

Sow and Gilt Management in Swine 2000 and Swine 2006

In 2000, the USDA's National Animal Health Monitoring System (NAHMS) conducted a study on swine health and management practices from a random sample of swine production sites in 17 States divided into 4 regions.* These States represented 94 percent of the U.S. pig inventory and 92 percent of U.S. pork producers with 100 or more pigs.

The same 17 States participated in NAHMS latest study of the U.S. swine industry, Swine 2006. In 2006, these States accounted for 94 percent of the U.S. pig inventory and 94 percent of U.S. pork producers with 100 or more pigs.

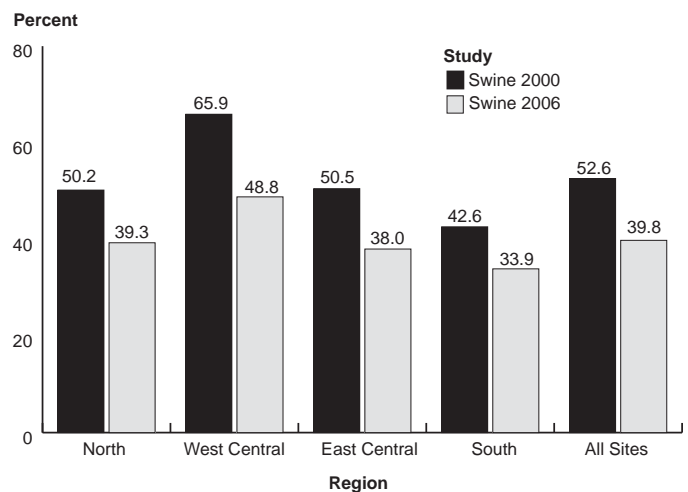
The following provides a comparison of sow and gilt management practices in 2000 and 2006 using data collected during both studies.

For estimates in this information sheet, small, medium, and large sites refer to sites with fewer than 250, 250 to 499, and 500 or more breeding females, respectively.

Sow and gilt management

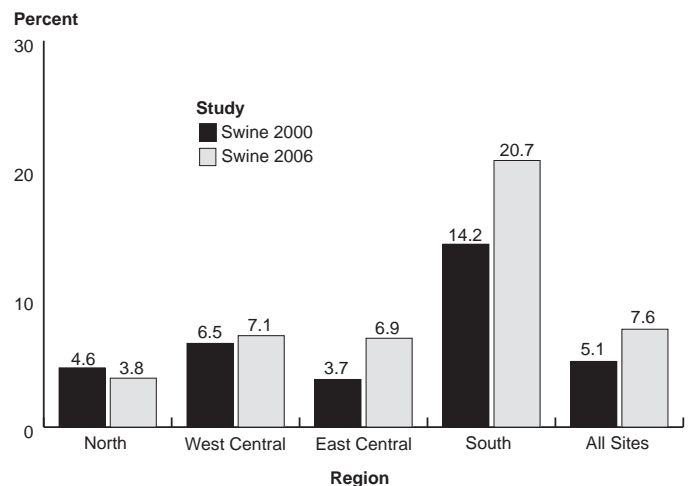
Similar percentages of sites by region (about 40 percent) had a gestation phase in 2006. However, since 2000 there has been a general decline in the percentages of sites with a gestation phase, most notably in the West Central region (figure 1).

Figure 1. Percentage of Sites with a Gestation Phase, by Region and by Study



The South region had the highest percentage of sites that specialized exclusively in breeding pigs in 2000 and 2006 (figure 2). Together, figures 1 and 2 show that pork production continues to be segmented, with various production phases occurring on separate sites.

Figure 2. Percentage of Sites that Specialized Exclusively in Gestation and Farrowing Phases, by Region and by Study



* **States/ Regions**

- 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

Biosecurity

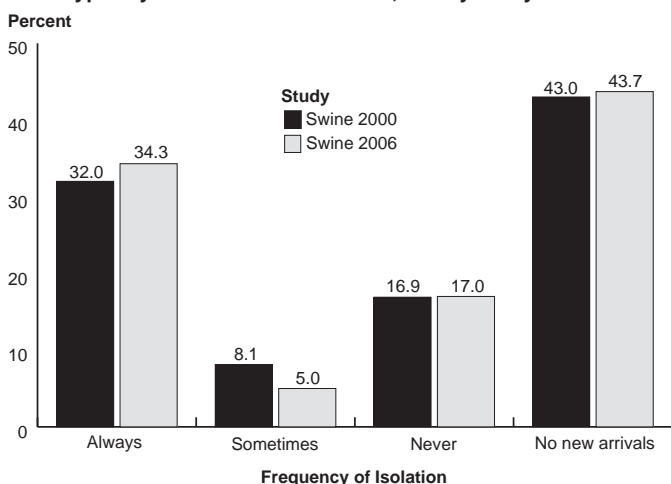
Table 1 shows the types of housing and flow systems used for breeding animals in 2000 and 2006. The percentage of sites that housed gestating animals in total confinement increased from 2000 to 2006. However, there was also an increase in the percentage of sites that kept gestating sows outside with no housing. In 2000 and 2006, continuous-flow management was used in the gestation phase by 71.4 and 61.5 percent of sites, respectively, and in the farrowing phase by 38.7 and 33.5 percent of sites, respectively.

