Animal Agriculture and One Health

Dr. Michael Apley
Kansas State University
The U.S. Beef and Dairy Industries

The sale of cattle and calves in the United States 2012 Agriculture Census totaled $76.4 Billion, 19% of total agricultural sales.

The sale of milk in the United States 2012 Agriculture Census totaled $35.5 billion, 9% of total agricultural sales.
The Industries

• 2012 Agriculture Census
  – 619,172 farms and ranches specializing in beef cattle
  – 915,000 total cattle and calf operations
  – Average beef herd size of 40 head

• Total cattle and calves - 92 million head as of January 1, 2016
  – 30.3 million beef cows
  – 9.3 million dairy cows

• In 2015 there were 43,584 dairy farms licensed to sell milk, each averaging 214 cows
Beef Industry Health Commitment

• The Beef Quality Assurance program started in the 1970s and has continued to expand across different production segments to address subjects such as residues, carcass quality, and animal handling.
  • The history and training/educational documents may be accessed at the BQA site. http://www.bqa.org/

• Another example of industry-wide collaboration related to one health is the Beef Industry Food Safety Council.
  • https://www.bifsco.org/
Beef Industry Health Commitment

• National Cattlemen’s Beef Association
  – A consistent long-term focus on food safety and quality
  – I serve as chair of a task force specifically addressing antimicrobial resistance.
Dairy Industry Health Commitment

• The Dairy Beef Quality Assurance program

• The National Dairy FARM program (Farmers Assuring Responsible Management)

• New 2016 FARM Residue Prevention Manual Focuses on Antimicrobial Stewardship
The Veterinary Commitment

• American Association of Bovine Practitioners - Guidelines
  • Drug Use Guidelines for Bovine Practice (2015)
  • Prudent Antimicrobial Use Guidelines for Cattle (2013)
  • Establishing and Maintaining the Veterinary-Client-Patient Relationship in Bovine Practice (2015)
  • AABP/AVMA Judicious Therapeutic Use of Antimicrobials in Cattle

• Academy of Veterinary Consultants

• State VMAs working with State Departments of Agriculture and Extension personnel
The Veterinary Commitment

• A shining example of a veterinary organization taking the lead is the Wisconsin VMA Food Armor Program. [http://www.foodarmor.org/](http://www.foodarmor.org/)
What is Stewardship?

Is there a non-antibiotic alternative which will appropriately prevent, control, or treat this disease challenge?

While asking...

Assuring use of the antibiotic as shown to be safe and effective

While

Selection of an antibiotic which has been demonstrated to be safe and effective for this purpose

If not...