



## About Us

The Illinois Citizens for Clean Air and Water (ICCAW) is a state-wide coalition of family farmers and community groups advocating for sound policies and practices that protect the environment, human health, and rural quality of life from the impacts of large-scale, industrialized livestock production facilities in Illinois. A majority of its members are family farmers and rural residents that live near large-scale industrial livestock facilities and have been adversely impacted by the problems they create.



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- Families Against Rural Messes,** Peoria County
- Coalition Against Factory Confinements,** Henderson County
- Rochester Buckhart Action Group,** Sangamon County
- Quad Cities Citizens Against Triumph,** Rock Island County
- Helping Others Maintain Environmental Standards,** Jo Daviess County
- Heart of Illinois Sierra Club,** Peoria County
- Citizens Against Factory Farms,** Brown County
- Families Against Animal Confinement Threats,** Rock Island County
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- Saving Our Rural Environment,** Hancock County
- Stop Triumph Permanently,** Rock Island County
- Clean Responsible Agriculture No CAFOs,** McDonough County

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To join our mailing list or become a member, please send your name, email address and phone number to: [info@iccaw.org](mailto:info@iccaw.org).



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**In the Matter of: Concentrated Animal Feeding Operations (CAFOs): Proposed Amendments to 35 Ill. Adm. Code Parts 501, 502, and 504 R2012-023**

**October 30, 2012**

**Testimony of Karen Hudson [khudson@elmnet.net](mailto:khudson@elmnet.net)**

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My name is Karen Hudson. My husband and I live and farm on our century farm in Peoria County, Illinois. As farmers, we have an understanding about best management practices in agriculture that would protect our natural resources for the generations to come.

Our family became immersed in the concentrated animal feeding operation (CAFO) issue in the fall of 1996 when factory farms announced they were building in our community. During this time I was appointed as a member of the House Senate Joint Livestock Advisory Committee in 1997 as President of Families Against Rural Messes. (FARM) Today I work with a national team for the **Socially Responsible Agricultural Project ([www.sraproject.org](http://www.sraproject.org))** as an environmental consultant that assists and educates the public on the numerous impacts of intensive animal agriculture production. I am also co-founder of a statewide coalition representing over 30 counties named **Illinois Citizens for Clean Air and Water (ICCAW)**. [www.iccwa.org](http://www.iccwa.org). In 2001 I traveled to Poland as a guest of the Polish Farmers Union to educate people there on the devastation caused by CAFO's in the United States. Today I enter this testimony with factsheets and the book titled the **CAFO Reader** onto the record as it contains pictures of Illinois spills I have documented.

On Veteran's Day eve in 2000 our organization called FARM (Families against Rural Messes) received an anonymous call regarding a stream that is fed by runoff from the local dairy CAFO, and then named Inwood Dairy. We discovered foam 1-3 feet in height in the creek and took documentation in photos as well as water samples. Fecal coliform lab results were 80,000 units per hundred millimeters far above the safe number of 200/1200/ml. We attempted to contact the Illinois EPA that evening for assistance with no luck. It was a holiday and after hours, so we were shouldered with recording the pollution event.

In late winter 2001 a neighbor nearest to the dairy noticed brown runoff streaming into his strip mine lake which is next to their home. It was cold and frost was in the ground. **Manure that had been applied simply slid off into his neighboring property and into the lake.** The EPA was contacted which led them to discover that the lagoon was overtopped and a hair away from a catastrophic spill. A judge ordered not to pump the lagoon, but against a court order, the owner pumped between two and ten million gallons of raw dairy sewage onto the ground. The sewage caused a fish kill and contaminated the west fork of the Kickapoo creek for miles. Another fish kill occurred in a lake on the farm's property

Our group, FARM, took to the sky and collected photographic evidence on the volume of the spill outside the site and 2 spills located on the property near the barns. Attorney General Lisa Madigan utilized our photos as states' evidence against the operator and it resulted in a 50,000.00 fine. The Federal EPA then stepped in and convicted the owner. He is now a convicted felon.

I have also been witness to and have documentation of over application and spills in fields surrounding the dairy CAFO in Elmwood. I documented this with photos on September 11, 2011 after an anonymous call came to my home. After the dairy operation repeatedly spread lagoon waste too close to the neighbor's well head, a family and their pets near the manure application site became very ill. They endured hospital tests at their own expense. When their well was tested, Fulton County Health Department warned them not to drink or even take a bath in the water which was contaminated with fecal coliform and e: coli. (The well was pristine when they built their home)

My husband and I witnessed pollution runoff the Stone Ridge Dairy in Mclean County on a trip home from Indiana. We took graphic photographs of runoff coming directly from the dairy which is located on the top of a large rise in the ground. We notified the IEPA and the press of the runoff in the creek. Later we discovered that the silage pile was not being maintained properly. This neighbor also had an operation in Wisconsin that has had outstanding violations including housing workers in trailers inside of a large dairy shed. In Illinois you cannot obtain a driver's license if you have an outstanding ticket in another state and on September 11, 2011, the operator was granted his permit.

In a past event, I know that the Elmwood area dairy CAFO spread waste for so long on a particular neighbor's field that the neighbor had to tell them to finally stop.

One December night I was shocked to be the recipient of an unusual call from Region 5 EPA. The official asked me if our group Families Against Rural Messes "knew where all the CAFO's were in the state." I said, "I thought you were supposed to have that information!"

**All of these events occurred after the LMFA was slightly strengthened when George Ryan was in office during themed 1990's. It is clear that the existing rules in place are not enough to protect the waters of our state. When I worked to strengthen the LMFA years ago it was supposed to be the "first step" in fixing the flawed LMFA. Today dangerous loopholes remain that undermine public safety and waters of the state.**

Unregistered CAFOs and undocumented discharges and applications have been an ongoing freebie for dumping livestock filth in our waterways for years. During the many years of work with Illinois citizens I have been witness to repeated CAFO scenarios that routinely play out and pollute the waters of our state. I strongly urge the Pollution Control Board to expedite the following changes that would assist in protecting the waters of the state of Illinois.

**The current regulatory program for Large CAFOs in Illinois is flawed and stronger regulations are necessary to protect our waters**

