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28TH DISTRICT, NEW YORK

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The Honorable Louise M. Slaughter
Statement for the Record
Submitted to the Health Subcommittee
Committee on Energy and Commerce

M. Chairman,

M. Chairman and Members of the Committee, thank you for taking the time to hold a hearing on this important subject, as well as for giving me the opportunity to contribute comments for the record.

Every year, two million Americans acquire bacterial infections during their hospital stay, and 90,000 will die from them. 70 percent of their infections will be resistant to the drugs commonly used to treat them.

Antibiotic resistance is a major food safety issue, disproportionately affecting children. The CDC reports that half of all *Campylobacter* infections are drug resistant. Furthermore, 20 percent of *Salmonella* infections are resistant to at least one drug. Food-borne illnesses, sadly, are more likely to impact children, with young children being five times more likely to get *Salmonella* than adults.

Drug resistance makes an illness more difficult to treat, as well as increasing the length, cost, and severity of the illness. The cost of these infections to our already strained health care system cannot be ignored.

In 1998, an Institute of Medicine study concluded that antibiotic resistant bacteria cost the hospital system an additional \$5 billion annually. A more recent study – based on exhaustive chart reviews in Cook County Hospital in Chicago – would lead to a current nationwide estimate of \$16.6 billion to \$26 billion in annual costs.

Antibiotic resistance is a major public health crisis, and yet antibiotics are used regularly and with little oversight in agriculture.

Currently, seven classes of antibiotics certified by the Food and Drug Administration (FDA) as "highly" or "critically" important in human medicine are used in agriculture as animal feed additives. Among them are penicillin, tetracyclines, macrolides, lincosamides, streptogramins, aminoglycosides, and sulfonamides. These classes of antibiotics are among the most critically important in our arsenal of defense against potentially fatal human diseases. Penicillins, for example, are used to treat infections ranging from strep throat to meningitis. Macrolides and

sulfonamides are used to prevent secondary infections in patients with AIDS and to treat pneumonia in HIV-infected patients. Tetracyclines are used to treat people potentially exposed to anthrax.

Despite their importance in human medicine, these drugs are added to animal feed as growth promotants and for routine disease prevention. Approximately 70 percent of antibiotics and related drugs produced in the US are given to cattle, pigs, and chicken to promote growth. The non-therapeutic use of antibiotics in poultry skyrocketed from two million pounds in 1985 to 10.5 million pounds in the late 1990s.

This kind of habitual, non-therapeutic use of antibiotics has been conclusively linked to a growing number of incidents of antimicrobial-resistant infections in humans, and may be contaminating ground water with resistant bacteria in rural areas. In fact, a *National Academy of Sciences* report states that, "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."

Resistant bacteria can be transferred from animals to humans in several ways. Perhaps most glaringly, antibiotic resistant bacteria can be found in the meat and poultry that we purchase in the grocery store. In fact, a *New England Journal of Medicine* study conducted in Washington, DC found that 20 percent of the meat sampled was contaminated with Salmonella and 84 percent of those bacteria were resistant to antibiotics used in human medicine and animal agriculture.

Bacteria can also be transferred from animals to humans via workers in the livestock industry who handle animals, feed, and manure. Farmers may then transfer the bacteria on to their family. Indeed, one study showed that poultry-workers are 32 times more likely than the general population to have antibiotic-resistant E. coli.

A third method is via the environment. Nearly two trillion pounds of manure generated in the US annually contaminate our groundwater, surface water, and soil. Because this manure contains resistant bacteria, the resistant bacteria can then be passed on to humans that come in contact with the water sources or soil.

The problem has been well documented.

A 2002 analysis of more than 500 scientific articles and published in the journal *Clinical Infectious Diseases* found that "many lines of evidence link antimicrobial resistant human infections to food-borne pathogens of animal origin."

The Institute of Medicine's 2003 report on *Microbial Threats to Health* concluded "Clearly, a decrease in the inappropriate use of antimicrobials in human medicine alone is not enough. Substantial efforts must be made to decrease inappropriate overuse in animals and agriculture as well."

As the impact of MRSA continues to unfold, there is little doubt that antibiotic resistant diseases are a growing public health menace demanding a high priority response. Despite increased attention to the issue, the response has been inadequate. Part of the problem has been the FDA's failure to properly address the effect of the misuse of animal antibiotics on the efficacy of human drugs.

Although the FDA could withdraw its approval for these antibiotics, its record of reviewing currently approved drugs under existing procedures indicate that it would take nearly a century to get these medically important antibiotics out of the feed given to food producing animals. In October 2000, for example, the FDA began consideration of a proposal to withdraw its approval for the therapeutic use of fluoroquinolones in poultry. The review, and eventual withdraw of approval, took five years to complete. Under its current regulations, the FDA must review each class of antibiotics separately.

For this reason, I introduced H.R. 1549, the Preservation of Antibiotics for the Medical Treatment Act (PAMTA).

H.R. 1549 would phase out the use of the seven classes of medically significant antibiotics that are currently approved for non-therapeutic use in animal agriculture. Make no mistake, this bill would in no way infringe upon the use of these drugs to treat a sick animal. It simply proscribes their non-therapeutic use.

Addressing this critical issue is not only important for protecting the public's health, but also to ensure that United States livestock producers remain competitive in international markets. The European Union, New Zealand, Thailand, and Korea all have either banned or will begin banning antibiotic growth promoters in animal feed. Under World Trade Organization rules, trading partners who implement this ban will have the right to refuse imports that do not meet this standard. Consequently, if the United States continues to allow non-therapeutic use of antibiotics in livestock, there may be major trade and economic implications.

The Preservation of Antibiotics for Medical Treatment Act, therefore, is an urgent trade matter as well as an urgent public health matter.

When we go to the grocery store to pick up dinner, we should be able to buy our food without the worry that eating it will expose our family to potentially deadly bacteria that will no longer respond to our medical treatments. Unless we act now, we will unwittingly be permitting animals to serve as incubators for resistant bacteria.

It is time for Congress to stand with scientists, the World Health Organization, the American Medical Association, and the National Academy of Sciences and do something to address the spread of resistant bacteria. We cannot afford for our medicines to become obsolete.

M. Chairman, thank you for the opportunity to submit comments for the record, and I look forward to working with you and all the Members of this Committee, as well as any other interested parties, to protect the integrity of our antibiotics and the health of American families.



Louise Slaughter