United States Department of Agriculture

Animal and Plant Health Inspection Service

The National Animal Identification System (NAIS)

Why Animal Identification? Why Now? What First?

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Why Do We Need Animal Identification?

A rational, cost-effective animal identification program will

- Enhance foreign animal disease surveillance, control, and eradication;
- Facilitate epidemiologic investigations;
- Improve biosecurity protection of the national livestock population;
- Distinguish animals vaccinated or tested under official U.S. Department of Agriculture (USDA) disease-control or -eradication programs from unvaccinated and untested herdmates;
- Furnish official identification for animals in interstate or international commerce;
- Accurately identify blood and tissue specimens used for laboratory diagnostics;
- Track the health certification status of herds, States, and regions; and
- Enable effective regionalization and risk assessment in support of international trade.

Why Do We Need a National Animal Identification System (NAIS)?

The increasing number of animal disease outbreaks that have been reported around the globe over the past decade and the single cow that tested positive for bovine spongiform encephalopathy (BSE) in the United States in December 2003 have greatly intensified public interest in developing a national animal identification program for the purpose of protecting animal health. The European Union, Canada, and Australia already have animal identification systems in place. A strong U.S. identification system is in increasing demand as a necessary component of our Nation's agricultural infrastructure.

Some History

Animal identification is not a new concept in the United States. Back in the 1940s, the predecessor agency of USDA's Animal and Plant Health Inspection Service (APHIS) initiated an extensive program to identify cattle vaccinated for brucellosis. The official brucellosis vaccination tag with an ear tattoo provided the United States with a highly successful animal identification program for cattle for decades. However, since brucellosis is close to being eradicated in the United States, that system of tagging and identification is being phased out rapidly. Other animal health programs also include an animal identification component, and certain classes of livestock must be officially identified before entering interstate commerce. So there are multiple systems in place that exist for different purposes, but there is no uniform, nationwide animal identification system for all animals of any given species.

Figure 1—Animal identification is not a new concept. In the United States, many animals are already identified through eartags, brands, or tattoos. However, methods vary from breed to breed and State to State. The NAIS will help standardize animal identification at the national level for all animals of a given species. *(USDA photo by Bill Tarpenning.)*

Animal identification is worthwhile to producers for various reasons, including performance recording and marketing opportunities. However, APHIS is focused on animal identification for one reason alone: to establish the foundation the agency needs to support its programs to control, eradicate, monitor, and survey for animal diseases.

Most individuals associated with animal agriculture recognize that finding potentially sick or exposed animals early in a disease outbreak is essential to containing the disease quickly. The NAIS would allow for rapid tracing of animals during an outbreak situation, helping to limit the scope and expense of the outbreak and allowing APHIS to minimize the impact on domestic and foreign markets. The NAIS will also be critical as APHIS works to complete disease eradication programs in which the Federal Government, States, and industry have invested many years of effort and millions of dollars.

NAIS: Goal and Objectives

The goal of the NAIS is to have the capability to identify all animals and premises that have had direct contact with a foreign animal disease or a domestic disease of concern within 48 hours after discovery. USDA believes that this goal can best be achieved by focusing on the following objectives.

First, USDA does not want to burden producers with multiple identification numbers, processes, or requirements. What USDA, together with its industry and State partners, has envisioned is very simple: a system where every premises involved in livestock commerce or animal movement in which exposure to other animals could occur has a unique, seven-character identifier. Every animal needing to be identified individually would have a 15-character number. Groups or lots of animals may be identified with a 13-character number. Many producers already want to

Figure 2—Species that normally move through the production chain in large groups, such as swine and the commercial turkeys shown here, may be identified through group or lot identification. However, animals that leave the group—to go to a fair, for example—would need to be individually identified under the NAIS. *(USDA photo by Bill Tarpenning.)*

Figure 3—Camelids, such as these llamas, are not considered traditional food animals by those who raise them in the United States. Some llamas are raised for their fiber, some as pets, and some are even raised to be pack animals for trail rides. However, because llamas and their relatives are susceptible to animal diseases that could devastate other segments of the livestock industry, camelids are included under the NAIS umbrella. *(USDA file photo.)*

make a move to this numbering system from the multiple systems currently in use. As a result, APHIS is planning to pursue rulemaking to recognize for official use the 7-character premises identification number, the 13-character group/lot identification number, and the 15-character animal identification number (AIN). This process will allow producers who want to transition to the NAIS numbering system to begin doing so while not requiring its adoption for others who may not be ready.