- **All Large CAFOs should be required to register information about their operations with the Illinois EPA so the agency can better regulate them. *This would save precious time on behalf of the IEPA and Federal EPA in keeping track of operations.***
  - The Illinois EPA lacks an accounting for all animal feeding operations in Illinois and employs a complaint driven process to inspect and enforce violations. This is an ineffective regulatory scheme and does little to prevent water pollution. The Illinois EPA needs to create a comprehensive inventory of CAFOs so they have the ability to evaluate them and their need for a permit. The only way to do this without wasting valuable taxpayer dollars is to require Large CAFOs to report information to the agency through a registration program. What is more appalling is that if a citizen calls in a complaint regarding a CAFO, it may not even be in the IEPA inventory.
- **All Large CAFOs should be required to file their waste management plans with the Illinois EPA as part of the registration program and those plans, along with other registration information, should be made available to the public**
  - **Most large CAFOs aren't required to submit their waste management plans to the Illinois EPA or the Illinois DOA.** Agencies responsible for regulating CAFOs should have manure plans. Without this information how will they regulate the millions of tons of manure they never see without waste management plans? **Plans should be made available to the public.** Currently Illinois citizens shoulder the externality of policing these operations within their neighborhoods and manure plans would help them do a better job. **County Boards** who hold IDOA meetings on CAFOs should also have access to

manure plans to determine how much and where it will be spread within their county. County boards can review plans to ensure they are adequate before any Large CAFO commences operations in their communities. A yes or a no vote, even though nonbinding, by county boards at hearings requires vital information that includes public safety and resource protection within the 8 siting criteria. Without these plans officials are in the dark on formulating opinions on how a CAFO would “fit” into the community. It is imperative that they have access to plans that if not followed, would impact public health in a big way. In Iowa, CAFO contaminants, drugs and antibiotic resistant pathogens have been discovered in wells, ditches and waterways outside of the property lines of CAFO facilities. **Recent research has concluded that livestock associated MRSA is higher in communities with factory farms. As outbreaks of illness, flu variants and antibiotic resistant pathogens becomes more prevalent in and around CAFOs manure plans and an inventory of CAFOs are an issue of public safety and national security.**

- **All Large CAFOs should be required to document in their waste management plans when they transfer their waste to another party and ensure that party has enough land to dispose of the waste responsibly**
  - Most Large CAFOs don't have enough land to dispose of their waste and so they often transfer it to others. After it leaves the site- it becomes a “ghost” and is not accounted for. There needs to be a system that tracks where the waste ends up ensuring there is adequate land available and that those accepting waste from CAFOs can dispose of it responsibly. I have seen CAFO waste being transported to reclaimed strip mined land and spread in the winter while frost was in the ground. Who documents these activities?
- **All Large CAFOs should be required to follow the same environmental standards regardless of whether or not they are required to have Clean Water Act permits**
  - The bulk of the Illinois EPA's proposed regulations only apply to permit CAFOs. Few CAFOs in Illinois even have Clean Water Act permits even though neighbors see discharges and spills. All Large CAFOs pose risks of water pollution regardless of their permit status. ***Arguably, unpermitted Large CAFOs pose greater risks because unlike permitted CAFOs they are not subject to regular monitoring and reporting requirements.*** The Pollution Control Board should enact regulations that apply to all Large CAFOs so that they all have to follow the same water protection standards. Otherwise the new regulations will be meaningless and will do little to protect our waters.
- **All Large CAFOs and their land application areas should be required to comply with increased setbacks from surface waters, wells, abandoned wells, and sensitive aquifer and karst areas**
  - Regardless of what they claim, CAFOs do pollute. Large CAFOs pose the greatest risk of catastrophic water pollution due to the vast amount of waste they produce which includes antibiotics, other drugs, heavy metals and antibiotic resistant pathogens. There needs to be more stringent setback requirements to protect ground and surface water resources from contamination by Large CAFOs. A well near the dairy CAFO in Elmwood became polluted after manure from the dairy CAFO was spread too close to the wellhead Estimates of abandoned wells in Illinois range from 50,000 to 150,000. Site checking for these wells should be mandated so setbacks can be adjusted as wells can be conduits for contamination by animal waste during application.
- **Land application of CAFO waste in winter months on frozen or snow or ice covered ground should be prohibited unless every measure is taken to avoid it, including depopulation of a facility**

- Livestock producers should be required to take measures to avoid waste disposal on frozen or snow covered ground because the practice has little agricultural benefits and causes an increased risk of runoff and pollution. It should only be allowed in emergency situations, with agency permission, when all measures have been responsibly taken to avoid it, and it is necessary to avoid a direct discharge from a waste pond overflow.
- **Stringent rules should be enforced regarding manure application practices during windy conditions. Surface waters can be polluted affected when effluent is carried in the atmosphere during windy applications.** I have in my possession a video of a neighbor in our coalition driving along a rural road during waste application pivot spray with his windshield wipers smearing raw hog waste on his car window. My husband and I have also witnessed this operation pivot spraying during 30+ miles per hour winds.



## Overuse of Antibiotics in Animal Agriculture: Air and Water Quality Impacts

By Karen Hudson October 29, 2012

Illinois Citizens for Clean Air and Water [www.iccaw.org](http://www.iccaw.org)

Socially Responsible Agricultural Project [www.sraproject.org](http://www.sraproject.org)

Antibiotics are routinely fed to livestock as growth promoters to increase profits and to ward off potential disease in the stressed and crowded livestock factory environment. Because stress lowers immune system function in animals, antibiotics are seen as especially useful in intensive animal confinements.<sup>1</sup>

In a report by the Union of Concerned Scientists, it is estimated that every year livestock producers in the United States use close to 25 million pounds of antimicrobials for nontherapeutic purposes. This usage estimate accounts for about 70% of total U.S. antibiotic production. The new report, "*Hogging It*," illustrates the total use of antibiotics in healthy livestock has climbed from 16 million pounds in the 1980's to 25 million pounds today. Tetracycline, penicillin, erythromycin, and other antimicrobials that are important in human use are used extensively in the absence of disease. This report can be accessed through [www.ucusa.org](http://www.ucusa.org)<sup>2</sup>

The Centers for Disease Control has concluded that in the United States, antimicrobial use in food animals is the dominant source of antibiotic resistance among food-borne pathogens. The World Health Organization has also called for a ban on the use of subtherapeutic antibiotics that are also used for human therapy. It is important to note that antibiotics are not a necessary evil of livestock production. In other countries, such as Sweden, antibiotics are used stringently and are applied for curative purposes only.<sup>3</sup>

The American Medical Association has approved a resolution to eliminate non-therapeutic use of antibiotics in agriculture. The AMA estimates that 80% of all antibiotics used are employed in agriculture for reasons other than to heal sick animals, such as for promoting growth, for pesticides, or to prevent disease. It opposes such uses because of the growing inability of antibiotics to cure serious human disease.

Evidence suggests that antibiotic use in agriculture has contributed to antibiotic resistance in the pathogenic bacteria of humans and a team of researchers in the international medical journal PLoS Medicine suggest that "transmission from agriculture can have a greater impact on human populations than hospital transmission."<sup>4</sup>

*In January 2004, the American Public Health Association (APHA) called for a precautionary moratorium on the construction of new CAFO's until more research is completed regarding their impacts on public health. The Association also called for federal and state governments to initiate and support research on the air pollutants, water and soil emissions, as well as investigate the greater vulnerability of infants and children to such pollutants.*<sup>5</sup>

### **Antibiotic Resistance and Water Quality**

The nearly two trillion pounds of animal wastes produced annually in the U.S. contain significant amounts of bacteria, including resistant bacteria. Because as much as 75% of an antibiotic may pass undigested through the animal, wastes can contain antibiotics as well as antibiotic-resistant bacteria. In many cases, wastes are stored in open-air lagoons and/or spread on fields.<sup>6</sup> When waste is overapplied or there are leaks or spills, runoff containing antibiotics, resistant bacteria and genes resistant to antibiotics can enter nearby surface waters posing a threat to wildlife and humans and contributing to the growing problem of antibiotic resistance in the environment.

