



Gilt Management

Proper management of the young breeding female herd is essential to the health and efficiency of any swine operation. For example, different management strategies may be used to prevent disease entry into herds and to maximize reproductive performance, depending on the source of replacement gilts.

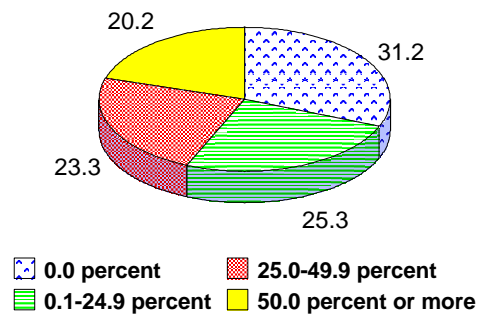
The USDA's National Animal Health Monitoring System (NAHMS) collected data on swine health and management practices from a random sample of swine production sites in 17 states¹ as part of the Swine 2000 study. These sites represented 94 percent of the U.S. pig inventory and 92 percent of U.S. pork producers with 100 or more pigs. Overall, 2,499 swine production sites participated in the first interview from June 1, 2000, through July 14, 2000. A second interview was completed by 895 of these sites between August 21, 2000, and November 3, 2000. For estimates in this report, small, medium, and large sites refer to sites with less than 250, 250 to 499, and 500 or more breeding females, respectively. Animal-level estimates reported here are based on a June 1, 2000, inventory.

Of the total breeding female inventory on hand at the time of the interview, 30 percent were introduced as replacement gilts during the 6 months prior to the study. During this period, 31.2 percent of sites did not introduce any replacement gilts, while 20.2 percent introduced half or more of their breeding female inventory as replacement gilts (Figure 1). Almost all medium (98.1 percent) and large (98.4 percent) sites added replacement gilts during the previous 6 months, compared to 61.9 percent of small sites. The proportion of introduced gilts to breeding female inventory was 38.9, 32.9, and 25.0 percent for small, medium, and large sites, respectively.

Over half (53.0 percent) of sites that introduced gilts in the previous 6 months obtained them from a parent herd/multiplier herd (crossing farm), accounting for

Figure 1.

Proportion of Total Breeding Female Inventory Introduced on Sites in Previous 6 months

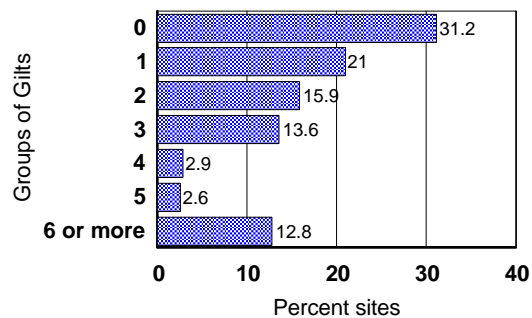


54.1 percent of introduced gilts. Although 42.1 percent of sites used gilts being raised as commercial stock (terminal cross females) as a source for replacements, this accounted for only 22.5 percent of introduced gilts.

Only 12.8 percent of sites introduced 6 or more **groups of gilts** during the previous 6 months (Figure 2). The percentage of sites that introduced 6 or more groups of gilts increased as site size increased (4.8, 34.9, and 60.9 percent of small, medium, and large sites, respectively).

Figure 2

Percent of Sites by Number of Groups of Gilts Introduced in Previous 6 Months



¹Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Carolina, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, Wisconsin

When adding gilts, small sites introduced most commonly 10 to 19 **gilts per group** (26.0 percent), while medium and large sites added most commonly 20 to 49 gilts per group (45.4 and 50.0 percent, respectively).

Gilts were designated part of the breeding herd between 16 and 25 weeks of age on the majority of sites (53.1 percent), regardless of site size. The average age at designation was 25.1, 22.1, and 22.3 weeks on small, medium, and large sites, respectively. The average age of gilts when commingled with sows in the breeding herd was 32.2, 28.9, and 29.3 weeks on small, medium, and large sites, respectively.

To prevent introducing an infectious disease into a herd, isolating new breeding stock prior to entry is important. The Swine 2000 study found that 66.6 percent of small sites that introduced new breeding females isolated them either always or sometimes, compared to 78.7 percent of medium and 84.2 percent of large sites.

The practice of isolating newly arrived female breeding stock has increased over the last 10 years. Compared to data from previous NAHMS swine studies in 1990 and 1995, for sites that obtained new breeding females, the percent of sites that isolated them was 55.7, 60.0, and 70.3 for 1990, 1995, and 2000, respectively (Figure 3).

Percent Sites that Always/Sometimes Isolated and Health Tested New Breeding Females

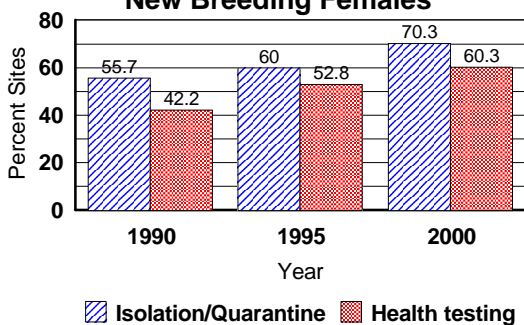
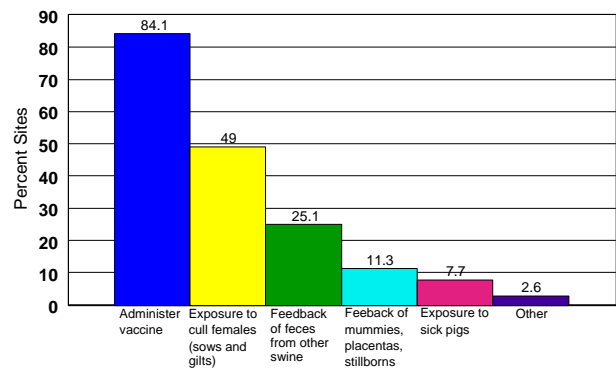


Figure 3

The number of days new breeding females are isolated has also increased from 30.8 in 1990 to 38.7 in 2000. For sites isolating new breeding females, the percent of sites testing the animals for disease was 42.2, 52.8, and 60.3 for 1990, 1995, and 2000, respectively. These trends should help control respiratory disease as well as other infectious disease.

Acclimatization, which includes vaccinations, is a method of introducing new breeding stock to viral and bacterial diseases present on the receiving farm. The Swine 2000 study found that 84.1 percent of sites that

Percent Sites that Used the Following Methods to Acclimate New Arrivals



olated new breeding females vaccinated them as part of the acclimatization process. Other practices employed commonly to acclimate gilts were exposure to cull females (49.0 percent) and feedback of feces from other swine (25.1 percent) (Figure 4).

Figure 4.

For more information, contact:

Centers for Epidemiology and Animal Health;
USDA:APHIS:VS,
attn. NAHMS; 555 South Howes, Fort Collins, CO 80521
Telephone: (970) 490-8000¹
E-mail: NAHMSweb@usda.gov
[Http://www.aphis.usda.gov/vs/ceah/cahm](http://www.aphis.usda.gov/vs/ceah/cahm)

**¹Beginning May 20, 2002, our new address and phone
number will be: 2150 Centre Ave. Bldg. B., Fort Collins,
CO 80526 -- (970) 494-7400**

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