

Seeing symptoms of PWD?  
*E. coli* F4/F18 is the likely culprit.

Protect your little piggies  
 by vaccinating with  
 Coliprotec™



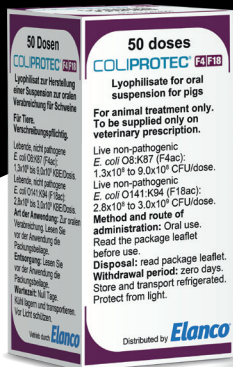
This little piggy had  
 diarrhoea.



This little piggy had  
 low weight gain.



This little piggy reached  
 market weight 7 days early.<sup>1</sup>



**COLIPROTEC™ F4|F18**

THE SMART CHOICE THAT GETS  
 YOUR PIGS TO MARKET FASTER





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## POST-WEANING DIARRHOEA (PWD)

When litters of pigs are mixed, in the nursery, at weaning, it is common for them to develop scours as a result of social stress, the change in diet and infections.

Typically, PWD occurs within 3 weeks of weaning with affected pigs likely to have higher mortality, reduced growth rates, and they can take longer to finish.

As a result of these negative impacts, and the related increase in feed costs of 7-9%,<sup>1</sup> PWD is estimated to cost up to £5 per piglet.<sup>1,2</sup>

The main cause of PWD are two specific types of disease-causing *E. coli* known as F4/F18 enterotoxigenic *Escherichia coli* (ETEC).<sup>3,4</sup> These bacteria are highly damaging to the intestines of young pigs which affects their ability to absorb essential nutrients required for their health and growth potential.

### Impact of *Escherichia coli* (ETEC) infections:

- ☆ Most common cause of post-weaning mortality<sup>5,6,7</sup>
- ☆ Decreases weight gain<sup>8</sup>
- ☆ Costs up to £5.00 per piglet<sup>1,2</sup>
- ☆ Delays time to market by 10 days<sup>1</sup>
- ☆ Increases feed costs by 7-9%<sup>1</sup>



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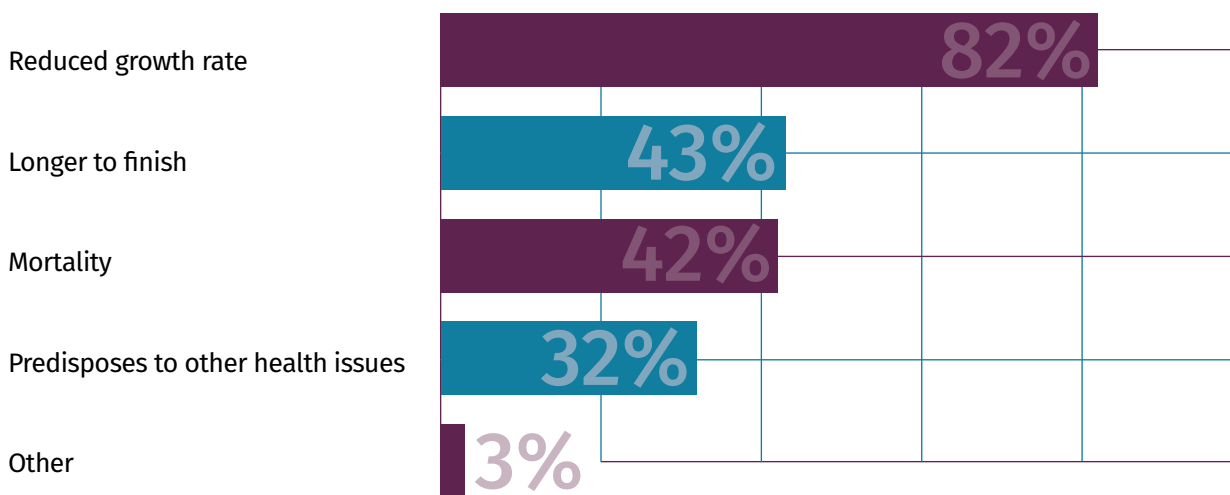


## PWD IN UK SWINE PRODUCTION

Historically, pig farmers have used a combination of methods to prevent and reduce the impact of PWD on the health and performance of their pigs.