Because of the massive amounts of antibiotics used in agriculture, manure can harbor dangerous bacteria that have the ability to contribute to antibiotic resistance in humans. This is proving to be a concern for our water supplies. Federal Health investigators have found potentially harmful bacteria and other pollutants commonly associated with hog manure in wells and waterways near Iowa hog confinements. Researchers at the Centers for Disease Control and Prevention found that contaminants including pathogens, metals, antibiotics commonly fed to hogs, bacteria, nitrates,

Findings of antibiotics in our waters raise a red flag. It is the real danger that waters laced with these drugs can breed super bugs, which will be resistant to antibiotics that are commonly used to treat human illness. It was announced in March 2001 that Federal and state researchers plan to check Iowa waterways for antibiotics and other drugs after a preliminary check of 30 streams raised questions about pollution. The U.S. Geological Survey's Iowa City office, reported in a check of 30 Iowa streams turned up antibiotics and other unnamed substances.<sup>15</sup> The U.S. Geological Survey (USGS) is now in the process of analyzing 140 streams in 32 states in an attempt to document antibiotic residues in surface waters. Many samples are from the Midwest and will focus on urban population centers and watersheds with CAFO's.<sup>16</sup>

#### Antibiotic Resistance and Air Quality Bacteria Spread Beyond Site

Scientists now confirm that particulates generated by livestock factories can also be a serious health threat. A 1995 Iowa State study confirmed that at least 95% of the dust particles in swine confinement are smaller than three microns, which is in the respirable range.<sup>17</sup> These small invisible particles, which consist of animal dander, feed, manure, molds, saliva, and bug parts not only harbor odor, but also can also carry dangerous compounds and viruses and irritate the lungs just as cigarette smoke does.<sup>18</sup> The generation and dispersal of these particulates from large, concentrated animal feeding operations pose a potential public health threat for nearby residents. The presence of microbes in the air environment inside of housed swine-production facilities is well documented. Research in Ohio verified the presence of microbes from swine growing-finishing facilities and in areas downwind from such operations. A series of bioaerosol studies were conducted around two Midwestern operations that assessed bacteria and fungi numbers and types released in air emissions. Many of the staphylococcal isolates from area near the swine barn were antibiotic resistant. Air fungi identified were species of *Alternaria*, *Aspergillus*, *Monilia*, *Mucor*, *Penicillium*, and *Rhizopus*. Significant levels of staphylococci and fungi were also found in the nearby residences. In early summer, high numbers of aerosolized staphylococci at one downhill station constituted 54% of the total bacteria recovered downwind of the facility. This study concluded that facilities should be sited with consideration of the location of human habitation.<sup>19</sup>

A follow up study released in 2004 again found resistant bacterial forms inside and downwind of swine confinement units and concluded that inhalation of microorganisms could be a health concern for workers inside and downwind. The major conclusion of this study was that bacteria were recovered inside and downwind of these facilities in levels that prior studies had stated could cause a potential human health hazard. The study also recommends that it is logical to place these facilities in areas that do not have a large population living nearby.<sup>20</sup> Another recent study by the USDA concluded "aerial transfer of antibiotics and antibiotic-resistant bacteria from swine confinements may represent an important, and previously overlooked mechanism for the transfer of antibiotic resistance to humans and the environment."<sup>21</sup>

In December 2004, researchers at Johns Hopkins University research found airborne multidrug-resistant bacteria and antibiotics inside large scale swine operations. The airborne bacteria samples that were multidrug resistant were *Enterococcus* *coagulase* negative staphylococci and *viridans* group streptococci. These bacteria are associated with a variety of human infections. The researchers believe workers are at the greatest risk; however they could also become carriers of the drug resistant bacteria that can be spread to other humans in the community. The study also stressed that the presence of high concentrations of multidrug resistant staphylococci and other bacterial pathogens amidst endotoxin containing dust from animal and human waste could pose unique health concerns to people living near land application areas.<sup>22</sup> The study also raises questions about the spread of drug-resistant bacteria to areas beyond the immediate site through ventilation fans. This research adds to the understanding of various pathways in which humans can be exposed to antibiotic resistant bacteria, such as consumption of retail pork products, and contact with or ingestion of the soil, surface water, and groundwater near production facilities.<sup>23</sup>

and parasites were found in manure lagoons, surrounding wells, drainage ditches and underground water. This study presented 3 significant findings:

1. It is clear that pathogens of concern for human health are in fact surviving in liquid manure
2. Pathogens that are surviving in manure show a disturbing pattern of antibiotic resistance
3. The same antibiotic resistant pathogens identified in liquid manure were also found in surface and groundwater near CAFO's suggesting that they may be viably transported. The researchers of this pilot study stress that these results are a clear warning signal and more research is definitely warranted.<sup>7</sup>

A Pilot Environmental Investigation Around Large Poultry Operations in Ohio studied groundwater, surface water, and sediment downgradient from large poultry houses. One surface water sample tested positive for antibiotics. E Coli, Salmonella and various types of Enterococcus were identified in water, soil, and sediment samples. The study also found antibiotic resistant bacteria and concluded that this presence indeed warrants "future investigation."<sup>8</sup>

The EPA and the U.S. Geological Survey have identified antibiotic contamination of waters near two North Carolina hog farms. The samples contained sulfamethazine, lincomycin, and chlortetracycline, antibiotics that are commonly fed to hogs. These drugs were identified in lagoons and in the samples from nearby streams. Researchers also discovered antibiotics in the Neuse River. Antibiotics were also found flowing from tap water on one of the hog farms. The faucet drew water from a well; a finding that suggests groundwater is laced with the drugs, according to the U.S. Geological Survey. Additionally, this study also found that bacteria in the streams had acquired resistance to common antibiotics, according to the EPA.<sup>9</sup> (After pressure from drug companies, the FDA approved the use of sulfamethazine, a drug that is used to promote growth and control rampant disease in animal confinements. In 1988, the National Center for Toxicological Research announced that this drug is a known carcinogen.<sup>10</sup>)

Illinois Research... In a groundbreaking study released from the University of Illinois, microbiologists discovered that bacteria in the soil and groundwater beneath farms are showing tetracycline resistant genes (tet genes) from bacteria that have been traced to pigs' guts. These genes can survive in soil and water-borne bacteria. They can then be passed on to other bacteria in the environment or to humans who come into contact with or ingest the water. The scientists tested samples from manure lagoons and from groundwater reservoirs under the lagoons at two hog farms that routinely use tetracycline as a growth promoter. The researchers also discovered that people at both sites were drinking the affected groundwater. They concluded that this is a practice that may be contributing to antibiotic resistance and that the problem could be very widespread since groundwater is a major part of the water supply in the United States. The scientists called for an end to the practice of using antibiotics as growth promoters.<sup>11</sup>

A Colorado State University study has found antibiotic drugs used to promote growth, prevent disease and increase feed efficiency in livestock are showing up in public waterways. Conducted on the Cache la Poudre River in Colorado, the study, funded by USDA and the university's Agricultural Experiment Station, showed that antibiotics used in livestock are finding their way into streams and rivers. Ken Carlson, principal investigator on the project, said future studies are needed to determine how the antibiotics made their way into public waterways, how long they stay in water and sediment, and to better understand potential dangers to aquatic life, animals and humans.<sup>12</sup>

