Get PRDC control and prevention strategies customised to your farm

by Rika Jolie, DVM, Director of Scientific Marketing Affairs – Swine, MSD Animal Health, USA.

Porcine Respiratory Disease Complex (PRDC), recognised by various respiratory signs also resulting in reduced feed efficiency and poor growth, remains a major economic concern in pig farms around the world.

The etiology of PRDC tends to be a complex mixture of pathogens, environmental and management factors, host immune system weakness and genetics.

Some of the pathogens commonly involved in PRDC include Porcine Reproductive and Respiratory Syndrome virus, Swine Influenza virus, Porcine Circovirus, Mycoplasma hyopneumoniae and a variety of bacteria, such as Haemophilus parasuis, Actinobacillus pleuropneumoniae and Streptococcus suis.

Considering this complexity, identification of the primary cause of the disease is often difficult and prevention and control strategies may vary widely within and between production sites.

Therefore, veterinarians and producers need to have access to appropriate tools to identify, not only the cause of PRDC, but also the risk factors so that long term effective solutions can be attained.

Nearly a decade ago, the ResPig Management System was developed to provide veterinarians and pig producers with a systematic problem solving method for respiratory disease. All the important risk factors are checked so the most effective plans of action can be formulated and monitored over time

Because of its continued dedication to PRDC prevention and control and the increased need for swine veterinarians and producers to make effective and profitable treatment decisions, Merck/MSD Animal Health recently updated and expanded the existing ResPig Management System.

The tool is now even more user friendly, flexible and solutions oriented.

The new ResPig Management system includes four different sections that can either be used separately or in combination:

- Farm audits.
- Slaughter Check tool.

- Economic simulator.
- Information resources.

Each of these sections is briefly reviewed here.

Farm audit

The audit is a questionnaire that analyses management, health and biosecurity status of the production system.

There are five short audits (general, weaned pigs, finisher, grower and biosecurity) and the user can opt to fill out one or more pending on the farm. Via a scoring system, risk factors are highlighted and indicators are identified which point to specific possible PRDC causative agents.

Pending on the audit findings, additional laboratory analysis may be needed to establish a severity score (either No (not present); Moderate; Considerable; or Severe) for each pathogen audited including an estimation of the timing of infection of the different pathogens. Upon completion of the audit, the results are summarised in an easy to read, dashboard style, report.

Slaughter check tool

Slaughter checks are an excellent tool to determine chronic lung lesions and/or respiratory diseases that are still active at the end of production.

The slaughter check results (pneumonia, pleuritis and rhinitis scores) can be entered and analysed in this tool. The outcome of this analysis further refines the specific pathogen score.

Economic simulator

The economic simulator is a modelling tool to support the decisions around intervention strategies for the control/reduction of respiratory problems in the farm. It compares production and economic parameters before and after introduction of an intervention strategy and estimates the impact of the intervention on profitability.

There are two economic calculators:

Standard – a limited number of farm spe-



cific production variables need to be filled in, while variable and fixed cost are based on local industry standards.

• Custom – for those production systems that prefer to use their internal variable and fixed cost data.

Each calculator allows the user to simulate predicted performance and economic impact of various intervention combinations, and follow-up of the recommended interventions

Information resources

The information resources section is an educational database with information about PRDC, various trainings about disease management and vaccination techniques, as well as Merck/MSD respiratory solutions.

The various tools in the renewed ResPig Management System make this a one stop PRDC resource and decision-making tool for the veterinarian and swine producer.

The audits allow the veterinarian together with the producer to do a consistent and standardised review of various health and management aspects, ensuring that nothing is overlooked time after time.

The economic simulators serve to run 'what-if' scenarios that lead into effective decision making about farm specific PRDC interventions.

As scenarios can be saved in the database, benchmarking can be done to ensure that goals are being met.

Throughout this process, the veterinarian works and communicates closely with the producer, creating a true partnership between them.

The ResPig Management System is a key tool in the improvement of overall health, production results and profitability of swine production systems around the world.