

# Colstridium perfringens and Escherichia coli

## Causing

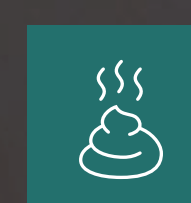
Two of the most common causes of diarrhea (scours) in piglets are *E. coli* and *C. perfringens* Type A and C.<sup>1</sup> These bacteria occur in sow feces. Piglets take them in via their snout, afterwards they infect the small intestine.

Infection with both pathogens can lead to fatal enteritis.

Infection is most common in piglets younger than 5 days of age.

*E. coli* toxins may cause acute diarrhea 5 to 14 days after weaning.

<sup>1</sup> Diseases manual. Colibacillosis. Pig333.com



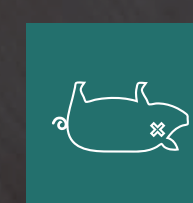
Diarrhea



Dehydration



Weakness



Death, in severe cases (mortality can reach 70% in affected litters).



## Economic impact

*C. perfringens* and *E. coli*-related neonatal scours in piglets can reduce profit by 30% due to:

- Increased mortality.
- Slower growth rate (reduction in ADG by 8 to 14 g/day in the first week of life).
- Additional cost for antibiotic treatments.



Costs caused by neonatal diarrhea can vary considerably depending on the severity of disease.

Infected farms see an average increase of \$1.29 in the cost per piglet.<sup>2</sup>



Profit  
30%



Cost per Pig  
\$1.29

<sup>2</sup> Mohr, M. Economic Impact of *E. coli* and *Clostridia* Disease in Piglet



## Prevalence

Neonatal diarrhea is one of the most common diseases in piglets.

The average neonatal diarrhea morbidity is 30–40% but may be as high as 80% in some herds.

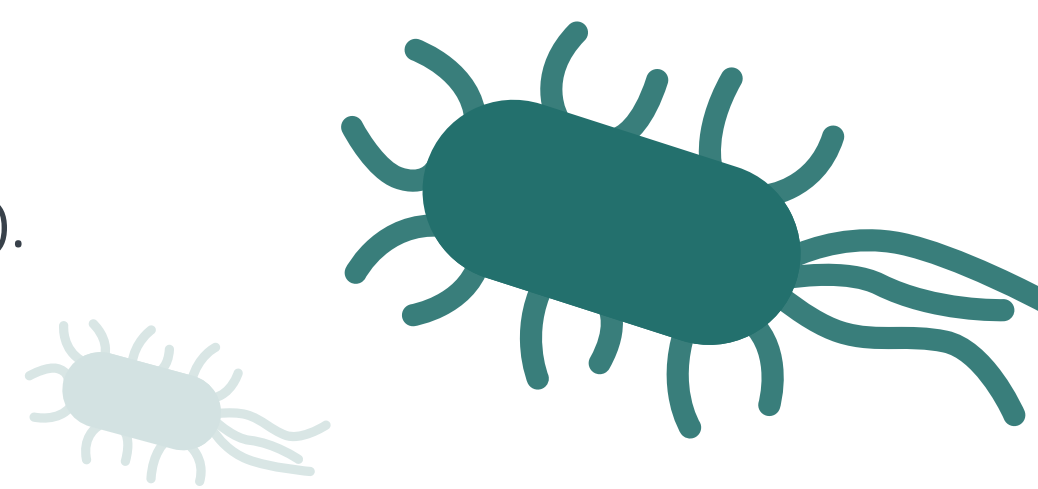


## Diagnosis

Necropsy and sample submission to a diagnostic laboratory is necessary to confirm the causative agent/s involved.

Visible symptoms of infection are:

- Watery and / or foamy creamy diarrhea (scour).
- Wet skin around the rectum and tail.
- Huddling of piglets together / shivering.



Diagnosis can be carried out by:

- Post-mortem examination.
- Cultivation of bacteria.
- Histopathology of the intestine.



## Treatment and prevention



Cleaning and hygiene:

- Clean sows before moving them to the farrowing stall.
- Clean staff's hands and footwear.
- Removing feces from farrowing stalls and clean them thoroughly.



Adequate and early intake of colostrum.



Antibiotics and supportive therapy in piglets.