

# The Influence of Pseudoscience, Media, and Social Perceptions on Policy Decisions

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# Today's Presentation

- ▶ Science behind antibiotic use in food animal medicine
- ▶ Don't bother me with the science
  - NGO example
  - Regulatory example
  - Legislative example
- ▶ Danish government's influence
- ▶ Media and public policy

# There Are Four FDA-Approved Uses For Antibiotics.

- ▶ Growth promotion/Feed efficiency
- ▶ Prevention
- ▶ Control
- ▶ Treatment

# Here's How Producers Can Get Antibiotics.

## ▶ Over-The-Counter (OTC)

- Producers, only as approved on label or added to feed by a feed mill as directed on the FDA approved label.

## ▶ Veterinary Feed Directive (VFD)

- Feed mill adds a specific antibiotic at specific dose. Most states require a VCPR

## ▶ Prescription

# The Science Of Antimicrobial Resistance

- ▶ Only occurs when an organism was susceptible and later becomes resistant
- ▶ Change in the organism's DNA
  - By accident
  - Due to exposure to antimicrobial
  - Transfer of DNA from another microbe
- ▶ Selection pressure
  - Never are all the organisms killed
  - Survivors develop and pass on resistance

# Show Me The Science, Doc!

- ▶ Iowa State University → demonstrated that when pigs have been sick during their life, those pigs will have a greater presence of food safety pathogens on carcasses
- ▶ The Ohio State University → pork from pigs produced in modern, conventional systems had levels of three food-borne pathogens lower than pigs raised in outdoor systems without the use of antibiotics.
- ▶ AVMA → risk assessments on antibiotic use demonstrate a very low risk to human health from the use of antimicrobials in food animals, and some models predict an increased human health burden if antibiotic use in food animals were withheld

# The Facts On Antimicrobial Resistance

- ▶ No case of human infection with a resistant bacteria has been proven to be caused by use of antimicrobials in food animals.
- ▶ There is little to no evidence that restricting or eliminating the use of antimicrobials in food-producing animals would improve human health or reduce the risk of antimicrobial resistance to humans.

# The Theory Of Food Animal Antibiotics and Resistance

- ▶ Antimicrobial resistance is caused by widespread use of antimicrobials in food production systems, i.e., the more we expose the organisms to antimicrobials the more we give them the opportunity to develop resistance.
- ▶ Although that may be true in a very simplified, general sense, there is no scientific evidence of *how, if or to what extent* such exposure affects human health.

# Interfaith Center on Corporate Responsibility

## ▶ ICCR's Mission Statement

- Through the lens of faith, ICCR builds a more just and sustainable world by integrating social values into corporate and investor actions.

## ▶ Our history

- For nearly four decades, ICCR has merged social and environmental values with investment decisions, believing as long-term investors, one must achieve more than an acceptable financial return.

## ▶ What we do

- ICCR raises the prophetic voice of faith to change the way companies conduct themselves as good corporate citizens. We promote transformation in corporate policies and practices, driven by changes in how companies relate to investors, stakeholders and the global community.

## Getting Started Latest Headlines

## On Corporate Resp...

from legislative and regulatory forums to create a shareholder advocacy presence globally as well as at the Federal/State level.

Want to help support this important work?

## 3 of the Ways ICCR is Changing Your World:

## Place

[From Farm to Fork: A Better Meat Industry](#)

Contemporary meat production – which relies on Concentrated Animal Feeding Operations, or CAFOs, has industrialized animal agriculture. US pork production alone is expected to reach 22.8 billion pounds in 2009. But do the supposed gains in efficiency make up for the risks to worker, consumer, and environmental health? As investors who analyze the environmental and social risk management practices of the companies in which we invest – whether compelled by faith or in the interests of sustainability – ICCR and its members are working to reform meat industry practices.

## People

[The Right to Learn: Ending Forced Child Labor in Cotton Harvesting](#)

The cotton trade is a vast, global industry with a total international trade estimated at \$12 billion. In developing countries like Uzbekistan – the leading cotton exporter after the US, cotton is still picked by hand. Hundreds of thousands of children – many between ten and fifteen years old – are forced out into its fields each year to manually harvest the bolls, which go on to make their way into name-brand clothing . As investors who apply an extra degree of diligence to our capital markets holdings – whether compelled by faith or in the interests of protecting human rights – ICCR and its members are taking steps to end this form of modern-day slavery.

