



PROTECTING UK PIGS FROM PED

Porcine epidemic diarrhoea (PED) isn't a new disease. It's caused by a coronavirus that was first described in the UK in 1971. Since then, the disease has been seen intermittently, but in recent years outbreaks have become rare.

PED isn't a risk to humans and isn't a notifiable disease in the UK. Where it has been seen here, PED has presented with relatively mild signs and low mortalities, however the recent low levels of disease may indicate a lack of immunity in our pig herds.

The recent acute outbreaks of PED in the United States – where it hadn't been identified until May 17 this year – followed serious epidemics in Asia. A variation of the endemic strain was identified in China in October 2010 with morbidity rates reaching 100% and mortality rates of 50-100% in young piglets.

The mortality rates were seen

in spite of the fact that China has been vaccinating for PED since the 1990s. The strain of PED seen in the US outbreak is 99.4% similar to the Asian virus

PED appears clinically similar to transmissible gastroenteritis (TGE), however the causal coronaviruses are unrelated. There are two recognised forms of PED. Type I affects growing pigs, while Type II can affect any age, including adults.

In non-immune herds, the introduction of PED typically causes acute outbreaks of watery, yellow-green diarrhoea and vomiting of 7-10 days duration. Younger pigs are typically worst affected, and dehydration leading to death is common. In the breeding herd, a 100% loss of appetite is common, with an associated reduction in reproductive performance.

Like TGE, it's important to spread the virus around your unit

as quickly as possible during an outbreak so that all animals, and especially pregnant sows, develop an immunity. Exposure in sows creates natural immunity within 2-4 weeks, which results in colostral protection of the piglets.

So, how can we keep it out? Well, first apply strict biosecurity measures to your unit as the main route of transmission of PED virus is through infected pigs or contaminated transport, equipment or people. The virus is susceptible to most common disinfectants, but it's stable in faeces up to 50C and pH 5-9 at 4C.

Use hauliers that you know and trust, and isolate incoming stock wherever possible. The incubation period for this virus is short, usually 2-4 days, so a week in isolation should be adequate, preferably with a few culls to act as sentinels.

Worryingly, a recent outbreak in the Russian Federation – which



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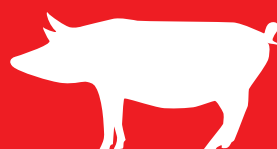
caused 100% mortality in piglets in a 5,000-sow herd for two weeks and is believed to have cost £800,000 – is thought to have been due to the introduction of healthy pigs on a contaminated vehicle.

The UK doesn't have a licensed vaccine available, and natural immunity appears to have limited protection. This means that the UK pig population is potentially naive and therefore susceptible to outbreaks of new variants of PED.

So, to summarise, be alert, be careful, improve your biosecurity, and take advice from, and report any unusual cases of diarrhoea, to your vet immediately.



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