Second, there is no "one-size-fits-all" technology. It is likely that some technologies will work better for some species than for others. Rather than focus on a specific technology, USDA will focus on the design of the identification data system—what information should be collected and when it should be collected

and reported. Once the identification system is designed, the market will determine which technologies will be the most appropriate to meet the needs of the system.

Third, the NAIS should be built on national data standards to ensure that a uniform and compatible system evolves. The system also must not preclude producers from being able to use it in coordination with production management systems that respond to market incentives.

Fourth, the architecture for the system should be created without unduly increasing the role and the size of the Government. Both public and private funding will be required for the NAIS to become fully operational. Database systems must be developed and maintained, equipment must be purchased, animals must be identified and tracked, programs must be monitored, and labor is needed for all these activities.

Flexibility, Confidentiality, and Cost

Which Species Will Be Included in the NAIS?
The NAIS is being developed for all animals that will benefit from having a system that will facilitate rapid tracing in the event of a disease concern. Currently, working groups are developing plans for camelids (llamas and alpacas), cattle and bison, cervids (deer and elk), equine, goats, poultry, sheep, and swine.

Is the NAIS Mandatory?
While the NAIS is being developed and refined, producer participation will be voluntary. As the system continues to take shape and is tested for all affected species, USDA will reassess the need for making some or all aspects of the program mandatory.

Eventually, USDA may move toward a requirement for premises and animal identification for all species included in the system. If USDA does decide to make all or parts of the NAIS mandatory, APHIS will follow the normal rulemaking process. The public will have the opportunity to comment upon any proposed regulations.

When Is the NAIS Going To Be Fully Implemented?
Right now, there is no set timeline for full implementation of the NAIS. USDA is moving forward under a phased-in approach. The first priority is to register animal premises and those premises associated with animals, such as exhibitions and veterinary clinics. This task will be accomplished at the State level. Assigning unique premises identification numbers to geographic locations is a fundamental component of the NAIS. In case of an animal disease outbreak, animal health authorities need premises location data at their fingertips to ensure disease investigations progress rapidly and efficiently. As premises are registered, animal identification and tracking systems will be tested and integrated under established USDA data standards.

Figure 4—USDA is including horses in the NAIS because they are susceptible to virulent diseases, such as African horse sickness, that can spread quickly and cause widescale industry losses. Working groups will determine the identification method most appropriate for each species. Horses will not be required to carry the same type of identification that cattle or sheep carry. *(USDA photo by Tim McCabe.)*

What Do Producers Need To Do First?

Producers should check with their State's or Tribe's animal health authority to find out whether a premises registration system is available in their area. Once a premises registration system is operational, producers should work with the State or Tribal authority to obtain unique premises identification numbers, as appropriate. The premises registration system will record information such as premises type, contact name, premises address, and phone number of the person in charge of the location. This system will be maintained at the State level. Key pieces of information will then be sent to the national premises information repository and may be accessed by animal health authorities during a disease traceback or for other appropriate animal-health-surveillance purposes.

