Equine Identification and Familiarity with the National Animal Identification System (NAIS)

A primary goal of the U.S. Department of Agriculture's National Animal Health Monitoring System (NAHMS) Equine 2005 study was to collect data on health and management practices on U.S. equine operations. As part of that goal, data were collected on equine identification (ID) practices and operator familiarity with the NAIS.

NAIS is a voluntary State-Federal-Industry partnership designed to help producers and animal-health officials respond quickly and effectively to animal-disease events in the United States. For more information on NAIS visit <http://animalid.aphis.usda.gov/nais/index.shtml>.

For the Equine 2005 study, NAHMS collected data on equine health and management practices from a representative sample of operations with 5 or more equids in 28 States divided into four regions.* The 28-State target population represented 78.0 percent of equids and 78.6 percent of operations with 5 or more equids in the United States. Interviews were conducted from July 18 through August 12, 2005, and 2,893 equine operations provided data on equine health and management.

Of operations participating in the study, 40.3 percent identified their primary function as “farm/ranch” and 37.0 percent identified their primary function as “residence with equids for personal use.” Over 95 percent of operations had horses and 34.8 percent had equids other than horses, e.g., donkeys, burros, mules, ponies, and miniature horses.

Equine Species Working Group

In fall 2003, a task force that included nearly 30 national equine organizations was formed to evaluate the concept of a national ID system. Known as the Equine Species Working Group (ESWG) the task force looked at developing standards for equine ID beneficial to the equine industry and compatible with the plans being considered for other livestock. The ESWG provided input to the NAIS Subcommittee of the Secretary’s Advisory Committee of Foreign Animal and Poultry Diseases. For more information about the ESWG visit <www.horsecouncil.org/equineid.htm>.

Identification methods

In the NAHMS Equine 2005 study, equine operators were asked about their methods of unique animal ID (defined as each equid has a different ID; no two equids have the same ID). Operators were given a list of possible methods of unique identification** and given the option to report forms of ID not listed. Forms of unique equine ID were not mutually exclusive, so that more than one form of ID could have been used on an operation or on the same equid. An ID unique on the home operation may not be unique off the home operation.

Nearly three-fourths of all resident equids (71.3 percent) had some form of unique ID. For the Equine 2005 study, a resident equid was defined as an equid that spent or was expected to spend more time at the operation than at any other operation, whether or not it was present at the time of the interview. The operation was its home base.

*Regions:
  West: California, Colorado, Montana, New Mexico, Oregon, Washington, and Wyoming
  Northeast: New Jersey, New York, Ohio, and Pennsylvania
  South: Alabama, Florida, Georgia, Kentucky, Louisiana, Maryland, Oklahoma, Tennessee, Texas, and Virginia
  Central: Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, and Wisconsin

**Hot-iron brand, freeze brand, microchip, tattoo, permanent brand inspection (card with markings indicated or sketch), registration papers, Coggins test papers (laboratory test results), halters or collars with name or number, passport, and other. These forms of unique ID are specific to the Equine 2005 survey and may not meet the requirements of the NAIS.
Four of five operations (80.8 percent) used a unique ID for at least some resident equids, and half of operations (50.7 percent) used a unique ID for all resident equids. A higher percentage of large operations (20 or more equids) were more likely to use a unique ID on at least some resident equids than medium operations (10 to 19 equids) and small operations (5 to 9 equids) (91.3, 85.2, and 77.8 percent, respectively). In addition, operations where the primary use of equids was lessons/school, show/competition, racing, or breeding were more likely to use unique forms of ID than operations where the primary use of equids was farm/ranch work or pleasure.

Across the four regions, a similar percentage of operations used some form of unique ID on at least some resident equids. However, a higher percentage of operations in the South region (54.1 percent) used a unique ID on all resident equids compared to operations in the Northeast region (43.6 percent).

The most common forms of unique ID were registration papers (61.7 percent of operations and 47.8 percent of equids) and Coggins test papers (40.0 percent of operations and 27.2 percent of equids). The least common forms of unique ID were microchip (3.1 percent of operations and 1.5 percent of equids) and passport (1.1 percent of operations and 0.3 percent of equids). Freeze brand and hot-iron brand were used as unique IDs on 13.8 and 12.2 percent of operations, respectively and 5.2 and 4.6 percent of equids, respectively. Of the 3.9 percent of operations and 2.3 percent of equids that had “other” unique IDs, DNA and blood testing were common forms of other unique IDs.

Familiarity with NAIS

To describe their level of familiarity with NAIS, operators selected from four options ranging from “had not heard of it before” to “knowledgeable.” At the time of the study survey, 41.7 percent of operations had not heard of NAIS and only 14.4 percent were knowledgeable about NAIS (figure 1).

A higher percentage of large operations (20.3 percent) were knowledgeable about NAIS compared to small operations (13.2 percent). The percentages of operations that had not heard of NAIS were similar across all operation sizes.

A higher percentage of operations in the South region (16.9 percent) were knowledgeable about NAIS than operations in the Northeast region (9.0 percent) (figure 2).
Operators that used their equids primarily for farm/ranch work were more likely to have at least recognized the name NAIS (66.2 percent) than operators that used their equids primarily for racing (44.6 percent) and pleasure (53.0 percent). This higher level of knowledge about NAIS may be explained by the fact that operations that used equids primarily for farm/ranch work were more likely to have cattle and therefore may have received information about NAIS from multiple industry sources.

Knowledge level about NAIS was associated with the use of unique forms of equine ID. Based on the Equine 2005 study, operations knowledgeable about NAIS were more likely to use a microchip as a unique form of ID than operations that had limited to no knowledge of NAIS.

Level of knowledge regarding equine infectious anemia (EIA)—a viral disease of equids—was associated with an increased knowledge of NAIS. Operators that at least recognized the name EIA were 2.8 times more likely to also have some level of knowledge about NAIS.