Swine wastewater that contains fluoroquinolone resistant genes and (fluoro)quinolone residues and is applied to agricultural fields or released to surrounding rivers might increase the risk that nearby residents will be exposed during farming or through their use of contaminated river water.<sup>13</sup>

Antibiotic-resistant organisms enter into water environments from human and animal sources. These bacteria are able to spread their genes into water-indigenous microbes, which also contain resistance genes.<sup>14</sup>

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# CAFOs and Water Quality

## **A Compilation of Facts from: Concentrating on Clean Water: The Challenge of Concentrated Animal Feeding Operations by Carol J. Hodne, Ph.D.**

Full report: [http://www.iowapolicyproject.org/2005\\_reports\\_press\\_releases/050406-cafo-fullx.pdf](http://www.iowapolicyproject.org/2005_reports_press_releases/050406-cafo-fullx.pdf)

- As Cooperband and Good (2002, p. 5075) observed, "Intensively managed livestock production systems have exacerbated conditions where manure use in crop production is more akin to waste disposal than beneficial fertilization." (Hodne, 2005, p. 6)
- ...the processes used in siting CAFOs inadequately consider water quality issues at regional and watershed levels (Jackson, Keeney, & Gilbert, 2000). (Hodne, 2005, p. 7)
- Contract producers compared to independent producers, have narrower options for manure management and other practices that affect water quality (e.g., Morrison, 1998). (Hodne, 2005, p. 4)

### **Manure Application / Runoff**

- Manure runoff to surface waters is increased by manure application to: flood plains; steep land slopes; and soil that is frozen, snow covered, saturated, or of low porosity (Mulla, et al., 1999). (Hodne, 2005, p. 13)
- Manure application near waterways, natural drainage paths and surface waters increases runoff (Crane, et al., 1983; U.S. E.P.A., 1998). (Hodne, 2005, p. 13)
- The Centers for Disease Control and Prevention (CDCP, 1998) studied lagoon, surface water and ground water samples from farm sites in Iowa counties with high densities of swine CAFOs. ...The results generally suggested the possibility that pollutants and pathogens can move through the soil and away from the point of higher pollution (i.e., lagoons) and by overland flow from the area of manure application. (Hodne, 2005, p. 18)
- Water contamination may increase with poorly planned CAFO siting that ignores issues such as regional and watershed water quality, sandy soils, shallow groundwater and flood plains (Jackson, et al., 2000). (Hodne, 2005, p. 14)

### **Manure Lagoon Seepage**

- Earthen manure storage lagoons (that are soil lined or clay lined) allow seepage of wastewater, creating a source of potential groundwater contamination (Ham & DeSutter, 2000). (Hodne, 2005, p. 11)
- With or without liners, lagoons are at risk for seepage due to freezing and thawing, burrowing animals, roots, and cracking from drying walls following pumpout (Jackson, 1998). (Hodne, 2005, p. 12)

### **Water Pollutants Emitted by Factory Farms**

- The main components of CAFO manure that may cause water pollution are nutrients, (i.e. nitrogen, phosphorous, and potassium), ammonia, pathogens, (e.g., bacteria), feed additives (e.g. antibiotics, hormones), salts and trace elements, organic matter, and solids (U.S. EPA, 1998). (Hodne, 2005, p. 7)

#### ***Antibiotics***

- Antibiotics are used in CAFO animals to treat disease, prevent the spread of disease, promote growth and enhance feed efficiency (Cole, Hill, Humenik, & Sobsey, 1999; McEwan & Fedorka-Cray, 2002). ...Depending on the source, 40 percent (Nawaz, et al., 2002) to 70 percent (Mellon, et al., 2000) of antibiotics used in the United States are fed to livestock to promote growth, treat disease and minimize the risks of confinement (e.g., stress from crowding). (Hodne, 2005, p. 8.)
- Of antibiotics given to CAFO livestock, 25-75 percent pass unchanged into manure waste and may contaminate soil and water through transmission through surface water and ground water (Chee-Sanford, Aminov, Krapac, Garrigues, & Mackie, 2001). (Hodne, 2005, p. 18)

- The use of antibiotics, including subtherapeutic use as growth promoters, in CAFOs has been associated with the selection and spread of antibiotic resistance among populations of bacteria in animals. Resistant organisms may spread through infected carrier animals, feed, wildlife, or clothing. (Addis, et al., 1999; Cole, et al., 1999; McEwan & Fedorka-Cray, 2002). (Hodne, 2005, p. 19)
- Methods of transmission of antibiotic resistance to humans include direct contact, animal manure and contaminated food (Gorbach, 2001; McEwan & Fedorka-Cray, 2002). (Hodne, 2005, p. 19)

#### **Hormones**

- Synthetic estrogen and testosterone, which are used in livestock feed to stimulate growth, increase feed efficiency and increase productivity, end up in animal manure (Mulla, et al., 1999). (Hodne, 2005, p. 8.)
- Estrogen and Testosterone are typically transferred to surface waters by runoff and leaching, respectively (Shore, Correll, & Chakraborty, 1995). (Hodne, 2005, p. 19)

#### **Nutrients**

- The application of manure at a nitrogen-based agronomic rate leads to significant overapplication of P [Phosphorus], relative to crop needs (Cooperband & Good, 2002; Sims, 1995). (Hodne, 2005, p. 13)
- High nutrient concentrations have been found in Iowa surface water in river basins with denser concentrations of CAFOs. (Hodne, 2005, p. 14)

#### **Pathogens**

- Pathogens are microorganisms (e.g., bacteria, viruses, parasites) that can cause disease. Animal waste may carry infectious organisms including those that cause food-borne illness in humans, such as *Campylobacter*, *Escherichia coli* (*E.coli*) and *Salmonella*. Animal manure can carry protozoa, including *Cryptosporidium parvum* and *Giardia* species. (Addis, et al., 1999; Mulla, et al., 1999; U.S. EPA, 2001). (Hodne, 2005, p. 8.)
- The settling of fecal coliform to sediments represents a latent human health threat. This is because natural or human disturbances may cause the contaminated sediments to become resuspended (i.e., released into the water again), thereby, becoming a source of contaminated water for humans (Burkholder, et al., 1997). (Hodne, 2005, p. 10)

#### **Salts and Trace Elements**

- Undigested feed that passes through animals contains sodium and potassium. Trace elements in manure include those that are often added to feed as growth stimulants and biocides – arsenic, copper, selenium and zinc. (Hodne, 2005, p. 8)
- Salts and trace elements from discharges from feedlots and land-applied manure, especially when applied excessively and repeatedly, can accumulate, as they persist in the environment, and can ultimately harm soil quality and plant growth. (Hodne, 2005, p. 20)
- Increased salts and trace elements may cause environmental imbalances in fresh waters and on agricultural lands, harming birds and reducing yields. (Hodne, 2005, p. 20)
- The Iowa CDCP (1998) study found trace metals and common ions in water affected by large-scale swine CAFOs, especially in earthen manure lagoons, but also in drainage ditches and wells, tile line inlets and outlets, and an adjacent river. (Hodne, 2005, p. 20)
- Excessive amounts of copper and zinc have been found in creek sediment and wetlands, in association with cattle CAFO and swine CAFOs, respectively (U.S.EPA, 2001). (Hodne, 2005, p. 20)

All information included in this factsheet was obtained from:

Hodne, Carol J. [Concentrating on Clean Water: The Challenge of Concentrated Animal Feeding Operations](http://www.iowapolicyproject.org/2005_reports_press_releases/050406-cafo-fullx.pdf). The Iowa Policy Project. 2005. Full report: [http://www.iowapolicyproject.org/2005\\_reports\\_press\\_releases/050406-cafo-fullx.pdf](http://www.iowapolicyproject.org/2005_reports_press_releases/050406-cafo-fullx.pdf)

Saying he was raised to do the right thing, David Inskeep said he believed his actions in February 2001 saved the area near Elmwood from having to endure a much larger waste spill caused by the failure of a lagoon on the dairy farm.

