



# Fact Sheet

## Antibiotic Use in Livestock Production

### An emerging public health risk

#### The Issue

Antibiotic use in livestock production is an emerging public health risk.

A recent report by the Economic Research Service (ERS) of the U.S. Department of Agriculture documents significant changes in agricultural practices in the United States over the last several decades.

One development that is raising alarm is the routine use of antibiotics in livestock production, a practice closely linked to large feedlot operations where animals are raised in large numbers in very close confinement.

Antibiotics are used not only to treat sick animals, but are administered in low doses in feed and water to protect against the spread of diseases and to promote feed efficiency and faster growth.

In 1999, the Animal and Plant Health Inspection Service reported that 83% of feedlots administered at least one antibiotic in feed or water for disease prevention or growth promotion. Today, that portion remains nearly the same, but there are many more concentrated feeding operations than in 1999, resulting in a significant increase in antibiotic usage.

The precise amount of antibiotics used in these facilities is unknown, but a study by the Union of Concerned Scientists concluded that an estimated 70% of all antibiotics annually used in the United States – about 24.6 million pounds – are fed routinely to healthy livestock for non-therapeutic purposes.



#### The Problem

The misuse of antibiotics in livestock and poultry production decreases their efficiency and fosters the development antibiotic resistant bacteria.

Many of the antibiotics used in animal agriculture are the same as or closely related to the antibiotics that we rely on to treat conditions such as children's ear infections and strep throat, pneumonia and other respiratory infections, urinary tract and heart valve infections, and staphylococcus aureus (staph), among other serious bacterial infections.

Resistant bacteria have been found in meat and poultry products, and detected

in ground and surface waters downstream from animal feeding operations. Resistant disease-causing organisms also can travel through the air from animal feeding operations, and can be carried by farm workers.

Producers claim that without the routine application of antibiotics, more animals would get sick and consumers would pay more at the grocery store. But, with the exception of the nursery stage at hog production facilities, the ERS report and recent studies have found little to no economic benefit to subtherapeutic use of antibiotics.

---

## The Problem (con't)

On the contrary, all economic benefits to producers are offset if the costs from increased antibiotic resistance are considered.

The Institute of Medicine estimates that treating resistant infections adds more than \$4 billion in costs to the U.S. health care system.

The costs of treating resistant infections are externalized to the larger society

and not reflected in the price of meat and poultry to consumers. The ERS report suggests that producers can take practical steps – at modest cost – to limit antibiotic use in industrialized feeding operations and the associated externalized costs to the public.

The overuse of antibiotics – whether in human or veterinary medicine – presents an unacceptable risk to public health and must be curtailed.

---

## Recommendations

At the Federal level:

- Support the Preservation of Antibiotics for Medical Treatment Act (PAMTA), which would phase out the use in animal agriculture of seven classes of antibiotics important to human medicine unless there is a reasonable certainty of no harm to human health due to the development of antimicrobial resistance.

At the State level:

- The Ohio General Assembly should support studies by the Ohio Environmental Protection Agency and the U.S. Geological Survey to identify potential environmental sources of resistant pathogens from confined feeding operations and the application of manure as a soil amendment.
- Ohio Department of Health should conduct studies in communities near to livestock feeding operations to determine potential pathways and exposures to resistant pathogens and the potential health risks.
- The Ohio Department of Agriculture should solicit data from the U.S. Food and Drug Administration or collect data on a state level as required by the Animal Drug User Fee Act (ADUFA) on the amount of each antimicrobial active ingredient in a drug sold or distributed in the State of Ohio for use in food-producing animals, including information on any distributor-labeled product. This will assist public health officials in linking antibiotic use to emerging strains of antibiotic-resistance bacteria, assessing risks to human health, and developing and evaluating strategies to mitigate antibiotic resistance.
- The Ohio Department of Agriculture should solicit all available data from the Agricultural Resource Management Survey (ARMS) related to the use of antibiotics and other health management technologies and practices in animal feeding operations in Ohio.



---

## What You Can Do

Please contact your members of Congress and urge for their support of PAMTA. Call (202) 224-3121 or visit these websites:

U.S. House of Representatives  
[www.house.gov](http://www.house.gov)

U.S Senate [www.senate.gov](http://www.senate.gov)

---

## For more information contact:

Ohio Environmental Council  
1207 Grandview Ave, Suite 201  
Columbus, Ohio 43212

tel (614) 487-7507  
fax (614) 487-7510  
e-mail [OEC@theOEC.org](mailto:OEC@theOEC.org)  
web [www.theOEC.org](http://www.theOEC.org)