

New Clostri Shield® 7 surpasses all leading 7-way clostridials

In tests of four top 7-way vaccines, only Clostri Shield 7 from Novartis met established antitoxin titer levels across all clostridial fractions.



Clostridial diseases like blackleg and *Cl. perfringens* Type C enterotoxemia can be devastating to any beef producer. That's why clostridium vaccination has become standard operating procedure in cow/calf operations, for stockers and backgrounders, and on feedlots across the country.

Likewise, dairy management is always a challenge. Several factors including close contact within herds, moist conditions, early weaning and intensive feeding all increase the importance of a safe and effective clostridial vaccine.



Clostri Shield 7 meets the challenge; Clostri Shield 7 beats the competition

Under current guidelines, 7-way clostridial vaccines must demonstrate efficacy in a cattle challenge study with *Cl. chauvoei* (blackleg). Guidelines also require that multivalent clostridial vaccines meet or exceed minimal target animal titer levels for *Cl. septicum*, *Cl. novyi*, *Cl. sordellii* and *Cl. perfringens* Types C and D.

Cl. chauvoei post-challenge results

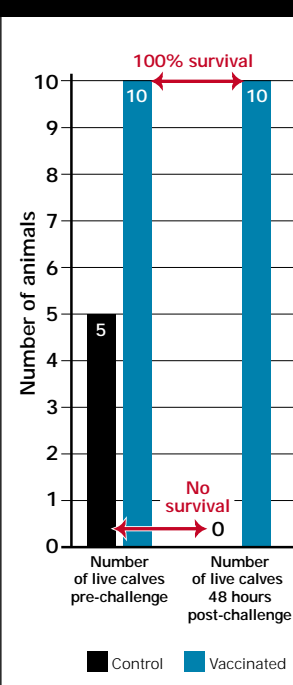
Protocol:

- 10 vaccinates and 5 non-vaccinated controls
- Vaccinates received two 2-mL doses of Clostri Shield 7, 21 days apart prior to challenge
- A virulent clostridial *Cl. chauvoei* challenge was administered intramuscularly at 17 days post-vaccination
- Animals were observed for seven days post-challenge

Results:

- All unvaccinated control calves died within 48 hours of challenge
- All 10 animals vaccinated with Clostri Shield 7 survived the challenge, with only three calves demonstrating mild clinical disease for one to two days

Survival of calves vaccinated with Clostri Shield 7



New studies show that Clostri Shield 7 has an edge over other 7-ways, while meeting Beef Quality Assurance requirements



Septicum, Novyi, Sordellii and Perfringens Types C and D protective antitoxin level comparison
Four leading 7-way vaccines were tested on 40 900-pound calves. Ten calves each were vaccinated with Clostri Shield® 7, Electroid® 7, UltraChoice™ 7 and Vision® 7. All the treatments were subjected to the same protocols and standards.

The result? Clostri Shield 7 met established antitoxin titer levels across **all** clostridial fractions. As Table 1 shows, Clostri Shield 7 provided the greatest level of broad-spectrum response.

Clostri Shield 7 has been evaluated for low tissue impact. During comparative trials, injection-site reactions were intensely monitored and evaluated through manual

palpation. Primary injection-site reactions were evaluated from day 13 to day 64 post-injection. Booster injections were given on the opposite side of the neck and evaluated from day one to day 42 post-booster. All the 2-mL products (Clostri Shield 7, Vision 7, UltraChoice 7) resulted in similar site reactions, but smaller than the 5-mL product (Electroid 7).

- **Highly syringeable/easily resuspended**
- **Proprietary dual-component adjuvant system for optimum immune response and low tissue impact**
- **Subcutaneous administration**
- **Clostri Shield 7 outperforms the competition**
- **2-mL SubQ dosage meeting Beef and Dairy Quality Assurance standards**

TABLE 1. Number of calves meeting or exceeding serological titer levels					
Clostridial Fraction	Antitoxin level IU/mL*	Clostri Shield® 7 (2-mL dose)	Vision® 7 (2-mL dose)	UltraChoice™ 7 (2-mL dose)	Electroid® 7 (5-mL dose)
<i>Perfringens C</i>	10	10 of 10	8 of 10	8 of 10	7 of 10
<i>Perfringens D</i>	0.5	9 of 10	3 of 10	10 of 10	9 of 10
<i>Sordellii</i>	1	10 of 10	4 of 10	10 of 10	10 of 10
<i>Septicum</i>	1	8 of 10	2 of 10	5 of 10	5 of 10
<i>Novyi</i>	0.5	10 of 10	4 of 10	3 of 10	10 of 10
Total		47 of 50	21 of 50	36 of 50	41 of 50

* IU/mL is standardized international unit/mL.

Using a standardized testing method, Clostri Shield 7 provided the most consistent high level of protective antitoxin.

Clostri Shield is a registered trademark of Novartis AG.
Electroid is a registered trademark of Schering Plough Veterinary Corporation.
UltraChoice is a trademark of Pfizer Inc.
Vision is a registered trademark of Intervet Inc.

Clostri Shield 7 is available in three convenient sizes, including 10-dose (20 mL), 50-dose (100 mL) and 250-dose bottles (500 mL).