"The right thing was to prevent the dam from collapsing, so therefore, I pumped," the 64-year-old man told U.S. District Judge Joe McDade.

That didn't prevent Inskeep from going to jail.

McDade sentenced him 30 days in custody, which likely will be served at a halfway house or a community confinement center run by the federal Bureau of Prisons. The judge also ordered Inskeep to pay a \$3,000 fine.

Inskeep's attorney, Ron Hamm, sought probation for his client, saying he had led a crime-free life and that prison wasn't necessary. Under a plea agreement reached in March, Inskeep faced a maximum of 10 months behind bars.

But McDade denied probation, saying there was a need to send a message that damaging the environment would have consequences that were unpleasant and not just result in a fine.

"Otherwise, some people might look at that as just the price of doing business," the judge said.

Rather, the judge told Inskeep he believed 30 days was enough that others might see what the consequences were and not repeat what Inskeep did.

In mid-February 2001, the waste lagoon at Inwood Dairy, which at the time was one of the largest in the state, was filled to near capacity. Three times, officials with the Illinois Environmental Protection Agency had told Inskeep to stop pumping waste into the lagoon because the level was too high. They also told him to hire truckers to remove the waste before it got worse.

Inskeep, however, pumped 1.6 million gallons of waste into a nearby ravine that drained into a pond and then into the creek. He refused to hire waste haulers and told the IEPA official that he would pump the waste out because of the cost difference.

That, said Mary Carraway of the Justice Department's Environmental Crimes section, showed Inskeep's greed and arrogance. She decried Inskeep as a man afraid to go to his investors and push a costly but safer method of removing the waste.

"His attitude was unbelievable," she said. "He did what he wanted when he wanted to do it."

Originally charged with a felony that carried a three-year prison term, Inskeep pleaded guilty to a misdemeanor offense of knowingly discharging pollutants into the waters of the United States without a permit.

Inskeep and the dairy were fined \$50,000 by the Illinois Attorney General as part of a settlement worked out in Peoria County Circuit Court stemming from the spill.

Andy Kravetz can be reached at 686-3283 or [akravetz@pjstar.com](mailto:akravetz@pjstar.com)

**FOR IMMEDIATE RELEASE**

**US Department of Justice  
FRIDAY, MARCH 24, 2006  
[WWW.USDOJ.GOV](http://WWW.USDOJ.GOV)**

**ENRD  
(202) 514-2007**

*Department of Justice*

TDD (202) 514-1888

## **Former Manager of Inwood Dairy Pleads Guilty to Violation of the Clean Water Act**

WASHINGTON, D.C. David Inskeep pleaded guilty to a criminal misdemeanor violation of the federal Clean Water Act (CWA), the Justice Department and the Environmental Protection Agency announced today. Inskeep, former manager and operator of the Inwood Dairy located in Elmwood, Illinois, pleaded guilty to one count of negligently discharging pollutants into waters of the United States without a permit. Sentencing is set for July 13, 2006.

Inskeep managed the Inwood Dairy and its 1,250 dairy cows and operated a waste management system consisting of a lagoon designed at full capacity to hold approximately 40 million gallons of waste generated by the animals. The system used water to flush cattle manure and waste water from the barns to a central collection point; waste was then pumped to the lagoon for storage until it could be lawfully removed.

Mr. Inskeep had many opportunities to lawfully dispose of the waste, but chose instead to disregard them and violate the Clean Water Act by discharging millions of gallons of waste generated by the dairy operation into nearby tributaries, said Sue Ellen Wooldridge, Assistant Attorney General for the Justice Departments Environment and Natural Resources Division. The defendants actions introduced pollutants into the environment and he now faces the consequences of his actions.

According to the plea agreement, on February 14, 2001, an Illinois Environmental Protection Agency (IEPA) official observed that the waste level in the Inwood Dairy lagoon was three inches from the top of the berm wall and advised Inskeep to stop pumping waste in to the lagoon. The following day, another IEPA official allegedly found the lagoon was completely full with the pump still operating. Despite the officials request to turn off the pump to prevent an overflow and discharge into a local tributary and subsequent flow to the West Fork of Kickapoo Creek Inskeep refused to turn off the pump. Inskeep failed to hire waste haulers to remove the waste, and he ultimately decided to pump more than a million gallons of animal waste from the lagoon to a tributary located on his property despite the fact that he was told by state regulators that such action was illegal.

Inskeep pleaded guilty to one count of negligently discharging pollutants (animal waste) into waters of the United States without a permit, in violation of the federal Clean Water Act. Per the terms of the plea agreement, Inskeep could receive up to 12 months in jail and a fine of up to \$30,000.

The case was investigated by Special Agents of the EPA and IEPA and the Illinois Department of Natural Resources. Trial attorney Mary Dee Carraway of the Environmental Crimes Section of the U.S. Department of Justice and Assistant U.S. Attorney Tate Chambers are prosecuting the case.

### **Dairy farm manager faces prison**

Elmwood's David Inskeep could get up to 3 years

Thursday, September 22, 2005

By **ANDY KRAVETZ**

of the Journal Star

**PEORIA** - The former manager of an Elmwood dairy farm faces up to three years in prison and fines of \$50,000 a day for



violating the U.S. Clean Water Act.

David Inskeep, who used to manage Inwood Dairy, was indicted Wednesday on one count of knowingly discharging pollutants into the waters of the United States without a permit.

The indictment alleges that Inskeep, while at Inwood Dairy, pumped more than 1 million gallons of animal waste into the west fork of Kickapoo Creek in February 2001.

That month, heavy rain caused the lagoons that hold animal waste on the farm to come close to overflowing. On Feb. 16 and Feb. 17, 2001, the dairy pumped an estimated 1 million to 2 million gallons of livestock waste from the lagoon, pumping through the night, to a ravine in violation of a court injunction.

According to the indictment, an official with the Illinois Environmental Protection Agency had previously warned Inskeep to stop pumping waste into the lagoon because the level was too high. Inskeep allegedly refused and indicated he would pump the waste into a nearby creek despite being told such an action was illegal, the indictment further alleges.

Inskeep and the dairy were fined \$50,000 by the Illinois Attorney General as part of a settlement worked out in Peoria County Circuit Court stemming from the spill.

