Where Are We Now?

The status of the NAIS.

by ***Abby White***

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As of Jan. 4, 2007, 24% of premises in the U.S. had been registered in the National Animal Identification System (NAIS). That's really close to the U.S. Department of Agriculture's (USDA's) benchmark goal of 25% of the premises being registered by 2007.

Registering premises is the first step in the NAIS, which the USDA plans to have fully operational by 2009. It will allow for officials to answer the question "where?" when faced with a disease outbreak.

"Disease investigation 101 is where did they come from, what management practices allowed them to spread, and where do they go from here," Valerie Ragan says. Ragan is the president of Agwork Solutions LLC and spoke in September 2006 at the International Symposium on Agroterrorism.

Ragan says the NAIS is designed to answer where affected animals came from and the path they traveled. It addresses questions about the spread of a disease, such as:

►Where did the exposure occur?

►When did the exposure happen?

►Which animals were affected?

►What happened to those animals?

"You usually don't know all of that information up front," Ragan explained. That is why "the National Animal ID System was designed — to maintain the health of the U.S. herd."

Granted, animal identification (ID) in general has a whole host of other uses, like marketing and collection of business decision-making information, but the goal of the NAIS is to have the system work during one of the most critical times — during a disease outbreak.

"You've got to get in front of it and stop it, rather than chase it all over the place," Ragan says. Investigators must also trace forward and backward, finding affected animals and determining their location.

"This is especially important with a zoonotic disease because it will help you determine the human population at risk," she explains.

48 hours

The USDA's goal is to maintain the health of the U.S. animal population and to be able to identify all animals in the premises that have come into direct contact with a foreign animal disease within 48 hours after discovery.

"That's actually very quick and very long," Ragan explains. "It depends on what your viewpoint is. I think it's pretty ambitious if it works the way it's supposed to, but it's a long time if you're dealing with foot-and-mouth (FMD) disease. Nevertheless, that's the goal."

Ragan says officials plan to identify all exposed premises within 48 hours so eradication work can begin.

"Properly identifying animals really minimizes the impact on the producer," Ragan says. "It allows us to go to the right place instead of the places that might be the right place. It will increase the efficiency of our ID investigation."

Benchmarks

The system must have three steps in

►**Above:** The USDA's goal is to maintain the health of the U.S. animal population and to be able to identify all animals in the premises that have come into direct contact with a foreign animal disease within 48 hours after discovery.

place before it becomes fully operational — a national premises system, a national animal ID system and an animal tracking system. The first priority is the premises system. A number is assigned to a premises where animals are held. That number correlates to the location of those animals and the person who is responsible for those animals.

"This converts from the past premises numbering system that was different from state to state," Ragan explains. "It's one uniform numbering system."

This numbering system is based on the location of the animals, not the owner. "Sometimes we find out that the owner lives in an apartment in Chicago," Ragan says. "It will work electronically, so we can know immediately."

The premises registration systems were operational in August 2005. As of Jan. 4, 343,186 premises were registered out of an estimated 1.4 million.

The animal ID number management system became operational in September 2006, and the tracking database is supposed to become operational this month.

The goal is to have 70% of the premises registered by January 2008 and 100% of the premises registered by January 2009. The USDA also wants to have 100% of the existing animals registered and 60% of animals 1 year or younger registered by January 2009.

In a way, the U.S. is behind when compared to other countries.

For example, Australia implemented an animal ID system called the National Livestock Identification System (NLIS), which became operational in 1996. It was an optional practice until 2000, when it became mandatory. They have been using premises registration for a long time.

"Since 1967, each farm has had its own unique number Property Identification Code (PIC)," Dean Merrilees says. Merrilees is a minister counselor for the Australian Government and spoke following Ragan. "All cattle consigned from each farm must be accompanied by their respective PIC."

Technology

Animals have been identified for many years and all sorts of tags are available. The problem lies in the fact that numbering systems are not standardized.

"What we want to do, as animals move, is know about that number on that animal," Ragan says.

The USDA is technology neutral when it comes to the method of identification. Officials don't tell producers what tag to use, but a standard form of numbering must exist.

"It has to be a 15-digit number that starts with 840," Ragan says. "That 840 number is the international designation number for the U.S. It also has to have the U.S. shield, and an 'unlawful to reproduce' statement."

Animals will be tracked using the tag number, but high-technology tags are not needed. "This is not real-time tracking," Ragan says. "There are no satellite beams going up and down that follow one cow."

All producers need to know is the tag number, what happened to that animal, where it occurred and the date. They can record that data in whatever method they see fit, but that data must be logged into a USDA-approved privately held database.

Australia used wrap-around tail tags for animal ID until eight years ago, when they started using electronic identification of individual animals.

"The NLIS moved into using RFID (radio frequency identification) to trace animal and product movements, animal status and carcass feedback for improved management," Merrilees says.

Keeping the data

Originally, it was envisioned that NAIS data would be held in a public database. Instead, the USDA decided to use animal tracking databases that will be held in the private sector, maintained and operated by the industry. The USDA is developing an animal trace processing system portal that will be held at the USDA level and connected to the privately held databases.

"Animal health authorities will request information through the portal to the animal tracking databases across the country," Ragan explains. That data will only be accessed by USDA officials if a disease outbreak occurs.

"The private databases will help protect confidentiality," Ragan says. "It will help, but there are still some issues to be resolved."

Producers and USDA officials alike must remember the goals of the NAIS. The ultimate goal is to maintain the health of the U.S. herd.

"I think we've got a really good start on a really good system," Ragan says. "We're going through growing pains right now, but we're going to have to get through these growing pains and move on if this system is going to work."

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What you can do

1. Register your premises. Each state has its own premises registration system. Contact your local Extension office for more information.

2. Tag your animals with a USDA-approved tag. The number will start with 840, and the number contains 15 digits.

3. Submit data to a private database that is linked to USDA's portal. AngusSource,® the American Angus Association's USDA Process Verified Program (PVP) is one example. For more information about AngusSource, call (816) 383-5100 or visit *www.angussource.com*.

The system must have three steps in place before it becomes fully operational — a national premises system, a national animal ID system and an animal tracking system.