Veterinary Services
Centers for Epidemiology and Animal Health



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# Highlights of Swine 2006 Part III: Reference of Swine Health, Productivity, and General Management 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, the States were divided into four geographic regions.\*

Part III: Reference of Swine Health, Productivity, and General Management in the United States, 2006 is the third in a series of reports containing national information from the NAHMS Swine 2006 study. Released March 2008, 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 III of the Swine 2006 study.

# Sow and gilt management

- About 40 percent of all sites had breedingage females.
- Reproductive failure and performance were the two most common reasons breeding-age females were culled (36.9 and 23.7 percent of culled females, respectively). Reproductive failure and performance accounted for 60.6 percent of all culled females. The most common "other reasons" included management practices and genetic improvement (table 1).

\*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

Table 1. Percentage of Culled Breeding-age Females from June through November 2006, by Reason Culled

Reason Culled	Percent Culled Females
Old age	11.1
Lameness	11.2
Performance*	23.7
Reproductive failure	36.9
Injury	4.9
Other reasons	12.2
Total	100.0

 $<sup>{}^{\</sup>star}\mathsf{Small}$  litter size, high preweaning mortality, or low birth weight

## Farrowing and weaning productivity

- The total number of piglets born and born alive per litter is a measure of reproductive performance. Overall, 11.9 piglets were born per litter, of which 10.9 were born alive and 9.5 were weaned.
- The number of pigs born alive per litter varied by size of site, ranging from 9.4 on small sites to 11.0 on large sites. Large sites also averaged one more weaned piglet per litter than small sites.
- Crushing by sow and starvation accounted for approximately 7 of 10 (71.7 percent) preweaning deaths from June through November 2006.
   Disease-related causes such as scours and respiratory problems led to 15.9 percent of preweaning deaths. Low viability was the most common "other" identified cause (table 2).

Table 2. Percentage of Preweaning Deaths from June through November 2006, by Producer-Identified Cause:

Producer-Identified Cause	Percent Preweaning Deaths
Scours	13.2
Crushing by sow (laid on)	42.0
Starvation*	29.7
Respiratory problems (e.g., PRRS, rhinitis)	2.7
Other identified problems	7.2
Unknown problems	5.2
Total	100.0

<sup>\*</sup>Starvation implies that pigs did not eat, not that they were not fed.

# **Nursery productivity**

- Over half of all sites (56.1 percent) had any nursery-age pigs from June through November 2006. Approximately one-third of sites in the South region (34.9 percent) had nursery pigs. The East Central and West Central regions had similar percentages of sites with nursery pigs at (62.4 and 62.1 percent, respectively).
- Respiratory problems accounted for the highest percentage of all nursery deaths (53.7 percent).

#### Grower/finisher productivity

- Over 8 of 10 sites (82.7 percent) had a grower/finisher phase.
- The majority of grower/finisher deaths (60.1 percent) were due to respiratory problems.

## **Production phase management**

- Only 4 of 10 sites had gestation or farrowing phases, while over 8 of 10 sites had a grower/finisher phase.
- More than one-quarter of all sites (27.6 percent) had all four production phases (gestation, farrowing, nursery, and grower/finisher). Only 11.6 percent of sites in the South region had all four phases.
- For sites with total confinement housing, square feet per animal ranged from 3.5 in the nursery to 53.6 in the gestation facility.

## **General management**

- Nearly all sites had buildings to house swine.
- For sites with at least one building used to house swine, over 60 percent of sites indicated that all buildings used to house swine were constructed and maintained to keep out birds, cats, and dogs. A higher percentage of large and medium sites housed swine in buildings that kept out birds, cats, rats, mice, and dogs than did small sites.
- About two of three sites (68.0 percent) had a policy in place that prohibits employees from coming into contact with off-site swine.
- About one-third of sites with sows (33.8 percent) used commercial software to keep track of individual sow production.
- Over half of sites that used antibiotics to treat disease conditions in grower/finisher pigs recorded the name of the antibiotic and the date of treatment.

#### Swine movement

- Market hogs were sold or shipped by 80.2 percent of sites, which comprised over half of off-site shipments (56.8 percent).
- Nearly half of all pig shipments (49.8 percent) went directly to slaughter.
- Only 5.3 percent of shipments traveled 300 miles or more.

Visit the NAHMS Web site at:

http://nahms.aphis.usda.gov for a complete copy of Part III: Reference of Swine Health, Productivity, and General Management in the United States, 2006.

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