Farmer's Weekly survey found that 54% of UK swine herds experience PWD. The same survey also established that 21% of UK producers would treat PWD with antibiotics and 9% routinely use antibiotics in the post-weaning period.<sup>9</sup>

**Figure 1:** The main impact of PWD on piglet performance in affected farms<sup>9</sup>





## FINDING AN EFFECTIVE WAY TO PREVENT PWD

With increasing pressure from WHO, OIE, consumers and regulators to reduce the use of antibiotics on farm to help fight against antimicrobial resistance (AMR), especially in relation to medicines important to human health which include apramycin, enrofloxacin and neomycin.<sup>10,11</sup>

This means that UK farmers may also need to find new ways to manage sustainable production.

That's where vaccination can make a very real difference.

Coliprotec™ is an oral vaccine for protection against F4/F18 ETEC. It is proven to be effective at stimulating a strong, local immune response in the intestine of young pigs with significant benefits.<sup>12-15</sup>



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# THE KEY BENEFITS OF COLIPROTEC™ VACCINATION

## Promotes piglet gut health

Coliprotec™ promotes a strong local immunity in the intestine to protect against pathogenic *E.coli* infections and has been proven to confer the following benefits:

## Decreases mortality

Coliprotec™ has been proven to reduce mortalities from PWD<sup>15</sup>

## Improves growth performance

Coliprotec™ vaccinated pigs can be 1 kg, or more, heavier than unvaccinated pigs at the end of the nursery period<sup>11</sup> This early gain in performance can result in an extra 2 kg of body weight at slaughter.<sup>13</sup>

## Gets pigs to market faster

Vaccinated animals reach market weight up to 7 days earlier.<sup>14</sup>

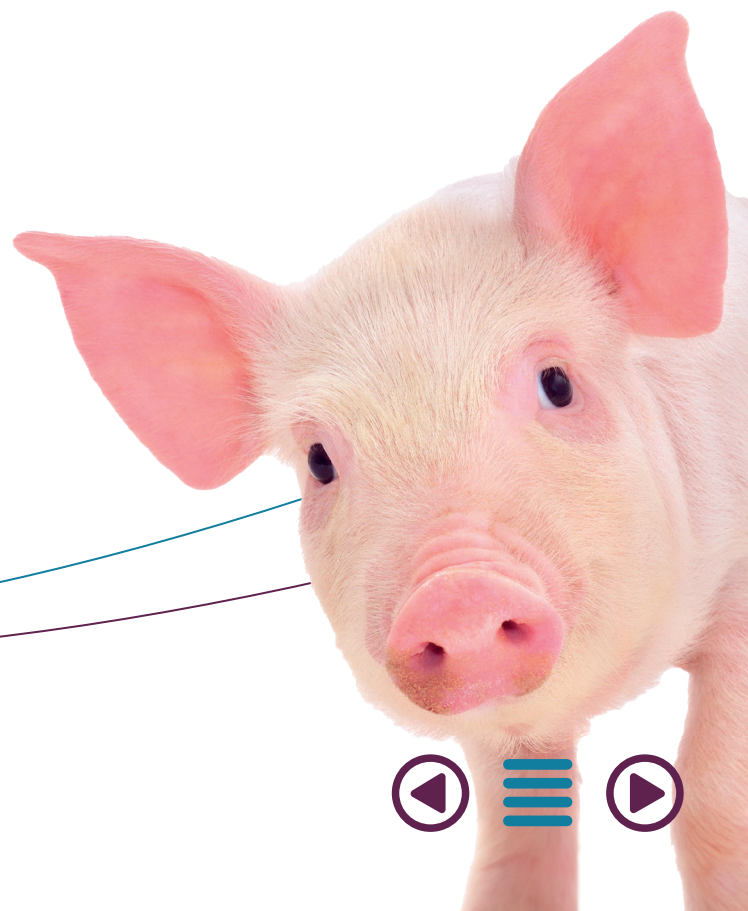
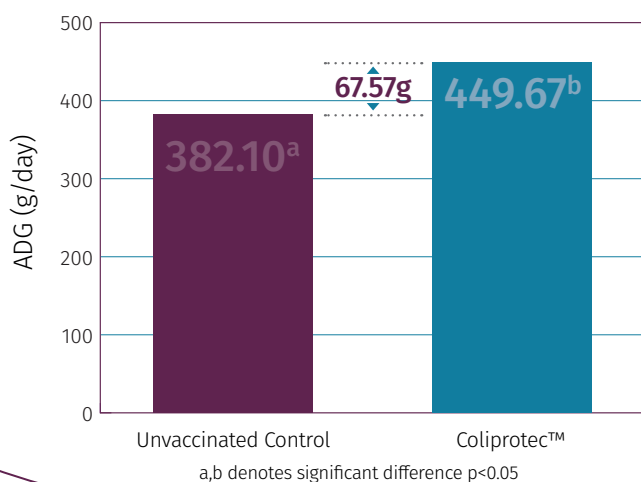
## Reduces use of antibiotics