"Crimes that impact our environment impact all of us," said U.S. Attorney Jan Paul Miller in a news release. "Federal laws designed to safeguard our land, water and air are not suggestions; they are mandates that will be enforced."

A date for Inskeep to appear in U.S. District Court in Peoria has not been set.

In March, Inskeep agreed to pay \$22,000 to settle a lawsuit that alleged his company, Inskeep Custom Services Inc., failed to contain and remove manure that spilled Dec. 2, 2003, while he field-applied liquid manure on the property of B and P Pork Producers near Tiskilwa. A break in the hose Inskeep was using allowed the manure to flow into a nearby creek.

***F.A.R.M.***

***Families Against Rural Messes***

**For Immediate Release**

**Dec. 12, 2003**

**Contact: Karen Hudson 309-742-8895**

***FORMER OPERATIONS MANAGER AT INWOOD DAIRY REFERRED TO ATTORNEY GENERAL'S OFFICE FOR RECENT MANURE SPILL***

**IEPA alleges that a Peoria County Manure application company is responsible for manure spill and delayed action to contain it. According to IEPA, Dave Inskeep, former operations manager of Inwood Dairy Livestock facility in Peoria County failed to take action to remove or contain manure that was spilled Dec. 2 in Bureau County, Illinois.**

**According to IEPA, Inskeep failed to take action regarding the recent spillage in Bureau County spillage until Dec. 9. Neighbors downstream used earthmoving equipment to try and dam up the waterway to prevent contamination from moving farther downstream. The IEPA has referred this matter the Illinois Attorney Generals office to compel Inskeep to promptly address all environmental damages caused.**

In recent years Inwood Dairy in Peoria County was responsible for numerous manure spills and other environmental violations. In February 2001, Inwood pumped millions of gallons of waste into a ravine against a court injunction. The manure then drained into the Kickapoo Creek, which flows into the Illinois River. The Illinois is a drinking water source for Peoria and other communities. In May 2002 Inwood Dairy was fined \$50,000.00 by the Illinois Attorney General's office.

According to Karen Hudson of FARM, manure pollution from livestock facilities has become the leading cause of fish kills in the United States from agricultural sources.

Manure contains pathogens which can be 10 to 100 times more concentrated than human sewage. There are more than 40 diseases that can be transmitted from manure to humans and disease organisms such as Salmonella, E.coli and cryptosporidium can contaminate water supplies, said Karen Hudson.

"We commend the actions of the neighbors downstream for their attempt to protect our surface waters. As in many cases of livestock pollution events such as this it is the concerned neighbors who can make a difference." Hudson said.

## **IEPA PRESS RELEASE:**

**Dec 11, 2003**

**Contact Joan Murray 217-785-7209**

**IEPA asks attorney General to pursue legal action over manure spill that contaminated creek in Bureau County**  
Springfield, Ill.--- The IEPA has asked the Illinois Attorney General's office to take enforcement action following the release of livestock manure on a farm in Bureau County last week, when equipment being used to pump out a waste storage pit failed and sent livestock waste into an unnamed creek.

The IEPA alleges that David Inskeep, who operates a company that applies manure to farm fields, was pumping out the pit on Dec. 2, and failed to take action to contain or remove the spilled manure until Dec. 9, causing water pollution in violation of state law.

Inskeep was previously the operations manager at the Inwood Dairy livestock facility in Peoria County. During his tenure there, that facility experienced numerous violations related to livestock waste land application practices and manure spills.

Those responsible for water pollution must take immediate action to contain the damage they cause and we are particularly concerned that this individual was involved in prior environmental violations, said Illinois EPA Director Renee Cipriano.

Shortly after the manure release on Dec. 2, neighbors downstream of the farm near Tiskilwa where it occurred used earthmoving equipment to dam up a portion of the unnamed waterway to try to prevent the flow of the waste from moving downstream.

Inskeep did not start pumping out some of the dammed portions of the waterway until the evening of Dec. 9 after being asked to do so by the IEPA on Dec. 8.

The referral to the Illinois Attorney General seeks legal action to compel Inskeep to promptly address all environmental damage caused by the manure spill.

## Stone Ridge Dairy

<http://www.hoinews.com/news/headlines/1136937.html>

### EPA Investigates Local Farm

*photos included*

The Environmental Protection Agency is investigating a local dairy farm.

The E.P.A is testing a fluid found at the Stone Ridge Dairy Farm to see if its dangerous.

Karen Hudson took some pictures of what she calls a suspicious runoff at the farm.

She says its the job of area citizens to make sure the farm doesnt hurt anyone or anything.

Its really important because citizens voices and the citizens monitoring of these facilities is really the only way a lot of these spills are being documented, said Hudson.

Hudson says allowing cows to graze instead of confining them like they are at Stone Ridge Dairy is much better for the animals and the environment.

A group of residents tried unsuccessfully to stop the dairy farm from coming to the area a couple years ago.



PICT020121.JPG

STONE Ridge Dairy / McLEAN County IL.  
Runoff  
Buildings on Hill  
photo: Karen Hudson



PICT020021.JPG

STONE RIDGE DAIRY  
RUNOFF  
MCLEAN COUNTY ILLINOIS  
Reported to IEPA  
Photo: Karen Hudson



PICT020221.JPG

STONE RIDGE DAIRY  
Photo: Karen Hudson  
Reported to IEPA



PICT020321.JPG

STONE RIDGE DAIRY  
RUNOFF  
PHOTO Karen HUDSON  
REPORTED TO IEPA

**Big Orientation**  
A short guide to campus life - page 6

Rep. Tim Johnson explains his fondness for House Speaker Dennis Hastert's new card - page 3

Comed West brings a voice for hope to the Campus Green convention in Chicago - page 8

**THE WEEK: GET YOUR LEFT WING WACKO?**  
Plus: Coverage from Terry Lohan, Tom Tomersek, Matt Wackler, and Dede

**indy**  
Bloomington-Normal's free independent newspaper

August 16, 2001  
Vol. 1, No. 1

# The Stench of Corporate Dairy Farming



18 February 2001: The Inwood Dairy near Dixon, Illinois (foreground) and a group of water fields in Iowa.

**Southeastern McLean County may soon have a new, unwanted neighbor. California-owned Kasbergen Dairy Farms is proposing for the Bellflower area the Stone Ridge Dairy, an operation so large it would dwarf all other such facilities in the state of Illinois. While the facility was approved by McLean County, residents of the Bellflower area are none too pleased.**

Shortly after plans for the Stone Ridge Dairy became public, residents of McLean, Ford, DeWitt, and Cass counties contacted the Quad County Board of Water Pollution Control to form a regional task force to study the proposed site. The group found that killing of lagoons would still not take care of the problem, and that spraying of space heat using gases such as ammonia would not solve the problem. The Stone Ridge Dairy would have 19 acres of lagoons and 19 acres of manure storage. The Stone Ridge Dairy would have 19 acres of lagoons and 19 acres of manure storage. The Stone Ridge Dairy would have 19 acres of lagoons and 19 acres of manure storage.

