

Public Health

Farmers Serious About Health Concerns

Taking care of one's health is just as much of a concern to farmers as it is to the critics who claim that livestock farms are endangering the public's health. Remember, it's farm families and the animals who breathe the air and drink the water first at a confined animal feeding site. If serious health problems existed as a result of living near a confinement livestock farm, the farm family and animals should be the first to be affected.

Common sense tells you that if a farmer thought the farm operation was making family members and animals sick, the problem would be taken care of immediately.

Livestock
farmers recognize that employees who work inside enclosed confined animal feeding barns need to take safety precautions to protect themselves and the animals from spreading potential diseases, But, there is no conclusive, peer-reviewed research that indicates confined animal feeding operations are a serious public health risk.
Purdue University CAFO Project - Public Health Fact Sheets

Affect of Livestock on Public Health

by Bob L. Larson, DVM, PhD, College of Veterinary Medicine, University of Missouri, Columbia

Livestock pose no or very limited infectious disease risk to people who are not in direct contact. It is inappropriate to extrapolate infectious disease risk of animal care givers to the general public.

In addition, the type of production system does not change the risk for diseases that can pass from animals to humans; and livestock are not over-represented in disease risk when compared to companion animals and wildlife.

While it is certainly true that there are infectious diseases that pass to humans from animals such as pets, wildlife, and livestock, these risks are confined to humans in direct contact with animals, or in the case of watershed contamination, the risk is reduced from animals housed in managed environments compared to wildlife or pastured livestock.

Read More...

Zoonotic Diseases

Zoonotic diseases are those diseases that can be passed from animals to humans.

CAFOs and Public Health: The Fate of Unabsorbed Antibiotics - Purdue University

Social Influences Affect Odor Perception

Where does odor and the role it plays in human health fit in the hog industry puzzle? Duke University professor Susan Schiffman recently published a report reviewing past and current research that looks at odor and health.

Consider this...

- An ammonia emissions exposure study conducted by the Missouri Department of Health found airborne ammonia exposures near CAFO and nearby residences showed no apparent public health hazard.

- There have been no reported outbreaks of human illness from drinking water contaminated by hog manure.

- New federal regulations clearly address land application of manure and set new standards to help producers protect water and soil quality.

- Very few manure storage lagoons have failed in the United States.

- Properly permitted lagoons are designed to anticipate unusually heavy rain events. Seepage rates from clay-lined lagoons are approximately equal to spooning six tablespoons of water on a square foot per day.

- By the time lagoon seepage filters to underground water supplies, it is clean.

- USDA's Agricultural Research Service (ARS) scientists have found that the microbes in manure can play an important role in breaking down antibiotics and other pharmaceuticals excreted by treated livestock.

Antibiotics Used In Livestock Production

Antibiotic use in animal agriculture is important to protecting animal health and human health.

- Most scientists agree that overuse of antibiotics by humans is the primary cause of antibiotic resistance.

- There are three main reasons for using antibiotics in livestock production – to treat sick animals, to reduce the spread of disease and to improve nutritional efficiency.

- Your chance of treatment failure due to antibiotic resistance from eating pork is 1 in 53-million. A person is more likely to be struck by lightning, attacked by a shark, die from a bee sting or die from a dog bite than experience antibiotic resistance from eating pork. (Download Risk Factor Chart)

- The use of any antibiotic increases a farmer's cost of production. Maintaining clean facilities and preventing the introduction of disease is a top priority for all producers because having a healthy herd provides the greatest financial return. A producer's first choice is always to reduce the cost of all inputs used in production.

- Livestock farmers know that using antibiotics responsibly is important to maintaining public trust and the ability to effectively use animal health products.

Study finds antibiotic resistance in poultry even when antibiotics were not used

Source: 3/8/2007 for Meatingplace.com

A surprising finding by a team of University of Georgia scientists suggests that curbing the use of antibiotics on poultry farms will do little, if anything, to reduce rates of antibiotic-resistant bacteria that have the potential to threaten human health.

Dr. Margie Lee, professor in the UGA College of Veterinary Medicine, and her colleagues have found that chickens raised on antibiotic-free

farms, and even those raised under pristine laboratory conditions, have high levels of bacteria that are resistant to common antibiotics. Her findings, published in the March issue of the journal *Applied and Environmental Microbiology*, suggest that poultry come to the farm harboring resistant bacteria, possibly acquired as they were developing in their eggs.

"The resistances don't necessarily come from antibiotic use in the birds that we eat," Lee said, "so banning antibiotic use on the farm isn't going to help. You have to put in some work before that."

Lee and her team sampled droppings from more than 140,000 birds under four different conditions:

1. commercial flocks that had been given antibiotics;
2. commercial flocks that had not been given antibiotics;
3. flocks raised in a lab that had been given antibiotics;
4. flocks raised in a lab that had not been given antibiotics.

The researchers examined levels of antibiotic resistance in normal intestinal bacteria that do not cause human illness and, in a companion study published in May in the same journal, also examined levels of drug-resistant campylobacter bacteria, a common foodborne cause of diarrhea, cramping and abdominal pain.

Two scientific reports indicate eliminating antimicrobials from food animal production may have little impact on resistant bacteria of concern to human health

Source: Animal Agriculture Alliance, March 28, 2007

Antimicrobials are integral to food production and manufacturing, providing for good physical condition of crops, good health of food animals, and maintaining sanitation during food processing," said Michael Doyle, PhD, at the Animal Agriculture Alliance's sixth industry-wide Stakeholders Summit held March 19-21 in Arlington, Virginia. "Antimicrobials are important to reduce and control foodborne pathogens in food animals and in their further processing."

Doyle, a professor at the University of Georgia and leader of an Institute of Food Technologists team of experts studying antimicrobial resistance, noted that 95% of antibiotic use in agriculture is for therapeutic treatment of disease or control of pathogens. He also said that antibiotic-resistant intestinal bacteria may be present in food animals, regardless of the animals, exposure to an antibiotic.

Further Doyle indicated that when the European Union (EU) eliminated

in-feed antibiotics, it likely resulted in increased intestinal disease in animals, causing therapeutic antibiotic use to rise which then triggered an increase in resistant microbes in EU nations. Doyle noted that some types of antimicrobial resistance in *S. Typhimurium*, *C. jejuni*, and *E. coli* have increased in Europe since the ban was instituted.

"Sweeping risk management measures that are proposed for a certain classification of use, such as growth promotion, can be draconian and without predictable results," warned Doyle after referring to the results of the EU experience. Doyle also noted that there is no notable difference in microbial resistance from animals raised in confined animal feeding operations when compared to animals from other systems used for growing food animals.

The findings of Dr. Doyle and the IFT panel of experts indicate that it is time for the inaccurate urban legend of antimicrobial resistance being caused by conventional animal feeding operations to end," said Alliance Executive Vice President, Kay Johnson. "This summer the IFT report indicated that eliminating antimicrobials from food animal production may have little positive impact on resistant bacteria of concern to human health. Then, just a couple weeks ago, a team of scientists at the University of Georgia found that antibiotic resistance doesn't necessarily stem from antibiotic use."