Close to 30% of all antibiotics used in pig production are administered to weaners.<sup>16</sup> Coliprotec™ vaccinated herds can achieve a substantial reduction in nursery antibiotic treatments required by protected weaners.<sup>14</sup> This reduces overall use on farm.

## Prevents significant losses

Preventing PWD can save producers costs of up to £5 per pig.<sup>1,2</sup>

**Figure 2:** Average daily weight gains in the nursery for vaccinated and unvaccinated pigs<sup>12</sup>



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## ELANCO OFFERS FREE *E. COLI* DIAGNOSTIC TESTING

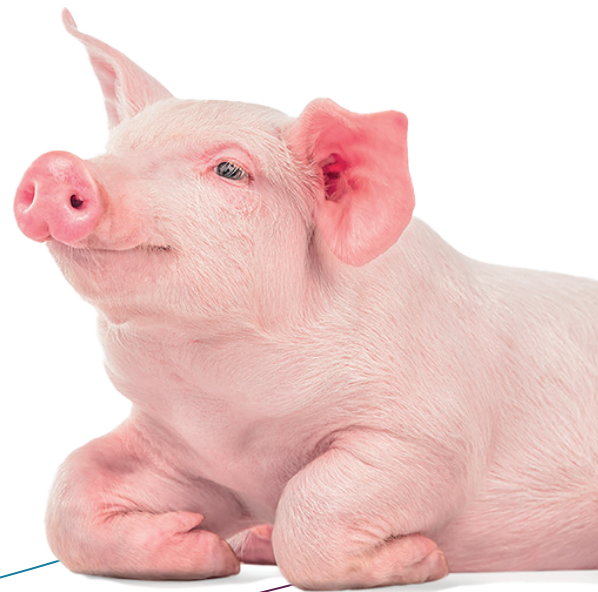
To help tackle the issue of *E. coli*-related post weaning diarrhoea (PWD) in piglets, Elanco is offering producers free diagnostic testing to identify the specific bacterial strain involved in the infection.

Simply request a free test from your vet using the QR code below as soon as you observe PWD symptoms (PWD typically occurs in the first three weeks immediately after weaning).

