

Highlights of Swine 2006 Part I: Reference of Swine Health and Management Practices in the United States, 2006

In 2006, the National Animal Health Monitoring System (NAHMS) conducted a study of U.S. swine operations. The Swine 2006 study collected data on swine health and management practices from 17 of the Nation's major swine States. These States represented 94 percent of U.S. swine operations and inventory on operations with 100 or more pigs. For the purposes of the study, States were divided into four geographic regions.* Size groupings for the study were based on total number of swine present on June 1, 2006. Size of site was categorized as small (fewer than 2,000), medium, (2,000 to 4,999), and large (5,000 or more). For results relating to sow and gilt management as well as farrowing and weaning productivity, size of site was based on the number of sows and gilts on-site: small (fewer than 250), medium (250 to 499), and large (500 or more).

Part 1: Reference of Swine Health and Management Practices in the United States, 2006 is the first in a series of reports containing national information from the NAHMS Swine 2006 study. Released October 2007, the report provides participants, industry, and animal-health officials with information on the Nation's swine population that will serve as a basis for education, service, and research. The following are highlights excerpted from Part I of the Swine 2006 study.

Sow and gilt management

- Nearly 40 percent of sites had gestation and farrowing production phases. A smaller percentage of medium sites had these production phases than their small and large counterparts.
- Nearly 80 percent of sows on all sites were mated two or more times per service. Small sites had a substantially higher percentage of pen-mating (62.5 percent of sows) than medium and large sites (23.4 and 1.9 percent of sows, respectively).

*Regions/States

North: Michigan, Minnesota, Pennsylvania, and Wisconsin

West Central: Colorado, Kansas, Missouri, Nebraska, and South Dakota

East Central: Illinois, Indiana, Iowa, and Ohio

South: Arkansas, North Carolina, Oklahoma, and Texas

- For sites that did not use pen-mating exclusively, artificial insemination was the predominant method of mating sows during first, second, and third or more matings (91.6, 90.0, and 51.0 percent of sows, respectively).
- Nearly three of four gilts (70.7 percent) were mated two or more times per service.
- Approximately 4 of 10 sites used artificial insemination as a predominant mating technique on sows and gilts for at least one mating.
- A higher percentage of breeding-age females (21.1 percent) were culled on large sites compared to medium and small sites (12.7 and 12.4 percent, respectively). Overall, 19.5 percent were culled.
- Old age and reproductive failure were the two most common reasons breeding-age females were culled (36.6 and 26.3 percent, respectively) (table 1).

Table 1. Percentage of Culled Breeding-Age Females from December 2005 through May 2006, by Reason Culled

Reason Culled	Percent Culled Females
Old age	36.6
Lameness	15.2
Performance*	13.0
Reproductive failure	26.3
Injury	4.0
Other reason	4.9
Total	100.0

*Small litter size, high preweaning mortality, or low birth weight

- The percentage of sites that always isolated new breeding females ranged from 61.1 percent of large sites to 26.5 percent of small sites. However, a higher percentage of small sites (51.0 percent) typically had no new arrivals compared to large sites (21.4 percent).
- For sites with newly arriving breeding stock, approximately 9 of 10 large sites (90.5 percent), 7 of 10 medium sites (74.8 percent), and 6 of 10 small sites (59.7 percent) administered vaccinations as a way of acclimating new arrivals to on-site pathogens.

Nursery and grower/finisher productivity

- About half of all sites (53.3 percent) had a nursery phase. Approximately one-third of sites in the South region (33.5 percent) had a nursery phase, the lowest percentage of any region.
- Eight of 10 sites (80.0 percent) had a grower/finisher phase. As was the case with the nursery phase, the South region had the lowest percentage of sites with a grower/finisher phase than any other region.

Facility management

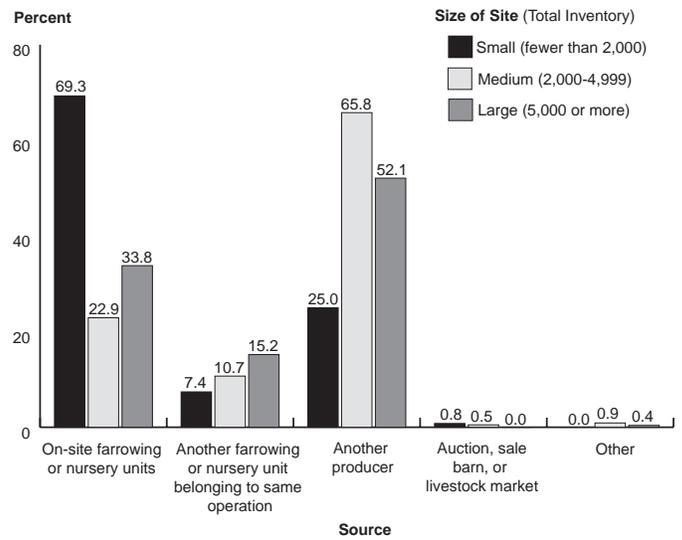
- Total confinement was the most common type of facility for all phases of production, except gestation (table 2).

Table 2. For Sites with the Specified Production Phases, Percentage of Sites by Facility Type Used Most:

Facility Type	Percent Sites			
	Production Phase			
	Gestation	Farrowing	Nursery	Grower/Finisher
Percent	Percent	Percent	Percent	
Total confinement	34.6	67.7	74.0	53.2
Open building with no outside access	13.3	10.6	10.7	20.4
Open building with outside access	37.3	15.1	11.3	23.3
Lot with hut or no building	8.6	3.3	1.8	1.8
Pasture with hut or no building	6.2	3.3	2.2	1.3
Total	100.0	100.0	100.0	100.0

- Continuous flow was the management style used most in the gestation phase by 61.5 percent of sites.
- Most sites with nursery or grower/finisher phases that did not use continuous-flow management had only one age group of nursery or grower/finisher pigs at one time.
- For sites with a farrowing phase, large sites were more likely to wean piglets at an average of 20 days or less and move pigs to a separate nursery site compared to small sites.
- The majority of sows and gilts entering the farrowing phase (84.6 percent) were obtained on-site.
- For sites with a nursery phase, over 6 of 10 medium sites (65.8 percent) and 5 of 10 large sites (52.1 percent) obtained pigs for the nursery phase from another producer, while fewer than 3 of 10 small sites did so (25.0 percent). Over one-third of all sites (35.4 percent) obtained pigs for the nursery phase from another producer (figure 1).

Figure 1. For Sites With a Nursery Phase, Percentage of Sites that Brought or Placed any Pigs Into the Nursery Phase from December 2005 through May 2006, by Source of Pigs and by Size of Site:



- For sites with a grower/finisher phase, a higher percentage of small sites (54.7 percent) brought or placed new nursery pigs from their own nursery units into the grower/finisher phase from December 2005 through May 2006 than did medium and large sites (36.3 and 42.7 percent, respectively).

Vaccination

- From December 2005 through May 2006, over 6 of 10 sites (61.4 percent) vaccinated any pigs. The highest percentage of sites regularly vaccinated against *Mycoplasma* and erysipelas (40.4 and 39.0 percent, respectively).

Visit the NAHMS Web site at: <http://www.aphis.usda.gov/nahms> for a complete copy of Part 1: Reference of Swine Health and Management Practices in the United States, 2006.

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