# PIG PRODUCTION NEWSLETTER FROM MSD ANIMAL HEALTH

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## **PIGS AT THE PLOUGHING**

The MSD Animal Health pig team attended the National Ploughing Championships at Ratheniska this September. We were one of only a few pig companies attending so we were delighted to see so many familiar faces over the three days and meet some pig farmers of the future too.

There was plenty of interest in the demonstrations of IDAL needle-free vaccinator and practical guides on the use and mixing of our portfolio of sow and piglet vaccines. Much of the chat revolved around the rising cost of pig feed and the role that Lawsonia vaccination can play in reducing onfarm costs. You can read more on the subject in this issue of Pig Health Update.

Everyone was also keen to enter our Competition to win a hamper of pig farming essentials worth over €400. It is full of top-quality equipment for everyday use including driving boards and paddles, disinfectants, stock markers, vaccinators and gloves.

Luckily it's not too late to enter, simply scan the QR below and enter your details before 31st January 2023 to be in with a chance of winning!



There is no denying that pig farmers in Ireland have had a challenging 6 months with rising feed, energy and labour costs outrunning the price of pig meat in what is a commodity-based industry. In this issue we look at how maximising feed efficiency can utilise farm resources more effectively and produce a profitable pig that is healthier, happier, and more sustainable.

As a result of the continued reduction of in-feed antibiotics throughout Ireland, we have seen strong interest in piglet vaccination as an alternative. As well as newer vaccines like Porcilis Lawsonia, there has been considerable demand for one of our older vaccines, Porcilis PRRS. You can learn a little more about the benefits of whole herd vaccination against PRRS on the back page

**Thomas Gallagher**, Swine Business Unit Director



## PIG UPDATE

# FOCUS ON GUT HEALTH

Pigs are monogastric like humans, so their digestive systems work in a similar way to our own. The ability to absorb essential nutrients is important to the development of growing pigs and, of course, their ability to gain weight.

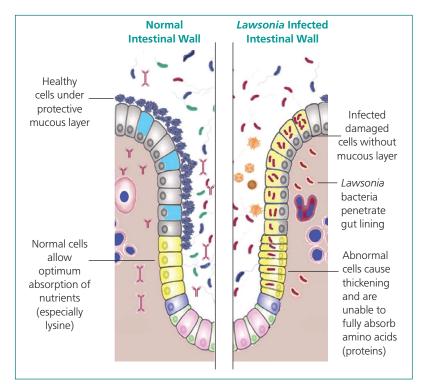
According to Teagasc figures, September saw the price of composite feed rise to €476/t, up €94 since the start of the year. With feed equating to 76% of the cost of pig production, farmers are trying to improve feed conversion rates wherever possible – which is why now is a great time to focus on gut health.

## **Post Weaning Ileitis**

Ileitis is one of the most common digestive diseases in growing pigs and is caused by the *Lawsonia* bacteria. The word means 'inflammation of the ileum' and the disease is caused when the infected villi become swollen and unable to absorb crucial nutrients, including lysine. Lysine is one of the costliest additives in pig feed, but if the villi in the ileum are damaged it cannot be fully absorbed. Lysine or other undigested nutrients passing into the large intestine disturb the microbiome, allowing pathogenic bacteria to thrive. This results in diarrhoea or faecal looseness that can often be grey or pasty in appearance.

The dose of bacteria ingested by pigs will determine disease severity, as well as the pigs' diet, genetics, immune response, including maternal antibody presence, intestinal microflora and general health and stress. However, some pigs may display few external signs, but still be affected internally.

Most pigs will recover from visible signs; however, they continue to eat less, affecting development and contributing to lower than expected growth rates. They may also be more susceptible to secondary infections, such as *Salmonella*.



#### 5 FACTS: **SMALL INTESTINE**

- The 'small' intestine of a fully grown pig is actually around 16-21m in length
- 2. There are three stages to the small intestine: the duodenum, the jejunum and the ileum
- Digestive enzymes break down the proteins, fats and carbohydrates so that they can be absorbed
- 4. The jejunum and the ileum are lined with finger-like projections called villi which increases the area available for absorption more than tenfold
- 5. The ileum is important for protein digestion particularly lysine

### **Control Measures and Vaccination**

Farmers can improve general gut health across the herd in conjunction with both their vet and their nutritionist. Particular attention should be paid to weaning management and water quality. Hygiene across the unit is essential as most digestive diseases are transmitted via infected faecal matter. Your vet can test for specific pathogens and recommend treatment methods accordingly.

Management of ileitis on farm has relied heavily on the use of zinc oxide and in-feed antibiotics, but with recent legislation changes, farmers are increasingly adopting vaccination as a control measure.

The Porcilis Lawsonia vaccine can be given by intramuscular injection or intradermally using the IDAL vaccination device. It can be given from 3 weeks of age and gives 21 weeks of immunity to protect growing pigs through the fattening stage. Vaccination with Porcilis Lawsonia has been proven to reduce diarrhoea, bacterial shedding, mortality, intestinal lesions and reduce loss of daily weight gain caused by *Lawsonia intracellularis* infection.

