

Perspectives on Antibiotic Stewardship in Food Animal Production

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Goal of Antibiotic Use Policy

To foster and protect the responsible and judicious use of antibiotics in the Smithfield Hog Production Division to promote the highest level of animal care and well-being while utilizing our vertically integrated structure to closely align our animal care and medication policies with the evolving values of our customers

Smithfield Antibiotic Use Policy Guiding Principles

Control Disease

- We administer antibiotics to our animals for a limited period of time to reduce the chance of spreading a specific disease following exposure.

Treat Disease

- We administer antibiotics to treat sick animals.

Prevent Disease

- We administer antibiotics to healthy animals when they may be exposed to a particular disease that exists on our premises or is likely to occur.

Promote Growth

- While we do not use medically important antibiotics to promote growth, we do use animal-only antibiotics for growth promotion and feed efficiency.

Visit www.smithfieldfoods.com to view the full policy.

Stewardship

- Antimicrobial stewardship refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobial agents by promoting the selection of the optimal antimicrobial drug regimen including dosing, duration of therapy, and route of administration.
- Ensure justification for all antibiotic use
- Antibiotics serve an important role in fighting infectious disease, preserving animal health, and protecting food safety.
- “Use as little as possible but as much as necessary.”

Is Antibiotic Resistance Affecting Our Ability to Effectively Treat Animal Disease?

In general, no. FDA National Antimicrobial Resistance Monitoring System (NARMS) data (2012-2013) in poultry, swine, and cattle indicates that resistance patterns are stable or have declined slightly. No significant impacts with regard to animal health management. Update 2014-2015 interim report highlights that “Encouraging Early Trends Continue” (05/12/16).

Challenges

- Effective therapeutic antibiotics are required to ensure food animal health, well-being, and food safety.
- As a practical matter, most all important therapeutics for swine disease are classified medically important for human use.
- With the exception of ionophores, most therapeutic antibiotics were originally developed for use in humans.
- Today the lack of incentive for the development of new antibiotics is a concern for human medicine, and there is even less incentive for development of animal therapeutics.

Animal Health Management

Primary concern for the longer term is availability of new products if we lose access to or efficacy of important therapeutics. Therefore, our focus is on stewardship. The majority of important animal therapeutic antibiotics are classified as medically important for human use (GFI#152).

Implications

It is important to consider a broad strategy to manage animal disease pathogens, both viral and bacterial. Development of new tools for prevention (vaccines) and treatment (antimicrobials, antivirals, monoclonal antibodies) of common diseases should be encouraged in order to maintain animal health, well-being, and a safe food supply.

Consumers' Preferences Are Changing

- Where does our food come from?
- How was the animal raised and how was the meat produced/processed?
- Antibiotic free: No residue vs raised without.
- Responsible use: Align with consumer values.
- Who is the audience? Meat buyers or end consumer?
- Often antibiotic free combined with other process modifications such as housing and no use of animal byproducts in feed.