International Pig Topics

Pighealth BYTES

Your own reference source on pig health

ESPHM 12th EUROPEAN SYMPOSIUM OF PORCINE HEALTH MANAGEMENT

Number: 183

Introduction to disease

Introduction

Disease is a state of ill being that has a cause and produces adverse consequences on the well being and performance of your pigs. In addition, the manifestation of the disease is influenced by management factors that are often referred to as stresses or aggravating factors. These increase the likelihood of disease occurring and, if it does, make its manifestation more severe. Aggravating factors include things like age, sex, overstocking, poor nutrition, mycotoxins and even other diseases. The opposite effects can be induced by mitigating factors such as good stocking rate, good ventilation, good nutrition and vaccination.

Thus, disease is a fluid entity with several factors interacting to influence its ultimate manifestation in our pigs. Diseases are manifested with differing degrees of severity.

The consequences of disease

These arise from the interaction of the causal agent of the disease on the cells of organs within the pig. The overt signs of the consequence of this action depend upon which organ(s) are affected. These overt signs are commonly known as clinical signs. For example, if the lungs are affected we will see respiratory distress, whereas if the intestines are affected we can see scour and poor growth. Therefore, clinical signs tell us which organs in the pig's body are being affected and are not an indication in themselves of which disease is involved.

Stresses

These were defined above and are many and varied. They impact on the pig and influence the ultimate outcome of the disease by modifying the severity of the disease-causing agent's impact on the pig's internal organs.

Treatment of disease

Simplistically, most people view the treatment of disease as the control of the disease-causing agent, for example, using antibiotics to counter a bacterial infection. However, an important and often undervalued aspect of treatment is the removal or minimisation of the stresses impacting on the overall disease situation. In the case of pneumonia the benefits from antibiotic therapy will be greater if we do not have any stresses impacting on the overall scenario.

Therefore, doing things like optimising stocking rate, improving bedding so pigs are on dry straw rather than on ammonia-emitting fouled straw, optimising environmental temperature, making it easier for sick pigs to get their daily feed intake, giving pigs easy access to water, minimising the stresses associated with mixing, ensuring adequate vitamins in the diet etc, will all improve the animal's probability of fully responding to medication and improve its odds for survival.

You may well say that this is good stockmanship, and you would be right, but giving extra emphasis to the good stockmanship of sick animals will improve their response to treatment. It will also lessen the adverse effects of disease, such as weight loss or cessation of growth for a few days.