At the heart of the issue is the size of the proposed waste lagoons. The largest proposal for Stone Ridge Dairy will be one of 19 manure lagoons, stretching over more than 20 acres. While lagoons are large components of farms, urine and other animal waste that are treated with other bacteria and not chemically. When the by-products of other ways of disposing of animal waste are often employed from piping waste, they're into streams or spraying liquid waste on fields in the guise of manure.

Such an operation is known as a CAFO, or "confined animal feeding operation." The Stone Ridge Dairy would have 19 acres of lagoons and 19 acres of manure storage. The Stone Ridge Dairy would have 19 acres of lagoons and 19 acres of manure storage. The Stone Ridge Dairy would have 19 acres of lagoons and 19 acres of manure storage.

The Inwood Dairy near Hinwood, Illinois, became the source of great controversy and industry when dairy employees deliberately dumped waste in excess of two million gallons into a nearby stream. The waste was pumped and applied over into Keokuk, Iowa. At the time, the dairy was under a court order to keep its lagoons from overflowing. At present, waste is being sprayed onto fields to prevent the lagoons from overflowing and residents are being told to expect more problems.

The Kasbergen Dairy is in the Bellflower area of McLean County, Illinois. The Kasbergen Dairy is in the Bellflower area of McLean County, Illinois. The Kasbergen Dairy is in the Bellflower area of McLean County, Illinois. The Kasbergen Dairy is in the Bellflower area of McLean County, Illinois.

**ISU alum Karen Hudson describes her fight against the megadairies • page 4**

The state's largest cesspool is planned for McLean County. Will 26 acres of cow feces cause sewage leaks, water pollution, and an unbearable stink?  
**By Matt Reeder**

and Starfield, and the ownership of Stone Ridge have all passed resolutions opposing the operation and urging the state to discontinue the Kasbergen Dairy's permit in that area.

Other groups have jumped into the fray. The Prairie Action Fund has been active in the fight against the Stone Ridge Dairy, as well as a group of citizens in the Quad County Board of Water Pollution Control.

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INWOOD  
DAIRY SPILL  
PHOTO





TRIBUTARY - KICKAPOO CREEK

NOV 2001

PHOTO BY K. HUDSON

FECAL COLIFORM

81,000 ml/cfu

PEORIA COUNTY ILLINOIS  
INWOOD DAIRY DELIBERATE SPILL  
BY KAREN HUDSON



James Kammameuller  
of Peoria Region office of IEPA.  
Publicly questioned rules of the  
LMFA in a letter to a producer  
in Woodford County. He referred to  
the fact that even if rules were  
followed, due to the vast amounts  
of waste and handling techniques  
ther could still be problems.

He was reprimanded by Gov. Ryan  
administration and was forced to  
apologize and retract his statement.

The article concerning this will  
be submitted at a later date.

## **FACTSHEET: Antibiotic Resistance and Animal Agriculture**

An estimated 70 percent of all U.S. antibiotics and related drugs are used nontherapeutically in animal agriculture.

When bacteria are exposed to antibiotics, the bacteria resistant to these drugs live to reproduce.

Drug choices for the treatment of common infections will become increasingly limited and expensive—and in some cases, nonexistent.

# The Problem: Antibiotic-resistant disease

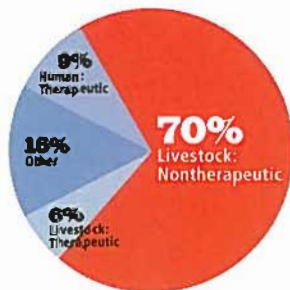
- Antibiotics, one of the medical miracles of the 20th century, are becoming less effective in human medicine due to the rise of resistant bacteria. The U.S. Centers for Disease Control (CDC) has declared antibiotic resistance to be one of its "top concerns."<sup>1</sup>
- An estimated 38 Americans die each day from hospital-acquired antibiotic-resistant infections.<sup>2</sup>
- Antibiotic-resistant bacteria that are commonly transmitted from food animals to people are associated with more infections, longer and more severe illnesses, more hospital visits, and increased death.<sup>3</sup>
- An interagency task force recently concluded that if the problem of antibiotic resistance is not addressed, "[d]rug choices for the treatment of common infections will become increasingly limited and expensive—and, in some cases, nonexistent."<sup>4</sup>
- Effective antibiotics are essential for treating sickness in all people, but they are particularly important for young children, seniors, diabetics, and people with compromised immune systems such as cancer, transplant, and AIDS patients.<sup>5</sup>
- In 1998, the National Academy of Sciences estimated antibiotic-resistant bacteria cost U.S. society at least \$4 to \$5 billion each year.<sup>6</sup>
- There are few new antibiotics on the horizon.<sup>7</sup>

## The causes of antibiotic-resistant diseases in humans: "The more you use them, the faster you lose them."

When bacteria are exposed to antibiotics, the bacteria resistant to these drugs live to reproduce. Thus, while antibiotics are important for disease treatment, their use creates stronger, more-resistant strains of bacteria over time. For this reason, it is important to use antibiotics only when it is absolutely necessary. Still, overuse of antibiotics occurs in both human medicine and animal agriculture.

**Overuse in human medicine:** Inappropriate prescriptions can elicit antibiotic-resistant bacteria. Patients often request—and doctors prescribe—antibiotics for viral infections such as the common cold, even though antibiotics cannot kill viruses. Failure of patients to complete prescriptions also promotes the survival of antibiotic-resistant bacteria

**Overuse in animal agriculture:** While overuse in human medicine is a major part of the problem of antibiotic resistance, meat producers use an estimated 70 percent of all U.S. antibiotics and related drugs nontherapeutically (i.e., as a routine feed additive to promote slightly faster growth and to compensate for unsanitary and crowded conditions).<sup>8</sup> The amount of antibiotics used nontherapeutically in animal agriculture is eight times greater than the amount used in all of human medicine.



An estimated 70 percent of all U.S. antibiotics and related drugs are used nontherapeutically in animal agriculture.<sup>9</sup>

### Furthermore...

- Many of the antibiotics used in animal agriculture are also used in human medicine.
- The nontherapeutic use of antibiotics involves low-level exposure in feed over long periods—an ideal way to encourage bacteria to develop resistance.
- A 2002 analysis of more than 500 scientific articles<sup>10</sup> by the Alliance for the Prudent Use of Antibiotics (APUA), published in the peer-reviewed journal *Clinical Infectious Diseases*, found that "[m]any lines of evidence link antimicrobial-resistant human infections to foodborne pathogens of animal origin."<sup>11</sup> The APUA report concluded that "the elimination of nontherapeutic use of antimicrobials in food animals... will lower the burden of antimicrobial resistance in the environment, with consequent benefits to human and animal health."<sup>12</sup>
- Antibiotic-resistant bacteria can easily transfer their resistance traits to unrelated bacteria once inside the human body.<sup>13</sup> Thus, development of resistance in all types of bacteria is of concern, regardless of whether those bacteria themselves cause disease.
- Resistant human diseases strongly linked to the agricultural overuse of antibiotics include food poisoning caused by *Salmonella* or *Campylobacter* and post-surgical infections caused by *Enterococcus*.<sup>14</sup> A recent study has suggested a link between resistant urinary tract infections caused by *Escherichia coli* and food sources.<sup>15</sup>

## Resistant bacteria can be transferred from animals to humans in three ways:

**Via food:** Meat in grocery stores is widely contaminated with antibiotic-resistant bacteria. A study in the Washington, DC, area found 20 percent of the sampled meat was contaminated with *Salmonella* and 84 percent of those bacteria were resistant to antibiotics used in human medicine and animal agriculture.<sup>16</sup>

**Via working with animals:** Workers in the livestock industry may pick up resistant bacteria by handling animals, feed, and manure. They can then transfer the bacteria to family and community members.<sup>17</sup>

**Via the environment:** Groundwater, surface water, and soil are contaminated from the nearly two trillion pounds of manure generated in the United States each year.<sup>18</sup> This manure contains resistant bacteria, creating an immense pool of resistance genes available for transfer to bacteria that cause human disease.

