

Clostridium Perfringens Type A Toxoid

First and only
C. perfringens Type A
vaccine for baby
pig diarrhea

- NEW swine vaccine to help control neonatal diarrhea caused by *C. perfringens*
- Conditional license issued by the USDA
- Now available from veterinarians or animal health suppliers

Baby pig diarrhea

- *C. perfringens* Type A is a leading cause of baby pig diarrhea
- 35 percent of pigs less than one week of age with diarrhea tested positive for *C. perfringens* Type A¹
- Appears as yellow-to-white pasty diarrhea that continues for about five days
- Mortality is low, but the impacts on lower weaning weights and reduced performance are seen throughout the pig's lifetime
- Because piglet immune systems are not fully developed, there is a possibility of co-infection with rotavirus, *E. coli* or *C. difficile*
- Use postmortem evaluations to identify causative pathogens



C. perfringens Type A is one of the leading causes of diarrhea or enteric diseases in neonatal pigs.



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New vaccine option

- Novartis Animal Health US, Inc. has been on the forefront of *C. perfringens* Type A disease emergence, conducting research and producing custom vaccines since the 1990s
- Novartis scientists have developed a way to produce a Type A vaccine with consistent toxoid levels that meet USDA efficacy standards for conditional licensure²
 - The vaccine was tested using 35 pigs 10 weeks of age with no history of clostridial enteric disease
 - Five pigs were controls and others received two, 2 mL doses of vaccine three weeks apart
 - Trials produced a serum antibody concentration of at least four international units per mL in at least 80 percent of vaccinates
- A proprietary dual-component adjuvant formulation plays an important role in the immunogenicity (ability to produce an elevated humoral immune response) to this vaccine
- Field studies with 1,364 bred gilts or sows and 590 feeder pigs demonstrated product safety when used according to label directions³

Use instructions

- **Clostridium Perfringens Type A Toxoid** is labeled for use in healthy swine as an aid in the control of disease syndromes caused by the alpha toxin of *C. perfringens*
- 2 mL of vaccine should be administered intramuscularly
- Revaccinate in two to four weeks; revaccinate as recommended by your veterinarian
- The product is available in 50-dose vials from your veterinarian or animal health supplier
- More product information is available at www.livestock.novartis.com

1. Personal communication with Karen Post, DVM. May 3, 2006.

2. Data on file, Novartis Animal Health US, Inc.

3. Clostridium Perfringens Type A Toxoid. Code 8081.01 Report 5. Field Safety Testing. Novartis Animal Health US, Inc., January 18, 2006.



Control of *C. perfringens* Type A is becoming increasingly important to offset the poor performance of pigs affected by diarrhea. Clostridium Perfringens Type A Toxoid gives veterinarians and producers a new tool to battle diarrhea associated with *C. perfringens* Type A.

Management key to disease control

- Environmental factors may trigger *C. perfringens* Type A infections
- In addition to vaccination, pre-farrowing and neonatal management is critical
 - Pre-farrowing preparation:
 - Pressure wash, clean and disinfect farrowing room
 - Set temperature and ventilation systems for young pigs
 - At the time of farrowing, remove all sow manure in crate
 - Day one care:
 - Check for chilled piglets
 - Ensure piglets receive adequate colostrum
 - Split suckling may need to be incorporated

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