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Management of Antibiotic Free Pigs

Lisa J. Becton, D.V.M.

With current trends leaning towards either reduction or elimination of the routine use of antimicrobials, the demand for pork that is certified free of antibiotics has grown tremendously. Raising pork without antibiotics is not uncommon. Many of the operations within the US and Europe currently perform this task on a daily basis and reap the benefits of such a production. However, the limitations inherent with the program (no antibiotics) can create some interesting challenges.

Each farm/system can have a different definition of what antibiotic free (ABF) really means. In some systems, it means no antibiotics after pigs are placed into nursery; for others it means no antibiotics after 150 lbs.; another definition can state no antibiotics what-so-ever during the lifetime of an animal. For Premium Standard Farms, our definition of the ABF program is no antibiotics administered to the pig from birth to slaughter.

PSF started the ABF program in summer of 1998 in response to a customer's demand for pork products that were guaranteed with no antibiotics. In order to maximize the productivity of this type of pork production we had to identify and manage certain risk factors:

- Initial health of the target herd
 - what diseases are currently present? (PRRS, Mycoplasma, ileitis E. coli etc....)
 - preventative measures (vaccines...)
 - sow treatments
- Location near similar status farms or finishing
- Sanitation – sanitation - sanitation
- Finishing infrastructure – can we group these pigs together? Owned vs. contract?
- Treatment of disease outbreak
 - injections?
 - targeted antibody (water application or oral paste products)
 - “burn the barn”?

For management of any ABF program, it is imperative to have or to try to reach the highest herd health possible. If you are not fighting significant pathogens, like PRRS

or Mycoplasma, then running an ABF farm can be less challenging.

Herd health criteria:

- highest herd health status possible
- production changes – parity segregation
- target vaccine use to known problems
 - E. coli (inoculum)
 - Salmonella
 - Ileitis
 - Influenza
 - HPS
 - A suis
 - Clostridia difficile/perfringens type A
 - Mycoplasma
- medicated feed for sows (CTC; BMD; other)
- manoligosaccharides
- segregate from any dissimilar production
- separate from finisher site

Sanitation:

- keeping bacterial load down is CRITICAL
- dry time important to break and control potential disease processes
- need to have clean environment since can't treat for 'mistakes'
- use degreaser/detergent as well as disinfectant
- hot water wash

Finishing Coordination:

- group all ABF together to better manage
- target health to best finisher sites
- contract vs. owned management

Treatment options during an outbreak:

- removal from the program (cost of loss of

production)

- essential oils (oregano)
- acidifiers (feed and water)
- vaccination strategies: timing? administration?
- antipyretics
- targeted antibody products (water application and/or oral paste products)
- other production aids:
 - Compost-a-mat
 - Mistral/drying agents

In summary, raising pork without antibiotics could potentially become a standard rather than a unique program. The "One Size Fits All" approach does not apply for this type of production as each farm/system has its own unique dynamics and challenges that create the need for alternative solutions. Antibiotic Free production does take more attention to detail in management of key risk factors and emphasizes the need for creative approaches to disease control and treatment.

