity, dissociation, spore count, safety and potency prior to release for sale.

Anthrax occurs in all parts of the world. It is an acute, febrile infection that has a rapidly fatal course. It is one of the oldest and most destructive disease of livestock and has caused the loss of many human lives as well.

The specific cause of anthrax is a micro-organism known as *Bacillus anthracis*. The organisms are highly virulent and once access to the animal body is gained, they multiply quickly, invade the blood stream and produce a rapidly fatal blood infection. In the presence of oxygen the bacilli form spores which are remarkably tenacious, highly resistant to heat, low temperatures and chemical disinfectants, retaining viability for many years in both soil and water and upon hides or contaminated objects held in storage. Animals of all species are susceptible to anthrax in some degree. Cattle, horses, sheep and goats are those most frequently affected. Swine apparently possess some natural resistance but anthrax does occasionally appear in hogs. Dogs, cats and wild animals may become infected under some conditions. Mice and guinea pigs are highly susceptible.

Symptoms of anthrax vary according to the species of animals and the acuteness of the attack. The average period of incubation under natural causes is indefinite ranging from 24 hours to as much as 5 days or more. The acute form, most common in cattle, sheep and goats is characterized by its sudden onset and rapidly fatal course. Affected animals present a picture of cerebral apoplexy—sudden staggering, difficult respiration, trembling, collapse with convulsive movements and death which may occur without evidence of illness. Swellings sometimes appear in different parts of the body, such as the throat and tongue, particularly in affected swine.

## DIRECTIONS

### WHEN TO VACCINATE

Do not vaccinate within 60 days before slaughter. In emergency conditions require vaccination of animals reaching market age and condition these should not be offered for slaughter in less than 60 days after administration of the vaccine.

In those areas where anthrax is an annual problem, it is advisable to vaccinate about 4 weeks prior to the time the disease usually appears. If an outbreak occurs, all animals not showing clinical symptoms should be vaccinated. Not all such animals may be fully protected but further spread of the disease may be stopped by promptly following this procedure.

### DOSAGE AND ADMINISTRATION

The recommended dose for all domestic farm animals is 1 ml. In heavily contaminated regions a "booster" injection 2 to 3 weeks after the first dose is administered is recommended.



The region of the neck just in front of the shoulder is a convenient site for administering the vaccine to cattle and sheep. Horses and mules may be vaccinated subcutaneously in the middle portion of the neck or in the brisket at a time when the animals are not being heavily worked. A light to moderate swelling may appear at the site of injection. This will disappear after

Anaphylaxis (shock) may sometimes follow the use of products of this nature. Epinephrine, or equivalent, should be available for immediate use in these instances.

## ACCIDENTAL HUMAN EXPOSURE

This is a live nonencapsulated variant of *Bacillus anthracis* that has been shown to be pure, safe, and immunogenic. However, because humans are susceptible to anthrax the product should be carefully handled to avoid exposure. If the vaccine should be accidentally injected, ingested, or exposure should occur otherwise through the conjunctiva or broken skin, consult a physician immediately.

## OTHER INFORMATION

1. Store in dark at 2° to 7° C.
2. Sterilize needles and syringes by boiling in clean water.
3. Use entire contents when bottle is first opened.
4. Burn this container and all unused contents.
5. Conveniently packaged in 10 ml., 25 ml., and 50 ml. sizes.



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