

# Got Salmonella?

An autogenous (custom) vaccine can be the answer



Salmonella are a species of bacteria that cause many diseases in cattle. These include digestive tract infections (severe diarrhea), respiratory system disease (pneumonia) and central nervous system (brain) infections. The number of cattle farms experiencing problems caused by Salmonella has grown in recent years. Risk factors for this disease include new cattle introduction (movement) and various stressors such as weather extremes, processing procedures and dietary changes. If Salmonellosis occurs, it can spread rapidly in a group of animals and cause high treatment costs and large death rates. Therefore, prevention/control measures are recommended to reduce death and economic losses from this bacterial disease.



## Clinical Signs

Clinical signs of Salmonella infection vary widely and depend greatly on the age of animal and species or the type and strain of Salmonella involved. Younger animals often can't mount a sufficient immune response (defense) before the disease overwhelms them. The following clinical signs are often observed:

### COWS AND CALVES

- Diarrhea
- Dehydration
- Fever
- Reduced feed intake

### CALVES ONLY

- Increased respiratory rate
- Weakness
- Incoordination

### COWS ONLY

- Reduced milk production

## What herd management techniques can help prevent disease?

- Isolate new/incoming cattle for two weeks and don't comingle them with cattle already on the farm until all new cattle appear healthy
- Clean and sanitize all feeding equipment and other tools used on cattle regularly to reduce contamination by Salmonella and other disease-causing organisms
- Reduce stress by only making one change at a time; wean, dehorn/castrate and vaccinate cattle at least one week apart
- Provide a high level of nutrition so the immune function of cattle is maximized
- Ensure housing is excellent in terms of bedding quality and ventilation



## What vaccination options exist for Salmonella?

- A few commercial bacterins (vaccines) for Salmonella are available; some cover multiple types/species of Salmonella but some cover only one or a few different types
- Many of these products can affect cattle negatively (reduced feed intake, milk production) and therefore can be difficult to manage
- **Custom-made products can offer broad protection covering several types of the most common Salmonella species that have occurred on farms; also, custom-made products tend to be less harsh and have fewer negative effects on cattle**

***An autogenous (custom) vaccine can be the answer!***

**Contact your Armor Veterinarian today to aid in your salmonella prevention decisions.**

Armor Veterinary Services

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An autogenous (custom) vaccine can be the answer

## Introducing Custom-Made Vaccines...

### Armor Autogenous Salmonella

Available in 100 mL, 50 ds  
100 mL, 50 ds Bio ONE

Vaccinates against 4 serotypes of Salmonella enterica: Salmonella Cerro, Salmonella Heidelberg, Salmonella Dublin and Salmonella Typhimurium. There are no commercially available vaccines against Salmonella Cerro, Salmonella Heidelberg and Salmonella Typhimurium, and the inclusion of Salmonella Dublin provides even broader coverage. **Autogenous vaccines can be formulated specifically for salmonella-causing bacteria found on your farm. Work with your Armor Veterinarian to determine what vaccine is appropriate for your farm or ranch. Bio ONE does not require a booster.**

### What is a custom-made vaccine?

Custom-made vaccines are developed from the virus or bacteria causing disease in a livestock operation. The resulting product is specific to the pathogenic (disease-causing) strain(s) in that herd.

### What is the benefit of a custom-made vaccine?

In some cases, commercially available “one-size-fits-all” combination vaccines may not contain the desired strain variation for an individual herd situation.

Newport Laboratories works with veterinarians and producers to formulate a combination product that is not commercially available.

### How is a custom-made vaccine created?

1. An Armor veterinarian or your herd veterinarian collects samples from nasal or tracheal swabs or a necropsy, places the samples on ice and submits them to the diagnostic lab.
2. The diagnostic lab performs a bacterial culture to identify involved organisms.
3. The lab creates a custom vaccine using the organisms found.  
-Vaccines are produced in 6 to 8 weeks.

**Contact your Armor Veterinarian or herd vet today to review your vaccination protocol and help determine where a custom-made vaccine could be a fit.**



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