Porcilis Lawsonia has been shown to increase ADWG by an average of 57g compared to unvaccinated pigs, and the same field trial also showed a reduction in FCR from 2.47 to 2.21. A recent study in a British indoor farrow-to-finish unit showed that vaccination with Porcilis Lawsonia also improved ADWG and days to finish when compared with in-feed antibiotics.

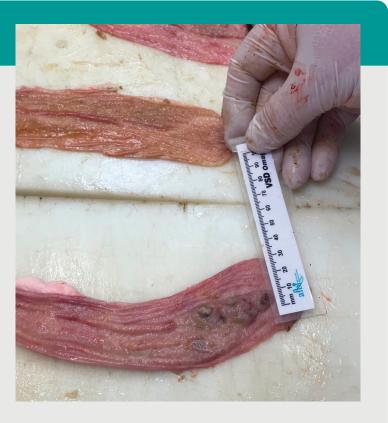
It is possible to administer Porcilis Lawsonia at the same time as other MSD Animal Health vaccines against porcine circovirus, *Mycoplasma hyopneumoniae* and PRRS to provide fourway protection against the most significant diseases affecting young pigs. Farmers should discuss their vaccination regime with their vet who can also advise on infection control and on-farm biosecurity.

#### PERMANENT DAMAGE

One of the unique features of ileitis is the long-term damage to gut integrity. Thickening of the gut caused by the disease remains for the rest of the fattener's life. Because the ileum is so essential to the way feed is digested, farmers see a significant impact to FCR and ADWG right up until slaughter.

The effect of ileitis can be seen post-mortem. Thickening of the folds and ridges can easily be seen and felt in diseased ileums. They may also have large, raised nodules and appear dark or bloody. Within groups of finished pigs, it's common to see a range of severity and this may explain why batch unevenness is such a feature of subclinical ileitis.

MSD Animal Health recently trained pig vets in Ireland how to recognise damage to the ileum during routine slaughterhouse checks. If you are concerned that ileitis might be affecting the performance of finished pigs, ask your vet for gut score feedback.



## PIG UPDATE

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#### Disease Update: PRRS and Seasonal Risk

Maureen Prendergast MVB, PhD, MRCVS, Technical Manager Integrated Livestock, MSD Animal Health

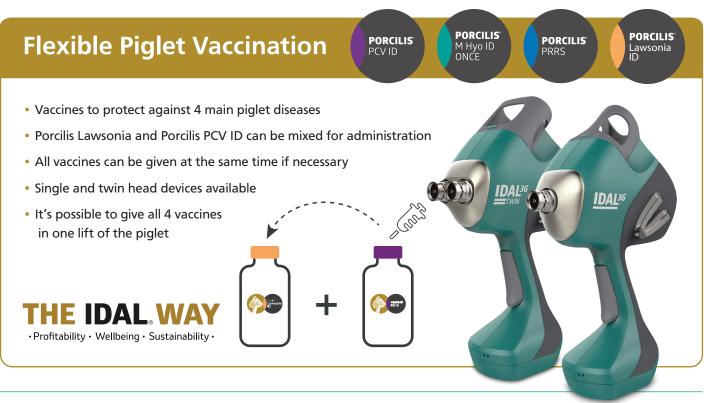


Although PRRS is a virus that causes year-round problems, the autumn and winter months bring increased risks to Irish pig farms. As with most respiratory diseases, humidity and poor ventilation can create greater challenges at this time of year. When PRRS infection occurs in young pigs, the suppression of their immunity can be immense and *Mycoplasma, Strep. suis*, Enzootic pneumonia (APP) and Glasser's disease follow on throughout the growing and finishing phases.

Even on farms that are vaccinating sows and gilts, if there is a small break in biosecurity or if the PRRS virus is present anywhere on the farm, the rest of the herd is at risk. Piglets that are not vaccinated are particularly susceptible to the disease and it can also circulate within second stage and fattener groups. If farms are trying to reduce their reliance on in-feed antibiotics, the risk posed by secondary bacterial infections is significantly increased.

PRRS virus can infect up to 95% of finishing pigs reducing the effectiveness of other vaccines through immuno-suppression and simply letting other respiratory diseases skip past the innate immunity. The cost of PRRS infection to farmers varies depending on secondary infection rates, but allowing for reduced growth rates, increased mortality and reduction in FCR, it is likely to exceed €5 per pig.

Vaccination of piglets with Porcilis PRRS from 14 days of age should provide immunity against the disease for the next 6 months and has been proven to result in better daily growth and feed conversion. Porcilis PRRS has been established for nearly 20 years and is Ireland's best-selling PRRS vaccine. Immunisation can be undertaken at the same time as Porcilis vaccines against three other diseases of economic importance in growing pigs, PCV2, *M. hyo* and ileitis. Speak to your vet for more information.



#### Use medicines responsibly.

Legal Category: ROI POM NI POM-V

Please refer to the product packaging and leaflets for information about side effects, precautions, warnings and contra-indications. For further information see your veterinary practitioner or contact MSD Animal Health, Red Oak North, South County Business Park, Leopardstown, Dublin 18, Ireland.

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