## Policy

[Paychecks and Balances: When CEO Compensation Becomes Excessive](#)

Part of the promise of the American Dream is the belief that hard work in the workplace will be

Inspired by Faith

**Our Work: Place***From Farm to Fork: A Better Meat Industry*

As investors who apply an extra degree of diligence to our capital markets holdings – whether compelled by faith or in the interests of sustainability, or both –ICCR and its members are concerned that meat industry practices are insufficiently attentive to worker, consumer and environmental health risk long-term harm to both the meat marketplace and the meat industry itself.

**CAFOs: Concentrated Animal Feeding Operations**

Swine flu is a red flag for the portion of the meat industry that relies on Concentrated Animal Feeding Operations, known as CAFOs. Pigs in CAFOs live by the hundreds or thousands in warehouse-like barns, in rows of wall-to-wall pens. The heat and concentrated waste in the CAFO barns creates gases so toxic that if the ventilation systems fail the animals (and workers) will die. Animals kept under these conditions have weakened immune systems and CAFOs rely on antibiotics to keep the animals healthy and increase their growth rates. The deadly MRSA (methicillin-resistant Staphylococcus aureus) infection, which is resistant to most antibiotics, is linked in part to routine use of antibiotics administered to CAFO animals. As Nicholas Kristof pointed out in *The New York Times* on March 11, the CDC reported that by 2005 MRSA killed more people in the U.S. than the AIDS virus.

**Antibiotic-Resistant Infections**

The UN Food and Agriculture Organization (FAO) warned in 2007, that the industrialization of pig and poultry production “could lead to a higher risk of disease transmission from animals to humans.” CAFOs are ideal environments for infection to spread among the thousands of animals in close quarters generating tons of pathogenic manure. The Pew Commission on Animal Farm Production called industrial farms “super-incubators for viruses.” The American Public Health Association, the largest association of public health professionals in the world, called for a moratorium on factory farms five years ago.

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Inspired by faith committed to action

# FDA's New Antibiotic Philosophy

- ▶ Joshua Sharfstein, Deputy Principal Commissioner of FDA, in the Rules Committee H.R. 1549 Hearing
  - “FDA also believes that the use of medications for prevention and control should be under the supervision of a veterinarian.
  - “FDA supports the idea of H.R. 1549 to phase out growth promotion/feed efficiency uses of antimicrobials in animals.
  - “FDA recommends that any proposed legislation facilitate the timely removal of non-judicious use of antimicrobial drugs in food-producing animals.”

# What Does This New Philosophy Mean To Producers?

- ▶ FDA is walking away from growth promotion/feed efficiency claims
- ▶ Veterinary supervision of all antibiotics
  - Two vehicles for this today: Rx or VFD
  - We have to assume that is how FDA will move forward
- ▶ The philosophy was put out there, BUT no details were provided on implementation

# At The Animal Ag Coalition Meeting FDA Says...

- ▶ Antibiotic growth promoters are non-judicious use.
- ▶ Antibiotic growth promoters are not justified for any amount of risk.
- ▶ Supports voluntary industry action to move growth promotion/feed efficiency claims to prevention
- ▶ Veterinary oversight still undefined

