

# FACTSHEET

## Veterinary Services

United States  
Department of  
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Animal and  
Plant Health  
Inspection  
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## Antibiotic Usage in Premarket Swine

Pork producers and other consumers are becoming increasingly aware of food safety concerns such as antibiotic residues in products.

The National Pork Producers Council (NPPC) has developed the Pork Quality Assurance (PQA) program to help producers avoid antibiotic residues in pork by emphasizing good management in handling and use of animal health products on the swine operation. To prevent antibiotic residues, the industry is working diligently to encourage producers to identify animals treated at a late finishing stage and observe proper withdrawal times prior to marketing.

The purpose of the National Animal Health Monitoring System's (NAHMS) Swine '95: Grower/Finisher study was to compile national information on animal health and food safety in pork production. Beginning in the summer of 1995, NAHMS contacted 418 pork producers with 300 or more market hogs in 16 of the primary hog-producing states.<sup>1</sup> Herds in the selected states represented 91 percent of the grower/finisher hogs produced in the United States and provided an overview of antibiotic management in premarket swine.

### Antibiotic Usage in 1995

The study indicated 92.7 percent of all grower/finisher pigs received antibiotics in their diets at some time during the grower/finisher period.

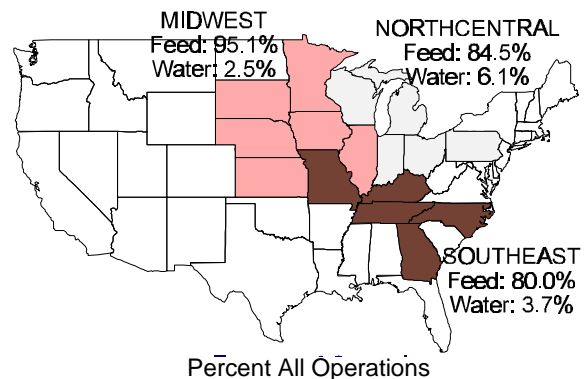
Swine '95 results indicated that, for disease prevention or growth promotant purposes, pork producers used feed antibiotics much more commonly than antibiotics administered in water. Ninety-one percent of *all operations* used antibiotics in feed on a preventive basis during the grower/finisher phase of production. Only 3.2 percent of the operations administered antibiotics in water during the same production phase.

Narrowing in on operations that are *best described as farrow-to-finish*, 89.5 percent used antibiotics on a preventive basis in feed, and 1.7 percent delivered them in water. **The percentages for operations classified as grower/finisher only were 97.4 percent for feed and 10.1 percent for water.**

Regionally, use of antibiotics in feed varied from 80.0 percent in the Southeastern region to 95.1 percent in the Midwest (Figure 1). More operations in the Northcentral region delivered antibiotics in water.

Figure 1

### Use of Antibiotics in Feed and Water on a Preventive Basis for Grower/Finisher Hogs



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<sup>1</sup> Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin.

Swine '95 data do not show how many producers fed antibiotics at lower concentrations or fed no antibiotics during the final finishing stage of production. These practices not only lower the cost of the diet, but greatly decrease the possibility of antibiotic residues in premarket hogs.

Of producers using antibiotics for preventive purposes in grower/finisher rations, 40.0 percent used chlortetracycline, 30.4 percent for tylosin, and 52.1 percent for bacitracin. These three were the most frequently used antibiotics and were fed on average for 58.1, 57.4, and 72.2 days, respectively.

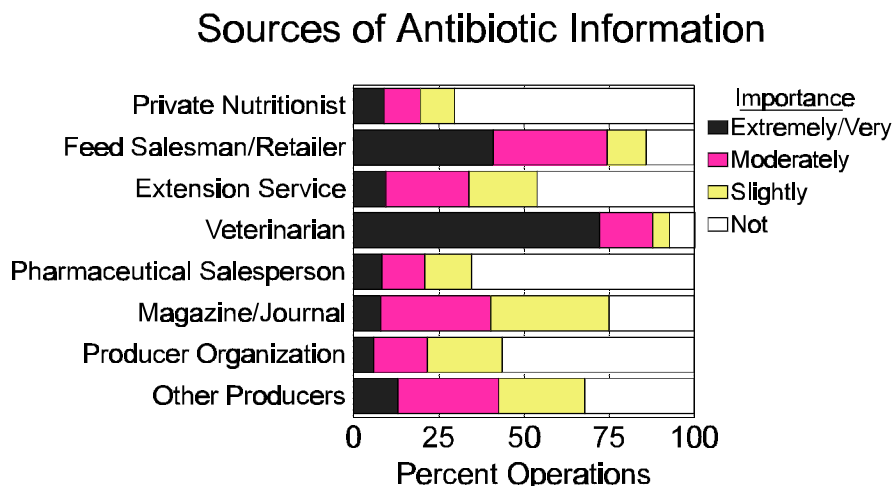
### Antibiotic Information

Swine '95 indicated that **72.1 percent of producers considered the veterinarian an extremely or very important source of antibiotic information** (Figure 2.) Feed salespersons or retailers rated second highest for antibiotic information with 41.0 percent of the producers considering them *extremely or very* important. The majority of producers did not consider private nutritionists, pharmaceutical salespersons, or producer organizations to be important sources of antibiotic information.

### Trends in Antibiotic Usage

While comparisons or changes in management of antibiotic use following the NPPC's 1989 introduction of the PQA program are difficult to assess, NAHMS can provide some information. The 1990 NAHMS National Swine Survey collected information on use of antibiotics for preventive purposes in feed and water that can be compared to Swine '95 results. Use

Figure 2



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**of antibiotics for preventive purposes in feed in breeding females has increased since the 1990 study**, from 39.1 to 45.5 percent of operations. For boars, the practice has increased from 10.9 to 38.4 percent of operations.

Producers selling feeder-size pigs for roasting or cull sows should be mindful of possible use of antibiotics in these animals prior to being sold.

NAHMS collaborators on the Swine '95 study included the National Agricultural Statistics Service (USDA); State and Federal Veterinary Medical Officers and Animal Health Technicians; and the National Veterinary Services Laboratories (USDA:APHIS:VS).

Other information from the Swine '95 is available on biosecurity, vaccination practices, and environmental practices. For more information on these topics or the study in general, contact:

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