**Elanco's free diagnostics service helps farmers, and their vets, to decide on the best PWD prevention strategy.**



REQUEST YOUR  
**FREE TEST NOW**



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## Protect your little piggies by vaccinating with Coliprotec™



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1. Elanco. Data on file. Elanco study ELA 1700757 report 2018. 2. Tokach, L.M. et al. 2000. Swine Health & Production; 8: 229-233. 3. Fairbrother JM and Gyles LG, 2012. Colibacillosis. In: Diseases of Swine. Zimmerman JJ, Krieger LA, Ramirez A, Schwartz KJ and Stevenson GW. Editors. 10th Edition. John Wiley and Sons, Inc. Chapter 53, p 723-749. 4. Luppi, A. et al. 2016. Porcine Health Management, 2:20. DOI: 10.1186/s40813-016-0039-9. 5. Amezcua R et al. 2002. Can J Vet Res. 66:73-78. 6. Hampson DJ. Postweaning *E.coli* diarrhoea in pigs. 1994. In: *Escherichia coli* in domestic animals and humans. Gyles CL. Editor. CAB international; Chapter 8: 171-191. 7. Zhang W et al. 2007. Vet Microbiol. 123:145-152. 8. Fairbrother JM et al. 2005. Anim Health Res Rev. 6:17-39. 9. Farmers Weekly Post Weaning Diarrhoea Research 2020. 10. WHO. Critically important antimicrobials for human medicine – 6th revision 2018. In World Health Organization, <https://apps.who.int/iris/bitstream/handle/10665/312266/9789241515528-eng.pdf?ua=1>. 11. WHO 2017 – Guidelines on use of medically important antimicrobials in food-producing animals – <https://apps.who.int/iris/bitstream/handle/10665/258970/978924155013-eng.pdf%3bjessionid=B982A811C8A4F2F79F5C306E2B647D62?sequence=1>. 12. Piqué, J., et al., 2018. Investigation of production parameters in a commercial pig farms in Spain with post-weaning diarrhoea before and after the implementation of a live non-pathogenic *Escherichia coli* vaccine (Coliprotec® F4/F18). 2018. Proceedings of the 10th ESPHM: 236. 13. Purina report: "Each production phase impacts the next". Retrieved from: <https://www.purinamills.com/purinamills/media/PDF/Swine/Progress-to-Profit/Purina-Each-Production-Phase-Impactsthe-Next-3-16.pdf>. 14. Vangroenweghe, F. et al., 2018. Proceedings of the 10th ESPHM: 252. 15. Vangroenweghe F, Van Poucke A, Defoort P. 2019. Performance and antibiotic use of piglets vaccinated with an *Escherichia coli* F4/F18 vaccination for the prevention of F18-ETEC post-weaning diarrhoea. 2019. Annual Meeting of the Belgian Society for Veterinary Epidemiology and Economics. Ghent, Belgium. DONNEES GLOBALE GAODEC complet. (2019). Data on file. 16. van Rennings L, von Münchhausen C, Otilie H, Hartmann M, Merle R, Honscha W, Käsbohrer A, Kreienbrock L. Cross-sectional study on antibiotic usage in pigs in Germany. PLoS One. 2015 Mar 18;10(3):e0119114. doi: 10.1371/journal.pone.0119114. PMID: 25785688; PMCID: PMC4364977.

Coliprotec™ F4/F18 is an oral vaccine used for active immunization of pigs from 18 days of age against enterotoxigenic F4-positive and F18-positive *Escherichia coli* in order to reduce the incidence of moderate to severe post-weaning diarrhoea infected pigs and reduce the faecal shedding of enterotoxigenic F4-positive and F18-positive *E. coli* from infected pigs. Each dose of vaccine contains  $1.3 \times 10^8$  to  $9.0 \times 10^8$  CFU of live non-pathogenic *Escherichia coli* O8:K87 (F4ac) and  $2.8 \times 10^8$  to  $3.0 \times 10^8$  CFU of live non-pathogenic *Escherichia coli* O141:K94 (F18ac). Refer to the product packaging and leaflets for information about side effects, precautions, warnings and contraindications. **Legal category** [POM-V]. Advice should be sought from the Medicine Prescriber. For further information consult the product SPC.

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