# Antibiotics:

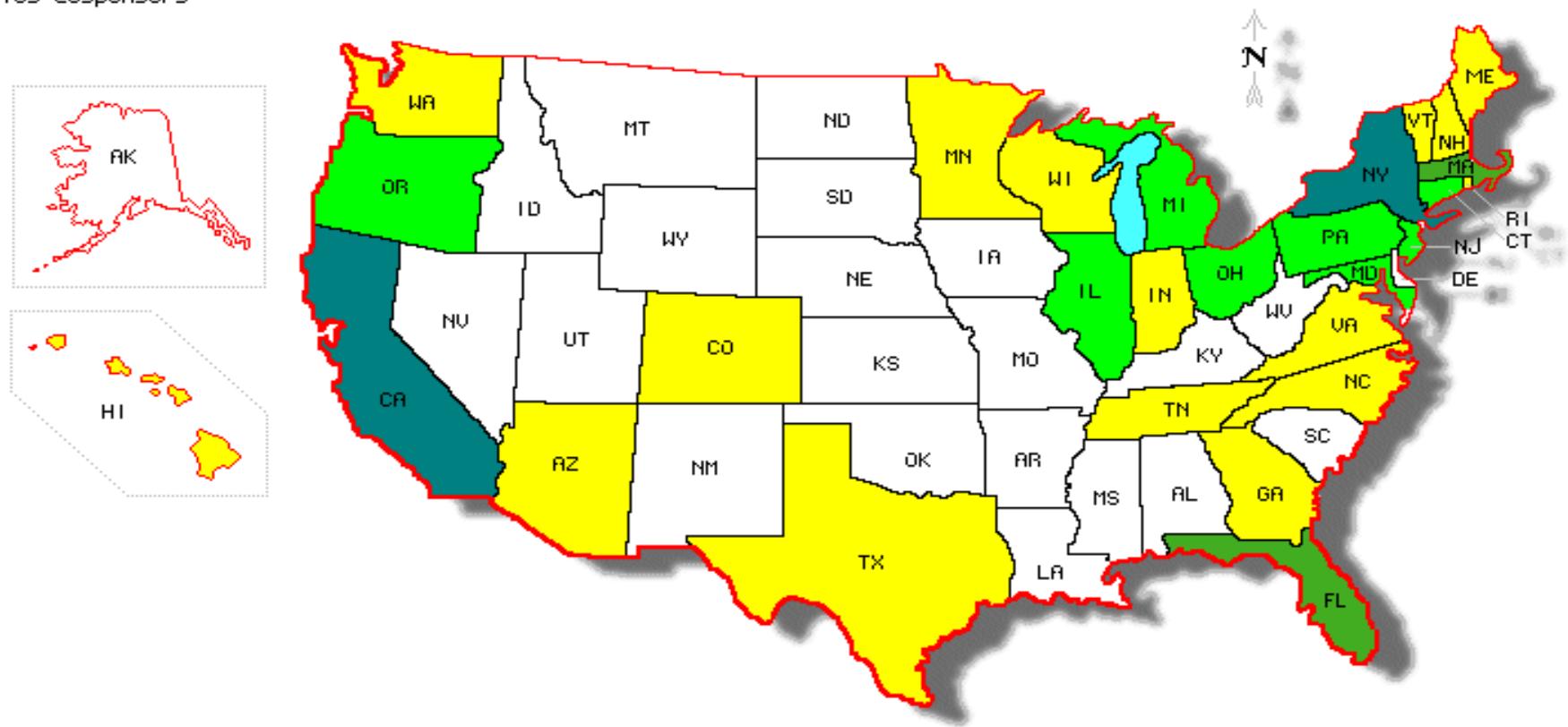
## S. 619/H.R. 1549: What Does It Really Mean?

- ▶ Manufacturers have to prove **again** that medicines are safe.
  - Have 2 years to complete risk assessment and have FDA sign off
- ▶ “Critical antimicrobial animal drug” definition
  - All inclusive list of medicines
  - On the chopping block: 7 classes
- ▶ Definition of nontherapeutic
  - Leaves us with treatment use of water and feed antibiotics
  - Lose prevention and control

# **Antibiotics: S.619/H.R. 1549: Policy or Politics?**

Cosponsorship for HR 1549

- - <2 cosponsors
  - - 3-6 cosponsors
  - - 7-10 cosponsors
  - - 10 plus cosponsors



# The Danish Government Attempts To Influence Our Lawmakers.

- ▶ Denmark's National Food Institute sent a letter to U.S. House Ag Committee
  - “We know that various rumours and sometimes ‘creative’ interpretations of what has taken place in Denmark have been circulated to members of the US Congress, and we are grateful for having been given this opportunity to correct some of these stories.”
- ▶ Briefing on Danish ban of AGPs
  - Sponsored by three U.S. members of Congress
  - Danish officials and farmers presented their side

# The Media's Role In The Antibiotic Debate.

- ▶ AP article entitled “Pressure rises to stop antibiotics in agriculture”
  - “FRANKENSTEIN — The mystery started the day farmer Russ Kremer got between a jealous boar and a sow in heat.
  - “Researchers say the overuse of antibiotics in humans and animals has led to a plague of drug-resistant infections that killed more than 65,000 people in the U.S. last year — more than prostate and breast cancer combined. And in a nation that used about 35 million pounds of antibiotics last year, **70 percent of the drugs** — 28 million pounds — went to pigs, chickens and cows. Worldwide, it's 50 percent.”

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# Thoughts For The Future

- ▶ The science supports using antibiotics responsibly and maintaining animal health.
- ▶ Many organizations and political influencers are on the opposite of the debate.
  - They keep veterinary antibiotics in the media.
  - They canvas the Beltway with their “facts”.
- ▶ Opponents do not have to base their comments on fact.
- ▶ Perception is reality.

# Courage Is What It Takes To Stand Up And Speak.

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