



United States  
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Services

# Preventive Practices National Swine Survey

Many of today's swine producers are taking precautions to protect their herds' health and subsequent production.

According to a recent study conducted by the National Animal Health Monitoring System, more than three-fourths of swine producers during 1990 routinely employed some vaccination practice to prevent illness or disease in their sows and gilts. The study represented 95 percent of the U.S. swine population.

The most common vaccinations for adult swine targeted leptospirosis, parvovirus, and erysipelas (Figure 1). Sixty to 70 percent of the producers represented vaccinated sows and gilts for these diseases. And 48 to 54 percent vaccinated boars for the same diseases.

Approximately one-half and one-third of the swine producers vaccinated sows and gilts for *E. coli* scours and atrophic rhinitis, while more than one out of every five vaccinated females for TGE, *Clostridium perfringens*, and pseudorabies. Additional vaccinations used by swine producers on females included rotavirus (15.8 percent) and *Haemophilus pleuropneumoniae* (7.2 percent).

Although almost as many producers vaccinated boars for pseudorabies as females (21.3 percent vs. 21.5 percent), they were not vaccinated quite as often as females for atrophic rhinitis (25.2 percent vs. 38.3 percent).

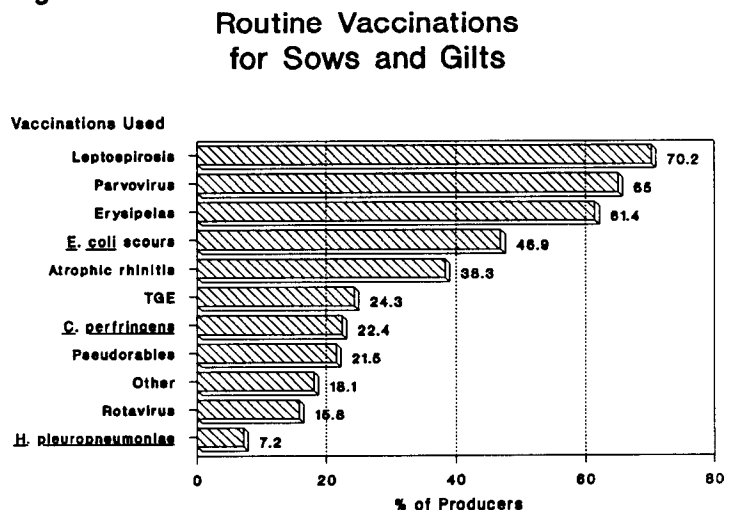
"All swine producers should vaccinate against certain diseases," Dr. Tim Loula of St. Peter, Minnesota, notes. "If a producer can prevent a disease, why not prevent it."

Fewer producers gave piglets injections than the adult swine population. Still, more than half of 1990's producers routinely vaccinated piglets prior to or at weaning.

According to the NAHMS study, vaccinations given before or at weaning for erysipelas and atrophic rhinitis were most common for piglets. Some 46.5 percent of the producers vaccinated piglets for erysipelas while 42.2 percent gave injections for atrophic rhinitis.

The third most targeted disease among piglets was pasteurella pneumonia, with 28.4 percent of swine producers vaccinating for it.

Figure 1.



Then, the percentage of producers that routinely vaccinated piglets dropped:

Haemophilus pleuropneumoniae (13.4 percent), streptococcus (12.2 percent), E. coli scours (11.7 percent), Clostridium perfringens antitoxin (8.2 percent), other (7.4 percent), TGE (3.8 percent), autogenous bacterin (3.3 percent), and pseudorabies (2.1 percent).

"If a producer's after consistent performance, he's ahead to vaccinate," Loula inserts. "It's too costly to get a disease."

"I really see a good vaccination program as an insurance policy. It costs you a little bit, and you don't have major dips in production."

Although vaccination programs for piglets were not as common as for adult swine, management practices designed to improve piglet health were widely used.

Just over 90 percent of the swine producers castrated male piglets before or at weaning, and close to 80 percent docked tails and gave iron shots. Plus, slightly more than three-fourths clipped needle teeth.

Other preventive management practices and the percentage of producers routinely applying them to piglets included deworming (48 per-

cent), mange/lice treatment (40.2 percent), injections of antibiotics (32.7 percent) dipping/spraying navels (22.5 percent), administering oral antibiotics (18.8 percent), and giving iron orally (15.2 percent). Just slightly more than 2 percent of the producers included coccidiostats in feed or water.

The two most popular preventive management practices applied to the adult swine population, according to this study, were deworming and treatment for mange/lice. Slightly more than 85 percent of producers dewormed sows and gilts while just over 76 percent dewormed boars. Almost 70 percent of the producers gave boars a preventive treatment for mange/lice compared to 72 percent for the female population.

After these two preventive management practices, however, the differences between management of boars and sows and gilts becomes more evident. For example, 39.1 percent of producers administered antibiotics to sows and gilts in their feed while only 10.9 percent of producers followed the same pattern for boars. Likewise, 15.9 percent of producers injected sows and gilts with antibiotics for prevention of disease compared to only 1.5 percent of producers who injected boars with antibiotics.

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The National Swine Survey was a cooperative effort of State agricultural departments; universities; and the following USDA agencies: Extension Service (ES), National Agricultural Statistics Service (NASS), and Animal and Plant Health Inspection Service (APHIS). The study of swine health and productivity was conducted from December 1989 through January 1991. The objectives were to provide information on the production and health levels of the United States' swine herd, and to suggest factors that may affect preweaning morbidity and mortality.

A statistical sample of producers from 18 States was selected to provide inferences about the nation's hog population. The resulting estimates represent 95 percent of the United States' swine population.

The National Agricultural Statistics Service (NASS) selected the sample and collected retrospective data on

swine health and management practices from 1,661 farms.

Seven hundred and twelve (712) producers agreed to continue providing data to State and federal Veterinary Medical Officers (VMO's). Each farm was visited a total of four times over a 90- to 120-day period. Data collection instruments such as diary cards were implemented to collect prospective data on the farrowing to weaning stage of swine production. The producers recorded observations of clinical signs associated with illness and death in sows, gilts, and preweaning piglets.

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