# The Solution: Reduce the use of antibiotics

## Reduce antibiotic overuse in human medicine

The Centers for Disease Control is implementing extensive programs to educate both patients and physicians about reducing antibiotic overuse.<sup>19</sup>

## Reduce antibiotic overuse in animal agriculture

As noted in a 2003 National Academy of Sciences report, “[a] decrease in antimicrobial use in human medicine alone will have little effect on the current situation. Substantial efforts must be made to decrease inappropriate overuse in animals and agriculture as well.”<sup>20</sup>

Major reductions in animal use can be achieved by canceling existing approvals of medically important antibiotics for nontherapeutic purposes. Existing approvals can be cancelled by Congress through legislation or by the Food and Drug Administration (FDA) through regulation.

Although FDA acknowledges that antibiotic resistance is a problem, the agency is unable to cancel existing approvals within a reasonable time.

FDA can theoretically cancel drug approvals, yet prior cancellations have taken up to 20 years to complete *per drug class*.<sup>21</sup> Seven important classes of antibiotics are currently used both in human medicine and as nontherapeutic feed additives.<sup>22</sup>

Existing feed-additive approvals were issued decades ago; at that time, resistance was not a prominent public health issue and FDA did not subject drugs to detailed evaluations that considered antibiotic resistance.<sup>23</sup>

In 2003, FDA released Guidance #152<sup>24</sup> acknowledging that use of antibiotics in animal agriculture is “a contributing factor to the development of [antibiotic] resistance.”<sup>25</sup>

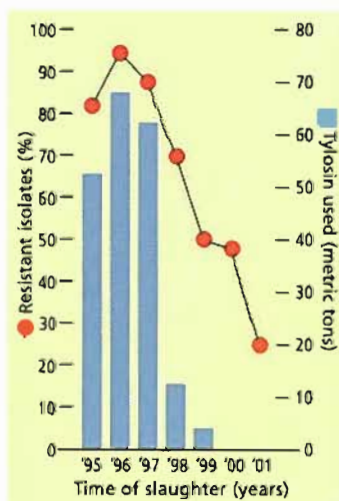
FDA guidance strengthens the review of antibiotics that are proposed to be marketed in the future, but does not establish any schedule for reviewing or taking action on antibiotics already on the market.

**Congress must pass new legislation to curb antibiotic resistance because FDA cannot solve this problem in a reasonable time.**

## Real world success stories: Examples of antibiotic reduction

- Large companies such as McDonald’s and Bon Appétit have already taken steps to reduce antibiotic use in animal agriculture by their producers.<sup>26</sup>
- In 1998, Denmark—the world’s largest pork exporter—enacted a ban on antibiotic feed additives. Producers adjusted to this ban by improving hygiene and animal husbandry standards. A study by the World Health Organization concluded that Denmark reduced overall use of antibiotics in agriculture by 54 percent and experienced a “dramatic”

reduction in resistant bacteria in animals, without causing consumer price increases or undermining animal health or food safety.<sup>27</sup> A similar ban is now in force in all EU countries.<sup>28</sup>



- Farmers practicing sustainable agriculture in the United States are already producing premium pork and chicken without antibiotics

Danish researchers found that reduced tylosin use in pigs correlated with a decline in bacteria resistant to erythromycin—the human medical equivalent of tylosin.<sup>29</sup>

## Legislation Recently Considered by Congress:<sup>30</sup>

- Phases out nontherapeutic use of seven specific classes of antibiotics as feed additives after two years, unless FDA concludes that continued use of a drug will not contribute to resistance affecting humans.
- Has been endorsed by more than 300 groups including the American Medical Association, the American Public Health Association, and 80 other health-related organizations.<sup>31</sup>
- Covers only antibiotics that are used in human medicine or have human-use equivalents, including penicillins, tetracyclines, macrolides (including but not limited to erythromycin and tylosin), lincomycin, virginiamycin, aminoglycosides, and sulfonamides.
- Does not prevent the use of antibiotics to treat sick animals.
- Authorizes data collection on antibiotic use, transition assistance for farmers, and research and development projects.
- Would have a negligible effect on consumer prices.<sup>32</sup>
- Is consistent with FDA Guidance #152.<sup>33</sup> If the Guidance’s criteria were applied to the antibiotics covered by recent legislation, most would presumptively not qualify for approval as nontherapeutic feed additives.
- Saves tax dollars. The bill’s provisions for canceling existing approvals for nontherapeutic use would occur far more quickly and cost effectively than would FDA procedures.

## Endnotes

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- A full list is available on the Keep Antibiotics Working website at [www.keepantibioticsworking.com/new/resources\\_library.cfm?refID=73271](http://www.keepantibioticsworking.com/new/resources_library.cfm?refID=73271).
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## Supporters of Legislation to Keep Antibiotics Working:

Academy of Medical-Surgical Nurses  
American Academy of Family Physicians  
American Academy of Neurology  
American College of Preventive Medicine  
American Medical Association  
American Public Health Association  
Breast Cancer Fund  
Center for Science in the Public Interest  
Consumer Federation of America  
Consumers Union  
Environmental Defense  
Food Animal Concerns Trust  
Global Resource Action Center for the Environment  
Health Care Without Harm  
Humane Society of the United States  
Institute for Agriculture and Trade Policy  
Leukemia and Lymphoma Society  
National Association of County and City Health Officials  
National Association of Pediatric Nurse Practitioners  
National Association of School Nurses  
National Campaign for Sustainable Agriculture  
National Catholic Rural Life Conference  
Natural Resources Defense Council  
Oncology Nursing Society  
Physicians for Social Responsibility  
Sierra Club  
Union of Concerned Scientists  
Medical associations/societies of California, Connecticut, District of Columbia, Florida, Idaho, Iowa, Louisiana, Maine, Massachusetts, Minnesota, Montana, Nevada, New Hampshire, New Jersey, New Mexico, Oregon, Rhode Island, Tennessee, Vermont, Virginia, and Wisconsin

For more information, visit

[www.keepantibioticsworking.com](http://www.keepantibioticsworking.com)

or write to

Keep Antibiotics Working

P.O. Box 14590

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*Keep Antibiotics Working: The Campaign to End Antibiotic Overuse* is a coalition of concerned health, consumer, agricultural, and environmental groups with more than nine million members, working to reduce the growing public health threat of antibiotic resistance.