Table 1. Percentage of Gestation and Farrowing Sites, by Facility Type and by Management Style

Facility Type	Percent Sites			
	Gestation		Farrowing	
	2000	2006	2000	2006
Total confinement	22.4	34.6	64.8	67.7
Management Style				
Continuous flow	71.4	61.5	38.7	33.5
All in/all out	23.5	23.7	56.9	59.8
No housing	5.1	14.8	4.4	6.7

Initial isolation or quarantine of new breeding stock is one method used to prevent disease transmission when animals come from another site or from a different health management system. About one-third of sites always isolated or quarantined new breeding females in 2000 and 2006 (figure 3).

Figure 3. Percentage of Sites by Frequency New Breeding Females Were Typically Isolated or Quarantined, and by Study



For sites that isolated or quarantined new breeding females, large sites isolated breeding females longer than small sites in 2000 and 2006. (table 2).

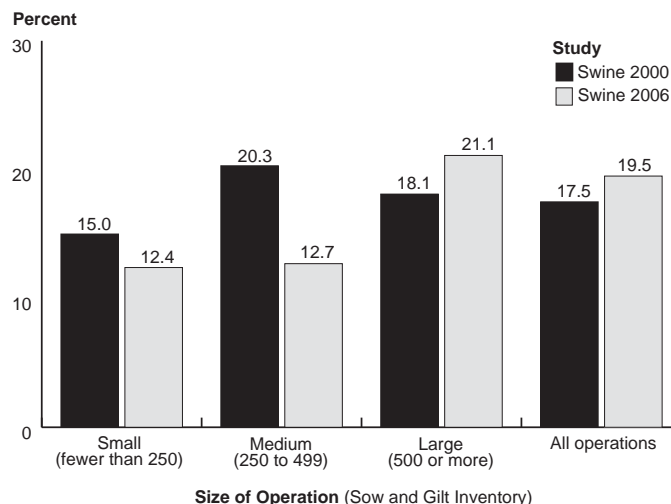
Table 2. For Sites that Isolated or Quarantined New Breeding Females, Site Average Number of Days New Arrivals were Isolated or Quarantined, by Size of Site:

Study	Site Average Number of Days			
	Size of Site (Sow and Gilt Inventory)			
	Small (Fewer than 250)	Medium (250-499)	Large (500 or More)	All Sites
Swine 2000	Avg. 35.1	Avg. 43.1	Avg. 51.1	Avg. 38.7
Swine 2006	Avg. 30.3	Avg. 36.1	Avg. 49.7	Avg. 37.0

Culling in the breeding herd

Culling occurs for many reasons and is part of any breeding herd management practice. In 2000, a higher percentage of breeding-age females (20.3 percent) were culled on medium sites compared with large and small sites (18.1 and 15.0 percent, respectively). In 2006, a higher percentage of breeding-age females (21.1 percent) were culled on large sites compared with medium and small sites (12.7 and 12.4 percent, respectively). Overall, 17.5 percent of breeding-age females were culled in 2000, and 19.5 percent were culled in 2006 (figure 4).

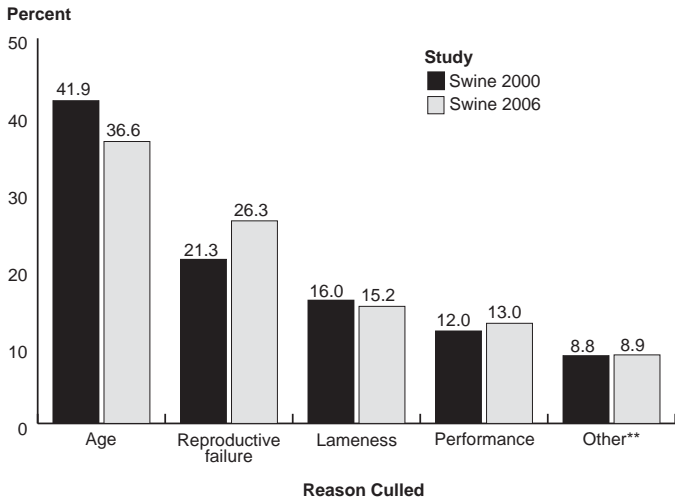
Figure 4. Percentage of Breeding-age Females Culled*, by Size of Site and by Study



*Culled from December through May and as a percentage of June 1 sow and gilt inventory.

Age and reproductive failure were the most common reasons breeding-age females were culled in 2000 and 2006 (figure 5).

Figure 5. Percentage of Culled Breeding-age Females by Reason Culled* and by Study



*Culled from December 1 through May 31, 2006

**In 2006, injury was included in the "Other" category.

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