

Policy Responses to Health Implications of Confined Animal Feeding Operations

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Health Implications

- Food-borne illnesses
- Antibiotic-resistant diseases
 - Food-borne infections
 - Urinary tract Infections
 - Post-operative blood infections
 - Others, MRSA??
- Pandemic flu

Three General Policy Responses

- Collect more and better information on animal-associated microorganisms
- Reduce the unnecessary use of antibiotics in agriculture
- Redesign animal production systems to keep healthy animals healthy

I. Collect More Information on Animal-Associated Diseases

- CDC does a great job with limited resources
- U.S. government (CDC, USDA, FDA) needs a much more robust system to compile and collect information on animal-associated diseases

Good Example: MRSA

- Methicillin-resistant *Staphylococcus aureus* (MRSA)
- 19,000 people died in 2005 of invasive MRSA
- 17,000 people died that same year from AIDS

New Findings in Europe

- Animal systems (particularly swine) are reservoirs for MRSA
- Swine operators, their families, and veterinarians are likely conduits to the general community

Are Animal Operations Reservoirs of MRSA in the United States?

- We don't know
- We're not trying very hard to find out



Credit: USDA-ARS

Fund Government Programs that Compile Data

- Pay urgent attention to MRSA
- Collect data on antibiotic use

II. Reduce Unnecessary Drug Use in Animals

- Antimicrobial use in animal systems estimated to be 24 million pounds annually
- 8X the estimated use in humans
- Most use in “healthy” animals for growth promotion and routine disease prevention

Why Use Antibiotics?

- Compensate for crowded, unsanitary conditions and stress
- Make animals grow faster
- ***USUALLY NOT TO TREAT DISEASE***



Credit: D. Hatz, Factoryfarm.org

Preservation of Antibiotics for Medical Treatment Act (PAMTA)

- Proposed federal legislation would phase out the use in animals of antibiotics also used in humans
- Applies only to routine prevention and growth promotion in animal agriculture

Under PAMTA

Animal producers

- can treat sick animals
- will have antimicrobial tools to use



Credit: Montana State University, Animal & Range Extension Service

PAMTA on the HILL

- **Senate (S. 549)**

Sponsored by Senators Edward Kennedy (D-MA), Olympia Snowe (R-ME), Susan Collins (R-ME), Sherrod Brown (D-OH), and Jack Reed (D-RI)

- **House of Representatives (H.R. 962)**

- Sponsored by Rep. Louise Slaughter (D-NY) and 34 other House members

STAAR Act

Strategies to Address Antibiotic Resistance Act (H.R. 3697)

- Establish an office in HHS to coordinate the government's response to antibiotic resistance
- Collect data on drug use
- Augment capacity to monitor resistant organisms

Put More Money into Existing Programs

CDC, USDA, FDA

III. Redesign Animal Operations to Reduce Antibiotic Use



Today's Animal Agriculture

Niche Farms

- Healthy food
- Less pollution
- Animals stay healthy
- Reduced use of drugs

Too *Little*

Huge, industrial operations

- Less healthy food
- Stressed, crowded animals
- Heavy use of drugs

Too *Big*

A Better
Way

A New Approach

New medium-sized farms can both take advantage of modern methods and efficiencies while avoiding excess dependence on antibiotics that plagues CAFOs.

Smart Pasture Operations

- Take advantage of low-cost feed (grass)
- Use sophisticated land management techniques
- Work with nature to produce efficiencies
- Are already being used on successful farms



Credit: Michele Stapleton for the Union of Concerned Scientists

WHY SMART PASTURE OPERATIONS WORK

Manageable
Scale



Natural Diet

Less Crowding

Summary of Policy Responses

- Collect more information on animal-associated pathogens
- Reduce the unnecessary use of antibiotics in agriculture
- Redesign animal production systems to keep healthy animals healthy



Thanks!