Following premises registration, producers may participate in animal identification and tracking programs as provided in their State. As the NAIS progresses, producers will be able to contact an animal identification number distributor to obtain official AINs. These numbers will be issued to the premises and attached or assigned to the animals in a way that is appropriate for the species. The AIN distributor will submit to a national information repository a record of the numbers provided to each premises. By obtaining numbers from an AIN distributor, the producer will, in effect, automatically provide the initial record for registering his or her animals' location. AIN distributors will be authorized by USDA to distribute official devices. They could include breed associations, Federal area offices, State departments of agriculture, and tag manufacturers, among others. Producers should check with their State or Tribal animal health authority to determine whom they should be contacting about AINs. They can also contact the APHIS Area Veterinarian-in-Charge for their State.

Who's Going To Have Access to the Information?

Federal, State, and Tribal animal-health officials will have access to the national premises and animal identification information repositories when they need data to administer animal health programs at the State and national level. For example, they may access the database if an APHIS–Veterinary Services program disease—such as tuberculosis or brucellosis—or a suspected foreign animal disease is reported and requires an epidemiologic investigation. They may also access the database during emergency-response simulations.

Animal health officials need access to this type of information to carry out their responsibilities: retrieving this kind of data is a critical part of their job. Every day, they conduct epidemiologic

investigations for a variety of reasons—to trace a tuberculosis or brucellosis reactor or animal suspected of being infected, to investigate the report of a suspected foreign animal disease, or to assess the effectiveness of a surveillance and monitoring program. In addition, public health officials may be provided access to this information in the case of zoonotic disease outbreaks that could affect both animals and humans.

Is the Information Going To Be Kept Confidential?

USDA is aware of producers' concerns about the confidentiality of information collected in the NAIS and is taking them very seriously as APHIS explores the most effective means for collecting animal identification information. Accordingly, USDA is investigating various options for protecting the information in the NAIS from public disclosure. It is important to note that the national repositories will include information only for animal and disease tracking purposes. Proprietary production data will not be retained by USDA.

Will Livestock Producers Be Held Liable If Someone Develops a Case of Food Poisoning?

APHIS' goal for the NAIS is to enhance the agency's ability to trace and respond to diseases in animal populations. The key objective is to achieve timely tracebacks and traceforwards to minimize the detrimental effect of a disease on the national herd. Accordingly, USDA will collect and retain only necessary identification data in the preharvest production chain and through final inspection at slaughter establishments. The NAIS will increase the accuracy of animal health information and will not expose producers to additional liability. Liability resulting from one's actions does not change as a result of the NAIS.

How Does This Relate to Country of Origin Labeling (COOL)?

The NAIS is not being implemented as a result of the COOL initiative. The intent of the NAIS is to create the ability to track animal disease to its source and other potentially exposed premises within a 48-hour period after detection. However, animal owners may be able to use information collected under the NAIS for other purposes, including the COOL program.

What Kind of Technology Will Producers Have To Purchase and Use?

USDA recognizes that there is no "one-size-fits-all" technology. An identification system that works for cattle may not work for goats. It is likely that some technologies will work better for some

Figure 5—Although this goat does not have an I.D. tag, sheep and goats enrolled in the national scrapie eradication program do because that program has a mandatory identification requirement. As it moves forward with the NAIS, USDA will work to incorporate identification systems already in existence. *(USDA Agricultural Research Service photo by Scott Bauer.)*

species than for others. Rather than focusing on a specific technology, USDA will focus on the design of the identification system—what information should be collected and when it should be collected. Once the identification system is designed, the market will determine which technologies will be most appropriate to meet the needs of the system.

USDA will work to incorporate identification systems already in existence, such as cattle brands and I.D. tags distributed as part of the scrapie eradication program, as we move forward with the NAIS.

What's the Cost?

At this point, USDA does not have a fully defined budget for implementing the NAIS. However, the size and scope of this undertaking demand that it be a cooperative effort. Because it is being developed as an industry–government partnership, it is expected that industry and the government will share the cost of the necessary elements. It is USDA's intent to minimize industry's share of NAIS' costs to individual producers as much as possible, but there still may be some expenses associated with participation.

How Can I Learn More?

Refer to the NAIS Web site at <http://www.aphis.usda.gov/lpa/issues/nais/nais.html>.