## Somnu Shield®

# Tech Specs

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## Haemophilus Somnus Bacterin

For use in healthy cattle, 3 months of age or older, as an aid in the prevention of disease caused by *Histophilus somni*.

#### **Broad Spectrum**

Somnu Shield is formulated from multiple isolates of highly pathogenic bacteria recovered from brain tissue, aborted fetal tissue and respiratory tracts of infected cattle involved in field cases. The bacterin is adjuvanted with a highly refined aluminum hydroxide for maximum antigenicity and syringeability.

#### **Safe and Effective**

H. somni isolates are inactivated using a special process that retains their potency.

#### Convenient

A 2 mL dose provides ease of administration to animals.



#### Somnu Shield

**INDICATIONS:** For use in healthy cattle, 3 months of age or older, as an aid in the prevention of disease caused by *Haemophilus somnus*. This product has not been tested in pregnant animals.

ADJUVANT: Aluminum hydroxide.

**DIRECTIONS:** Shake well before using. Administer 2 mL intramuscularly or subcutaneously. In accordance with Beef Quality Assurance guidelines, the recommended route of administration is subcutaneously (under the skin) in the neck. Repeat in 2 to 3 weeks. Revaccinate annually or as recommended by your veterinarian.

**PRECAUTIONS:** Store out of direct sunlight at 2° to 8° C (35° to 46° F). DO NOT FREEZE. Do not mix with other products, except as specified on this label. In case of human exposure, contact a physician. Use entire contents when first opened. Do not vaccinate within 21 days prior to slaughter. Anaphylactic reactions may occur. Symptomatic treatment: Epinephrine.

#### TECHNICAL DISEASE INFORMATION<sup>1</sup>

Haemophilus somnus, renamed Histophilus somni by the scientific community, has long been recognized by veterinary researchers, diagnosticians and practitioners as a major cause of death in feedlot calves. H. somni can cause an acute, often fatal, systemic disease that involves the respiratory, cardiovascular, musculoskeletal or nervous systems. The organism causes disease by blocking capillaries, thereby restricting blood flow to vital organs.

H. somni infections occur most commonly in stress situations such as when cattle are grouped closely together in feedlots, confined dairies, or when gathered for shipping or assembled for grazing fall and winter pasture.

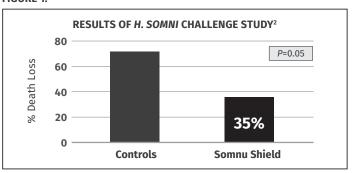
All organs of the animal's body can be affected by *H. somni*. Even if the animal is treated with antibiotics and recovers, damage due to loss of blood supply to various body organs can cause chronic, debilitating disease problems. Common manifestations of this damage include arthritis, abortion and sterility.

The disease usually occurs 1 week to 1 month after cattle are grouped together. During an outbreak, some cattle will show signs of encephalitis, including blindness, staggering and convulsions. Without prompt treatment with antibiotics, most of these animals will die. The brain damage caused by *H. somni* is irreversible, so even if the animal is treated and survives, it may have to be culled.

Concurrent with the encephalitis outbreak, other cattle may develop pneumonia. This pneumonia is indistinguishable from viral and other bacterial pneumonia; thus, *H. somni* pneumonia can be easily misdiagnosed.

As noted in Figure 1, death losses from an *H. somni* infection can be greatly reduced by vaccinating cattle before the stress of shipping and exposure with Somnu Shield\*.<sup>2</sup>

FIGURE 1.



Following a severe intravenous challenge 2 weeks after the second vaccination, death loss in controls was over 100% greater than in those vaccinated with Somnu Shield.<sup>1</sup>

The label contains complete use information, including cautions and warnings. Always read, understand and follow the label and use directions.

'Ahlemeyer N. Histophilus somni complex in cattle. Available at: https://addl.purdue.edu/newsletters/2010/Spring/histophilus.htm. Accessed: March 5, 2020.

<sup>2</sup>Elanco Animal Health. Data on file.

