



NAHMS Swine 2012 Study

In July 2012, the USDA's National Animal Health Monitoring System (NAHMS), in collaboration with the National Agricultural Statistics Service (NASS), will begin the Swine 2012 study. This national study will take an in-depth look at swine operations in the United States and provide the industry with an update of information last collected during the NAHMS Swine 2006 study.

Study focus

NAHMS worked with an array of stakeholders to define the most critical information gaps to be addressed in the upcoming study. Six objectives were identified.

- Describe current U.S. swine production practices including general management practices, housing practices, productivity, disease prevention, and mortality for five phases of production: gestation, farrowing, nursery, grow/finish, and wean-to-finish.
- Describe trends in swine health and management practices.
- Determine the prevalence and associated risk factors for select respiratory, neurologic, gastrointestinal, systemic, and foodborne pathogens found in weaned market hogs.
- Describe antibiotic usage patterns in pigs postweaning to market to control and treat disease and promote growth.
- Evaluate presence of or exposure to select pathogens and characterize isolated organisms from biological specimens (feces, sera, feed).
- Update estimates of the economic cost of select respiratory, neurologic, gastrointestinal, systemic, and foodborne pathogens found in commercial swine herds and create estimates of the economic cost of different treatment approaches.

"Swine 2012 will provide the pork industry with valuable information on levels of disease; farrow-to-finish producers; all-in, all-out management; biosecurity practices; etc. I wholeheartedly encourage any producer who can participate in the NAHMS Swine 2012 study to do so."

Jim Niewold, Illinois Pork Producer
Swine Health Committee Chair
National Pork Board



Study activities for participants with 100 or more pigs

Participants with an inventory of 100 or more pigs in 13 States (see map above) will be asked to provide important health management and productivity information to characterize management practices in the swine industry. Fecal, blood, and other biological specimens will be collected for analysis on a subset of operations. Data collection will begin in July 2012.

- Representatives from NASS will visit or telephone randomly selected swine operations to complete a questionnaire.
- NASS will identify producers interested in the next phase of the NAHMS Swine 2012 study administered by APHIS.
- Beginning in September 2012, interested producers will be contacted by APHIS personnel for a follow-up interview.
- Biological specimens will be collected on a subset of operations. Fecal samples will be evaluated for the presence of enteric bacteria that are considered to be foodborne pathogens. Blood samples will be tested for evidence of host exposure to selected swine pathogens.

Study activities for participants with fewer than 100 pigs

Participants on operations with an inventory of fewer than 100 pigs in 31 States (AL, AR, AZ, CA, CO, FL, GA, HI, IA, IL, IN, KS, LA, MI, MN, MO, MS, NC, NE, NJ, NM, NY, OH, OK, PA, SC, SD, TN, TX, WA, and WI) will be asked to provide important health management information about their operations. Data collection will begin in July 2012.

NASS will mail a short questionnaire tailored to smaller operations and, if necessary, follow up by telephone to assist in completing that questionnaire.

Benefits to the U.S. pork industry from the Swine 2012 study

- In-depth reports and information sheets will provide a national snapshot of current management, health, and productivity of the U.S. swine herd.
- Laboratory test results for biological specimens collected during the study will be returned to participating producers, such as PRRS results for serum collected from sows and finishers or *Salmonella* results from fecal samples.
- Serum aliquots will be added to the serum bank (established in 1990) and made available to address emerging diseases or to elucidate the epidemiology of endemic diseases.
- Objective data on antibiotic usage patterns in pigs postweaning to market will inform those engaged in the national debate on the use of antibiotics in swine.
- Broad geographic representation of the health status of U.S. pigs (e.g., concerning toxoplasmosis and trichinellosis) will be used to facilitate trade and enhance the U.S. position in international markets.
- Scientifically valid estimates of productivity will be used to assess the economic impact of PRRS on the swine industry.
- National estimates spanning nearly 25 years will help assess changes in swine management, health, and productivity.
- Foodborne pathogens isolated on-farm will be characterized, including isolation rates, serotypes, and resistance patterns for enteric pathogens.

"NAHMS is a great example of the USDA being responsive to the needs of the pork industry. The information provided by the NAHMS studies is used often to provide credible answers to questions posed by regulators and media about the pork industry."

Liz Wagstrom,
Chief Veterinarian
National Pork Producers Council

A scientific approach

NAHMS collects and reports accurate and useful information on animal health and management in the United States. Since 1990, NAHMS has developed national estimates on disease prevalence and other factors related to the health of U.S. beef cattle, sheep, goat, dairy cattle, swine, equine, poultry, and catfish populations. The science-based results produced by NAHMS have proven to be of considerable value to the U.S. livestock, poultry, and aquaculture industries as well as to other animal health stakeholders. NAHMS studies are

- National in scope,
- Science based,
- Statistically valid,
- Collaborative,
- Voluntary, and
- Confidential.

"We estimate that exports add over \$55 of value to every hog marketed in the United States. Using data supplied by NAHMS has helped us reassure our trading partners about swine health and food safety, supporting the expansion of our export markets."

Nick Giordano,
Vice President, International Affairs
National Pork Producers Council

Confidentiality

Because NAHMS studies rely on voluntary participation, the privacy of every participant is protected. Only those collecting the data know the identity of the respondent. No name or contact information will be associated with individual data, and no data will be reported in a way that could reveal the identity of a participant. Data are presented only in an aggregate manner.

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